



Subject index of Volumes 271–300

Absorber Materials

- The behaviour of control rod absorber under irradiation, J. Bourgoin, F. Couvreur, D. Gosset, F. Defoort, M. Monchanin and X. Thibault 275 (1999) 296
- Study of boron carbide evolution under neutron irradiation by Raman spectroscopy, D. Simeone, C. Mallet, P. Dubuisson, G. Baldinozzi, C. Gervais and J. Maquet 277 (2000) 1
- SIMS imaging analyses of in-reactor irradiated boron carbide control rod samples, O. Gebhardt and D. Gavillet 279 (2000) 368
- Dysprosium titanate as an absorber material for control rods, V.D. Risovany, E.E. Varlashova and D.N. Suslov 281 (2000) 84

Actinides (*minor, excludes Plutonium, Thorium and Uranium*)

- Semi-empirical models of actinide alloying, J.K. Gibson, R.G. Haire and T. Ogawa 273 (1999) 139
- Concepts for an inert matrix fuel, an overview, C. Degueldre and J.M. Paratte 274 (1999) 1
- Materials research on inert matrices: a screening study, Hj. Matzke, V.V. Rondinella and T. Wiss 274 (1999) 47
- Optimisation of inert matrix fuel concepts for americium transmutation, N. Chauvin, R.J.M. Konings and Hj. Matzke 274 (1999) 105
- Vaporization behavior of NpN coloaded with PuN, K. Nakajima, Y. Arai and Y. Suzuki 275 (1999) 332
- Actinide distribution in a stainless steel–15 wt% zirconium high-level nuclear waste form, D.D. Keiser Jr., D.P. Abraham, W. Sinkler, J.W. Richardson and S.M. McDeavitt 279 (2000) 234
- The EFTTRA-T4 experiment on americium transmutation, R.J.M. Konings, R. Conrad, G. Dassel, B.J. Pijlgroms, J. Somers and E. Toscano 282 (2000) 159
- Thermodynamic systematics of the formation of liquid alloys of f-elements with bismuth, H. Yamana, J. Sheng, K. Kawamoto and H. Moriyama 294 (2001) 53

- Thermal expansion of $(\text{Ca}_{1-x}\text{Pu}_x)\text{TiO}_3$, T. Sato, Y. Hanajiri, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 130
- Enthalpy and heat capacity of $(\text{Ca}_{1-x}\text{Pu}_x)\text{TiO}_3$ ($x = 0$ and 0.20), T. Sato, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 135
- Estimation of the standard entropies of some Am(III) and Cm(III) compounds, R.J.M. Konings 295 (2001) 57
- Application of normal pulse voltammetry to on-line monitoring of actinide concentrations in molten salt electrolyte, M. Iizuka, T. Inoue, O. Shirai, T. Iwai and Y. Arai 297 (2001) 43
- Determination of dissolution rates of spent fuel in carbonate solutions under different redox conditions with a flow-through experiment, S. Röllin, K. Spahiu and U.-B. Eklund 297 (2001) 231
- Behavior of plutonium and americium at liquid cadmium cathode in molten LiCl–KCl electrolyte, M. Iizuka, K. Uozumi, T. Inoue, T. Iwai, O. Shirai and Y. Arai 299 (2001) 32

Adsorption

- Evaluation and mitigation of tritium memory in detritiation dryers, C. Malara, I. Ricapito, R.A.H. Edwards and F. Toci 273 (1999) 203
- Silicon carbide as an inert-matrix for a thermal reactor fuel, R.A. Verrall, M.D. Vljacic and V.D. Krstic 274 (1999) 54
- Tritium trapping capacity on metal surface, M. Nishikawa, N. Nakashio, T. Shiraishi, S. Odoi, T. Takeishi and K. Kamimae 277 (2000) 99
- The impact of materials selection on long-term activation in fusion power plants, N.P. Taylor, C.B.A. Forty, D.A. Petti and K.A. McCarthy 283–287 (2000) 28
- Measurement and analysis of radioactivity induced in steels and a vanadium alloy by 14-MeV neutrons, D. Richter, R.A. Forrest, H. Freiesleben, Va.D. Kovalchuk, Vi.D. Kovalchuk, D.V. Markovskij, K. Seidel, V.I. Tereshkin and S. Unholzer 283–287 (2000) 1434

- Surface inventory of tritium on Li_2TiO_3 , T. Kawagoe, M. Nishikawa, A. Baba and S. Beloglazov 297 (2001) 27
- Accumulation of radioactive corrosion products on steel surfaces of VVER-type nuclear reactors. II. ^{60}Co , K. Varga, G. Hirschberg, Z. Németh, G. Myburg, J. Schunk and P. Tilky 298 (2001) 231
- Age Hardening**
- Influence of post-irradiation thermal annealing on the mechanical properties of ion irradiated layers in 316L stainless steel, C. Robertson, L. Boulanger and S. Poissonnet 271&272 (1999) 102
- Evaluation of thermal aging embrittlement in CF8 duplex stainless steel by small punch test, J.S. Cheon and I.S. Kim 278 (2000) 96
- Study of the tritium behavior on the surface of Li_2O by means of work function measurement, T. Yokota, A. Suzuki, K. Yamaguchi, T. Terai and M. Yamawaki 283–287 (2000) 1366
- Aluminum, Aluminum Alloys and Compounds**
- Effect of size and configuration of 3-point bend bar specimens on J – R curves, S. Jitsukawa, A. Naito and J. Segawa 271&272 (1999) 87
- Development of tritium permeation barriers on Al base in Europe, G. Benamati, C. Chabrol, A. Perujo, E. Rigal and H. Glasbrenner 271&272 (1999) 391
- Deuterium retention in codeposited layers and carbon materials exposed to high flux D-plasma, I.I. Arkhipov, A.E. Gorodetsky, R.Kh. Zalavutdinov, A.P. Zakharov, T.A. Burtseva, I.V. Mazul, B.I. Khripunov, V.V. Shapkin and V.B. Petrov 271&272 (1999) 418
- Influence of thermal aging on tensile and impact bending properties of the steel grades OPTIFER and F82H mod., L. Schäfer and M. Schirra 271&272 (1999) 455
- Manufacturing technique of Nb_3Al super-conductive sheet by electrically heated powder rolling, C. Mochizuki and M. Mikami 271&272 (1999) 508
- Investigation on the suitability of plasma sprayed Fe–Cr–Al coatings as tritium permeation barrier, C. Fazio, K. Stein-Fechner, E. Serra, H. Glasbrenner and G. Benamati 273 (1999) 233
- Neutron irradiation of polycrystalline yttrium aluminate garnet, magnesium aluminate spinel and α -alumina., E.A.C. Neeft, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, R.P.C. Schram, A. van Veen and R. Conrad 274 (1999) 78
- Alternative versions of inert matrix fuel for the use of civil and weapons-grade plutonium in reactors, A. Vatulin, V. Lysenko, V. Kostomarov and V. Sirotin 274 (1999) 135
- Quantitative analysis of CTEM images of small dislocation loops in Al and stacking fault tetrahedra in Cu generated by molecular dynamics simulation, R. Schäublin, A. Almazouzi, Y. Dai, Yu.N. Osetsky and M. Victoria 276 (2000) 251
- Tritium trapping capacity on metal surface, M. Nishikawa, N. Nakashio, T. Shiraishi, S. Odoi, T. Takeishi and K. Kamimae 277 (2000) 99
- Slow neutron total cross-section of Al6061 at low temperatures, J.R. Granada 277 (2000) 346
- Retention and release of deuterium implanted in copper coatings on Al-6061, M.Y. Inal, M. Alam, K. Kurz, D.F. Cowgill and R.A. Causey 278 (2000) 164
- Gamma-irradiation effect on heterogeneous short-range order in Fe+12 at.% Al alloy, L.I. Chyrko, V.I. Chyrko, E.U. Grynyk, O.V. Drogayev, M.P. Krulikovska and V.I. Sugakov 279 (2000) 162
- Optical properties of γ -irradiated synthetic sapphire and yttria-stabilized zirconia spectroscopic windows, L. Fuks and C. Degueldre 280 (2000) 360
- Progress and critical issues of reduced activation ferritic/martensitic steel development, B. van der Schaaf, D.S. Gelles, S. Jitsukawa, A. Kimura, R.L. Klueh, A. Möslang and G.R. Odette 283–287 (2000) 52
- Chemical segregation behavior under thermal aging of the low-activation F82H-modified steel, J. Lapeña, M. Garcia-Mazarío, P. Fernández and A.M. Lancha 283–287 (2000) 662
- Mechanical properties of 8Cr–2WVTa steel aged for 30 000 h, M. Tamura, K. Shinozuka, H. Esaka, S. Sugimoto, K. Ishizawa and K. Masamura 283–287 (2000) 667
- Tensile and impact behavior of the reduced-activation steels OPTIFER and F82H mod, L. Schäfer 283–287 (2000) 707
- Recovery and recrystallization behavior of vanadium at various controlled nitrogen and oxygen levels, T. Nagasaka, H. Takahashi, T. Muroga, T. Tanabe and H. Matsui 283–287 (2000) 816
- Effects of thermal aging on the mechanical behavior of F82H weldments, A. Alamo, A. Castaing, A. Fontes and P. Wident 283–287 (2000) 1192
- Permeation behavior of deuterium implanted in electro- and sputter-

- deposited copper coatings on aluminum alloy substrates, M. Alam and M.Y. Inal 295 (2001) 27
- On the mechanism for dose rate dependence of stationary luminescence of F and F^+ centres excited by electron beam in α - Al_2O_3 , V.I. Meshakin and T. Tanabe 297 (2001) 149
- Neutron irradiation of sapphire for compressive strengthening. I. Processing conditions and compressive strength, T.M. Regan, D.C. Harris, R.M. Stroud and J.R. White 300 (2002) 39
- Neutron irradiation of sapphire for compressive strengthening. II. Physical properties changes, T.M. Regan, D.C. Harris, D.W. Blodgett, K.C. Baldwin, J.A. Miragliotta, M.E. Thomas, M.J. Linevsky, J.W. Giles, T.A. Kennedy, M. Fatemi, D.R. Black, K.P.D. Lagerlöf 300 (2002) 47
- The effect of coatings on deuterium retention and permeation in aluminum 6061-T6 APT tritium production tubes, K.L. Hertz, R.A. Causey and D.F. Cowgill 300 (2002) 255
- Amorphization and Amorphous Materials**
- Microstructure and mechanical properties of neutron irradiated TiNi shape memory alloy, Y. Matsukawa, T. Suda, S. Ohnuki and C. Namba 271&272 (1999) 106
- Electron irradiation effects on Ti–Ni shape memory alloys, A. Okada, K. Hamada, T. Matsumoto, I. Ishida and Y. Abe 271&272 (1999) 189
- Neutron irradiation induced amorphization of silicon carbide, L.L. Snead and J.C. Hay 273 (1999) 213
- Dissolution of lanthanide aluminosilicate oxynitride glasses, L. Bois, N. Barré, S. Guillopé, M.J. Guittet, M. Gautier-Soyer, J.P. Duraud, P. Trocellier, P. Verdier and Y. Laurent 277 (2000) 57
- Ion beam-induced amorphisation of freudenbergite, K.L. Smith, M.G. Blackford, G.R. Lumpkin and N.J. Zaluzec 277 (2000) 159
- The effect of amorphization on the Cs ion exchange and retention capacity of zeolite-NaY, B.X. Gu, L.M. Wang, R.C. Ewing 278 (2000) 64
- Reaction sintered glass: a durable matrix for spinel-forming nuclear waste compositions, W.L. Gong, W. Lutze and R.C. Ewing 278 (2000) 73
- XAS and XRD study of annealed ^{238}Pu - and ^{239}Pu -substituted zircons ($\text{Zr}_{0.92}\text{Pu}_{0.08}\text{SiO}_4$), B.D. Begg, N.J. Hess, W.J. Weber, S.D. Conradson, M.J. Schweiger and R.C. Ewing 278 (2000) 212
- $\text{KNa}_3(\text{UO}_2)_2(\text{Si}_4\text{O}_{10})_2(\text{H}_2\text{O})_4$, a new compound formed during vapor hydration of an actinide-bearing borosilicate waste glass, P.C. Burns, R.A. Olson, R.J. Finch, J.M. Hanchar and Y. Thibault 278 (2000) 290
- Alteration kinetics of a simplified nuclear glass in an aqueous medium: effects of solution chemistry and of protective gel properties on diminishing the alteration rate, C. Jégou, S. Gin and F. Larché 280 (2000) 216
- Simulated alteration tests on non-radioactive SON 68 nuclear glass in the presence of corrosion products and environmental materials, P. Jollivet, Y. Minet, M. Nicolas and E. Vernaz 281 (2000) 231
- Basaltic glass: alteration mechanisms and analogy with nuclear waste glasses, I. Techer, T. Advocat, J. Lancelot and J.-M. Liotard 282 (2000) 40
- An interlaboratory study of a standard glass for acceptance testing of low-activity waste glass, W.L. Ebert and S.F. Wolf 282 (2000) 112
- Microstructures in Ti–Al intermetallic compounds irradiated at 673 K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer and A. Hishinuma 283–287 (2000) 273
- Significance of sample thickness and surface segregation on the electrical conductivity of Wesgo AL995 alumina under ITER environments, M.M.R. Howlader, C. Kinoshita, K. Shiiyama, M. Kutsuwada and T. Higuchi 283–287 (2000) 885
- In-beam dielectric properties of alumina at low frequencies, R. Vila and E.R. Hodgson 283–287 (2000) 903
- Current–voltage characteristic of alumina and aluminum nitride with or without electron irradiation, K. Shiiyama, M.M.R. Howlader, Y. Izumi, M. Kutsuwada, S. Matsumura and C. Kinoshita 283–287 (2000) 912
- Neutron irradiation damage in aluminum oxide and nitride ceramics up to a fluence of 4.2×10^{26} n/m², T. Yano, K. Ichikawa, M. Akiyoshi and Y. Tachi 283–287 (2000) 947
- Scale structure of aluminised MANET steel after HIP treatment, H. Glasbrenner, K. Stein-Fechner and J. Konys 283–287 (2000) 1302
- Compatibility of AlN with liquid lithium, T. Terai, A. Suzuki, T. Yoneoka and T. Mitsuyama 283–287 (2000) 1322
- Heavy-ion irradiation effects on structures and acid dissolution of pyrochlores, B.D. Begg, N.J. Hess, W.J. Weber, R. Devanathan, J.P.

- Icenhower, S. Thevuthasan and B.P. McGrail 288 (2001) 208
- Alpha-decay damage and aqueous durability of actinide host phases in natural systems, G.R. Lumpkin 289 (2001) 136
- Heavy ion irradiation studies of columbite, brannerite, and pyrochlore structure types, G.R. Lumpkin, K.L. Smith and M.G. Blackford 289 (2001) 177
- Surface tension enhancement of TRIM sputtering yields for liquid metal targets, A. Grossman, R.P. Doerner and S. Luckhardt 290–293 (2001) 80
- Reactivity of lithium-containing amorphous carbon (a-C) films, M. Töwe, P. Reinke and P. Oelhafen 290–293 (2001) 153
- Wall conditioning by microwave generated plasmas in a toroidal magnetic field, J. Ihde, H.B. Störk, J. Winter, M. Rubel, H.G. Esser and H. Toyoda 290–293 (2001) 1180
- Vitrification of gamma irradiated $^{60}\text{Co}^{2+}$ zeolites, S. Bulbulian and P. Bosch 295 (2001) 64
- SON 68 nuclear glass alteration kinetics between pH 7 and pH 11.5, S. Gin and J.P. Mestre 295 (2001) 83
- Molecular dynamics modeling of irradiation damage in pure and uranium-doped zircon, J.-P. Crocombette and D. Ghaleb 295 (2001) 167
- Vitrification of liquid waste from nuclear power plants, J. Sheng, K. Choi and M.-J. Song 297 (2001) 7
- 90-19/U HLW-glass leaching mechanism in underground water, J. Sheng and S. Luo 297 (2001) 57
- Radiation damage and nanocrystal formation in uranium–niobium titanates, J. Lian, S.X. Wang, L.M. Wang and R.C. Ewing 297 (2001) 89
- EXAFS/XANES studies of plutonium-loaded sodalite/glass waste forms, M.K. Richmann, D.T. Reed, A.J. Kropf, S.B. Aase and M.A. Lewis 297 (2001) 303
- Temperature effects on the radiation stability and ion exchange capacity of smectites, B.X. Gu, L.M. Wang, L.D. Minc and R.C. Ewing 297 (2001) 345
- Determination of the defect creation mechanism in the mono-silicated fluorapatite. Disorder modeling under repository conditions, S. Soulet, J. Carpena, J. Chaumont, J.-C. Krupa and M.-O. Ruault 299 (2001) 227
- Amorphization and recrystallization of the ABO_3 oxides, A. Meldrum, L.A. Boatner, W.J. Weber and R.C. Ewing 300 (2002) 242
- Analytical Instruments and Methods** (*not listed elsewhere*)
- Radiation-induced amorphization and recrystallization of α -SiC single crystal, K. Kawatsura, N. Shimatani, T. Igarashi, T. Inoue, N. Terazawa, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 11
- Influence of post-irradiation thermal annealing on the mechanical properties of ion irradiated layers in 316L stainless steel, C. Robertson, L. Boulanger and S. Poissonnet 271&272 (1999) 102
- Voids in fast-neutron-irradiated Cu, Ni and Cu–Ni concentrated alloys studied by TEM and positron annihilation methods, H. Fukushima, K. Ochiai and Y. Shimomura 271&272 (1999) 220
- Amplitude dependent damping study in austenitic stainless steels 316H and 304H. Its relation with the microstructure, G.I. Zelada-Lambri, O.A. Lambri and G.H. Rubiolo 273 (1999) 248
- Determination of the solidus temperatures of Zircaloy-4/oxygen alloys, P.J. Hayward and I.M. George 273 (1999) 294
- Proton irradiation effects in Zr–1.0 Nb–1.0 Sn–0.1 Fe probed by positron annihilation, P. Mukherjee, P.M.G. Nambissan, P. Sen, P. Barat and S.K. Bandyopadhyay 273 (1999) 338
- Annealing behaviour of reactor pressure-vessel steels studied by positron-annihilation spectroscopy, Mössbauer spectroscopy and transmission electron microscopy, V. Slugeň, D. Segers, P.M.A. de Bakker, E. De Grave, V. Magula, T. Van Hoecke and B. Van Waeyenberge 274 (1999) 273
- Reexamination of the fundamental interactions of water with uranium, W.L. Manner, J.A. Lloyd and M.T. Paffett 275 (1999) 37
- Internal friction study of hydrogen behaviour in low activated martensitic F82H steel, Y. Jagodzinski, A. Tarasenko, S. Smuk, S. Tähtinen and H. Hänninen 275 (1999) 47
- Effect of Ti solute on the recovery of cold-rolled V–Ti alloys, T. Leguey, A. Muñoz and R. Pareja 275 (1999) 138
- Fracture strength of hydride precipitates in Zr–2.5Nb alloys, S.-Q. Shi and M.P. Puls 275 (1999) 312
- Variability of radiation-induced segregation in iron–chromium–nickel alloys, T.R. Allen, E.A. Kenik and G.S. Was 278 (2000) 149
- Retention and release of deuterium implanted in copper coatings on Al-6061, M.Y. Inal, M. Alam, K. Kurz, D.F. Cowgill and R.A. Causey 278 (2000) 164
- Microchemistry characterization by Auger electron spectroscopy of a cold-worked AISI-304L stainless steel, M.

- Hernández-Mayoral, G. de Diego and M. García-Mazarío 279 (2000) 189
- Recovery characteristics of neutron-irradiated V–Ti alloys, T. Leguey and R. Pareja 279 (2000) 216
- Recovery of electron irradiated V–Ga alloys, T. Leguey, M. Monge, R. Pareja and E.R. Hodgson 279 (2000) 364
- XPS study of the process of oxygen getting by thin films of PACVD boron, M.M. Ennaceur and B. Terreaux 280 (2000) 33
- Neutron diffraction study of U5.4 wt% Mo alloy, J.S. Lee, C.H. Lee, K.H. Kim and V. Em 280 (2000) 116
- Synthesis of atom probe experiments on irradiation-induced solute segregation in French ferritic pressure vessel steels, P. Auger, P. Pareige, S. Welzel and J.C. Van Duysen 280 (2000) 331
- Li₄SiO₄ pebbles reduction in He + 0.1% H₂ purge gas and effects on tritium release properties, C. Alvani, P. Carconi and S. Casadio 280 (2000) 372
- Quantitative analysis of deuterium in a-C:D layers, a Round Robin experiment, R. Behrisch, M. Mayer, W. Jacob, W. Assmann, G. Dollinger, A. Bergmaier, U. Kreissig, M. Friedrich, G.Y. Sun, D. Hildebrandt, M. Akbi, W. Schneider, D. Schleußner, W. Knapp and C. Edelmann 281 (2000) 42
- Ultra-high vacuum investigation of the surface chemistry of zirconium, Y.C. Kang, M.M. Milovancev, D.A. Clauss, M.A. Lange and R.D. Ramsier 281 (2000) 57
- Performance of a Li₂TiO₃ pebble-bed in the CRITIC-III irradiation, R.A. Verrall, J.M. Miller and P. Gierszewski 281 (2000) 71
- Multiple voltage electron probe microanalysis of fission gas bubbles in irradiated nuclear fuel, M. Verwerft 282 (2000) 97
- Selective excitation of odd gadolinium isotopes using two-colour photoionisation schemes, P.V. Kiran Kumar, M.V. Suryanarayana and S. Gangadharan 282 (2000) 255
- Differences in the microstructure of the F82H ferritic/martensitic steel after proton and neutron irradiation, R. Schäublin and M. Victoria 283–287 (2000) 339
- Molecular dynamics simulation of defect production in irradiated β -SiC, L. Malerba, J.M. Perlado, A. Sánchez-Rubio, I. Pastor, L. Colombo and T. Diaz de la Rubia 283–287 (2000) 794
- Molecular dynamics simulation of irradiation-induced amorphization of cubic silicon carbide, L. Malerba and J.M. Perlado 289 (2001) 57
- Molecular dynamics refinement of topologically generated reconstructions of simulated irradiation cascades in silica networks, X. Yuan, V. Pulim and L.W. Hobbs 289 (2001) 71
- Structural stability of irradiated ceramics, P.M. Ossi 289 (2001) 80
- Effects of Xe ion irradiation and subsequent annealing on the structural properties of magnesium-aluminate spinel, I.V. Afanasyev-Charkin, R.M. Dickerson, D. Wayne Cooke, B.L. Bennett, V.T. Gritsyna and K.E. Sickafus 289 (2001) 110
- Effects of fission product incorporation on the microstructure of cubic zirconia, L.M. Wang, S.X. Wang, S. Zhu and R.C. Ewing 289 (2001) 122
- Heavy-ion irradiation effects in Gd₂(Ti_{2-x}Zr_x)O₇ pyrochlores, B.D. Begg, N.J. Hess, D.E. McCready, S. Thevuthasan and W.J. Weber 289 (2001) 188
- Accumulation and thermal recovery of disorder in Au²⁺-irradiated SrTiO₃, S. Thevuthasan, W. Jiang, V. Shutthanandan and W.J. Weber 289 (2001) 204
- A 2D fluid model of the scrape-off layer (SOL) using adaptive unstructured finite volumes, F. Subba and R. Zanino 290–293 (2001) 743
- Observation of second-phase particles in bulk zirconium alloys using synchrotron radiation, K.T. Erwin, O. Delaire, A.T. Motta, Y.S. Chu, D.C. Mancini and R.C. Birtcher 294 (2001) 299
- Study of surface modification of uranium and UFe₂ by various surface analysis techniques, O. Bonino, O. Dugne, C. Merlet, E. Gat, Ph. Holliger and M. Lahaye 294 (2001) 305
- Annealing of hardening in copper after neutron irradiation hardening at 77 K, H.C. González and M.T. Miralles 295 (2001) 157
- Effects of phosphorus on defects accumulation and annealing in electron-irradiated Fe–Ni austenitic alloys, V.L. Arbutov, A.P. Druzhkov and S.E. Danilov 295 (2001) 273
- Auger electron spectroscopy study of alloy 718 and 304L stainless steel irradiated with 800 MeV protons, M. Garcia-Mazarío, M. Hernández-Mayoral and A.M. Lancha 296 (2001) 192
- EXAFS/XANES studies of plutonium-loaded sodalite/glass waste forms, M.K. Richmann, D.T. Reed, A.J. Kropf, S.B. Aase and M.A. Lewis 297 (2001) 303
- Analytical method for thermal stress analysis of plasma facing materials, J.H. You and H. Bolt 299 (2001) 9

Beryllium, Beryllium Alloys and Compounds

- Strengthening, loss of strength and embrittlement of beryllium under high temperature neutron irradiation, G.A. Sernyaev, A.V. Kozlov and V.R. Barabash 271&272 (1999) 123
- Be–Cu joints based on amorphous alloy brazing for divertor and first wall application, B. Kalin, V. Fedotov, O. Sevryukov, A. Plyushev, I. Mazul, A. Gervash and R. Giniatulin 271&272 (1999) 410
- The method design, manufacture and tests of the porous beryllium mock-ups for the ITER breeding blanket, D.A. Davydov, M.I. Solonin, Yu.E. Markuchkin, V.A. Gorokhov and V.V. Gorlevsky 271&272 (1999) 435
- ITER and beyond 271&272 (1999) 569
- Hydrogen isotope retention in beryllium for tokamak plasma-facing applications, R.A. Anderl, R.A. Causey, J.W. Davis, R.P. Doerner, G. Federici, A.A. Haasz, G.R. Longhurst, W.R. Wampler and K.L. Wilson 273 (1999) 1
- Depth distribution of deuterium atoms and molecules in beryllium oxide implanted with deuterium ions, V.Kh. Alimov and V.N. Chernikov 273 (1999) 277
- Influence of isothermal and cyclic annealing on structure and swelling of neutron-irradiated beryllium, D.V. Andreev, V.N. Bepalov, A.Yu. Biryukov and E.A. Krasikov 274 (1999) 329
- Dynamic behaviour of the systems Be–C, Be–W and C–W, W. Eckstein 281 (2000) 195
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- The status of beryllium technology for fusion, F. Scaffidi-Argentina, G.R. Longhurst, V. Shestakov and H. Kawamura 283–287 (2000) 43
- Neutron irradiation effects on plasma facing materials, V. Barabash, G. Federici, M. Rödiger, L.L. Snead and C.H. Wu 283–287 (2000) 138
- Codeposition of deuterium ions with beryllium oxide at elevated temperatures, A.V. Markin, V.P. Dubkov, A.E. Gorodetsky, M.A. Negodaev, N.V. Rozhanskii, F. Scaffidi-Argentina, H. Werle, C.H. Wu, R.Kh. Zalavutdinov and A.P. Zakharov 283–287 (2000) 1094
- Sputtering studies of beryllium with helium and deuterium using molecular dynamics approach, S. Ueda, T. Oh-saka and S. Kuwajima 283–287 (2000) 1100
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Armor and heat sink materials joining technologies development for ITER plasma facing components, V. Barabash, M. Akiba, A. Cardella, I. Mazul, B.C. Odegard Jr., L. Plöechl, R. Tivey and G. Vieider 283–287 (2000) 1248
- Multiplier, moderator, and reflector materials for advanced lithium–vanadium fusion blankets, Y. Gohar and D.L. Smith 283–287 (2000) 1370
- Chemical reactivity of SiC fibre-reinforced SiC with beryllium and lithium ceramic breeder materials, H. Kleykamp 283–287 (2000) 1385
- On the mechanisms associated with the chemical reactivity of Be in steam, D.A. Petti, G.R. Smolik and R.A. Anderl 283–287 (2000) 1390
- Effects of helium production and radiation damage on tritium release behavior of neutron-irradiated beryllium pebbles, E. Ishitsuka, H. Kawamura, T. Terai and S. Tanaka 283–287 (2000) 1401
- Development of materials and fabrication of porous and pebble bed beryllium multipliers, D.A. Davydov, M.I. Solonin, Yu.E. Markushkin, V.A. Gorokhov, V.V. Gorlevsky and G.N. Nikolaev 283–287 (2000) 1409
- Materials and fabrication technology of modules intended for irradiation tests of blanket tritium-breeding zones in Russian fusion reactor projects, V. Kapychev, D. Davydov, V. Gorokhov, A. Ioltukhovskiy, Yu. Kazennov, V. Tebus, V. Frolov, A. Shikov, N. Shishkov, V. Kovalenko, N. Shishkin and Yu. Strebkov 283–287 (2000) 1429
- Steam chemical reactivity of Be pebbles and Be powder, R.A. Anderl, F. Scaffidi-Argentina, D. Davydov, R.J. Pawelko and G.R. Smolik 283–287 (2000) 1463
- Present status and future prospect of the Russian program for fusion low-activation materials, M.I. Solonin, V.M. Chernov, V.A. Gorokhov, A.G. Ioltukhovskiy, A.K. Shikov and A.I. Blokhin 283–287 (2000) 1468
- XPS characterization of beryllium carbide thin films formed via plasma deposition, Y. Xie, N.C. Morosoff and W.J. James 289 (2001) 48
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Formation of mixed layers and compounds on beryllium due to C⁺ and

- CO⁺ bombardment, P. Goldstrass and Ch. Linsmeier 290–293 (2001) 71
- Surface reactions on beryllium after carbon vapour deposition and thermal treatment, P. Goldstrass, K.U. Klages and Ch. Linsmeier 290–293 (2001) 76
- Tritium retention in neutron-irradiated low-Z materials for use as plasma facing materials, F. Scaffidi-Argentina, C. Sand and C.H. Wu 290–293 (2001) 211
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Some problems arising due to plasma–surface interaction for operation of the in-vessel mirrors in a fusion reactor, V.S. Voitsenya, A.F. Bardamid, V.N. Bondarenko, W. Jacob, V.G. Konovalov, S. Masuzaki, O. Motojima, D.V. Orlinskij, V.L. Poperenko, I.V. Ryzhkov, A. Sagara, A.F. Shtan, S.I. Solodovchenko and M.V. Vinnichenko 290–293 (2001) 336
- Selected thermal properties of beryllium and phase equilibria in beryllium systems relevant for nuclear fusion reactor blankets, H. Kleykamp 294 (2001) 88
- 3D Micromechanical modeling of packed beds, Z. Lu, M. Abdou and A. Ying 299 (2001) 101
- Breeding Materials for Fusion**
- Properties of lithium metatitanate pebbles produced by a wet process, J.G. van der Laan and R.P. Muis 271&272 (1999) 401
- The method design, manufacture and tests of the porous beryllium mock-ups for the ITER breeding blanket, D.A. Davydov, M.I. Solonin, Yu.E. Markuchkin, V.A. Gorokhov and V.V. Gorlevsky 271&272 (1999) 435
- The role of materials R&D in the development of commercial fusion power plants, J.W. Davis 271&272 (1999) 532
- Summary of discussion session: Design and materials, A. Kohyama, E.E. Bloom and K. Ehrlich 271&272 (1999) 538
- Modeling and analysis of time-dependent tritium transport in lithium oxide, A. Badawi, A.R. Raffray and M.A. Abdou 273 (1999) 79
- Chemical interactions in the EXOTIC-7 experiment, H. Kleykamp 273 (1999) 171
- Ab initio molecular orbital calculations on chemical nature of hydrogen on surface of lithium silicate, T. Nakazawa, K. Yokoyama, V. Grismanovs and Y. Katano 279 (2000) 201
- high flux fission test reactors and a fusion power demonstration reactor, U. Fischer, S. Herring, A. Hogenbirk, D. Leichtle, Y. Nagao, B.J. Pijlgroms and A. Ying 280 (2000) 151
- Lithium and tritium diffusion in lithium oxide (Li₂O), a molecular dynamics simulation, H. Pfeiffer, J. Sánchez-Sánchez and L.J. Álvarez 280 (2000) 295
- Li₄SiO₄ pebbles reduction in He + 0.1% H₂ purge gas and effects on tritium release properties, C. Alvani, P. Carconi and S. Casadio 280 (2000) 372
- Performance of a Li₂TiO₃ pebble-bed in the CRITIC-III irradiation, R.A. Verrall, J.M. Miller and P. Gierszewski 281 (2000) 71
- Production behavior of irradiation defects in lithium silicates and silica under ion beam irradiation, K. Moritani, S. Tanaka and H. Moriyama 281 (2000) 106
- The status of beryllium technology for fusion, F. Scaffidi-Argentina, G.R. Longhurst, V. Shestakov and H. Kawamura 283–287 (2000) 43
- Critical issues and current status of vanadium alloys for fusion energy applications, R.J. Kurtz, K. Abe, V.M. Chernov, V.A. Kazakov, G.E. Lucas, H. Matsui, T. Muroga, G.R. Odette, D.L. Smith and S.J. Zinkle 283–287 (2000) 70
- International strategy for fusion materials development, K. Ehrlich, E.E. Bloom and T. Kondo 283–287 (2000) 79
- High-performance SiC/SiC composites by improved PIP processing with new precursor polymers, A. Kohyama, M. Kotani, Y. Katoh, T. Nakayasu, M. Sato, T. Yamamura and K. Okamura 283–287 (2000) 565
- Thermomechanical characteristics of the low activation materials chromium and Cr-5Fe-1Y₂O₃ alloy, H. Stamm, U. Holzwarth, F. Lakestani, R. Valiev, V. Provenzano and A. Volcan 283–287 (2000) 597
- Uses of zirconium alloys in fusion applications, C.B.A. Forty and P.J. Karditsas 283–287 (2000) 607
- Design and fabrication methods of FW/blanket, divertor and vacuum vessel for ITER, K. Ioki, V. Barabash, A. Cardella, F. Elio, C. Ibbott, G. Janeschitz, G. Johnson, G. Kalinin, N. Miki, M. Onozuka, G. Sannazzaro, R. Tivey, Y. Utin and M. Yamada 283–287 (2000) 957
- Diffusion welding parameters and mechanical properties of martensitic chromium steels, K. Schleisiek, T. Lechler, L. Schäfer and P. Weimar 283–287 (2000) 1196
- Microstructure and mechanical properties of low-activation glass-ceramic

- joining and coating for SiC/SiC composites, Y. Katoh, M. Kotani, A. Kohyama, M. Montorsi, M. Salvo and M. Ferraris 283–287 (2000) 1262
- Magnetic field effect on deposition of corrosion products in liquid Pb–17Li, F. Barbier 283–287 (2000) 1267
- The hydrogen permeation behaviour of aluminised coated martensitic steels under gaseous hydrogen, liquid Pb–17Li/hydrogen and cyclic tensile load, T. Sample, A. Perujo, H. Kolbe and B. Mancinelli 283–287 (2000) 1272
- Liquid metal embrittlement (LME) susceptibility of the 8–9% Cr martensitic steels F82H-mod., OPTIFER IVb and their simulated welded structures in liquid Pb–17Li, T. Sample and H. Kolbe 283–287 (2000) 1336
- In-pile tritium-permeation measurements on T91 tubes with double walls or a Fe–Al/Al₂O₃ coating, R. Conrad, K. Bakker, C. Chabrol, M.A. Fütterer, J.G. van der Laan, E. Rigal and M.P. Stijkel 283–287 (2000) 1351
- Multiplier, moderator, and reflector materials for advanced lithium–vanadium fusion blankets, Y. Gohar and D.L. Smith 283–287 (2000) 1370
- On the use of tin–lithium alloys as breeder material for blankets of fusion power plants, M.A. Fütterer, G. Aiello, F. Barbier, L. Giancarli, Y. Poitevin, P. Sardain, J. Szczepanski, A. Li Puma, G. Ruvutuso and G. Vella 283–287 (2000) 1375
- Chemical reactivity of SiC fibre-reinforced SiC with beryllium and lithium ceramic breeder materials, H. Kleykamp 283–287 (2000) 1385
- Post-irradiation examinations of Li₄SiO₄ pebbles irradiated in the EXOTIC-7 experiment, G. Piazza, F. Scaffidi-Argentina and H. Werle 283–287 (2000) 1396
- Effects of helium production and radiation damage on tritium release behavior of neutron-irradiated beryllium pebbles, E. Ishitsuka, H. Kawamura, T. Terai and S. Tanaka 283–287 (2000) 1401
- Development of materials and fabrication of porous and pebble bed beryllium multipliers, D.A. Davydov, M.I. Solonin, Yu.E. Markushkin, V.A. Gorokhov, V.V. Gorlevsky and G.N. Nikolaev 283–287 (2000) 1409
- Improvement of the model for surface process of tritium release from lithium oxide, D. Yamaki, A. Iwamoto and S. Jitsukawa 283–287 (2000) 1414
- Compositional optimisation of silicon carbide for various fusion blanket designs, C.B.A. Forty 283–287 (2000) 1443
- Development of SiC/SiC composites by PIP in combination with RS, M. Kotani, A. Kohyama and Y. Katoh 289 (2001) 37
- Lithium titanate pebbles reprocessing by wet chemistry, C. Alvani, P.L. Carconi, S. Casadio, V. Contini, A. Dibartolomeo, F. Pierdominici, A. Deptula, S. Lagos and C.A. Nannetti 289 (2001) 303
- Permeation behavior of deuterium implanted in electro- and sputter-deposited copper coatings on aluminum alloy substrates, M. Alam and M.Y. Inal 295 (2001) 27
- The effects of moisture on LiD single crystals studied by temperature-programmed decomposition, L.N. Dinh, C.M. Cecala, J.H. Leckey and M. Balooch 295 (2001) 193
- Enthalpy, heat capacity and enthalpy of transformation of Li₂TiO₃, H. Kleykamp 295 (2001) 244
- Surface inventory of tritium on Li₂TiO₃, T. Kawagoe, M. Nishikawa, A. Baba and S. Beloglazov 297 (2001) 27
- An ab initio study on formation and desorption reactions of H₂O molecules from surface hydroxyl groups in silicates, T. Nakazawa, K. Yokoyama, V. Grismanovs and Y. Katano 297 (2001) 69
- Combustion synthesis of γ -lithium aluminate by using various fuels, F. Li, K. Hu, J. Li, D. Zhang and G. Chen 300 (2002) 82
- Tritium recovery from nanostructured LiAlO₂, L.M. Carrera, J. Jiménez-Becerril, R. Basurto, J. Arenas, B.E. López M, S. Bulbulian and P. Bosch 299 (2001) 242
- Carbon**
- Structural change in graphite under electron irradiation at low temperatures, M. Takeuchi, S. Muto, T. Tanabe, H. Kurata and K. Hojou 271&272 (1999) 280
- TEM analyses of surface ridge network in an ion-irradiated graphite thin film, S. Muto, T. Tanabe, M. Takeuchi, Y. Kobayashi, S. Furuno and K. Hojou 271&272 (1999) 285
- Dependence of deuterium line-shape on the insertion depth of BN and C limiters in the TPE-IRM20 reversed field pinch plasma, S. Sekine, Y. Hirano, T. Shimada, Y. Yagi and H. Sakakita 271&272 (1999) 415
- Deuterium retention in codeposited layers and carbon materials exposed to high flux D-plasma, I.I. Arkhipov, A.E. Gorodetsky, R.Kh. Zalavutdinov, A.P. Zakharov, T.A. Burtseva, I.V. Mazul, B.I. Khripunov, V.V. Shapkin and V.B. Petrov 271&272 (1999) 418
- Intrinsic hydrogen transport constants in the CFC matrix and fibres derived

- from isovolumetric desorption experiments, L.A. Sedano, A. Perujo and C.H. Wu 273 (1999) 285
- Nitrogen implantation into carbon: retention, release and target-erosion processes, S. Grigull, R. Behrisch and S. Parascandola 275 (1999) 158
- Neutron irradiation effects on carbon based materials at 350 °C and 800 °C, J.P. Bonal and C.H. Wu 277 (2000) 351
- Tritium profiles in tiles from the first wall of fusion machines and techniques for their detritiation, R.-D. Penzhorn, N. Bekris, W. Hellriegel, H.-E. Noppel, W. Nägele, H. Ziegler, R. Rolli, H. Werle, A. Haigh and A. Peacock 279 (2000) 139
- Residual carbon impurities in Zr–2.5Nb and their effect on deuterium pickup, R.A. Ploc 279 (2000) 344
- Comparison of the chemical erosion of Si, C and SiC under deuterium ion bombardment, M. Balden and J. Roth 279 (2000) 351
- New weight-loss measurements of the chemical erosion yields of carbon materials under hydrogen ion bombardment, M. Balden and J. Roth 280 (2000) 39
- Quantitative analysis of deuterium in a-C:D layers, a Round Robin experiment, R. Behrisch, M. Mayer, W. Jacob, W. Assmann, G. Dollinger, A. Bergmaier, U. Kreissig, M. Friedrich, G.Y. Sun, D. Hildebrandt, M. Akbi, W. Schneider, D. Schleußner, W. Knapp and C. Edelmann 281 (2000) 42
- Multi-layer coating of silicon carbide and pyrolytic carbon on UO₂ pellets by a combustion reaction, B.G. Kim, Y. Choi, J.W. Lee, Y.W. Lee, D.S. Sohn and G.M. Kim 281 (2000) 163
- Dynamic behaviour of the systems Be–C, Be–W and C–W, W. Eckstein 281 (2000) 195
- Mechanism of chemical sputtering of graphite under high flux deuterium bombardment, Y. Ueda, T. Sugai, Y. Ohtsuka and M. Nishikawa 282 (2000) 216
- Temperature effect of electron-irradiation-induced structural modification in graphite, S. Muto and T. Tanabe 283–287 (2000) 917
- Positron lifetime calculation for defects and defect clusters in graphite, T. Onitsuka, H. Ohkubo, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 922
- Hydrogen absorption process into graphite and carbon materials, H. Atsumi and M. Iseki 283–287 (2000) 1053
- Removal of deuterium from co-deposited carbon–silicon layers, M. Balden and M. Mayer 283–287 (2000) 1057
- Tungsten filament mock-ups for gas box liner, C. Cazzola, J. Boscardy and R. Matera 283–287 (2000) 1073
- Graphite–tungsten twin limiters in studies of material mixing processes on high heat flux components, M. Rubel, T. Tanabe, V. Philipps, B. Emmoth, A. Kirschner, J. von Seggern and P. Wienhold 283–287 (2000) 1089
- Erosion mechanisms and products in graphite targets under simulated disruption conditions, F. Scaffidi-Argentina, V. Safronov, I. Arkhipov, N. Arkhipov, V. Bakhtin, V. Barsuk, S. Kurkin, E. Mironova, D. Toporkov, S. Vasenin, H. Werle, H. Würz and A. Zhitlukhin 283–287 (2000) 1111
- Changes of composition and microstructure of joint interface of tungsten coated carbon by high heat flux, K. Tokunaga, T. Matsubara, Y. Miyamoto, Y. Takao, N. Yoshida, N. Noda, Y. Kubota, T. Sogabe, T. Kato and L. Plöchl 283–287 (2000) 1121
- Erosion characteristics of neutron-irradiated carbon-based materials under simulated disruption heat loads, K. Sato, E. Ishitsuka, M. Uda, H. Kawamura, S. Suzuki, M. Taniguchi, K. Ezato and M. Akiba 283–287 (2000) 1157
- Neutron-irradiation effects on high heat flux components – examination of plasma-facing materials and their joints, M. Rödíg, R. Conrad, H. Derz, R. Duwe, J. Linke, A. Lodato, M. Merola, G. Pott, G. Vieider and B. Wiechers 283–287 (2000) 1161
- Simulation study of carbon and tungsten deposition on W/C twin test limiter in TEXTOR-94, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, B. Schweer, A. Huber, M. Rubel, J. von Seggern and N. Noda 283–287 (2000) 1182
- O₂ erosion of graphite tile substrates, J.W. Davis, C.G. Hamilton and A.A. Haasz 288 (2001) 148
- Evaluation of chemical erosion data for carbon materials at high ion fluxes using Bayesian probability theory, V. Dose, R. Preuss and J. Roth 288 (2001) 153
- Tritium depth profiles in graphite and carbon fibre composite material exposed to tokamak plasmas, R.-D. Penzhorn, N. Bekris, U. Berndt, J.P. Coad, H. Ziegler and W. Nägele 288 (2001) 170
- Tensile strength and fracture surface characterization of Hi-Nicalon™ SiC fibers, G.E. Youngblood, C. Lewinsohn, R.H. Jones and A. Kohyama 289 (2001) 1
- Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers, T. Hinoki,

- W. Yang, T. Nozawa, T. Shibayama, Y. Katoh and A. Kohyama 289 (2001) 23
- Kinetics of uranium release from Synroc phases, Y. Zhang, K.P. Hart, W.L. Bourcier, R.A. Day, M. Colella, B. Thomas, Z. Aly and A. Jostsons 289 (2001) 254
- Absorption of molten fluoride salts in glassy carbon, pyrographite and Hastelloy B, J. Vacik, H. Naramoto, J. Cervena, V. Hnatowicz, I. Peka and D. Fink 289 (2001) 308
- Review of initial experimental results of the PSI studies in the large helical device, S. Masuzaki, K. Akaiishi, H. Funaba, M. Goto, K. Ida, S. Inagaki, N. Inoue, K. Kawahata, A. Komori, Y. Kubota, T. Morisaki, S. Morita, Y. Nakamura, K. Narihara, K. Nishimura, N. Noda, N. Ohyabu, B.J. Peterson, A. Sagara, R. Sakamoto, K. Sato, M. Shoji, H. Suzuki, Y. Takeiri, K. Tanaka, T. Tokuzawa, T. Watanabe, K. Tsuzuki, T. Hino, Y. Matsumoto, S. Kado, O. Motojima and LHD Experimental Group 290–293 (2001) 12
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldsträß 290–293 (2001) 25
- Solid-state reaction between tungsten and hydrogen-containing carbon film at elevated temperature, K. Ashida, K. Fujino, T. Okabe, M. Matsuyama and K. Watanabe 290–293 (2001) 42
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Formation of mixed layers and compounds on beryllium due to C⁺ and CO⁺ bombardment, P. Goldstrass and Ch. Linsmeier 290–293 (2001) 71
- Surface reactions on beryllium after carbon vapour deposition and thermal treatment, P. Goldstrass, K.U. Klages and Ch. Linsmeier 290–293 (2001) 76
- Mixed-material coating formation on tungsten surfaces during plasma exposure in TEXTOR-94, D. Hildebrandt, P. Wienhold and W. Schneider 290–293 (2001) 89
- Synergistic effects by simultaneous bombardment of tungsten with hydrogen and carbon, K. Krieger and J. Roth 290–293 (2001) 107
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Simulation study on retention and reflection from tungsten carbide under high fluence of helium ions, T. Ono, T. Kawamura, T. Kenmotsu and Y. Yamamura 290–293 (2001) 140
- Carbon erosion mechanisms in tokamak divertor materials: insight from molecular dynamics simulations, E. Salonen, K. Nordlund, J. Keinonen and C.H. Wu 290–293 (2001) 144
- Influence of diffusion on W sputtering by carbon, K. Schmid, J. Roth and W. Eckstein 290–293 (2001) 148
- Reactivity of lithium-containing amorphous carbon (a-C) films, M. Töwe, P. Reinke and P. Oelhafen 290–293 (2001) 153
- Energy distributions of CD₄ and CD₃ chemically released from graphite by D⁺ and D⁰/Ne⁺ impact, E. Vietzke 290–293 (2001) 158
- Implantation, erosion, and retention of tungsten in carbon, R.A. Zuhr, J. Roth, W. Eckstein, U. von Toussaint and J. Luthin 290–293 (2001) 162
- Chemical erosion of doped graphites for fusion devices, C. García-Rosales and M. Balden 290–293 (2001) 173
- The primary results for the mixed carbon material used for high flux steady-state tokamak operation in China, Q.G. Guo, J.G. Li, G.T. Zhai, L. Liu, J.R. Song, L.F. Zhang, Y.X. He and J.L. Chen 290–293 (2001) 191
- Tritium retention in neutron-irradiated low-Z materials for use as plasma facing materials, F. Scaffidi-Argentina, C. Sand and C.H. Wu 290–293 (2001) 211
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Surface reactions of hydrocarbon radicals: suppression of the re-deposition in fusion experiments via a divertor liner, A. von Keudell, T. Schwarz-Selinger, W. Jacob and A. Stevens 290–293 (2001) 231
- Modelling of erosion and deposition at limiter surfaces and divertor target plates, A. Kirschner, A. Huber, V. Philipps, A. Pospieszczyk, P. Wienhold and J. Winter 290–293 (2001) 238
- Dust characterization and analysis in Tore-Supra, Ph. Chappuis, E. Tsi-trone, M. Mayne, X. Armand, H. Linke, H. Bolt, D. Petti and J.P. Sharpe 290–293 (2001) 245
- Transport of and deposition from hydrocarbon radicals in a flow tube downstream from a CH₄ RF discharge, A.E. Gorodetsky, I.I. Arkhipov, R.Kh. Zalavutdinov, A.P. Zakharov, Yu.N. Tolmachev, S.P. Vnukov and V.L. Bukhovets 290–293 (2001) 271
- Comparison of impurity production, recycling and power deposition on carbon and tungsten limiters in

- TEXTOR-94, A. Huber, V. Philipps, A. Pospieszczyk, A. Kirschner, M. Lehnen, T. Ohgo, K. Ohya, M. Rubel, B. Schweer, J. von Seggern, G. Sergienko, T. Tanabe and M. Wada 290–293 (2001) 276
- Rapid diffusion of lithium into bulk graphite in lithium conditioning, N. Itou, H. Toyoda, K. Morita and H. Sugai 290–293 (2001) 281
- Effects of condensible impurities on the erosion behavior of the plasma-facing materials, N. Ohno, S. Uno, Y. Hirooka and S. Takamura 290–293 (2001) 299
- Simulation calculations of mutual contamination between tungsten and carbon and its impact on plasma surface interactions, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, A. Huber, M. Rubel, G. Sergienko and N. Noda 290–293 (2001) 303
- Spectroscopic investigation on the impurity influxes of carbon and silicon in the ASDEX upgrade experiment, R. Pugno, A. Kallenbach, D. Bolshukhin, R. Dux, J. Gafert, R. Neu, V. Rohde, K. Schmidtman, W. Ullrich, U. Wenzel and ASDEX Upgrade Team 290–293 (2001) 308
- Carbon layers in the divertor of ASDEX Upgrade, V. Rohde, H. Maier, K. Krieger, R. Neu, J. Perchermaier and ASDEX Upgrade Team 290–293 (2001) 317
- Chemical erosion yields and photon efficiency measurements in the JET gas box divertor, M.F. Stamp, S.K. Erents, W. Fundamenski, G.F. Matthews and R.D. Monk 290–293 (2001) 321
- Studies of tungsten erosion at the inner and outer main chamber wall of the ASDEX Upgrade tokamak, A. Tabbasso, H. Maier, J. Roth, K. Krieger and ASDEX Upgrade Team 290–293 (2001) 326
- Net erosion measurements on plasma facing components of Tore Supra, E. Tsitrone, P. Chappuis, Y. Corre, E. Gauthier, A. Grosman and J.Y. Pascal 290–293 (2001) 331
- Erosion and deposition effects on the vessel wall of TEXTOR-94, J. von Seggern, M. Mayer, D. Reiser, M. Rubel and V. Philipps 290–293 (2001) 341
- Reduction of divertor carbon sources in DIII-D, D.G. Whyte, W.P. West, R. Doerner, N.H. Brooks, R.C. Isler, G.L. Jackson, G. Porter, M.R. Wade and C.P.C. Wong 290–293 (2001) 356
- Investigation of carbon transport in the scrape-off layer of TEXTOR-94, P. Wienhold, H.G. Esser, D. Hildebrandt, A. Kirschner, M. Mayer, V. Philipps and M. Rubel 290–293 (2001) 362
- Laboratory study of the transport and condensation of hydrocarbon radicals and its consequences for mitigating the tritium inventory in the ITER-FEAT divertor, I.I. Arkhipov, G. Federici, A.E. Gorodetsky, C. Ibbott, D.A. Komarov, A.N. Makhankov, A.V. Markin, I.V. Mazul, R. Tivey, A.P. Zakharov and R.Kh. Zala-vutdinov 290–293 (2001) 394
- Particle trapping in carbon walls during ICRH heating in Tore Supra, C. Grisolia, J. Hogan, Ph. Ghendrih, T. Loarer, J. Gunn, P. Monier-Garbet, M. Becoulet and Th. Hutter 290–293 (2001) 402
- Comparison of hydrogen and tritium uptake and retention in JET, D.L. Hillis, J. Hogan, J.P. Coad, G. Duxbury, M. Groth, H.Y. Guo, L. Horton, G. Matthews, A. Meigs, P. Morgan, M. Stamp and M. von Hellermann 290–293 (2001) 418
- Role of grain boundaries and carbon deposition in deuterium retention behavior of deuterium plasma exposed tungsten, D.A. Komarov, A.V. Markin, S.Yu. Rybakov and A.P. Zakharov 290–293 (2001) 433
- Tritium detection in plasma facing component by imaging plate technique, K. Miyasaka, T. Tanabe, G. Mank, K.H. Finken, V. Philipps, D.S. Walsh, K. Nishizawa and T. Saze 290–293 (2001) 448
- A study of tritium decontamination of deposits by UV irradiation, Y. Oya, W. Shu, S. O'hira, T. Hayashi, H. Nakamura, T. Sakai, T. Tadokoro, K. Kobayashi, T. Suzuki and M. Nishi 290–293 (2001) 469
- Fuel accumulation in co-deposited layers on plasma facing components, M. Rubel, P. Wienhold and D. Hildebrandt 290–293 (2001) 473
- Tritium decontamination of TFTR carbon tiles employing ultra violet light, W.M. Shu, S. Ohira, C.A. Gentile, Y. Oya, H. Nakamura, T. Hayashi, Y. Iwai, Y. Kawamura, S. Konishi, M.F. Nishi and K.M. Young 290–293 (2001) 482
- Hydrogen isotope depth profiling in carbon samples from the erosion dominated inner vessel walls of JET, C. Stan-Sion, R. Behrisch, J.P. Coad, U. Kreißig, F. Kubo, V. Lazarev, S. Lindig, M. Mayer, E. Nolte, A. Peacock, L. Rohrer and J. Roth 290–293 (2001) 491
- In situ measurement of hydrogen retention in JET carbon tiles, D.D.R. Summers, M.N.A. Beurskens, J.P.

- Coad, G. Counsell, W. Fundamenski, G.F. Matthews and M.F. Stamp 290–293 (2001) 496
- Thermography of target plates with near-infrared optical fibres at Tore Supra, R. Reichle, V. Basiuk, V. Bergeaud, A. Cambe, M. Chantant, E. Delchambre, M. Druetta, E. Gauthier, W. Hess and C. Pocheau 290–293 (2001) 701
- Consistency check of Z_{eff} measurements in ergodic divertor plasmas on Tore Supra, B. Schunke, C. DeMichelis, R. Guirlet, P. Monier-Garbet, M. Mattioli, E. Chareyre and O. Meyer 290–293 (2001) 715
- Modeling of carbon transport in the divertor and SOL of DIII-D during high performance plasma operation, W.P. West, G.D. Porter, T.E. Evans, P. Stangeby, N.H. Brooks, M.E. Fenstermacher, R.C. Isler, T.D. Rognlien, M.R. Wade, D.G. Whyte and N.S. Wolf 290–293 (2001) 783
- The effect of divertor tile material on radiation profiles in LHD, B.J. Peterson, S. Masuzaki, R. Sakamoto, K. Sato, S. Inagaki, A. Sagara, S. Ohdachi, Y. Nakamura, N. Noda, Y. Xu, J.E. Rice, N. Ashikawa, S. Yamamoto, M. Takechi, K. Toi, S. Morita, M. Goto, K. Narihara, N. Inoue, Y. Takeiri, M. Sato, M. Osakabe, K. Tanaka, T. Tokuzawa, S. Sakakibara, M. Shoji, K. Kawahata, O. Kaneko, N. Ohyabu, H. Yamada, A. Komori, K. Yamazaki, S. Sudo and O. Motojima 290–293 (2001) 930
- JET methane screening experiments, J.D. Strachan, K. Erents, W. Fundamenski, M. von Hellermann, L. Horton, K. Lawson, G. McCracken, J. Spence, M. Stamp and K-D. Zastrow 290–293 (2001) 972
- Material erosion and erosion products under plasma heat loads typical for ITER hard disruptions, V. Safronov, N. Arkipov, V. Bakhtin, S. Kurkin, F. Scaffidi-Argentina, D. Toporkov, S. Vasenin, H. Würz and A. Zhitlukhin 290–293 (2001) 1052
- Cloud drifts over eroding surfaces in magnetic field configurations with three field components, P. Lalousis, R. Schneider and L.L. Lengyel 290–293 (2001) 1084
- Experimental study of radiation power flux on the target surface during high heat plasma irradiation, V.N. Litunovskiy, I.B. Ovchinnikov and V.A. Titov 290–293 (2001) 1112
- Combined sheath and thermal analysis of overheated surfaces in fusion devices, D. Naujoks and J.N. Brooks 290–293 (2001) 1123
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz, S. Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- Wall conditioning by microwave generated plasmas in a toroidal magnetic field, J. Ihde, H.B. Störk, J. Winter, M. Rubel, H.G. Esser and H. Toyoda 290–293 (2001) 1180
- Consideration of the effects on fuel particle behavior from shrinkage cracks in the inner pyrocarbon layer, G.K. Miller, D.A. Petti, D.J. Varacalle and J.T. Maki 295 (2001) 205
- Deuterium in re-deposited silicon-doped carbon layers and its removal by heating in air, M. Balden and M. Mayer 298 (2001) 225
- Cavities (includes Voids, Holes)**
- Contribution to irradiation creep arising from gas-driven bubble growth, C.H. Woo and F.A. Garner 271&272 (1999) 78
- Defect structure development in a pure iron and dilute iron alloys irradiated with neutrons and electrons, A. Okada, H. Maeda, K. Hamada and I. Ishida 271&272 (1999) 133
- High-resolution electron microscopy of γ -TiAl irradiated with 15 keV helium ions at room temperature, M. Song, K. Furuya, T. Tanabe and T. Noda 271&272 (1999) 200
- Voids in fast-neutron-irradiated Cu, Ni and Cu–Ni concentrated alloys studied by TEM and positron annihilation methods, H. Fukushima, K. Ochiai and Y. Shimomura 271&272 (1999) 220
- Computer simulation on the void formation in neutron-irradiated Cu and Ni at high temperature, Y. Shimomura, I. Mukouda and K. Sugio 271&272 (1999) 225
- Damage evolution in neutron-irradiated Cu during neutron irradiation, I. Mukouda and Y. Shimomura 271&272 (1999) 230
- Void formation close to stacking fault tetrahedra in heavily electron irradiated pure Ag and Cu, K. Niwase, F. Philipp, W. Sigle and A. Seeger 271&272 (1999) 261
- Surface morphology and void formation in 316L stainless steel irradiated with high energy C-ions, Z.G. Wang, K.Q. Chen, L.W. Li, C.H. Zhang, J.M. Quan, M.D. Hou, R.H. Xu, F. Ma, Y.F. Jin, C.L. Li and Y.M. Sun 271&272 (1999) 306
- Effect of temperature change on void swelling in P, Ti-modified 316 stainless steel, N. Akasaka, K. Hattori, S. Onose and S. Ukai 271&272 (1999) 370
- Theory of gas bubble nucleation in supersaturated solution of vacancies,

- interstitials and gas atoms, A.E. Volkov and A.I. Ryazanov 273 (1999) 155
- Study of defect annealing behaviour in neutron irradiated Cu and Fe using positron annihilation and electrical conductivity, M. Eldrup and B.N. Singh 276 (2000) 269
- TEM study of the aging of palladium-based alloys during tritium storage, S. Thiébaud, B. Décamps, J.M. Pénisson, B. Limacher and A. Percheron Guégan 277 (2000) 217
- An alternative explanation for evidence that xenon depletion, pore formation, and grain subdivision begin at different local burnups, J. Rest and G.L. Hofman 277 (2000) 231
- Irradiation behavior of U₆Mn–Al dispersion fuel elements, M.K. Meyer, T.C. Wiencek, S.L. Hayes and G.L. Hofman 278 (2000) 358
- Effects of helium on radiation-induced defect microstructure in austenitic stainless steel, E.H. Lee, J.D. Hunn, T.S. Byun and L.K. Mansur 280 (2000) 18
- Stress tensor of a strained material with a linear row of stress concentrators, R.E. Voskoboinikov 280 (2000) 169
- Microstructure of austenitic stainless steels irradiated at 400 °C in the ORR and the HFIR spectral tailoring experiment, N. Hashimoto, E. Wakai, J.P. Robertson, T. Sawai and A. Hishinuma 280 (2000) 186
- Kinetics of gas bubble ensemble in supersaturated solid solution of point defects and gas atoms, R.E. Voskoboinikov and A.E. Volkov 282 (2000) 66
- Neutron irradiation effects on plasma facing materials, V. Barabash, G. Federici, M. Rödig, L.L. Snead and C.H. Wu 283–287 (2000) 138
- Effect of temperature gradients on void formation in modified 316 stainless steel cladding, N. Akasaka, I. Yamagata and S. Ukai 283–287 (2000) 169
- Effects of dose rate on microstructural evolution and swelling in austenitic steels under irradiation, T. Okita, T. Kamada and N. Sekimura 283–287 (2000) 220
- Synergistic effects of hydrogen and helium on microstructural evolution in vanadium alloys by triple ion beam irradiation, N. Sekimura, T. Iwai, Y. Arai, S. Yonamine, A. Naito, Y. Miwa and S. Hamada 283–287 (2000) 224
- Microstructural changes in a low-activation Fe–Cr–Mn alloy irradiated with 92 MeV Ar ions at 450 °C, C. Zhang, K. Chen, Y. Wang, J. Sun, B. Hu, Y. Jin, M. Hou, C. Liu, Y. Sun, J. Han and C. Chen 283–287 (2000) 259
- Role of α_2/γ and γ/γ phase boundaries in cavity formation in a TiAl intermetallic compound irradiated with He-ions, K. Nakata, K. Fukai, A. Hishinuma and K. Ameyama 283–287 (2000) 278
- Microstructure of Cu–Ni alloys neutron irradiated at 210 °C and 420 °C to 14 dpa, S.J. Zinkle and B.N. Singh 283–287 (2000) 306
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Microstructural changes induced by post-irradiation annealing of neutron-irradiated austenitic stainless steels, J.I. Cole and T.R. Allen 283–287 (2000) 329
- Uses of zirconium alloys in fusion applications, C.B.A. Forty and P.J. Karditsas 283–287 (2000) 607
- Comparison of a microstructure evolution model with experiments on irradiated vanadium, S. Sharafat and N.M. Ghoniem 283–287 (2000) 789
- Effects of co-implanted oxygen or aluminum atoms on hydrogen migration and damage structure in multiple-beam irradiated Al₂O₃, Y. Katano, T. Aruga, S. Yamamoto, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 942
- Manufacturing and testing of a prototypical divertor vertical target for ITER, M. Merola, L. Plöchl, Ph. Chappuis, F. Escourbiac, M. Grattarola, I. Smid, R. Tivey and G. Vieider 283–287 (2000) 1068
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- High heat flux simulation experiments with improved electron beam diagnostics, J. Linke, H. Bolt, R. Duwe, W. Kühnlein, A. Lodato, M. Rödig, K. Schöpflin and B. Wiechers 283–287 (2000) 1152
- Armor and heat sink materials joining technologies development for ITER plasma facing components, V. Barabash, M. Akiba, A. Cardella, I. Mazul, B.C. Odegard Jr., L. Plöchl, R. Tivey and G. Vieider 283–287 (2000) 1248
- Fission gas release and swelling model of metallic fast reactor fuel, C.B. Lee, D.H. Kim and Y.H. Jung 288 (2001) 29
- New mechanism for radiation defect production and aggregation in crystalline ceramics, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 289 (2001) 86

- Effect of point defect interaction with bubble surface on the nucleation and growth of gas bubbles, R.E. Voskoboinikov and A.E. Volkov 297 (2001) 262
- Response of reduced activation ferritic steels to high-fluence ion-irradiation, H. Tanigawa, M. Ando, Y. Katoh, T. Hirose, H. Sakasegawa, S. Jitsukawa, A. Kohyama and T. Iwai 297 (2001) 279
- Effect of ensemble of stress concentrators on the ultimate tensile strength of material, R.E. Voskoboinikov 299 (2001) 68
- Irradiation behavior of U–Nb–Zr alloy dispersed in aluminum, M.K. Meyer, G.L. Hofman, T.C. Wiencek, S.L. Hayes and J.L. Snelgrove 299 (2001) 175
- Ceramics (not listed elsewhere)**
- Properties of lithium metatitanate pebbles produced by a wet process, J.G. van der Laan and R.P. Muis 271&272 (1999) 401
- Development of a reaction-sintered silicon carbide matrix composite, A. Sayano, C. Sutoh, S. Suyama, Y. Itoh and S. Nakagawa 271&272 (1999) 467
- Radiation-induced electrical and optical processes in materials based on Al₂O₃, O.A. Plaskin, V.A. Stepanov, P.A. Stepanov and V.M. Chernov 271&272 (1999) 496
- Irradiation effects in ceramics for fusion reactor applications, T. Shikama, K. Yasuda, S. Yamamoto, C. Kinoshita, S.J. Zinkle and E.R. Hodgson 271&272 (1999) 560
- ITER and beyond 271&272 (1999) 569
- Preparation of simulated inert matrix fuel with different powders by dry milling method, Y.-W. Lee, H.S. Kim, S.H. Kim, C.Y. Joung, S.H. Na, G. Ledergerber, P. Heimgartner, M. Pouchon and M. Burghartz 274 (1999) 7
- Materials research on inert matrices: a screening study, H.J. Matzke, V.V. Rondinella and T. Wiss 274 (1999) 47
- Radiation damage effects in zirconia, K.E. Sickafus, H.J. Matzke, Th. Hartmann, K. Yasuda, J.A. Valdez, P. Chodak III, M. Nastasi and R.A. Verrall 274 (1999) 66
- Neutron irradiation of polycrystalline yttrium aluminate garnet, magnesium aluminate spinel and α -alumina., E.A.C. Neeft, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, R.P.C. Schram, A. van Veen and R. Conrad 274 (1999) 78
- Transmutation of actinides in inert-matrix fuels: fabrication studies and modelling of fuel behaviour, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, M.E. Huntelaar and R.R. van der Laan 274 (1999) 84
- Core design study on rock-like oxide fuel light water reactor and improvements of core characteristics, H. Akie, H. Takano and Y. Anoda 274 (1999) 139
- A review of the high temperature oxidation of uranium oxides in molten salts and in the solid state to form alkali metal uranates, and their composition and properties, T.R. Griffiths and V.A. Volkovich 274 (1999) 229
- Use of linear free energy relationship to predict Gibbs free energies of formation of zirconolite phases (MZr-Ti₂O₇ and MHf Ti₂O₇), H. Xu and Y. Wang 275 (1999) 211
- Use of linear free energy relationship to predict Gibbs free energies of formation of pyrochlore phases (CaMTi₂O₇), H. Xu and Y. Wang 275 (1999) 216
- Analysis of displacement cascades and threshold displacement energies in β -SiC, J.M. Perlado, L. Malerba, A. Sánchez-Rubio and T. Díaz de la Rubia 276 (2000) 235
- Ion beam-induced amorphisation of freudenbergite, K.L. Smith, M.G. Blackford, G.R. Lumpkin and N.J. Zaluzec 277 (2000) 159
- Theory of the late stage of radiolysis of alkali halides, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 277 (2000) 184
- Radiation damage in neutron-irradiated yttria-stabilized-zirconia single crystals, B. Savoini, D. Cáceres, I. Vergara, R. González and J.E. Muñoz Santuste 277 (2000) 199
- Zirconia ceramics for excess weapons plutonium waste, W.L. Gong, W. Lutze and R.C. Ewing 277 (2000) 239
- Joining of SiC/SiC_f ceramic matrix composites for fusion reactor blanket applications, P. Colombo, B. Riccardi, A. Donato and G. Scarinci 278 (2000) 127
- Electron and ion irradiation of zeolites, S.X. Wang, L.M. Wang and R.C. Ewing 278 (2000) 233
- KNa₃(UO₂)₂(Si₄O₁₀)₂(H₂O)₄, a new compound formed during vapor hydration of an actinide-bearing borosilicate waste glass, P.C. Burns, R.A. Olson, R.J. Finch, J.M. Hanchar and Y. Thibault 278 (2000) 290
- Crystallization sequence and microstructure evolution of Synroc samples crystallized from CaZrTi₂O₇ melts, H. Xu and Y. Wang 279 (2000) 100
- Bulk and lattice thermal expansion of Th_{1-x}Ce_xO₂, M.D. Mathews, B.R. Ambekar and A.K. Tyagi 280 (2000) 246

- Thermal removal of gallium from gallia-doped ceria, Y.S. Park, H.Y. Sohn and D.P. Butt 280 (2000) 285
- Beta radiation effects in ^{137}Cs -substituted pollucite, N.J. Hess, F.J. Espinosa, S.D. Conradson and W.J. Weber 281 (2000) 22
- Production behavior of irradiation defects in lithium silicates and silica under ion beam irradiation, K. Moritani, S. Tanaka and H. Moriyama 281 (2000) 106
- Impact of irradiation effects on design solutions for ITER diagnostics, S. Yamamoto, T. Shikama, V. Belyakov, E. Farnum, E. Hodgson, T. Nishitani, D. Orlinski, S. Zinkle, S. Kasai, P. Stott, K. Young, V. Zaveriaev, A. Costley, L. deKock, C. Walker and G. Janeschitz 283–287 (2000) 60
- Ceramic breeder research and development: progress and focus, J.G. van der Laan, H. Kawamura, N. Roux and D. Yamaki 283–287 (2000) 99
- Development of vacancy clusters in neutron-irradiated copper at high temperature, Y. Shimomura and I. Mukouda 283–287 (2000) 249
- Microstructural changes of austenitic steels caused by proton irradiation under various conditions, T. Fukuda, M. Sagisaka, Y. Isobe, A. Hasegawa, M. Sato, K. Abe, Y. Nishida, T. Kamada and Y. Kaneshima 283–287 (2000) 263
- The contribution of various defects to irradiation-induced hardening in an austenitic model alloy, M. Ando, Y. Katoh, H. Tanigawa, A. Kohyama and T. Iwai 283–287 (2000) 423
- In situ thermal conductivity measurement of ceramics in a fast neutron environment, L.L. Snead, R. Yamada, K. Noda, Y. Katoh, S.J. Zinkle, W.S. Eatherly and A.L. Qualls 283–287 (2000) 545
- SYLRAMICTM SiC fibers for CMC reinforcement, R.E. Jones, D. Petrak, J. Rabe and A. Szweda 283–287 (2000) 556
- High-performance SiC/SiC composites by improved PIP processing with new precursor polymers, A. Kohyama, M. Kotani, Y. Katoh, T. Nakayasu, M. Sato, T. Yamamura and K. Okamura 283–287 (2000) 565
- New evaluation method of crack growth in SiC/SiC composites using interface elements, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 283–287 (2000) 579
- In-beam dielectric properties of alumina at low frequencies, R. Vila and E.R. Hodgson 283–287 (2000) 903
- Radiation-induced processes and their influence on the functional properties of dielectrics for different types of irradiation, V.A. Stepanov and V.M. Chernov 283–287 (2000) 932
- Microstructure and mechanical properties of low-activation glass-ceramic joining and coating for SiC/SiC composites, Y. Katoh, M. Kotani, A. Kohyama, M. Montorsi, M. Salvo and M. Ferraris 283–287 (2000) 1262
- Post-irradiation examinations of Li_4SiO_4 pebbles irradiated in the EXOTIC-7 experiment, G. Piazza, F. Scaffidi-Argentina and H. Werle 283–287 (2000) 1396
- Improvement of the model for surface process of tritium release from lithium oxide, D. Yamaki, A. Iwamoto and S. Jitsukawa 283–287 (2000) 1414
- Heavy-ion irradiation effects on structures and acid dissolution of pyrochlores, B.D. Begg, N.J. Hess, W.J. Weber, R. Devanathan, J.P. Icenhower, S. Thevuthasan and B.P. McGrail 288 (2001) 208
- Computational analysis of creep fracture deformation in SiC/SiC composites, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 289 (2001) 16
- Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC, Y. Katoh, M. Kotani, H. Kishimoto, W. Yang and A. Kohyama 289 (2001) 42
- XPS characterization of beryllium carbide thin films formed via plasma deposition, Y. Xie, N.C. Morosoff and W.J. James 289 (2001) 48
- Long-term stability of ceramics in liquid lithium, B.A. Pint, L.D. Chitwood and J.R. Di Stefano 289 (2001) 52
- Structural stability of irradiated ceramics, P.M. Ossi 289 (2001) 80
- New mechanism for radiation defect production and aggregation in crystalline ceramics, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 289 (2001) 86
- Determination of the defect creation mechanism in fluoroapatite, S. Soulet, J. Chaumont, J.-C. Krupa, J. Carpena and M.-O. Ruault 289 (2001) 194
- Optical emission due to ionic displacements in alkaline earth titanates, R. Cooper, K.L. Smith, M. Colella, E.R. Vance and M. Phillips 289 (2001) 199
- Accumulation and thermal recovery of disorder in Au^{2+} -irradiated SrTiO_3 , S. Thevuthasan, W. Jiang, V. Shutthanandan and W.J. Weber 289 (2001) 204
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Role of grain boundaries and carbon deposition in deuterium retention

- behavior of deuterium plasma exposed tungsten, D.A. Komarov, A.V. Markin, S.Yu. Rybakov and A.P. Zakharov 290–293 (2001) 433
- Some properties of a lead vanado-iodoapatite $Pb_{10}(VO_4)_6I_2$, M. Uno, M. Shinohara, K. Kurosaki and S. Yamanaoka 294 (2001) 119
- Thermal expansion of $(Ca_{1-x}Pu_x)TiO_3$, T. Sato, Y. Hanajiri, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 130
- Enthalpy and heat capacity of $(Ca_{1-x}Pu_x)TiO_3$ ($x = 0$ and 0.20), T. Sato, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 135
- Thermodynamic and mechanical properties of $Ce_{1-x}Hf_xO_2$ ($x = 0-0.10$) solid solutions, N. Nakajima, H. Mitani, Y. Yamamura and T. Tsuji 294 (2001) 188
- Vitrification of gamma irradiated $^{60}Co^{2+}$ zeolites, S. Bulbulian and P. Bosch 295 (2001) 64
- Safe disposal of surplus plutonium, W.L. Gong, S. Naz, W. Lutze, R. Busch, A. Prinja and W. Stoll 295 (2001) 295
- Surface inventory of tritium on Li_2TiO_3 , T. Kawagoe, M. Nishikawa, A. Baba and S. Beloglazov 297 (2001) 27
- Radiation damage and nanocrystal formation in uranium–niobium titanates, J. Lian, S.X. Wang, L.M. Wang and R.C. Ewing 297 (2001) 89
- Preliminary results on the leaching process of phosphate ceramics, potential hosts for actinide immobilization, L. Bois, M.J. Guittet, F. Carrot, P. Trocellier and M. Gautier-Soyer 297 (2001) 129
- Temperature effects on the radiation stability and ion exchange capacity of smectites, B.X. Gu, L.M. Wang, L.D. Minc and R.C. Ewing 297 (2001) 345
- Role and properties of the gel formed during nuclear glass alteration: importance of gel formation conditions, S. Gin, I. Ribet and M. Couillard 298 (2001) 1
- The effect of clay on the dissolution of nuclear waste glass, K. Lemmens 298 (2001) 11
- A proposition for an improved theoretical treatment of the corrosion of multi-component glasses, R. Conradt 298 (2001) 19
- New techniques for modelling glass dissolution, M. Aertsens and D. Ghaleb 298 (2001) 37
- Overview of actinides (Np, Pu, Am) and Tc release from waste glasses: influence of solution composition, V. Pirllet 298 (2001) 47
- The effect of coprecipitation in some key spent fuel elements, J. Quiñones, J. Serrano and P. Diaz Arocas 298 (2001) 63
- Glass dissolution: testing and modeling for long-term behavior, D.M. Strachan 298 (2001) 69
- Database development of glass dissolution and radionuclide migration for performance analysis of HLW repository in Japan, M. Yui 298 (2001) 136
- Numerical modelling of glass dissolution: gel layer morphology, F. Devreux and P. Barboux 298 (2001) 145
- Determination of sorption isotherms for Eu, Th, U and Am on the gel layer of corroded HLW glass, B. Luckscheiter and B. Kienzler 298 (2001) 155
- Release and retention of uranium during glass corrosion, T. Maeda, T. Banba, K. Sonoda, Y. Inagaki and H. Furuya 298 (2001) 163
- Leaching and migration of neptunium in a simulated engineered barrier system consisting of HLW glass and compacted bentonite, Y. Inagaki, H. Furuya, K. Idemitsu, T. Arima, H. Osako, T. Banba, T. Maeda, S. Matsumoto, I. Nomura, S. Kikkawa, M. Saito and H. Okamoto 298 (2001) 168
- Waste glass behavior in a loamy soil of a wet repository site, M.I. Ojovan, N.V. Ojovan, I.V. Startceva, G.N. Tchuiikova, Z.I. Golubeva and A.S. Barinov 298 (2001) 174
- A comparison of HLW-glass and PWR-borate waste glass, S. Luo, J. Sheng and B. Tang 298 (2001) 180
- Effect of a siliceous additive on aqueous alteration of waste glass with engineered barrier materials, S. Mitsui and R. Aoki 298 (2001) 184
- Determination of the defect creation mechanism in the mono-silicated fluoroapatite. Disorder modeling under repository conditions, S. Soulet, J. Carpéna, J. Chaumont, J.-C. Krupa and M.-O. Ruault 299 (2001) 227
- Development of CaF_2 special refractory components, A. Ghosh, D.D. Upadhyaya, R. Prasad and A.K. Suri 299 (2001) 274
- Neutron irradiation of sapphire for compressive strengthening. I. Processing conditions and compressive strength, T.M. Regan, D.C. Harris, R.M. Stroud and J.R. White 300 (2002) 39
- Neutron irradiation of sapphire for compressive strengthening. II. Physical properties changes T.M. Regan, D.C. Harris, D.W. Blodgett, K.C. Baldwin, J.A. Miragliotta, M.E. Thomas, M.J. Linevsky, J.W. Giles, T.A. Kennedy, M. Fatemi, D.R. Black, K.P.D. Lagerlöf 300 (2002) 47
- Combustion synthesis of γ -lithium aluminate by using various fuels, F. Li, K. Hu, J. Li, D. Zhang and G. Chen 300 (2002) 82

- Aqueous corrosion of lanthanum aluminosilicate glasses: influence of inorganic anions, L. Bois, N. Barré, M.J. Guittet, S. Guillopé, P. Trocellier, M. Gautier-Soyer, P. Verdier and Y. Laurent 300 (2002) 141
- Order–disorder phase transition induced by swift ions in MgAl_2O_4 and ZnAl_2O_4 spinels, D. Simeone, C. Dodane-Thiriet, D. Gosset, P. Daniel and M. Beauvy 300 (2002) 151
- Amorphization and recrystallization of the ABO_3 oxides, A. Meldrum, L.A. Boatner, W.J. Weber and R.C. Ewing 300 (2002) 242
- Concentration-triggered fission product release from zirconia: consequences for nuclear safety, A. Gentils, L. Thomé, J. Jagielski and F. Garrido 300 (2002) 266
- Chemical Reactions** (includes *Electrochemical and Thermochemical Reactions*)
- Metal and oxygen mobilities during Zircaloy-4 oxidation at high temperature, A. Grandjean and Y. Serruys 273 (1999) 111
- Long-term oxidation characteristics of oxygen-added modified Zircaloy-4 in 360 °C water, H.S. Hong, S.J. Kim and K.S. Lee 273 (1999) 177
- Diffusion model for the oxidation of Zircaloy-4 at 400 °C in steam. The influence of metallurgical structure (precipitates and grain size), E.A. Garcia and G. Béranger 273 (1999) 221
- Behavior of cesium implanted in zirconia based inert matrix fuel, M.A. Pouchon, M. Döbeli, C. Degueldre and M. Burghartz 274 (1999) 61
- Modeling the solubility of zirconia in a repository for high-level radioactive waste, E. Curti and W. Hummel 274 (1999) 189
- A review of the high temperature oxidation of uranium oxides in molten salts and in the solid state to form alkali metal uranates, and their composition and properties, T.R. Griffiths and V.A. Volkovich 274 (1999) 229
- Thermochemistry of binary Na–NaH and ternary Na–O–H systems and the kinetics of reaction of hydrogen/water with liquid sodium – a review, T. Gnanasekaran 274 (1999) 252
- Selection of materials as diluents for burning of plutonium fuels in nuclear reactors, H. Kleykamp 275 (1999) 1
- ⁷⁹Se: geochemical and crystallo-chemical retardation mechanisms, F. Chen, P.C. Burns and R.C. Ewing 275 (1999) 81
- Cation incorporation into zirconium oxide in LiOH, NaOH, and KOH solutions Y.H. Jeong, K.H. Kim and J.H. Baek 275 (1999) 221
- Reactions of U–Zr alloy with Fe and Fe–Cr alloy, K. Nakamura, T. Ogata, M. Kurata, A. Itoh and M. Akabori 275 (1999) 246
- Preparation and characterisation of platinum and platinum–iridium coated titanium electrodes, U. Kamachi Mudali, V.R. Raju and R.K. Dayal 277 (2000) 49
- Dissolution of lanthanide aluminosilicate oxynitride glasses, L. Bois, N. Barré, S. Guillopé, M.J. Guittet, M. Gautier-Soyer, J.P. Duraud, P. Trocellier, P. Verdier and Y. Laurent 277 (2000) 57
- Electrolysis of plutonium nitride in LiCl–KCl eutectic melts, O. Shirai, T. Iwai, K. Shiozawa, Y. Suzuki, Y. Sakamura and T. Inoue 277 (2000) 226
- Etching of UO_2 in NF_3 RF plasma glow discharge, J.M. Veilleux, M.S. El-Genk, E.P. Chamberlin, C. Munson and J. FitzPatrick 277 (2000) 315
- Oxidation kinetic changes of UO_2 by additive addition and irradiation, G.-S. You, K.-S. Kim, D.-K. Min and S.-G. Ro 277 (2000) 325
- A study of absorption processes of hydrogen isotopes in some transition metals by LiOD+LiOH mixture electrolysis, Y. Oya, T. Suzuki, K. Inuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 278 (2000) 48
- Near-field behavior of ⁹⁹Tc during the oxidative alteration of spent nuclear fuel, F. Chen, P.C. Burns and R.C. Ewing 278 (2000) 225
- On the reactive occlusion of the (uranium trichloride + lithium chloride + potassium chloride) eutectic salt in zeolite 4A, D. Lexa, L. Leibowitz and J. Kropf 279 (2000) 57
- Behaviour of materials for accelerator driven systems in stagnant molten lead, G. Benamati, P. Buttol, V. Imbeni, C. Martini and G. Palombarini 279 (2000) 308
- Zr–silicide particles in Zr–2.5Nb pressure tube material: influence of oxidation and irradiation, Y.P. Lin and V. Perovic 280 (2000) 120
- In situ XRD analysis of the oxide layers formed by oxidation at 743 K on Zircaloy 4 and Zr–1NbO, N. Pétigny, P. Barberis, C. Lemaignan, Ch. Valot and M. Lallemand 280 (2000) 318
- Ultra-high vacuum investigation of the surface chemistry of zirconium, Y.C. Kang, M.M. Milovancev, D.A. Clauss, M.A. Lange and R.D. Ramsier 281 (2000) 57
- Kinetics of thermal decomposition of $\text{Th}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$, K. Joseph, R. Sridharan and T. Gnanasekaran 281 (2000) 129
- Multi-layer coating of silicon carbide and pyrolytic carbon on UO_2 pellets by a

- combustion reaction, B.G. Kim, Y. Choi, J.W. Lee, Y.W. Lee, D.S. Sohn and G.M. Kim 281 (2000) 163
- Effect of AlOOH on the microstructure of UO₂ pellets, H.-s. Yoo, S.-y. Lee, S.-j. Lee and K.-w. Song 281 (2000) 191
- Effect of silicon impurities and heat treatment on uranium hydriding rates, A.L. DeMint and J.H. Leckey 281 (2000) 208
- Simulated alteration tests on non-radioactive SON 68 nuclear glass in the presence of corrosion products and environmental materials, P. Jollivet, Y. Minet, M. Nicolas and E. Vernaz 281 (2000) 231
- Preparation and characterisation of Pu-pyrochlore: [La_{1-x}Pu_x]₂Zr₂O₇ (x = 0–1), N.K. Kulkarni, S. Sampath and V. Venugopal 281 (2000) 248
- An interlaboratory study of a standard glass for acceptance testing of low-activity waste glass, W.L. Ebert and S.F. Wolf 282 (2000) 112
- Preparation of uranium by electrolysis in chloride melt, K. Serrano, P. Taxil, O. Dugne, S. Bouvet and E. Puech 282 (2000) 137
- Solid state reactions of UO₂, ThO₂ and their mixed oxides with sulphates of potassium, M. Keskar, U.M. Kasar and K.D. Singh Mudher 282 (2000) 146
- A new method for determining oxygen solubility in molten carbonates and carbonate-chloride mixtures using the oxidation of UO₂ to uranate reaction, V.A. Volkovich, T.R. Griffiths, D.J. Fray and R.C. Thied 282 (2000) 152
- Mechanism of chemical sputtering of graphite under high flux deuterium bombardment, Y. Ueda, T. Sugai, Y. Ohtsuka and M. Nishikawa 282 (2000) 216
- Neutron irradiation effects in magnesium-aluminate spinel doped with transition metals, V.T. Gritsyna, I.V. Afanasyev-Charkin, V.A. Kobayakov and K.E. Sickafus 283–287 (2000) 927
- Thermal stability and kinetics of defects in magnesium aluminate spinel irradiated with fast neutrons, K. Yasuda, C. Kinoshita, K. Fukuda and F.A. Garner 283–287 (2000) 937
- Cation disordering in magnesium aluminate spinel crystals induced by electron or ion irradiation, T. Soeda, S. Matsumura, C. Kinoshita and N.J. Zaluzec 283–287 (2000) 952
- Removal of deuterium from co-deposited carbon-silicon layers, M. Balden and M. Mayer 283–287 (2000) 1057
- Development of electrically insulating coatings for service in a lithium environment, K. Natesan, M. Uz and S. Wieder 283–287 (2000) 1277
- The oxidation kinetics of Incoloy 800 and its deuterium permeation behavior, A. Perujo, J. Reimann, H. Feuerstein and B. Mancinelli 283–287 (2000) 1292
- Oxidation and hardness profile of V–Ti–Cr–Si–Al–Y alloys, M. Fujiwara, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1311
- Chemical reactivity of SiC fibre-reinforced SiC with beryllium and lithium ceramic breeder materials, H. Kleykamp 283–287 (2000) 1385
- Oxidation and volatilization of TZM alloy in air, G.R. Smolik, D.A. Petti and S.T. Schuetz 283–287 (2000) 1458
- Steam chemical reactivity of Be pebbles and Be powder, R.A. Anderl, F. Scaffidi-Argentina, D. Davydov, R.J. Pawelko and G.R. Smolik 283–287 (2000) 1463
- Evaluation of chemical erosion data for carbon materials at high ion fluxes using Bayesian probability theory, V. Dose, R. Preuss and J. Roth 288 (2001) 153
- Effects of temperature and contact stress on the sliding wear of Ni-base Deloro 50 hardfacing alloy, S.J. Kim and J.K. Kim 288 (2001) 163
- Some aspects of the use of ZrN as an inert matrix for actinide fuels, M. Burghartz, G. Ledergerber, H. Hein, R.R. van der Laan and R.J.M. Konings 288 (2001) 233
- Dissolution behaviour of magnetite film formed over carbon steel in dilute organic acid media, A.A.M. Prince, S. Velmurugan, S.V. Narasimhan, C. Ramesh, N. Murugesan, P.S. Raghavan and R. Gopalan 289 (2001) 281
- Lithium titanate pebbles reprocessing by wet chemistry, C. Alvani, P.L. Carconi, S. Casadio, V. Contini, A. Di-bartolomeo, F. Pierdominici, A. Deptula, S. Lagos and C.A. Nannetti 289 (2001) 303
- Formation of nitrides at the surface of U–Zr alloys, M. Akabori, A. Itoh and T. Ogawa 289 (2001) 342
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Mechanism of the chemical erosion of SiC under hydrogen irradiation, M. Balden, S. Picarle and J. Roth 290–293 (2001) 47
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Methane formation in graphite and boron-doped graphite under simultaneous O⁺ and H⁺ irradiation, A.Y.K. Chen, J.W. Davis and A.A. Haasz 290–293 (2001) 61
- Formation of mixed layers and compounds on beryllium due to C⁺ and

- CO⁺ bombardment, P. Goldstrass and Ch. Linsmeier 290–293 (2001) 71
- Surface reactions on beryllium after carbon vapour deposition and thermal treatment, P. Goldstrass, K.U. Klages and Ch. Linsmeier 290–293 (2001) 76
- Reactivity of lithium-containing amorphous carbon (a-C) films, M. Töwe, P. Reinke and P. Oelhafen 290–293 (2001) 153
- Energy distributions of CD₄ and CD₃ chemically released from graphite by D⁺ and D⁰/Ne⁺ impact, E. Vietzke 290–293 (2001) 158
- Chemical erosion of doped graphites for fusion devices, C. García-Rosales and M. Balden 290–293 (2001) 173
- Surface reactions of hydrocarbon radicals: suppression of the re-deposition in fusion experiments via a divertor liner, A. von Keudell, T. Schwarz-Selinger, W. Jacob and A. Stevens 290–293 (2001) 231
- Reduction of divertor carbon sources in DIII-D, D.G. Whyte, W.P. West, R. Doerner, N.H. Brooks, R.C. Isler, G.L. Jackson, G. Porter, M.R. Wade and C.P.C. Wong 290–293 (2001) 356
- Spectral profile analysis of the D α line in the divertor region of Tore-Supra, A. Escarguel, R. Guirlet, A. Azéroual, B. Pégourié, J. Gunn, T. Loarer, H. Capes, Y. Corre, C. DeMichelis, L. Godbert-Mouret, M. Koubiti, M. Mattioli and R. Stamm 290–293 (2001) 854
- Impurity release and recycling behaviour in TEXTOR-94 with siliconised walls, V. Philipps, A. Huber, H.G. Esser, A. Pospieszczyk, B. Schweer, J. von Seggern, W. Biel, J. Rapp and U. Samm 290–293 (2001) 1190
- Carbothermic synthesis of (Cm,Pu)N, M. Takano, A. Itoh, M. Akabori, T. Ogawa, M. Numata and H. Okamoto 294 (2001) 24
- Stability of SiC/SiC fibre composites exposed to Li₄SiO₄ and Li₂TiO₃ in fusion relevant conditions, A. La Barbera, B. Riccardi, A. Donato, C.A. Nannetti and L.F. Moreschi 294 (2001) 223
- The effects of moisture on LiD single crystals studied by temperature-programmed decomposition, L.N. Dinh, C.M. Cecala, J.H. Leckey and M. Balooch 295 (2001) 193
- Effect of electrolyte composition on the electrochemical potentiokinetic re-activation behavior of Alloy 600, T.-F. Wu, T.-P. Cheng and W.-T. Tsai 295 (2001) 233
- Temperature programmed decomposition of thorium oxalate hexahydrate, S. Dash, R. Krishnan, M. Kamrudin, A.K. Tyagi and B. Raj 295 (2001) 281
- 90-19/U HLW-glass leaching mechanism in underground water, J. Sheng and S. Luo 297 (2001) 57
- Investigation on the oxidation characteristics of copper-added modified Zircaloy-4 alloys in pressurized water at 360 °C, H. Hong, J. Moon, S. Kim and K. Lee 297 (2001) 113
- Effect of a trivalent dopant, Gd³⁺, on the oxidation of uranium dioxide, J.-G. Kim, Y.-K. Ha, S.-D. Park, K.-Y. Jee and W.-H. Kim 297 (2001) 327
- Role and properties of the gel formed during nuclear glass alteration: importance of gel formation conditions, S. Gin, I. Ribet and M. Couillard 298 (2001) 1
- A proposition for an improved theoretical treatment of the corrosion of multi-component glasses, R. Conradt 298 (2001) 19
- Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling, E. Vernaz, S. Gin, C. Jégou and I. Ribet 298 (2001) 27
- New techniques for modelling glass dissolution, M. Aertsens and D. Ghaleb 298 (2001) 37
- Glass dissolution: testing and modeling for long-term behavior, D.M. Strachan 298 (2001) 69
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- First-order dissolution rate law and the role of surface layers in glass performance assessment, B. Grambow and R. Müller 298 (2001) 112
- Database development of glass dissolution and radionuclide migration for performance analysis of HLW repository in Japan, M. Yui 298 (2001) 136
- Numerical modelling of glass dissolution: gel layer morphology, F. Devreux and P. Barboux 298 (2001) 145
- Release of boron and cesium or uranium from simulated borosilicate waste glasses through a compacted Cabentonite layer, K.S. Chun, S.S. Kim and C.H. Kang 298 (2001) 150
- Waste glass behavior in a loamy soil of a wet repository site, M.I. Ojovan, N.V. Ojovan, I.V. Startceva, G.N. Tchuikova, Z.I. Golubeva and A.S. Barinov 298 (2001) 174
- A comparison of HLW-glass and PWR-borate waste glass, S. Luo, J. Sheng and B. Tang 298 (2001) 180
- Effect of a siliceous additive on aqueous alteration of waste glass with engineered barrier materials, S. Mitsui and R. Aoki 298 (2001) 184

- Application of electrochemical impedance spectroscopy (EIS) for in situ study of glass alteration, D. Chaulet, S. Martemianov, J.H. Thomassin and P. Le Coustumer 298 (2001) 192
- In-depth distributions of elements in leached layers on two HLW waste glasses after burial in clay; step-scan by SIMS, A. Lodding and P. Van Iseghem 298 (2001) 197
- In situ characterization of Zircaloy-4 oxidation at 500 °C in dry air, J.J. Vermoyal, L. Dessemond, A. Hammou and A. Fricbet 298 (2001) 297
- Behavior of plutonium and americium at liquid cadmium cathode in molten LiCl–KCl electrolyte, M. Iizuka, K. Uozumi, T. Inoue, T. Iwai, O. Shirai and Y. Arai 299 (2001) 32
- A working hypothesis on oxidation kinetics of Zircaloy, H.-I. Yoo, B.-J. Koo, J.-O. Hong, I.-S. Hwang and Y.-H. Jeong 299 (2001) 235
- Pyrochemical reduction of uranium dioxide and plutonium dioxide by lithium metal, T. Usami, M. Kurata, T. Inoue, H.E. Sims, S.A. Beetham and J.A. Jenkins 300 (2002) 15
- Aqueous corrosion of lanthanum aluminosilicate glasses: influence of inorganic anions, L. Bois, N. Barré, M.J. Guittet, S. Guillopé, P. Trocellier, M. Gautier-Soyer, P. Verdier and Y. Laurent 300 (2002) 141
- In situ electrochemical impedance spectroscopy of Zr–1%Nb under VVER primary circuit conditions, G. Nagy, Z. Kerner and T. Pajkossy 300 (2002) 230
- Redox condition in molten fluoride salts
Definition and control, D. Olander 300 (2002) 270
- Cladding Materials**
- Observation of spatial distribution of tritium in zirconium alloy with microautoradiography, K. Isobe, Y. Hatano, M. Sugisaki, T. Hayashi, M. Nishi and K. Okuno 271&272 (1999) 326
- Effect of temperature change on void swelling in P, Ti-modified 316 stainless steel, N. Akasaka, K. Hattori, S. Onose and S. Ukai 271&272 (1999) 370
- Proton irradiation effects in Zr–1.0 Nb–1.0 Sn–0.1 Fe probed by positron annihilation, P. Mukherjee, P.M.G. Nambissan, P. Sen, P. Barat and S.K. Bandyopadhyay 273 (1999) 338
- Oxidation of β -Zr and related phases in Zr–Nb alloys: an electron microscopy investigation, Y.P. Lin and O.T. Woo 277 (2000) 11
- Microstructural aspects of Zircaloy nodular corrosion in steam, D.F. Taylor 277 (2000) 295
- Long-term corrosion of Zircaloy before and after irradiation, E. Hillner, D.G. Franklin and J.D. Smeed 278 (2000) 334
- Influence of irradiation on $K_{currISCC}$ of Zr–1%Nb claddings, Y.K. Bibilashvili, A.V. Medvedev, B.I. Nesterov, V.V. Novikov, V.N. Golovanov, S.G. Eremin and A.D. Yurtchenko 280 (2000) 106
- Effects of the accumulated annealing parameter on the corrosion characteristics of a Zr–0.5Nb–1.0Sn–0.5Fe–0.25Cr alloy, J. Baek, Y. Jeong and I. Kim 280 (2000) 235
- Phase transition temperature in the Zr-rich corner of Zr–Nb–Sn–Fe alloys, M. Canay, C.A. Danón and D. Arias 280 (2000) 365
- Ultra-high vacuum investigation of the surface chemistry of zirconium, Y.C. Kang, M.M. Milovancev, D.A. Clauss, M.A. Lange and R.D. Ramsier 281 (2000) 57
- Investigation on the zirconia phase transition under irradiation, D. Simeone, J.L. Bechade, D. Gosset, A. Chevarier, P. Daniel, H. Pilliaire and G. Baldinozzi 281 (2000) 171
- Effect of temperature gradients on void formation in modified 316 stainless steel cladding, N. Akasaka, I. Yamagata and S. Ukai 283–287 (2000) 169
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- A microstructural study of the oxide scale formation on ODS Fe–13Cr steel, D.T. Hoelzer, B.A. Pint and I.G. Wright 283–287 (2000) 1306
- Effect of plastic shearing on damage and texture on Zircaloy-4 cladding tubes: experimental and numerical study, E. Girard, R. Guillén, P. Weisbecker and M. Francois 294 (2001) 330
- Consideration of the effects on fuel particle behavior from shrinkage cracks in the inner pyrocarbon layer, G.K. Miller, D.A. Petti, D.J. Varacalle and J.T. Maki 295 (2001) 205
- The study of microstructural defects and mechanical properties in proton-irradiated Zr–1.0%Nb–1.0%Sn–0.1%Fe, P. Mukherjee, P.M.G. Nambissan, P. Barat, P. Sen, S.K. Bandyopadhyay, J.K. Chakravarty, S.L. Wadekar, S. Banerjee, S.K. Chattopadhyay, S.K. Chatterjee and M.K. Mitra 297 (2001) 341

- Fission product precipitates in irradiated uranium carbonitride fuel, H. Kleykamp 300 (2002) 273
- Coatings and Coated Particles**
- Development of tritium permeation barriers on Al base in Europe, G. Benamati, C. Chabrol, A. Perujo, E. Rigal and H. Glasbrenner 271&272 (1999) 391
- Investigation on the suitability of plasma sprayed Fe–Cr–Al coatings as tritium permeation barrier, C. Fazio, K. Stein-Fechner, E. Serra, H. Glasbrenner and G. Benamati 273 (1999) 233
- Retention of fission product caesium in ZrC-coated fuel particles for high-temperature gas-cooled reactors, K. Minato, T. Ogawa, T. Koya, H. Sekino and T. Tomita 279 (2000) 181
- Multi-layer coating of silicon carbide and pyrolytic carbon on UO₂ pellets by a combustion reaction, B.G. Kim, Y. Choi, J.W. Lee, Y.W. Lee, D.S. Sohn and G.M. Kim 281 (2000) 163
- Boron coating on boron nitride coated nuclear fuels by chemical vapor deposition, H.H. Durmazucar and G. Gündüz 282 (2000) 239
- The behavior of coatings and SiC_f/SiC composites under thermal shock, J. Yu, Z. Yao, G. Yu, F. Chu, X. Tang, Y. Zeng and T. Noda 283–287 (2000) 1077
- Changes of composition and microstructure of joint interface of tungsten coated carbon by high heat flux, K. Tokunaga, T. Matsubara, Y. Miyamoto, Y. Takao, N. Yoshida, N. Noda, Y. Kubota, T. Sogabe, T. Kato and L. Plöchl 283–287 (2000) 1121
- Microstructure and mechanical properties of low-activation glass-ceramic joining and coating for SiC/SiC composites, Y. Katoh, M. Kotani, A. Kohyama, M. Montorsi, M. Salvo and M. Ferraris 283–287 (2000) 1262
- The hydrogen permeation behaviour of aluminised coated martensitic steels under gaseous hydrogen, liquid Pb–17Li/hydrogen and cyclic tensile load, T. Sample, A. Perujo, H. Kolbe and B. Mancinelli 283–287 (2000) 1272
- Development of electrically insulating coatings for service in a lithium environment, K. Natesan, M. Uz and S. Wieder 283–287 (2000) 1277
- The permeation of tritium through 316L stainless steel with multiple coatings, Z. Yao, J. Hao, C. Zhou, C. Shan and J. Yu 283–287 (2000) 1287
- The oxidation kinetics of Incoloy 800 and its deuterium permeation behavior, A. Perujo, J. Reimann, H. Feuerstein and B. Mancinelli 283–287 (2000) 1292
- Effects of thin films on inventory, permeation and re-emission of energetic hydrogen, N. Ohyabu, Y. Nakamura, Y. Nakahara, A. Livshits, V. Alimov, A. Busnyuk, M. Notkin, A. Samartsev and A. Doroshin 283–287 (2000) 1297
- Compatibility of AlN with liquid lithium, T. Terai, A. Suzuki, T. Yoneoka and T. Mitsuyama 283–287 (2000) 1322
- Long-term stability of ceramics in liquid lithium, B.A. Pint, L.D. Chitwood and J.R. Di Stefano 289 (2001) 52
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Silicon diffusion in amorphous carbon films, E. Vainonen-Ahlgren, T. Ahlgren, L. Khriachtchev, J. Likonen, S. Lehto, J. Keinonen and C.H. Wu 290–293 (2001) 216
- Rapid diffusion of lithium into bulk graphite in lithium conditioning, N. Itou, H. Toyoda, K. Morita and H. Sugai 290–293 (2001) 281
- Erosion and deposition effects on the vessel wall of TEXTOR-94, J. von Seggern, M. Mayer, D. Reiser, M. Rubel and V. Philipps 290–293 (2001) 341
- Particle control in the sustained spheromak physics experiment, R.D. Wood, D.N. Hill, E.B. Hooper, D. Buchenauer, H. McLean, Z. Wang, S. Woodruff and G. Wurden 290–293 (2001) 513
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M. Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- Peculiarity of deuterium ions interaction with tungsten surface in the condition imitating combination of normal operation with plasma disruption in ITER, M.I. Guseva, V.I. Vasiliev, V.M. Gureev, L.S. Danelyan, B.I. Khirpunov, S.N. Korshunov, V.S. Kulikauskas, Yu.V. Martynenko, V.B. Petrov, V.N. Strunnikov, V.G. Stolyarova, V.V. Zatekin and A.M. Litnovsky 290–293 (2001) 1069
- Operational limits under different wall conditions on TEXTOR-94, J. Rapp, W. Biel, H. Gerhauser, A. Huber, H.R. Koslowski, M. Lehnen, V. Philipps, A. Pospieszczyk, D. Reiser,

- U. Samm, G. Sergienko, M.Z. Tokar and R. Zagórski 290–293 (2001) 1148
- Wall conditioning by microwave generated plasmas in a toroidal magnetic field, J. Ihde, H.B. Störk, J. Winter, M. Rubel, H.G. Esser and H. Toyoda 290–293 (2001) 1180
- Permeation behavior of deuterium implanted in electro- and sputter-deposited copper coatings on aluminum alloy substrates, M. Alam and M.Y. Inal 295 (2001) 27
- Ultrasonic study of UO_2 : effects of porosity and grain size on ultrasonic attenuation and velocities, D. Laux, B. Cros, G. Despau and D. Baron 300 (2002) 192
- The effect of coatings on deuterium retention and permeation in aluminum 6061-T6 APT tritium production tubes, K.L. Hertz, R.A. Causey and D.F. Cowgill 300 (2002) 255
- Cold-Worked Materials**
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenkoa 283–287 (2000) 694
- Infrared characterization and high heat flux testing of plasma sprayed layers, Ph. Chappuis, F. Escourbiac, M. Chantant, M. Febvre, M. Grattarola, M. Bet, M. Merola and B. Riccardi 283–287 (2000) 1081
- Compatibility and Corrosion (include Stress Corrosion Cracking)**
- Microstructures of type 316 model alloys neutron-irradiated at 513 K to 1 dpa, Y. Miwa, T. Tsukada, H. Tsuji and H. Nakajima 271&272 (1999) 316
- Observation of spatial distribution of tritium in zirconium alloy with microautoradiography, K. Isobe, Y. Hatano, M. Sugisaki, T. Hayashi, M. Nishi and K. Okuno 271&272 (1999) 326
- Corrosion of some V- and Nb-base alloys under irradiation in water, V.A. Kazakov, V.P. Chakin and Yu.D. Goncharenko 271&272 (1999) 463
- Reactions of hydrogen with V–Cr–Ti alloys, J.R. DiStefano, J.H. De Van, D.H. Röhrig and L.D. Chitwood 273 (1999) 102
- Chemical interactions in the EXOTIC-7 experiment, H. Kleykamp 273 (1999) 171
- Materials research on inert matrices: a screening study, Hj. Matzke, V.V. Rondinella and T. Wiss 274 (1999) 47
- Radiation-induced material changes and susceptibility to intergranular failure of light-water-reactor core internals, S.M. Bruemmer, E.P. Simonen, P.M. Scott, P.L. Andresen, G.S. Was and J.L. Nelson 274 (1999) 299
- An Auger electron spectroscopy analysis of thermally-sensitized type 304 stainless steels irradiated to low neutron fluences, T. Onchi, K. Hide and H.M. Chung 274 (1999) 341
- Selection of materials as diluents for burning of plutonium fuels in nuclear reactors, H. Kleykamp 275 (1999) 1
- Reexamination of the fundamental interactions of water with uranium, W.L. Manner, J.A. Lloyd and M.T. Paffett 275 (1999) 37
- Influence of thermomechanical treatment on the corrosion behavior of Zr–1Nb–0.2Cu alloys, J.M. Kim and Y.H. Jeong 275 (1999) 74
- Synergistic interaction of fatigue and stress corrosion on the corrosion fatigue crack growth behavior in Alloy 600 in high temperature and high pressure water, W.Y. Maeng, Y.H. Kang, T.W. Nam, S. Ohashi and T. Ishihara 275 (1999) 194
- Cation incorporation into zirconium oxide in LiOH, NaOH, and KOH solutions, Y.H. Jeong, K.H. Kim and J.H. Baek 275 (1999) 221
- Oxidation of β -Zr and related phases in Zr–Nb alloys: an electron microscopy investigation, Y.P. Lin and O.T. Woo 277 (2000) 11
- Pitting corrosion of Alloy 690 in thio-sulfate-containing chloride solutions, W.-T. Tsai and T.-F. Wu 277 (2000) 169
- The corrosion of Alloy 718 during 800 MeV proton irradiation, R.S. Lillard, G.J. Willcutt, D.L. Pile and D.P. Butt 277 (2000) 250
- Microstructural aspects of Zircaloy nodular corrosion in steam, D.F. Taylor 277 (2000) 295
- Investigation on oxygen controlled liquid lead corrosion of surface treated steels, G. Müller, G. Schumacher and F. Zimmermann 278 (2000) 85
- Nitrogen effect on precipitation and sensitization in cold-worked Type 316L(N) stainless steels, Y. Oh and J. Hong 278 (2000) 242
- The corrosion of materials in water irradiated by 800 MeV protons, R.S. Lillard, D.L. Pile and D.P. Butt 278 (2000) 277
- Characterization of uranium corrosion products involved in a uranium hydride pyrophoric event, T.C. Tote-meier 278 (2000) 301
- Long-term corrosion of Zircaloy before and after irradiation, E. Hillner, D.G. Franklin and J.D. Smee 278 (2000) 334
- Effects of Sn and Nb on massive hydriding kinetics of Zr–XSn–YNb al-

- loy, Y.-s. Kim, S.-k. Kim, J.-g. Bang and Y.-h. Jung 279 (2000) 335
- Residual carbon impurities in Zr–2.5Nb and their effect on deuterium pickup, R.A. Ploc 279 (2000) 344
- Effects of the accumulated annealing parameter on the corrosion characteristics of a Zr–0.5Nb–1.0Sn–0.5Fe–0.25Cr alloy, J.H. Baek, Y.H. Jeong and I.S. Kim 280 (2000) 235
- Interaction between blue brittleness and stress corrosion cracking, W.Y. Chu, Y.B. Wang and L.J. Qiao 280 (2000) 250
- Passivation of uranium towards air corrosion by N_2^+ and C^+ ion implantation, R. Arkush, M.H. Mintz and N. Shamir 281 (2000) 182
- Corrosion behaviour of low activation steels in flowing Pb–17Li, H. Glasbrenner, J. Konys and Z. Voß 281 (2000) 225
- Corrosion resistance of nitrogen-implanted Zircaloy-4 in high-temperature water, S. Lee, C. Park, H. Kwon and B. Choi 282 (2000) 223
- Thermally induced gallium removal from plutonium dioxide for MOX fuel production, D.G. Kolman, M.E. Griego, C.A. James and D.P. Butt 282 (2000) 245
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- Magnetic field effect on deposition of corrosion products in liquid Pb–17Li, F. Barbier 283–287 (2000) 1267
- Development of electrically insulating coatings for service in a lithium environment, K. Natesan, M. Uz and S. Wieder 283–287 (2000) 1277
- Corrosion of V–Ti–Cr alloys in liquid lithium: influence of alloy composition and concentration of nitrogen in lithium, O.I. Eliseeva, V.N. Fedirko, V.M. Chernov and L.P. Zaviatsky 283–287 (2000) 1282
- Compatibility of AlN with liquid lithium, T. Terai, A. Suzuki, T. Yoneoka and T. Mitsuyama 283–287 (2000) 1322
- Compatibility of structural candidate materials with LiF–BeF₂ molten salt mixture, H. Nishimura, T. Terai, T. Yoneoka, S. Tanaka, A. Sagara and O. Motojima 283–287 (2000) 1326
- Corrosion of ferritic–martensitic steels in the eutectic Pb–17Li, H. Glasbrenner, J. Konys, H.D. Röhrig, K. Steinfechner and Z. Voss 283–287 (2000) 1332
- Water corrosion of F82H-modified in simulated irradiation conditions by heat treatment, J. Lapeña and F. Blázquez 283–287 (2000) 1341
- Copper corrosion and activation in water cooling loops under fusion irradiation conditions, P.J. Karditsas, S.M. Ali and D. Wan 283–287 (2000) 1346
- Stress corrosion cracking on irradiated 316 stainless steel, G. Furutani, N. Nakajima, T. Konishi and M. Kodama 288 (2001) 179
- Influence of precipitate density on the nodular corrosion resistance of Zr–Sn–Fe–Cr– alloys at 500 °C, D. Charquet 288 (2001) 237
- Long-term stability of ceramics in liquid lithium, B.A. Pint, L.D. Chitwood and J.R. Di Stefano 289 (2001) 52
- Investigation of models to predict the corrosion of steels in flowing liquid lead alloys, F. Balbaud-Célérier and F. Barbier 289 (2001) 227
- Dissolution behaviour of magnetite film formed over carbon steel in dilute organic acid media, A.A.M. Prince, S. Velmurugan, S.V. Narasimhan, C. Ramesh, N. Murugesan, P.S. Raghavan and R. Gopalan 289 (2001) 281
- Absorption of molten fluoride salts in glassy carbon, pyrographite and Hastelloy B, J. Vacik, H. Naramoto, J. Cervena, V. Hnatowicz, I. Peka and D. Fink 289 (2001) 308
- Shadow corrosion or crevice corrosion? F. Garzarolli, P.B. Hoffmann and A. Seibold 289 (2001) 338
- The corrosion of Alloy 690 in high-temperature aqueous media – thermodynamic considerations, R.J. Lemire and G.A. McRae 294 (2001) 141
- Hydrogen analysis and slow strain rate test in Ar gas for irradiated austenitic stainless steel, J. Morisawa, M. Kodama, N. Yokota, K. Nakata, K. Fukuya, S. Shima and K. Asano 294 (2001) 241
- Oxidation and its effects on the mechanical properties of Nb–1Zr, J.R. DiStefano and L.D. Chitwood 295 (2001) 42
- Oxidation of Zircaloy-2 and Zircaloy-4 in water and lithiated water at 360 °C, M. Oskarsson, E. Ahlberg and K. Pettersson 295 (2001) 97
- Compatibility tests of steels in flowing liquid lead–bismuth, F. Barbier, G. Benamati, C. Fazio and A. Rusanov 295 (2001) 149
- Effect of electrolyte composition on the electrochemical potentiokinetic reactivation behavior of Alloy 600, T.-F. Wu, T.-P. Cheng and W.-T. Tsai 295 (2001) 233

- Thermal gradient mass transfer of type 316L stainless steel and alloy 718 in flowing mercury, S.J. Pawel, J.R. DiStefano and E.T. Manneschildt 296 (2001) 210
- A study on martensitic and austenitic steels after exposure in mercury at 573 K up to 5000 h, R.Kh. Zala-vutdinov, Y. Dai, A.E. Gorodetsky, G.S. Bauer, V.Kh. Alimov and A.P. Zakharov 296 (2001) 219
- Corrosion behavior of steels in flowing lead–bismuth, F. Barbier and A. Rusanov 296 (2001) 231
- Corrosion investigations of steels in flowing lead at 400 °C and 550 °C, H. Glasbrenner, J. Konys, G. Mueller and A. Rusanov 296 (2001) 237
- Compatibility tests on steels in molten lead and lead–bismuth, C. Fazio, G. Benamati, C. Martini and G. Palombarini 296 (2001) 243
- Evaluation of the mechanical properties of T91 steel exposed to Pb and Pb–Bi at high temperature in controlled environment, B. Schmidt, S. Guerin, J.-L. Pastol, P. Plaindoux, J.-P. Dallas, C. Leroux and D. Gorse 296 (2001) 249
- Embrittlement of the martensitic steel 91 tested in liquid lead, G. Nicaise, A. Legris, J.B. Vogt and J. Foct 296 (2001) 256
- Behaviour of F82H mod. stainless steel in lead–bismuth under temperature gradient, D. Gómez Briceño, F.J. Martín, L. Soler Crespo, F. Esteban and C. Torres 296 (2001) 265
- Short-term static corrosion tests in lead–bismuth, L. Soler Crespo, F.J. Martín Muñoz and D. Gómez Briceño 296 (2001) 273
- Intergranular penetration and embrittlement of solid nickel through bismuth vapour condensation at 700 °C, N. Marié, K. Wolski and M. Biscondi 296 (2001) 282
- Development of oxygen meters for the use in lead–bismuth, J. Konys, H. Muscher, Z. Voß and O. Wedemeyer 296 (2001) 289
- Experimental setup for steel corrosion characterization in lead bath, V. Ghetta, F. Gamaoun, J. Fouletier, M. Hénault and A. Lemoulec 296 (2001) 295
- Hydrogen uptake and corrosion behavior of Zr–2.5Nb pressure tubes in Wolsong Unit 1, K.-N. Choo and Y.-S. Kim 297 (2001) 52
- Oxide layers of Zr–1% Nb under PWR primary circuit conditions, G. Nagy, Z. Kerner, G. Battistig, A. Pintér-Csordás, J. Balogh and T. Pajkossy 297 (2001) 62
- Measurement of hydriding susceptibility of Zircaloy cladding by the tube-burst technique at high pressure and high temperature, H.S. Hong and D.R. Olander 297 (2001) 107
- A kinetic model for corrosion and precipitation in non-isothermal LBE flow loop, B. He, N. Li and M. Mineev 297 (2001) 214
- The effect of clay on the dissolution of nuclear waste glass, K. Lemmens 298 (2001) 11
- Overview of actinides (Np, Pu, Am) and Tc release from waste glasses: influence of solution composition, V. Pirlet 298 (2001) 47
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- Near-field performance assessment for a low-activity waste glass disposal system: laboratory testing to modeling results, B.P. McGrail, D.H. Bacon, J.P. Icenhower, F.M. Mann, R.J. Puigh, H.T. Schaefer and S.V. Mattigod 298 (2001) 95
- Performance assessment of the disposal of vitrified high-level waste in a clay layer, D. Mallants, J. Marivoet and X. Sillen 298 (2001) 125
- Release of boron and cesium or uranium from simulated borosilicate waste glasses through a compacted Cabentonite layer, K.S. Chun, S.S. Kim and C.H. Kang 298 (2001) 150
- Determination of sorption isotherms for Eu, Th, U and Am on the gel layer of corroded HLW glass, B. Luckscheiter and B. Kienzler 298 (2001) 155
- Release and retention of uranium during glass corrosion, T. Maeda, T. Banba, K. Sonoda, Y. Inagaki and H. Furuya 298 (2001) 163
- Leaching and migration of neptunium in a simulated engineered barrier system consisting of HLW glass and compacted bentonite, Y. Inagaki, H. Furuya, K. Idemitsu, T. Arima, H. Osako, T. Banba, T. Maeda, S. Matsumoto, I. Nomura, S. Kikkawa, M. Saito and H. Okamoto 298 (2001) 168
- Accumulation of radioactive corrosion products on steel surfaces of VVER-type nuclear reactors. II. ⁶⁰Co, K. Varga, G. Hirschberg, Z. Németh, G. Myburg, J. Schunk and P. Tilky 298 (2001) 231
- In situ Raman spectroscopic investigation of zirconium–niobium alloy corrosion under hydrothermal conditions, J.E. Maslar, W.S. Hurst, W.J. Bowers and J.H. Hendricks 298 (2001) 239

- A working hypothesis on oxidation kinetics of Zircaloy, H.-I. Yoo, B.-J. Koo, J.-O. Hong, I.-S. Hwang and Y.-H. Jeong 299 (2001) 235
- Active control of oxygen in molten lead–bismuth eutectic systems to prevent steel corrosion and coolant contamination, N. Li 300 (2002) 73
- Redox condition in molten fluoride salts
Definition and control, D. Olander 300 (2002) 270
- Emulation of neutron irradiation effects protons: validation of principle, G.S. Was, J.T. Busby, T. Allen, E.A. Kenik, A. Jansson, S.M. Brummer, J. Gan, A.D. Edwards, P.M. Scott and P.L. Andreson 300 (2002) 198
- Composite Materials**
- Development of a reaction-sintered silicon carbide matrix composite, A. Sayano, C. Sutoh, S. Suyama, Y. Itoh and S. Nakagawa 271&272 (1999) 467
- In-pile studies of inert matrices with emphasis on magnesia and magnesium aluminate spinel, N. Chauvin, T. Albiol, R. Mazoyer, J. Noirod, D. Lespiaux, J.C. Dumas, C. Weinberg, J.C. Ménard and J.P. Ottaviani 274 (1999) 91
- Toward very high burnups, a strategy for plutonium utilization in pressurized water reactors, J. Porta and J.-Y. Doriath 274 (1999) 153
- Joining of SiC/SiC_f ceramic matrix composites for fusion reactor blanket applications, P. Colombo, B. Riccardi, A. Donato and G. Scarinci 278 (2000) 127
- Critical issues and current status of SiC/SiC composites for fusion, A. Hasegawa, A. Kohyama, R.H. Jones, L.L. Snead, B. Riccardi and P. Fenici 283–287 (2000) 128
- Effect of dual-beam-irradiation by helium and carbon ions on microstructure development of SiC/SiC composites, S. Nogami, A. Hasegawa, K. Abe, T. Taguchi and R. Yamada 283–287 (2000) 268
- The effect of neutron-irradiation on the shear properties of SiC/SiC composites with varied interface, T. Hinoki, L.L. Snead, Y. Katoh, A. Kohyama and R. Shinavski 283–287 (2000) 376
- SYLRAMIC™ SiC fibers for CMC reinforcement, R.E. Jones, D. Petrak, J. Rabe and A. Szweda 283–287 (2000) 556
- Room and high-temperature mechanical and thermal properties of SiC fiber-reinforced SiC composite sintered under pressure, K. Yoshida and T. Yano 283–287 (2000) 560
- High thermal conductivity SiC/SiC composites for fusion applications, W. Kowbel, C.A. Bruce, K.L. Tsou, K. Patel, J.C. Withers and G.E. Youngblood 283–287 (2000) 570
- Mechanical and thermal properties of 2D and 3D SiC/SiC composites, R. Yamada, T. Taguchi and N. Igawa 283–287 (2000) 574
- New evaluation method of crack growth in SiC/SiC composites using interface elements, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 283–287 (2000) 579
- Study of helium effects in SiC/SiC composites under fusion reactor environment, A. Hasegawa, B.M. Oliver, S. Nogami, K. Abe and R.H. Jones 283–287 (2000) 811
- Russian superconducting materials for magnet systems of fusion reactors, A. Shikov, A. Nikulin, V. Patsyrnyi, A. Vorobieva, G. Vedernikov, A. Silaev, E. Dergunova, S. Soudiev and I. Akimov 283–287 (2000) 968
- The behavior of coatings and SiC_f/SiC composites under thermal shock, J. Yu, Z. Yao, G. Yu, F. Chu, X. Tang, Y. Zeng and T. Noda 283–287 (2000) 1077
- Computational analysis of creep fracture deformation in SiC/SiC composites, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 289 (2001) 16
- Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers, T. Hinoki, W. Yang, T. Nozawa, T. Shibayama, Y. Katoh and A. Kohyama 289 (2001) 23
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- Development of SiC/SiC composites by PIP in combination with RS, M. Kotani, A. Kohyama and Y. Katoh 289 (2001) 37
- Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC, Y. Katoh, M. Kotani, H. Kishimoto, W. Yang and A. Kohyama 289 (2001) 42
- Mixed-material coating formation on tungsten surfaces during plasma exposure in TEXTOR-94, D. Hildebrandt, P. Wienhold and W. Schneider 290–293 (2001) 89
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Simulation study on retention and reflection from tungsten carbide under high fluence of helium ions, T. Ono, T. Kawamura, T. Kenmotsu and Y. Yamamura 290–293 (2001) 140

- Reactivity of lithium-containing amorphous carbon (a-C) films, M. Töwe, P. Reinke and P. Oelhafen 290–293 (2001) 153
- Effects of condensible impurities on the erosion behavior of the plasma-facing materials, N. Ohno, S. Uno, Y. Hirooka and S. Takamura 290–293 (2001) 299
- Copper, Copper Alloys and Compounds**
- TRANS_MU computer code for computation of transmutant formation kinetics in advanced structural materials for fusion reactors, N.V. Markina and G.A. Shimansky 271&272 (1999) 30
- Simulation of the kinetics of defect accumulation in copper under neutron irradiation, H.L. Heinisch and B.N. Singh 271&272 (1999) 46
- Irradiation examination of CuNiCrSi alloy for ITER applications, A.D. Ivanov, A.V. Kozlov, M.V. Chernetsov and S.A. Averin 271&272 (1999) 139
- Annealing of Cu₃Au irradiated with protons, α -particles and C ions at liquid nitrogen temperature, H. Sakairi, E. Yagi and A. Koyama 271&272 (1999) 194
- Voids in fast-neutron-irradiated Cu, Ni and Cu–Ni concentrated alloys studied by TEM and positron annihilation methods, H. Fukushima, K. Ochiai and Y. Shimomura 271&272 (1999) 220
- Computer simulation on the void formation in neutron-irradiated Cu and Ni at high temperature, Y. Shimomura, I. Mukouda and K. Sugio 271&272 (1999) 225
- Damage evolution in neutron-irradiated Cu during neutron irradiation, I. Mukouda and Y. Shimomura 271&272 (1999) 230
- Void formation close to stacking fault tetrahedra in heavily electron irradiated pure Ag and Cu, K. Niwase, F. Phillipp, W. Sigle and A. Seeger 271&272 (1999) 261
- Effects of He implantation on radiation induced segregation in Cu–Au and Ni–Si alloys, A. Iwase, L.E. Rehn, P.M. Baldo and L. Funk 271&272 (1999) 321
- Be–Cu joints based on amorphous alloy brazing for divertor and first wall application, B. Kalin, V. Fedotov, O. Sevryukov, A. Plyushev, I. Mazul, A. Gervash and R. Giniatulin 271&272 (1999) 410
- Fracture toughness of copper-base alloys for fusion energy applications, D.J. Alexander, S.J. Zinkle and A.F. Rowcliffe 271&272 (1999) 429
- ITER and beyond 271&272 (1999) 569
- TEM and SEM studies of radiation blistering in helium-implanted copper, P.B. Johnson, R.W. Thomson and K. Reader 273 (1999) 117
- The influence of neutron irradiation on the fatigue performance of OFHC copper and a dispersion strengthened copper alloy B.N. Singh, J.F. Stubbins and P. Toft 275 (1999) 125
- Comparative study of radiation damage accumulation in Cu and Fe, M.J. Caturla, N. Soneda, E. Alonso, B.D. Wirth, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 13
- The search for interstitial dislocation loops produced in displacement cascades at 20 K in copper, M.A. Kirk, M.L. Jenkins and H. Fukushima 276 (2000) 50
- Stability and mobility of defect clusters and dislocation loops in metals, Yu.N. Osetsky, D.J. Bacon, A. Serra, B.N. Singh and S.I. Golubov 276 (2000) 65
- Defect accumulation in fcc and bcc metals and alloys under cascade damage conditions – Towards a generalisation of the production bias model, S.I. Golubov, B.N. Singh and H. Trinkaus 276 (2000) 78
- Interactions between mobile dislocation loops in Cu and α -Fe, Yu.N. Osetsky, A. Serra and V. Priego 276 (2000) 202
- Quantitative analysis of CTEM images of small dislocation loops in Al and stacking fault tetrahedra in Cu generated by molecular dynamics simulation, R. Schäublin, A. Almazouzi, Y. Dai, Yu.N. Osetsky and M. Victoria 276 (2000) 251
- Study of defect annealing behaviour in neutron irradiated Cu and Fe using positron annihilation and electrical conductivity, M. Eldrup and B.N. Singh 276 (2000) 269
- Tritium trapping capacity on metal surface, M. Nishikawa, N. Nakashio, T. Shiraishi, S. Odoi, T. Takeishi and K. Kamimae 277 (2000) 99
- On the validity of the cluster model to describe the evolution of Cu precipitates in FeCu alloys, S.I. Golubov, A. Serra, Y.N. Osetsky and A.V. Barashev 277 (2000) 113
- Retention and release of deuterium implanted in copper coatings on Al-6061, M.Y. Inal, M. Alam, K. Kurz, D.F. Cowgill and R.A. Causey 278 (2000) 164
- On the recovery of the physical and mechanical properties of a CuCrZr alloy subjected to heat treatments simulating the thermal cycle of hot isostatic pressing, U. Holzwarth, M. Pisoni, R. Scholz, H. Stamm and A. Volcan 279 (2000) 19
- The precipitation behaviour of ITER-grade Cu–Cr–Zr alloy after simulating the thermal cycle of hot isostatic

- pressing, U. Holzwarth and H. Stamm 279 (2000) 31
- Heavy-ion cascade effects on radiation-induced segregation kinetics in Cu–1%Au alloys, M.J. Giacobbe, N.Q. Lam, L.E. Rehn, P.M. Baldo, L. Funk and J.F. Stubbins 281 (2000) 213
- Evaluation of hot isostatic pressing for joining of fusion reactor structural components, A.D. Ivanov, S. Sato and G. Le Marois 283–287 (2000) 35
- Influence of neutron irradiation on Cu–NiCrSi alloy pre-implanted with helium, A.V. Kozlov, M.V. Chernetsov, S.A. Averin, V.Ya. Abramov, A.D. Ivanov, Yu.S. Strebkov and V.F. Reutov 283–287 (2000) 193
- The effect of transmutation and displacement in irradiated copper for heat-sink materials, S. Ishino, A. Kurui, S. Ichikawa, T. Inaba and T. Hasegawa 283–287 (2000) 215
- Application of the internal friction method to studying microstructural effects in fusion materials, S. Tähtinen, Y. Jagodzinski, O. Tarasenko, S. Smuk and H. Hänninen 283–287 (2000) 255
- Computer simulations of the effects of temperature change on defect accumulation in copper during neutron irradiation, Q. Xu, H.L. Heinisch and T. Yoshiie 283–287 (2000) 297
- Microstructure of Cu–Ni alloys neutron irradiated at 210 °C and 420 °C to 14 dpa, S.J. Zinkle and B.N. Singh 283–287 (2000) 306
- Effect of neutron dose and irradiation temperature on the mechanical properties and structure of dispersion strengthened copper alloys, A.S. Pokrovsky, S.A. Fabritsiev, D.J. Edwards, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 404
- Effect of high-dose neutron irradiation on the mechanical properties and structure of copper alloys and Cu/SS joints for ITER applications, S.A. Fabritsiev, A.S. Pokrovsky, D.J. Edwards, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 523
- Status of international collaborative efforts on selected ITER materials, V.A. Belyakov, S.A. Fabritsiev, I.V. Mazul and A.F. Rowcliffe 283–287 (2000) 962
- Fracture behavior of high-strength, high-conductivity copper alloys, M. Li, J.K. Heuer, J.F. Stubbins and D.J. Edwards 283–287 (2000) 977
- Evaluation of the deformation fields and bond integrity of Cu/SS joints, J.F. Stubbins, J. Collins and J. Min 283–287 (2000) 982
- Damage mechanisms and fracture toughness of GlidCop® CuAl25 IG0 copper alloy, S. Tähtinen, A. Laukkanen and B.N. Singh 283–287 (2000) 1028
- Effects of heat treatments on microstructure changes in the interface of Cu/SS316L joint materials, Q. Xu, D.J. Edwards and T. Yoshiie 283–287 (2000) 1229
- Low cycle fatigue strength of diffusion bonded joints of alumina dispersion-strengthened copper to stainless steel, H. Nishi and T. Araki 283–287 (2000) 1234
- Effect of neutron irradiation on mechanical properties of Cu/SS joints after single and multiple HIP cycles, S. Tähtinen, B.N. Singh and P. Toft 283–287 (2000) 1238
- High temperature residual strain measurements in a brazed sample for NET/ITER, R. Coppola, C. Nardi and B. Riccardi 283–287 (2000) 1243
- Copper corrosion and activation in water cooling loops under fusion irradiation conditions, P.J. Karditsas, S.M. Ali and D. Wan 283–287 (2000) 1346
- Studies of tungsten erosion at the inner and outer main chamber wall of the ASDEX Upgrade tokamak, A. Tabasso, H. Maier, J. Roth, K. Krieger and ASDEX Upgrade Team 290–293 (2001) 326
- Some problems arising due to plasma–surface interaction for operation of the in-vessel mirrors in a fusion reactor, V.S. Voitsenya, A.F. Bardamid, V.N. Bondarenko, W. Jacob, V.G. Konovalov, S. Masuzaki, O. Motojima, D.V. Orlinskij, V.L. Poperenko, I.V. Ryzhkov, A. Sagara, A.F. Shtan, S.I. Solodovchenko and M.V. Vinnichenko 290–293 (2001) 336
- The role of Cu in displacement cascades examined by molecular dynamics, C.S. Becquart, C. Domain, J.C. van Duysen and J.M. Raulot 294 (2001) 274
- Effect of bonding and bakeout thermal cycles on the properties of copper alloys irradiated at 350 °C, B.N. Singh, D.J. Edwards, M. Eldrup and P. Toft 295 (2001) 1
- Permeation behavior of deuterium implanted in electro- and sputter-deposited copper coatings on aluminum alloy substrates, M. Alam and M.Y. Inal 295 (2001) 27
- Annealing of hardening in copper after neutron irradiation hardening at 77 K, H.C. González and M.T. Miralles 295 (2001) 157
- Multiscale modeling of radiation damage: applications to damage production by GeV proton irradiation of Cu and W, and pulsed irradiation effects in Cu and Fe, M.J. Caturla, T. Diaz de la Rubia, M. Victoria, R.K. Corzine, M.R. James and G.A. Greene 296 (2001) 90

- Microstructure and properties of a Cu–Cr–Zr alloy, I.S. Batra, G.K. Dey, U.D. Kulkarni and S. Banerjee 299 (2001) 91
- Varying temperature irradiation experiment in HFIR, T. Muroga, S.J. Zinkle, A.L. Qualls and H. Watanabe 299 (2001) 148
- Effect of neutron irradiation and post-irradiation annealing on microstructure and mechanical properties of OFHC-copper, B.N. Singh, D.J. Edwards and P. Toft 299 (2001) 205
- Creep and Stress Relaxation**
- Mechanical property changes of low activation ferritic/martensitic steels after neutron irradiation, Y. Kohno, A. Kohyama, T. Hirose, M.L. Hamilton and M. Narui 271&272 (1999) 145
- Post-irradiation creep rupture properties of FBR grade 316 SS structural material, N. Miyaji, Y. Abe, S. Ukai and S. Onose 271&272 (1999) 173
- Creep deformation and fracture behaviour of a nitrogen-bearing type 316 stainless steel weld metal, G. Sasikala, M.D. Mathew, K. Bhanu Sankara Rao and S.L. Mannan 273 (1999) 257
- Thermophysical properties of rock-like oxide fuel with spinel–yttria stabilized zirconia system, N. Nitani, T. Yamashita, T. Matsuda, S.-i. Kobayashi and T. Ohmichi 274 (1999) 15
- Defect accumulation behaviour in hcp metals and alloys, C.H. Woo 276 (2000) 90
- Comparison of swelling and irradiation creep behavior of fcc-austenitic and bcc-ferritic/martensitic alloys at high neutron exposure, F.A. Garner, M.B. Toloczko and B.H. Sencer 276 (2000) 123
- In-reactor creep rupture properties of 20% CW modified 316 stainless steel, S. Ukai, S. Mizuta, T. Kaito and H. Okada 278 (2000) 320
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- Development of vacancy clusters in neutron-irradiated copper at high temperature, Y. Shimomura and I. Mukouda 283–287 (2000) 249
- Microstructure in pure copper irradiated by simultaneous multi-ion beam of hydrogen, helium and self ions, I. Mukouda, Y. Shimomura, T. Iiyama, Y. Harada, Y. Katano, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 302
- New evaluation method of crack growth in SiC/SiC composites using interface elements, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 283–287 (2000) 579
- A molecular dynamics simulation study of small cluster formation and migration in metals, K. Morishita, T. Diaz de la Rubia, E. Alonso, N. Sekimura and N. Yoshida 283–287 (2000) 753
- Effect of oxygen on the crack growth behavior of V–4Cr–4Ti at 600 °C, R.J. Kurtz 283–287 (2000) 822
- Fatigue behavior and development of microcracks in F82H after helium implantation at 200 °C, J. Bertsch, S. Meyer and A. Möslang 283–287 (2000) 832
- Fracture behavior of high-strength, high-conductivity copper alloys, M. Li, J.K. Heuer, J.F. Stubbins and D.J. Edwards 283–287 (2000) 977
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- ITER structural design criteria and their extension to advanced reactor blankets, S. Majumdar and G. Kalinin 283–287 (2000) 1424
- Computational analysis of creep fracture deformation in SiC/SiC composites, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 289 (2001) 16
- Short-time creep and rupture tests on high burnup fuel rod cladding, W. Goll, H. Spilker and E.H. Toscano 289 (2001) 247
- Ductility and strain rate sensitivity of Zircaloy-4 nuclear fuel claddings, K.W. Lee, S.K. Kim, K.T. Kim and S.I. Hong 295 (2001) 21
- Radiation resistance and thermal creep of ODS ferritic steels, V.V. Sagaradze, V.I. Shalaev, V.L. Arbutov, B.N. Goshchitskii, Y. Tian, W. Qun and S. Jiguang 295 (2001) 265
- Dependence of the non-swelling in-reactor steady-state creep component of austenitic phase alloys on the stacking fault energy, E.R. Gilbert and J.P. Foster 298 (2001) 321
- Crystallographic Properties**
- Contribution to irradiation creep arising from gas-driven bubble growth, C.H. Woo and F.A. Garner 271&272 (1999) 78
- TEM analyses of surface ridge network in an ion-irradiated graphite thin film, S. Muto, T. Tanabe, M. Takeuchi, Y. Kobayashi, S. Furuno and K. Hojou 271&272 (1999) 285
- Native vacancy migrations in zircon, R.E. Williford, W.J. Weber, R. Devanathan and A.N. Cormack 273 (1999) 164
- A review of the high temperature oxidation of uranium oxides in molten salts and in the solid state to form alkali

- metal uranates, and their composition and properties, T.R. Griffiths and V.A. Volkovich 274 (1999) 229
- ⁷⁹Se: geochemical and crystallo-chemical retardation mechanisms, F. Chen, P.C. Burns and R.C. Ewing 275 (1999) 81
- The niobium–silicon–uranium system, T. Lebihan, P. Rogl, H. Noël 277 (2000) 82
- Neutron diffraction study of U–10 wt% Mo alloy, B.-S. Seong, C.-H. Lee, J.-S. Lee, H.-S. Shim, J.-H. Lee, K. Kim, C. Kim and V. Em 277 (2000) 274
- Thermal expansion of ThO₂ 2 wt% UO₂ by HT-XRD, A.K. Tyagi and M.D. Mathews 278 (2000) 123
- Gamma-irradiation effect on heterogeneous short-range order in Fe + 12 at.% Al alloy, L.I. Chyrko, V.I. Chyrko, E.U. Grynuk, O.V. Drogayev, M.P. Krulikovska and V.I. Sugakov 279 (2000) 162
- Thermal and X-ray diffraction studies on the phase equilibria in the system UO₂(NO₃)₂ · 6H₂O–NaNO₃, B.B. Kalekar, K.V. Rajagopalan, C.G.S. Pillai, P.V. Ravindran and P.K. Mathur 279 (2000) 245
- Ultrashort X-ray pulse generation using subpicosecond electron linac, H. Harano, K. Kinoshita, K. Yoshii, T. Ueda, S. Okita and M. Uesaka 280 (2000) 255
- Preparation and characterisation of Pu-pyrochlore: [La_{1-x}Pu_x]₂Zr₂O₇ (x = 0–1), N.K. Kulkarni, S. Sampath and V. Venugopal 281 (2000) 248
- In-pile and post-irradiation creep of type 304 stainless steel under different neutron spectra, Y. Kurata, Y. Itabashi, H. Mimura, T. Kikuchi, H. Amezawa, S. Shimakawa, H. Tsuji and M. Shindo 283–287 (2000) 386
- Irradiation creep at 60 °C in SUS 316 and its impact on fatigue fracture, J. Nagakawa, Y. Murase, N. Yamamoto and T. Fukuzawa 283–287 (2000) 391
- Irradiation creep of 11Cr–0.5Mo–2W, V, Nb ferritic–martensitic, modified 316, and 15Cr–20Ni austenitic S.S. irradiated in FFTF to 103–206 dpa, A. Uehira, S. Mizuta, S. Ukai and R.J. Puigh 283–287 (2000) 396
- Effects of helium implantation on creep rupture properties of low activation ferritic steel F82H IEA heat, N. Yamamoto, J. Nagakawa and K. Shiba 283–287 (2000) 400
- Application of generalized deformation theory to irradiation creep of fcc and bcc stainless steels, M.B. Toloczko, J.P. Hirth and F.A. Garner 283–287 (2000) 409
- Mechanical behavior and microstructural evolution of vanadium alloys irradiated in ATR-A1, K.-i. Fukumoto, H. Matsui, H. Tsai and D.L. Smith 283–287 (2000) 492
- New evaluation method of crack growth in SiC/SiC composites using interface elements, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 283–287 (2000) 579
- Uses of zirconium alloys in fusion applications, C.B.A. Forty and P.J. Karditsas 283–287 (2000) 607
- Biaxial thermal creep of V–4Cr–4Ti at 700 °C and 800 °C, R.J. Kurtz and M.L. Hamilton 283–287 (2000) 628
- Phase equilibria and magnetism in the Mo–Si–U system, P. Rogl, T. Lebihan and H. Noël 288 (2001) 66
- Computational analysis of creep fracture deformation in SiC/SiC composites, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 289 (2001) 16
- Heavy ion irradiation studies of columbite, brannerite, and pyrochlore structure types, G.R. Lumpkin, K.L. Smith and M.G. Blackford 289 (2001) 177
- Densification behaviour and sintering kinetics of PuO₂ pellets, T.R.G. Kutty, K.B. Khan, P.V. Hegde, A.K. Sengupta, S. Majumdar and D.S.C. Purushotham 297 (2001) 120
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in gadolinium zirconate, R.E. Williford and W.J. Weber 299 (2001) 140
- On the relationship among 'f' texture factors for the principal planes of zirconium, hafnium and titanium alloys, J.J. Kearns 299 (2001) 171
- The structures of two sodium uranyl compounds relevant to nuclear waste disposal, Y. Li and P.C. Burns 299 (2001) 219
- Characterization of the new uranium–nickel alloy U₁₀Ni₁₃, A. Perricone and H. Noël 299 (2001) 260
- Neutron irradiation of sapphire for compressive strengthening. I. Processing conditions and compressive strength, T.M. Regan, D.C. Harris, R.M. Stroud and J.R. White 300 (2002) 39
- A Raman study of the nanocrystallite size effect on the pressure–temperature phase diagram of zirconia grown by zirconium-based alloys oxidation, P. Bouvier, J. Godlewski and G. Lucazeau 300 (2002) 118
- Order–disorder phase transition induced by swift ions in MgAl₂O₄ and ZnAl₂O₄ spinels, D. Simeone, C. Dodane-Thiriet, D. Gosset, P. Daniel and M. Beauvy 300 (2002) 151
- Amorphization and recrystallization of the ABO₃ oxides, A. Meldrum, L.A. Boatner, W.J. Weber and R.C. Ewing 300 (2002) 242

Defects and Defect Structures (*excludes by Irradiation*)

- Computer simulation of the interaction between an edge dislocation and interstitial clusters in Fe and Ni, E. Kuramoto, K. Ohsawa, T. Tsutsumi and M. Koyanagi 271&272 (1999) 26
- Properties of precipitation hardened steel irradiated at 323 K in the Japan materials testing reactor, M. Niimi, Y. Matsui, S. Jitsukawa, T. Hoshiya, T. Tsukada, M. Ohmi, H. Mimura, N. Ooka and K. Hide 271&272 (1999) 92
- Effects of neutron irradiation on microstructure and mechanical properties of pure iron, B.N. Singh, A. Horsewell and P. Toft 271&272 (1999) 97
- The mechanical properties of 590 MeV proton irradiated iron, Y. Chen, P. Spätig and M. Victoria 271&272 (1999) 128
- Irradiation hardening of V-4Cr-4Ti, E.V. van Osch and M.I. de Vries 271&272 (1999) 162
- Defect-flow-induced heterogeneous dislocation formation and solute redistribution near a grain boundary in austenitic stainless steel under electron irradiation, S. Watanabe, N. Sakaguchi, S. Mochizuki and H. Takahashi 271&272 (1999) 184
- Atomic mechanisms and energetics of thermally activated processes of helium redistribution in vanadium, V.M. Chernov, V.A. Romanov and A.O. Krutskikh 271&272 (1999) 274
- Destination of point defects and microstructural evolution under collision cascade damage, T. Yoshiie and M. Kiritani 271&272 (1999) 296
- Trapping of deuterium by niobium at eV ion bombardment energies, A.A. Evanov, V.A. Kurnaev, D.V. Levchuk and A.A. Pisarev 271&272 (1999) 330
- Native vacancy migrations in zircon, R.E. Williford, W.J. Weber, R. Devanathan and A.N. Cormack 273 (1999) 164
- Characterization of Zircaloy-4 oxide layers by impedance spectroscopy, P. Barberis and A. Fricet 273 (1999) 182
- Effects of thermal cycles on ^{222}Rn permeability in Au, S.K. Bhattacharyya and S.K. Pabi 275 (1999) 206
- Dislocation loop structure, energy and mobility of self-interstitial atom clusters in bcc iron, B.D. Wirth, G.R. Odette, D. Maroudas and G.E. Lucas 276 (2000) 33
- Stability and mobility of defect clusters and dislocation loops in metals, Yu.N. Osetsky, D.J. Bacon, A. Serra, B.N. Singh and S.I. Golubov 276 (2000) 65
- Defect accumulation behaviour in hcp metals and alloys, C.H. Woo 276 (2000) 90
- Computer simulation of fundamental behaviors of interstitial clusters in Fe and Ni, E. Kuramoto 276 (2000) 143
- Interaction and accumulation of glissile defect clusters near dislocations, N.M. Ghoniem, B.N. Singh, L.Z. Sun and T. Díaz de la Rubia 276 (2000) 166
- Computer simulation of SIA migration in bcc and hcp metals, R.C. Pasianot, A.M. Monti, G. Simonelli and E.J. Savino 276 (2000) 230
- A new procedure of X-ray line profile analysis applied to study the dislocation structure and subgrain size-distributions in fatigued MANET steel, T. Ungár, M. Victoria, P. Marmy, P. Hanák and G. Szenes 276 (2000) 278
- Thermal conductivity of hypostoichiometric low Pu content (U,Pu)O_{2-x} mixed oxide, C. Duriez, J.-P. Alesandri, T. Gervais and Y. Philipponneau 277 (2000) 143
- Non-stoichiometry, electrical conductivity and defect structure of hyperstoichiometric UO_{2+x} at 1000 °C, S.-H. Kang, J.-H. Lee, H.-I. Yoo, H. Soo Kim and Y. Woo Lee 277 (2000) 339
- The diffusion of iodine and caesium in the UO_{2±x} lattice, G. Busker, R.W. Grimes and M.R. Bradford 279 (2000) 46
- Theoretical oxygen potential change of quaternary solid solution, A_y²⁺B_z³⁺-U_{1-y-z}O_{2+x}, by configurational entropy calculation, T. Fujino and N. Sato 282 (2000) 232
- Tensile and impact properties of V-4Cr-4Ti alloy heats 832665 and 832864, T.S. Bray, H. Tsai, L.J. Nowicki, M.C. Billone, D.L. Smith, W.R. Johnson and P.W. Trester 283–287 (2000) 633
- 3D dislocation dynamics study of plastic instability in irradiated copper, L.Z. Sun, N.M. Ghoniem, S.-H. Tong and B.N. Singh 283–287 (2000) 741
- In-beam dielectric properties of alumina at low frequencies, R. Vila and E.R. Hodgson 283–287 (2000) 903
- Material composition and nuclear data libraries' influence on nickel-chromium alloys activation evaluation: a comparison with decay heat experiments, D.G. Cepraga and G. Cambi 283–287 (2000) 1453
- Oxidation and volatilization of TZM alloy in air, G.R. Smolik, D.A. Petti and S.T. Schuetz 283–287 (2000) 1458
- New mechanism for radiation defect production and aggregation in crystalline ceramics, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 289 (2001) 86

- Oxygen potential and defect structure of the solid solution, Mg–Gd–UO₂, T. Fujino, N. Sato, K. Yamada, M. Okazaki, K. Fukuda, H. Serizawa and T. Shiratori 289 (2001) 270
- Deuterium retention and lattice damage in tungsten irradiated with D ions, V.Kh. Alimov, K. Ertl and J. Roth 290–293 (2001) 389
- Study of brittle destruction and erosion mechanisms of carbon-based materials during plasma instabilities, T. Burtseva, A. Hassanein, I. Ovchinnikov and V. Titov 290–293 (2001) 1059
- Deformation**
- Diffuse X-ray scattering studies of radiation defects in Ni and dilute Ni alloys, H. Yuya, H. Maeta, H. Oh-tsuka, N. Matsumoto, H. Sugai, A. Iwase, T. Matsui, T. Suzuki, M. Jinchoh and K. Yamakawa 271&272 (1999) 7
- Influence of irradiation on the dislocation kinetics with allowance for the dislocation velocity distribution, N.V. Kamyshanchenko, V.V. Krasil'nikov, I.M. Nekliudov and A.A. Parkhomenko 271&272 (1999) 84
- Investigation of palladium alloy properties degradation during long-time tritium exposure, V. Tebus, L. Rivkis, G. Arutunova, E. Dmitrievsky, V. Filin, Y. Golikov, V. Krivova and V. Kapyshev 271&272 (1999) 345
- Physical mechanisms of helium release during deformation of vanadium alloys doped with helium atoms, A. Ryazanov, H. Matsui and A.V. Kazaryan 271&272 (1999) 356
- Similarity and difference between fcc, bcc and hcp metals from the view point of point defect cluster formation, M. Kiritani 276 (2000) 41
- Deformation modes of proton and neutron irradiated stainless steels, C. Bailat, F. Gröschel and M. Victoria 276 (2000) 283
- A method to study deformation mechanisms for irradiated steels using a disk-bend test, E.H. Lee, T.S. Byun, J.D. Hunn, N. Hashimoto and K. Farrell 281 (2000) 65
- Radiation-induced inter-granular segregation in first wall fusion reactor materials, R.G. Faulkner, S. Song and P.E.J. Flewitt 283–287 (2000) 147
- The effect of alloying elements on the defect structural evolution in neutron irradiated Ni alloys, T. Yoshiie, Q. Xu, Y. Satoh, H. Ohkubo and M. Kiritani 283–287 (2000) 229
- Tensile properties and microstructure of 590 MeV proton-irradiated pure Fe and a Fe–Cr alloy, M.I. Luppó, C. Bailat, R. Schäublin and M. Victoria 283–287 (2000) 483
- Effect of strain rate on the tensile properties of unirradiated and irradiated V–4Cr–4Ti, A.F. Rowcliffe, S.J. Zinkle and D.T. Hoelzer 283–287 (2000) 508
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- 3D dislocation dynamics study of plastic instability in irradiated copper, L.Z. Sun, N.M. Ghoniem, S.-H. Tong and B.N. Singh 283–287 (2000) 741
- Molecular dynamics simulation of defect production in irradiated β -SiC, L. Malerba, J.M. Perlado, A. Sánchez-Rubio, I. Pastor, L. Colombo and T. Diaz de la Rubia 283–287 (2000) 794
- Positron-lifetime study of electrically hydrogen charged Ni, austenitic stainless steel and Fe, H. Ohkubo, S. Sugiyama, K. Fukuzato, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 858
- Study on the damaging process of silica by in-reactor luminescence, T. Ii, T. Yoshida, T. Tanabe, T. Hara, M. Okada and K. Yamaguchi 283–287 (2000) 898
- Effects of co-implanted oxygen or aluminum atoms on hydrogen migration and damage structure in multiple-beam irradiated Al₂O₃, Y. Katano, T. Aruga, S. Yamamoto, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 942
- Ductility correlations between shear punch and uniaxial tensile test data, M.B. Toloczko, M.L. Hamilton and G.E. Lucas 283–287 (2000) 987
- Deuterium retention in tungsten and molybdenum, S. Nagata and K. Takahiro 283–287 (2000) 1038
- Study of the tritium behavior on the surface of Li₂O by means of work function measurement, T. Yokota, A. Suzuki, K. Yamaguchi, T. Terai and M. Yamawaki 283–287 (2000) 1366
- Characterization of plastic deformation in a disk bend test, T.S. Byun, E.H. Lee, J.D. Hunn, K. Farrell and L.K. Mansur 294 (2001) 256
- Effect of Mo addition on the crystal texture and deformation twin formation in Zr-based alloys, Y.B. Chun, S.K. Hwang, M.H. Kim, S.I. Kwun and S.W. Chae 295 (2001) 31
- Influence of dynamic strain aging on the ductile tearing of C–Mn steels: modelling by a local approach

- method, D. Wagner, J.C. Moreno, C. Prioul, J.M. Frund and B. Houssin 300 (2002) 178
- Diffusion**
- Simulation of the kinetics of defect accumulation in copper under neutron irradiation, H.L. Heinisch and B.N. Singh 271&272 (1999) 46
- Atom transport efficiency in heavy ion irradiated metals, P. Fielitz, V. Naundorf and H. Wollenberger 271&272 (1999) 52
- Destination of point defects and microstructural evolution under collision cascade damage, T. Yoshiie and M. Kiritani 271&272 (1999) 296
- Physical mechanisms of helium release during deformation of vanadium alloys doped with helium atoms, A. Ryazanov, H. Matsui and A.V. Kazaryan 271&272 (1999) 356
- Damage production and accumulation 271&272 (1999) 540
- Modeling and analysis of time-dependent tritium transport in lithium oxide, A. Badawi, A.R. Raffray and M.A. Abdou 273 (1999) 79
- Metal and oxygen mobilities during Zircaloy-4 oxidation at high temperature, A. Grandjean and Y. Serruys 273 (1999) 111
- Diffusion model for the oxidation of Zircaloy-4 at 400 °C in steam. The influence of metallurgical structure (precipitates and grain size), E.A. Garcia and G. Béranger 273 (1999) 221
- Comments on 'Thermal treatment of uranium oxide irradiated in pressurized water reactor: swelling and release of fission gases' by I. Zacharie, S. Lansiart, P. Combette, M. Trotabas, M. Coster and M. Groos, J.H. Evans 274 (1999) 61
- Behavior of cesium implanted in zirconia based inert matrix fuel, M.A. Pouchon, M. Döbeli, C. Degueudre and M. Burghartz 275 (1999) 108
- Reactions of U–Zr alloy with Fe and Fe–Cr alloy, K. Nakamura, T. Ogata, M. Kurata, A. Itoh and M. Akabori 275 (1999) 246
- Mechanisms involved in thermal diffusion of rare earth elements in apatite, P. Martin, G. Carlot, A. Chevarier, C. Den-Auwer and G. Panczer 275 (1999) 268
- Diffusion-controlled hydride growth near crack tip in zirconium under temperature transients, S.-Q. Shi 275 (1999) 318
- The primary damage state in fcc, bcc and hcp metals as seen in molecular dynamics simulations, D.J. Bacon, F. Gao and Yu.N. Osetsky 276 (2000) 1
- Comparative study of radiation damage accumulation in Cu and Fe, M.J. Caturla, N. Soneda, E. Alonso, B.D. Wirth, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 13
- Kinetic Monte Carlo studies of the effects of Burgers vector changes on the reaction kinetics of one-dimensionally gliding interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 276 (2000) 59
- Stability and mobility of defect clusters and dislocation loops in metals, Yu.N. Osetsky, D.J. Bacon, A. Serra, B.N. Singh and S.I. Golubov 276 (2000) 65
- Defect accumulation behaviour in hcp metals and alloys, C.H. Woo 276 (2000) 90
- Heavy ion irradiation and annealing of lead: atomistic simulations and experimental validation, M.-J. Caturla, M. Wall, E. Alonso, T. Díaz de la Rubia, T. Felter and M.J. Fluss 276 (2000) 186
- Interactions between mobile dislocation loops in Cu and α -Fe, Yu.N. Osetsky, A. Serra and V. Priego 276 (2000) 202
- Properties and evolution of sessile interstitial clusters produced by displacement cascades in α -iron, F. Gao, D.J. Bacon, Yu.N. Osetsky, P.E.J. Flewitt and T.A. Lewis 276 (2000) 213
- Computer simulation of SIA migration in bcc and hcp metals, R.C. Pasianot, A.M. Monti, G. Simonelli and E.J. Savino 276 (2000) 230
- Transport and leaching of technetium and uranium from spent UO₂ fuel in compacted bentonite clay, H. Ramebäck, Y. Albinsson, M. Skålbeg, U.B. Eklund, L. Kjellberg and L. Werme 277 (2000) 288
- Diffusion under irradiation of rare earth elements in apatite, P. Martin, A. Chevarier and G. Panczer 278 (2000) 202
- Effect of grain-boundaries on uranium and oxygen diffusion in polycrystalline UO₂, A.C.S. Sabioni, W.B. Ferraz and F. Millot 278 (2000) 364
- Thermophysical properties of uranium dioxide, J.K. Fink 279 (2000) 1
- The diffusion of iodine and caesium in the UO_{2±x} lattice, G. Busker, R.W. Grimes and M.R. Bradford 279 (2000) 46
- Thermal iodine release of surface-implanted iodine in zirconia and its affect on hull disposal, F. Brossard, N. Chevarier, N. Moncoffre, Ph. Sainsot, D. Crusset and H. Jaffrezic 279 (2000) 153
- A reaction–diffusion analysis of the hydriding kinetics of zirconium-based alloys, G.E. Fernández and G. Meyer 279 (2000) 167
- Analysis of constituent redistribution in the γ (bcc) U–Pu–Zr alloys under gradients of temperature and concentrations, Y.H. Sohn, M.A. Da-

- yananda, G.L. Hofman, R.V. Strain and S.L. Hayes 279 (2000) 317
- Lithium and tritium diffusion in lithium oxide (Li₂O), a molecular dynamics simulation, H. Pfeiffer, J. Sánchez-Sánchez and L.J. Álvarez 280 (2000) 295
- Effect of partial damage efficiencies on the radiation-induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 282 (2000) 47
- Application of generalized deformation theory to irradiation creep of fcc and bcc stainless steels, M.B. Toloczko, J.P. Hirth and F.A. Garner 283–287 (2000) 409
- The effects of irradiation and testing temperature on tensile behaviour of stainless steels, C. Bailat, A. Almazouzi, N. Baluc, R. Schäublin, F. Gröschel and M. Victoria 283–287 (2000) 446
- Biaxial thermal creep of V–4Cr–4Ti at 700 °C and 800 °C, R.J. Kurtz and M.L. Hamilton 283–287 (2000) 628
- The interaction of deuterium and tritium with radiation and other defects in austenitic steel and nickel, V.L. Arbutov, G.A. Raspopova, S.E. Danilov, A.P. Druzhkov and Yu.N. Zouev 283–287 (2000) 849
- Radiation-induced processes and their influence on the functional properties of dielectrics for different types of irradiation, V.A. Stepanov and V.M. Chernov 283–287 (2000) 932
- Fracture behavior of high-strength, high-conductivity copper alloys, M. Li, J.K. Heuer, J.F. Stubbins and D.J. Edwards 283–287 (2000) 977
- Evaluation of the deformation fields and bond integrity of Cu/SS joints, J.F. Stubbins, J. Collins and J. Min 283–287 (2000) 982
- Specimen size effects on the tensile properties of JPCA and JFMS, Y. Kohno, A. Kohyama, M.L. Hamilton, T. Hirose, Y. Katoh and F.A. Garner 283–287 (2000) 1014
- Damage mechanisms and fracture toughness of GlidCop® CuAl25 IG0 copper alloy, S. Tähtinen, A. Laukkanen and B.N. Singh 283–287 (2000) 1028
- Effect of ITER components manufacturing cycle on the irradiation behaviour of 316L(N)-IG steel, B.S. Rodchenkov, V.I. Prokhorov, O.Yu. Makarov, V.K. Shamardin, G.M. Kalinin, Yu.S. Strebkov and O.A. Golosov 283–287 (2000) 1166
- Cracks as sink of irradiation created point defects, A. Sarce 288 (2001) 130
- On the role of grain boundary diffusion in fission gas release, D.R. Olander and P. Van Uffelen 288 (2001) 137
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Influence of diffusion on W sputtering by carbon, K. Schmid, J. Roth and W. Eckstein 290–293 (2001) 148
- Deuterium retention of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, Y. Hirohata, T. Oda, T. Hino and S. Sengoku 290–293 (2001) 196
- Silicon diffusion in amorphous carbon films, E. Vainonen-Ahlgren, T. Ahlgren, L. Khriachtchev, J. Likonen, S. Lehto, J. Keinonen and C.H. Wu 290–293 (2001) 216
- Rapid diffusion of lithium into bulk graphite in lithium conditioning, N. Itou, H. Toyoda, K. Morita and H. Sugai 290–293 (2001) 281
- Heat flux decay length in the midplane of ASDEX Upgrade, A. Herrmann, A. Carlson, J.C. Fuchs, O. Gruber, M. Laux, J. Neuhauser, R. Pugno, A. Sips, W. Treutterer, W. Schneider and ASDEX Upgrade Team 290–293 (2001) 619
- Gas puff fueled H-mode discharges with good energy confinement above the Greenwald density limit on DIII-D, T.H. Osborne, M.A. Mahdavi, M. Chu, M.E. Fenstermacher, R. La Haye, A.W. Leonard, G. McKee, T.W. Petrie, C. Rettig, M. Wade, J. Watkins and DIII-D Team 290–293 (2001) 1013
- Fission gas release and volume diffusion enthalpy in UO₂ irradiated at low and high burnup, J.P. Hiernaut and C. Ronchi 294 (2001) 39
- Migration behaviour of iodine in nuclear fuel, W.H. Hocking, R.A. Verrall and I.J. Muir 294 (2001) 45
- Temperature-dependence of defect creation and clustering by displacement cascades in α -zirconium, F. Gao, D.J. Bacon, L.M. Howe and C.B. So 294 (2001) 288
- Multi-component gas transport in the fuel-to-clad gap of candu fuel rods during severe accidents, B. Szpunar, B.J. Lewis, V.I. Arimescu, R.S. Dickson and L.W. Dickson 294 (2001) 315
- Effect of defect sink strengths on the radiation induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 295 (2001) 290
- Coarsening-densification transition temperature in sintering of uranium dioxide, P. Balakrishna, B. Narasimha Murty, K.P. Chakraborty, R.N. Jayaraj and C. Ganguly 297 (2001) 35
- Densification behaviour and sintering kinetics of PuO₂ pellets, T.R.G. Kutty, K.B. Khan, P.V. Hegde, A.K.

- Sengupta, S. Majumdar and D.S.C. Purushotham 297 (2001) 120
- Diffusion reactions in titanium/Inconel-600 system, R.V. Patil, G.B. Kale and P.S. Gawde 297 (2001) 153
- Diffusion reaction between Zr–2.5 wt% Nb alloy and martensitic grade 403 stainless steel, K. Bhanumurthy, R.V. Patil, D. Srivatsava, P.S. Gawde and G.B. Kale 297 (2001) 220
- Nuclear microprobe analysis of ^7Li profile induced in HfB_2 by a neutron irradiation, D. Simeone, X. Deschanel, D. Gosset, J.P. Bonal and E. Berthoumioux 297 (2001) 244
- The effect of the point defects on the behavior of a crack inside of a pressure tube, A. Sarce 299 (2001) 20
- Study of mechanisms involved in thermal migration of molybdenum and rhenium in apatites, C. Gaillard, N. Chevarier, C. Den Auwer, N. Millard-Pinard, P. Delichère and Ph. Sainsot 299 (2001) 43
- A novel technique to remove deuterium from CANDU pressure tubes, Z. Qin, C.-S. Zhang, K. Griffiths and P.R. Norton 299 (2001) 77
- Hydrogen isotope retention and recycling in fusion reactor plasma-facing components, R.A. Causey 300 (2002) 91
- Concentration-triggered fission product release from zirconia: consequences for nuclear safety, A. Gentils, L. Thomé, J. Jagielski and F. Garrido 300 (2002) 266
- Dislocations**
- Diffuse X-ray scattering studies of radiation defects in Ni and dilute Ni alloys, H. Yuya, H. Maeta, H. Oh-tsuka, N. Matsumoto, H. Sugai, A. Iwase, T. Matsui, T. Suzuki, M. Jinchō and K. Yamakawa 271&272 (1999) 7
- Computer simulation of the interaction between an edge dislocation and interstitial clusters in Fe and Ni, E. Kuramoto, K. Ohsawa, T. Tsutsumi and M. Koyanagi 271&272 (1999) 26
- Influence of irradiation on the dislocation kinetics with allowance for the dislocation velocity distribution, N.V. Kamyshanchenko, V.V. Krasil'nikov, I.M. Neklyudov and A.A. Parkhomenko 271&272 (1999) 84
- Influence of post-irradiation thermal annealing on the mechanical properties of ion irradiated layers in 316L stainless steel, C. Robertson, L. Boulanger and S. Poissonnet 271&272 (1999) 102
- Microstructural examination of Ni-ion irradiated Fe–Ni–Cr alloys followed to micro-zone deformation, M. Ando, Y. Katoh, H. Tanigawa and A. Kohyama 271&272 (1999) 111
- Defect structure development in a pure iron and dilute iron alloys irradiated with neutrons and electrons, A. Okada, H. Maeda, K. Hamada and I. Ishida 271&272 (1999) 133
- Defect-flow-induced heterogeneous dislocation formation and solute redistribution near a grain boundary in austenitic stainless steel under electron irradiation, S. Watanabe, N. Sakaguchi, S. Mochizuki and H. Takahashi 271&272 (1999) 184
- Dynamical phase changes induced by point defect fluxes under irradiation, C. Abromeit and G. Martin 271&272 (1999) 251
- Invisible and visible point defect clusters in neutron irradiated iron, M. Horiki, T. Yoshiie, M. Iseki and M. Kiritani 271&272 (1999) 256
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Effect of temperature change on void swelling in P, Ti-modified 316 stainless steel, N. Akasaka, K. Hattori, S. Onose and S. Ukai 271&272 (1999) 370
- Amplitude dependent damping study in austenitic stainless steels 316H and 304H. Its relation with the microstructure, G.I. Zelada-Lambri, O.A. Lambri and G.H. Rubiolo 273 (1999) 248
- The primary damage state in fcc, bcc and hcp metals as seen in molecular dynamics simulations, D.J. Bacon, F. Gao and Yu.N. Osetsky 276 (2000) 1
- Similarity and difference between fcc, bcc and hcp metals from the view point of point defect cluster formation, M. Kiritani 276 (2000) 41
- Computer simulation of fundamental behaviors of interstitial clusters in Fe and Ni, E. Kuramoto 276 (2000) 143
- 3D dislocation dynamics: stress–strain behavior and hardening mechanisms in fcc and bcc metals, H.M. Zbib, T. Díaz de la Rubia, M. Rhee and J.P. Hirth 276 (2000) 154
- Interaction and accumulation of glissile defect clusters near dislocations, N.M. Ghoniem, B.N. Singh, L.Z. Sun and T. Díaz de la Rubia 276 (2000) 166
- Collision cascades in metals and semiconductors: defect creation and interface behavior, K. Nordlund and R.S. Averback 276 (2000) 194
- Interactions between mobile dislocation loops in Cu and $\alpha\text{-Fe}$, Yu.N. Osetsky, A. Serra and V. Priego 276 (2000) 202

- Properties and evolution of sessile interstitial clusters produced by displacement cascades in α -iron, F. Gao, D.J. Bacon, Yu.N. Osetsky, P.E.J. Flewitt and T.A. Lewis 276 (2000) 213
- TEM study of the aging of palladium-based alloys during tritium storage, S. Thiébaud, B. Décamps, J.M. Pénisson, B. Limacher and A. Percheron Guégan 277 (2000) 217
- Interaction between blue brittleness and stress corrosion cracking, W.Y. Chu, Y.B. Wang and L.J. Qiao 280 (2000) 250
- A method to study deformation mechanisms for irradiated steels using a disk-bend test, E.H. Lee, T.S. Byun, J.D. Hunn, N. Hashimoto and K. Farrell 281 (2000) 65
- Evaluation of hot isostatic pressing for joining of fusion reactor structural components, A.D. Ivanov, S. Sato and G. Le Marois 283–287 (2000) 35
- Formation and migration of helium bubbles in Fe–16Cr–17Ni austenitic alloy at high temperature, K. Ono, K. Arakawa, M. Oohashi, H. Kurata, K. Hojou and N. Yoshida 283–287 (2000) 210
- Study of point defect behaviors in vanadium and its alloys by using HVEM, T. Hayashi, K. Fukumoto and H. Matsui 283–287 (2000) 234
- V-alloy embrittlement by irradiation in a cooling gas environment, H.D. Röhrig, M. Rieth, B. Dafferner and E. Materna-Morris 283–287 (2000) 498
- Diffusion and permeation of hydrogen in low-activation martensitic stainless steel – effect of irradiation, F. Schliefer, C. Liu and P. Jung 283–287 (2000) 540
- The effects of one-dimensional glide on the reaction kinetics of interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 283–287 (2000) 737
- A molecular dynamics simulation study of small cluster formation and migration in metals, K. Morishita, T. Diaz de la Rubia, E. Alonso, N. Sekimura and N. Yoshida 283–287 (2000) 753
- A comparison of defects in helium implanted α - and β -SiC, P. Jung, H. Klein and J. Chen 283–287 (2000) 806
- Thermal stability and kinetics of defects in magnesium aluminate spinel irradiated with fast neutrons, K. Yasuda, C. Kinoshita, K. Fukuda and F.A. Garner 283–287 (2000) 937
- Hydrogen absorption process into graphite and carbon materials, H. Atsumi and M. Iseki 283–287 (2000) 1053
- TEM study on deuterium-irradiation-induced defects in tungsten and molybdenum, T. Matsui, S. Muto and T. Tanabe 283–287 (2000) 1139
- Diffusion welding parameters and mechanical properties of martensitic chromium steels, K. Schleisiek, T. Lechler, L. Schäfer and P. Weimar 283–287 (2000) 1196
- Effects of helium production and radiation damage on tritium release behavior of neutron-irradiated beryllium pebbles, E. Ishitsuka, H. Kawamura, T. Terai and S. Tanaka 283–287 (2000) 1401
- Behaviour of implanted xenon in yttria-stabilised zirconia as inert matrix of a nuclear fuel, C. Degueldre, M. Pouchon, M. Döbeli, K. Sickafus, K. Hojou, G. Ledergerber and S. Abolhassani-Dadras 289 (2001) 115
- Divertor Materials**
- Strengthening, loss of strength and embrittlement of beryllium under high temperature neutron irradiation, G.A. Sernyaev, A.V. Kozlov and V.R. Barabash 271&272 (1999) 123
- MD study of the dynamic behavior of small interstitial clusters in Fe, M. Koyanagi, K. Ohsawa and E. Kuramoto 271&272 (1999) 205
- Calculation and experimental investigation of fusion reactor divertor plate and first wall protection by capillary-pore systems with lithium, V.A. Evtikhin, I.E. Lyublinski, A.V. Vertkov, V.G. Belan, I.K. Konkashbaev and L.B. Nikandrov 271&272 (1999) 396
- The use of liquid metals in porous materials for divertor applications, L.I. Ivanov, S.A. Maslyaev, V.N. Pimenov, E.V. Dyomina and Yu.M. Platov 271&272 (1999) 405
- Be–Cu joints based on amorphous alloy brazing for divertor and first wall application, B. Kalin, V. Fedotov, O. Sevryukov, A. Plyushev, I. Mazul, A. Gervash and R. Giniatulin 271&272 (1999) 410
- Deuterium retention in codeposited layers and carbon materials exposed to high flux D-plasma, I.I. Arkhipov, A.E. Gorodetsky, R.Kh. Zalavutdinov, A.P. Zakharov, T.A. Burtseva, I.V. Mazul, B.I. Khripunov, V.V. Shapkin and V.B. Petrov 271&272 (1999) 418
- ITER Materials R&D Data Bank, S. Tanaka, R. Matera, G. Kalinin, V. Barabash and K. Mohri 271&272 (1999) 478
- Plasma-facing materials mixing and mixed material properties, 271&272 (1999) 526
- Interpretation of the impurity distribution in the divertor during divertor plate biasing using the DIVIMP code, E. Haddad, F. Meo, R. Marchand,

- G. Ratel, B.L. Stansfield, J. Gunn, P.C. Stangeby, J.D. Elder, S. Lisgo and K. Krieger 278 (2000) 111
- Interaction of ICRF power and edge plasma in Tore Supra ergodic divertor configuration, F. Nguyen, A. Grosman, V. Basiuk, D. Fraboulet, B. Beaumont, A. Bécoulet, Ph. Ghendrih, L. Ladurelle and B. Meslin 278 (2000) 117
- Deuterium pumping experiment with superpermeable Nb membrane in JFT-2M tokamak, Y. Nakamura, S. Sengoku, Y. Nakahara, N. Suzuki, H. Suzuki, N. Ohyabu, A. Busnyuk, M. Notkin and A. Livshits 278 (2000) 312
- Effects of dose rate on microstructural evolution and swelling in austenitic steels under irradiation, T. Okita, T. Kamada and N. Sekimura 283–287 (2000) 220
- Microstructural changes induced by post-irradiation annealing of neutron-irradiated austenitic stainless steels, J.I. Cole and T.R. Allen 283–287 (2000) 329
- Application of generalized deformation theory to irradiation creep of fcc and bcc stainless steels, M.B. Toloczko, J.P. Hirth and F.A. Garner 283–287 (2000) 409
- The contribution of various defects to irradiation-induced hardening in an austenitic model alloy, M. Ando, Y. Katoh, H. Tanigawa, A. Kohyama and T. Iwai 283–287 (2000) 423
- A physically based constitutive model for a V-4Cr-4Ti alloy, E.G. Donahue, G.R. Odette and G.E. Lucas 283–287 (2000) 637
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Constitutive behavior and fracture toughness properties of the F82H ferritic/martensitic steel, P. Spätig, G.R. Odette, E. Donahue and G.E. Lucas 283–287 (2000) 721
- Interstitial cluster motion in displacement cascades, N.V. Doan 283–287 (2000) 763
- Computer simulation of defects interacting with a dislocation in Fe and Ni, E. Kuramoto, K. Ohsawa and T. Tsutsumi 283–287 (2000) 778
- Neutron-irradiation effects on high heat flux components – examination of plasma-facing materials and their joints, M. Rödiger, R. Conrad, H. Derz, R. Duwe, J. Linke, A. Lodato, M. Merola, G. Pott, G. Vieider and B. Wiechers 283–287 (2000) 1161
- Effects of heat treatments on microstructure changes in the interface of Cu/SS316L joint materials, Q. Xu, D.J. Edwards and T. Yoshiie 283–287 (2000) 1229
- Review of initial experimental results of the PSI studies in the large helical device, S. Masuzaki, K. Akaishi, H. Funaba, M. Goto, K. Ida, S. Inagaki, N. Inoue, K. Kawahata, A. Komori, Y. Kubota, T. Morisaki, S. Morita, Y. Nakamura, K. Narihara, K. Nishimura, N. Noda, N. Ohyabu, B.J. Peterson, A. Sagara, R. Sakamoto, K. Sato, M. Shoji, H. Suzuki, Y. Takeiri, K. Tanaka, T. Tokuzawa, T. Watanabe, K. Tsuzuki, T. Hino, Y. Matsumoto, S. Kado, O. Motojima and LHD Experimental Group 290–293 (2001) 12
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- D, He and Li sputtering of liquid eutectic Sn–Li, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 33
- Deuterium retention in W, W1%La, C-coated W and W₂C, R.A. Anderl, R.J. Pawelko and S.T. Schuetz 290–293 (2001) 38
- Surface tension enhancement of TRIM sputtering yields for liquid metal targets, A. Grossman, R.P. Doerner and S. Luckhardt 290–293 (2001) 80
- Deuterium retention in single crystal tungsten, A.A. Haasz, M. Poon, R.G. Macaulay-Newcombe and J.W. Davis 290–293 (2001) 85
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Chemical erosion of doped graphites for fusion devices, C. García-Rosales and M. Balden 290–293 (2001) 173
- Measurements and modeling of D, He and Li sputtering of liquid lithium, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 180
- Erosion/redeposition analysis of lithium-based liquid surface divertors, J.N. Brooks, T.D. Rognlien, D.N. Ruzic and J.P. Allain 290–293 (2001) 185
- Experimental study of lithium target under high power load, B.I. Khripunov, V.B. Petrov, V.V. Shapkin, A.S. Ple-shakov, A.S. Rupyshv, N.V. Antonov, A.M. Litnovsky, P.V. Romanov, Yu.S. Shpansky, V.A. Evtikhin, I.E. Lyublinsky and A.V. Vertkov 290–293 (2001) 201
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Towards an improved understanding of the relationship between plasma edge and materials issues in a next-step

- fusion device, G.F. Counsell, J.P. Coad, G. Federici, K. Krieger, V. Philipps, C.H. Skinner and D.G. Whyte 290–293 (2001) 255
- Assessment of erosion and tritium codeposition in ITER-FEAT, G. Federici, J.N. Brooks, D.P. Coster, G. Janeschitz, A. Kukushkin, A. Loarte, H.D. Pacher, J. Stober and C.H. Wu 290–293 (2001) 260
- Detection of sputtered and evaporated carbon aggregates: relative and absolute electron ionization fragmentation yields, C. Mair, H. Deutsch, K. Becker, T.D. Märk and E. Vietzke 290–293 (2001) 291
- Carbon layers in the divertor of ASDEX Upgrade, V. Rohde, H. Maier, K. Krieger, R. Neu and J. Perchermaier and ASDEX Upgrade Team 290–293 (2001) 317
- Net erosion measurements on plasma facing components of Tore Supra, E. Tsitrone, P. Chappuis, Y. Corre, E. Gauthier, A. Grosman and J.Y. Pascal 290–293 (2001) 331
- Suppression of net erosion in the DIII-D divertor with detached plasmas, W.R. Wampler, D.G. Whyte, C.P.C. Wong and W.P. West 290–293 (2001) 346
- Extinction of CD band emission in the divertor of ASDEX Upgrade, U. Wenzel, M. Laux, R. Pugno and K. Schmidtman 290–293 (2001) 352
- Reduction of divertor carbon sources in DIII-D, D.G. Whyte, W.P. West, R. Doerner, N.H. Brooks, R.C. Isler, G.L. Jackson, G. Porter, M.R. Wade and C.P.C. Wong 290–293 (2001) 356
- Hydrogen recycling study by Balmer lines emissions in linear plasma machine TPE, K. Shimada, T. Tanabe, R. Causey, T. Venhaus and K. Okuno 290–293 (2001) 478
- Hydrogen isotope depth profiling in carbon samples from the erosion dominated inner vessel walls of JET, C. Stan-Sion, R. Behrisch, J.P. Coad, U. Kreißig, F. Kubo, V. Lazarev, S. Lindig, M. Mayer, E. Nolte, A. Peacock, L. Rohrer and J. Roth 290–293 (2001) 491
- Modeling of carbon transport in the divertor and SOL of DIII-D during high performance plasma operation, W.P. West, G.D. Porter, T.E. Evans, P. Stangeby, N.H. Brooks, M.E. Fenstermacher, R.C. Isler, T.D. Rognlien, M.R. Wade, D.G. Whyte and N.S. Wolf 290–293 (2001) 783
- Spectral profile analysis of the D α line in the divertor region of Tore-Supra, A. Escarguel, R. Guirlet, A. Azéroual, B. Pégourié, J. Gunn, T. Loarer, H. Capes, Y. Corre, C. DeMichelis, L. Godbert-Mouret, M. Koubiti, M. Mattioli and R. Stamm 290–293 (2001) 854
- Spectroscopic study of neon emission and retention in the Tore Supra ergodic divertor, R. Guirlet, J. Hogan, Y. Corre, C. De Michelis, A. Escarguel, W. Hess, P. Monier-Garbet and B. Schunke 290–293 (2001) 872
- The effect of divertor tile material on radiation profiles onmn LHD, B.J. Peterson, S. Masuzaki, R. Sakamoto, K. Sato, S. Inagaki, A. Sagara, S. Ohdachi, Y. Nakamura, N. Noda, Y. Xu, J.E. Rice, N. Ashikawa, S. Yamamoto, M. Takaechi, K. Toi, S. Morita, M. Goto, K. Narihara, N. Inoue, Y. Takeiri, M. Sato, M. Osakabe, K. Tanaka, T. Tokuzawa, S. Sakakibara, M. Shoji, K. Kawahata, O. Kaneko, N. Ohyabu, H. Yamada, A. Komori, K. Yamazaki, S. Sudo and O. Motojima 290–293 (2001) 930
- Divertor geometry effects on detachment in TCv, R.A. Pitts, B.P. Duval, A. Loarte, J.-M. Moret, J.A. Boedo, D. Coster, I. Furno, J. Horacek, A.S. Kukushkin, D. Reiter and J. Rommers 290–293 (2001) 940
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M. Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- Study of brittle destruction and erosion mechanisms of carbon-based materials during plasma instabilities, T. Burtseva, A. Hassanein, I. Ovchinnikov and V. Titov 290–293 (2001) 1059
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Heat and particle fluxes from collisionless scrape-off-layer during tokamak plasma disruptions, A. Hassanein, I. Konkashbaev and L. Nikandrov 290–293 (2001) 1079
- Experimental study of radiation power flux on the target surface during high heat plasma irradiation, V.N. Litunovskiy, I.B. Ovchinnikov and V.A. Titov 290–293 (2001) 1112
- Performance of the different tungsten grades under fusion relevant power loads, A. Makhankov, V. Barabash, I. Mazul and D. Youchison 290–293 (2001) 1117
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz,

- S. Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- Analysis of singular interface stresses in dissimilar material joints for plasma facing components, J.H. You and H. Bolt 299 (2001) 1
- Microstructure and properties of a Cu–Cr–Zr alloy, I.S. Batra, G.K. Dey, U.D. Kulkarni and S. Banerjee 299 (2001) 91
- Dosimetry**
- The role of materials R&D in the development of commercial fusion power plants, J.W. Davis 271&272 (1999) 532
- Summary of discussion session: Design and materials, A. Kohyama, E.E. Bloom and K. Ehrlich 271&272 (1999) 538
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- Critical plasma–wall interaction issues for plasma-facing materials and components in near-term fusion devices, G. Federici, J.P. Coad, A.A. Haasz, G. Janeschitz, N. Noda, V. Philipps, J. Roth, C.H. Skinner, R. Tivey and C.H. Wu 283–287 (2000) 110
- Correlation between defect structures and hardness in tantalum irradiated by heavy ions, K. Yasunaga, H. Watanabe, N. Yoshida, T. Muroga and N. Noda 283–287 (2000) 179
- Design and fabrication methods of FW/blanket, divertor and vacuum vessel for ITER, K. Ioki, V. Barabash, A. Cardella, F. Elio, C. Ibbott, G. Janeschitz, G. Johnson, G. Kalinin, N. Miki, M. Onozuka, G. Sannazzaro, R. Tivey, Y. Utin and M. Yamada 283–287 (2000) 957
- Hydrogen and deuterium transport and inventory parameters through W and W-alloys for fusion reactor applications, G. Benamati, E. Serra and C.H. Wu 283–287 (2000) 1033
- Tritium permeation experiment using a tungsten armored divertor-simulating module, H. Nakamura, S. O'hira, W. Shu, M. Nishi, T.J. Venhaus, R.A. Causey, D.R. Hyatt and R.S. Willms 283–287 (2000) 1043
- Effect of carbon pre-implantation on deuterium retention in tungsten, M. Poon, J.W. Davis and A.A. Haasz 283–287 (2000) 1062
- Manufacturing and testing of a prototypical divertor vertical target for ITER, M. Merola, L. Plöchl, Ph. Chappuis, F. Escourbiac, M. Grattarola, I. Smid, R. Tivey and G. Vieider 283–287 (2000) 1068
- Erosion mechanisms and products in graphite targets under simulated disruption conditions, F. Scaffidi-Argentina, V. Safronov, I. Arkhipov, N. Arkhipov, V. Bakhtin, V. Barsuk, S. Kurkin, E. Mironova, D. Toporkov, S. Vasenin, H. Werle, H. Würz and A. Zhitlukhin 283–287 (2000) 1111
- Changes of composition and microstructure of joint interface of tungsten coated carbon by high heat flux, K. Tokunaga, T. Matsubara, Y. Miyamoto, Y. Takao, N. Yoshida, N. Noda, Y. Kubota, T. Sogabe, T. Kato and L. Plöchl 283–287 (2000) 1121
- High temperature residual strain measurements in a brazed sample for NET/ITER, R. Coppola, C. Nardi and B. Riccardi 283–287 (2000) 1243
- Ductility and Ductile–Brittle Transitions**
- Properties of precipitation hardened steel irradiated at 323 K in the Japan materials testing reactor, M. Niimi, Y. Matsui, S. Jitsukawa, T. Hoshiya, T. Tsukada, M. Ohmi, H. Mimura, N. Ooka and K. Hide 271&272 (1999) 92
- Microstructure and impact properties of ultra-fine grained tungsten alloys dispersed with TiC, Y. Kitsunai, H. Kurishita, H. Kayano, Y. Hiraoka, T. Igarashi and T. Takida 271&272 (1999) 423
- Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels, R. Lindau, A. Möslang, D. Preininger, M. Rieth and H.D. Röhrig 271&272 (1999) 450
- Present status of Data-Free-Way (distributed database system for advanced nuclear materials), H. Tsuji, N. Yokoyama, M. Fujita, Y. Kurihara, S. Kano, Y. Tachi, K. Shimura, R. Nakajima and S. Iwata 271&272 (1999) 486
- Database and Materials Data**
- Properties of precipitation hardened steel irradiated at 323 K in the Japan materials testing reactor, M. Niimi, Y. Matsui, S. Jitsukawa, T. Hoshiya, T. Tsukada, M. Ohmi, H. Mimura, N. Ooka and K. Hide 271&272 (1999) 92
- Mechanical property changes of low activation ferritic/martensitic steels after neutron irradiation, Y. Kohno, A. Kohyama, T. Hirose, M.L. Hamilton and M. Narui 271&272 (1999) 145
- Investigation of palladium alloy properties degradation during long-time tritium exposure, V. Tebus, L. Rivkis, G. Arutunova, E. Dmitrievsky, V.

- Filin, Y. Golikov, V. Krivova and V. Kapyshev 271&272 (1999) 345
- Tensile and impact behaviour of BAT-MAN II steels, Ti-bearing reduced activation martensitic alloys, G. Filacchioni, E. Casagrande, U. De Angelis, G. De Santis, D. Ferrara and L. Pilloni 271&272 (1999) 445
- Development of a reaction-sintered silicon carbide matrix composite, A. Sayano, C. Sutoh, S. Suyama, Y. Itoh and S. Nakagawa 271&272 (1999) 467
- ITER Materials R&D Data Bank, S. Tanaka, R. Matera, G. Kalinin, V. Barabash and K. Mohri 271&272 (1999) 478
- Present status of Data-Free-Way (distributed database system for advanced nuclear materials), H. Tsuji, N. Yokoyama, M. Fujita, Y. Kurihara, S. Kano, Y. Tachi, K. Shimura, R. Nakajima and S. Iwata 271&272 (1999) 486
- The role of materials R&D in the development of commercial fusion power plants, J.W. Davis 271&272 (1999) 532
- Summary of discussion session: Design and materials, A. Kohyama, E.E. Bloom and K. Ehrlich 271&272 (1999) 538
- Irradiation effects in ceramics for fusion reactor applications, T. Shikama, K. Yasuda, S. Yamamoto, C. Kinoshita, S.J. Zinkle and E.R. Hodgson 271&272 (1999) 560
- Electrical Properties**
- Irradiation examination of CuNiCrSi alloy for ITER applications, A.D. Ivanov, A.V. Kozlov, M.V. Chernetsov and S.A. Averin 271&272 (1999) 139
- Interaction of solutes with irradiation-induced defects of electron-irradiated dilute iron alloys, H. Abe and E. Kuramoto 271&272 (1999) 209
- Defect accumulation behavior in iron irradiated with energetic ions and electrons at ~80 K, Y. Chimi, A. Iwase and N. Ishikawa 271&272 (1999) 236
- Radiation-induced electrical and optical processes in materials based on Al₂O₃, O.A. Plaksin, V.A. Stepanov, P.A. Stepanov and V.M. Chernov 271&272 (1999) 496
- Manufacturing technique of Nb₃Al super-conductive sheet by electrically heated powder rolling, C. Mochizuki and M. Mikami 271&272 (1999) 508
- Irradiation effects in ceramics for fusion reactor applications, T. Shikama, K. Yasuda, S. Yamamoto, C. Kinoshita, S.J. Zinkle and E.R. Hodgson 271&272 (1999) 560
- Comparison between radiation effects in some fcc and bcc metals irradiated with energetic heavy ions – a review, A. Iwase and S. Ishino 276 (2000) 178
- Pitting corrosion of Alloy 690 in thio-sulfate-containing chloride solutions, W.-T. Tsai and T.-F. Wu 277 (2000) 169
- The corrosion of Alloy 718 during 800 MeV proton irradiation, R.S. Lillard, G.J. Willcutt, D.L. Pile and D.P. Butt 277 (2000) 250
- Non-stoichiometry, electrical conductivity and defect structure of hyperstoichiometric UO_{2+x} at 1000 °C, S.-H. Kang, J.-H. Lee, H.-I. Yoo, H. Soo Kim and Y. Woo Lee 277 (2000) 339
- Phase transition temperature in the Zr-rich corner of Zr–Nb–Sn–Fe alloys, M. Canay, C.A. Danón and D. Arias 280 (2000) 365
- Impact of irradiation effects on design solutions for ITER diagnostics, S. Yamamoto, T. Shikama, V. Belyakov, E. Farnum, E. Hodgson, T. Nishitani, D. Orlinski, S. Zinkle, S. Kasai, P. Stott, K. Young, V. Zaveriaev, A. Costley, L. deKock, C. Walker and G. Janeschitz 283–287 (2000) 60
- An initial model for the RIED effect, E.R. Hodgson and A. Morono 283–287 (2000) 880
- Significance of sample thickness and surface segregation on the electrical conductivity of Wesgo AL995 alumina under ITER environments, M.M.R. Howlader, C. Kinoshita, K. Shiiyama, M. Kutsuwada and T. Higuchi 283–287 (2000) 885
- In-beam dielectric properties of alumina at low frequencies, R. Vila and E.R. Hodgson 283–287 (2000) 903
- Radiation-induced conductivity of doped silicon in response to photon, proton and neutron irradiation, N. Kishimoto, H. Amekura, O.A. Plaksin and V.A. Stepanov 283–287 (2000) 907
- Current–voltage characteristic of alumina and aluminum nitride with or without electron irradiation, K. Shiiyama, M.M.R. Howlader, Y. Izumi, M. Kutsuwada, S. Matsumura and C. Kinoshita 283–287 (2000) 912
- Development of electrically insulating coatings for service in a lithium environment, K. Natesan, M. Uz and S. Wieder 283–287 (2000) 1277
- Study of the tritium behavior on the surface of Li₂O by means of work function measurement, T. Yokota, A. Suzuki, K. Yamaguchi, T. Terai and M. Yamawaki 283–287 (2000) 1366
- Thermoelectric properties of Rh-doped Ru₂Si₃ prepared by floating zone melting method, Y. Arita, S. Mitsuda, Y. Nishi, T. Matsui and T. Nagasaki 294 (2001) 202
- Thermoelectric properties of URu₂Si₂ and U₂Ru₃Si₅, Y. Arita, K. Terao,

- S. Mitsuda, Y. Nishi, T. Matsui and T. Nagasaki 294 (2001) 206
- Boron isotope effects on the thermoelectric properties of UB_4 at low temperatures, Y. Nishi, Y. Arita, K. Terao, T. Matsui and T. Nagasaki 294 (2001) 209
- Effect of electrolyte composition on the electrochemical potentiokinetic reactivation behavior of Alloy 600, T.-F. Wu, T.-P. Cheng and W.-T. Tsai 295 (2001) 233
- Accumulation and recovery of defects in ion-irradiated nanocrystalline gold, Y. Chimi, A. Iwase, N. Ishikawa, M. Kobiyama, T. Inami and S. Okuda 297 (2001) 355
- Electron Irradiation**
- Diffuse X-ray scattering studies of radiation defects in Ni and dilute Ni alloys, H. Yuya, H. Maeta, H. Ohtsuka, N. Matsumoto, H. Sugai, A. Iwase, T. Matsui, T. Suzuki, M. Jinchou and K. Yamakawa 271&272 (1999) 7
- Justification of the new approach to the testing of the candidate iter materials in fission reactor, V.A. Nikolaenko, V.I. Karpukhin, E.A. Krasikov and V.N. Kuznetsov 271&272 (1999) 120
- Defect structure development in a pure iron and dilute iron alloys irradiated with neutrons and electrons, A. Okada, H. Maeda, K. Hamada and I. Ishida 271&272 (1999) 133
- Electron irradiation effects on Ti–Ni shape memory alloys, A. Okada, K. Hamada, T. Matsumoto, I. Ishida and Y. Abe 271&272 (1999) 189
- Interaction of solutes with irradiation-induced defects of electron-irradiated dilute iron alloys, H. Abe and E. Kuramoto 271&272 (1999) 209
- Defect accumulation behavior in iron irradiated with energetic ions and electrons at ~ 80 K, Y. Chimi, A. Iwase and N. Ishikawa 271&272 (1999) 236
- Void formation close to stacking fault tetrahedra in heavily electron irradiated pure Ag and Cu, K. Niwase, F. Phillipp, W. Sigle and A. Seeger 271&272 (1999) 261
- Structural change in graphite under electron irradiation at low temperatures, M. Takeuchi, S. Muto, T. Tanabe, H. Kurata and K. Hojou 271&272 (1999) 280
- Effect of solute concentration on grain boundary migration with segregation in stainless steel and model alloys, H. Kanda, N. Hashimoto and H. Takahashi 271&272 (1999) 311
- Similarity and difference between fcc, bcc and hcp metals from the view point of point defect cluster formation, M. Kiritani 276 (2000) 41
- Determination of displacement threshold energies in pure Ti and in γ -TiAl alloys by electron irradiation, G. Sattonnay, F. Rullier-Albenque and O. Dimitrov 275 (1999) 63
- Theory of the late stage of radiolysis of alkali halides, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 277 (2000) 184
- The effect of amorphization on the Cs ion exchange and retention capacity of zeolite-NaY, B.X. Gu, L.M. Wang and R.C. Ewing 278 (2000) 64
- Electron and ion irradiation of zeolites, S.X. Wang, L.M. Wang and R.C. Ewing 278 (2000) 233
- Hardening of ferritic alloys at 288 °C by electron irradiation, K. Farrell, R.E. Stoller, P. Jung and H. Ullmaier 279 (2000) 77
- Recovery of electron irradiated V–Ga alloys, T. Leguey, M. Monge, R. Pareja and E.R. Hodgson 279 (2000) 364
- Ultrashort X-ray pulse generation using subpicosecond electron linac, H. Harano, K. Kinoshita, K. Yoshii, T. Ueda, S. Okita and M. Uesaka 280 (2000) 255
- Synthesis of atom probe experiments on irradiation-induced solute segregation in French ferritic pressure vessel steels, P. Auger, P. Pareige, S. Welzel and J.-C. Van Duysen 280 (2000) 331
- Beta radiation effects in ^{137}Cs -substituted pollucite, N.J. Hess, F.J. Espinosa, S.D. Conradson and W.J. Weber 281 (2000) 22
- Recovery of electrical resistivity of high-purity iron irradiated with 30 MeV electrons at 77 K, H. Abe and E. Kuramoto 283–287 (2000) 174
- Study of point defect behaviors in vanadium and its alloys by using HVEM, T. Hayashi, K. Fukumoto and H. Matsui 283–287 (2000) 234
- Radiation-induced segregation in model alloys, T. Ezawa, E. Wakai and R. Oshima 283–287 (2000) 244
- Differences in the microstructure of the F82H ferritic/martensitic steel after proton and neutron irradiation, R. Schäublin and M. Victoria 283–287 (2000) 339
- Microstructure of welded and thermal-aged low activation steel F82H IEA heat, T. Sawai, K. Shiba and A. Hishinuma 283–287 (2000) 657
- An initial model for the RIED effect, E.R. Hodgson and A. Morono 283–287 (2000) 880
- Significance of sample thickness and surface segregation on the electrical conductivity of Wesgo AL995 alumina under ITER environments, M.M.R. Howlader, C. Kinoshita, K.

- Shiyama, M. Kutsuwada and T. Higuchi 283–287 (2000) 885
- KU1 quartz glass for remote handling and LIDAR diagnostic optical transmission systems, M. García-Matos, A. Morono and E.R. Hodgson 283–287 (2000) 890
- Current–voltage characteristic of alumina and aluminum nitride with or without electron irradiation, K. Shiyama, M.M.R. Howlader, Y. Izumi, M. Kutsuwada, S. Matsumura and C. Kinoshita 283–287 (2000) 912
- Temperature effect of electron-irradiation-induced structural modification in graphite, S. Muto and T. Tanabe 283–287 (2000) 917
- Positron lifetime calculation for defects and defect clusters in graphite, T. Onitsuka, H. Ohkubo, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 922
- Cation disordering in magnesium aluminate spinel crystals induced by electron or ion irradiation, T. Soeda, S. Matsumura, C. Kinoshita and N.J. Zaluzec 283–287 (2000) 952
- Neutron-irradiation effects on high heat flux components – examination of plasma-facing materials and their joints, M. Rödig, R. Conrad, H. Derz, R. Duwe, J. Linke, A. Lodato, M. Merola, G. Pott, G. Vieider and B. Wiechers 283–287 (2000) 1161
- Effects of fission product incorporation on the microstructure of cubic zirconia, L.M. Wang, S.X. Wang, S. Zhu and R.C. Ewing 289 (2001) 122
- Optical emission due to ionic displacements in alkaline earth titanates, R. Cooper, K.L. Smith, M. Colella, E.R. Vance and M. Phillips 289 (2001) 199
- Effect of molybdenum on electron radiation damage of Zr-base alloys, J.H. Lee, S.K. Hwang, K. Yasuda and C. Kinoshita 289 (2001) 334
- Experimental study of lithium target under high power load, B.I. Khripunov, V.B. Petrov, V.V. Shapkin, A.S. Pleshakov, A.S. Rupyshv, N.V. Antonov, A.M. Litnovsky, P.V. Romanov, Yu.S. Shpansky, V.A. Evtikhin, I.E. Lyublinsky and A.V. Vertkov 290–293 (2001) 201
- Effects of phosphorus on defects accumulation and annealing in electron-irradiated Fe–Ni austenitic alloys, V.L. Arbuzov, A.P. Druzhkov and S.E. Danilov 295 (2001) 273
- On the mechanism for dose rate dependence of stationary luminescence of F^+ and F^{2+} centres excited by electron beam in α -Al₂O₃, V.I. Meshakin and T. Tanabe 297 (2001) 149
- Temperature effects on the radiation stability and ion exchange capacity of smectites, B.X. Gu, L.M. Wang, L.D. Minc and R.C. Ewing 297 (2001) 345
- Hardening of Fe–Cu alloys at elevated temperatures by electron and neutron irradiations, T. Tobita, M. Suzuki, A. Iwase and K. Aizawa 299 (2001) 267
- Analysis of the monoclinic–tetragonal phase transition of zirconia under irradiation, D. Simeone, D. Gosset, J.L. Bechade and A. Chevarier 300 (2002) 27
- Electron Microscopy**
- Formation mechanism of clustered small loops (rafts) in fission-neutron irradiated Mo at high temperatures, K. Yamakawa and Y. Shimomura 271&272 (1999) 41
- Influence of post-irradiation thermal annealing on the mechanical properties of ion irradiated layers in 316L stainless steel, C. Robertson, L. Boulanger and S. Poissonnet 271&272 (1999) 102
- Defect-flow-induced heterogeneous dislocation formation and solute redistribution near a grain boundary in austenitic stainless steel under electron irradiation, S. Watanabe, N. Sakaguchi, S. Mochizuki and H. Takahashi 271&272 (1999) 184
- High-resolution electron microscopy of γ -TiAl irradiated with 15 keV helium ions at room temperature, M. Song, K. Furuya, T. Tanabe and T. Noda 271&272 (1999) 200
- Dynamical process of defect clustering in Ni under the irradiation with low energy helium ions, K. Ono, K. Arakawa and N. Yoshida 271&272 (1999) 214
- Voids in fast-neutron-irradiated Cu, Ni and Cu–Ni concentrated alloys studied by TEM and positron annihilation methods, H. Fukushima, K. Ochiai and Y. Shimomura 271&272 (1999) 220
- Damage evolution in neutron-irradiated Cu during neutron irradiation, I. Mukouda and Y. Shimomura 271&272 (1999) 230
- Invisible and visible point defect clusters in neutron irradiated iron, M. Horiki, T. Yoshiie, M. Iseki and M. Kiritani 271&272 (1999) 256
- Structural change in graphite under electron irradiation at low temperatures, M. Takeuchi, S. Muto, T. Tanabe, H. Kurata and K. Hojou 271&272 (1999) 280
- TEM analyses of surface ridge network in an ion-irradiated graphite thin film, S. Muto, T. Tanabe, M. Takeuchi, Y. Kobayashi, S. Furuno and K. Hojou 271&272 (1999) 285
- Microstructural evolution and hardening of neutron irradiated vanadium alloys at low temperatures in Japan Material Testing Reactor, Y. Candra, K.

- Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 301
- Surface morphology and void formation in 316L stainless steel irradiated with high energy C-ions, Z.G. Wang, K.Q. Chen, L.W. Li, C.H. Zhang, J.M. Quan, M.D. Hou, R.H. Xu, F. Ma, Y.F. Jin, C.L. Li and Y.M. Sun 271&272 (1999) 306
- Effect of solute concentration on grain boundary migration with segregation in stainless steel and model alloys, H. Kanda, N. Hashimoto and H. Takahashi 271&272 (1999) 311
- Effect of temperature change on microstructural evolution of vanadium alloys under neutron irradiation in JMTR, N. Nita, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 365
- Fluence dependence of defect evolution in austenitic stainless steels during fission neutron irradiation, H. Watanabe, T. Muroga and N. Yoshida 271&272 (1999) 381
- Corrosion of some V- and Nb-base alloys under irradiation in water, V.A. Kazakov, V.P. Chakin and Yu.D. Goncharenko 271&272 (1999) 463
- Amplitude dependent damping study in austenitic stainless steels 316H and 304H. Its relation with the microstructure, G.I. Zelada-Lambri, O.A. Lambri and G.H. Rubiolo 273 (1999) 248
- Depth profiles of damage accumulation in UO₂ and (U,Gd)O₂ pellets irradiated with 100 MeV iodine ions, K. Nogita, K. Hayashi, K. Une and K. Fukuda 273 (1999) 302
- Physical and chemical characteristics of baddeleyite (monoclinic zirconia) in natural environments: an overview and case study, G.R. Lumpkin 274 (1999) 206
- Damage observed in Mo irradiated with 14 MeV neutrons at RTNS-II, K. Yamakawa and Y. Shimomura 275 (1999) 101
- The search for interstitial dislocation loops produced in displacement cascades at 20 K in copper, M.A. Kirk, M.L. Jenkins and H. Fukushima 276 (2000) 50
- Heavy ion irradiation and annealing of lead: atomistic simulations and experimental validation, M.-J. Caturla, M. Wall, E. Alonso, T. Díaz de la Rubia, T. Felter and M.J. Fluss 276 (2000) 186
- Quantitative analysis of CTEM images of small dislocation loops in Al and stacking fault tetrahedra in Cu generated by molecular dynamics simulation, R. Schäublin, A. Almazouzi, Y. Dai, Yu.N. Osetsky and M. Victoria 276 (2000) 251
- Deformation modes of proton and neutron irradiated stainless steels, C. Bailat, F. Gröschel and M. Victoria 276 (2000) 283
- Oxidation of β -Zr and related phases in ZrNb alloys: an electron microscopy investigation, Y.P. Lin and O.T. Woo 277 (2000) 11
- Micro-structures associated with uraninite alteration, M. Fayek, P. Burns, Y.-X. Guo and R.C. Ewing 277 (2000) 204
- Zirconia ceramics for excess weapons plutonium waste, W.L. Gong, W. Lutze and R.C. Ewing 277 (2000) 239
- Rim structure formation and high burn-up fuel behavior of large-grained UO₂ fuels, K. Une, M. Hirai, K. Nogita, T. Hosokawa, Y. Suzawa, S. Shimizu and Y. Etoh 278 (2000) 54
- Crystallization sequence and microstructure evolution of Synroc samples crystallized from CaZrTi₂O₇ melts, H. Xu and Y. Wang 279 (2000) 100
- Orientation of γ to α transformation in Xe-implanted austenitic 304 stainless steel, G. Xie, M. Song, K. Mitsuishi and K. Furuya 281 (2000) 80
- Radiation-induced inter-granular segregation in first wall fusion reactor materials, R.G. Faulkner, S. Song and P.E.J. Flewitt 283–287 (2000) 147
- Effect of temperature gradients on void formation in modified 316 stainless steel cladding, N. Akasaka, I. Yamagata and S. Ukai 283–287 (2000) 169
- Correlation between defect structures and hardness in tantalum irradiated by heavy ions, K. Yasunaga, H. Watanabe, N. Yoshida, T. Muroga and N. Noda 283–287 (2000) 179
- Correlation of simulated TEM images with irradiation induced damage, R. Schäublin, P. de Almeida, A. Almazouzi and M. Victoria 283–287 (2000) 205
- Formation and migration of helium bubbles in Fe–16Cr–17Ni austenitic alloy at high temperature, K. Ono, K. Arakawa, M. Oohashi, H. Kurata, K. Hojou and N. Yoshida 283–287 (2000) 210
- The effect of alloying elements on the defect structural evolution in neutron irradiated Ni alloys, T. Yoshiie, Q. Xu, Y. Satoh, H. Ohkubo and M. Kiritani 283–287 (2000) 229
- Radiation-induced segregation in model alloys, T. Ezawa, E. Wakai and R. Oshima 283–287 (2000) 244
- Development of vacancy clusters in neutron-irradiated copper at high temperature, Y. Shimomura and I. Mukouda 283–287 (2000) 249
- Microstructural changes in a low-activation Fe–Cr–Mn alloy irradiated with 92 MeV Ar ions at 450 °C, C. Zhang,

- K. Chen, Y. Wang, J. Sun, B. Hu, Y. Jin, M. Hou, C. Liu, Y. Sun, J. Han and C. Chen 283–287 (2000) 259
- Effect of dual-beam-irradiation by helium and carbon ions on microstructure development of SiC/SiC composites, S. Nogami, A. Hasegawa, K. Abe, T. Taguchi and R. Yamada 283–287 (2000) 268
- Defect structures introduced in iron under varying temperature neutron irradiation, M. Horiki, T. Yoshiie, Q. Xu, M. Iseki and M. Kiritani 283–287 (2000) 282
- Microstructure of vanadium alloys during ion irradiation with stepwise change of temperature, H. Watanabe, T. Arinaga, K. Ochiai, T. Muroga and N. Yoshida 283–287 (2000) 286
- Effects of temperature change on the microstructural evolution of vanadium alloys under ion irradiation, N. Nita, T. Iwai, K. Fukumoto and H. Matsui 283–287 (2000) 291
- Microstructure in pure copper irradiated by simultaneous multi-ion beam of hydrogen, helium and self ions, I. Mukouda, Y. Shimomura, T. Iiyama, Y. Harada, Y. Katano, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 302
- Microstructure of Cu–Ni alloys neutron irradiated at 210 °C and 420 °C to 14 dpa, S.J. Zinkle and B.N. Singh 283–287 (2000) 306
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Microstructural evolution of Alloy 718 at high helium and hydrogen generation rates during irradiation with 600–800 MeV protons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, B.M. Oliver, L.E. Thomas, S.A. Maloy, W.F. Sommer, M.R. James and P.D. Ferguson 283–287 (2000) 324
- Microstructural changes induced by post-irradiation annealing of neutron-irradiated austenitic stainless steels, J.I. Cole and T.R. Allen 283–287 (2000) 329
- Tensile properties and microstructure of 590 MeV proton-irradiated pure Fe and a Fe–Cr alloy, M.I. Luppó, C. Bailat, R. Schäublin and M. Victoria 283–287 (2000) 483
- Effect of thermal aging on the microstructure and mechanical properties of 7–11 CrW steels, Y. de Carlan, A. Alamo, M.H. Mathon, G. Geoffroy and A. Castaing 283–287 (2000) 672
- Features of radiation damage of vanadium and its alloys at a temperature of 330–340 °C, V.A. Kazakov, Z. Ostrovsky, Yu. Goncharenko and V. Chakin 283–287 (2000) 727
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- Temperature effect of electron-irradiation-induced structural modification in graphite, S. Muto and T. Tanabe 283–287 (2000) 917
- Thermal stability and kinetics of defects in magnesium aluminate spinel irradiated with fast neutrons, K. Yasuda, C. Kinoshita, K. Fukuda and F.A. Garner 283–287 (2000) 937
- Effects of co-implanted oxygen or aluminum atoms on hydrogen migration and damage structure in multiple-beam irradiated Al₂O₃, Y. Katano, T. Aruga, S. Yamamoto, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 942
- Cation disordering in magnesium aluminate spinel crystals induced by electron or ion irradiation, T. Soeda, S. Matsumura, C. Kinoshita and N.J. Zaluzec 283–287 (2000) 952
- TEM study on deuterium-irradiation-induced defects in tungsten and molybdenum, T. Matsui, S. Muto and T. Tanabe 283–287 (2000) 1139
- A microstructural study of the oxide scale formation on ODS Fe–13Cr steel, D.T. Hoelzer, B.A. Pint and I.G. Wright 283–287 (2000) 1306
- Tensile strength and fracture surface characterization of Hi-Nicalon™ SiC fibers, G.E. Youngblood, C. Lewinsohn, R.H. Jones and A. Kohyama 289 (2001) 1
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- Effects of Xe ion irradiation and subsequent annealing on the structural properties of magnesium-aluminate spinel, I.V. Afanasyev-Charkin, R.M. Dickerson, D. Wayne Cooke, B.L. Bennett, V.T. Gritsyna and K.E. Sickafus 289 (2001) 110
- Hydrogen–damage interactions in yttria-stabilized zirconia, V. Shutthanandan, S. Thevuthasan, J.S. Young, T.M. Orlando and W.J. Weber 289 (2001) 128
- Alpha-decay damage and aqueous durability of actinide host phases in natural systems, G.R. Lumpkin 289 (2001) 136
- Heavy ion irradiation studies of columbite, brannerite, and pyrochlore structure types, G.R. Lumpkin, K.L. Smith and M.G. Blackford 289 (2001) 177

- Anisotropic radiation damage by charge exchange neutrals under tokamak discharges in TRIAM-1M, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida and S. Itoh and TRIAM Group 290–293 (2001) 94
- Non-destructive structural analysis of surface blistering by TEM and EELS in a reflection configuration, S. Muto, T. Matsui and T. Tanabe 290–293 (2001) 131
- Detailed structure analysis of deposit layer in TEXTOR by means of TEM techniques, S. Muto, N. Yokoya and T. Tanabe 290–293 (2001) 295
- Radiation resistance and thermal creep of ODS ferritic steels, V.V. Sagaradze, V.I. Shalaev, V.L. Arbuzov, B.N. Goshchitskii, Y. Tian, W. Qun and S. Jiguang 295 (2001) 265
- Microstructural origins of radiation-induced changes in mechanical properties of 316 L and 304 L austenitic stainless steels irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, M.L. Hamilton, F.A. Garner, S.A. Maloy and W.F. Sommer 296 (2001) 112
- Correlation of radiation-induced changes in mechanical properties and microstructural development of Alloy 718 irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, S.A. Maloy and W.F. Sommer 296 (2001) 145
- Microstructure of both as-irradiated and deformed 304L stainless steel irradiated with 800 MeV protons, Y. Dai, X. Jia, J.C. Chen, W.F. Sommer, M. Victoria and G.S. Bauer 296 (2001) 174
- Origin of hardening and deformation mechanisms in irradiated 316 LN austenitic stainless steel, E.H. Lee, T.S. Byun, J.D. Hunn, K. Farrell and L.K. Mansur 296 (2001) 183
- Response of reduced activation ferritic steels to high-fluence ion-irradiation, H. Tanigawa, M. Ando, Y. Katoh, T. Hirose, H. Sakasegawa, S. Jitsukawa, A. Kohyama and T. Iwai 297 (2001) 279
- Tritium recovery from nanostructured LiAlO_2 , L.M. Carrera, J. Jiménez-Becerril, R. Basurto, J. Arenas, B.E. López M, S. Bulbulian and P. Bosch 299 (2001) 242
- V.I. Karpukhin, E.A. Krasikov and V.N. Kuznetsov 271&272 (1999) 120
- Irradiation hardening of V–4Cr–4Ti, E.V. van Osch and M.I. de Vries 271&272 (1999) 162
- Microstructural evolution and hardening of neutron irradiated vanadium alloys at low temperatures in Japan Material Testing Reactor, Y. Candra, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 301
- Physical mechanisms of helium release during deformation of vanadium alloys doped with helium atoms, A. Ryazanov, H. Matsui and A.V. Kazaryan 271&272 (1999) 356
- Fracture toughness of copper-base alloys for fusion energy applications, D.J. Alexander, S.J. Zinkle and A.F. Rowcliffe 271&272 (1999) 429
- Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels, R. Lindau, A. Möslang, D. Preininger, M. Rieth and H.D. Röhrig 271&272 (1999) 450
- Reactions of hydrogen with V–Cr–Ti alloys, J.R. DiStefano, J.H. De Van, D.H. Röhrig and L.D. Chitwood 273 (1999) 102
- Evaluation of thermal aging embrittlement in CF8 duplex stainless steel by small punch test, J.S. Cheon and I.S. Kim 278 (2000) 96
- Simulation of hydrogen embrittlement in zirconium alloys under stress and temperature gradients, A.G. Varias and A.R. Massih 279 (2000) 273
- Irradiation-induced embrittlement of a 2.25Cr1Mo steel, S.-H. Song, R.G. Faulkner, P.E.J. Flewitt, R.F. Smith, P. Marmy and M. Victoria 280 (2000) 162
- Embrittlement of low copper VVER 440 surveillance samples neutron-irradiated to high fluences, M.K. Miller, K.F. Russell, J. Kocik and E. Keilova 282 (2000) 83
- A cleavage toughness master curve model, G.R. Odette and M.Y. He 283–287 (2000) 120
- Influence of neutron irradiation on Cu–NiCrSi alloy pre-implanted with helium, A.V. Kozlov, M.V. Chernetsov, S.A. Averin, V.Ya. Abramov, A.D. Ivanov, Yu.S. Strebkov and V.F. Reutov 283–287 (2000) 193
- Microstructural examination of V–(3–6%)Cr–(3–5%)Ti irradiated in the ATR-A1 experiment, D.S. Gelles 283–287 (2000) 344
- Effect of neutron dose and irradiation temperature on the mechanical properties and structure of dispersion strengthened copper alloys, A.S. Pokrovsky, S.A. Fabritsiev, D.J. Edwards, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 404

Embrittlement

Justification of the new approach to the testing of the candidate iter materials in fission reactor, V.A. Nikolaenko,

- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- Defect microstructure and deformation behavior of V–Ti–Cr–Si–Al–Y alloy irradiated in ATR, T. Chuto, M. Satou and K. Abe 283–287 (2000) 503
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenkoa 283–287 (2000) 694
- 3D dislocation dynamics study of plastic instability in irradiated copper, L.Z. Sun, N.M. Ghoniem, S.-H. Tong and B.N. Singh 283–287 (2000) 741
- On quantification of helium embrittlement in ferritic/martensitic steels, D.S. Gelles 283–287 (2000) 838
- Development of a small specimen test machine to evaluate irradiation embrittlement of fusion reactor materials, T. Ishii, M. Ohmi, J. Saito, T. Hoshiya, N. Ooka, S. Jitsukawa and M. Eto 283–287 (2000) 1023
- Microstructural development of neutron irradiated W–Re alloys, Y. Nemoto, A. Hasegawa, M. Satou and K. Abe 283–287 (2000) 1144
- Radiation resistance of weld joints of type 316 stainless steel containing about 10 appm He, S.A. Fabritsiev and A.S. Pokrovsky 283–287 (2000) 1215
- Performance of V–Cr–Ti alloys in a hydrogen environment, K. Natesan and W.K. Soppet 283–287 (2000) 1316
- Liquid metal embrittlement (LME) susceptibility of the 8–9% Cr martensitic steels F82H-mod., OPTIFER IVb and their simulated welded structures in liquid Pb–17Li, T. Sample and H. Kolbe 283–287 (2000) 1336
- ITER structural design criteria and their extension to advanced reactor blankets, S. Majumdar and G. Kalinin 283–287 (2000) 1424
- A fracture mechanics analysis of the PWR nuclear power plant reactor pressure vessel beltline weld, L.-j. Young 288 (2001) 197
- Deuterium retention of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, Y. Hirohata, T. Oda, T. Hino and S. Sengoku 290–293 (2001) 196
- Embrittlement behaviour of different international low activation alloys after neutron irradiation, H.-C. Schneider, B. Dafferner and J. Aktaa 295 (2001) 16
- Hydrogen concentrations near cracks in target materials for high-power spallation neutron sources, H. Rauh and H. Ullmaier 295 (2001) 109
- The effect of mercury on the fatigue behavior of 316 LN stainless steel, J.P. Strizak, J.R. DiStefano, P.K. Liaw and H. Tian 296 (2001) 225
- Effect of helium implantation on mechanical properties and microstructure evolution of reduced-activation 9Cr–2W martensitic steel, R. Kasada, T. Morimura, A. Hasegawa and A. Kimura 299 (2001) 83
- Comparison of microstructural features of radiation embrittlement of VVER-440 and VVER-1000 reactor pressure vessel steels, E.A. Kuleshova, B.A. Gurovich, Ya.I. Shtrombakh, D.Yu. Erak and O.V. Lavrenchuk 300 (2002) 127
- Environmental Effects**
- A study of actinide decay chains on the environmental effect of a geologic disposal of ‘rock-like oxide’ fuels and uranium–plutonium oxide fuels, H. Kimura, H. Takano and T. Muro-mura 274 (1999) 197
- Dissolution kinetics of particles of irradiated Chernobyl nuclear fuel: influence of pH and oxidation state on the release of radionuclides in the contaminated soil of Chernobyl, V.A. Kashparov, V.P. Protsak, N. Ahamdach, D. Stammose, J.M. Peres, V.I. Yoschenko and S.I. Zvarich 279 (2000) 225
- Alteration kinetics of a simplified nuclear glass in an aqueous medium: effects of solution chemistry and of protective gel properties on diminishing the alteration rate, C. Jégou, S. Gin and F. Larché 280 (2000) 216
- Performance of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, W.R. Johnson, P.W. Trester, S. Sengoku, S. Ishiyama, K. Fukaya, M. Eto, T. Oda, Y. Hirohata, T. Hino and H. Tsai 283–287 (2000) 622
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Effect of oxygen on the crack growth behavior of V–4Cr–4Ti at 600 °C, R.J. Kurtz 283–287 (2000) 822

- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- A microstructural study of the oxide scale formation on ODS Fe–13Cr steel, D.T. Hoelzer, B.A. Pint and I.G. Wright 283–287 (2000) 1306
- Performance of V–Cr–Ti alloys in a hydrogen environment, K. Natesan and W.K. Soppet 283–287 (2000) 1316
- Long-term stability of ceramics in liquid lithium, B.A. Pint, L.D. Chitwood and J.R. DiStefano 289 (2001) 52
- The effect of mercury on the fatigue behavior of 316 LN stainless steel, J.P. Strizak, J.R. DiStefano, P.K. Liaw and H. Tian 296 (2001) 225
- Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling, E. Vernaz, S. Gin, C. Jégou and I. Ribet 298 (2001) 27
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- Near-field performance assessment for a low-activity waste glass disposal system: laboratory testing to modeling results, B.P. McGrail, D.H. Bacon, J.P. Icenhower, F.M. Mann, R.J. Puigh, H.T. Schaef and S.V. Mattigod 298 (2001) 95
- Performance assessment of the disposal of vitrified high-level waste in a clay layer, D. Mallants, J. Marivoet and X. Sillen 298 (2001) 125
- Experimental Techniques**
- Microstructural examination of Ni-ion irradiated Fe–Ni–Cr alloys followed to micro-zone deformation, M. Ando, Y. Katoh, H. Tanigawa and A. Kohyama 271&272 (1999) 111
- Disordering kinetics of Ni₃Al under ion irradiation, S. Müller, C. Abromeit, S. Matsumura, N. Wanderka and H. Wollenberger 271&272 (1999) 241
- Modelling of dissolution profiles of ordered particles under irradiation, C. Abromeit, E. Camus and S. Matsumura 271&272 (1999) 246
- Modeling of the cyclic ball indentation test for small specimens using the finite element method, T. Yamamoto, H. Kurishita and H. Matsui 271&272 (1999) 440
- Manufacturing technique of Nb₃Al super-conductive sheet by electrically heated powder rolling, C. Mochizuki and M. Mikami 271&272 (1999) 508
- Feedback control of highly radiative plasmas in Tore Supra, C. Grisolia, Ph. Ghendrih, A. Grosman, P. Monier-Garbet, D. Moulin and J.C. Vallet 275 (1999) 95
- A new procedure of X-ray line profile analysis applied to study the dislocation structure and subgrain size-distributions in fatigued MANET steel, T. Ungár, M. Victoria, P. Marmy, P. Hanák and G. Szenes 276 (2000) 278
- Evaluation of thermal aging embrittlement in CF8 duplex stainless steel by small punch test, J.S. Cheona and I.S. Kim 278 (2000) 96
- Tritium profiles in tiles from the first wall of fusion machines and techniques for their detritiation, R.-D. Penzhorn, N. Bekris, W. Hellriegel, H.-E. Noppel, W. Nägele, H. Ziegler, R. Rolli, H. Werle, A. Haigh and A. Peacock 279 (2000) 139
- Ultrashort X-ray pulse generation using subpicosecond electron linac, H. Harano, K. Kinoshita, K. Yoshii, T. Ueda, S. Okita and M. Uesaka 280 (2000) 255
- Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161
- Effects of grain boundary misorientation on solute segregation in thermally sensitized and proton-irradiated 304 stainless steel, T.S. Duh, J.J. Kai and F.R. Chen 283–287 (2000) 198
- Shear punch and tensile measurements of mechanical property changes induced in various austenitic alloys by high-energy mixed proton and neutron irradiation at low temperatures, M.L. Hamilton, F.A. Garner, M.B. Toloczko, S.A. Maloy, W.F. Sommer, M.R. James, P.D. Ferguson and M.R. Louthan Jr. 283–287 (2000) 418
- Effect of low temperature irradiation on the mechanical properties of ternary V–Cr–Ti alloys as determined by tensile tests and shear punch tests, M.L. Hamilton and M.B. Toloczko 283–287 (2000) 488
- Time-dependent failure mechanisms in silicon carbide composites for fusion energy applications, C.A. Lewinsohn, G.E. Youngblood, C.H. Henager Jr., E.P. Simonen and R.H. Jones 283–287 (2000) 584
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenko 283–287 (2000) 694
- Ductility correlations between shear punch and uniaxial tensile test data,

- M.B. Toloczko, M.L. Hamilton and G.E. Lucas 283–287 (2000) 987
- Confocal microscopy–fracture reconstruction and finite element modeling characterization of local cleavage toughness in a ferritic/martensitic steel in subsized Charpy V-notch impact tests, T. Yamamoto, G.R. Odette, G.E. Lucas and H. Matsui 283–287 (2000) 992
- High-sensitivity quadrupole mass spectrometry system for the determination of hydrogen in irradiated materials, B.M. Oliver, F.A. Garner, L.R. Greenwood and J.A. Abrefah 283–287 (2000) 1006
- Specimen size effects on the tensile properties of JPCA and JFMS, Y. Kohno, A. Kohyama, M.L. Hamilton, T. Hirose, Y. Katoh and F.A. Garner 283–287 (2000) 1014
- Effect of specimen size on fatigue properties of reduced activation ferritic/martensitic steels, T. Hirose, H. Sakasegawa, A. Kohyama, Y. Katoh and H. Tanigawa 283–287 (2000) 1018
- Development of a small specimen test machine to evaluate irradiation embrittlement of fusion reactor materials, T. Ishii, M. Ohmi, J. Saito, T. Hoshiya, N. Ooka, S. Jitsukawa and M. Eto 283–287 (2000) 1023
- Joining of silicon carbide composites for fusion energy applications, C.A. Lewinsohn, M. Singh, T. Shibayama, T. Hinoki, M. Ando, Y. Katoh and A. Kohyama 283–287 (2000) 1258
- Development of wet process with substitution reaction for the mass production of Li_2TiO_3 pebbles, K. Tsuchiya and H. Kawamura 283–287 (2000) 1380
- Tensile strength and fracture surface characterization of Hi-Nicalon™ SiC fibers, G.E. Youngblood, C. Lewinsohn, R.H. Jones and A. Kohyama 289 (2001) 1
- Failure mechanisms in continuous-fiber ceramic composites in fusion energy environments, C.A. Lewinsohn, C.H. Henager, G.E. Youngblood, R.H. Jones, E. Lara-Curzio and R. Scholz 289 (2001) 10
- TOF analysis of reflection of low-energy light ions from solid targets using coaxial impact collision ion scattering spectroscopy (CAICISS), K. Morita, N. Kishi, A. Grigoriev, S. Masuzaki and T. Muroga 290–293 (2001) 126
- Hydrogen molecules in the divertor of ASDEX Upgrade, U. Fantz, D. Reiter, B. Heger and D. Coster 290–293 (2001) 367
- Vibrational population of the ground state of H_2 and D_2 in the divertor of ASDEX Upgrade, B. Heger, U. Fantz, K. Behringer and ASDEX Upgrade Team 290–293 (2001) 413
- In situ measurement of hydrogen retention in JET carbon tiles, D.D.R. Summers, M.N.A. Beurskens, J.P. Coad, G. Counsell, W. Fundamenski, G.F. Matthews and M.F. Stamp 290–293 (2001) 496
- Particle control in the sustained spheromak physics experiment, R.D. Wood, D.N. Hill, E.B. Hooper, D. Buchenauer, H. McLean, Z. Wang, S. Woodruff and G. Wurden 290–293 (2001) 513
- Performance of high triangularity plasmas as the volume of the secondary divertor is varied in DIII-D, M.E. Fenstermacher, T.H. Osborne, T.W. Petrie, R.J. Groebner, C.J. Lasnier, R.J. La Haye, A.W. Leonard, G.D. Porter and J.G. Watkins 290–293 (2001) 588
- Observation of detachment in the JET MkIIIGB divertor using CCD camera tomography, K. Itami, P. Coad, W. Fundamenski, C. Ingesson, J. Lingertat, G.F. Matthews and A. Tabasso 290–293 (2001) 633
- Explorative studies for the development of fast He beam plasma diagnostics, S. Menhart, M. Proschek, H.-D. Falter, H. Anderson, H. Summers, A. Staebler, P. Franzen, H. Meister, J. Schweinzer, T.T.C. Jones, S. Cox, N. Hawkes, F. Aumayr and H.P. Winter 290–293 (2001) 673
- Consistency check of Z_{eff} measurements in ergodic divertor plasmas on Tore Supra, B. Schunke, C. DeMichelis, R. Guirlet, P. Monier-Garbet, M. Mattioli, E. Chareyre and O. Meyer 290–293 (2001) 715
- Comparison of Langmuir probe and Thomson scattering measurements in DIII-D, J.G. Watkins, P. Stangeby, J.A. Boedo, T.N. Carlstrom, C.J. Lasnier, R.A. Moyer, D.L. Rudakov and D.G. Whyte 290–293 (2001) 778
- Effects of flush-mounted probe bias on local turbulent fluctuations, D.L. Winslow and B. LaBombard 290–293 (2001) 788
- Helium transport and exhaust with an ITER-like divertor in ASDEX Upgrade, H.-S. Bosch, W. Ullrich, D. Coster, O. Gruber, G. Haas, J. Neuhauser, R. Schneider, R. Wolf and ASDEX Upgrade Team 290–293 (2001) 836
- Measurement of thermal wall-load distribution caused by the locked mode in a reversed-field pinch plasma, Y. Yagi, S. Sekine, H. Koguchi, T. Bolzonella and H. Sakakita 290–293 (2001) 1144
- High-temperature, Knudsen cell-mass spectroscopic studies on lanthanum oxide/uranium dioxide solid solutions,

- S. Sunder, R. McEachern and J.C. LeBlanc
Thermodynamic studies on ThGa₂, B. Prabhakara Reddy, R. Kandan, R. Babu, K. Nagarajan and P.R. Vasudeva Rao
R&D for the Spallation Neutron Source mercury target, L.K. Mansur, T.A. Gabriel, J.R. Haines and D.C. Louston
MEGAPIE, a 1 MW pilot experiment for a liquid metal spallation target, G.S. Bauer, M. Salvatores and G. Heuser
Current status of JAERI spallation target material program, K. Kikuchi, T. Sasa, S. Ishikura, K. Mukugi, T. Kai, N. Ouchi and I. Ioka
Status of the first SINQ irradiation experiment, STIP-I, Y. Dai and G.S. Bauer
Kinetics of gas phase oxygen control system (OCS) for stagnant and flowing Pb–Bi Systems, C.H. Lefhalm, J.U. Knebel and K.J. Mack
Monitoring of low-cycle fatigue degradation in X6CrNiTi18-10 austenitic steel, M. Grosse, M. Niffenegger and D. Kalkhof
Fabrication of a tantalum-clad tungsten target for KENS, M. Kawai, K. Kikuchi, H. Kurishita, J.-F. Li and M. Furusaka
Application of normal pulse voltammetry to on-line monitoring of actinide concentrations in molten salt electrolyte, M. Iizuka, T. Inoue, O. Shirai, T. Iwai and Y. Arai
US field testing programs and results, G.G. Wicks
Application of electrochemical impedance spectroscopy (EIS) for in situ study of glass alteration, D. Chaulet, S. Martemianov, J.H. Thomassin and P. Le Coustumer
In-depth distributions of elements in leached layers on two HLW waste glasses after burial in clay; step-scan by SIMS, A. Lodding and P. Van Iseghem
Varying temperature irradiation experiment in HFIR, T. Muroga, S.J. Zinkle, A.L. Qualls and H. Watanabe
Ultrasonic study of UO₂: effects of porosity and grain size on ultrasonic attenuation and velocities, D. Laux, B. Cros, G. Despaux and D. Baron
persed with TiC, Y. Kitsunai, H. Kurishita, H. Kayano, Y. Hiraoka, T. Igarashi and T. Takida
ITER Materials R&D Data Bank, S. Tanaka, R. Matera, G. Kalinin, V. Barabash and K. Mohri
Preparation of simulated inert matrix fuel with different powders by dry milling method, Y.-W. Lee, H.S. Kim, S.H. Kim, C.Y. Joung, S.H. Na, G. Ledergerber, P. Heimgartner, M. Pouchon and M. Burghartz
Preliminary fabrication and characterisation of inert matrix and thoria fuels for plutonium disposition in light water reactors, F. Vettrano, G. Magnani, T.La. Torretta, E. Marmo, S. Coelli, L. Luzzi, P. Ossi and G. Zappa
Preparation of rock-like oxide fuels for the irradiation test in the Japan Research Reactor No. 3, T. Shiratori, T. Yamashita, T. Ohmichi, A. Yasuda and K. Watarumi
Silicon carbide as an inert-matrix for a thermal reactor fuel, R.A. Verrall, M.D. Vlajic and V.D. Krstic
Transmutation of actinides in inert-matrix fuels: fabrication studies and modelling of fuel behaviour, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, M.E. Huntelaar and R.R. van der Laan
Core severe accidents with cermet fuels – a specific study for pressurized water reactors, J. Porta, C. Aillaud and S. Baldi
Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. I. Effects of minor alloying elements on precipitate phases in melt products and implication in alloy fabrication, E.H. Lee and L.K. Mansur
Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. II. Effects of minor elements on precipitate phase stability during thermal aging, E.H. Lee and L.K. Mansur
Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams
Microstructure control to improve mechanical properties of vanadium alloys for fusion applications, T. Kuwabara, H. Kurishita and M. Hasegawa

- Material science and manufacturing of heat-resistant reduced-activation ferritic–martensitic steels for fusion, A.G. Ioltukhovskiy, A.I. Blokhin, N.I. Budylnin, V.M. Chernov, M.V. Leont'eva-Smirnova, E.G. Mironova, E.A. Medvedeva, M.I. Solonin, S.I. Porollo and L.P. Zavyalsky 283–287 (2000) 652
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- NIFS program for large ingot production of a V–Cr–Ti alloy, T. Muroga, T. Nagasaka, A. Iiyoshi, A. Kawabata, S. Sakurai and M. Sakata 283–287 (2000) 711
- Russian superconducting materials for magnet systems of fusion reactors, A. Shikov, A. Nikulin, V. Pantsyrnyi, A. Vorobieva, G. Vedernikov, A. Silaev, E. Dergunova, S. Soudiev and I. Akimov 283–287 (2000) 968
- Effect of ITER components manufacturing cycle on the irradiation behaviour of 316L(N)-IG steel, B.S. Rodchenkov, V.I. Prokhorov, O.Yu. Makarov, V.K. Shamardin, G.M. Kalinin, Yu.S. Strebkov and O.A. Golosov 283–287 (2000) 1166
- Diffusion welding parameters and mechanical properties of martensitic chromium steels, K. Schleisiek, T. Lechler, L. Schäfer and P. Weimar 283–287 (2000) 1196
- The effect of laser welding process parameters on the mechanical and microstructural properties of V–4Cr–4Ti structural materials, C.B. Reed, K. Natesan, Z. Xu and D.L. Smith 283–287 (2000) 1206
- Behaviour of Li_2ZrO_3 and Li_2TiO_3 pebbles relevant to their utilization as ceramic breeder for the HCPB blanket, J.D. Lulewicz, N. Roux, G. Piazza, J. Reimann and J. van der Laan 283–287 (2000) 1361
- Development of wet process with substitution reaction for the mass production of Li_2TiO_3 pebbles, K. Tsuchiya and H. Kawamura 283–287 (2000) 1380
- Development of materials and fabrication of porous and pebble bed beryllium multipliers, D.A. Davydov, M.I. Solonin, Yu.E. Markushkin, V.A. Gorokhov, V.V. Gorlevsky and G.N. Nikolaev 283–287 (2000) 1409
- Present status and future prospect of the Russian program for fusion low-activation materials, M.I. Solonin, V.M. Chernov, V.A. Gorokhov, A.G. Ioltukhovskiy, A.K. Shikov and A.I. Blokhin 283–287 (2000) 1468
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- Fabrication of a tantalum-clad tungsten target for KENS, M. Kawai, K. Kikuchi, H. Kurishita, J.-F. Li and M. Furusaka 296 (2001) 312
- Structural and thermal investigations on cerium oxalate and derived oxide powders for the preparation of (Th,Ce) O_2 pellets, Y. Altaş and H. Tel 298 (2001) 316
- Fast Reactors Materials**
- Common technologies and knowledge sharing, J.W. Davis, T. Kondo, G.R. Odette, P. Fenici and T. Kusanagi 271&272 (1999) 553
- Concepts for an inert matrix fuel, an overview, C. Degueldre and J.M. Paratte 274 (1999) 1
- Temperature programmed decomposition of thorium nitrate pentahydrate, S. Dash, M. Kamruddin, P.K. Ajikumar, A.K. Tyagi, B. Raj, S. Bera and S.V. Narasimhan 278 (2000) 173
- Stress tensor of a strained material with a linear row of stress concentrators, R.E. Voskoboinikov 280 (2000) 169
- The effects of long-time irradiation and thermal aging on 304 stainless steel, T.R. Allen, J.I. Cole, C.L. Trybus and D.L. Porter 282 (2000) 171
- Thermal conductivity of uranium–plutonium oxide fuel for fast reactors, M. Inoue 282 (2000) 186
- Influence of cold work to increase swelling of pure iron irradiated in the BR-10 reactor to ~ 6 and ~ 25 dpa at ~ 400 °C, A.M. Dvoriashin, S.I. Porollo, Yu.V. Konobeev and F.A. Garner 283–287 (2000) 157
- Compositional and temperature dependence of void swelling in model Fe–Cr base alloys irradiated in the EBR-II fast reactor, B.H. Sencer and F.A. Garner 283–287 (2000) 164
- Void swelling and irradiation creep of two high-nickel steels after irradiation at 400–410 °C to 84–91 dpa in the BN-350 fast reactor, S.I. Porollo, A.M. Dvoriashin, A.N. Vorobjev, Yu.V. Konobeev, V.M. Krigan, E.G. Mironova, N.I. Budylnin and F.A. Garner 283–287 (2000) 239
- In-pile and post-irradiation creep of type 304 stainless steel under different neutron spectra, Y. Kurata, Y. Itabashi, H. Mimura, T. Kikuchi, H.

- Amezawa, S. Shimakawa, H. Tsuji and M. Shindo 283–287 (2000) 386
- Irradiation creep of 11Cr–0.5Mo–2W, V, Nb ferritic–martensitic, modified 316, and 15Cr–20Ni austenitic S.S. irradiated in FFTF to 103–206 dpa, A. Uehira, S. Mizuta, S. Ukai and R.J. Puigh 283–287 (2000) 396
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- Transport of and deposition from hydrocarbon radicals in a flow tube downstream from a CH₄ RF discharge, A.E. Gorodetsky, I.I. Arkhipov, R.Kh. Zalavutdinov, A.P. Zakharov, Yu.N. Tolmachev, S.P. Vnukov and V.L. Bukhovets 290–293 (2001) 271
- An investigation of the Pu migration phenomena during irradiation in fast reactor, T. Ishii and T. Asaga 294 (2001) 13
- Fatigue**
- Post-irradiation thermocyclic loading of ferritic–martensitic structural materials, L. Belyaeva, A. Orychtchenko, C. Petersen and V. Rybin 271&272 (1999) 151
- Post-irradiation mechanical properties of austenitic alloys at temperatures below 703 K, S. Jitsukawa, I. Ioka and A. Hishinuma 271&272 (1999) 167
- Present status of Data-Free-Way (distributed database system for advanced nuclear materials), H. Tsuji, N. Yokoyama, M. Fujita, Y. Kurihara, S. Kano, Y. Tachi, K. Shimura, R. Nakajima and S. Iwata 271&272 (1999) 486
- Fatigue failure analysis of V–4Ti–4Cr alloy, H. Aglan, Y.X. Gan, B. Chin and M. Grossbeck 273 (1999) 192
- The influence of neutron irradiation on the fatigue performance of OFHC copper and a dispersion strengthened copper alloy B.N. Singh, J.F. Stubbins and P. Toft 275 (1999) 125
- Synergistic interaction of fatigue and stress corrosion on the corrosion fatigue crack growth behavior in Alloy 600 in high temperature and high pressure water, W.Y. Maeng, Y.H. Kang, T.W. Nam, S. Ohashi and T. Ishihara 275 (1999) 194
- A new procedure of X-ray line profile analysis applied to study the dislocation structure and subgrain size-distributions in fatigued MANET steel, T. Ungár, M. Victoria, P. Marmy, P. Hanák and G. Szenes 276 (2000) 278
- Effect of composition on the fatigue failure behavior of vanadium alloys, H.A. Aglan, Y.X. Gan, B.A. Chin and M.L. Grossbeck 278 (2000) 186
- High temperature fatigue behaviour of TZM molybdenum alloy under mechanical and thermomechanical cyclic loads, H.J. Shi, L.S. Niu, C. Korn and G. Pluvinage 278 (2000) 328
- Comparative study on the fatigue crack growth behavior of 316L and 316LN stainless steels: effect of microstructure of cyclic plastic strain zone at crack tip, W.-Y. Maeng and M.-H. Kim 282 (2000) 32
- Irradiation creep at 60 °C in SUS 316 and its impact on fatigue fracture, J. Nagakawa, Y. Murase, N. Yamamoto and T. Fukuzawa 283–287 (2000) 391
- Tensile and low-cycle fatigue properties of solution annealed type 316L stainless steel plate and TIG-weld exposed to 5 dpa at low-temperature (42 °C), J.-L. Puzzolante, M. Scibetta, R. Chaouadi and W. Vandermeulen 283–287 (2000) 428
- Effect of helium to dpa ratio on fatigue behavior of austenitic stainless steel irradiated to 2 dpa, I. Ioka, M. Yonekawa, Y. Miwa, H. Mimura, H. Tsuji and T. Hoshiya 283–287 (2000) 440
- Thermal fatigue crack nucleation in ferritic–martensitic steels before and after neutron irradiation, L.A. Belyaeva, A.A. Zisman, C. Petersen, V.A. Potapova and V.V. Rybin 283–287 (2000) 461
- Low cycle fatigue properties of a low activation ferritic steel (JLF-1) at room temperature, A. Nishimura, T. Nagasaka, N. Inoue, T. Muroga and C. Namba 283–287 (2000) 677
- High heat flux test of a HIP-bonded first wall panel of reduced activation ferritic steel F-82H, T. Hatano, S. Suzuki, K. Yokoyama, T. Kuroda and M. Enoda 283–287 (2000) 685
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Fatigue behavior and development of microcracks in F82H after helium implantation at 200 °C, J. Bertsch, S. Meyer and A. Möslang 283–287 (2000) 832
- Mechanical properties of the ITER central solenoid model coil insulation under static and dynamic load after reactor irradiation, K. Humer, P. Rosenkranz, H.W. Weber, P.E. Fabian and J.A. Rice 283–287 (2000) 973

- Effect of specimen size on fatigue properties of reduced activation ferritic/martensitic steels, T. Hirose, H. Sakasegawa, A. Kohyama, Y. Katoh and H. Tanigawa 283–287 (2000) 1018
- Manufacturing and testing of a prototypical divertor vertical target for ITER, M. Merola, L. Plöchl, P. Chappuis, F. Escourbiac, M. Grattarola, I. Smid, R. Tivey and G. Vieider 283–287 (2000) 1068
- Low cycle fatigue strength of diffusion bonded joints of alumina dispersion-strengthened copper to stainless steel, H. Nishi and T. Araki 283–287 (2000) 1234
- Impact of irradiation on the tensile and fatigue properties of two titanium alloys, P. Marmy and T. Leguey 296 (2001) 155
- The effect of mercury on the fatigue behavior of 316 LN stainless steel, J.P. Strizak, J.R. DiStefano, P.K. Liaw and H. Tian 296 (2001) 225
- Monitoring of low-cycle fatigue degradation in X6CrNiTi18-10 austenitic steel, M. Grosse, M. Niffenegger and D. Kalkhof 296 (2001) 305
- Effects of nitrogen on low-cycle fatigue properties of type 304L austenitic stainless steels tested with and without tensile strain hold, B. Rho and S. Nam 300 (2002) 65
- First Wall Materials**
- Microstructural examination of Ni-ion irradiated Fe–Ni–Cr alloys followed to micro-zone deformation, M. Ando, Y. Katoh, H. Tanigawa and A. Kohyama 271&272 (1999) 111
- Justification of the new approach to the testing of the candidate iter materials in fission reactor, V.A. Nikolaenko, V.I. Karpukhin, E.A. Krasikov and V.N. Kuznetsov 271&272 (1999) 120
- Irradiation examination of CuNiCrSi alloy for ITER applications, A.D. Ivanov, A.V. Kozlov, M.V. Chernetsov and S.A. Averin 271&272 (1999) 139
- Post-irradiation thermocyclic loading of ferritic–martensitic structural materials, L. Belyaeva, A. Orychtchenko, C. Petersen and V. Rybin 271&272 (1999) 151
- Post-irradiation mechanical properties of austenitic alloys at temperatures below 703 K, S. Jitsukawa, I. Ioka and A. Hishinuma 271&272 (1999) 167
- Invisible and visible point defect clusters in neutron irradiated iron, M. Horiki, T. Yoshiie, M. Iseki and M. Kiritani 271&272 (1999) 256
- Triple ion beam studies of radiation damage in 9Cr–2WVTa ferritic/martensitic steel for a high power spallation neutron source, E.H. Lee, J.D. Hunn, G.R. Rao, R.L. Klueh and L.K. Mansur 271&272 (1999) 385
- Fracture toughness of copper-base alloys for fusion energy applications, D.J. Alexander, S.J. Zinkle and A.F. Rowcliffe 271&272 (1999) 429
- Influence of thermal aging on tensile and impact bending properties of the steel grades OPTIFER and F82H mod., L. Schäfer and M. Schirra 271&272 (1999) 455
- ITER Materials R&D Data Bank, S. Tanaka, R. Matera, G. Kalinin, V. Barabash and K. Mohri 271&272 (1999) 478
- Evaluation of magnetic fields due to the ferromagnetic vacuum vessel and their influence on plasma discharge in tokamak devices, T. Nakayama, M. Abe, T. Tadokoro and M. Otsuka 271&272 (1999) 491
- Hydrogen isotope retention in beryllium for tokamak plasma-facing applications, R.A. Anderl, R.A. Causey, J.W. Davis, R.P. Doerner, G. Federici, A.A. Haasz, G.R. Longhurst, W.R. Wampler and K.L. Wilson 273 (1999) 1
- Deposition of lithium on a plasma edge probe in TFTR. Behavior of lithium-painted walls interacting with edge plasmas, Y. Hirooka, K. Ashida, H. Kugel, D. Walsh, W. Wampler, M. Bell, R. Conn, M. Hara, S. Luckhardt, M. Matsuyama, D. Mansfield, D. Mueller, C. Skinner, T. Walters and K. Watanabe 274 (1999) 320
- Low temperature yield properties of two 7–9Cr ferritic/martensitic steels, P. Spätig, G.R. Odette and G.E. Lucas 275 (1999) 324
- Simulation of damage production and accumulation in vanadium, E. Alonso, M.-J. Caturla, T. Diaz de la Rubia and J.M. Perlado 276 (2000) 221
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- Critical issues and current status of vanadium alloys for fusion energy applications, R.J. Kurtz, K. Abe, V.M. Chernov, V.A. Kazakov, G.E. Lucas, H. Matsui, T. Muroga, G.R. Odette, D.L. Smith and S.J. Zinkle 283–287 (2000) 70
- International strategy for fusion materials development, K. Ehrlich, E.E. Bloom and T. Kondo 283–287 (2000) 79
- Influence of neutron irradiation on Cu–NiCrSi alloy pre-implanted with helium, A.V. Kozlov, M.V. Chernetsov, S.A. Averin, V.Ya. Abramov, A.D.

- Ivanov, Yu.S. Strebkov and V.F. Reutov 283–287 (2000) 193
- Application of the internal friction method to studying microstructural effects in fusion materials, S. Tähtinen, Y. Jagodzinski, O. Tarasenko, S. Smuk and H. Hänninen 283–287 (2000) 255
- Microstructures in Ti–Al intermetallic compounds irradiated at 673 K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer and A. Hishinuma 283–287 (2000) 273
- Defect structures introduced in iron under varying temperature neutron irradiation, M. Horiki, T. Yoshiie, Q. Xu, M. Iseki and M. Kiritani 283–287 (2000) 282
- Simulating the influence of radiation temperature variations on microstructural evolution, Y. Katoh, R.E. Stoller, A. Kohyama and T. Muroga 283–287 (2000) 313
- Swelling of F82H irradiated at 673 K up to 51 dpa in HFIR, Y. Miwa, E. Wakai, K. Shiba, N. Hashimoto, J.P. Robertson, A.F. Rowcliffe and A. Hishinuma 283–287 (2000) 334
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- Tensile behavior of F82H with and without spectral tailoring, K. Shiba, R.L. Klueh, Y. Miwa, J.P. Robertson and A. Hishinuma 283–287 (2000) 358
- The contribution of various defects to irradiation-induced hardening in an austenitic model alloy, M. Ando, Y. Katoh, H. Tanigawa, A. Kohyama and T. Iwai 283–287 (2000) 423
- Tensile and low-cycle fatigue properties of solution annealed type 316L stainless steel plate and TIG-weld exposed to 5 dpa at low-temperature (42 °C), J.-L. Puzzolante, M. Scibetta, R. Chaouadi and W. Vandermeulen 283–287 (2000) 428
- Thermal fatigue crack nucleation in ferritic–martensitic steels before and after neutron irradiation, L.A. Belyaeva, A.A. Zisman, C. Petersen, V.A. Potapova and V.V. Rybin 283–287 (2000) 461
- Low-temperature irradiation effects on tensile and Charpy properties of low-activation ferritic steels, K. Shiba and A. Hishinuma 283–287 (2000) 474
- Time-dependent failure mechanisms in silicon carbide composites for fusion energy applications, C.A. Lewinsohn, G.E. Youngblood, C.H. Henager Jr., E.P. Simonen and R.H. Jones 283–287 (2000) 584
- Thermomechanical characteristics of the low activation materials chromium and Cr-5Fe-1Y₂O₃ alloy, H. Stamm, U. Holzwarth, F. Lakestani, R. Valiev, V. Provenzano and A. Volcan 283–287 (2000) 597
- High heat flux test of a HIP-bonded first wall panel of reduced activation ferritic steel F-82H, T. Hatano, S. Suzuki, K. Yokoyama, T. Kuroda and M. Enoda 283–287 (2000) 685
- A potential new ferritic/martensitic steel for fusion applications, R.L. Klueh, N. Hashimoto, R.F. Buck and M.A. Sokolov 283–287 (2000) 697
- Tensile and impact behavior of the reduced-activation steels OPTIFER and F82H mod, L. Schäfer 283–287 (2000) 707
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- Features of radiation damage of vanadium and its alloys at a temperature of 330–340 °C, V.A. Kazakov, Z. Ostrovsky, Yu. Goncharenko and V. Chakin 283–287 (2000) 727
- Damage mechanisms and fracture toughness of GlidCop[®] CuAl25 IG0 copper alloy, S. Tähtinen, A. Laukkanen and B.N. Singh 283–287 (2000) 1028
- Hydrogen absorption process into graphite and carbon materials, H. Atsumi and M. Iseki 283–287 (2000) 1053
- The removal of ion implanted deuterium from tungsten and stainless steel by transferred-arc cleaning, K.J. Hollis, R.G. Castro, C.J. Maggiore and A. Ayala 283–287 (2000) 1085
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Furnace brazing type 304 stainless steel to vanadium alloy (V–5Cr–5Ti), R.V. Steward, M.L. Grossbeck, B.A. Chin, H.A. Aglan and Y. Gan 283–287 (2000) 1224
- Effects of heat treatments on microstructure changes in the interface of Cu/SS316L joint materials, Q. Xu, D.J. Edwards and T. Yoshiie 283–287 (2000) 1229
- Effect of neutron irradiation on mechanical properties of Cu/SS joints after single and multiple HIP cycles, S. Tähtinen, B.N. Singh and P. Toft 283–287 (2000) 1238
- Joining of silicon carbide composites for fusion energy applications, C.A. Lewinsohn, M. Singh, T. Shibayama, T. Hinoki, M. Ando, Y. Katoh and A. Kohyama 283–287 (2000) 1258
- Failure mechanisms in continuous-fiber ceramic composites in fusion energy environments, C.A. Lewinsohn, C.H. Henager, G.E. Youngblood, R.H. Jones, E. Lara-Curzio and R. Scholz 289 (2001) 10

- Plasma–surface interactions on liquids, R. Bastasz and W. Eckstein 290–293 (2001) 19
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstrab 290–293 (2001) 25
- D, He and Li sputtering of liquid eutectic Sn–Li, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 33
- Chemical erosion of boronized films from DIII-D tiles, J.W. Davis, P.B. Wright, R.G. Macaulay-Newcombe, A.A. Haasz and C.G. Hamilton 290–293 (2001) 66
- Formation of mixed layers and compounds on beryllium due to C⁺ and CO⁺ bombardment, P. Goldstrass and Ch. Linsmeier 290–293 (2001) 71
- Surface reactions on beryllium after carbon vapour deposition and thermal treatment, P. Goldstrass, K.U. Klages and Ch. Linsmeier 290–293 (2001) 76
- Anisotropic radiation damage by charge exchange neutrals under tokamak discharges in TRIAM-1M, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, S. Itoh and TRIAM Group 290–293 (2001) 94
- Synergistic effects by simultaneous bombardment of tungsten with hydrogen and carbon, K. Krieger and J. Roth 290–293 (2001) 107
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Carbon erosion mechanisms in tokamak divertor materials: insight from molecular dynamics simulations, E. Salonen, K. Nordlund, J. Keinonen and C.H. Wu 290–293 (2001) 144
- Chemical erosion of doped graphites for fusion devices, C. García-Rosales and M. Balden 290–293 (2001) 173
- Measurements and modeling of D, He and Li sputtering of liquid lithium, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 180
- Plasma operation with tungsten tiles at the central column of ASDEX Upgrade, R. Neu, V. Rohde, A. Geier, K. Krieger, H. Maier, D. Bolshukhin, A. Kallenbach, R. Pugno, K. Schmidtman, M. Zarrabian and ASDEX Upgrade Team 290–293 (2001) 206
- Tritium retention in neutron-irradiated low-Z materials for use as plasma facing materials, F. Scaffidi-Argentina, C. Sand and C.H. Wu 290–293 (2001) 211
- The porous vanadium as a plasma facing material for the fusion devices, A.V. Zhmendak, A. Huber, V.A. Kvitcinskiy, E.V. Mudretskaya, A.V. Nedospasov, V.V. Panechkina, S.N. Pavlov, A. Pospieszczyk, G.V. Sergienko and V.F. Virko 290–293 (2001) 220
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Assessment of erosion and tritium codeposition in ITER-FEAT, G. Federici, J.N. Brooks, D.P. Coster, G. Janeschitz, A. Kukushkin, A. Loarte, H.D. Pacher, J. Stober and C.H. Wu 290–293 (2001) 260
- Molybdenum sources and transport in Alcator C-Mod, B. Lipschultz, D.A. Pappas, B. LaBombard, J.E. Rice, D. Smith and S. Wukitch 290–293 (2001) 286
- Interactions between liquid-wall vapor and edge plasmas, T.D. Rognlien and M.E. Rensink 290–293 (2001) 312
- Carbon layers in the divertor of ASDEX Upgrade, V. Rohde, H. Maier, K. Krieger, R. Neu and J. Perchermaier 290–293 (2001) 317
- Studies of tritiated co-deposited layers in TFTR, C.H. Skinner, C.A. Gentile, G. Ascione, A. Carpe, R.A. Causey, T. Hayashi, J. Hogan, S. Langish, M. Nishi, W.M. Shu, W.R. Wampler and K.M. Young 290–293 (2001) 486
- In situ measurement of hydrogen retention in JET carbon tiles, D.D.R. Summers, M.N.A. Beurskens, J.P. Coad, G. Counsell, W. Fundamenski, G.F. Matthews and M.F. Stamp 290–293 (2001) 496
- Thermography of target plates with near-infrared optical fibres at Tore Supra, R. Reichle, V. Basiuk, V. Bergeaud, A. Cambe, M. Chantant, E. Delchambre, M. Druetta, E. Gauthier, W. Hess and C. Pocheau 290–293 (2001) 701
- The effect of divertor tile material on radiation profiles in LHD, B.J. Peterson, S. Masuzaki, R. Sakamoto, K. Sato, S. Inagaki, A. Sagara, S. Ohdachi, Y. Nakamura, N. Noda, Y. Xu, J.E. Rice, N. Ashikawa, S. Yamamoto, M. Takechi, K. Toi, S. Morita, M. Goto, K. Narihara, N. Inoue, Y. Takeiri, M. Sato, M. Osakabe, K. Tanaka, T. Tokuzawa, S. Sakakibara, M. Shoji, K. Kawahata, O. Kaneko, N. Ohyabu, H. Yamada, A. Komori, K. Yamazaki, S. Sudo and O. Motojima 290–293 (2001) 930
- Material degradation and particle formation under transient thermal loads, J. Linke, M. Akiba, R. Duwe, A. Lodato, H.-J. Penkalla, M. Rödiger and K. Schöpflin 290–293 (2001) 1102
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz, S.

- Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- ICRF wall conditioning experiments in the W7-AS stellarator, R. Brakel, D. Hartmann, P. Grigull and W7-AS Team 290–293 (2001) 1160
- Characterization and conditioning of SSPX plasma facing surfaces, D.A. Buchenauer, B.E. Mills, R. Wood, S. Woodruff, D.N. Hill, E.B. Hooper, D.F. Cowgill, M.W. Clift and N.Y. Yang 290–293 (2001) 1165
- Conditionings for plasma facing walls of large helical device, T. Hino, T. Ohuchi, M. Hashiba, Y. Yamauchi, Y. Hirohata, N. Inoue, A. Sagara, N. Noda and O. Motojima 290–293 (2001) 1176
- Overview of impurity control and wall conditioning in NSTX, H.W. Kugel, R. Maingi, W. Wampler, R.E. Barry, M. Bell, W. Blanchard, D. Gates, D. Johnson, R. Kaita, S. Kaye, R. Maqueda, J. Menard, M.M. Menon, D. Mueller, M. Ono, S. Paul, Y-K.M. Peng, R. Raman, A. Roquemore, C.H. Skinner, S. Sabbagh, B. Stratton, D. Stutman, J.R. Wilson and S. Zweben 290–293 (2001) 1185
- Analytical method for thermal stress analysis of plasma facing materials, J.H. You and H. Bolt 299 (2001) 9
- Fission Products**
- Neutronics aspects of a DHCE experiment, I.C. Gomes, H. Tsai and D.L. Smith 271&272 (1999) 349
- Behavior of metallic fission products in uranium–plutonium mixed oxide fuel, I. Sato, H. Furuya, T. Arima, K. Idemitsu and K. Yamamoto 273 (1999) 239
- Transmutation of technetium – results of the EFTTRA-T2 experiment, R.J.M. Konings and R. Conrad 274 (1999) 336
- Assessment of the radial extent and completion of recrystallisation in high burn-up UO_2 nuclear fuel by EPMA, C.T. Walker 275 (1999) 56
- ^{79}Se : geochemical and crystallo-chemical retardation mechanisms, F. Chen, P.C. Burns and R.C. Ewing 275 (1999) 81
- Location of krypton atoms in uranium dioxide, T. Petit, G. Jomard, C. Lemaignan, B. Bigot and A. Pasturel 275 (1999) 119
- A theoretical study of volatile fission products release from oxide fuels, M.C. Paraschiv, A. Paraschiv and V.V. Grecu 275 (1999) 164
- Modelling intergranular fuel swelling in severe accidents, N. Kourti and I. Shepherd 277 (2000) 37
- Thermal studies on alkaline earth uranates, S.K. Sali, S. Sampath and V. Venugopal 277 (2000) 106
- Transport and leaching of technetium and uranium from spent UO_2 fuel in compacted bentonite clay, H. Ramebäck, Y. Albinsson, M. Skålberg, U.B. Eklund, L. Kjellberg and L. Werme 277 (2000) 288
- Influence of technetium on the microstructure of a stainless steel–zirconium alloy, D.D. Keiser Jr., D.P. Abraham and J.W. Richardson Jr. 277 (2000) 333
- Rim structure formation and high burn-up fuel behavior of large-grained UO_2 fuels, K. Une, M. Hirai, K. Nogita, T. Hosokawa, Y. Suzawa, S. Shimizu and Y. Etoh 278 (2000) 54
- Near-field behavior of ^{99}Tc during the oxidative alteration of spent nuclear fuel, F. Chen, P.C. Burns and R.C. Ewing 278 (2000) 225
- Irradiation behavior of U_6Mn –Al dispersion fuel elements, M.K. Meyer, T.C. Wienczek, S.L. Hayes and G.L. Hofman 278 (2000) 358
- The diffusion of iodine and caesium in the UO_{2+x} lattice, G. Busker, R.W. Grimes and M.R. Bradford 279 (2000) 46
- On the reactive occlusion of the (uranium trichloride + lithium chloride + potassium chloride) eutectic salt in zeolite 4A, D. Lexa, L. Leibowitz and J. Kropf 279 (2000) 57
- Calorimetric studies on the strontium–uranium–oxygen system, S. Dash, Z. Singh, R. Prasad and V. Venugopal 279 (2000) 84
- Retention of fission product caesium in ZrC-coated fuel particles for high-temperature gas-cooled reactors, K. Minato, T. Ogawa, T. Koya, H. Sekino and T. Tomita 279 (2000) 181
- An attempt to explain the high burnup structure formation mechanism in UO_2 fuel, C. Lee and Y. Jung 279 (2000) 207
- On the behaviour of intragranular fission gas in UO_2 fuel, P. Lösönen 280 (2000) 56
- Analysis of fission gas release and gaseous swelling in UO_2 fuel under the effect of external restraint, Y.-H. Koo, B.-H. Lee and D.-S. Sohn 280 (2000) 86
- Numerical algorithms for intragranular fission gas release, K. Lassmann and H. Benk 280 (2000) 127
- Modelling the variable precipitation of fission products at grain boundaries, P. Van Uffelen 280 (2000) 275
- Beta radiation effects in ^{137}Cs -substituted pollucite, N.J. Hess, F.J. Espinosa, S.D. Conradson and W.J. Weber 281 (2000) 22

- Lattice parameter changes associated with the rim-structure formation in high burn-up UO_2 fuels by micro X-ray diffraction, J. Spino and D. Papaioannou 281 (2000) 146
- Fuel corrosion processes under waste disposal conditions, D.W. Shoemith 282 (2000) 1
- Multiple voltage electron probe microanalysis of fission gas bubbles in irradiated nuclear fuel, M. Verwerft 282 (2000) 97
- Vaporization behavior and Gibbs energy of formation of Cs_2ThO_3 , M. Ali (Basu), R. Mishra, K.N.G. Kaimal, S.R. Bharadwaj, A.S. Kerkar, D. Das and S.R. Dharwadkar 282 (2000) 261
- Comment on 'Location of krypton atoms in uranium dioxide' by T. Petit, G. Jomard, C. Lemaignan, B. Bigot and A. Pasturel, C.R. Stanek and R.W. Grimes 282 (2000) 265
- Fission gas release and swelling model of metallic fast reactor fuel, C.B. Lee, D.H. Kim and Y.H. Jung 288 (2001) 29
- Measurement and analysis of fission gas release from BNFL's SBR MOX fuel, R.J. White, S.B. Fisher, P.M.A. Cook, R. Stratton, C.T. Walker and I.D. Palmer 288 (2001) 43
- Behaviour of implanted xenon in yttria-stabilised zirconia as inert matrix of a nuclear fuel, C. Degueldre, M. Pouchon, M. Döbeli, K. Sickafus, K. Hojou, G. Ledergerber and S. Abolhassani-Dadras 289 (2001) 115
- Effects of fission product incorporation on the microstructure of cubic zirconia, L.M. Wang, S.X. Wang, S. Zhu and R.C. Ewing 289 (2001) 122
- Gibbs energy of formation of $\text{Ba}(\text{OH})_2$ vapor species using the transpiration technique, M. Ali (Basu), R. Mishra, A.S. Kerkar, S.R. Bharadwaj and D. Das 289 (2001) 243
- Thermochemical data and modelling for ex-vessel corium behaviour during a severe accident, E.H.P. Cordfunke, M.E. Huntelaar, F. Funke, M.K. Koch, Ch. Kortz, P.K. Mason, M.A. Mignanelli and M.S. Newland 294 (2001) 18
- A qualitative comparison of barium behaviour in the PHEBUS FPT0 test and analytical tests, R. Dubourg and P. Taylor 294 (2001) 32
- Migration behaviour of iodine in nuclear fuel, W.H. Hocking, R.A. Verrall and I.J. Muir 294 (2001) 45
- X-ray photoelectron spectroscopy on uranium oxides: a comparison between bulk and thin layers, S. Van den Berghe, F. Miserque, T. Gouder, B. Gaudreau and M. Verwerft 294 (2001) 168
- The fractal nature of the surface of uranium dioxide: a resolution of the short-lived/stable gas release dichotomy, R.J. White 295 (2001) 133
- Consideration of the effects on fuel particle behavior from shrinkage cracks in the inner pyrocarbon layer, G.K. Miller, D.A. Petti, D.J. Varacalle and J.T. Maki 295 (2001) 205
- Enthalpy and Gibbs energy of formation of lanthanum dicarbide, R. Vidhya, M.P. Antony, P.R. Vasudeva Rao and B. Viswanathan 295 (2001) 221
- Enthalpy and Gibbs energy of formation of neodymium dicarbide, R. Vidhya, M.P. Antony, P.R. Vasudeva Rao and B. Viswanathan 295 (2001) 228
- Post-irradiation examination of high burnup Mg doped UO_2 in comparison with undoped UO_2 , Mg–Nb doped UO_2 and Ti doped UO_2 , T. Fujino, T. Shiratori, N. Sato, K. Fukuda, K. Yamada and H. Serizawa 297 (2001) 176
- Determination of dissolution rates of spent fuel in carbonate solutions under different redox conditions with a flow-through experiment, S. Röllin, K. Spahiu and U.-B. Eklund 297 (2001) 231
- EXAFS/XANES studies of plutonium-loaded sodalite/glass waste forms, M.K. Richmann, D.T. Reed, A.J. Kropf, S.B. Aase and M.A. Lewis 297 (2001) 303
- Heat capacity measurements on BaThO_3 and BaCeO_3 , R. Venkata Krishnan, K. Nagarajan and P.R. Vasudeva Rao 299 (2001) 28
- Concentration-triggered fission product release from zirconia: consequences for nuclear safety, A. Gentils, L. Thomé, J. Jagielski and F. Garrido 300 (2002) 266
- Fission product precipitates in irradiated uranium carbonitride fuel, H. Kleykamp 300 (2002) 273
- Fracture and Fracture Toughness**
- Effect of size and configuration of 3-point bend bar specimens on J – R curves, S. Jitsukawa, A. Naito and J. Segawa 271&272 (1999) 87
- Properties of precipitation hardened steel irradiated at 323 K in the Japan materials testing reactor, M. Niimi, Y. Matsui, S. Jitsukawa, T. Hoshiya, T. Tsukada, M. Ohmi, H. Mimura, N. Ooka and K. Hide 271&272 (1999) 92
- Post-irradiation mechanical properties of austenitic alloys at temperatures below 703 K, S. Jitsukawa, I. Ioka and A. Hishinuma 271&272 (1999) 167
- Physical mechanisms of helium release during deformation of vanadium

- alloys doped with helium atoms, A. Ryazanov, H. Matsui and A.V. Kazaryan 271&272 (1999) 356
- Be–Cu joints based on amorphous alloy brazing for divertor and first wall application, B. Kalin, V. Fedotov, O. Sevryukov, A. Plyushev, I. Mazul, A. Gervash and R. Giniatulin 271&272 (1999) 410
- Fracture toughness of copper-base alloys for fusion energy applications, D.J. Alexander, S.J. Zinkle and A.F. Rowcliffe 271&272 (1999) 429
- The effect of tantalum on the mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M. Rieth 273 (1999) 146
- Creep deformation and fracture behaviour of a nitrogen-bearing type 316 stainless steel weld metal, G. Sasikala, M.D. Mathew, K. Bhanu Sankara Rao and S.L. Mannan 273 (1999) 257
- Influence of prior thermal ageing on tensile deformation and fracture behaviour of forged thick section 9Cr–1Mo ferritic steel, B.K. Choudhary, K. Bhanu Sankara Rao, S.L. Mannan and B.P. Kashyap 273 (1999) 315
- Synergistic interaction of fatigue and stress corrosion on the corrosion fatigue crack growth behavior in Alloy 600 in high temperature and high pressure water, W.Y. Maeng, Y.H. Kang, T.W. Nam, S. Ohashi and T. Ishihara 275 (1999) 194
- Fracture strength of hydride precipitates in Zr–2.5Nb alloys, S.-Q. Shi and M.P. Puls 275 (1999) 312
- Estimation of fracture toughness transition curves of RPV steels from ball indentation and tensile test data, T. Byun, S. Kim, B. Lee, I. Kim and J. Hong 277 (2000) 263
- Effect of composition on the fatigue failure behavior of vanadium alloys, H.A. Aglan, Y.X. Gan, B.A. Chin and M.L. Grossbeck 278 (2000) 186
- A model of the threshold stress intensity factor, K_{IH} , for delayed hydride cracking of Zr–2.5Nb alloy, Y.S. Kim, Y.G. Matvienko, Y.M. Cheong, S.S. Kim and S.C. Kwon 278 (2000) 251
- High temperature fatigue behaviour of TZM molybdenum alloy under mechanical and thermomechanical cyclic loads, H.J. Shi, L.S. Niu, C. Korn and G. Pluvinage 278 (2000) 328
- Effect of rhenium and osmium on mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M.A. Sokolov 279 (2000) 91
- Delayed hydride cracking in zirconium alloys in a temperature gradient, S. Sagat, C.K. Chow, M.P. Puls and C.E. Coleman 279 (2000) 107
- Intergranular and intragranular phosphorus segregation in Russian pressure vessel steels due to neutron irradiation, B.A. Gurovich, E.A. Kuleshova, Ya.I. Shtrombakh, O.O. Zabusov and E.A. Krasikov 279 (2000) 259
- K_{IH} in radial textured Zr–2.5%Nb pressure tube, S. Kim and Y. Kim 279 (2000) 286
- Interaction between blue brittleness and stress corrosion cracking, W.Y. Chu, Y.B. Wang and L.J. Qiao 280 (2000) 250
- Crack growth pattern and threshold stress intensity factor, K_{IH} , of Zr–2.5Nb alloy with the notch direction, Y.S. Kim, S.C. Kwon and S.S. Kim 280 (2000) 304
- A cleavage toughness master curve model, G.R. Odette and M.Y. He 283–287 (2000) 120
- Analysis of tensile and fracture toughness results on irradiated molybdenum alloys, TZM and Mo–5%Re, M. Scibetta, R. Chaouadi and J.L. Puzzolante 283–287 (2000) 455
- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- On the mechanisms and mechanics of fracture toughness of a V–4Cr–4Ti alloy, E.G. Donahue, G.R. Odette and G.E. Lucas 283–287 (2000) 518
- New evaluation method of crack growth in SiC/SiC composites using interface elements, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 283–287 (2000) 579
- Constitutive behavior and fracture toughness properties of the F82H ferritic/martensitic steel, P. Spätig, G.R. Odette, E. Donahue and G.E. Lucas 283–287 (2000) 721
- Effect of oxygen on the crack growth behavior of V–4Cr–4Ti at 600 °C, R.J. Kurtz 283–287 (2000) 822
- Fracture behavior of high-strength, high-conductivity copper alloys, M. Li, J.K. Heuer, J.F. Stubbins and D.J. Edwards 283–287 (2000) 977
- Confocal microscopy–fracture reconstruction and finite element modeling characterization of local cleavage toughness in a ferritic/martensitic steel in subsized Charpy V-notch impact tests, T. Yamamoto, G.R. Odette, G.E. Lucas and H. Matsui 283–287 (2000) 992
- Damage mechanisms and fracture toughness of GlidCop® CuAl25 IG0

- copper alloy, S. Tähtinen, A. Laukkanen and B.N. Singh 283–287 (2000) 1028
- Effect of neutron irradiation on mechanical properties of Cu/SS joints after single and multiple HIP cycles, S. Tähtinen, B.N. Singh and P. Toft 283–287 (2000) 1238
- Cracks as sink of irradiation created point defects, A. Sarce 288 (2001) 130
- A fracture mechanics analysis of the PWR nuclear power plant reactor pressure vessel beltline weld, L.-j. Young 288 (2001) 197
- Tensile strength and fracture surface characterization of Hi-Nicalon™ SiC fibers, G.E. Youngblood, C. Lewinsohn, R.H. Jones and A. Kohyama 289 (2001) 1
- Computational analysis of creep fracture deformation in SiC/SiC composites, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 289 (2001) 16
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- Comparative analysis of pressure vessel integrity for various LOCA conditions, Ü. Çolak and O. Özdere 297 (2001) 271
- Precipitation of reoriented hydrides and textural change of α -zirconium grains during delayed hydride cracking of Zr–2.5%Nb pressure tube, Y.S. Kim, Y.S. Perlovich, M. Isaenkova, S.U. Kim and Y.M. Cheong 297 (2001) 292
- The effect of the point defects on the behavior of a crack inside of a pressure tube, A. Sarce 299 (2001) 20
- Effect of ensemble of stress concentrators on the ultimate tensile strength of material, R.E. Voskoboinikov 299 (2001) 68
- Fracture behavior of heat-affected zone in low alloy steels, J.H. Kim, Y.J. Oh, I.S. Hwang, D.J. Kim and J.T. Kim 299 (2001) 132
- Microstructure–fracture toughness relationship of vanadium alloy/stainless steel brazed joints, Y.X. Gan, H.A. Aglan, R.V. Steward, B.A. Chin and M.L. Grossbeck 299 (2001) 157
- Influence of dynamic strain aging on the ductile tearing of C–Mn steels: modelling by a local approach method, D. Wagner, J.C. Moreno, C. Prioul, J.M. Frund and B. Houssin 300 (2002) 178
- Fuels and Fuel Elements**
- Immobilization of spent nuclear fuel in iron phosphate glass, M.G. Mesko and D.E. Day 273 (1999) 27
- Behavior of metallic fission products in uranium–plutonium mixed oxide fuel, I. Sato, H. Furuya, T. Arima, K. Idemitsu and K. Yamamoto 273 (1999) 239
- Preparation of simulated inert matrix fuel with different powders by dry milling method, Y.-W. Lee, H.S. Kim, S.H. Kim, C.Y. Joung, S.H. Na, G. Ledergerber, P. Heimgartner, M. Pouchon and M. Burghartz 274 (1999) 7
- Preliminary fabrication and characterisation of inert matrix and thoria fuels for plutonium disposition in light water reactors, F. Vettraiño, G. Magnani, T.L. Torretta, E. Marmo, S. Coelli, L. Luzzi, P. Ossi and G. Zappa 274 (1999) 23
- Preparation of rock-like oxide fuels for the irradiation test in the Japan Research Reactor No. 3, T. Shiratori, T. Yamashita, T. Ohmichi, A. Yasuda and K. Watarumi 274 (1999) 40
- Silicon carbide as an inert-matrix for a thermal reactor fuel, R.A. Verrall, M.D. Vljajic and V.D. Krstic 274 (1999) 54
- Radiation damage effects in zirconia, K.E. Sickafus, Hj. Matzke, Th. Hartmann, K. Yasuda, J.A. Valdez, P. Chodak III, M. Nastasi and R.A. Verrall 274 (1999) 66
- In-pile irradiation of plutonium rock-like oxide fuels with yttria stabilized zirconia or thoria, spinel and corundum, T. Yamashita, N. Nitani, H. Kanazawa, M. Magara, T. Ohmichi, H. Takano and T. Muromura 274 (1999) 98
- Optimisation of inert matrix fuel concepts for americium transmutation, N. Chauvin, R.J.M. Konings and Hj. Matzke 274 (1999) 105
- Reactor physics aspects of plutonium burning in inert matrix fuels, J.L. Kloosterman and P.M.G. Damen 274 (1999) 112
- Validation efforts for the neutronics of a plutonium–erbium–zirconium oxide inert matrix light water reactor fuel, J.M. Paratte, R. Chawla, R. Früh, O.P. Joneja, S. Pelloni and C. Pralong 274 (1999) 120
- Alternative versions of inert matrix fuel for the use of civil and weapons-grade plutonium in reactors, A. Vatulin, V. Lysenko, V. Kostomarov and V. Sirotnin 274 (1999) 135
- Toward very high burnups, a strategy for plutonium utilization in pressurized water reactors, J. Porta and J.-Y. Doriath 274 (1999) 153
- Neutronic analysis of U-free inert matrix and thoria fuels for plutonium disposition in pressurised water reactors, C. Lombardi, A. Mazzola, E. Padovani and M.E. Ricotti 274 (1999) 181

- A review of the high temperature oxidation of uranium oxides in molten salts and in the solid state to form alkali metal uranates, and their composition and properties, T.R. Griffiths and V.A. Volkovich 274 (1999) 229
- Selection of materials as diluents for burning of plutonium fuels in nuclear reactors, H. Kleykamp 275 (1999) 1
- Reexamination of the fundamental interactions of water with uranium, W.L. Manner, J.A. Lloyd and M.T. Paffett 275 (1999) 37
- A theoretical study of volatile fission products release from oxide fuels, M.C. Paraschiv, A. Paraschiv and V.V. Grecu 275 (1999) 164
- Reactions of U–Zr alloy with Fe and Fe–Cr alloy, K. Nakamura, T. Ogata, M. Kurata, A. Itoh and M. Akabori 275 (1999) 246
- Study by acoustic microscopy of irradiated and non-irradiated uranium dioxide, V. Roque, D. Bayon, J. Bourgoin, and J.M. Saurel 275 (1999) 305
- Modelling intergranular fuel swelling in severe accidents, N. Kourti and I. Shepherd 277 (2000) 37
- Gibbs energy of formation of UPd₃(s), R. Prasad, S. Dash, S.C. Parida, Z. Singh and V. Venugopal 277 (2000) 45
- Thermal studies on alkaline earth uranates, S.K. Sali, S. Sampath and V. Venugopal 277 (2000) 106
- Micro-structures associated with uraninite alteration, M. Fayek, P. Burns, Y.-X. Guo and R.C. Ewing 277 (2000) 204
- An alternative explanation for evidence that xenon depletion, pore formation, and grain subdivision begin at different local burnups, J. Rest and G.L. Hofman 277 (2000) 231
- Examination of melted fuel rods and released core material from the first Phebus-FP reactor accident experiment, P.D.W. Bottomley, A.D. Stallios, J.-P. Glatz, B. Sätmark and C.T. Walker 278 (2000) 136
- Temperature programmed decomposition of thorium nitrate pentahydrate, S. Dash, M. Kamruddin, P.K. Ajikumar, A.K. Tyagi, B. Raj, S. Bera and S.V. Narasimhan 278 (2000) 173
- Near-field behavior of ⁹⁹Tc during the oxidative alteration of spent nuclear fuel, F. Chen, P.C. Burns and R.C. Ewing 278 (2000) 225
- Long-term corrosion of Zircaloy before and after irradiation, E. Hillner, D.G. Franklin and J.D. Smee 278 (2000) 334
- Irradiation behavior of U₆Mn–Al dispersion fuel elements, M.K. Meyer, T.C. Wienczek, S.L. Hayes and G.L. Hofman 278 (2000) 358
- On the reactive occlusion of the (uranium trichloride + lithium chloride + potassium chloride) eutectic salt in zeolite 4A, D. Lexa, L. Leibowitz and J. Kropf 279 (2000) 57
- XPS and XRD studies of (Th,U)O₂ fuel corrosion in water, S. Sunder and N.H. Miller 279 (2000) 118
- A thermodynamic evaluation of the U–O system from UO₂ to U₃O₈, Y.S. Kim 279 (2000) 173
- An attempt to explain the high burnup structure formation mechanism in UO₂ fuel, C.B. Lee and Y.H. Jung 279 (2000) 207
- Analysis of constituent redistribution in the γ (bcc) U–Pu–Zr alloys under gradients of temperature and concentrations, Y.H. Sohn, M.A. Dayananda, G.L. Hofman, R.V. Strain and S.L. Hayes 279 (2000) 317
- Densification behavior of U₃O₈ powder compacts by dilatometry, K.W. Song, K.S. Kim and Y.H. Jung 279 (2000) 356
- Estimates of helium gas release in ²³⁸PuO₂ fuel particles for radioisotope heat sources and heater units, M.S. El-Genk and J.-M. Tournier 280 (2000) 1
- On the behaviour of intragranular fission gas in UO₂ fuel, P. Lösönen 280 (2000) 56
- Neutron diffraction study of U5.4 wt% Mo alloy, J.S. Lee, C.H. Lee, K.H. Kim and V. Em 280 (2000) 116
- Thermal removal of gallium from gallia-doped ceria, Y.S. Park, H.Y. Sohn and D.P. Butt 280 (2000) 285
- Dysprosium titanate as an absorber material for control rods, V.D. Riso-vany, E.E. Varlashova and D.N. Suslov 281 (2000) 84
- Passivation of uranium towards air corrosion by N₂⁺ and C⁺ ion implantation, R. Arkush, M.H. Mintz and N. Shamir 281 (2000) 182
- Effect of AlOOH on the microstructure of UO₂ pellets, H.-s. Yoo, S.-y. Lee, S.-j. Lee and K.-w. Song 281 (2000) 191
- Fuel corrosion processes under waste disposal conditions, D.W. Shoesmith 282 (2000) 1
- Dissolution of UO₂ in Boom clay water in oxidizing conditions: an XPS study, S. Guilbert, M.J. Guittet, N. Barré, M. Gautier-Soyer, P. Trocellier, D. Gosset and Z. Andriambolona 282 (2000) 75
- Solid state reactions of UO₂,ThO₂ and their mixed oxides with sulphates of potassium, M. Keskar, U.M. Kasar and K.D. Singh Mudher 282 (2000) 146
- A new method for determining oxygen solubility in molten carbonates and

- carbonate–chloride mixtures using the oxidation of UO_2 to uranate reaction, V.A. Volkovich, T.R. Griffiths, D.J. Fray and R.C. Thied 282 (2000) 152
- RAPID model to predict radial burnup distribution in LWR UO_2 fuel, C.B. Lee, D.H. Kim, J.S. Song, J.G. Bang and Y.H. Jung 282 (2000) 196
- Investigation of aerosols released at high temperature from nuclear reactor core models, A. Pintér Csordás, L. Matus, A. Czitrovsky, P. Jani, L. Maróti, Z. Hózer, P. Windberg and R. Hummel 282 (2000) 205
- Boron coating on boron nitride coated nuclear fuels by chemical vapor deposition, H.H. Durmazucar and G. Gündüz 282 (2000) 239
- Thermally induced gallium removal from plutonium dioxide for MOX fuel production, D.G. Kolman, M.E. Griego, C.A. James and D.P. Butt 282 (2000) 245
- Selective excitation of odd gadolinium isotopes using two-colour photo-ionisation schemes, P.V. Kiran Kumar, M.V. Suryanarayana and S. Gangadharan 282 (2000) 255
- Rim structure formation of isothermally irradiated UO_2 fuel discs, K. Une, K. Nogita, T. Shiratori and K. Hayashi 288 (2001) 20
- High-density H-mode operation achieved using efficient plasma refueling by inboard pellet launch, P.T. Lang, O. Gruber, L.D. Horton, T.T.C. Jones, M. Kaufmann, A. Lorenz, M. Maraschek, V. Mertens, J. Neuhäuser, G. Saibene, H. Zohm, ASDEX Upgrade Team and JET Team 290–293 (2001) 374
- Compact toroid injection as fueling in the JFT-2M tokamak, T. Ogawa, H. Ogawa, Y. Miura, H. Niimi, H. Kimura, Y. Kashiwa, T. Shibata, M. Yamamoto, N. Fukumoto, M. Nagata and T. Uyama 290–293 (2001) 454
- Heat capacity measurements on unirradiated and irradiated fuel pellets, M. Amaya, K. Une and K. Minato 294 (2001) 1
- An investigation of the Pu migration phenomena during irradiation in fast reactor, T. Ishii and T. Asaga 294 (2001) 13
- Carbothermic synthesis of $(\text{Cm}, \text{Pu})\text{N}$, M. Takano, A. Itoh, M. Akabori, T. Ogawa, M. Numata and H. Okamoto 294 (2001) 24
- Fission gas release and volume diffusion enthalpy in UO_2 irradiated at low and high burnup, J.P. Hiernaut and C. Ronchi 294 (2001) 39
- High-temperature, Knudsen cell-mass spectroscopic studies on lanthanum oxide/uranium dioxide solid solutions, S. Sunder, R. McEachern and J.C. LeBlanc 294 (2001) 59
- Vaporization chemistry of hypo-stoichiometric $(\text{U}, \text{Pu})\text{O}_2$, R. Viswanathan and M.V. Krishnaiah 294 (2001) 69
- Thermodynamics of $(\text{Mg}, \text{Ce}, \text{U})\text{O}_{2+x}$ ($x \geq 0$) solid solutions, T. Fujino, K. Park, N. Sato and M. Yamada 294 (2001) 104
- Observation of second-phase particles in bulk zirconium alloys using synchrotron radiation, K.T. Erwin, O. Delaire, A.T. Motta, Y.S. Chu, D.C. Mancini and R.C. Birtcher 294 (2001) 299
- Multi-component gas transport in the fuel-to-clad gap of candu fuel rods during severe accidents, B. Szpunar, B.J. Lewis, V.I. Arimescu, R.S. Dickson and L.W. Dickson 294 (2001) 315
- Influence of low-temperature air oxidation on the dissolution behaviour of high burn-up LWR spent fuel, J.A. Serrano, J.P. Glatz, E.H. Toscano, J. Barrero and D. Papaioannou 294 (2001) 339
- Consideration of the effects on fuel particle behavior from shrinkage cracks in the inner pyrocarbon layer, G.K. Miller, D.A. Petti, D.J. Varacalle and J.T. Maki 295 (2001) 205
- Temperature programmed decomposition of thorium oxalate hexahydrate, S. Dash, R. Krishnan, M. Kamrudin, A.K. Tyagi and B. Raj 295 (2001) 281
- Coarsening-densification transition temperature in sintering of uranium dioxide, P. Balakrishna, B. Narasimha Murty, K.P. Chakraborty, R.N. Jayaraj and C. Ganguly 297 (2001) 35
- Characterisation of pre-transition oxides on Zircalloys, M. Oskarsson, E. Ahlberg, U. Andersson and K. Pettersson 297 (2001) 77
- What's new on plutonium up to 4000 K? M. Boivineau 297 (2001) 97
- Determination of dissolution rates of spent fuel in carbonate solutions under different redox conditions with a flow-through experiment, S. Röllin, K. Spahiu and U.-B. Eklund 297 (2001) 231
- Effect of a trivalent dopant, Gd^{3+} , on the oxidation of uranium dioxide, J.-G. Kim, Y.-K. Ha, S.-D. Park, K.-Y. Jee and W.-H. Kim 297 (2001) 327
- An estimate of the high temperature, metal rich phase boundary of plutonium sesquioxide, R.I. Sheldon 297 (2001) 358
- Accumulation of radioactive corrosion products on steel surfaces of VVER-type nuclear reactors. II. ^{60}Co , K. Varga, G. Hirschberg, Z. Németh, G. Myburg, J. Schunk and P. Tilky 298 (2001) 231

- In situ Raman spectroscopic investigation of zirconium–niobium alloy corrosion under hydrothermal conditions, J.E. Maslar, W.S. Hurst, W.J. Bowers and J.H. Hendricks 298 (2001) 239
- Use of UO₂ films for electrochemical studies, F. Miserque, T. Gouder, D.H. Wegen and P.D.W. Bottomley 298 (2001) 280
- Irradiation behavior of U–Nb–Zr alloy dispersed in aluminum, M.K. Meyer, G.L. Hofman, T.C. Wiencek, S.L. Hayes and J.L. Snelgrove 299 (2001) 175
- A review of the thermophysical properties of MOX and UO₂ fuels, J.J. Carbajo, G.L. Yoder, S.G. Popov and V.K. Ivanov 299 (2001) 181
- The structures of two sodium uranyl compounds relevant to nuclear waste disposal, Y. Li and P.C. Burns 299 (2001) 219
- Development of CaF₂ special refractory components, A. Ghosh, D.D. Upadhyaya, R. Prasad and A.K. Suri 299 (2001) 274
- Thermal conductivities of irradiated UO₂ and (U, Gd)O₂ pellets, M. Amaya, M. Hirai, H. Sakurai, K. Ito, M. Sasaki, T. Nomata, K. Kamimura and R. Iwasaki 300 (2002) 57
- Ultrasonic study of UO₂: effects of porosity and grain size on ultrasonic attenuation and velocities, D. Laux, B. Cros, G. Despau and D. Baron 300 (2002) 192
- Fission product precipitates in irradiated uranium carbonitride fuel, H. Kleykamp 300 (2002) 273
- Fusion Reactor Materials**
- The role of materials R&D in the development of commercial fusion power plants, J.W. Davis 271&272 (1999) 532
- Summary of discussion session: Design and materials, A. Kohyama, E.E. Bloom and K. Ehrlich 271&272 (1999) 538
- Common technologies and knowledge sharing, J.W. Davis, T. Kondo, G.R. Odette, P. Fenici and T. Kusanagi 271&272 (1999) 553
- Materials research and development strategy in the next decade, 271&272 (1999) 578
- Fatigue failure analysis of V–4Ti–4Cr alloy, H. Aglan, Y.X. Gan, B. Chin and M. Grossbeck 273 (1999) 192
- Internal friction study of hydrogen behaviour in low activated martensitic F82H steel, Y. Jagodzinski, A. Tarasenko, S. Smuk, S. Tähtinen and H. Hänninen 275 (1999) 47
- Feedback control of highly radiative plasmas in Tore Supra, C. Grisolia, Ph. Ghendrih, A. Grosman, P. Monier-Garbet, D. Moulin and J.C. Vallet 275 (1999) 95
- Computer simulation of fundamental behaviors of interstitial clusters in Fe and Ni, E. Kuramoto 276 (2000) 143
- Comparison of hydrogen gas–, atom– and ion–metal interactions, O.V. Ogorodnikova 277 (2000) 130
- Theory of edge plasma in a spheromak, E.B. Hooper, R.H. Cohen and D.D. Ryutov 278 (2000) 104
- Interaction of ICRF power and edge plasma in Tore Supra ergodic divertor configuration, F. Nguyen, A. Grosman, V. Basiuk, D. Fraboulet, B. Beaumont, A. Bécoulet, Ph. Ghendrih, L. Ladurelle and B. Meslin 278 (2000) 117
- Joining of SiC/SiC_f ceramic matrix composites for fusion reactor blanket applications, P. Colombo, B. Riccardi, A. Donato and G. Scarinci 278 (2000) 127
- Deuterium pumping experiment with superpermeable Nb membrane in JFT-2M tokamak, Y. Nakamura, S. Sengoku, Y. Nakahara, N. Suzuki, H. Suzuki, N. Ohyabu, A. Busnyuk, M. Notkin and A. Livshits 278 (2000) 312
- Comparison of nuclear irradiation parameters of fusion breeder materials in high flux fission test reactors and a fusion power demonstration reactor, U. Fischer, S. Herring, A. Hogenbirk, D. Leichte, Y. Nagao, B.J. Pijlgroms and A. Ying 280 (2000) 151
- Advances in fusion technology, C.C. Baker 283–287 (2000) 1
- Interactions between fusion materials R&D and other technologies, A. Kohyama, M. Seki, K. Abe, T. Muroga, H. Matsui, S. Jitsukawa and S. Matsuda 283–287 (2000) 20
- The impact of materials selection on long-term activation in fusion power plants, N.P. Taylor, C.B.A. Forty, D.A. Petti and K.A. McCarthy 283–287 (2000) 28
- International strategy for fusion materials development, K. Ehrlich, E.E. Bloom and T. Kondo 283–287 (2000) 79
- A cleavage toughness master curve model, G.R. Odette and M.Y. He 283–287 (2000) 120
- V-alloy embrittlement by irradiation in a cooling gas environment, H.D. Röhrig, M. Rieth, B. Dafferner and E. Materna-Morris 283–287 (2000) 498
- Effect of strain rate on the tensile properties of unirradiated and irradiated V–4Cr–4Ti, A.F. Rowcliffe, S.J. Zinkle and D.T. Hoelzer 283–287 (2000) 508
- Neutron wall loading of Tokamak reactors, C.P.C. Wong 283–287 (2000) 588
- High heat flux test of a HIP-bonded first wall panel of reduced activation fer-

- ritic steel F-82H, T. Hatano, S. Suzuki, K. Yokoyama, T. Kuroda and M. Enoeda 283–287 (2000) 685
- Design and fabrication methods of FW/blanket, divertor and vacuum vessel for ITER, K. Ioki, V. Barabash, A. Cardella, F. Elio, C. Ibbott, G. Janeschitz, G. Johnson, G. Kalinin, N. Miki, M. Onozuka, G. Sannazaro, R. Tivey, Y. Utin and M. Yamada 283–287 (2000) 957
- Manufacturing and testing of a prototypical divertor vertical target for ITER, M. Merola, L. Plöchl, P. Chappuis, F. Escourbiac, M. Grattarola, I. Smid, R. Tivey and G. Vieider 283–287 (2000) 1068
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Magnetic field effect on deposition of corrosion products in liquid Pb–17Li, F. Barbier 283–287 (2000) 1267
- Copper corrosion and activation in water cooling loops under fusion irradiation conditions, P.J. Karditsas, S.M. Ali and D. Wan 283–287 (2000) 1346
- Multiplier, moderator, and reflector materials for advanced lithium–vanadium fusion blankets, Y. Gohar and D.L. Smith 283–287 (2000) 1370
- On the use of tin–lithium alloys as breeder material for blankets of fusion power plants, M.A. Fütterer, G. Aiello, F. Barbier, L. Giancarli, Y. Poitevin, P. Sardain, J. Szczepanski, A. Li Puma, G. Ruvutuso and G. Vella 283–287 (2000) 1375
- Materials and fabrication technology of modules intended for irradiation tests of blanket tritium-breeding zones in Russian fusion reactor projects, V. Kapychev, D. Davydov, V. Gorokhov, A. Ioltukhovskiy, Yu. Kazennov, V. Tebus, V. Frolov, A. Shikov, N. Shishkov, V. Kovalenko, N. Shishkin and Yu. Strebkov 283–287 (2000) 1429
- Material composition and nuclear data libraries' influence on nickel–chromium alloys activation evaluation: a comparison with decay heat experiments, D.G. Cepraga and G. Cambi 283–287 (2000) 1453
- Steam chemical reactivity of Be pebbles and Be powder, R.A. Anderl, F. Scaffidi-Argentina, D. Davydov, R.J. Pawelko and G.R. Smolik 283–287 (2000) 1463
- Plasma–wall interaction issues in ITER, G. Janeschitz and ITER JCT and HTs 290–293 (2001) 1
- Plasma–surface interactions on liquids, R. Bastasz and W. Eckstein 290–293 (2001) 19
- Erosion/redeposition analysis of lithium-based liquid surface divertors, J.N. Brooks, T.D. Rognlien, D.N. Ruzic and J.P. Allain 290–293 (2001) 185
- Plasma operation with tungsten tiles at the central column of ASDEX Upgrade, R. Neu, V. Rohde, A. Geier, K. Krieger, H. Maier, D. Bolshukhin, A. Kallenbach, R. Pugno, K. Schmidtman, M. Zarrabian and ASDEX Upgrade Team 290–293 (2001) 206
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Carbon layers in the divertor of ASDEX Upgrade, V. Rohde, H. Maier, K. Krieger, R. Neu, J. Perchermaier and ASDEX Upgrade Team 290–293 (2001) 317
- Studies of tungsten erosion at the inner and outer main chamber wall of the ASDEX Upgrade tokamak, A. Tabbasso, H. Maier, J. Roth, K. Krieger and ASDEX Upgrade Team 290–293 (2001) 326
- Erosion and deposition effects on the vessel wall of TEXTOR-94, J. von Seggern, M. Mayer, D. Reiser, M. Rubel and V. Philipps 290–293 (2001) 341
- Hydrogen molecules in the divertor of ASDEX Upgrade, U. Fantz, D. Reiter, B. Heger and D. Coster 290–293 (2001) 367
- Hydrogen inventories in nuclear fusion devices, M. Mayer, V. Philipps, P. Wienhold, H.G. Esser, J. von Seggern and M. Rubel 290–293 (2001) 381
- Laboratory study of the transport and condensation of hydrocarbon radicals and its consequences for mitigating the tritium inventory in the ITER-FEAT divertor, I.I. Arkhipov, G. Federici, A.E. Gorodetsky, C. Ibbott, D.A. Komarov, A.N. Makhankov, A.V. Markin, I.V. Mazul, R. Tivey, A.P. Zakharov and R.Kh. Zalatutdinov 290–293 (2001) 394
- Vibrational population of the ground state of H₂ and D₂ in the divertor of ASDEX Upgrade, B. Heger, U. Fantz, K. Behringer and ASDEX Upgrade Team 290–293 (2001) 413
- Modeling of wall recycling effects on the global particle balance in magnetic fusion devices, Y. Hirooka, S. Masuzaki, H. Suzuki, T. Kenmotsu and T. Kawamura 290–293 (2001) 423
- Hydrogen recycling study by Balmer lines emissions in linear plasma

- machine TPE, K. Shimada, T. Tanabe, R. Causey, T. Venhaus and K. Okuno 290–293 (2001) 478
- Interpretation of SOL flows and target asymmetries in JET using EDGE2D code calculations, A.V. Chankin, G. Corrigan, S.K. Erents, G.F. Matthews, J. Spence and P.C. Stangeby 290–293 (2001) 518
- Extension of the B2 code towards the plasma core for a self-consistent simulation of ASDEX upgrade scenarios, H. Bürbaumer, R. Neu, R. Schneider, D. Coster, J. Stober, F. Aumayr and H.P. Winter 290–293 (2001) 571
- Performance of high triangularity plasmas as the volume of the secondary divertor is varied in DIII-D, M.E. Fenstermacher, T.H. Osborne, T.W. Petrie, R.J. Groebner, C.J. Lasnier, R.J. La Haye, A.W. Leonard, G.D. Porter, J.G. Watkins and DIII-D Team 290–293 (2001) 588
- Analysis of SOL behaviour in JET MkIIIGB using an advanced onion-skin solver (OSM2), W. Fundamenski, S.K. Erents, G.F. Matthews, A.V. Chankin, V. Riccardo, P.C. Stangeby and J.D. Elder 290–293 (2001) 593
- Impurity transport experiments in the edge plasma of Alcator C-Mod using gas injection plumes, S. Gangadhara, B. LaBombard and C. MacLatchy 290–293 (2001) 598
- Heat flux decay length in the midplane of ASDEX Upgrade, A. Herrmann, A. Carlson, J.C. Fuchs, O. Gruber, M. Laux, J. Neuhauser, R. Pugno, A. Sips, W. Treutterer, W. Schneider and ASDEX Upgrade Team 290–293 (2001) 619
- Explorative studies for the development of fast He beam plasma diagnostics, S. Menhart, M. Proschek, H.-D. Falter, H. Anderson, H. Summers, A. Staebler, P. Franzen, H. Meister, J. Schweinzer, T.T.C. Jones, S. Cox, N. Hawkes, F. Aumayr and H.P. Winter 290–293 (2001) 673
- Island divertor in a helical-axis heliotron device (Heliotron J), T. Mizuuchi, M. Nakasuga, F. Sano, Y. Nakamura, K. Nagasaki, H. Okada, K. Kondo and T. Obiki 290–293 (2001) 678
- Self-consistent description of the core and boundary plasma in the high-field ignition experiment, R. Stankiewicz and R. Zagórski 290–293 (2001) 738
- Visible imaging of turbulence in the SOL of the Alcator C-Mod tokamak, J.L. Terry, R. Maqueda, C.S. Pitcher, S.J. Zweben, B. LaBombard, E.S. Marmor, A.Yu. Pigarov and G. Wurden 290–293 (2001) 757
- Effects of flush-mounted probe bias on local turbulent fluctuations, D.L. Winslow and B. LaBombard 290–293 (2001) 788
- B2–EIRENE modelling of He compression and enrichment, D.P. Coster, H.-S. Bosch, W. Ullrich and ASDEX Upgrade Team 290–293 (2001) 845
- Critical issues in divertor optimisation for ITER–FEAT, A.S. Kukushkin, G. Janeschitz, A. Loarte, H.D. Pacher, D. Coster, D. Reiter and R. Schneider 290–293 (2001) 887
- Helium exhaust in divertor-closure configuration with W-shaped divertor of JT-60U, A. Sakasai, H. Takenaga, H. Kubo, N. Akino, S. Higashijima, S. Sakurai, H. Tamai, K. Itami and N. Asakura 290–293 (2001) 957
- Microstructure and properties of a Cu–Cr–Zr alloy, I.S. Batra, G.K. Dey, U.D. Kulkarni and S. Banerjee 299 (2001) 91
- 3D Micromechanical modeling of packed beds, Z. Lu, M. Abdou and A. Ying 299 (2001) 101
- Hydrogen isotope retention and recycling in fusion reactor plasma-facing components, R.A. Causey 300 (2002) 91
- Gamma Irradiation**
- Justification of the new approach to the testing of the candidate iter materials in fission reactor, V.A. Nikolaenko, V.I. Karpukhin, E.A. Krasikov and V.N. Kuznetsov 271&272 (1999) 120
- Measurements of the radiation resistant fused quartz radioluminescence spectral intensity under irradiation in the pulse nuclear reactor, A. Gorshkov, D. Orłinski, V. Sannikov, K. Vukolov, S. Goncharov, Yu. Sadovnikov and A. Kirillov 273 (1999) 271
- Gamma-irradiation effect on heterogeneous short-range order in Fe+12 at.% Al alloy, L.I. Chyrko, V.I. Chyrko, E.U. Grynik, O.V. Drogayev, M.P. Krulikovska and V.I. Sugakov 279 (2000) 162
- Optical properties of γ -irradiated synthetic sapphire and yttria-stabilized zirconia spectroscopic windows, L. Fuks and C. Degueldre 280 (2000) 360
- KU1 quartz glass for remote handling and LIDAR diagnostic optical transmission systems, M. García-Matos, A. Moroño and E.R. Hodgson 283–287 (2000) 890
- Study on the damaging process of silica by in-reactor luminescence, T. Ii, T. Yoshida, T. Tanabe, T. Hara, M. Okada and K. Yamaguchi 283–287 (2000) 898
- Preliminary study of irradiation effects on thorium phosphate-diphosphate,

- E. Pichot, N. Dacheux, J. Emery, J. Chaumont, V. Brandel and M. Genet 289 (2001) 219
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- Gases (excludes Hydrogen, Helium and Tritium) in Materials**
- Damage evolution in neutron-irradiated Cu during neutron irradiation, I. Mukouda and Y. Shimomura 271&272 (1999) 230
- Investigation of palladium alloy properties degradation during long-time tritium exposure, V. Tebus, L. Rivkis, G. Arutunova, E. Dmitrievsky, V. Filin, Y. Golikov, V. Krivova and V. Kapychev 271&272 (1999) 345
- Optimisation of inert matrix fuel concepts for americium transmutation, N. Chauvin, R.J.M. Konings and H.J. Matzke 274 (1999) 105
- Reply to the comments by J.H. Evans about two papers 'Thermal treatment of UO₂ irradiated in a pressurized water reactor: swelling and release of fission gases' and 'Microstructural analysis and modelling of intergranular swelling of an irradiated UO₂ fuel treated at high temperature' by I. Zacharie, S. Lansart, P. Combette, M. Troabas, M. Coster and M. Groos, P. Combette and I. Zacharie 275 (1999) 112
- Location of krypton atoms in uranium dioxide, T. Petit, G. Jomard, C. Lemaignan, B. Bigot and A. Pasturel 275 (1999) 119
- Modelling intergranular fuel swelling in severe accidents, N. Kourti and I. Shepherd 277 (2000) 37
- On the theory of fission gas bubble evolution in irradiated UO₂ fuel, M.S. Veshchunov 277 (2000) 67
- On the behaviour of intragranular fission gas in UO₂ fuel, P. Lösönen 280 (2000) 56
- Pressure building during the early stages of gas production in a radioactive waste repository, B. Bonin, M. Colin and A. Dutfoy 281 (2000) 1
- Microstructural changes in a low-activation Fe–Cr–Mn alloy irradiated with 92 MeV Ar ions at 450 °C, C. Zhang, K. Chen, Y. Wang, J. Sun, B. Hu, Y. Jin, M. Hou, C. Liu, Y. Sun, J. Han and C. Chen 283–287 (2000) 259
- High-sensitivity quadrupole mass spectrometry system for the determination of hydrogen in irradiated materials, B.M. Oliver, F.A. Garner, L.R. Greenwood and J.A. Abrefah 283–287 (2000) 1006
- Membrane bias effects on plasma-driven permeation of hydrogen through niobium membrane, A. Busnyuk, Y. Nakamura, Y. Nakahara, H. Suzuki, N. Ohyabu and A. Livshits 290–293 (2001) 57
- Carbon layers in the divertor of ASDEX Upgrade, V. Rohde, H. Maier, K. Krieger, R. Neu, J. Perchermaier and ASDEX Upgrade Team 290–293 (2001) 317
- The effect of baffling on divertor leakage in Alcator C-Mod, C.S. Pitcher, C.J. Boswell, T. Chung, J.A. Goetz, B. LaBombard, B. Lipschultz, J.E. Rice, D.P. Stotler and J.L. Terry 290–293 (2001) 812
- Fission gas release and volume diffusion enthalpy in UO₂ irradiated at low and high burnup, J.P. Hiernaut and C. Ronchi 294 (2001) 39
- Helium production for 0.8–2.5 GeV proton induced spallation reactions, damage induced in metallic window materials, D. Hilscher, C.-M. Herbach, U. Jahnke, V. Tishchenko, M. Enke, D. Filges, F. Goldenbaum, R.-D. Neef, K. Nünighoff, N. Paul, H. Schaal, G. Sterzenbach, A. Letourneau, A. Böhm, J. Galin, B. Lott, A. Péghaire and L. Pienkowski 296 (2001) 83
- Grain Boundaries**
- Neutron energy spectrum and temperature effects on freely migrating defect concentrations and grain boundary segregation in α -Fe, R.G. Faulkner, D.J. Bacon, S. Song and P.E.J. Flewitt 271&272 (1999) 1
- Defect-flow-induced heterogeneous dislocation formation and solute redistribution near a grain boundary in austenitic stainless steel under electron irradiation, S. Watanabe, N. Sakaguchi, S. Mochizuki and H. Takahashi 271&272 (1999) 184
- Effect of solute concentration on grain boundary migration with segregation in stainless steel and model alloys, H. Kanda, N. Hashimoto and H. Takahashi 271&272 (1999) 311
- Physical mechanisms of helium release during deformation of vanadium alloys doped with helium atoms, A. Ryazanov, H. Matsui and A.V. Kazaryan 271&272 (1999) 356
- Radiation-induced material changes and susceptibility to intergranular failure of light-water-reactor core internals, S.M. Bruemmer, E.P. Simonen, P.M. Scott, P.L. Andresen, G.S. Was and J.L. Nelson 274 (1999) 299
- Effect of grain-boundaries on uranium and oxygen diffusion in polycrystalline

- UO₂, A.C.S. Sabioni, W.B. Ferraz and F. Millot 278 (2000) 364
 Effect of AlOOH on the microstructure of UO₂ pellets, H.-s. Yoo, S.-y. Lee, S.-j. Lee and K.-w. Song 281 (2000) 191
 Sink effect of grain boundary on radiation-induced segregation in austenitic stainless steel, S. Watanabe, Y. Takamatsu, N. Sakaguchi and H. Takahashi 283–287 (2000) 152
 Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161
 Effects of grain boundary misorientation on solute segregation in thermally sensitized and proton-irradiated 304 stainless steel, T.S. Duh, J.J. Kai and F.R. Chen 283–287 (2000) 198
 Chemical segregation behavior under thermal aging of the low-activation F82H-modified steel, J. Lapeña, M. Garcia-Mazario, P. Fernández and A.M. Lancha 283–287 (2000) 662
 Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenkoa 283–287 (2000) 694
 A comparison of defects in helium implanted α - and β -SiC, P. Jung, H. Klein and J. Chen 283–287 (2000) 806
 On the role of grain boundary diffusion in fission gas release, D.R. Olander and P. Van Uffelen 288 (2001) 137
 Numerical simulation modeling on the effects of grain boundary misorientation on radiation-induced solute segregation in 304 austenitic stainless steels, T.S. Duh, J.J. Kai, F.R. Chen and L.H. Wang 294 (2001) 267
 Effects of nitrogen on low-cycle fatigue properties of type 304L austenitic stainless steels tested with and without tensile strain hold, B. Rho and S. Nam 300 (2002) 65
- Growth**
- Morphology of UO₂, M. Abramowski, R.W. Grimes and S. Owens 275 (1999) 12
 The initial transient of the irradiation growth in a zirconium alloy, A.M. Fortis and H.C. González 279 (2000) 301
 High-dose irradiation growth kinetics at 448 K in a zirconium alloy, H.C. González, A.M. Fortis and G.D.H. Coccoz 279 (2000) 360
- Surface reactions of hydrocarbon radicals: suppression of the re-deposition in fusion experiments via a divertor liner, A. von Keudell, T. Schwarz-Selinger, W. Jacob and A. Stevens 290–293 (2001) 231
 Transport of and deposition from hydrocarbon radicals in a flow tube downstream from a CH₄ RF discharge, A.E. Gorodetsky, I.I. Arkhipov, R.Kh. Zalavutdinov, A.P. Zakharov, Yu.N. Tolmachev, S.P. Vnukov and V.L. Bukhovets 290–293 (2001) 271
 Laboratory study of the transport and condensation of hydrocarbon radicals and its consequences for mitigating the tritium inventory in the ITER-FEAT divertor, I.I. Arkhipov, G. Federici, A.E. Gorodetsky, C. Ibbott, D.A. Komarov, A.N. Makhankov, A.V. Markin, I.V. Mazul, R. Tivey, A.P. Zakharov and R.Kh. Zalavutdinov 290–293 (2001) 394
- Heat Treatment**
- Influence of post-irradiation thermal annealing on the mechanical properties of ion irradiated layers in 316L stainless steel, C. Robertson, L. Boulanger and S. Poissonnet 271&272 (1999) 102
 Irradiation examination of CuNiCrSi alloy for ITER applications, A.D. Ivanov, A.V. Kozlov, M.V. Chernetsov and S.A. Averin 271&272 (1999) 139
 Heavy ion irradiation and annealing of lead: atomistic simulations and experimental validation, M.-J. Caturla, M. Wall, E. Alonso, T. Diaz de la Rubia, T. Felter and M.J. Fluss 276 (2000) 186
 A new ternary compound in the Zr–Sn–Fe system, N. Nieva and D. Arias 277 (2000) 120
 On the recovery of the physical and mechanical properties of a CuCrZr alloy subjected to heat treatments simulating the thermal cycle of hot isostatic pressing, U. Holzwarth, M. Pisoni, R. Scholz, H. Stamm and A. Volcan 279 (2000) 19
 The precipitation behaviour of ITER-grade Cu–Cr–Zr alloy after simulating the thermal cycle of hot isostatic pressing, U. Holzwarth and H. Stamm 279 (2000) 31
 Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
 Improvement in post-irradiation ductility of neutron irradiated V–Ti–Cr–Si–Al–Y alloy and the role of interstitial

- impurities, M. Satou, T. Chuto and K. Abe 283–287 (2000) 367
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- Hydrogen-irradiated steel interaction during alternating hydrogenation and annealing, E.A. Krasikov and A.D. Amajev 283–287 (2000) 846
- Russian superconducting materials for magnet systems of fusion reactors, A. Shikov, A. Nikulin, V. Pantsyrnyi, A. Vorobieva, G. Vedernikov, A. Silaev, E. Dergunova, S. Soudiev and I. Akimov 283–287 (2000) 968
- Effect of ITER components manufacturing cycle on the irradiation behaviour of 316L(N)-IG steel, B.S. Rodchenkov, V.I. Prokhorov, O.Yu. Makarov, V.K. Shamardin, G.M. Kalinin, Yu.S. Strebkov and O.A. Golosov 283–287 (2000) 1166
- Characterization of low-activation ferritic steel (JLF-1) weld joint by simulated heat-treatments, N. Inoue, T. Muroga, A. Nishimura, T. Nagasaka, O. Motojima, S. Uchida, H. Yabe, K. Oguri, Y. Nishi, Y. Katoh and A. Kohyama 283–287 (2000) 1187
- Physical property change of heavily neutron-irradiated Si_3N_4 and SiC by thermal annealing, T. Yano, M. Akiyoshi, K. Ichikawa, Y. Tachi and T. Iseki 289 (2001) 102
- Behaviour of implanted xenon in yttria-stabilised zirconia as inert matrix of a nuclear fuel, C. Degueldre, M. Pouchon, M. Döbeli, K. Sickafus, K. Hojou, G. Ledergerber and S. Abolhassani-Dadras 289 (2001) 115
- Island divertor in a helical-axis heliotron device (Heliotron J), T. Mizuuchi, M. Nakasuga, F. Sano, Y. Nakamura, K. Nagasaki, H. Okada, K. Kondo and T. Obiki 290–293 (2001) 678
- Material degradation and particle formation under transient thermal loads, J. Linke, M. Akiba, R. Duwe, A. Lodato, H.-J. Penkalla, M. Rödiger and K. Schöpflin 290–293 (2001) 1102
- Measurement of thermal wall-load distribution caused by the locked mode in a reversed-field pinch plasma, Y. Yagi, S. Sekine, H. Koguchi, T. Bolzonella and H. Sakakita 290–293 (2001) 1144
- Deuterium in re-deposited silicon-doped carbon layers and its removal by heating in air, M. Balden and M. Mayer 298 (2001) 225
- Helium**
- Contribution to irradiation creep arising from gas-driven bubble growth, C.H. Woo and F.A. Garner 271&272 (1999) 78
- The influence of helium co-implantation on ion-induced hardening of low activation ferritic steel evaluated by micro-indentation technique, Y. Katoh, H. Tanigawa, T. Muroga, T. Iwai and A. Kohyama 271&272 (1999) 115
- Dynamical process of defect clustering in Ni under the irradiation with low energy helium ions, K. Ono, K. Arakawa and N. Yoshida 271&272 (1999) 214
- Atomic mechanisms and energetics of thermally activated processes of helium redistribution in vanadium, V.M. Chernov, V.A. Romanov and A.O. Krutskikh 271&272 (1999) 274
- Effects of He implantation on radiation induced segregation in Cu–Au and Ni–Si alloys, A. Iwase, L.E. Rehn, P.M. Baldo and L. Funk 271&272 (1999) 321
- Behavior of ion-implanted helium and structural changes in nickel-base alloys under long-time exposure at elevated temperatures, I.I. Chernov, B.A. Kalin, A.N. Kalashnikov and V.M. Ananin 271&272 (1999) 333
- Neutronics aspects of a DHCE experiment, I.C. Gomes, H. Tsai and D.L. Smith 271&272 (1999) 349
- Physical mechanisms of helium release during deformation of vanadium alloys doped with helium atoms, A. Ryazanov, H. Matsui and A.V. Kazaryan 271&272 (1999) 356
- Triple ion beam studies of radiation damage in 9Cr–2WVTa ferritic/martensitic steel for a high power spallation neutron source, E.H. Lee, J.D. Hunn, G.R. Rao, R.L. Klueh and L.K. Mansur 271&272 (1999) 385
- Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels, R. Lindau, A. Möslang, D. Preininger, M. Rieth and H.D. Röhrig 271&272 (1999) 450
- TEM and SEM studies of radiation blistering in helium-implanted copper, P.B. Johnson, R.W. Thomson and K. Reader 273 (1999) 117
- Theory of gas bubble nucleation in supersaturated solution of vacancies, interstitials and gas atoms, A.E. Volkov and A.I. Ryazanov 273 (1999) 155
- AFM study of the surface deformation of austenitic stainless steel irradiated by He^+ ions, L. Liu, T. Mitamura, M. Niibe, H. Tsubakino and M. Terasawa 278 (2000) 30

- Estimates of helium gas release in $^{238}\text{PuO}_2$ fuel particles for radio-isotope heat sources and heater units, M.S. El-Genk and J.-M. Tournier 280 (2000) 1
- Effects of helium on radiation-induced defect microstructure in austenitic stainless steel, E.H. Lee, J.D. Hunn, T.S. Byun and L.K. Mansur 280 (2000) 18
- Defect and void evolution in oxide dispersion strengthened ferritic steels under 3.2 MeV Fe^+ ion irradiation with simultaneous helium injection, I.-S. Kim, J.D. Hunn, N. Hashimoto, D.L. Larson, P.J. Maziasz, K. Miyahara and E.H. Lee 280 (2000) 264
- Kinetics of gas bubble ensemble in supersaturated solid solution of point defects and gas atoms, R.E. Voskoboinikov and A.E. Volkov 282 (2000) 66
- Study of He-bubble growth in α -particle implanted F82H-mod martensitic steel, R. Coppola, M. Magnani, R.P. May, A. Möslang and M. Valli 283–287 (2000) 183
- Influence of neutron irradiation on Cu-NiCrSi alloy pre-implanted with helium, A.V. Kozlov, M.V. Chernetsov, S.A. Averin, V.Ya. Abramov, A.D. Ivanov, Yu.S. Strebkov and V.F. Reutov 283–287 (2000) 193
- Synergistic effects of hydrogen and helium on microstructural evolution in vanadium alloys by triple ion beam irradiation, N. Sekimura, T. Iwai, Y. Arai, S. Yonamine, A. Naito, Y. Miwa and S. Hamada 283–287 (2000) 224
- Microstructural changes of austenitic steels caused by proton irradiation under various conditions, T. Fukuda, M. Sagisaka, Y. Isobe, A. Hasegawa, M. Sato, K. Abe, Y. Nishida, T. Kamada and Y. Kaneshima 283–287 (2000) 263
- Effect of dual-beam-irradiation by helium and carbon ions on microstructure development of SiC/SiC composites, S. Nogami, A. Hasegawa, K. Abe, T. Taguchi and R. Yamada 283–287 (2000) 268
- Microstructure in pure copper irradiated by simultaneous multi-ion beam of hydrogen, helium and self ions, I. Mukouda, Y. Shimomura, T. Iiyama, Y. Harada, Y. Katano, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 302
- Microstructural evolution of Alloy 718 at high helium and hydrogen generation rates during irradiation with 600–800 MeV protons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, B.M. Oliver, L.E. Thomas, S.A. Maloy, W.F. Sommer, M.R. James and P.D. Ferguson 283–287 (2000) 324
- Effects of helium implantation on creep rupture properties of low activation ferritic steel F82H IEA heat, N. Yamamoto, J. Nagakawa and K. Shiba 283–287 (2000) 400
- Shear punch and tensile measurements of mechanical property changes induced in various austenitic alloys by high-energy mixed proton and neutron irradiation at low temperatures, M.L. Hamilton, F.A. Garner, M.B. Toloczko, S.A. Maloy, W.F. Sommer, M.R. James, P.D. Ferguson and M.R. Louthan Jr. 283–287 (2000) 418
- Effect of helium to dpa ratio on fatigue behavior of austenitic stainless steel irradiated to 2 dpa, I. Ioka, M. Yonekawa, Y. Miwa, H. Mimura, H. Tsuji and T. Hoshiya 283–287 (2000) 440
- Effects of helium implantation on hardness of pure iron and a reduced activation ferritic–martensitic steel, H. Tanigawa, S. Jitsukawa, A. Hishinuma, M. Ando, Y. Katoh, A. Kohyama and T. Iwai 283–287 (2000) 470
- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- Comparison of a microstructure evolution model with experiments on irradiated vanadium, S. Sharafat and N.M. Ghoniem 283–287 (2000) 789
- Effect of helium production on swelling of F82H irradiated in HFIR, E. Wakai, N. Hashimoto, Y. Miwa, J.P. Robertson, R.L. Klueh, K. Shiba and S. Jistukawa 283–287 (2000) 799
- A comparison of defects in helium implanted α - and β -SiC, P. Jung, H. Klein and J. Chen 283–287 (2000) 806
- Study of helium effects in SiC/SiC composites under fusion reactor environment, A. Hasegawa, B.M. Oliver, S. Nogami, K. Abe and R.H. Jones 283–287 (2000) 811
- Annealing behavior of irradiation hardening and microstructure in helium-implanted reduced activation martensitic steel, A. Kimura, R. Kasada, R. Sugano, A. Hasegawa and H. Matsui 283–287 (2000) 827
- Fatigue behavior and development of microcracks in F82H after helium implantation at 200 °C, J. Bertsch, S. Meyer and A. Möslang 283–287 (2000) 832
- On quantification of helium embrittlement in ferritic/martensitic steels, D.S. Gelles 283–287 (2000) 838
- Positron-lifetime study of electrically hydrogen charged Ni, austenitic stainless steel and Fe, H. Ohkubo, S.

- Sugiyama, K. Fukuzato, M. Take-
naka, N. Tsukuda and E. Kuramoto
Permeation of hydrogen through vana-
dium under helium ion irradiation, Y.
Hatano, Y. Nanjo, R. Hayakawa and
K. Watanabe 283–287 (2000) 858
- Microstructure evolution in tungsten
during low-energy helium ion irra-
diation, H. Iwakiri, K. Yasunaga, K.
Morishita and N. Yoshida 283–287 (2000) 868
- Re-weldability tests of irradiated austenitic stainless steel by a TIG welding method, K. Tsuchiya, H. Kawamura and G. Kalinin 283–287 (2000) 1134
- Radiation resistance of weld joints of type 316 stainless steel containing about 10 appm He, S.A. Fabritsiev and A.S. Pokrovsky 283–287 (2000) 1210
- Effect of weld thermal cycle and restraint stress on helium bubble formation in stainless steels, S. Kawano, K. Fukuya, F. Kano, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1215
- Accelerated helium and hydrogen production in ^{54}Fe doped alloys – measurements and calculations for the FIST experiment, L.R. Greenwood, B.M. Oliver, S. Ohnuki, K. Shiba, Y. Kohno, A. Kohyama, J.P. Robertson, J.W. Meadows and D.S. Gelles 283–287 (2000) 1220
- Effect of helium irradiation on trapping and thermal release of deuterium implanted in tungsten, S. Nagata and K. Takahiro 283–287 (2000) 1438
- Explorative studies for the development of fast He beam plasma diagnostics, S. Menhart, M. Proschek, H.-D. Falter, H. Anderson, H. Summers, A. Staebler, P. Franzen, H. Meister, J. Schweinzer, T.T.C. Jones, S. Cox, N. Hawkes, F. Aumayr and H.P. Winter 290–293 (2001) 135
- Study of edge plasma properties comparing operation in hydrogen and helium in RFX, M. Spolaore, V. Antoni, M. Bagatin, D. Desideri, L. Fattorini, E. Martines, G. Serianni, L. Tramontin and N. Vianello 290–293 (2001) 673
- Helium transport and exhaust with an ITER-like divertor in ASDEX Upgrade, H.-S. Bosch, W. Ullrich, D. Coster, O. Gruber, G. Haas, J. Neuhauser, R. Schneider, R. Wolf and ASDEX Upgrade Team 290–293 (2001) 729
- B2–EIRENE modelling of He compression and enrichment, D.P. Coster, H.-S. Bosch, W. Ullrich and ASDEX Upgrade Team 290–293 (2001) 836
- Noble gas enrichment studies at JET, M. Groth, P. Andrew, W. Fundamenski, H.Y. Guo, D.L. Hillis, J.T. Hogan, L.D. Horton, G.F. Matthews, A.G. Meigs, P.M. Morgan, M.F. Stamp and M. von Hellermann 290–293 (2001) 867
- Helium compression analysis for ASDEX Upgrade with fluid and kinetic codes, D. Reiser, R. Schneider, D. Coster, W. Ullrich and H.S. Bosch 290–293 (2001) 953
- Helium exhaust in divertor–closure configuration with W-shaped divertor of JT-60U, A. Sakasai, H. Takenaga, H. Kubo, N. Akino, S. Higashijima, S. Sakurai, H. Tamai, K. Itami and N. Asakura 290–293 (2001) 957
- Resonance radiation and high excitation of neutrals in plasma–gas interactions, A.M. Litnovsky, B.I. Khripunov, G.V. Sholin, V.B. Petrov, V.V. Shapkin and N.V. Antonov 290–293 (2001) 1107
- Radiation damage to the 316 stainless steel target container vessel at SNS, M.H. Barnett, M.S. Wechsler, D.J. Dudziak, L.K. Mansur and B.D. Murphy 296 (2001) 54
- Determination of helium and hydrogen yield from measurements on pure metals and alloys irradiated by mixed high energy proton and spallation neutron spectra in LANSCE, F.A. Garner, B.M. Oliver, L.R. Greenwood, M.R. James, P.D. Ferguson, S.A. Maloy and W.F. Sommer 296 (2001) 66
- Helium production for 0.8–2.5 GeV proton induced spallation reactions, damage induced in metallic window materials, D. Hilscher, C.-M. Herbach, U. Jahnke, V. Tishchenko, M. Enke, D. Filges, F. Goldenbaum, R.-D. Neef, K. Nünighoff, N. Paul, H. Schaal, G. Sterzenbach, A. Letourneau, A. Böhm, J. Galin, B. Lott, A. Péghaire and L. Pienkowski 296 (2001) 83
- Retention of implanted hydrogen and helium in martensitic stainless steels and their effects on mechanical properties, P. Jung, C. Liu and J. Chen 296 (2001) 165
- Origin of hardening and deformation mechanisms in irradiated 316 LN austenitic stainless steel, E.H. Lee, T.S. Byun, J.D. Hunn, K. Farrell and L.K. Mansur 296 (2001) 183
- Ion-irradiation-induced hardening in Inconel 718, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur 296 (2001) 203
- Effect of point defect interaction with bubble surface on the nucleation and growth of gas bubbles, R.E. Voskoboinikov and A.E. Volkov 297 (2001) 262
- Response of reduced activation ferritic steels to high-fluence ion-irradiation, H. Tanigawa, M. Ando, Y. Katoh, T.

- Hirose, H. Sakasegawa, S. Jitsukawa, A. Kohyama and T. Iwai 297 (2001) 279
- Effect of helium implantation on mechanical properties and microstructure evolution of reduced-activation 9Cr–2W martensitic steel, R. Kasada, T. Morimura, A. Hasegawa and A. Kimura 299 (2001) 83
- High Temperature Reactors**
- The use of liquid metals in porous materials for divertor applications, L.I. Ivanov, S.A. Maslyaev, V.N. Pimenov, E.V. Dyomina and Yu.M. Platov 271&272 (1999) 405
- Microstructure and impact properties of ultra-fine grained tungsten alloys dispersed with TiC, Y. Kitsunai, H. Kurishita, H. Kayano, Y. Hiraoka, T. Igarashi and T. Takida 271&272 (1999) 423
- Fracture toughness of copper-base alloys for fusion energy applications, D.J. Alexander, S.J. Zinkle and A.F. Rowcliffe 271&272 (1999) 429
- ITER Materials R&D Data Bank, S. Tanaka, R. Matera, G. Kalinin, V. Barabash and K. Mohri 271&272 (1999) 478
- Retention of fission product caesium in ZrC-coated fuel particles for high-temperature gas-cooled reactors, K. Minato, T. Ogawa, T. Koya, H. Sekino and T. Tomita 279 (2000) 181
- Manufacturing and testing of a prototypical divertor vertical target for ITER, M. Merola, L. Plöchl, Ph. Chappuis, F. Escourbiac, M. Grattarola, I. Smid, R. Tivey and G. Vieider 283–287 (2000) 1068
- Infrared characterization and high heat flux testing of plasma sprayed layers, Ph. Chappuis, F. Escourbiac, M. Chantant, M. Febvre, M. Grattarola, M. Bet, M. Merola and B. Riccardi 283–287 (2000) 1081
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Microstructural development of neutron irradiated W–Re alloys, Y. Nemoto, A. Hasegawa, M. Satou and K. Abe 283–287 (2000) 1144
- Low cycle fatigue strength of diffusion bonded joints of alumina dispersion-strengthened copper to stainless steel, H. Nishi and T. Araki 283–287 (2000) 1234
- ITER structural design criteria and their extension to advanced reactor blankets, S. Majumdar and G. Kalinin 283–287 (2000) 1424
- History (of Nuclear Materials)**
- The role of materials R&D in the development of commercial fusion power plants, J.W. Davis 271&272 (1999) 532
- Summary of discussion session: Design and materials, A. Kohyama, E.E. Bloom and K. Ehrlich 271&272 (1999) 538
- The interaction of deuterium and tritium with radiation and other defects in austenitic steel and nickel, V.L. Arbusov, G.A. Raspopova, S.E. Danilov, A.P. Druzhkov and Yu.N. Zouev 283–287 (2000) 849
- Erosion and deposition effects on the vessel wall of TEXTOR-94, J. von Seggern, M. Mayer, D. Reiser, M. Rubel and V. Philipps 290–293 (2001) 341
- Hydrogen and Hydrides (includes Deuterium and Deuterides)**
- Contribution to irradiation creep arising from gas-driven bubble growth, C.H. Woo and F.A. Garner 271&272 (1999) 78
- Observation of spatial distribution of tritium in zirconium alloy with microautoradiography, K. Isobe, Y. Hatano, M. Sugisaki, T. Hayashi, M. Nishi and K. Okuno 271&272 (1999) 326
- Trapping of deuterium by niobium at eV ion bombardment energies, A.A. Evanov, V.A. Kurnaev, D.V. Levchuk and A.A. Pisarev 271&272 (1999) 330
- Triple ion beam studies of radiation damage in 9Cr–2WVTa ferritic/martensitic steel for a high power spallation neutron source, E.H. Lee, J.D. Hunn, G.R. Rao, R.L. Klueh and L.K. Mansur 271&272 (1999) 385
- Deuterium retention in codeposited layers and carbon materials exposed to high flux D-plasma, I.I. Arkhipov, A.E. Gorodetsky, R.Kh. Zalavutdinov, A.P. Zakharov, T.A. Burtseva, I.V. Mazul, B.I. Khripunov, V.V. Shapkin and V.B. Petrov 271&272 (1999) 418
- Hydrogen isotope retention in beryllium for tokamak plasma-facing applications, R.A. Anderl, R.A. Causey, J.W. Davis, R.P. Doerner, G. Federici, A.A. Haasz, G.R. Longhurst, W.R. Wampler and K.L. Wilson 273 (1999) 1
- The effect of texture variation on delayed hydride cracking behavior of Zr–2.5%Nb plate, S.S. Kim, S.C. Kwon, and Y.S. Kim 273 (1999) 52
- Permeation of multi-component hydrogen isotopes through austenitic stainless steels, T. Shiraishi, M. Nishikawa, T. Yamaguchi and K. Kenmotsu 273 (1999) 60
- Hydrogen isotope permeation through and inventory in the first wall of the water cooled Pb–17Li blanket for DEMO, O.V. Ogorodnikova, M.A. Fütterer, E. Serra, G. Benamati, J.-F. Salavy and G. Aiello 273 (1999) 66
- Characterization of hydrogen permeation through recycled cast iron for

- subsurface disposal, A.M. Brass and F. Barbier 273 (1999) 265
- Depth distribution of deuterium atoms and molecules in beryllium oxide implanted with deuterium ions, V.Kh. Alimov and V.N. Chernikov 273 (1999) 277
- Intrinsic hydrogen transport constants in the FCC matrix and fibres derived from isovolumetric desorption experiments, L.A. Sedano, A. Perujo and C.H. Wu 273 (1999) 285
- Thermochemistry of binary Na–NaH and ternary Na–O–H systems and the kinetics of reaction of hydrogen/water with liquid sodium – a review, T. Gnanasekaran 274 (1999) 252
- Internal friction study of hydrogen behaviour in low activated martensitic F82H steel, Y. Jagodzinski, A. Tarasenko, S. Smuk, S. Tähtinen and H. Hänninen 275 (1999) 47
- Electrolytic hydrogenation and its isotope effect in Zr and Pd studied by ERDA and SIMS techniques, Y. Oya, T. Suzuki, K. Iinuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 275 (1999) 186
- Hydride distribution around a blister in Zr–2.5Nb pressure tubes, G. Domizzi, G. Vigna, S. Bermúdez and J. Ovejero-García 275 (1999) 255
- Fracture strength of hydride precipitates in Zr–2.5Nb alloys, S.-Q. Shi and M.P. Puls 275 (1999) 312
- Diffusion-controlled hydride growth near crack tip in zirconium under temperature transients, S.-Q. Shi 275 (1999) 318
- Comparison of hydrogen gas-, atom- and ion-metal interactions, O.V. Ogorodnikova 277 (2000) 130
- A study of absorption processes of hydrogen isotopes in some transition metals by LiOD + LiOH mixture electrolysis, Y. Oya, T. Suzuki, K. Iinuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 278 (2000) 48
- Retention and release of deuterium implanted in copper coatings on Al-6061, M.Y. Inal, M. Alam, K. Kurz, D.F. Cowgill and R.A. Causey 278 (2000) 164
- A model of the threshold stress intensity factor, K_{IH} , for delayed hydride cracking of Zr–2.5Nb alloy, Y.S. Kim, Y.G. Matvienko, Y.M. Cheong, S.S. Kim and S.C. Kwon 278 (2000) 251
- Characterization of uranium corrosion products involved in a uranium hydride pyrophoric event, T.C. Tote-meier 278 (2000) 301
- Delayed hydride cracking in zirconium alloys in a temperature gradient, S. Sagat, C.K. Chow, M.P. Puls and C.E. Coleman 279 (2000) 107
- A reaction-diffusion analysis of the hydriding kinetics of zirconium-based alloys, G.E. Fernández and G. Meyer 279 (2000) 167
- Simulation of hydrogen embrittlement in zirconium alloys under stress and temperature gradients, A.G. Varias and A.R. Massih 279 (2000) 273
- K_{IH} in radial textured Zr–2.5%Nb pressure tube, S.S. Kim and Y.S. Kim 279 (2000) 286
- Effects of Sn and Nb on massive hydriding kinetics of Zr–XSn–YNb alloy, Y.-s. Kim, S.-k. Kim, J.-g. Bang and Y.-h. Jung 279 (2000) 335
- Residual carbon impurities in Zr–2.5Nb and their effect on deuterium pickup, R.A. Ploc 279 (2000) 344
- New weight-loss measurements of the chemical erosion yields of carbon materials under hydrogen ion bombardment, M. Balden and J. Roth 280 (2000) 39
- Effects of the accumulated annealing parameter on the corrosion characteristics of a Zr–0.5Nb–1.0Sn–0.5Fe–0.25Cr alloy, J.H. Baek, Y.H. Jeong and I.S. Kim 280 (2000) 235
- Interaction between blue brittleness and stress corrosion cracking, W.Y. Chu, Y.B. Wang and L.J. Qiao 280 (2000) 250
- Quantitative analysis of deuterium in a C:D layers, a Round Robin experiment, R. Behrisch, M. Mayer, W. Jacob, W. Assmann, G. Dollinger, A. Bergmaier, U. Kreissig, M. Friedrich, G.Y. Sun, D. Hildebrandt, M. Akbi, W. Schneider, D. Schleußner, W. Knapp and C. Edelmann 281 (2000) 42
- Effect of silicon impurities and heat treatment on uranium hydriding rates, A.L. DeMint and J.H. Leckey 281 (2000) 208
- The surface rate constants of deuterium in the reduced activating martensitic steel OPTIFER-IVb, G.A. Esteban, A. Perujo, L.A. Sedano and B. Mancinelli 282 (2000) 89
- Retention of ion-implanted deuterium in tungsten pre-irradiated with carbon ions, V.Kh. Alimov, K. Ertl, J. Roth and K. Schmid 282 (2000) 125
- Mechanism of chemical sputtering of graphite under high flux deuterium bombardment, Y. Ueda, T. Sugai, Y. Ohtsuka and M. Nishikawa 282 (2000) 216
- Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161

- Formation and migration of helium bubbles in Fe–16Cr–17Ni austenitic alloy at high temperature, K. Ono, K. Arakawa, M. Oohashi, H. Kurata, K. Hojou and N. Yoshida 283–287 (2000) 210
- Synergistic effects of hydrogen and helium on microstructural evolution in vanadium alloys by triple ion beam irradiation, N. Sekimura, T. Iwai, Y. Arai, S. Yonamine, A. Naito, Y. Miwa and S. Hamada 283–287 (2000) 224
- Application of the internal friction method to studying microstructural effects in fusion materials, S. Tähtinen, Y. Jagodzinski, O. Tarasenko, S. Smuk and H. Hänninen 283–287 (2000) 255
- Microstructure in pure copper irradiated by simultaneous multi-ion beam of hydrogen, helium and self ions, I. Mukouda, Y. Shimomura, T. Iiyama, Y. Harada, Y. Katano, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 302
- Microstructural evolution of Alloy 718 at high helium and hydrogen generation rates during irradiation with 600–800 MeV protons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, B.M. Oliver, L.E. Thomas, S.A. Maloy, W.F. Sommer, M.R. James and P.D. Ferguson 283–287 (2000) 324
- Shear punch and tensile measurements of mechanical property changes induced in various austenitic alloys by high-energy mixed proton and neutron irradiation at low temperatures, M.L. Hamilton, F.A. Garner, M.B. Toloczko, S.A. Maloy, W.F. Sommer, M.R. James, P.D. Ferguson and M.R. Louthan Jr. 283–287 (2000) 418
- Diffusion and permeation of hydrogen in low-activation martensitic stainless steel – effect of irradiation, F. Schliefer, C. Liu and P. Jung 283–287 (2000) 540
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenkoa 283–287 (2000) 694
- Heavy hydrogen isotopes penetration through austenitic and martensitic steels, Yu. Dolinski, I. Lyasota, A. Shestakov, Yu. Repritsev and Yu. Zouev 283–287 (2000) 854
- The effect of electrical hydrogen charging on the strength of 316 stainless steel, S. Sugiyama, H. Ohkubo, M. Takenaka, K. Ohsawa, M.I. Ansari, N. Tsukuda and E. Kuramoto 283–287 (2000) 863
- Permeation of hydrogen through vanadium under helium ion irradiation, Y. Hatano, Y. Nanjo, R. Hayakawa and K. Watanabe 283–287 (2000) 868
- Hydrogen permeation through vanadium alloy V–4Cr–4Ti ‘in situ’ of reactor irradiation, T.V. Kulsartov, V.P. Shestakov, I.L. Tazhibaeva and E.A. Kenzhin 283–287 (2000) 872
- Effect of hydrogen accumulation on mechanical property and microstructure of V–Cr–Ti alloys, K. Aoyagi, E.P. Torres, T. Suda and S. Ohnuki 283–287 (2000) 876
- Hydrogen and deuterium transport and inventory parameters through W and W-alloys for fusion reactor applications, G. Benamati, E. Serra and C.H. Wu 283–287 (2000) 1033
- Deuterium retention in tungsten and molybdenum, S. Nagata and K. Takahiro 283–287 (2000) 1038
- Hydrogen absorption process into graphite and carbon materials, H. Atsumi and M. Iseki 283–287 (2000) 1053
- Removal of deuterium from co-deposited carbon–silicon layers, M. Balden and M. Mayer 283–287 (2000) 1057
- Effect of carbon pre-implantation on deuterium retention in tungsten, M. Poon, J.W. Davis and A.A. Haasz 283–287 (2000) 1062
- Tungsten filament mock-ups for gas box liner, C. Cazzola, J. Boscarly and R. Matera 283–287 (2000) 1073
- The removal of ion implanted deuterium from tungsten and stainless steel by transferred-arc cleaning, K.J. Hollis, R.G. Castro, C.J. Maggiore and A. Ayala 283–287 (2000) 1085
- Graphite–tungsten twin limiters in studies of material mixing processes on high heat flux components, M. Rubel, T. Tanabe, V. Philipps, B. Emmoth, A. Kirschner, J. von Seggern and P. Wienhold 283–287 (2000) 1089
- Codeposition of deuterium ions with beryllium oxide at elevated temperatures, A.V. Markin, V.P. Dubkov, A.E. Gorodetsky, M.A. Negodaev, N.V. Rozhanskii, F. Scaffidi-Argentina, H. Werle, C.H. Wu, R.Kh. Zhalavutdinov and A.P. Zakharov 283–287 (2000) 1094
- TEM study on deuterium-irradiation-induced defects in tungsten and molybdenum, T. Matsui, S. Muto and T. Tanabe 283–287 (2000) 1139
- The hydrogen permeation behaviour of aluminised coated martensitic steels under gaseous hydrogen, liquid Pb–17Li/hydrogen and cyclic tensile load, T. Sample, A. Perujo, H. Kolbe and B. Mancinelli 283–287 (2000) 1272

- The oxidation kinetics of Incoloy 800 and its deuterium permeation behavior, A. Perujo, J. Reimann, H. Feuerstein and B. Mancinelli 283–287 (2000) 1292
- Effects of thin films on inventory, permeation and re-emission of energetic hydrogen, N. Ohyabu, Y. Nakamura, Y. Nakahara, A. Livshits, V. Alimov, A. Busnyuk, M. Notkin, A. Samartsev and A. Doroshin 283–287 (2000) 1297
- Performance of V–Cr–Ti alloys in a hydrogen environment, K. Natesan and W.K. Soppet 283–287 (2000) 1316
- Water corrosion of F82H-modified in simulated irradiation conditions by heat treatment, J. Lapeña and F. Blázquez 283–287 (2000) 1341
- Study of the tritium behavior on the surface of Li₂O by means of work function measurement, T. Yokota, A. Suzuki, K. Yamaguchi, T. Terai and M. Yamawaki 283–287 (2000) 1366
- XPS and UPS studies on electronic structure of Li₂O, S. Tanaka, M. Taniguchi and H. Tanigawa 283–287 (2000) 1405
- Improvement of the model for surface process of tritium release from lithium oxide, D. Yamaki, A. Iwamoto and S. Jitsukawa 283–287 (2000) 1414
- Accelerated helium and hydrogen production in ⁵⁴Fe doped alloys – measurements and calculations for the FIST experiment, L.R. Greenwood, B.M. Oliver, S. Ohnuki, K. Shiba, Y. Kohno, A. Kohyama, J.P. Robertson, J.W. Meadows and D.S. Gelles 283–287 (2000) 1438
- Studies on hydrogen permeability of 2.25% Cr–1% Mo ferritic steel: correlation with microstructure, N. Parvathavarthini, S. Saroja, R.K. Dayal and H.S. Khatak 288 (2001) 187
- Hydrogen–damage interactions in yttria-stabilized zirconia, V. Shutthanandan, S. Thevuthasan, J.S. Young, T.M. Orlando and W.J. Weber 289 (2001) 128
- Co-permeation of deuterium and hydrogen through Pd, K. Kizu, A. Pisarev and T. Tanabe 289 (2001) 291
- Thermophysical properties of zirconium hydride and uranium–zirconium hydride, B. Tsuchiya, J. Huang, K. Konashi, M. Teshigawara and M. Yamawaki 289 (2001) 329
- Deuterium retention in W, W1%La, C-coated W and W₂C, R.A. Anderl, R.J. Pawelko and S.T. Schuetz 290–293 (2001) 38
- Solid-state reaction between tungsten and hydrogen-containing carbon film at elevated temperature, K. Ashida, K. Fujino, T. Okabe, M. Matsuyama and K. Watanabe 290–293 (2001) 42
- Chemical erosion of boronized films from DIII-D tiles, J.W. Davis, P.B. Wright, R.G. Macaulay-Newcombe, A.A. Haasz and C.G. Hamilton 290–293 (2001) 66
- Deuterium retention in single crystal tungsten, A.A. Haasz, M. Poon, R.G. Macaulay-Newcombe and J.W. Davis 290–293 (2001) 85
- Trapping of eV deuterium ions by niobium at glancing incidence, V.A. Kurnaev, A.V. Golubeva, A.A. Evanov, D.V. Levchuk, A.A. Pisarev and N.N. Trifonov 290–293 (2001) 112
- Effect of helium irradiation on trapping and thermal release of deuterium implanted in tungsten, S. Nagata and K. Takahiro 290–293 (2001) 135
- Deuterium retention of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, Y. Hirohata, T. Oda, T. Hino and S. Sengoku 290–293 (2001) 196
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Carbon layers in the divertor of ASDEX Upgrade, V. Rohde, H. Maier, K. Krieger, R. Neu, J. Perchermaier and ASDEX Upgrade Team 290–293 (2001) 317
- Erosion and deposition effects on the vessel wall of TEXTOR-94, J. von Seggern, M. Mayer, D. Reiser, M. Rubel and V. Philipps 290–293 (2001) 341
- Hydrogen molecules in the divertor of ASDEX Upgrade, U. Fantz, D. Reiter, B. Heger and D. Coster 290–293 (2001) 367
- High-density H-mode operation achieved using efficient plasma refueling by inboard pellet launch, P.T. Lang, O. Gruber, L.D. Horton, T.T.C. Jones, M. Kaufmann, A. Lorenz, M. Maraschek, V. Mertens, J. Neuhauser, G. Saibene, H. Zohm, ASDEX Upgrade Team and JET Team 290–293 (2001) 374
- Deuterium retention and lattice damage in tungsten irradiated with D ions, V.Kh. Alimov, K. Ertl and J. Roth 290–293 (2001) 389
- Particle trapping in carbon walls during ICRH heating in Tore Supra, C. Grisolia, J. Hogan, Ph. Ghendrih, Th. Loarer, J. Gunn, P. Monier-Garbet, M. Becoulet and T. Hutter 290–293 (2001) 402
- Vibrational population of the ground state of H₂ and D₂ in the divertor of ASDEX Upgrade, B. Heger, U. Fantz, K. Behringer and ASDEX Upgrade Team 290–293 (2001) 413

- Comparison of hydrogen and tritium uptake and retention in JET, D.L. Hillis, J. Hogan, J.P. Coad, G. Duxbury, M. Groth, H.Y. Guo, L. Horton, G. Matthews, A. Meigs, P. Morgan, M. Stamp and M. von Hellermann 290–293 (2001) 418
- Isotope effects in thermal release of H and D implanted into WC layers on graphite, T. Horikawa, K. Morita and B. Tsuchiya 290–293 (2001) 428
- Role of grain boundaries and carbon deposition in deuterium retention behavior of deuterium plasma exposed tungsten, D.A. Komarov, A.V. Markin, S.Yu. Rybakov and A.P. Zakharov 290–293 (2001) 433
- Fuel accumulation in co-deposited layers on plasma facing components, M. Rubel, P. Wienhold and D. Hildebrandt 290–293 (2001) 473
- Hydrogen recycling study by Balmer lines emissions in linear plasma machine TPE, K. Shimada, T. Tanabe, R. Causey, T. Venhaus and K. Okuno 290–293 (2001) 478
- Hydrogen isotope depth profiling in carbon samples from the erosion dominated inner vessel walls of JET, C. Stan-Sion, R. Behrisch, J.P. Coad, U. Kreißig, F. Kubo, V. Lazarev, S. Lindig, M. Mayer, E. Nolte, A. Peacock, L. Rohrer and J. Roth 290–293 (2001) 491
- Influence of hydrogen surface coverage on atomic particle reflection, I. Takagi, Y. Koga, H. Fujita and K. Higashi 290–293 (2001) 501
- Heat load on the first wall materials and interaction of emitted neutrals with plasma, K. Kobayashi, S. Kado, B. Xiao and S. Tanaka 290–293 (2001) 648
- Investigation of the hydrogen fluxes in the plasma edge of W7-AS during H-mode discharges, U. Langer, E. Taglauer, R. Fischer and W7-AS Team 290–293 (2001) 658
- Numerical simulation of hydrogen molecular dissociation and the effects to $H\alpha$ profiles in low temperature plasmas, B. Xiao, S. Kado, K. Kobayashi and S. Tanaka 290–293 (2001) 793
- Spectral profile analysis of the $D\alpha$ line in the divertor region of Tore-Supra, A. Escarguel, R. Guirlet, A. Azéroual, B. Pégourié, J. Gunn, T. Loarer, H. Capes, Y. Corre, C. De Michelis, L. Godbert-Mouret, M. Koubiti, M. Mattioli and R. Stamm 290–293 (2001) 854
- Tore Supra divertor screening efficiency during density regime experiments, C. Grisolia, Ph. Ghendrih, J. Gunn, T. Loarer, P. Monier-Garbet, C. De Michelis, L. Costanzo and J.Y. Pascal 290–293 (2001) 863
- Island divertor investigations on the W7-AS stellarator, R.W.T. König, K. McCormick, Y. Feng, S. Fiedler, P. Grigull, D. Hildebrandt, J. Kisslinger, J.P. Knauer, G. Kühner, D. Naujoks, J. Sallander, S. Sardei, F. Wagner, A. Werner and W7-AS Team 290–293 (2001) 882
- Plasma–surface interaction effects during high ion temperature long pulse experiments in TRIAM-1M, N. Yoshida, T. Hirai, K. Tokunaga, S. Itoh and TRIAM Group 290–293 (2001) 1030
- Thermal properties of hydride fuel 45% U–ZrH_{1.6}, K. Kakiuchi, N. Itagaki, T. Furuya, T. Hattori, Y. Nakazono, F. Ono, K. Yamaguchi and M. Yamawaki 294 (2001) 28
- Thermodynamic analysis of chemical states of fission products in uranium–zirconium hydride fuel, J. Huang, B. Tsuchiya, K. Konashi and M. Yamawaki 294 (2001) 154
- Hydrogen analysis and slow strain rate test in Ar gas for irradiated austenitic stainless steel, J. Morisawa, M. Kodama, N. Yokota, K. Nakata, K. Fukuya, S. Shima and K. Asano 294 (2001) 241
- Hydrogen isotope diffusive transport parameters in pure polycrystalline tungsten, G.A. Esteban, A. Perujo, L.A. Sedano and K. Douglas 295 (2001) 49
- Hydrogen concentrations near cracks in target materials for high-power spallation neutron sources, H. Rauh and H. Ullmaier 295 (2001) 109
- Determination of helium and hydrogen yield from measurements on pure metals and alloys irradiated by mixed high energy proton and spallation neutron spectra in LANSCE, F.A. Garner, B.M. Oliver, L.R. Greenwood, M.R. James, P.D. Ferguson, S.A. Maloy and W.F. Sommer 296 (2001) 66
- Retention of implanted hydrogen and helium in martensitic stainless steels and their effects on mechanical properties, P. Jung, C. Liu and J. Chen 296 (2001) 165
- Hydrogen uptake and corrosion behavior of Zr–2.5Nb pressure tubes in Wolsong Unit 1, K.-N. Choo and Y.-S. Kim 297 (2001) 52
- Measurement of hydriding susceptibility of Zircaloy cladding by the tube-burst technique at high pressure and high temperature, H.S. Hong and D.R. Olander 297 (2001) 107
- Precipitation of reoriented hydrides and textural change of α -zirconium grains

- during delayed hydride cracking of Zr–2.5%Nb pressure tube, Y. Kim, Yu. Perlovich, M. Isaenkova, S.S. Kim and Y.M. Cheong 297 (2001) 292
- Deuterium in re-deposited silicon-doped carbon layers and its removal by heating in air, M. Balden and M. Mayer 298 (2001) 225
- Diffusive transport parameters and surface rate constants of deuterium in Incoloy 800, G.A. Esteban, A. Perujo, L.A. Sedano, F. Legarda, B. Mancinelli and K. Douglas 300 (2002) 1
- A novel technique to remove deuterium from CANDU pressure tubes, Z. Qin, C.-S. Zhang, K. Griffiths and P.R. Norton 299 (2001) 77
- Hydrogen isotope retention and recycling in fusion reactor plasma-facing components, R.A. Causey 300 (2002) 91
- The effect of coatings on deuterium retention and permeation in aluminum 6061-T6 APT tritium production tubes, K.L. Hertz, R.A. Causey and D.F. Cowgill 300 (2002) 255
- Impact**
- Defect cluster formation in vanadium irradiated with heavy ions, N. Sekimura, Y. Shirao, H. Yamaguchi, S. Yonamine and Y. Arai 271&272 (1999) 63
- Tensile and impact behaviour of BATMAN II steels, Ti-bearing reduced activation martensitic alloys, G. Filacchioni, E. Casagrande, U. De Angelis, G. De Santis, D. Ferrara and L. Pilloni 271&272 (1999) 445
- Effect of heat treatment and irradiation temperature on mechanical properties and structure of reduced-activation Cr–W–V steels of bainitic, martensitic, and martensitic–ferritic classes, I.V. Gorynin, V.V. Rybin, I.P. Kursevich, A.N. Lapin, E.V. Nesterova and E.Yu. Klepikov 283–287 (2000) 465
- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- Mechanical behavior and microstructural evolution of vanadium alloys irradiated in ATR-A1, K.-i. Fukumoto, H. Matsui, H. Tsai and D.L. Smith 283–287 (2000) 492
- V-alloy embrittlement by irradiation in a cooling gas environment, H.D. Röhrig, M. Rieth, B. Dafferner and E. Materna-Morris 283–287 (2000) 498
- Tensile and impact properties of V–4Cr–4Ti alloy heats 832665 and 832864, T.S. Bray, H. Tsai, L.J. Nowicki, M.C. Billone, D.L. Smith, W.R. Johnson and P.W. Trester 283–287 (2000) 633
- Effect of thermal aging on the microstructure and mechanical properties of 7–11 CrW steels, Y. de Carlan, A. Alamo, M.H. Mathon, G. Geoffroy and A. Castaing 283–287 (2000) 672
- On quantification of helium embrittlement in ferritic/martensitic steels, D.S. Gelles 283–287 (2000) 838
- Confocal microscopy–fracture reconstruction and finite element modeling characterization of local cleavage toughness in a ferritic/martensitic steel in subsized Charpy V-notch impact tests, T. Yamamoto, G.R. Odette, G.E. Lucas and H. Matsui 283–287 (2000) 992
- Unified analytic representation of physical sputtering yield, R.K. Janev, Yu.V. Ralchenko, T. Kenmotsu and K. Hosaka 290–293 (2001) 104
- Effects of carbide precipitation on the strength and Charpy impact properties of low carbon Mn–Ni–Mo bainitic steels, Y.-R. Im, Y.J. Oh, B.-J. Lee, J.H. Hong and H.-C. Lee 297 (2001) 138
- Impurities**
- Microstructures of type 316 model alloys neutron-irradiated at 513 K to 1 dpa, Y. Miwa, T. Tsukada, H. Tsuji and H. Nakajima 271&272 (1999) 316
- Study of oxygen influence on vanadium product for fusion structural materials, X. Hui, W. Yan, L. Ansheng, H. Xue and W. Lijun 271&272 (1999) 459
- Plasma-facing materials mixing and mixed material properties, 271&272 (1999) 526
- In situ purification, alloying and casting methodology for metallic plutonium, J.C. Lashley, M.S. Blau, K.P. Staudhammer and R.A. Pereyra 274 (1999) 315
- Simulation of damage production and accumulation in vanadium, E. Alonso, M.-J. Caturla, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 221
- MARFE phenomena in the HT-7 tokamak, X. Gao, J.R. Luo, Y.P. Zhao, N. Qiu, Y.X. Jie, Y. Yang, C.Y. Xia, B.N. Wan, G.L. Kuang, X.D. Zhang, J.G. Li, F.X. Yin, X.N. Liu, X.Z. Gong, S.Y. Zhang, J.Y. Zhao, L.Q. Hu, Z.W. Wu, Y.D. Li, K. Yang, Y. Bao, W.W. Ye, L. Chen, H.Y. Fan, S.X. Liu, Y.F. Chen, B.L. Lin, Y.H. Xu, Y.J. Shi, M. Song, X.M. Zhang, M.S. Wei, M. Zeng, A.G. Xie, N.Z. Cui, H.L. Ruan, L. Wang, B. Sheng, S. Liu, X.D. Tong, X.M. Gu, J.S. Mao, J.K. Xie and Y.X. Wan 279 (2000) 330

- Residual carbon impurities in Zr–2.5Nb and their effect on deuterium pickup, R.A. Ploc 279 (2000) 344
- XPS study of the process of oxygen gettering by thin films of PACVD boron, M.M. Ennaceur and B. Terreault 280 (2000) 33
- Impurity effects on reduced-activation ferritic steels developed for fusion applications, R.L. Klueh, E.T. Cheng, M.L. Grossbeck and E.E. Bloom 280 (2000) 353
- Effect of silicon impurities and heat treatment on uranium hydriding rates, A.L. DeMint and J.H. Leckey 281 (2000) 208
- Thermally induced gallium removal from plutonium dioxide for MOX fuel production, D.G. Kolman, M.E. Griego, C.A. James and D.P. Butt 282 (2000) 245
- Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161
- Synergistic effects of hydrogen and helium on microstructural evolution in vanadium alloys by triple ion beam irradiation, N. Sekimura, T. Iwai, Y. Arai, S. Yonamine, A. Naito, Y. Miwa and S. Hamada 283–287 (2000) 224
- Effect of strain rate on the tensile properties of unirradiated and irradiated V–4Cr–4Ti, A.F. Rowcliffe, S.J. Zinkle and D.T. Hoelzer 283–287 (2000) 508
- Microstructure control to improve mechanical properties of vanadium alloys for fusion applications, T. Kuwabara, H. Kurishita and M. Hasegawa 283–287 (2000) 611
- Solute interactions in pure vanadium and V–4Cr–4Ti alloy, D.T. Hoelzer, M.K. West, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 616
- NIFS program for large ingot production of a V–Cr–Ti alloy, T. Muroga, T. Nagasaka, A. Iiyoshi, A. Kawabata, S. Sakurai and M. Sakata 283–287 (2000) 711
- Recovery and recrystallization behavior of vanadium at various controlled nitrogen and oxygen levels, T. Nagasaka, H. Takahashi, T. Muroga, T. Tanabe and H. Matsui 283–287 (2000) 816
- Effects of oxygen and hydrogen at low pressure on the mechanical properties of V–Cr–Ti alloys, J.R. DiStefano, B.A. Pint, J.H. DeVan, H.D. Röhrig and L.D. Chitwood 283–287 (2000) 841
- Impurity effects on gas tungsten arc welds in V–Cr–Ti alloys, M.L. Grossbeck, J.F. King and D.T. Hoelzer 283–287 (2000) 1356
- Membrane bias effects on plasma-driven permeation of hydrogen through niobium membrane, A. Busnyuk, Y. Nakamura, Y. Nakahara, H. Suzuki, N. Ohyabu and A. Livshits 290–293 (2001) 57
- Simulation study on retention and reflection from tungsten carbide under high fluence of helium ions, T. Ono, T. Kawamura, T. Kenmotsu and Y. Yamamura 290–293 (2001) 140
- Deuterium retention of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, Y. Hirohata, T. Oda, T. Hino and S. Sengoku 290–293 (2001) 196
- Silicon diffusion in amorphous carbon films, E. Vainonen-Ahlgren, T. Ahlgren, L. Khriachtchev, J. Likonen, S. Lehto, J. Keinonen and C.H. Wu 290–293 (2001) 216
- Modelling of erosion and deposition at limiter surfaces and divertor target plates, A. Kirschner, A. Huber, V. Philipps, A. Pospieszczyk, P. Wienhold and J. Winter 290–293 (2001) 238
- Comparison of impurity production, recycling and power deposition on carbon and tungsten limiters in TEXTOR-94, A. Huber, V. Philipps, A. Pospieszczyk, A. Kirschner, M. Lehnen, T. Ohgo, K. Ohya, M. Rubel, B. Schweer, J. von Seggern, G. Sergienko, T. Tanabe and M. Wada 290–293 (2001) 276
- Rapid diffusion of lithium into bulk graphite in lithium conditioning, N. Itou, H. Toyoda, K. Morita and H. Sugai 290–293 (2001) 281
- Molybdenum sources and transport in Alcator C-Mod, B. Lipschultz, D.A. Pappas, B. LaBombard, J.E. Rice, D. Smith and S. Wukitch 290–293 (2001) 286
- Effects of condensible impurities on the erosion behavior of the plasma-facing materials, N. Ohno, S. Uno, Y. Hirooka and S. Takamura 290–293 (2001) 299
- Interactions between liquid-wall vapor and edge plasmas, T.D. Rognlien and M.E. Rensink 290–293 (2001) 312
- Studies of tungsten erosion at the inner and outer main chamber wall of the ASDEX Upgrade tokamak, A. Tabbasso, H. Maier, J. Roth and K. Krieger 290–293 (2001) 326
- Particle control in the sustained spheromak physics experiment, R.D. Wood, D.N. Hill, E.B. Hooper, D. Buchenauer, H. McLean, Z. Wang, S. Woodruff and G. Wurden 290–293 (2001) 513
- Impurity transport experiments in the edge plasma of Alcator C-Mod using gas injection plumes, S. Gangadhara, B. LaBombard and C. MacLachy 290–293 (2001) 598

- Consistency check of Z_{eff} measurements in ergodic divertor plasmas on Tore Supra, B. Schunke, C. DeMichelis, R. Guirlet, P. Monier-Garbet, M. Mattioli, E. Chareyre and O. Meyer 290–293 (2001) 715
- Self-consistent description of the core and boundary plasma in the high-field ignition experiment, R. Stankiewicz and R. Zagórski 290–293 (2001) 738
- Low-Z impurity transport in DIII-D – observations and implications, M.R. Wade, W.A. Houlberg, L.R. Baylor, W.P. West and D.R. Baker 290–293 (2001) 773
- Modeling of carbon transport in the divertor and SOL of DIII-D during high performance plasma operation, W.P. West, G.D. Porter, T.E. Evans, P. Stangeby, N.H. Brooks, M.E. Fenstermacher, R.C. Isler, T.D. Rognlien, M.R. Wade, D.G. Whyte and N.S. Wolf 290–293 (2001) 783
- Noble gas enrichment studies at JET, M. Groth, P. Andrew, W. Fundamenski, H.Y. Guo, D.L. Hillis, J.T. Hogan, L.D. Horton, G.F. Matthews, A.G. Meigs, P.M. Morgan, M.F. Stamp and M. von Hellermann 290–293 (2001) 867
- Spectroscopic study of neon emission and retention in the Tore Supra ergodic divertor, R. Guirlet, J. Hogan, Y. Corre, C. De Michelis, A. Escarguel, W. Hess, P. Monier-Garbet and B. Schunke 290–293 (2001) 872
- Measurement and simulation of edge flows induced by ergodization in Tore Supra, J.P. Gunn, C. Boucher, Y. Corre, P. Devynck, Ph. Ghendrih and J.-Y. Pascal 290–293 (2001) 877
- Initial performance results of the DIII-D Divertor 2000, M.A. Mahdavi, M.R. Wade, J.G. Watkins, C.J. Lasnier, T. Luce, S.L. Allen, A.W. Hyatt, C. Baxi, J.A. Boedo, A.S. Bozek, N.H. Brooks, R.J. Colchin, T.E. Evans, M.E. Fenstermacher, M.E. Friend, R.C. O'Neill, R.C. Isler, A.G. Kellman, A.W. Leonard, R. Maingi, R.A. Moyer, T.W. Petrie, G.D. Porter, M.J. Schaffer, S. Skinner, R.D. Stambaugh, P.C. Stangeby, W.P. West, D.G. Whyte and N.S. Wolf 290–293 (2001) 905
- Alternative schemes of power deposition with the ergodic divertor on Tore Supra, G. Mank, Ph. Ghendrih, C. Grisolia, J. Gunn, T. Loarer, P. Monier-Garbet, L. Costanzo, K.H. Finken, C. De Michelis and R. Reichle 290–293 (2001) 910
- High radiation from intrinsic and injected impurities in Tore Supra ergodic divertor plasmas, P. Monier-Garbet, C. De Michelis, Ph. Ghendrih, C. Grisolia, A. Grosman, R. Guirlet, J. Gunn, T. Loarer, C.E. Bush, C. Clement, Y. Corre, L. Costanzo, B. Schunke and J.C. Vallet 290–293 (2001) 925
- The effect of divertor tile material on radiation profiles in LHD, B.J. Peterson, S. Masuzaki, R. Sakamoto, K. Sato, S. Inagaki, A. Sagara, S. Ohdachi, Y. Nakamura, N. Noda, Y. Xu, J.E. Rice, N. Ashikawa, S. Yamamoto, M. Takechi, K. Toi, S. Morita, M. Goto, K. Narihara, N. Inoue, Y. Takeiri, M. Sato, M. Osakabe, K. Tanaka, T. Tokuzawa, S. Sakakibara, M. Shoji, K. Kawahata, O. Kaneko, N. Ohyabu, H. Yamada, A. Komori, K. Yamazaki, S. Sudo and O. Motojima 290–293 (2001) 930
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M. Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- JET methane screening experiments, J.D. Strachan, K. Erents, W. Fundamenski, M. von Hellermann, L. Horton, K. Lawson, G. McCracken, J. Spence, M. Stamp and K-D. Zastrow 290–293 (2001) 972
- Issues in the plasma wall interactions in RFX, M. Valisa, R. Bartiromo, D. Bettella, L. Carraro, S. Costa, P. Martin, S. Martini, R. Pasqualotto, M.E. Puiatti, P. Scarin, F. Sattin, G. Telesca, P. Zanca and B. Zaniol 290–293 (2001) 980
- Particle balance in NBI heated long pulse discharges on LHD, Y. Nakamura, H. Suzuki, Y. Oka, M. Osakabe, B.J. Peterson, S. Masuzaki, T. Morisaki, J. Miyazawa, Y. Takeiri, M. Sato, T. Shimozuma, T. Mutoh, N. Noda, K. Kawahata, N. Ohyabu, O. Motojima and LHD Experimental Groups 290–293 (2001) 1040
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz, S. Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- Operational limits under different wall conditions on TEXTOR-94, J. Rapp, W. Biel, H. Gerhauser, A. Huber, H.R. Koslowski, M. Lehnen, V. Philipps, A. Pospieszczyk, D. Reiser, U. Samm, G. Sergienko, M.Z. Tokar and R. Zagórski 290–293 (2001) 1148
- Characterization and conditioning of SSPX plasma facing surfaces, D.A. Buchenauer, B.E. Mills, R. Wood, S.

- Woodruff, D.N. Hill, E.B. Hooper, D.F. Cowgill, M.W. Clift and N.Y. Yang 290–293 (2001) 1165
- Conditionings for plasma facing walls of large helical device, T. Hino, T. Ohuchi, M. Hashiba, Y. Yamauchi, Y. Hirohata, N. Inoue, A. Sagara, N. Noda and O. Motojima 290–293 (2001) 1176
- Selected thermal properties of beryllium and phase equilibria in beryllium systems relevant for nuclear fusion reactor blankets, H. Kleykamp 294 (2001) 88
- Accumulation of radioactive corrosion products on steel surfaces of VVER-type nuclear reactors. II. ⁶⁰Co, K. Varga, G. Hirschberg, Z. Németh, G. Myburg, J. Schunk and P. Tilky 298 (2001) 231
- Effects of nitrogen on low-cycle fatigue properties of type 304L austenitic stainless steels tested with and without tensile strain hold, B. Rho and S. Nam 300 (2002) 65
- Microstructure–fracture toughness relationship of vanadium alloy/stainless steel brazed joints, Y.X. Gan, H.A. Aglan, R.V. Steward, B.A. Chin and M.L. Grossbeck 299 (2001) 157
- Interfaces**
- Microchemistry characterization by Auger electron spectroscopy of a cold-worked AISI-304L stainless steel, M. Hernández-Mayoral, G. de Diego and M. García-Mazarío 279 (2000) 189
- The effect of neutron-irradiation on the shear properties of SiC/SiC composites with varied interface, T. Hinoki, L.L. Snead, Y. Katoh, A. Kohyama and R. Shinavski 283–287 (2000) 376
- Evaluation of the deformation fields and bond integrity of Cu/SS joints, J.F. Stubbins, J. Collins and J. Min 283–287 (2000) 982
- Effects of heat treatments on microstructure changes in the interface of Cu/SS316L joint materials, Q. Xu, D.J. Edwards and T. Yoshiie 283–287 (2000) 1229
- Low cycle fatigue strength of diffusion bonded joints of alumina dispersion-strengthened copper to stainless steel, H. Nishi and T. Araki 283–287 (2000) 1234
- Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers, T. Hinoki, W. Yang, T. Nozawa, T. Shibayama, Y. Katoh and A. Kohyama 289 (2001) 23
- Structural stability of irradiated ceramics, P.M. Ossi 289 (2001) 80
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Numerical study of plasma–wall transition in an oblique magnetic field, F. Valsaque and G. Manfredi 290–293 (2001) 763
- Internal Friction**
- Behavior of ion-implanted helium and structural changes in nickel-base alloys under long-time exposure at elevated temperatures, I.I. Chernov, B.A. Kalin, A.N. Kalashnikov and V.M. Ananin 271&272 (1999) 333
- Application of the internal friction method to studying microstructural effects in fusion materials, S. Tähtinen, Y. Jagodzinski, O. Tarasenko, S. Smuk and H. Hänninen 283–287 (2000) 255
- Ion Irradiation**
- Radiation-induced amorphization and recrystallization of α -SiC single crystal, K. Kawatsura, N. Shimatani, T. Igarashi, T. Inoue, N. Terazawa, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 11
- Radiation effects of 200 keV and 1 MeV Ni ion on MgO single crystal, T. Mitamura, K. Kawatsura, R. Takahashi, T. Adachi, T. Igarashi, S. Arai, N. Masuda, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 15
- Radiation damage and radiation-induced segregation in single crystal stainless steel by RBS and PIXE channeling, T. Mitamura, K. Kawatsura, T. Nakaie, T. Igarashi, T. Inoue, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno, K. Fujii, M. Terasawa, H. Uchida, K. Koterazawa, K. Takahiro, S. Nagata and S. Yamaguchi 271&272 (1999) 21
- Atom transport efficiency in heavy ion irradiated metals, P. Fielitz, V. Naundorf and H. Wollenberger 271&272 (1999) 52
- Defect cluster formation in vanadium irradiated with heavy ions, N. Sekimura, Y. Shirao, H. Yamaguchi, S. Yonamine and Y. Arai 271&272 (1999) 63
- High energy cascades in gold as studied by high energy self-ion irradiation, N. Sekimura, Y. Kanzaki, N. Ohtake, J. Saeki, Y. Shirao, S. Ishino, T. Iwata, A. Iwase and R. Tanaka 271&272 (1999) 68
- Microstructural examination of Ni-ion irradiated Fe–Ni–Cr alloys followed to micro-zone deformation, M. Ando, Y. Katoh, H. Tanigawa and A. Kohyama 271&272 (1999) 111
- The influence of helium co-implantation on ion-induced hardening of low ac-

- tivation ferritic steel evaluated by micro-indentation technique, Y. Kato, H. Tanigawa, T. Muroga, T. Iwai and A. Kohyama 271&272 (1999) 115
- Annealing of Cu₃Au irradiated with protons, α -particles and C ions at liquid nitrogen temperature, H. Sakairi, E. Yagi and A. Koyama 271&272 (1999) 194
- High-resolution electron microscopy of γ -TiAl irradiated with 15 keV helium ions at room temperature, M. Song, K. Furuya, T. Tanabe and T. Noda 271&272 (1999) 200
- Defect accumulation behavior in iron irradiated with energetic ions and electrons at ~80 K, Y. Chimi, A. Iwase and N. Ishikawa 271&272 (1999) 236
- An analysis of void swelling dose dependence in ion irradiated V–Fe alloys, V.A. Pechenkin, Yu.V. Kono-beev, S.I. Rudnev and G.A. Epov 271&272 (1999) 266
- TEM analyses of surface ridge network in an ion-irradiated graphite thin film, S. Muto, T. Tanabe, M. Takeuchi, Y. Kobayashi, S. Furuno and K. Hojou 271&272 (1999) 285
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Surface morphology and void formation in 316L stainless steel irradiated with high energy C-ions, Z.G. Wang, K.Q. Chen, L.W. Li, C.H. Zhang, J.M. Quan, M.D. Hou, R.H. Xu, F. Ma, Y.F. Jin, C.L. Li and Y.M. Sun 271&272 (1999) 306
- Effects of He implantation on radiation induced segregation in Cu–Au and Ni–Si alloys, A. Iwase, L.E. Rehn, P.M. Baldo and L. Funk 271&272 (1999) 321
- Trapping of deuterium by niobium at eV ion bombardment energies, A.A. Evanov, V.A. Kurnaev, D.V. Levchuk and A.A. Pisarev 271&272 (1999) 330
- Behavior of ion-implanted helium and structural changes in nickel-base alloys under long-time exposure at elevated temperatures, I.I. Chernov, B.A. Kalin, A.N. Kalashnikov and V.M. Ananin 271&272 (1999) 333
- Microstructural evolution in vanadium irradiated during ion irradiation at constant and varying temperature, K. Ochiai, H. Watanabe, T. Muroga, N. Yoshida and H. Matsui 271&272 (1999) 376
- Triple ion beam studies of radiation damage in 9Cr–2WVTa ferritic/martensitic steel for a high power spallation neutron source, E.H. Lee, J.D. Hunn, G.R. Rao, R.L. Klueh and L.K. Mansur 271&272 (1999) 385
- Depth distribution of deuterium atoms and molecules in beryllium oxide implanted with deuterium ions, V.Kh. Alimov and V.N. Chernikov 273 (1999) 277
- Depth profiles of damage accumulation in UO₂ and (U,Gd)O₂ pellets irradiated with 100 MeV iodine ions, K. Nogita, K. Hayashi, K. Une and K. Fukuda 273 (1999) 302
- Proton irradiation effects in Zr–1.0 Nb–1.0 Sn–0.1 Fe probed by positron annihilation, P. Mukherjee, P.M.G. Nambissan, P. Sen, P. Barat and S.K. Bandyopadhyay 273 (1999) 338
- Radiation damage effects in zirconia, K.E. Sickafus, Hj. Matzke, Th. Hartmann, K. Yasuda, J.A. Valdez, P. Chodak III, M. Nastasi and R.A. Verrall 274 (1999) 66
- Influence of high-dose Kr⁺ irradiation on structural evolution and swelling of 16Cr–15Ni–3Mo–1Ti aging steel, V.V. Sagaradze, S.S. Lapin, M.A. Kirk and B.N. Goshchitskii 274 (1999) 287
- Mechanical properties of 304L stainless steel irradiated with 800 MeV protons, J. Chen, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 275 (1999) 115
- Nitrogen implantation into carbon: retention, release and target-erosion processes, S. Grigull, R. Behrisch and S. Parascandola 275 (1999) 158
- The search for interstitial dislocation loops produced in displacement cascades at 20 K in copper, M.A. Kirk, M.L. Jenkins and H. Fukushima 276 (2000) 50
- Defect accumulation behaviour in hcp metals and alloys, C.H. Woo 276 (2000) 90
- Comparison between radiation effects in some fcc and bcc metals irradiated with energetic heavy ions – a review, A. Iwase and S. Ishino 276 (2000) 178
- Tensile properties and microstructure of martensitic steel DIN 1.4926 after 800 MeV proton irradiation, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 276 (2000) 289
- Ion beam-induced amorphisation of freudenbergite, K.L. Smith, M.G. Blackford, G.R. Lumpkin and N.J. Zaluzec 277 (2000) 159
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. III. Phase stability during heavy ion irradiation, E.H. Lee and L.K. Mansur 278 (2000) 20
- AFM study of the surface deformation of austenitic stainless steel irradiated by He⁺ ions, L. Liu, T. Mitamura, M.

- Niibe, H. Tsubakino and M. Terasawa
Electron and ion irradiation of zeolites, S.X. Wang, L.M. Wang and R.C. Ewing
Hardness and defect structures in EC316LN austenitic alloy irradiated under a simulated spallation neutron source environment using triple ion-beams, E.H. Lee, J.D. Hunn, N. Hashimoto and L.K. Mansur
The corrosion of materials in water irradiated by 800 MeV protons, R.S. Lillard, D.L. Pile and D.P. Butt
Comparison of the chemical erosion of Si, C and SiC under deuterium ion bombardment, M. Balden and J. Roth
Effects of helium on radiation-induced defect microstructure in austenitic stainless steel, E.H. Lee, J.D. Hunn, T.S. Byun and L.K. Mansur
Influence of the interatomic potentials on molecular dynamics simulations of displacement cascades, C.S. Becquart, C. Domain, A. Legris and J.C. Van Duysen
Defect and void evolution in oxide dispersion strengthened ferritic steels under 3.2 MeV Fe⁺ ion irradiation with simultaneous helium injection, I.-S. Kim, J.D. Hunn, N. Hashimoto, D.L. Larson, P.J. Maziasz, K. Miyahara and E.H. Lee
Synthesis of atom probe experiments on irradiation-induced solute segregation in French ferritic pressure vessel steels, P. Auger, P. Pareige, S. Welzel and J.-C. Van Duysen
Non-equilibrium intragrain concentration redistribution of the alloying elements in austenitic steels under irradiation, V.V. Sagaradze, S.S. Lapin and M.A. Kirk
A method to study deformation mechanisms for irradiated steels using a disk-bend test, E.H. Lee, T.S. Byun, J.D. Hunn, N. Hashimoto and K. Farrell
Orientation of γ to α transformation in Xe-implanted austenitic 304 stainless steel, G. Xie, M. Song, K. Mitsuishi and K. Furuya
Production behavior of irradiation defects in lithium silicates and silica under ion beam irradiation, K. Moritani, S. Tanaka and H. Moriyama
Passivation of uranium towards air corrosion by N₂⁺ and C⁺ ion implantation, R. Arkush, M.H. Mintz and N. Shamir
Heavy-ion cascade effects on radiation-induced segregation kinetics in Cu–1%Au alloys, M.J. Giacobbe, N.Q. Lam, L.E. Rehn, P.M. Baldo, L. Funk and J.F. Stubbins
Retention of ion-implanted deuterium in tungsten pre-irradiated with carbon ions, V.Kh. Alimov, K. Ertl, J. Roth and K. Schmid
Helium and hydrogen induced hardening in 316LN stainless steel, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur
Mechanism of chemical sputtering of graphite under high flux deuterium bombardment, Y. Ueda, T. Sugai, Y. Ohtsuka and M. Nishikawa
Corrosion resistance of nitrogen-implanted Zircaloy-4 in high-temperature water, S. Lee, C. Park, H. Kwon and B. Choi
Correlation between defect structures and hardness in tantalum irradiated by heavy ions, K. Yasunaga, H. Watanabe, N. Yoshida, T. Muroga and N. Noda
The effect of transmutation and displacement in irradiated copper for heat-sink materials, S. Ishino, A. Kurui, S. Ichikawa, T. Inaba and T. Hasegawa
Microstructural changes in a low-activation Fe–Cr–Mn alloy irradiated with 92 MeV Ar ions at 450 °C, C. Zhang, K. Chen, Y. Wang, J. Sun, B. Hu, Y. Jin, M. Hou, C. Liu, Y. Sun, J. Han and C. Chen
Effect of dual-beam-irradiation by helium and carbon ions on microstructure development of SiC/SiC composites, S. Nogami, A. Hasegawa, K. Abe, T. Taguchi and R. Yamada
Role of α_2/γ and γ/γ phase boundaries in cavity formation in a TiAl intermetallic compound irradiated with He-ions, K. Nakata, K. Fukai, A. Hishinuma and K. Ameyama
Microstructure of vanadium alloys during ion irradiation with stepwise change of temperature, H. Watanabe, T. Arinaga, K. Ochiai, T. Muroga and N. Yoshida
Effects of temperature change on the microstructural evolution of vanadium alloys under ion irradiation, N. Nita, T. Iwai, K. Fukumoto and H. Matsui
Microstructure in pure copper irradiated by simultaneous multi-ion beam of hydrogen, helium and self ions, I.

- Mukouda, Y. Shimomura, T. Iiyama, Y. Harada, Y. Katano, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 302
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Effects of helium implantation on creep rupture properties of low activation ferritic steel F82H IEA heat, N. Yamamoto, J. Nagakawa and K. Shiba 283–287 (2000) 400
- The contribution of various defects to irradiation-induced hardening in an austenitic model alloy, M. Ando, Y. Katoh, H. Tanigawa, A. Kohyama and T. Iwai 283–287 (2000) 423
- Radiation-induced precipitation in V–(Cr,Fe)–Ti alloys irradiated at low temperature with low dose during neutron or ion irradiation, K.-i. Fukumoto, H. Matsui, Y. Candra, K. Takahashi, H. Sasanuma, S. Nagata and K. Takahiro 283–287 (2000) 535
- Study of helium effects in SiC/SiC composites under fusion reactor environment, A. Hasegawa, B.M. Oliver, S. Nogami, K. Abe and R.H. Jones 283–287 (2000) 811
- Fatigue behavior and development of microcracks in F82H after helium implantation at 200 °C, J. Bertsch, S. Meyer and A. Möslang 283–287 (2000) 832
- Permeation of hydrogen through vanadium under helium ion irradiation, Y. Hatano, Y. Nanjo, R. Hayakawa and K. Watanabe 283–287 (2000) 868
- Effects of co-implanted oxygen or aluminum atoms on hydrogen migration and damage structure in multiple-beam irradiated Al₂O₃, Y. Katano, T. Aruga, S. Yamamoto, T. Nakazawa, D. Yamaki and K. Noda 283–287 (2000) 942
- Cation disordering in magnesium aluminate spinel crystals induced by electron or ion irradiation, T. Soeda, S. Matsumura, C. Kinoshita and N.J. Zaluzec 283–287 (2000) 952
- Deuterium retention in tungsten and molybdenum, S. Nagata and K. Takahiro 283–287 (2000) 1038
- Effect of carbon pre-implantation on deuterium retention in tungsten, M. Poon, J.W. Davis and A.A. Haasz 283–287 (2000) 1062
- The removal of ion implanted deuterium from tungsten and stainless steel by transferred-arc cleaning, K.J. Hollis, R.G. Castro, C.J. Maggiore and A. Ayala 283–287 (2000) 1085
- Microstructure evolution in tungsten during low-energy helium ion irradiation, H. Iwakiri, K. Yasunaga, K. Morishita and N. Yoshida 283–287 (2000) 1134
- Effect of weld thermal cycle and restraint stress on helium bubble formation in stainless steels, S. Kawano, K. Fukuya, F. Kano, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1220
- Evaluation of chemical erosion data for carbon materials at high ion fluxes using Bayesian probability theory, V. Dose, R. Preuss and J. Roth 288 (2001) 153
- Heavy-ion irradiation effects on structures and acid dissolution of pyrochlores, B.D. Begg, N.J. Hess, W.J. Weber, R. Devanathan, J.P. Icenhower, S. Thevuthasan and B.P. McGrail 288 (2001) 208
- Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC, Y. Katoh, M. Kotani, H. Kishimoto, W. Yang and A. Kohyama 289 (2001) 42
- Structural stability of irradiated ceramics, P.M. Ossi 289 (2001) 80
- Accumulation and recovery of disorder on silicon and carbon sublattices in ion-irradiated 6H-SiC, W. Jiang, W.J. Weber, S. Thevuthasan and V. Shutthanandan 289 (2001) 96
- Effects of Xe ion irradiation and subsequent annealing on the structural properties of magnesium-aluminate spinel, I.V. Afanasyev-Charkin, R.M. Dickerson, D. Wayne Cooke, B.L. Bennett, V.T. Gritsyna and K.E. Sickafus 289 (2001) 110
- Effects of fission product incorporation on the microstructure of cubic zirconia, L.M. Wang, S.X. Wang, S. Zhu and R.C. Ewing 289 (2001) 122
- Hydrogen–damage interactions in yttria-stabilized zirconia, V. Shutthanandan, S. Thevuthasan, J.S. Young, T.M. Orlando and W.J. Weber 289 (2001) 128
- Heavy ion irradiation studies of columbite, brannerite, and pyrochlore structure types, G.R. Lumpkin, K.L. Smith and M.G. Blackford 289 (2001) 177
- Heavy-ion irradiation effects in Gd₂(Ti_{2-x}Zr_x)O₇ pyrochlores, B.D. Begg, N.J. Hess, D.E. McCready, S. Thevuthasan and W.J. Weber 289 (2001) 188
- Determination of the defect creation mechanism in fluoroapatite, S. Soulet, J. Chaumont, J.-C. Krupa, J. Carpena and M.-O. Ruault 289 (2001) 194
- Accumulation and thermal recovery of disorder in Au²⁺-irradiated SrTiO₃, S. Thevuthasan, W. Jiang, V. Shutthanandan and W.J. Weber 289 (2001) 204

- Deuterium retention in W, W1%La, C-coated W and W₂C, R.A. Anderl, R.J. Pawelko and S.T. Schuetz 290–293 (2001) 38
- Mechanism of the chemical erosion of SiC under hydrogen irradiation, M. Balden, S. Picarle and J. Roth 290–293 (2001) 47
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Methane formation in graphite and boron-doped graphite under simultaneous O⁺ and H⁺ irradiation, A.Y.K. Chen, J.W. Davis and A.A. Haasz 290–293 (2001) 61
- Formation of mixed layers and compounds on beryllium due to C⁺ and CO⁺ bombardment, P. Goldstrass and Ch. Linsmeier 290–293 (2001) 71
- Trapping of eV deuterium ions by niobium at glancing incidence, V.A. Kurnaev, A.V. Golubeva, A.A. Evanov, D.V. Levchuk, A.A. Pisarev and N.N. Trifonov 290–293 (2001) 112
- Work function change of first wall candidate metals due to ion beam irradiation, G.-N. Luo, K. Yamaguchi, T. Terai and M. Yamawaki 290–293 (2001) 116
- Non-destructive structural analysis of surface blistering by TEM and EELS in a reflection configuration, S. Muto, T. Matsui and T. Tanabe 290–293 (2001) 131
- Effect of helium irradiation on trapping and thermal release of deuterium implanted in tungsten, S. Nagata and K. Takahiro 290–293 (2001) 135
- Carbon erosion mechanisms in tokamak divertor materials: insight from molecular dynamics simulations, E. Salonen, K. Nordlund, J. Keinonen and C.H. Wu 290–293 (2001) 144
- Influence of diffusion on W sputtering by carbon, K. Schmid, J. Roth and W. Eckstein 290–293 (2001) 148
- Energy distributions of CD₄ and CD₃ chemically released from graphite by D⁺ and D⁰/Ne⁺ impact, E. Vietzke 290–293 (2001) 158
- Chemical erosion of doped graphites for fusion devices, C. García-Rosales and M. Balden 290–293 (2001) 173
- Deuterium retention and lattice damage in tungsten irradiated with D ions, V.Kh. Alimov, K. Ertl and J. Roth 290–293 (2001) 389
- Hydrogen recycling study by Balmer lines emissions in linear plasma machine TPE, K. Shimada, T. Tanabe, R. Causey, T. Venhaus and K. Okuno 290–293 (2001) 478
- Numerical simulation modeling on the effects of grain boundary misorientation on radiation-induced solute segregation in 304 austenitic stainless steels, T.S. Duh, J.J. Kai, F.R. Chen and L.H. Wang 294 (2001) 267
- Phase transformation of polycrystalline zirconia induced by swift heavy ion irradiation, C. Gibert-Mougel, F. Couvreur, J.M. Costantini, S. Bouffard, F. Levesque, S. Hémon, E. Paumier and C. Dufour 295 (2001) 121
- R&D for the Spallation Neutron Source mercury target, L.K. Mansur, T.A. Gabriel, J.R. Haines and D.C. Lous-teau 296 (2001) 1
- Helium production for 0.8–2.5 GeV proton induced spallation reactions, damage induced in metallic window materials, D. Hilscher, C.-M. Herbach, U. Jahnke, V. Tishchenko, M. Enke, D. Filges, F. Goldenbaum, R.-D. Neef, K. Nünighoff, N. Paul, H. Schaal, G. Sterzenbach, A. Letourneau, A. Böhm, J. Galin, B. Lott, A. Péghaire and L. Pienkowski 296 (2001) 83
- Multiscale modeling of radiation damage: applications to damage production by GeV proton irradiation of Cu and W, and pulsed irradiation effects in Cu and Fe, M. Caturla, T. Diaz de la Rubia, M. Victoria, R.K. Corzine, M.R. James and G.A. Greene 296 (2001) 90
- Retention of implanted hydrogen and helium in martensitic stainless steels and their effects on mechanical properties, P. Jung, C. Liu and J. Chen 296 (2001) 165
- Origin of hardening and deformation mechanisms in irradiated 316 LN austenitic stainless steel, E.H. Lee, T.S. Byun, J.D. Hunn, K. Farrell and L.K. Mansur 296 (2001) 183
- Ion-irradiation-induced hardening in Inconel 718, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur 296 (2001) 203
- Radiation damage and nanocrystal formation in uranium–niobium titanates, J. Lian, S.X. Wang, L.M. Wang and R.C. Ewing 297 (2001) 89
- Microstructure evolution in austenitic Fe–Cr–Ni alloys irradiated with protons: comparison with neutron-irradiated microstructures, J. Gan and G.S. Was 297 (2001) 161
- Response of reduced activation ferritic steels to high-fluence ion-irradiation, H. Tanigawa, M. Ando, Y. Katoh, T. Hirose, H. Sakasegawa, S. Jitsukawa, A. Kohyama and T. Iwai 297 (2001) 279
- The study of microstructural defects and mechanical properties in proton-irradiated Zr–1.0%Nb–1.0%Sn–0.1%Fe, P. Mukherjee, P.M.G. Nambissan, P. Barat, P. Sen, S.K. Bandyopadhyay,

- J.K. Chakravartty, S.L. Wadekar, S. Banerjee, S.K. Chattopadhyay, S.K. Chatterjee and M.K. Mitra 297 (2001) 341
- Accumulation and recovery of defects in ion-irradiated nanocrystalline gold, Y. Chimi, A. Iwase, N. Ishikawa, M. Kobiyama, T. Inami and S. Okuda 297 (2001) 355
- Mechanical properties of pure tantalum after 800 MeV proton irradiation, J. Chen, H. Ullmaier, T. Floßdorf, W. Kühnlein, R. Duwe, F. Carsughi and T. Broome 298 (2001) 248
- Strain hardening and plastic instability properties of austenitic stainless steels after proton and neutron irradiation, T.S. Byun, K. Farrell, E.H. Lee, J.D. Hunn and L.K. Mansur 298 (2001) 269
- Effect of helium implantation on mechanical properties and microstructure evolution of reduced-activation 9Cr–2W martensitic steel, R. Kasada, T. Morimura, A. Hasegawa and A. Kimura 299 (2001) 83
- Blister formation of tungsten due to ion bombardment, W. Wang, J. Roth, S. Lindig and C.H. Wu 299 (2001) 124
- Determination of the defect creation mechanism in the mono-silicated fluoroapatite. Disorder modeling under repository conditions, S. Soulet, J. Carpéna, J. Chaumont, J.-C. Krupa and M.-O. Ruault 299 (2001) 227
- Analysis of the monoclinic–tetragonal phase transition of zirconia under irradiation, D. Simeone, D. Gosset, J.L. Bechade and A. Chevarier 300 (2002) 27
- Order–disorder phase transition induced by swift ions in MgAl₂O₄ and ZnAl₂O₄ spinels, D. Simeone, C. Dodane-Thiriet, D. Gosset, P. Daniel and M. Beauvy 300 (2002) 151
- Emulation of neutron irradiation effects protons: validation of principle, G.S. Was, J.T. Busby, T. Allen, E.A. Kenik, A. Jensson, S.M. Bruemmer, J. Gan, A.D. Edwards, P.M. Scott and P.L. Andreson 300 (2002) 198
- Amorphization and recrystallization of the ABO₃ oxides, A. Meldrum, L.A. Boatner, W.J. Weber and R.C. Ewing 300 (2002) 242
- The effect of coatings on deuterium retention and permeation in aluminum 6061-T6 APT tritium production tubes, K.L. Hertz, R.A. Causey and D.F. Cowgill 300 (2002) 255
- Concentration-triggered fission product release from zirconia: consequences for nuclear safety, A. Gentils, L. Thomé, J. Jagielski and F. Garrido 300 (2002) 266
- Iron, Iron alloys (excludes Steels) and Compounds**
- Computer simulation of the interaction between an edge dislocation and interstitial clusters in Fe and Ni, E. Kuramoto, K. Ohsawa, T. Tsutsumi and M. Koyanagi 271&272 (1999) 26
- Subcascade formation in displacement cascade simulations: Implications for fusion reactor materials, R.E. Stoller and L.R. Greenwood 271&272 (1999) 57
- Effects of neutron irradiation on microstructure and mechanical properties of pure iron, B.N. Singh, A. Horsewell and P. Toft 271&272 (1999) 97
- The mechanical properties of 590 MeV proton irradiated iron, Y. Chen, P. Spätig and M. Victoria 271&272 (1999) 128
- Defect structure development in a pure iron and dilute iron alloys irradiated with neutrons and electrons, A. Okada, H. Maeda, K. Hamada and I. Ishida 271&272 (1999) 133
- MD study of the dynamic behavior of small interstitial clusters in Fe, M. Koyanagi, K. Ohsawa and E. Kuramoto 271&272 (1999) 205
- Interaction of solutes with irradiation-induced defects of electron-irradiated dilute iron alloys, H. Abe and E. Kuramoto 271&272 (1999) 209
- Defect accumulation behavior in iron irradiated with energetic ions and electrons at ~80 K, Y. Chimi, A. Iwase and N. Ishikawa 271&272 (1999) 236
- Invisible and visible point defect clusters in neutron irradiated iron, M. Horiki, T. Yoshiie, M. Iseki and M. Kiritani 271&272 (1999) 256
- Characterization of hydrogen permeation through recycled cast iron for subsurface disposal, A.M. Brass and F. Barbier 273 (1999) 265
- Equilibrium phase relations in the U–Zr–Fe ternary system, K. Nakamura, M. Kurata, T. Ogata, A. Itoh and M. Akabori 275 (1999) 151
- Comparative study of radiation damage accumulation in Cu and Fe, M.J. Caturla, N. Soneda, E. Alonso, B.D. Wirth, T. Diaz de la Rubia and J.M. Perlado 276 (2000) 13
- The role of cascade energy and temperature in primary defect formation in iron, R.E. Stoller 276 (2000) 22
- Dislocation loop structure, energy and mobility of self-interstitial atom clusters in bcc iron, B.D. Wirth, G.R. Odette, D. Maroudas and G.E. Lucas 276 (2000) 33
- Stability and mobility of defect clusters and dislocation loops in metals, Yu.N. Osetsky, D.J. Bacon, A. Serra, B.N. Singh and S.I. Golubov 276 (2000) 65

- Computer simulation of fundamental behaviors of interstitial clusters in Fe and Ni, E. Kuramoto 276 (2000) 143
- Comparison between radiation effects in some fcc and bcc metals irradiated with energetic heavy ions – a review, A. Iwase and S. Ishino 276 (2000) 178
- Interactions between mobile dislocation loops in Cu and α -Fe, Yu.N. Osetsky, A. Serra and V. Priego 276 (2000) 202
- Computer simulation of SIA migration in bcc and hcp metals, R.C. Pasianot, A.M. Monti, G. Simonelli and E.J. Savino 276 (2000) 230
- Study of defect annealing behaviour in neutron irradiated Cu and Fe using positron annihilation and electrical conductivity, M. Eldrup and B.N. Singh 276 (2000) 269
- On the validity of the cluster model to describe the evolution of Cu precipitates in FeCu alloys, S.I. Golubov, A. Serra, Yu.N. Osetsky and A.V. Barashev 277 (2000) 113
- Gamma-irradiation effect on heterogeneous short-range order in Fe+12 at.% Al alloy, L.I. Chyrko, V.I. Chyrko, E.U. Grynik, O.V. Drogayev, M.P. Krulikovska and V.I. Sugakov 279 (2000) 162
- Influence of cold work to increase swelling of pure iron irradiated in the BR-10 reactor to ~ 6 and ~ 25 dpa at ~ 400 °C, A.M. Dvoriashin, S.I. Porollo, Yu.V. Konobeev and F.A. Garner 283–287 (2000) 157
- Recovery of electrical resistivity of high-purity iron irradiated with 30 MeV electrons at 77 K, H. Abe and E. Kuramoto 283–287 (2000) 174
- Defect structures introduced in iron under varying temperature neutron irradiation, M. Horiki, T. Yoshiie, Q. Xu, M. Iseki and M. Kiritani 283–287 (2000) 282
- Effects of helium implantation on hardness of pure iron and a reduced activation ferritic–martensitic steel, H. Tanigawa, S. Jitsukawa, A. Hishinuma, M. Ando, Y. Katoh, A. Kohyama and T. Iwai 283–287 (2000) 470
- Statistical analysis of a library of molecular dynamics cascade simulations in iron at 100 K, R.E. Stoller and A.F. Calder 283–287 (2000) 746
- Comparative study of damage accumulation in iron under magnetic and inertial fusion conditions, E. Alonso, M.J. Caturla, T. Diaz de la Rubia, N. Soneda, J. Marian, J.M. Perlado and R.E. Stoller 283–287 (2000) 768
- Computer simulation of defects interacting with a dislocation in Fe and Ni, E. Kuramoto, K. Ohsawa and T. Tsutsumi 283–287 (2000) 778
- Study of loop–loop and loop–edge dislocation interactions in bcc iron, Yu.N. Osetsky, D.J. Bacon, F. Gao, A. Serra and B.N. Singh 283–287 (2000) 784
- Positron-lifetime study of electrically hydrogen charged Ni, austenitic stainless steel and Fe, H. Ohkubo, S. Sugiyama, K. Fukuzato, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 858
- Accelerated helium and hydrogen production in ^{54}Fe doped alloys – measurements and calculations for the FIST experiment, L.R. Greenwood, B.M. Oliver, S. Ohnuki, K. Shiba, Y. Kohno, A. Kohyama, J.P. Robertson, J.W. Meadows and D.S. Gelles 283–287 (2000) 1438
- Atomic displacement cascade distributions in iron, A. Souidi, M. Hou, C.S. Becquart and C. Domain 295 (2001) 179
- Effects of phosphorus on defects accumulation and annealing in electron-irradiated Fe–Ni austenitic alloys, V.L. Arbutov, A.P. Druzhkov and S.E. Danilov 295 (2001) 273
- Hardening of Fe–Cu alloys at elevated temperatures by electron and neutron irradiations, T. Tobita, M. Suzuki, A. Iwase and K. Aizawa 299 (2001) 267
- High temperature application of EDTA solvents for iron oxide removal, D.H. Hur, E.H. Lee, M.S. Choi, H.S. Chung and U.C. Kim 299 (2001) 271
- Irradiation** (*not listed elsewhere, includes Irradiation History or Schedule*)
- TRANS_MU computer code for computation of transmutant formation kinetics in advanced structural materials for fusion reactors, N.V. Markina and G.A. Shimansky 271&272 (1999) 30
- Influence of irradiation on the dislocation kinetics with allowance for the dislocation velocity distribution, N.V. Kamyshanchenko, V.V. Krasil'nikov, I.M. Nekliudov and A.A. Parkhomenko 271&272 (1999) 84
- The effect of the solute atomic size on the swelling of vanadium alloys, V.A. Borodin and A.I. Ryazanov 271&272 (1999) 270
- Neutronics aspects of a DHCE experiment, I.C. Gomes, H. Tsai and D.L. Smith 271&272 (1999) 349
- Damage production and accumulation, 271&272 (1999) 540
- Transmutation of actinides in inert-matrix fuels: fabrication studies and modelling of fuel behaviour, R.J.M.

- Konings, K. Bakker, J.G. Boshoven, H. Hein, M.E. Huntelaar and R.R. van der Laan 274 (1999) 84
- In-pile irradiation of plutonium rock-like oxide fuels with yttria stabilized zirconia or thoria, spinel and corundum, T. Yamashita, N. Nitani, H. Kanazawa, M. Magara, T. Ohmichi, H. Takano and T. Muromura 274 (1999) 98
- Toward very high burnups, a strategy for plutonium utilization in pressurized water reactors, J. Porta and J.-Y. Doriath 274 (1999) 153
- Study by acoustic microscopy of irradiated and non-irradiated uranium dioxide, V. Roque, D. Baron, J. Bourgoïn and J.M. Saurel 275 (1999) 305
- Defect accumulation behaviour in hcp metals and alloys, C.H. Woo 276 (2000) 90
- Computer simulation of fundamental behaviors of interstitial clusters in Fe and Ni, E. Kuramoto 276 (2000) 143
- 3D dislocation dynamics: stress-strain behavior and hardening mechanisms in fcc and bcc metals, H.M. Zbib, T. Díaz de la Rubia, M. Rhee and J.P. Hirth 276 (2000) 154
- Analysis of displacement cascades and threshold displacement energies in β -SiC, J.M. Perlado, L. Malerba, A. Sánchez-Rubio and T. Díaz de la Rubia 276 (2000) 235
- Basic aspects of differences in irradiation effects between fcc, bcc and hcp metals and alloys, A. Almazouzi, T. Díaz de la Rubia, B.N. Singh and M. Victoria 276 (2000) 295
- Influence of irradiation on K_{ISCC} of Zr-1%Nb claddings, Y.K. Bibilashvili, A.V. Medvedev, B.I. Nesterov, V.V. Novikov, V.N. Golovanov, S.G. Eremin and A.D. Yurtchenko 280 (2000) 106
- International strategy for fusion materials development, K. Ehrlich, E.E. Bloom and T. Kondo 283–287 (2000) 79
- Study of He-bubble growth in α -particle implanted F82H-mod martensitic steel, R. Coppola, M. Magnani, R.P. May, A. Möslang and M. Valli 283–287 (2000) 183
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- The effects of irradiation and testing temperature on tensile behaviour of stainless steels, C. Bailat, A. Almazouzi, N. Baluc, R. Schäublin, F. Gröschel and M. Victoria 283–287 (2000) 446
- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- Comparative study of damage accumulation in iron under magnetic and inertial fusion conditions, E. Alonso, M.J. Caturla, T. Díaz de la Rubia, N. Soneda, J. Marian, J.M. Perlado and R.E. Stoller 283–287 (2000) 768
- Molecular dynamics simulation of defect production in irradiated β -SiC, L. Malerba, J.M. Perlado, A. Sánchez-Rubio, I. Pastor, L. Colombo and T. Díaz de la Rubia 283–287 (2000) 794
- The interaction of deuterium and tritium with radiation and other defects in austenitic steel and nickel, V.L. Arbuzov, G.A. Raspopova, S.E. Danilov, A.P. Druzhkov and Yu.N. Zouev 283–287 (2000) 849
- Hydrogen permeation through vanadium alloy V-4Cr-4Ti 'in situ' of reactor irradiation, T.V. Kulsartov, V.P. Shestakov, I.L. Tazhibaeva and E.A. Kenzhin 283–287 (2000) 872
- In-beam dielectric properties of alumina at low frequencies, R. Vila and E.R. Hodgson 283–287 (2000) 903
- Radiation-induced processes and their influence on the functional properties of dielectrics for different types of irradiation, V.A. Stepanov and V.M. Chernov 283–287 (2000) 932
- Mechanical properties of the ITER central solenoid model coil insulation under static and dynamic load after reactor irradiation, K. Humer, P. Rosenkranz, H.W. Weber, P.E. Fabian and J.A. Rice 283–287 (2000) 973
- Neutron irradiation hardening of ODS alloy tested by miniature disk bend test method, C.Q. Chen, J.G. Sun and Y.C. Xu 283–287 (2000) 1011
- Development of a small specimen test machine to evaluate irradiation embrittlement of fusion reactor materials, T. Ishii, M. Ohmi, J. Saito, T. Hoshiya, N. Ooka, S. Jitsukawa and M. Eto 283–287 (2000) 1023
- In-pile tritium-permeation measurements on T91 tubes with double walls or a Fe-Al/Al₂O₃ coating, R. Conrad, K. Bakker, C. Chabrol, M.A. Fütterer, J.G. van der Laan, E. Rigal and M.P. Stijkel 283–287 (2000) 1351
- Post-irradiation examinations of Li₄SiO₄ pebbles irradiated in the EXOTIC-7 experiment, G. Piazza, F. Scaffidi-Argentina and H. Werle 283–287 (2000) 1396

- Materials and fabrication technology of modules intended for irradiation tests of blanket tritium-breeding zones in Russian fusion reactor projects, V. Kapychev, D. Davydov, V. Gorokhov, A. Ioltukhovskiy, Yu. Kazennov, V. Tebus, V. Frolov, A. Shikov, N. Shishkov, V. Kovalenko, N. Shishkin and Yu. Strebkov 283–287 (2000) 1429
- Molecular dynamics simulation of irradiation-induced amorphization of cubic silicon carbide, L. Malerba and J.M. Perlado 289 (2001) 57
- Hydrogen recycling study by Balmer lines emissions in linear plasma machine TPE, K. Shimada, T. Tanabe, R. Causey, T. Venhaus and K. Okuno 290–293 (2001) 478
- Migration behaviour of iodine in nuclear fuel, W.H. Hocking, R.A. Verrall and I.J. Muir 294 (2001) 45
- The role of Cu in displacement cascades examined by molecular dynamics, C.S. Becquart, C. Domain, J.C. van Duysen and J.M. Raulot 294 (2001) 274
- MEGAPIE, a 1 MW pilot experiment for a liquid metal spallation target, G.S. Bauer, M. Salvatores and G. Heuser 296 (2001) 17
- Status of the first SINQ irradiation experiment, STIP-I, Y. Dai and G.S. Bauer 296 (2001) 43
- Radiation damage to the 316 stainless steel target container vessel at SNS, M.H. Barnett, M.S. Wechsler, D.J. Dudziak, L.K. Mansur and B.D. Murphy 296 (2001) 54
- Joining (include Welding, Brazing, Soldering)**
- Be–Cu joints based on amorphous alloy brazing for divertor and first wall application, B. Kalin, V. Fedotov, O. Sevryukov, A. Plyushev, I. Mazul, A. Gervash and R. Giniatulin 271&272 (1999) 410
- ITER Materials R&D Data Bank, S. Tanaka, R. Matera, G. Kalinin, V. Barabash and K. Mohri 271&272 (1999) 478
- Common technologies and knowledge sharing, J.W. Davis, T. Kondo, G.R. Odette, P. Fenici and T. Kusanagi 271&272 (1999) 553
- A comparative evaluation of welding consumables for dissimilar welds between 316LN austenitic stainless steel and Alloy 800, M. Sireesha, S.K. Albert, V. Shankar and S. Sundaresan 279 (2000) 65
- Mechanisms and kinetics of tempering in weldments of 9Cr–1Mo steel, M. Vijayalakshmi, S. Saroja, R. Mythili, V. Thomas Paul and V.S. Raghunathan 279 (2000) 293
- Evaluation of hot isostatic pressing for joining of fusion reactor structural components, A.D. Ivanov, S. Sato and G. Le Marois 283–287 (2000) 35
- Neutron-irradiation effects on high heat flux components – examination of plasma-facing materials and their joints, M. Rödiger, R. Conrad, H. Derz, R. Duwe, J. Linke, A. Lodato, M. Merola, G. Pott, G. Vieider and B. Wiechers 283–287 (2000) 1161
- Diffusion welding parameters and mechanical properties of martensitic chromium steels, K. Schleisiek, T. Lechler, L. Schäfer and P. Weimar 283–287 (2000) 1196
- The effect of laser welding process parameters on the mechanical and microstructural properties of V–4Cr–4Ti structural materials, C.B. Reed, K. Natesan, Z. Xu and D.L. Smith 283–287 (2000) 1206
- Re-weldability tests of irradiated austenitic stainless steel by a TIG welding method, K. Tsuchiya, H. Kawamura and G. Kalinin 283–287 (2000) 1210
- Furnace brazing type 304 stainless steel to vanadium alloy (V–5Cr–5Ti), R.V. Steward, M.L. Grossbeck, B.A. Chin, H.A. Aglan and Y. Gan 283–287 (2000) 1224
- Effects of heat treatments on microstructure changes in the interface of Cu/SS316L joint materials, Q. Xu, D.J. Edwards and T. Yoshiie 283–287 (2000) 1229
- Low cycle fatigue strength of diffusion bonded joints of alumina dispersion-strengthened copper to stainless steel, H. Nishi and T. Araki 283–287 (2000) 1234
- Effect of neutron irradiation on mechanical properties of Cu/SS joints after single and multiple HIP cycles, S. Tähtinen, B.N. Singh and P. Toft 283–287 (2000) 1238
- High temperature residual strain measurements in a brazed sample for NET/ITER, R. Coppola, C. Nardi and B. Riccardi 283–287 (2000) 1243
- Armor and heat sink materials joining technologies development for ITER plasma facing components, V. Barabash, M. Akiba, A. Cardella, I. Mazul, B.C. Odegard Jr., L. Plöchl, R. Tivey and G. Vieider 283–287 (2000) 1248
- Refractory metal joining for first wall applications, C.H. Cadden and B.C. Odegard Jr. 283–287 (2000) 1253
- Joining of silicon carbide composites for fusion energy applications, C.A. Lewinsohn, M. Singh, T. Shibayama, T. Hinoki, M. Ando, Y. Katoh and A. Kohyama 283–287 (2000) 1258
- Microstructure and mechanical properties of low-activation glass-ceramic joining and coating for SiC/SiC

- composites, Y. Katoh, M. Kotani, A. Kohyama, M. Montorsi, M. Salvo and M. Ferraris 283–287 (2000) 1262
- A fracture mechanics analysis of the PWR nuclear power plant reactor pressure vessel beltline weld, L.-j. Young 288 (2001) 197
- Diffusion reaction between Zr–2.5 wt% Nb alloy and martensitic grade 403 stainless steel, K. Bhanumurthy, R.V. Patil, D. Srivatsava, P.S. Gawde and G.B. Kale 297 (2001) 220
- Analysis of singular interface stresses in dissimilar material joints for plasma facing components, J.H. You and H. Bolt 299 (2001) 1
- Fracture behavior of heat-affected zone in low alloy steels, J.H. Kim, Y.J. Oh, I.S. Hwang, D.J. Kim and J.T. Kim 299 (2001) 132
- Kinetics**
- Dynamical process of defect clustering in Ni under the irradiation with low energy helium ions, K. Ono, K. Arakawa and N. Yoshida 271&272 (1999) 214
- Atomic mechanisms and energetics of thermally activated processes of helium redistribution in vanadium, V.M. Chernov, V.A. Romanov and A.O. Krutskikh 271&272 (1999) 274
- Kinetic Monte Carlo studies of the effects of Burgers vector changes on the reaction kinetics of one-dimensionally gliding interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 276 (2000) 59
- Monte Carlo modelling of damage accumulation in metals under cascade irradiation, A.V. Barashev, D.J. Bacon and S.I. Golubov 276 (2000) 243
- Oxidation kinetic changes of UO₂ by additive addition and irradiation, G.-S. You, K.-S. Kim, D.-K. Min and S.-G. Ro 277 (2000) 325
- Temperature programmed decomposition of thorium nitrate pentahydrate, S. Dash, M. Kamruddin, P.K. Ajikumar, A.K. Tyagi, B. Raj, S. Bera and S.V. Narasimhan 278 (2000) 173
- A reaction–diffusion analysis of the hydriding kinetics of zirconium-based alloys, G.E. Fernández and G. Meyer 279 (2000) 167
- Effects of Sn and Nb on massive hydriding kinetics of Zr–XSn–YNb alloy, Y.-s. Kim, S.-k. Kim, J.-g. Bang and Y.-h. Jung 279 (2000) 335
- Studies on the kinetics of oxidation of urania–thoria solid solutions in air, S. Anthonysamy, K. Joseph, T. Gnana-sekaran and P.R. Vasudeva Rao 280 (2000) 25
- Li₄SiO₄ pebbles reduction in He + 0.1% H₂ purge gas and effects on tritium release properties, C. Alvani, P. Carconi and S. Casadio 280 (2000) 372
- Kinetic and thermodynamic study of the thorium phosphate–diphosphate dissolution, A.C. Thomas, N. Dacheux, P. Le Coustumer, V. Brandel and M. Genet 281 (2000) 91
- Passivation of uranium towards air corrosion by N₂⁺ and C⁺ ion implantation, R. Arkush, M.H. Mintz and N. Shamir 281 (2000) 182
- Effect of partial damage efficiencies on the radiation-induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 282 (2000) 47
- Kinetics of gas bubble ensemble in supersaturated solid solution of point defects and gas atoms, R.E. Voskoboinikov and A.E. Volkov 282 (2000) 66
- Progress in modelling the microstructural evolution in metals under cascade damage conditions, H. Trinkaus, B.N. Singh and S.I. Golubov 283–287 (2000) 89
- Comparison of a microstructure evolution model with experiments on irradiated vanadium, S. Sharafat and N.M. Ghoniem 283–287 (2000) 789
- Radiation-induced processes and their influence on the functional properties of dielectrics for different types of irradiation, V.A. Stepanov and V.M. Chernov 283–287 (2000) 932
- Accumulation and recovery of disorder on silicon and carbon sublattices in ion-irradiated 6H–SiC, W. Jiang, W.J. Weber, S. Thevuthasan and V. Shutthanandan 289 (2001) 96
- Kinetics of uranium release from Synroc phases, Y. Zhang, K.P. Hart, W.L. Bourcier, R.A. Day, M. Colella, B. Thomas, Z. Aly and A. Jostsons 289 (2001) 254
- Isotope effects in thermal release of H and D implanted into WC layers on graphite, T. Horikawa, K. Morita and B. Tsuchiya 290–293 (2001) 428
- Kinetic simulation of a source dominated plasma–wall interaction in an oblique magnetic field, D. Sharma and H. Ramachandran 290–293 (2001) 725
- Numerical study of plasma–wall transition in an oblique magnetic field, F. Valsaque and G. Manfredi 290–293 (2001) 763
- Spectral profile analysis of the D α line in the divertor region of Tore-Supra, A. Escarguel, R. Guirlet, A. Azéroual, B. Pégourié, J. Gunn, T. Loarer, H. Capes, Y. Corre, C. DeMichelis, L. Godbert-Mouret, M. Koubiti, M. Mattioli and R. Stamm 290–293 (2001) 854
- Macroscopic erosion of plasma facing and nearby components during

- plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Heat and particle fluxes from collisionless scrape-off-layer during tokamak plasma disruptions, A. Hassanein, I. Konkashbaev and L. Nikandrov 290–293 (2001) 1079
- Pore migration in UO₂ and grain growth kinetics, L. Bourgeois, Ph. Dehault, C. Lemaignan and J.P. Fredric 295 (2001) 73
- SON 68 nuclear glass alteration kinetics between pH 7 and pH 11.5, S. Gin and J.P. Mestre 295 (2001) 83
- The effects of moisture on LiD single crystals studied by temperature-programmed decomposition, L.N. Dinh, C.M. Cecala, J.H. Leckey and M. Balooch 295 (2001) 193
- Kinetic and thermodynamic studies of the dissolution of thorium–uranium (IV) phosphate–diphosphate solid solutions, A.C. Thomas, N. Dacheux, P. Le Coustumer, V. Brandel and M. Genet 295 (2001) 249
- Temperature programmed decomposition of thorium oxalate hexahydrate, S. Dash, R. Krishnan, M. Kamrudin, A.K. Tyagi and B. Raj 295 (2001) 281
- Kinetics of gas phase oxygen control system (OCS) for stagnant and flowing Pb–Bi Systems, C.H. Lefhalm, J.U. Knebel and K.J. Mack 296 (2001) 301
- Influence of the precursor and the calcination temperature on the dissolution of thorium dioxide, S. Hubert, K. Barthelet, B. Fourest, G. Lagarde, N. Dacheux and N. Baglan 297 (2001) 206
- A kinetic model for corrosion and precipitation in non-isothermal LBE flow loop, B.N. He, N. Li and M. Mineev 297 (2001) 214
- Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling, E. Vernaz, S. Gin, C. Jégou and I. Ribet 298 (2001) 27
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- First-order dissolution rate law and the role of surface layers in glass performance assessment, B. Grambow and R. Müller 298 (2001) 112
- Release of boron and cesium or uranium from simulated borosilicate waste glasses through a compacted Ca-bentonite layer, K.S. Chun, S.S. Kim and C.H. Kang 298 (2001) 150
- Application of electrochemical impedance spectroscopy (EIS) for in situ study of glass alteration, D. Chaulet, S. Martemianov, J.H. Thomassin and P. Le Coustumer 298 (2001) 192
- In-depth distributions of elements in leached layers on two HLW waste glasses after burial in clay; step-scan by SIMS, A. Lodding and P. Van Iseghem 298 (2001) 197
- In situ characterization of Zircaloy-4 oxidation at 500 °C in dry air, J.J. Vermoyal, L. Dessemond, A. Hammou and A. Frichet 298 (2001) 297
- A working hypothesis on oxidation kinetics of Zircaloy, H.-I. Yoo, B.-J. Koo, J.-O. Hong, I.-S. Hwang and Y.-H. Jeong 299 (2001) 235
- Laser**
- Selective excitation of odd gadolinium isotopes using two-colour photo-ionisation schemes, P.V. Kiran Kumar, M.V. Suryanarayana and S. Gangadharan 282 (2000) 255
- Effect of helium to dpa ratio on fatigue behavior of austenitic stainless steel irradiated to 2 dpa, I. Ioka, M. Yonekawa, Y. Miwa, H. Mimura, H. Tsuji and T. Hoshiya 283–287 (2000) 440
- KU1 quartz glass for remote handling and LIDAR diagnostic optical transmission systems, M. García-Matos, A. Moróño and E.R. Hodgson 283–287 (2000) 890
- Radiation effects on laser damage in KU1 quartz glass, P. Martin, A. Moróño and E.R. Hodgson 283–287 (2000) 894
- Application of a new thermochemical measurement method for nuclear materials at temperatures beyond 3000 K, J.W. Hastie, D.W. Bonnell and P.K. Schenck 294 (2001) 175
- Limiter Materials**
- Strengthening, loss of strength and embrittlement of beryllium under high temperature neutron irradiation, G.A. Sernyaev, A.V. Kozlov and V.R. Barabash 271&272 (1999) 123
- MARFE phenomena in the HT-7 tokamak, X. Gao, J.R. Luo, Y.P. Zhao, N. Qiu, Y.X. Jie, Y. Yang, C.Y. Xia, B.N. Wan, G.L. Kuang, X.D. Zhang, J.G. Li, F.X. Yin, X.N. Liu, X.Z. Gong, S.Y. Zhang, J.Y. Zhao, L.Q.

- Hu, Z.W. Wu, Y.D. Li, K. Yang, Y. Bao, W.W. Ye, L. Chen, H.Y. Fan, S.X. Liu, Y.F. Chen, B.L. Lin, Y.H. Xu, Y.J. Shi, M. Song, X.M. Zhang, M.S. Wei, M. Zeng, A.G. Xie, N.Z. Cui, H.L. Ruan, L. Wang, B. Sheng, S. Liu, X.D. Tong, X.M. Gu, J.S. Mao, J.K. Xie and Y.X. Wan 279 (2000) 330
- Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161
- Surface tension enhancement of TRIM sputtering yields for liquid metal targets, A. Grossman, R.P. Doerner and S. Luckhardt 290–293 (2001) 80
- Dust characterization and analysis in Tore-Supra, Ph. Chappuis, E. Tsitrone, M. Mayne, X. Armand, H. Linke, H. Bolt, D. Petti and J.P. Sharpe 290–293 (2001) 245
- Erosion and outgassing behavior of TiN-coated plasma facing components of the Uragan-3M torsatron, G.P. Glazunov, E.D. Volkov, V.P. Veremeyenko, N.A. Kosik, A.A. Kutsyn, J. Langner, E. Langner, Yu.K. Mironov, N.I. Nazarov, J. Piekoszewski, M. Sadowski, J. Stanislawski and V.I. Tereshin 290–293 (2001) 266
- Comparison of impurity production, recycling and power deposition on carbon and tungsten limiters in TEXTOR-94, A. Huber, V. Philipps, A. Pospieszczyk, A. Kirschner, M. Lehnen, T. Ohgo, K. Ohya, M. Rubel, B. Schweer, J. von Seggern, G. Sergienko, T. Tanabe and M. Wada 290–293 (2001) 276
- Detection of sputtered and evaporated carbon aggregates: relative and absolute electron ionization fragmentation yields, C. Mair, H. Deutsch, K. Becker, T.D. Märk and E. Vietzke 290–293 (2001) 291
- Detailed structure analysis of deposit layer in TEXTOR by means of TEM techniques, S. Muto, N. Yokoya and T. Tanabe 290–293 (2001) 295
- Local emission and core concentration of tungsten in TEXTOR-94 plasmas operated with tungsten test and poloidal limiters, M. Wada, T. Ohgo, A. Pospieszczyk, A. Huber, G. Sergienko, T. Tanabe, W. Biel, K. Kondo, K. Ohya, V. Philipps, G. Bertschinger, J. Rapp, B. Schweer and N. Noda 290–293 (2001) 768
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M. Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- Self-shadowing, gaps and leading edges on Tore Supra's inner first wall, R. Mitteau, Ph. Chappuis, Ph. Ghendrih, A. Grosman, D. Guilhem, J. Gunn, J. Hogan, M. Lipa, G. Martin, J. Schlosser and E. Tsitrone 290–293 (2001) 1036
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- A study on martensitic and austenitic steels after exposure in mercury at 573 K up to 5000 h, R.Kh. Zalavutdinov, Y. Dai, A.E. Gorodetsky, G.S. Bauer, V.Kh. Alimov and A.P. Zakharov 296 (2001) 219
- Liquid Metals**
- Calculation and experimental investigation of fusion reactor divertor plate and first wall protection by capillary-pore systems with lithium, V.A. Evtikhin, I.E. Lyublinski, A.V. Vertkov, V.G. Belan, I.K. Konkashbaev and L.B. Nikandrov 271&272 (1999) 396
- Properties of lithium metatitanate pebbles produced by a wet process, J.G. van der Laan and R.P. Muis 271&272 (1999) 401
- The use of liquid metals in porous materials for divertor applications, L.I. Ivanov, S.A. Maslyaev, V.N. Pimenov, E.V. Dyomina and Yu.M. Platov 271&272 (1999) 405
- Thermochemistry of binary Na–NaH and ternary Na–O–H systems and the kinetics of reaction of hydrogen/water with liquid sodium – a review, T. Gnanasekaran 274 (1999) 252
- Systematics of the thermodynamic properties of trivalent f-elements in a pyrometallurgical bi-phase extraction system, H. Yamana, N. Wakayama, N. Souda and H. Moriyama 278 (2000) 37
- Investigation on oxygen controlled liquid lead corrosion of surface treated steels, G. Müller, G. Schumacher and F. Zimmermann 278 (2000) 85
- Behaviour of materials for accelerator driven systems in stagnant molten lead, G. Benamati, P. Buttol, V. Imbeni, C. Martini and G. Palombarini 279 (2000) 308
- Corrosion behaviour of low activation steels in flowing Pb–17Li, H. Glasbrenner, J. Konys and Z. Voß 281 (2000) 225
- Magnetic field effect on deposition of corrosion products in liquid Pb–17Li, F. Barbier 283–287 (2000) 1267

- The hydrogen permeation behaviour of aluminised coated martensitic steels under gaseous hydrogen, liquid Pb–17Li/hydrogen and cyclic tensile load, T. Sample, A. Perujo, H. Kolbe and B. Mancinelli 283–287 (2000) 1272
- Development of electrically insulating coatings for service in a lithium environment, K. Natesan, M. Uz and S. Wieder 283–287 (2000) 1277
- Corrosion of V–Ti–Cr alloys in liquid lithium: influence of alloy composition and concentration of nitrogen in lithium, O.I. Eliseeva, V.N. Fedirko, V.M. Chernov and L.P. Zaviatsky 283–287 (2000) 1282
- Compatibility of AlN with liquid lithium, T. Terai, A. Suzuki, T. Yoneoka and T. Mitsuyama 283–287 (2000) 1322
- Compatibility of structural candidate materials with LiF–BeF₂ molten salt mixture, H. Nishimura, T. Terai, T. Yoneoka, S. Tanaka, A. Sagara and O. Motojima 283–287 (2000) 1326
- Corrosion of ferritic–martensitic steels in the eutectic Pb–17Li, H. Glasbrenner, J. Konys, H.D. Röhrig, K. Stein-Fechner and Z. Voss 283–287 (2000) 1332
- Liquid metal embrittlement (LME) susceptibility of the 8–9% Cr martensitic steels F82H-mod., OPTIFER IVb and their simulated welded structures in liquid Pb–17Li, T. Sample and H. Kolbe 283–287 (2000) 1336
- Multiplier, moderator, and reflector materials for advanced lithium–vanadium fusion blankets, Y. Gohar and D.L. Smith 283–287 (2000) 1370
- On the use of tin–lithium alloys as breeder material for blankets of fusion power plants, M.A. Fütterer, G. Aiello, F. Barbier, L. Giancarli, Y. Poitevin, P. Sardain, J. Szczeplanski, A. Li Puma, G. Ruvutuso and G. Vella 283–287 (2000) 1375
- Waste management for different fusion reactor designs, P. Rocco and M. Zucchetti 283–287 (2000) 1473
- Long-term stability of ceramics in liquid lithium, B.A. Pint, L.D. Chitwood and J.R. Di Stefano 289 (2001) 52
- D, He and Li sputtering of liquid eutectic Sn–Li, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 33
- Surface tension enhancement of TRIM sputtering yields for liquid metal targets, A. Grossman, R.P. Doerner and S. Luckhardt 290–293 (2001) 80
- Measurements and modeling of D, He and Li sputtering of liquid lithium, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 180
- Erosion/redeposition analysis of lithium-based liquid surface divertors, J.N. Brooks, T.D. Rognlien, D.N. Ruzic and J.P. Allain 290–293 (2001) 185
- Interactions between liquid-wall vapor and edge plasmas, T.D. Rognlien and M.E. Rensink 290–293 (2001) 312
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Thermodynamic study of liquid lithium–lead alloys using the EMF method, W. Gasior and Z. Moser 294 (2001) 77
- Thermodynamic properties of lanthanide metals in liquid bismuth, H. Yamana, J. Sheng, N. Souda and H. Moriyama 294 (2001) 232
- Compatibility tests of steels in flowing liquid lead–bismuth, F. Barbier, G. Benamati, C. Fazio and A. Rusanov 295 (2001) 149
- R&D for the Spallation Neutron Source mercury target, L.K. Mansur, T.A. Gabriel, J.R. Haines and D.C. Lous-teau 296 (2001) 1
- MEGAPIE, a 1 MW pilot experiment for a liquid metal spallation target, G.S. Bauer, M. Salvatores and G. Heu-sener 296 (2001) 17
- Thermal gradient mass transfer of type 316L stainless steel and alloy 718 in flowing mercury, S.J. Pawel, J.R. DiStefano and E.T. Manneschmidt 296 (2001) 210
- The effect of mercury on the fatigue behavior of 316 LN stainless steel, J.P. Strizak, J.R. DiStefano, P.K. Liaw and H. Tian 296 (2001) 225
- Corrosion behavior of steels in flowing lead–bismuth, F. Barbier and A. Rusanov 296 (2001) 231
- Corrosion investigations of steels in flowing lead at 400 °C and 550 °C, H. Glasbrenner, J. Konys, G. Mueller and A. Rusanov 296 (2001) 237
- Compatibility tests on steels in molten lead and lead–bismuth, C. Fazio, G. Benamati, C. Martini and G. Pal-lombarini 296 (2001) 243
- Evaluation of the mechanical properties of T91 steel exposed to Pb and Pb–Bi at high temperature in controlled environment, B. Schmidt, S. Guerin, J.-L. Pastol, P. Plaindoux, J.-P. Dallas, C. Leroux and D. Gorse 296 (2001) 249
- Embrittlement of the martensitic steel 91 tested in liquid lead, G. Nicaise, A. Legris, J.B. Vogt and J. Foct 296 (2001) 256
- Behaviour of F82H mod. stainless steel in lead–bismuth under temperature gradient, D. Gómez Briceño, F.J. Mar-

- tin, L. Soler Cespo, F. Esteban and C. Torres 296 (2001) 265
 Short-term static corrosion tests in lead–bismuth, L. Soler Cespo, F.J. Martín Muñoz and D. Gómez Briceño 296 (2001) 273
 Intergranular penetration and embrittlement of solid nickel through bismuth vapour condensation at 700 °C, N. Marié, K. Wolski and M. Biscondi 296 (2001) 282
 Development of oxygen meters for the use in lead–bismuth, J. Konys, H. Muscher, Z. Voß and O. Wedemeyer 296 (2001) 289
 Experimental setup for steel corrosion characterization in lead bath, V. Ghetta, F. Gamaoun, J. Fouletier, M. Hénault and A. Lemoulec 296 (2001) 295
 Kinetics of gas phase oxygen control system (OCS) for stagnant and flowing Pb–Bi Systems, C.H. Lefhalm, J.U. Knebel and K.J. Mack 296 (2001) 301
 A kinetic model for corrosion and precipitation in non-isothermal LBE flow loop, B.X. He, N. Li and M. Mineev 297 (2001) 214
 Gibbs free energy of formation of liquid lanthanide–bismuth alloys, J. Sheng, H. Yamana and H. Moriyama 299 (2001) 264
 Active control of oxygen in molten lead–bismuth eutectic systems to prevent steel corrosion and coolant contamination, N. Li 300 (2002) 73
- Low Activation Materials (includes Reduced Activation)**
 The influence of helium co-implantation on ion-induced hardening of low activation ferritic steel evaluated by micro-indentation technique, Y. Kato, H. Tanigawa, T. Muroga, T. Iwai and A. Kohyama 271&272 (1999) 115
 Mechanical property changes of low activation ferritic/martensitic steels after neutron irradiation, Y. Kohno, A. Kohyama, T. Hirose, M.L. Hamilton and M. Narui 271&272 (1999) 145
 Mechanical properties and microstructure of advanced ferritic–martensitic steels used under high dose neutron irradiation, V.K. Shamardin, V.N. Golovanov, T.M. Bulanova, A.V. Povstianko, A.E. Fedoseev, Yu.D. Goncharenko and Z.E. Ostrovsky 271&272 (1999) 155
 Irradiation hardening of V–4Cr–4Ti, E.V. van Osch and M.I. de Vries 271&272 (1999) 162
 Effects of varying temperature irradiation on the neutron irradiation hardening of reduced-activation 9Cr–2W martensitic steels, R. Kasada, A. Kimura, H. Matsui, M. Hasegawa and M. Narui 271&272 (1999) 360
 Microstructural evolution in vanadium irradiated during ion irradiation at constant and varying temperature, K. Ochiai, H. Watanabe, T. Muroga, N. Yoshida and H. Matsui 271&272 (1999) 376
 Tensile and impact behaviour of BATMAN II steels, Ti-bearing reduced activation martensitic alloys, G. Filacchioni, E. Casagrande, U. De Angelis, G. De Santis, D. Ferrara and L. Pilloni 271&272 (1999) 445
 Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels, R. Lindau, A. Möslang, D. Preininger, M. Rieth and H.D. Röhrig 271&272 (1999) 450
 Low activation materials, R.H. Jones, H.L. Heinisch and K.A. McCarthy 271&272 (1999) 518
 The effect of tantalum on the mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M. Rieth 273 (1999) 146
 A new procedure of X-ray line profile analysis applied to study the dislocation structure and subgrain size-distributions in fatigued MANET steel, T. Ungár, M. Victoria, P. Marmy, P. Hanák and G. Szenes 276 (2000) 278
 Displacement energy surface in 3C and 6H SiC, R. Devanathan and W.J. Weber 278 (2000) 258
 Impurity effects on reduced-activation ferritic steels developed for fusion applications, R.L. Klueh, E.T. Cheng, M.L. Grossbeck and E.E. Bloom 280 (2000) 353
 Interactions between fusion materials R&D and other technologies, A. Kohyama, M. Seki, K. Abe, T. Muroga, H. Matsui, S. Jitsukawa and S. Matsuda 283–287 (2000) 20
 The impact of materials selection on long-term activation in fusion power plants, N.P. Taylor, C.B.A. Forty, D.A. Petti and K.A. McCarthy 283–287 (2000) 28
 Progress and critical issues of reduced activation ferritic/martensitic steel development, B. van der Schaaf, D.S. Gelles, S. Jitsukawa, A. Kimura, R.L. Klueh, A. Möslang and G.R. Odette 283–287 (2000) 52
 Critical issues and current status of vanadium alloys for fusion energy applications, R.J. Kurtz, K. Abe, V.M. Chernov, V.A. Kazakov, G.E. Lucas, H. Matsui, T. Muroga, G.R. Odette, D.L. Smith and S.J. Zinkle 283–287 (2000) 70
 Modeling of microstructure evolution and mechanical property change of reduced-activation martensitic steel during varying-temperature irradiation, R. Kasada and A. Kimura 283–287 (2000) 188

- Application of the internal friction method to studying microstructural effects in fusion materials, S. Tähtinen, Y. Jagodzinski, O. Tarasenko, S. Smuk and H. Hänninen 283–287 (2000) 255
- Microstructural changes in a low-activation Fe–Cr–Mn alloy irradiated with 92 MeV Ar ions at 450 °C, C. Zhang, K. Chen, Y. Wang, J. Sun, B. Hu, Y. Jin, M. Hou, C. Liu, Y. Sun, J. Han and C. Chen 283–287 (2000) 259
- Microstructures in Ti–Al intermetallic compounds irradiated at 673 K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer and A. Hishinuma 283–287 (2000) 273
- Role of α_2/γ and γ/γ' phase boundaries in cavity formation in a TiAl intermetallic compound irradiated with He-ions, K. Nakata, K. Fukai, A. Hishinuma and K. Ameyama 283–287 (2000) 278
- Microstructure of vanadium alloys during ion irradiation with stepwise change of temperature, H. Watanabe, T. Arinaga, K. Ochiai, T. Muroga and N. Yoshida 283–287 (2000) 286
- Swelling of F82H irradiated at 673 K up to 51 dpa in HFIR, Y. Miwa, E. Wakai, K. Shiba, N. Hashimoto, J.P. Robertson, A.F. Rowcliffe and A. Hishinuma 283–287 (2000) 334
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- Tensile behavior of F82H with and without spectral tailoring, K. Shiba, R.L. Klueh, Y. Miwa, J.P. Robertson and A. Hishinuma 283–287 (2000) 358
- The effect of neutron-irradiation on the shear properties of SiC/SiC composites with varied interface, T. Hinoki, L.L. Snead, Y. Katoh, A. Kohyama and R. Shinavski 283–287 (2000) 376
- Effects of helium implantation on creep rupture properties of low activation ferritic steel F82H IEA heat, N. Yamamoto, J. Nagakawa and K. Shiba 283–287 (2000) 400
- Thermal fatigue crack nucleation in ferritic–martensitic steels before and after neutron irradiation, L.A. Belyaeva, A.A. Zisman, C. Petersen, V.A. Potapova and V.V. Rybin 283–287 (2000) 461
- I.V. Gorynin, V.V. Rybin, I.P. Kursevich, A.N. Lapin, E.V. Nesterova and E.Yu. Klepikov 283–287 (2000) 465
- Effects of helium implantation on hardness of pure iron and a reduced activation ferritic–martensitic steel, H. Tanigawa, S. Jitsukawa, A. Hishinuma, M. Ando, Y. Katoh, A. Kohyama and T. Iwai 283–287 (2000) 470
- Low-temperature irradiation effects on tensile and Charpy properties of low-activation ferritic steels, K. Shiba and A. Hishinuma 283–287 (2000) 474
- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- Effect of low temperature irradiation on the mechanical properties of ternary V–Cr–Ti alloys as determined by tensile tests and shear punch tests, M.L. Hamilton and M.B. Toloczko 283–287 (2000) 488
- Defect microstructure and deformation behavior of V–Ti–Cr–Si–Al–Y alloy irradiated in ATR, T. Chuto, M. Saitou and K. Abe 283–287 (2000) 503
- Mechanical properties and microstructure in low-activation martensitic steels F82H and Optimax after 800-MeV proton irradiation, Y. Dai, S.A. Maloy, G.S. Bauer and W.F. Sommer 283–287 (2000) 513
- Diffusion and permeation of hydrogen in low-activation martensitic stainless steel – effect of irradiation, F. Schliefer, C. Liu and P. Jung 283–287 (2000) 540
- Room and high-temperature mechanical and thermal properties of SiC fiber-reinforced SiC composite sintered under pressure, K. Yoshida and T. Yano 283–287 (2000) 560
- High-performance SiC/SiC composites by improved PIP processing with new precursor polymers, A. Kohyama, M. Kotani, Y. Katoh, T. Nakayasu, M. Sato, T. Yamamura and K. Okamura 283–287 (2000) 565
- Time-dependent failure mechanisms in silicon carbide composites for fusion energy applications, C.A. Lewinsohn, G.E. Youngblood, C.H. Henager Jr., E.P. Simonen and R.H. Jones 283–287 (2000) 584
- Characterization of non-magnetic Mn–Cr steel as a low induced activation material for vacuum vessels, S. Saito, K. Fukaya, S. Ishiyama, M. Eto, I. Sato, M. Kusuhashi, T. Hatakeyama, H. Takahashi and M. Kikuchi 283–287 (2000) 593

- Thermomechanical characteristics of the low activation materials chromium and Cr-5Fe-1Y₂O₃ alloy, H. Stamm, U. Holzwarth, F. Lakestani, R. Valiev, V. Provenzano and A. Volcan 283–287 (2000) 597
- Performance of V-4Cr-4Ti alloy exposed to the JFT-2M tokamak environment, W.R. Johnson, P.W. Trester, S. Sengoku, S. Ishiyama, K. Fukaya, M. Eto, T. Oda, Y. Hirohata, T. Hino and H. Tsai 283–287 (2000) 622
- Development of an oxide dispersion strengthened, reduced-activation steel for fusion energy, G.R. Romanoski, L.L. Snead, R.L. Klueh and D.T. Hoelzer 283–287 (2000) 642
- Material science and manufacturing of heat-resistant reduced-activation ferritic–martensitic steels for fusion, A.G. Ioltukhovskiy, A.I. Blokhin, N.I. Budylnin, V.M. Chernov, M.V. Leont'eva-Smirnova, E.G. Mironova, E.A. Medvedeva, M.I. Solonin, S.I. Porollo and L.P. Zavyalsky 283–287 (2000) 652
- Mechanical properties of 8Cr–2WVTa steel aged for 30000 h, M. Tamura, K. Shinozuka, H. Esaka, S. Sugimoto, K. Ishizawa and K. Masamura 283–287 (2000) 667
- Effect of thermal aging on the microstructure and mechanical properties of 7–11 CrW steels, Y. de Carlan, A. Alamo, M.H. Mathon, G. Geoffroy and A. Castaing 283–287 (2000) 672
- Low cycle fatigue properties of a low activation ferritic steel (JLF-1) at room temperature, A. Nishimura, T. Nagasaka, N. Inoue, T. Muroga and C. Namba 283–287 (2000) 677
- Ripple reduction and surface coating tests with ferritic steel on JFT-2M, K. Tsuzuki, M. Sato, H. Kawashima, Y. Miura, H. Kimura, T. Abe, K. Uehara, T. Ogawa, T. Akiyama, T. Shibata, M. Yamamoto and T. Koike 283–287 (2000) 681
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- Tensile and impact behavior of the reduced-activation steels OPTIFER and F82H mod, L. Schäfer 283–287 (2000) 707
- Constitutive behavior and fracture toughness properties of the F82H ferritic/martensitic steel, P. Spätig, G.R. Odette, E. Donahue and G.E. Lucas 283–287 (2000) 721
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- Recovery and recrystallization behavior of vanadium at various controlled nitrogen and oxygen levels, T. Nagasaka, H. Takahashi, T. Muroga, T. Tanabe and H. Matsui 283–287 (2000) 816
- Annealing behavior of irradiation hardening and microstructure in helium-implanted reduced activation martensitic steel, A. Kimura, R. Kasada, R. Sugano, A. Hasegawa and H. Matsui 283–287 (2000) 827
- Fatigue behavior and development of microcracks in F82H after helium implantation at 200 °C, J. Bertsch, S. Meyer and A. Möslang 283–287 (2000) 832
- Permeation of hydrogen through vanadium under helium ion irradiation, Y. Hatano, Y. Nanjo, R. Hayakawa and K. Watanabe 283–287 (2000) 868
- Effect of specimen size on fatigue properties of reduced activation ferritic/martensitic steels, T. Hirose, H. Sakasegawa, A. Kohyama, Y. Katoh and H. Tanigawa 283–287 (2000) 1018
- Characterization of low-activation ferritic steel (JLF-1) weld joint by simulated heat-treatments, N. Inoue, T. Muroga, A. Nishimura, T. Nagasaka, O. Motojima, S. Uchida, H. Yabe, K. Oguri, Y. Nishi, Y. Katoh and A. Kohyama 283–287 (2000) 1187
- Effects of thermal aging on the mechanical behavior of F82H weldments, A. Alamo, A. Castaing, A. Fontes and P. Wident 283–287 (2000) 1192
- Post-irradiation mechanical tests on F82H EB and TIG welds, J. Rensman, E.V. van Osch, M.G. Horsten and D.S. d'Hulst 283–287 (2000) 1201
- Joining of silicon carbide composites for fusion energy applications, C.A. Lewinsohn, M. Singh, T. Shibayama, T. Hinoki, M. Ando, Y. Katoh and A. Kohyama 283–287 (2000) 1258
- Microstructure and mechanical properties of low-activation glass-ceramic joining and coating for SiC/SiC composites, Y. Katoh, M. Kotani, A. Kohyama, M. Montorsi, M. Salvo and M. Ferraris 283–287 (2000) 1262
- The hydrogen permeation behaviour of aluminised coated martensitic steels under gaseous hydrogen, liquid

- Pb–17Li/hydrogen and cyclic tensile load, T. Sample, A. Perujo, H. Kolbe and B. Mancinelli 283–287 (2000) 1272
- Oxidation and hardness profile of V–Ti–Cr–Si–Al–Y alloys, M. Fujiwara, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1311
- Liquid metal embrittlement (LME) susceptibility of the 8–9% Cr martensitic steels F82H-mod., OPTIFER IVb and their simulated welded structures in liquid Pb–17Li, T. Sample and H. Kolbe 283–287 (2000) 1336
- Measurement and analysis of radioactivity induced in steels and a vanadium alloy by 14-MeV neutrons, D. Richter, R.A. Forrest, H. Freiesleben, Va.D. Kovalchuk, Vi.D. Kovalchuk, D.V. Markovskij, K. Seidel, V.I. Tereshkin and S. Unholzer 283–287 (2000) 1434
- Compositional optimisation of silicon carbide for various fusion blanket designs, C.B.A. Forty 283–287 (2000) 1443
- Experimental study on beryllium-7 production via sequential reactions in lithium-containing compounds irradiated by 14 MeV neutrons, F. Maekawa, Y.M. Verzilov, D.L. Smith and Y. Ikeda 283–287 (2000) 1448
- Present status and future prospect of the Russian program for fusion low-activation materials, M.I. Solonin, V.M. Chernov, V.A. Gorokhov, A.G. Ioltukhovskiy, A.K. Shikov and A.I. Blokhin 283–287 (2000) 1468
- Waste management for different fusion reactor designs, P. Rocco and M. Zuchetti 283–287 (2000) 1473
- Failure mechanisms in continuous-fiber ceramic composites in fusion energy environments, C.A. Lewinsohn, C.H. Henager, G.E. Youngblood, R.H. Jones, E. Lara-Curzio and R. Scholz 289 (2001) 10
- Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers, T. Hinoki, W. Yang, T. Nozawa, T. Shibayama, Y. Katoh and A. Kohyama 289 (2001) 23
- Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC, Y. Katoh, M. Kotani, H. Kishimoto, W. Yang and A. Kohyama 289 (2001) 42
- The effect of manganese on the strain-induced martensitic transformation and high temperature wear resistance of Fe–20Cr–1C–1Si hardfacing alloy, J.-k. Kim, G.-m. Kim and S.-j. Kim 289 (2001) 263
- Effect of helium implantation on mechanical properties and microstructure evolution of reduced-activation 9Cr–2W martensitic steel, R. Kasada, T. Morimura, A. Hasegawa and A. Kimura 299 (2001) 83
- Magnesium, Magnesium Alloys and Compounds**
- Radiation effects of 200 keV and 1 MeV Ni ion on MgO single crystal, T. Mitamura, K. Kawatsura, R. Takahashi, T. Adachi, T. Igarashi, S. Arai, N. Masuda, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 15
- Wet precipitate method for mixing magnesium and uranium in preparation of $Mg_yU_{1-y}O_{2+x}$ solid solution, T. Fujino, Y. Hoshi, N. Sato and K. Yamada 275 (1999) 19
- Oxygen potential and defect structure of the solid solution, Mg–Gd– UO_2 , T. Fujino, N. Sato, K. Yamada, M. Okazaki, K. Fukuda, H. Serizawa and T. Shiratori 289 (2001) 270
- Thermodynamics of $(Mg, Ce, U) O_{2+x}$ ($x \geq 0$) solid solutions, T. Fujino, K. Park, N. Sato and M. Yamada 294 (2001) 104
- Mass-spectrometric investigation of $UO_3(g)$, K. Nakajima and Y. Arai 294 (2001) 250
- Thermodynamics of the UO_2 solid solution with magnesium and europium oxides, T. Fujino, N. Sato, K. Yamada, S. Nakama, K. Fukuda, H. Serizawa and T. Shiratori 297 (2001) 332
- Mathematical and Computational Methods**
- Neutron energy spectrum and temperature effects on freely migrating defect concentrations and grain boundary segregation in α -Fe, R.G. Faulkner, D.J. Bacon, S. Song and P.E.J. Flewitt 271&272 (1999) 1
- TRANS_MU computer code for computation of transmutant formation kinetics in advanced structural materials for fusion reactors, N.V. Markina and G.A. Shimansky 271&272 (1999) 30
- A molecular dynamics simulation study of displacement cascades in vanadium, K. Morishita and T. Diaz de la Rubia 271&272 (1999) 35
- Subcascade formation in displacement cascade simulations: Implications for fusion reactor materials, R.E. Stoller and L.R. Greenwood 271&272 (1999) 57
- MD study of the dynamic behavior of small interstitial clusters in Fe, M. Koyanagi, K. Ohsawa and E. Kuramoto 271&272 (1999) 205
- Computer simulation on the void formation in neutron-irradiated Cu and Ni at high temperature, Y. Shimomura, I. Mukouda and K. Sugio 271&272 (1999) 225

- Modeling and analysis of time-dependent tritium transport in lithium oxide, A. Badawi, A.R. Raffray and M.A. Abdou 273 (1999) 79
- Native vacancy migrations in zircon, R.E. Williford, W.J. Weber, R. Devanathan and A.N. Cormack 273 (1999) 164
- Comprehensive physical models and simulation package for plasma/material interactions during plasma instabilities, A. Hassanein and I. Konkashbaev 273 (1999) 326
- Burnup analysis of rock-like oxide fuel disks irradiated in the Japan Research Reactor No. 3, Y. Nakano, H. Akie, M. Magara and H. Takano 274 (1999) 127
- A study of actinide decay chains on the environmental effect of a geologic disposal of 'rock-like oxide' fuels and uranium-plutonium oxide fuels, H. Kimura, H. Takano and T. Muro-mura 274 (1999) 197
- The primary damage state in fcc, bcc and hcp metals as seen in molecular dynamics simulations, D.J. Bacon, F. Gao and Yu.N. Osetsky 276 (2000) 1
- Comparative study of radiation damage accumulation in Cu and Fe, M.J. Caturla, N. Soneda, E. Alonso, B.D. Wirth, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 13
- The role of cascade energy and temperature in primary defect formation in iron, R.E. Stoller 276 (2000) 22
- Dislocation loop structure, energy and mobility of self-interstitial atom clusters in bcc iron, B.D. Wirth, G.R. Odette, D. Maroudas and G.E. Lucas 276 (2000) 33
- Heavy ion irradiation and annealing of lead: atomistic simulations and experimental validation, M.-J. Caturla, M. Wall, E. Alonso, T. Díaz de la Rubia, T. Felter and M.J. Fluss 276 (2000) 186
- Properties and evolution of sessile interstitial clusters produced by displacement cascades in α -iron, F. Gao, D.J. Bacon, Yu.N. Osetsky, P.E.J. Flewitt and T.A. Lewis 276 (2000) 213
- Computer simulation of SIA migration in bcc and hcp metals, R.C. Pasianot, A.M. Monti, G. Simonelli and E.J. Savino 276 (2000) 230
- Analysis of displacement cascades and threshold displacement energies in β -sic, J.M. Perlado, L. Malerba, A. Sánchez-Rubio and T. Díaz de la Rubia 276 (2000) 235
- Monte Carlo modelling of damage accumulation in metals under cascade irradiation, A.V. Barashev, D.J. Bacon and S.I. Golubov 276 (2000) 243
- Quantitative analysis of CTEM images of small dislocation loops in Al and stacking fault tetrahedra in Cu generated by molecular dynamics simulation, R. Schäublin, A. Almazouzi, Y. Dai, Yu.N. Osetsky and M. Victoria 276 (2000) 251
- Slow neutron total cross-section of Al6061 at low temperatures, J.R. Granada 277 (2000) 346
- Interpretation of the impurity distribution in the divertor during divertor plate biasing using the DIVIMP code, E. Haddad, F. Meo, R. Marchand, G. Ratel, B.L. Stansfield, J. Gunn, P.C. Stangeby, J.D. Elder, S. Lisgo and K. Krieger 278 (2000) 111
- Variability of radiation-induced segregation in iron-chromium-nickel alloys, T.R. Allen, E.A. Kenik and G.S. Was 278 (2000) 149
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in zircon, R.E. Williford, B.D. Begg, W.J. Weber and N.J. Hess 278 (2000) 207
- Displacement energy surface in 3C and 6H SiC, R. Devanathan and W.J. Weber 278 (2000) 258
- Influence of the interatomic potentials on molecular dynamics simulations of displacement cascades, C.S. Becquart, C. Domain, A. Legris and J.C. Van Duysen 280 (2000) 73
- Comparison of nuclear irradiation parameters of fusion breeder materials in high flux fission test reactors and a fusion power demonstration reactor, U. Fischer, S. Herring, A. Hogenbirk, D. Leichtle, Y. Nagao, B.J. Pijlgroms and A. Ying 280 (2000) 151
- Lithium and tritium diffusion in lithium oxide (Li₂O), a molecular dynamics simulation, H. Pfeiffer, J. Sánchez-Sánchez and L.J. Álvarez 280 (2000) 295
- Correlation of simulated TEM images with irradiation induced damage, R. Schäublin, P. de Almeida, A. Almazouzi and M. Victoria 283–287 (2000) 205
- Development of vacancy clusters in neutron-irradiated copper at high temperature, Y. Shimomura and I. Mukouda 283–287 (2000) 249
- Computer simulations of the effects of temperature change on defect accumulation in copper during neutron irradiation, Q. Xu, H.L. Heinisch and T. Yoshiie 283–287 (2000) 297
- Simulating the influence of radiation temperature variations on microstructural evolution, Y. Katoh, R.E. Stoller, A. Kohyama and T. Muroga 283–287 (2000) 313

- Irradiation creep at 60 °C in SUS 316 and its impact on fatigue fracture, J. Nagakawa, Y. Murase, N. Yamamoto and T. Fukuzawa 283–287 (2000) 391
- New evaluation method of crack growth in SiC/SiC composites using interface elements, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 283–287 (2000) 579
- Statistical analysis of a library of molecular dynamics cascade simulations in iron at 100 K, R.E. Stoller and A.F. Calder 283–287 (2000) 746
- A molecular dynamics simulation study of small cluster formation and migration in metals, K. Morishita, T. Diaz de la Rubia, E. Alonso, N. Sekimura and N. Yoshida 283–287 (2000) 753
- Interstitial cluster motion in displacement cascades, N.V. Doan 283–287 (2000) 763
- Atomistic simulation of stacking fault tetrahedra formation in Cu, B.D. Wirth, V. Bulatov and T. Diaz de la Rubia 283–287 (2000) 773
- Molecular dynamics simulation of defect production in irradiated β -SiC, L. Malerba, J.M. Perlado, A. Sánchez-Rubio, I. Pastor, L. Colombo and T. Diaz de la Rubia 283–287 (2000) 794
- Positron lifetime calculation for defects and defect clusters in graphite, T. Onitsuka, H. Ohkubo, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 922
- Sputtering studies of beryllium with helium and deuterium using molecular dynamics approach, S. Ueda, T. Oh-saka and S. Kuwajima 283–287 (2000) 1100
- Simulation study of carbon and tungsten deposition on W/C twin test limiter in TEXTOR-94, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, B. Schweer, A. Huber, M. Rubel, J. von Seggern and N. Noda 283–287 (2000) 1182
- Computational analysis of creep fracture deformation in SiC/SiC composites, H. Serizawa, M. Ando, C.A. Lewinsohn and H. Murakawa 289 (2001) 16
- Molecular dynamics simulation of irradiation-induced amorphization of cubic silicon carbide, L. Malerba and J.M. Perlado 289 (2001) 57
- Molecular dynamics refinement of topologically generated reconstructions of simulated irradiation cascades in silica networks, X. Yuan, V. Pulim and L.W. Hobbs 289 (2001) 71
- Computational study of plutonium–neodymium fluorobriholite $\text{Ca}_9\text{Nd}_{0.5}\text{Pu}_{0.5}(\text{SiO}_4)(\text{PO}_4)_5\text{F}_2$ thermodynamic properties, C. Meis 289 (2001) 167
- Influence of diffusion on W sputtering by carbon, K. Schmid, J. Roth and W. Eckstein 290–293 (2001) 148
- W7-X edge modelling with the 3D SOL fluid code BoRiS, M. Borchardt, J. Riemann, R. Schneider and X. Bonnin 290–293 (2001) 546
- Analysis of SOL behaviour in JET MkIIIGB using an advanced onion-skin solver (OSM2), W. Fundamenski, S.K. Erents, G.F. Matthews, A.V. Chankin, V. Riccardo, P.C. Stangeby and J.D. Elder 290–293 (2001) 593
- Observation of detachment in the JET MkIIIGB divertor using CCD camera tomography, K. Itami, P. Coad, W. Fundamenski, C. Ingesson, J. Lingertat, G.F. Matthews and A. Tabasso 290–293 (2001) 633
- ASDEX-Upgrade edge transport scalings from the two-dimensional interpretative code B2.5-I, J.-W. Kim, D.P. Coster, J. Neuhauser and R. Schneider 290–293 (2001) 644
- Simulation of power and particle flows in the NSTX edge plasma, M.E. Rensink, H. Kugel, R. Maingi, F. Paoletti, G.D. Porter, T.D. Rognlien, S. Sabbagh and X. Xu 290–293 (2001) 706
- Numerical study of plasma–wall transition in an oblique magnetic field, F. Valsaque and G. Manfredi 290–293 (2001) 763
- Multi-machine modelling of divertor geometry effects, A. Loarte 290–293 (2001) 805
- Electric fields and currents in an island divertor configuration, X. Bonnin, R. Schneider, D. Coster, V. Rozhansky and S. Voskoboinikov 290–293 (2001) 829
- B2–EIRENE modelling of He compression and enrichment, D.P. Coster, H.-S. Bosch and W. Ullrich 290–293 (2001) 845
- Helium compression analysis for ASDEX Upgrade with fluid and kinetic codes, D. Reiser, R. Schneider, D. Coster, W. Ullrich and H.S. Bosch 290–293 (2001) 953
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Heat and particle fluxes from collisionless scrape-off-layer during tokamak plasma disruptions, A. Hassanein, I. Konkashbaev and L. Nikandrov 290–293 (2001) 1079
- The role of Cu in displacement cascades examined by molecular dynamics, C.S. Becquart, C. Domain, J.C. van Duysen and J.M. Raulot 294 (2001) 274
- Molecular dynamics modeling of irradiation damage in pure and uranium-

- doped zircon, J.-P. Crocombette and D. Ghaleb 295 (2001) 167
- Atomic displacement cascade distributions in iron, A. Souidi, M. Hou, C.S. Bequart and C. Domain 295 (2001) 179
- An ab initio study on formation and desorption reactions of H₂O molecules from surface hydroxyl groups in silicates, T. Nakazawa, K. Yokoyama, V. Grismanovs and Y. Katano 297 (2001) 69
- 3D Micromechanical modeling of packed beds, Z. Lu, M. Abdou and A. Ying 299 (2001) 101
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in gadolinium zirconate, R.E. Williford and W.J. Weber 299 (2001) 140
- Mechanical Properties (not listed elsewhere)**
- Effect of size and configuration of 3-point bend bar specimens on *J-R* curves, S. Jitsukawa, A. Naito and J. Segawa 271&272 (1999) 87
- Properties of precipitation hardened steel irradiated at 323 K in the Japan materials testing reactor, M. Niimi, Y. Matsui, S. Jitsukawa, T. Hoshiya, T. Tsukada, M. Ohmi, H. Mimura, N. Ooka and K. Hide 271&272 (1999) 92
- Defect structure development in a pure iron and dilute iron alloys irradiated with neutrons and electrons, A. Okada, H. Maeda, K. Hamada and I. Ishida 271&272 (1999) 133
- Investigation of palladium alloy properties degradation during long-time tritium exposure, V. Tebus, L. Rivkis, G. Arutunova, E. Dmitrievsky, V. Filin, Y. Golikov, V. Krivova and V. Kapychev 271&272 (1999) 345
- Effect of temperature change on microstructural evolution of vanadium alloys under neutron irradiation in JMTR, N. Nita, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 365
- Modeling of the cyclic ball indentation test for small specimens using the finite element method, T. Yamamoto, H. Kurishita and H. Matsui 271&272 (1999) 440
- Tensile and impact behaviour of BATMAN II steels, Ti-bearing reduced activation martensitic alloys, G. Filacchioni, E. Casagrande, U. De Angelis, G. De Santis, D. Ferrara and L. Pilloni 271&272 (1999) 445
- Influence of thermal aging on tensile and impact bending properties of the steel grades OPTIFER and F82H mod., L. Schäfer and M. Schirra 271&272 (1999) 455
- Corrosion of some V- and Nb-base alloys under irradiation in water, V.A. Kazakov, V.P. Chakin and Yu.D. Goncharenko 271&272 (1999) 463
- Effect of strain rate and test temperature on superplasticity of a Zr–2.5 wt% Nb alloy, S.V. Shukla, C. Chandrashekharayya, R.N. Singh, R. Fotedar, R. Kishore, T.K. Sinha and B.P. Kashyap 273 (1999) 130
- Influence of prior thermal ageing on tensile deformation and fracture behaviour of forged thick section 9Cr–1Mo ferritic steel, B.K. Choudhary, K. Bhanu Sankara Rao, S.L. Mannan and B.P. Kashyap 273 (1999) 315
- Thermophysical properties of rock-like oxide fuel with spinel–yttria stabilized zirconia system, N. Nitani, T. Yamashita, T. Matsuda, S.-i. Kobayashi and T. Ohmichi 274 (1999) 15
- Annealing behaviour of reactor pressure-vessel steels studied by positron-annihilation spectroscopy, Mössbauer spectroscopy and transmission electron microscopy, V. Slugeň, D. Segers, P.M.A. de Bakker, E. De Grave, V. Magula, T. Van Hoecke and B. Van Waeyenberge 274 (1999) 273
- Mechanical properties of 304L stainless steel irradiated with 800 MeV protons, J. Chen, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 275 (1999) 115
- Low temperature yield properties of two 7–9Cr ferritic/martensitic steels, P. Spätig, G.R. Odette and G.E. Lucas 275 (1999) 324
- 3D dislocation dynamics: stress–strain behavior and hardening mechanisms in fcc and bcc metals, H.M. Zbib, T. Diaz de la Rubia, M. Rhee and J.P. Hirth 276 (2000) 154
- Interaction and accumulation of glissile defect clusters near dislocations, N.M. Ghoniem, B.N. Singh, L.Z. Sun and T. Díaz de la Rubia 276 (2000) 166
- Deformation modes of proton and neutron irradiated stainless steels, C. Bailat, F. Gröschel and M. Victoria 276 (2000) 283
- Effects of the porosity in uranium dioxide on microacoustic and elastic properties, V. Roque, B. Cros, D. Baron and P. Dehault 277 (2000) 211
- Estimation of fracture toughness transition curves of RPV steels from ball indentation and tensile test data, T. Byun, S. Kim, B. Lee, I. Kim and J. Hong 277 (2000) 263
- Hardness and defect structures in EC316LN austenitic alloy irradiated under a simulated spallation neutron source environment using triple ion-beams, E.H. Lee, J.D. Hunn, N. Hashimoto and L.K. Mansur 278 (2000) 266

- On the recovery of the physical and mechanical properties of a CuCrZr alloy subjected to heat treatments simulating the thermal cycle of hot isostatic pressing, U. Holzwarth, M. Pisoni, R. Scholz, H. Stamm and A. Volcan 279 (2000) 19
- Determination of the yield strength of nuclear reactor pressure vessel steels by means of amplitude-dependent internal friction, K. Van Ouytsel, A. Fabry, R. De Batist and R. Schaller 279 (2000) 51
- A comparative evaluation of welding consumables for dissimilar welds between 316LN austenitic stainless steel and Alloy 800, M. Sireesha, S.K. Albert, V. Shankar and S. Sundaresan 279 (2000) 65
- Effect of rhenium and osmium on mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M.A. Sokolov 279 (2000) 91
- Effects of copper addition on the tensile properties and microstructures of modified Zircaloy-4, H.S. Hong, H.S. Kim, S.J. Kim and K.S. Lee 280 (2000) 230
- In situ XRD analysis of the oxide layers formed by oxidation at 743 K on Zircaloy 4 and Zr–1NbO, N. Pétigny, P. Barberis, C. Lemaignan, Ch. Valot and M. Lallemand 280 (2000) 318
- Evaluation of hot isostatic pressing for joining of fusion reactor structural components, A.D. Ivanov, S. Sato and G. Le Marois 283–287 (2000) 35
- Progress and critical issues of reduced activation ferritic/martensitic steel development, B. van der Schaaf, D.S. Gelles, S. Jitsukawa, A. Kimura, R.L. Klueh, A. Möslang and G.R. Odette 283–287 (2000) 52
- A cleavage toughness master curve model, G.R. Odette and M.Y. He 283–287 (2000) 120
- Correlation between defect structures and hardness in tantalum irradiated by heavy ions, K. Yasunaga, H. Watanabe, N. Yoshida, T. Muroga and N. Noda 283–287 (2000) 179
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- Tensile properties and damage microstructures in ORR/HFIR-irradiated austenitic stainless steels, E. Wakai, N. Hashimoto, J.P. Robertson, S. Jitsukawa, T. Sawai and A. Hishinuma 283–287 (2000) 435
- The effects of irradiation and testing temperature on tensile behaviour of stainless steels, C. Bailat, A. Almazouzi, N. Baluc, R. Schäublin, F. Gröschel and M. Victoria 283–287 (2000) 446
- Mechanical properties of hot isostatically pressed type 316LN steel after irradiation, A. Lind and U. Bergenlid 283–287 (2000) 451
- Effect of heat treatment and irradiation temperature on mechanical properties and structure of reduced-activation Cr–W–V steels of bainitic, martensitic, and martensitic–ferritic classes, I.V. Gorynin, V.V. Rybin, I.P. Kursevich, A.N. Lapin, E.V. Nesterova and E.Yu. Klepikov 283–287 (2000) 465
- Effects of helium implantation on hardness of pure iron and a reduced activation ferritic–martensitic steel, H. Tanigawa, S. Jitsukawa, A. Hishinuma, M. Ando, Y. Katoh, A. Koyama and T. Iwai 283–287 (2000) 470
- Tensile properties and microstructure of 590 MeV proton-irradiated pure Fe and a Fe–Cr alloy, M.I. Luppo, C. Bailat, R. Schäublin and M. Victoria 283–287 (2000) 483
- Mechanical properties and microstructure in low-activation martensitic steels F82H and Optimax after 800-MeV proton irradiation, Y. Dai, S.A. Maloy, G.S. Bauer and W.F. Sommer 283–287 (2000) 513
- Room and high-temperature mechanical and thermal properties of SiC fiber-reinforced SiC composite sintered under pressure, K. Yoshida and T. Yano 283–287 (2000) 560
- Mechanical and thermal properties of 2D and 3D SiC/SiC composites, R. Yamada, T. Taguchi and N. Igawa 283–287 (2000) 574
- Characterization of non-magnetic Mn–Cr steel as a low induced activation material for vacuum vessels, S. Saito, K. Fukaya, S. Ishiyama, M. Eto, I. Sato, M. Kusuhashi, T. Hatakeyama, H. Takahashi and M. Kikuchi 283–287 (2000) 593
- Thermomechanical characteristics of the low activation materials chromium and Cr–5Fe–1Y₂O₃ alloy, H. Stamm, U. Holzwarth, F. Lakestani, R. Valiev, V. Provenzano and A. Volcan 283–287 (2000) 597
- Performance of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, W.R. Johnson, P.W. Trester, S. Sengoku, S. Ishiyama, K. Fukaya, M. Eto, T. Oda, Y. Hirohata, T. Hino and H. Tsai 283–287 (2000) 622
- Tensile and impact properties of V–4Cr–4Ti alloy heats 832665 and 832864, T.S. Bray, H. Tsai, L.J. Nowicki, M.C. Billone, D.L. Smith, W.R. Johnson and P.W. Trester 283–287 (2000) 633

- A physically based constitutive model for a V–4Cr–4Ti alloy, E.G. Donahue, G.R. Odette and G.E. Lucas 283–287 (2000) 637
- Chemical segregation behavior under thermal aging of the low-activation F82H-modified steel, J. Lapeña, M. Garcia-Mazario, P. Fernández and A.M. Lancha 283–287 (2000) 662
- Mechanical properties of 8Cr–2WVTa steel aged for 30 000 h, M. Tamura, K. Shinozuka, H. Esaka, S. Sugimoto, K. Ishizawa and K. Masamura 283–287 (2000) 667
- A potential new ferritic/martensitic steel for fusion applications, R.L. Klueh, N. Hashimoto, R.F. Buck and M.A. Sokolov 283–287 (2000) 697
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- Tensile and impact behavior of the reduced-activation steels OPTIFER and F82H mod, L. Schäfer 283–287 (2000) 707
- Constitutive behavior and fracture toughness properties of the F82H ferritic/martensitic steel, P. Spätig, G.R. Odette, E. Donahue and G.E. Lucas 283–287 (2000) 721
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- 3D dislocation dynamics study of plastic instability in irradiated copper, L.Z. Sun, N.M. Ghoniem, S.-H. Tong and B.N. Singh 283–287 (2000) 741
- Study of loop–loop and loop–edge dislocation interactions in bcc iron, Yu.N. Osetsky, D.J. Bacon, F. Gao, A. Serra and B.N. Singh 283–287 (2000) 784
- Effects of oxygen and hydrogen at low pressure on the mechanical properties of V–Cr–Ti alloys, J.R. DiStefano, B.A. Pint, J.H. DeVan, H.D. Röhrig and L.D. Chitwood 283–287 (2000) 841
- The effect of electrical hydrogen charging on the strength of 316 stainless steel, S. Sugiyama, H. Ohkubo, M. Takehana, K. Ohsawa, M.I. Ansari, N. Tsukuda and E. Kuramoto 283–287 (2000) 863
- Effect of hydrogen accumulation on mechanical property and microstructure of V–Cr–Ti alloys, K. Aoyagi, E.P. Torres, T. Suda and S. Ohnuki 283–287 (2000) 876
- Neutron irradiation hardening of ODS alloy tested by miniature disk bend test method, C.Q. Chen, J.G. Sun and Y.C. Xu 283–287 (2000) 1011
- Specimen size effects on the tensile properties of JPCA and JFMS, Y. Kohno, A. Kohyama, M.L. Hamilton, T. Hirose, Y. Katoh and F.A. Garner 283–287 (2000) 1014
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Characterization of low-activation ferritic steel (JLF-1) weld joint by simulated heat-treatments, N. Inoue, T. Muroga, A. Nishimura, T. Nagasaka, O. Motojima, S. Uchida, H. Yabe, K. Oguri, Y. Nishi, Y. Katoh and A. Kohyama 283–287 (2000) 1187
- Effects of thermal aging on the mechanical behavior of F82H weldments, A. Alamo, A. Castaing, A. Fontes and P. Wident 283–287 (2000) 1192
- Re-weldability tests of irradiated austenitic stainless steel by a TIG welding method, K. Tsuchiya, H. Kawamura and G. Kalinin 283–287 (2000) 1210
- Furnace brazing type 304 stainless steel to vanadium alloy (V–5Cr–5Ti), R.V. Steward, M.L. Grossbeck, B.A. Chin, H.A. Aglan and Y. Gan 283–287 (2000) 1224
- Oxidation and hardness profile of V–Ti–Cr–Si–Al–Y alloys, M. Fujiwara, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1311
- Performance of V–Cr–Ti alloys in a hydrogen environment, K. Natesan and W.K. Soppet 283–287 (2000) 1316
- Behaviour of Li_2ZrO_3 and Li_2TiO_3 pebbles relevant to their utilization as ceramic breeder for the HCPB blanket, J.D. Lulewicz, N. Roux, G. Piazza, J. Reimann and J. van der Laan 283–287 (2000) 1361
- Effect of hydrogen on the ductility reduction of F82H martensitic steel after different heat treatments, M. Beghini, G. Benamati, L. Bertini, I. Ricapito and R. Valentini 288 (2001) 1
- Effects of temperature and contact stress on the sliding wear of Ni-base Deloro 50 hardfacing alloy, S.J. Kim and J.K. Kim 288 (2001) 163
- Microstructure and mechanical properties of Inconel 625 superalloy, V. Shankar, K. Bhanu Sankara Rao and S.L. Mannan 288 (2001) 222
- Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers, T. Hinoki, W. Yang, T. Nozawa, T. Shibayama, Y. Katoh and A. Kohyama 289 (2001) 23
- Short-time creep and rupture tests on high burnup fuel rod cladding, W. Goll, H. Spilker and E.H. Toscano 289 (2001) 247
- The effect of manganese on the strain-induced martensitic transformation

- and high temperature wear resistance of Fe–20Cr–1C–1Si hardfacing alloy, J.-k. Kim, G.-m. Kim and S.-j. Kim 289 (2001) 263
- Thermophysical properties of BaUO₃, S. Yamanaka, K. Kurosaki, T. Matsuda and M. Uno 294 (2001) 99
- Some properties of a lead vanado-iodoapatite Pb₁₀(VO₄)₆I₂, M. Uno, M. Shinohara, K. Kurosaki and S. Yamanaka 294 (2001) 119
- Thermodynamic and mechanical properties of Ce_{1-x}Hf_xO₂ ($x = 0-0.10$) solid solutions, N. Nakajima, H. Mitani, Y. Yamamura and T. Tsuji 294 (2001) 188
- Effect of bonding and bakeout thermal cycles on the properties of copper alloys irradiated at 350 °C, B.N. Singh, D.J. Edwards, M. Eldrup and P. Toft 295 (2001) 1
- Ductility and strain rate sensitivity of Zircaloy-4 nuclear fuel claddings, K.W. Lee, S.K. Kim, K.T. Kim and S.I. Hong 295 (2001) 21
- Oxidation and its effects on the mechanical properties of Nb–IZr, J.R. DiStefano and L.D. Chitwood 295 (2001) 42
- Evaluation of the mechanical properties of T91 steel exposed to Pb and Pb–Bi at high temperature in controlled environment, B. Schmidt, S. Guerin, J.-L. Pastol, P. Plaindoux, J.-P. Dallas, C. Leroux and D. Gorse 296 (2001) 249
- Embrittlement of the martensitic steel 91 tested in liquid lead, G. Nicaise, A. Legris, J.B. Vogt and J. Foct 296 (2001) 256
- Texture dependent plastic behavior of Zr 702 at large strain, O. Castelnau, H. Francillette, B. Bacroix and R.A. Lebensohn 297 (2001) 14
- Irradiation effects on toughness behaviour and microstructure of VVER-type pressure vessel steels, J. Böhmert, H.-W. Viehriig and A. Ulbricht 297 (2001) 251
- Torsion texture development of zirconium alloys, P. Sanchez, A. Pochettino, T. Chauveau and B. Bacroix 298 (2001) 329
- Analysis of singular interface stresses in dissimilar material joints for plasma facing components, J.H. You and H. Bolt 299 (2001) 1
- Microstructure and properties of a Cu–Cr–Zr alloy, I.S. Batra, G.K. Dey, U.D. Kulkarni and S. Banerjee 299 (2001) 91
- 3D Micromechanical modeling of packed beds, Z. Lu, M. Abdou and A. Ying 299 (2001) 101
- Hardening of Fe–Cu alloys at elevated temperatures by electron and neutron irradiations, T. Tobita, M. Suzuki, A. Iwase and K. Aizawa 299 (2001) 267
- Mechanical and thermomechanical properties of commercially pure chromium and chromium alloys, U. Holzwarth and H. Stamm 300 (2002) 161
- Metals, Alloys and Compounds (not listed elsewhere)**
- Radiation processing of powders for improved fusion structural materials, Yu.A. Zaykin, B.A. Aliyev, B.P. Chesnokov and O.A. Kiryushatov 271&272 (1999) 73
- Properties of lithium metatitanate pebbles produced by a wet process, J.G. van der Laan and R.P. Muis 271&272 (1999) 401
- Damage production and accumulation toward very high burnups, a strategy for plutonium utilization in pressurized water reactors, J. Porta and J.-Y. Doriath 271&272 (1999) 540
- 274 (1999) 153
- Electrolytic hydrogenation and its isotope effect in Zr and Pd studied by ERDA and SIMS techniques, Y. Oya, T. Suzuki, K. Iinuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 275 (1999) 186
- Effects of thermal cycles on ²²²Rn permeability in Au, S.K. Bhattacharyya and S.K. Pabi 275 (1999) 206
- Stability of ordered phases under irradiation, C. Abromeit, H. Wollenberger, S. Matsumura and C. Kinoshita 276 (2000) 104
- Collision cascades in metals and semiconductors: defect creation and interface behavior, K. Nordlund and R.S. Averback 276 (2000) 194
- Gibbs energy of formation of UPd₃(s), R. Prasad, S. Dash, S.C. Parida, Z. Singh and V. Venugopal 277 (2000) 45
- Preparation and characterisation of platinum and platinum–iridium coated titanium electrodes, U. Kamachi Mudali, V.R. Raju and R.K. Dayal 277 (2000) 49
- The niobium–silicon–uranium system, T. Lebihan, P. Rogl and H. Noël 277 (2000) 82
- Measurement of backward sputtering yields induced by fast neutrons, B. Ye, Y. Kasugai, Y. Ikeda, Y. Fan, J. Du, X. Zhou and R. Han 281 (2000) 112
- Advances in fusion technology, C.C. Baker 283–287 (2000) 1
- Progress in modelling the microstructural evolution in metals under cascade damage conditions, H. Trinkaus, B.N. Singh and S.I. Golubov 283–287 (2000) 89
- Co-permeation of deuterium and hydrogen through Pd, K. Kizu, A. Pisarev and T. Tanabe 289 (2001) 291
- Thermodynamic study of liquid lithium–lead alloys using the EMF method, W. Gasior and Z. Moser 294 (2001) 77
- Nuclear microprobe analysis of ⁷Li profile induced in HfB₂ by a neutron irradiation, D. Simeone, X. Descha-

- nels, D. Gosset, J.P. Bonal and E. Berthoumieux 297 (2001) 244
- Accumulation and recovery of defects in ion-irradiated nanocrystalline gold, Y. Chimi, A. Iwase, N. Ishikawa, M. Kobiyama, T. Inami and S. Okuda 297 (2001) 355
- Mechanical properties of pure tantalum after 800 MeV proton irradiation, J. Chen, H. Ullmaier, T. Floßdorf, W. Kühnlein, R. Duwe, F. Carsughi and T. Broome 298 (2001) 248
- Gibbs free energy of formation of liquid lanthanide–bismuth alloys, J. Sheng, H. Yamana and H. Moriyama 299 (2001) 264
- Mechanical and thermomechanical properties of commercially pure chromium and chromium alloys, U. Holzwarth and H. Stamm 300 (2002) 161
- Microstructure and Texture** (*excludes by Irradiation*)
- Investigation of palladium alloy properties degradation during long-time tritium exposure, V. Tebus, L. Rivkis, G. Arutunova, E. Dmitrievsky, V. Filin, Y. Golikov, V. Krivova and V. Kapychev 271&272 (1999) 345
- The effect of texture variation on delayed hydride cracking behavior of Zr–2.5%Nb plate, S.S. Kim, S.C. Kwon and Y.S. Kim 273 (1999) 52
- Reactions of hydrogen with V–Cr–Ti alloys, J.R. DiStefano, J.H. De Van, D.H. Röhrig and L.D. Chitwood 273 (1999) 102
- Fatigue failure analysis of V–4Ti–4Cr alloy, H. Aglan, Y.X. Gan, B. Chin and M. Grossbeck 273 (1999) 192
- Modification of microstructure and the alligating damage in a modified 9Cr–1Mo steel, R. Kishore and T.K. Sinha 273 (1999) 334
- Morphology of UO₂, M. Abramowski, R.W. Grimes and S. Owens 275 (1999) 12
- Influence of thermomechanical treatment on the corrosion behavior of Zr–1Nb–0.2Cu alloys, J.M. Kim and Y.H. Jeong 275 (1999) 74
- Texture of welded joints of 316L stainless steel, multi-scale orientation analysis of a weld metal deposit, G. Bouche, J.L. Béchade, M.H. Mathon, L. Allais, A.F. Gourgues and L. Nazé 277 (2000) 91
- Micro-structures associated with uraninite alteration, M. Fayek, P. Burns, Y.-X. Guo and R.C. Ewing 277 (2000) 204
- Microstructural aspects of Zircaloy nodular corrosion in steam, D.F. Taylor 277 (2000) 295
- Effect of composition on the fatigue failure behavior of vanadium alloys, H.A. Aglan, Y.X. Gan, B.A. Chin and M.L. Grossbeck 278 (2000) 186
- An attempt to explain the high burnup structure formation mechanism in UO₂ fuel, C.B. Lee and Y.H. Jung 279 (2000) 207
- K_{IH} in radial textured Zr–2.5%Nb pressure tube, S.S. Kim and Y.S. Kim 279 (2000) 286
- Mechanisms and kinetics of tempering in weldments of 9Cr–1Mo steel, M. Vijayalakshmi, S. Saroja, R. Mythili, V. Thomas Paul and V.S. Raghunathan 279 (2000) 293
- Crack growth pattern and threshold stress intensity factor, K_{IH} , of Zr–2.5Nb alloy with the notch direction, Y.S. Kim, S.C. Kwon and S.S. Kim 280 (2000) 304
- A method for determining an effective porosity correction factor for thermal conductivity in fast reactor uranium–plutonium oxide fuel pellets, M. Inoue, K. Abe and I. Sato 281 (2000) 117
- Preparation and characterization of PuN pellets containing ZrN and TiN, Y. Arai and K. Nakajima 281 (2000) 244
- Comparative study on the fatigue crack growth behavior of 316L and 316LN stainless steels: effect of microstructure of cyclic plastic strain zone at crack tip, W.-Y. Maeng and M.-H. Kim 282 (2000) 32
- Evaluation of hot isostatic pressing for joining of fusion reactor structural components, A.D. Ivanov, S. Sato and G. Le Marois 283–287 (2000) 35
- Progress and critical issues of reduced activation ferritic/martensitic steel development, B. van der Schaaf, D.S. Gelles, S. Jitsukawa, A. Kimura, R.L. Klueh, A. Möslang and G.R. Odette 283–287 (2000) 52
- Role of α_2/γ and γ/γ' phase boundaries in cavity formation in a TiAl intermetallic compound irradiated with He-ions, K. Nakata, K. Fukai, A. Hishinuma and K. Ameyama 283–287 (2000) 278
- Microstructural examination of V–(3–6%)Cr–(3–5%)Ti irradiated in the ATR-A1 experiment, D.S. Gelles 283–287 (2000) 344
- Tensile properties and damage microstructures in ORR/HFIR-irradiated austenitic stainless steels, E. Wakai, N. Hashimoto, J.P. Robertson, S. Jitsukawa, T. Sawai and A. Hishinuma 283–287 (2000) 435
- Effects of helium implantation on hardness of pure iron and a reduced activation ferritic–martensitic steel, H. Tanigawa, S. Jitsukawa, A. Hishinuma, M. Ando, Y. Katoh, A. Kohyama and T. Iwai 283–287 (2000) 470
- Mechanical behavior and microstructural evolution of vanadium alloys irradiated in ATR-A1, K.-i. Fukumoto, H. Matsui, H. Tsai and D.L. Smith 283–287 (2000) 492

- Radiation-induced precipitation in V–(Cr,Fe)–Ti alloys irradiated at low temperature with low dose during neutron or ion irradiation, K.-i. Fukumoto, H. Matsui, Y. Candra, K. Takahashi, H. Sasanuma, S. Nagata and K. Takahiro 283–287 (2000) 535
- Microstructure control to improve mechanical properties of vanadium alloys for fusion applications, T. Kuwabara, H. Kurishita and M. Hasegawa 283–287 (2000) 611
- Microstructure of welded and thermal-aged low activation steel F82H IEA heat, T. Sawai, K. Shiba and A. Hishinuma 283–287 (2000) 657
- Chemical segregation behavior under thermal aging of the low-activation F82H-modified steel, J. Lapeña, M. Garcia-Mazarío, P. Fernández and A.M. Lancha 283–287 (2000) 662
- Mechanical properties of 8Cr–2WVTa steel aged for 30 000 h, M. Tamura, K. Shinozuka, H. Esaka, S. Sugimoto, K. Ishizawa and K. Masamura 283–287 (2000) 667
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- A potential new ferritic/martensitic steel for fusion applications, R.L. Klueh, N. Hashimoto, R.F. Buck and M.A. Sokolov 283–287 (2000) 697
- Effect of hydrogen accumulation on mechanical property and microstructure of V–Cr–Ti alloys, K. Aoyagi, E.P. Torres, T. Suda and S. Ohnuki 283–287 (2000) 876
- Structure of materials deposited on the plasma facing surface in TRIAM-1M tokamak and the effect on hydrogen recycling, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, A. Komori, O. Motojima, S. Itoh and TRIAM group 283–287 (2000) 1177
- A microstructural study of the oxide scale formation on ODS Fe–13Cr steel, D.T. Hoelzer, B.A. Pint and I.G. Wright 283–287 (2000) 1306
- Behaviour of Li₂ZrO₃ and Li₂TiO₃ pebbles relevant to their utilization as ceramic breeder for the HCPB blanket, J.D. Lulewicz, N. Roux, G. Piazza, J. Reimann and J. van der Laan 283–287 (2000) 1361
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- New mechanism for radiation defect production and aggregation in crystalline ceramics, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 289 (2001) 86
- Detailed structure analysis of deposit layer in TEXTOR by means of TEM techniques, S. Muto, N. Yokoya and T. Tanabe 290–293 (2001) 295
- Thermography of target plates with near-infrared optical fibres at Tore Supra, R. Reichle, V. Basiuk, V. Bergeaud, A. Cambe, M. Chantant, E. Delchambre, M. Druetta, E. Gauthier, W. Hess and C. Pocheau 290–293 (2001) 701
- Characterization and conditioning of SSPX plasma facing surfaces, D.A. Buchenauer, B.E. Mills, R. Wood, S. Woodruff, D.N. Hill, E.B. Hooper, D.F. Cowgill, M.W. Clift and N.Y. Yang 290–293 (2001) 1165
- Effect of plastic shearing on damage and texture on Zircaloy-4 cladding tubes: experimental and numerical study, E. Girard, R. Guillén, P. Weisbecker and M. François 294 (2001) 330
- Effect of Mo addition on the crystal texture and deformation twin formation in Zr-based alloys, Y.B. Chun, S.K. Hwang, M.H. Kim, S.I. Kwun and S.W. Chae 295 (2001) 31
- Texture dependent plastic behavior of Zr 702 at large strain, O. Castelnau, H. Francillette, B. Bacroix and R.A. Lebensohn 297 (2001) 14
- Effects of carbide precipitation on the strength and Charpy impact properties of low carbon Mn–Ni–Mo bainitic steels, Y.-R. Im, Y.J. Oh, B.-J. Lee, J.H. Hong and H.-C. Lee 297 (2001) 138
- Precipitation of reoriented hydrides and textural change of α -zirconium grains during delayed hydride cracking of Zr–2.5%Nb pressure tube, Y.S. Kim, Yu. Perlovich, M. Isaenkova, S. Kim and Y. Cheong 297 (2001) 292
- Torsion texture development of zirconium alloys, P. Sanchez, A. Pochettino, T. Chauveau and B. Bacroix 298 (2001) 329
- Microstructure and properties of a Cu–Cr–Zr alloy, I.S. Batra, G.K. Dey, U.D. Kulkarni and S. Banerjee 299 (2001) 91
- Effect of the expansion associated with the plutonium α – β – γ phase transitions on storage can integrity, D.R. Spearing, D.K. Veirs and F.C. Prenger 299 (2001) 111
- Fracture behavior of heat-affected zone in low alloy steels, J.H. Kim, Y.J. Oh, I.S. Hwang, D.J. Kim and J.T. Kim 299 (2001) 132

- Microstructure–fracture toughness relationship of vanadium alloy/stainless steel brazed joints, Y.X. Gan, H.A. Aglan, R.V. Steward, B.A. Chin and M.L. Grossbeck 299 (2001) 157
- On the relationship among γ' texture factors for the principal planes of zirconium, hafnium and titanium alloys, J.J. Kearns 299 (2001) 171
- Combustion synthesis of γ -lithium aluminate by using various fuels, F. Li, K. Hu, J. Li, D. Zhang and G. Chen 300 (2002) 82
- A Raman study of the nanocrystallite size effect on the pressure–temperature phase diagram of zirconia grown by zirconium-based alloys oxidation, P. Bouvier, J. Godlewski and G. Lucazeau 300 (2002) 118
- Migration (see Diffusion)**
- Behavior of cesium implanted in zirconia based inert matrix fuel, M.A. Pouchon, M. Döbeli, C. Degueldre and M. Burghartz 274 (1999) 61
- Moderator and Reflector Materials**
- Multiplier, moderator, and reflector materials for advanced lithium–vanadium fusion blankets, Y. Gohar and D.L. Smith 283–287 (2000) 1370
- Molybdenum, Molybdenum Alloys and Compounds**
- Formation mechanism of clustered small loops (rafts) in fission-neutron irradiated Mo at high temperatures, K. Yamakawa and Y. Shimomura 271&272 (1999) 41
- Damage observed in Mo irradiated with 14 MeV neutrons at RTNS-II, K. Yamakawa and Y. Shimomura 275 (1999) 101
- Defect accumulation in fcc and bcc metals and alloys under cascade damage conditions – Towards a generalisation of the production bias model, S.I. Golubov, B.N. Singh and H. Trinkaus 276 (2000) 78
- Neutron diffraction study of U–10 wt% Mo alloy, B.-S. Seong, C.-H. Lee, J.-S. Lee, H.-S. Shim, J.-H. Lee, K. Kim, C. Kim and V. Em 277 (2000) 274
- High temperature fatigue behaviour of TZM molybdenum alloy under mechanical and thermomechanical cyclic loads, H.J. Shi, L.S. Niu, C. Korn and G. Pluvinage 278 (2000) 328
- Analysis of tensile and fracture toughness results on irradiated molybdenum alloys, TZM and Mo–5%Re, M. Scibetta, R. Chaouadi and J.L. Puzzolante 283–287 (2000) 455
- Deuterium retention in tungsten and molybdenum, S. Nagata and K. Takahiro 283–287 (2000) 1038
- TEM study on deuterium-irradiation-induced defects in tungsten and molybdenum, T. Matsui, S. Muto and T. Tanabe 283–287 (2000) 1139
- Structure of materials deposited on the plasma facing surface in TRIAM-1M tokamak and the effect on hydrogen recycling, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, A. Komori, O. Motojima, S. Itoh and TRIAM group 283–287 (2000) 1177
- Refractory metal joining for first wall applications, C.H. Cadden and B.C. Odegard Jr. 283–287 (2000) 1253
- Oxidation and volatilization of TZM alloy in air, G.R. Smolik, D.A. Petti and S.T. Schuetz 283–287 (2000) 1458
- Studies on hydrogen permeability of 2.25% Cr–1% Mo ferritic steel: correlation with microstructure, N. Parvathavarthini, S. Saroja, R.K. Dayal and H.S. Khatak 288 (2001) 187
- Some problems arising due to plasma–surface interaction for operation of the in-vessel mirrors in a fusion reactor, V.S. Voitsenya, A.F. Bardamid, V.N. Bondarenko, W. Jacob, V.G. Konovalov, S. Masuzaki, O. Motojima, D.V. Orlinkij, V.L. Popperenko, I.V. Ryzhkov, A. Sagara, A.F. Shtan, S.I. Solodovchenko and M.V. Vinnichenko 290–293 (2001) 336
- Thermal properties of Mo₃Te₄, K. Kurosaki, A. Kosuga, M. Uno and S. Yamanaka 294 (2001) 179
- Study of mechanisms involved in thermal migration of molybdenum and rhenium in apatites, C. Gaillard, N. Chevarier, C. Den Auwer, N. Millard-Pinard, P. Delichère and Ph. Sainsot 299 (2001) 43
- Monitoring Methods**
- TOF analysis of reflection of low-energy light ions from solid targets using coaxial impact collision ion scattering spectroscopy (CAICISS), K. Morita, N. Kishi, A. Grigoriev, S. Masuzaki and T. Muroga 290–293 (2001) 126
- Towards an improved understanding of the relationship between plasma edge and materials issues in a next-step fusion device, G.F. Counsell, J.P. Coad, G. Federici, K. Krieger, V. Philipps, C.H. Skinner and D.G. Whyte 290–293 (2001) 255
- Energy flux measurements in a steady-state discharge at PSI-2, B. Koch, W.

- Bohmeyer, G. Fussmann, P. Kornejew and H.-D. Reiner 290–293 (2001) 653
- Investigation of the hydrogen fluxes in the plasma edge of W7-AS during H-mode discharges, U. Langer, E. Taglauer and R. Fischer 290–293 (2001) 658
- Non-axisymmetric perturbation of the plasma surface in RFX: analysis of magnetic data versus CCD images of plasma–wall interaction, P. Zanca, D. Bettella, S. Martini and M. Valisa 290–293 (2001) 990
- Measurement of thermal wall-load distribution caused by the locked mode in a reversed-field pinch plasma, Y. Yagi, S. Sekine, H. Koguchi, T. Bolzonella and H. Sakakita 290–293 (2001) 1144
- Neutron Irradiation**
- Formation mechanism of clustered small loops (rafts) in fission-neutron irradiated Mo at high temperatures, K. Yamakawa and Y. Shimomura 271&272 (1999) 41
- Subcascade formation in displacement cascade simulations: Implications for fusion reactor materials, R.E. Stoller and L.R. Greenwood 271&272 (1999) 57
- Properties of precipitation hardened steel irradiated at 323 K in the Japan materials testing reactor, M. Niimi, Y. Matsui, S. Jitsukawa, T. Hoshiya, T. Tsukada, M. Ohmi, H. Mimura, N. Ooka and K. Hide 271&272 (1999) 92
- Effects of neutron irradiation on microstructure and mechanical properties of pure iron, B.N. Singh, A. Horsewell and P. Toft 271&272 (1999) 97
- Microstructure and mechanical properties of neutron irradiated TiNi shape memory alloy, Y. Matsukawa, T. Suda, S. Ohnuki and C. Namba 271&272 (1999) 106
- Justification of the new approach to the testing of the candidate iter materials in fission reactor, V.A. Nikolaenko, V.I. Karpukhin, E.A. Krasikov and V.N. Kuznetsov 271&272 (1999) 120
- Strengthening, loss of strength and embrittlement of beryllium under high temperature neutron irradiation, G.A. Sernyaev, A.V. Kozlov and V.R. Barabash 271&272 (1999) 123
- Defect structure development in a pure iron and dilute iron alloys irradiated with neutrons and electrons, A. Okada, H. Maeda, K. Hamada and I. Ishida 271&272 (1999) 133
- Irradiation examination of CuNiCrSi alloy for ITER applications, A.D. Ivanov, A.V. Kozlov, M.V. Chernetsov and S.A. Averin 271&272 (1999) 139
- Mechanical property changes of low activation ferritic/martensitic steels after neutron irradiation, Y. Kohno, A. Kohyama, T. Hirose, M.L. Hamilton and M. Narui 271&272 (1999) 145
- Postirradiation thermocyclic loading of ferritic–martensitic structural materials, L. Belyaeva, A. Orychtchenko, C. Petersen and V. Rybin 271&272 (1999) 151
- Irradiation hardening of V–4Cr–4Ti, E.V. van Osch and M.I. de Vries 271&272 (1999) 162
- Voids in fast-neutron-irradiated Cu, Ni and Cu–Ni concentrated alloys studied by TEM and positron annihilation methods, H. Fukushima, K. Ochiai and Y. Shimomura 271&272 (1999) 220
- Computer simulation on the void formation in neutron-irradiated Cu and Ni at high temperature, Y. Shimomura, I. Mukouda and K. Sugio 271&272 (1999) 225
- Damage evolution in neutron-irradiated Cu during neutron irradiation, I. Mukouda and Y. Shimomura 271&272 (1999) 230
- Invisible and visible point defect clusters in neutron irradiated iron, M. Horiki, T. Yoshiie, M. Iseki and M. Kiritani 271&272 (1999) 256
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Destination of point defects and microstructural evolution under collision cascade damage, T. Yoshiie and M. Kiritani 271&272 (1999) 296
- Microstructural evolution and hardening of neutron irradiated vanadium alloys at low temperatures in Japan Material Testing Reactor, Y. Candra, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 301
- Microstructures of type 316 model alloys neutron-irradiated at 513 K to 1 dpa, Y. Miwa, T. Tsukada, H. Tsuji and H. Nakajima 271&272 (1999) 316
- Effects of varying temperature irradiation on the neutron irradiation hardening of reduced-activation 9Cr–2W martensitic steels, R. Kasada, A. Kimura, H. Matsui, M. Hasegawa and M. Narui 271&272 (1999) 360
- Effect of temperature change on microstructural evolution of vanadium alloys under neutron irradiation in JMTR, N. Nita, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 365
- Effect of temperature change on void swelling in P, Ti-modified 316 stainless steel, N. Akasaka, K. Hattori, S. Onose and S. Ukai 271&272 (1999) 370
- Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels, R. Lindau, A.

- Möslang, D. Preininger, M. Rieth and H.D. Röhrig 271&272 (1999) 450
- Corrosion of some V- and Nb-base alloys under irradiation in water, V.A. Kazakov, V.P. Chakin and Yu.D. Goncharenko 271&272 (1999) 463
- Influence of neutron irradiation on deformability and fracture micro-mechanisms of titanium α -alloys, O.A. Kozhevnikov, E.V. Nesterova, V.V. Rybin and I.I. Yarmolovich 271&272 (1999) 472
- Present status of Data-Free-Way (distributed database system for advanced nuclear materials), H. Tsuji, N. Yokoyama, M. Fujita, Y. Kurihara, S. Kano, Y. Tachi, K. Shimura, R. Nakajima and S. Iwata 271&272 (1999) 486
- Superconducting transition in Nb₃Ge irradiated by neutrons in the superconducting state, L.S. Topchishvili and T.Sh. Kvirikashvili 271&272 (1999) 502
- Critical current in NbTi wires irradiated by neutrons at 20 K, L.S. Topchishvili and A.I. Naskidashvili 271&272 (1999) 505
- Materials research and development strategy in the next decade 271&272 (1999) 578
- Relationship between hardening and damage structure in austenitic stainless steel 316LN irradiated at low temperature in the HFIR, N. Hashimoto, E. Wakai and J.P. Robertson 273 (1999) 95
- The effect of tantalum on the mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M. Rieth 273 (1999) 146
- Chemical interactions in the EXOTIC-7 experiment, H. Kleykamp 273 (1999) 171
- Neutron irradiation induced amorphization of silicon carbide, L.L. Snead and J.C. Hay 273 (1999) 213
- Irradiation swelling of explosively shocked materials, V.M. Kosenkov, A.V. Kolesnikov and S.A. Vorobjev 273 (1999) 228
- Measurements of the radiation resistant fused quartz radioluminescence spectral intensity under irradiation in the pulse nuclear reactor, A. Gorshkov, D. Orlinski, V. Sannikov, K. Vukolov, S. Goncharov, Yu. Sadovnikov and A. Kirillov 273 (1999) 271
- Neutron irradiation of polycrystalline yttrium aluminate garnet, magnesium aluminate spinel and α -alumina., E.A.C. Neeft, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, R.P.C. Schram, A. van Veen and R. Conrad 274 (1999) 78
- In-pile studies of inert matrices with emphasis on magnesia and magnesium aluminate spinel, N. Chauvin, T. Albiol, R. Mazoyer, J. Noirot, D. Lespiaux, J.C. Dumas, C. Weinberg, J.C. Ménard and J.P. Ottaviani 274 (1999) 91
- Burnup analysis of rock-like oxide fuel disks irradiated in the Japan Research Reactor No. 3, Y. Nakano, H. Akie, M. Magara and H. Takano 274 (1999) 127
- Influence of high-dose Kr⁺ irradiation on structural evolution and swelling of 16Cr–15Ni–3Mo–1Ti aging steel, V.V. Sagaradze, S.S. Lapin, M.A. Kirk and B.N. Goshchitskii 274 (1999) 287
- Influence of isothermal and cyclic annealing on structure and swelling of neutron-irradiated beryllium, D.V. Andreev, V.N. Bespalov, A.Yu. Biryukov and E.A. Krasikov 274 (1999) 329
- Transmutation of technetium – results of the EFTTRA-T2 experiment, R.J.M. Konings and R. Conrad 274 (1999) 336
- An Auger electron spectroscopy analysis of thermally-sensitized type 304 stainless steels irradiated to low neutron fluences, T. Onchi, K. Hide and H.M. Chung 274 (1999) 341
- Damage observed in Mo irradiated with 14 MeV neutrons at RTNS-II, K. Yamakawa and Y. Shimomura 275 (1999) 101
- The influence of neutron irradiation on the fatigue performance of OFHC copper and a dispersion strengthened copper alloy B.N. Singh, J.F. Stubbins and P. Toft 275 (1999) 125
- The role of cascade energy and temperature in primary defect formation in iron, R.E. Stoller 276 (2000) 22
- Similarity and difference between fcc, bcc and hcp metals from the view point of point defect cluster formation, M. Kiritani 276 (2000) 41
- Defect accumulation in fcc and bcc metals and alloys under cascade damage conditions – Towards a generalisation of the production bias model, S.I. Golubov, B.N. Singh and H. Trinkaus 276 (2000) 78
- Comparison of swelling and irradiation creep behavior of fcc-austenitic and bcc-ferritic/martensitic alloys at high neutron exposure, F.A. Garner, M.B. Toloczko and B.H. Sencer 276 (2000) 123
- Monte Carlo modelling of damage accumulation in metals under cascade irradiation, A.V. Barashev, D.J. Bacon and S.I. Golubov 276 (2000) 243
- Study of defect annealing behaviour in neutron irradiated Cu and Fe using positron annihilation and electrical conductivity, M. Eldrup and B.N. Singh 276 (2000) 269
- Deformation modes of proton and neutron irradiated stainless steels, C. Bailat, F. Gröschel and M. Victoria 276 (2000) 283

- Study of boron carbide evolution under neutron irradiation by Raman spectroscopy, D. Simeone, C. Mallet, P. Dubuisson, G. Baldinozzi, C. Gervais and J. Maquet 277 (2000) 1
- An alternative explanation for evidence that xenon depletion, pore formation, and grain subdivision begin at different local burnups, J. Rest and G.L. Hofman 277 (2000) 231
- Neutron irradiation effects on carbon based materials at 350 °C and 800 °C, J.P. Bonal and C.H. Wu 277 (2000) 351
- Rim structure formation and high burn-up fuel behavior of large-grained UO₂ fuels, K. Une, M. Hirai, K. Nogita, T. Hosokawa, Y. Suzawa, S. Shimizu and Y. Etoh 278 (2000) 54
- In-reactor creep rupture properties of 20% CW modified 316 stainless steel, S. Ukai, S. Mizuta, T. Kaito and H. Okada 278 (2000) 320
- Long-term corrosion of Zircaloy before and after irradiation, E. Hillner, D.G. Franklin and J.D. Smee 278 (2000) 334
- Recovery characteristics of neutron-irradiated V–Ti alloys, T. Leguey and R. Pareja 279 (2000) 216
- Intergranular and intragranular phosphorus segregation in Russian pressure vessel steels due to neutron irradiation, B.A. Gurovich, E.A. Kuleshova, Ya.I. Shtrombakh, O.O. Zabusov and E.A. Krasikov 279 (2000) 259
- The initial transient of the irradiation growth in a zirconium alloy, A.M. Fortis and H.C. González 279 (2000) 301
- High-dose irradiation growth kinetics at 448 K in a zirconium alloy, H.C. González, A.M. Fortis and G.D.H. Cocoz 279 (2000) 360
- SIMS imaging analyses of in-reactor irradiated boron carbide control rod samples, O. Gebhardt and D. Gavillet 279 (2000) 368
- Estimates of helium gas release in ²³⁸PuO₂ fuel particles for radioisotope heat sources and heater units, M.S. El-Genk and J.-M. Tournier 280 (2000) 1
- Zr–silicide particles in Zr–2.5Nb pressure tube material: influence of oxidation and irradiation, Y.P. Lin and V. Perovic 280 (2000) 120
- Microstructure of austenitic stainless steels irradiated at 400 °C in the ORR and the HFIR spectral tailoring experiment, N. Hashimoto, E. Wakai, J.P. Robertson, T. Sawai and A. Hishinuma 280 (2000) 186
- Synthesis of atom probe experiments on irradiation-induced solute segregation in French ferritic pressure vessel steels, P. Auger, P. Pareige, S. Welzel and J.-C. Van Duysen 280 (2000) 331
- Performance of a Li₂TiO₃ pebble-bed in the CRITIC-III irradiation, R.A. Verrall, J.M. Miller and P. Gierszewski 281 (2000) 71
- Measurement of backward sputtering yields induced by fast neutrons, B. Ye, Y. Kasugai, Y. Ikeda, Y. Fan, J. Du, X. Zhou and R. Han 281 (2000) 112
- Embrittlement of low copper VVER 440 surveillance samples neutron-irradiated to high fluences, M.K. Miller, K.F. Russell, J. Kocik and E. Keilova 282 (2000) 83
- The EFTTRA-T4 experiment on americium transmutation, R.J.M. Konings, R. Conrad, G. Dassel, B.J. Pijlgroms, J. Somers and E. Toscano 282 (2000) 159
- The effects of long-time irradiation and thermal aging on 304 stainless steel, T.R. Allen, J.I. Cole, C.L. Trybus and D.L. Porter 282 (2000) 171
- Thermal conductivity of uranium–plutonium oxide fuel for fast reactors, M. Inoue 282 (2000) 186
- Interactions between fusion materials R&D and other technologies, A. Kohyama, M. Seki, K. Abe, T. Muroga, H. Matsui, S. Jitsukawa and S. Matsuda 283–287 (2000) 20
- Progress in modelling the microstructural evolution in metals under cascade damage conditions, H. Trinkaus, B.N. Singh and S.I. Golubov 283–287 (2000) 89
- Radiation-induced inter-granular segregation in first wall fusion reactor materials, R.G. Faulkner, S. Song and P.E.J. Flewitt 283–287 (2000) 147
- Influence of cold work to increase swelling of pure iron irradiated in the BR-10 reactor to ~6 and ~25 dpa at ~400 °C, A.M. Dvoriashin, S.I. Porollo, Yu.V. Konobeev and F.A. Garner 283–287 (2000) 157
- Compositional and temperature dependence of void swelling in model Fe–Cr base alloys irradiated in the EBR-II fast reactor, B.H. Sencer and F.A. Garner 283–287 (2000) 164
- Effect of temperature gradients on void formation in modified 316 stainless steel cladding, N. Akasaka, I. Yamagata and S. Ukai 283–287 (2000) 169
- Recovery of electrical resistivity of high-purity iron irradiated with 30 MeV electrons at 77 K, H. Abe and E. Kuramoto 283–287 (2000) 174
- Modeling of microstructure evolution and mechanical property change of

- reduced-activation martensitic steel during varying-temperature irradiation, R. Kasada and A. Kimura 283–287 (2000) 188
- Influence of neutron irradiation on Cu-NiCrSi alloy pre-implanted with helium, A.V. Kozlov, M.V. Chernetsov, S.A. Averin, V.Ya. Abramov, A.D. Ivanov, Yu.S. Strebkov and V.F. Reutov 283–287 (2000) 193
- Void swelling and irradiation creep of two high-nickel steels after irradiation at 400–410 °C to 84–91 dpa in the BN-350 fast reactor, S.I. Porollo, A.M. Dvoriashin, A.N. Vorobjev, Yu.V. Konobeev, V.M. Krigan, E.G. Mironova, N.I. Budylkin and F.A. Garner 283–287 (2000) 239
- Development of vacancy clusters in neutron-irradiated copper at high temperature, Y. Shimomura and I. Mukouda 283–287 (2000) 249
- Microstructures in Ti–Al intermetallic compounds irradiated at 673 K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer and A. Hishinuma 283–287 (2000) 273
- Defect structures introduced in iron under varying temperature neutron irradiation, M. Horiki, T. Yoshiie, Q. Xu, M. Iseki and M. Kiritani 283–287 (2000) 282
- Microstructure of Cu–Ni alloys neutron irradiated at 210 °C and 420 °C to 14 dpa, S.J. Zinkle and B.N. Singh 283–287 (2000) 306
- Simulating the influence of radiation temperature variations on microstructural evolution, Y. Katoh, R.E. Stoller, A. Kohyama and T. Muroga 283–287 (2000) 313
- Swelling of F82H irradiated at 673 K up to 51 dpa in HFIR, Y. Miwa, E. Wakai, K. Shiba, N. Hashimoto, J.P. Robertson, A.F. Rowcliffe and A. Hishinuma 283–287 (2000) 334
- Differences in the microstructure of the F82H ferritic/martensitic steel after proton and neutron irradiation, R. Schäublin and M. Victoria 283–287 (2000) 339
- Microstructural examination of V–(3–6%)Cr–(3–5%)Ti irradiated in the ATR-A1 experiment, D.S. Gelles 283–287 (2000) 344
- Tensile behavior of F82H with and without spectral tailoring, K. Shiba, R.L. Klueh, Y. Miwa, J.P. Robertson and A. Hishinuma 283–287 (2000) 358
- Effects of low-temperature neutron irradiation on mechanical properties of vanadium-base alloys, H. Tsai, T.S. Bray, H. Matsui, M.L. Grossbeck, R. Fukumoto, J. Gazda, M.C. Billone and D.L. Smith 283–287 (2000) 362
- Improvement in post-irradiation ductility of neutron irradiated V–Ti–Cr–Si–Al–Y alloy and the role of interstitial impurities, M. Satou, T. Chuto and K. Abe 283–287 (2000) 367
- The effect of neutron-irradiation on the shear properties of SiC/SiC composites with varied interface, T. Hinoki, L.L. Snead, Y. Katoh, A. Kohyama and R. Shinavski 283–287 (2000) 376
- Swelling, irradiation creep and growth of pure rhenium irradiated with fast neutrons at 1030–1330 °C, F.A. Garner, M.B. Toloczko, L.R. Greenwood, C.R. Eiholzer, M.M. Paxton and R.J. Puigh 283–287 (2000) 380
- In-pile and post-irradiation creep of type 304 stainless steel under different neutron spectra, Y. Kurata, Y. Itabashi, H. Mimura, T. Kikuchi, H. Amezawa, S. Shimakawa, H. Tsuji and M. Shindo 283–287 (2000) 386
- Effect of neutron dose and irradiation temperature on the mechanical properties and structure of dispersion strengthened copper alloys, A.S. Pokrovsky, S.A. Fabritsiev, D.J. Edwards, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 404
- Shear punch and tensile measurements of mechanical property changes induced in various austenitic alloys by high-energy mixed proton and neutron irradiation at low temperatures, M.L. Hamilton, F.A. Garner, M.B. Toloczko, S.A. Maloy, W.F. Sommer, M.R. James, P.D. Ferguson and M.R. Louthan Jr. 283–287 (2000) 418
- Tensile and low-cycle fatigue properties of solution annealed type 316L stainless steel plate and TIG-weld exposed to 5 dpa at low-temperature (42 °C), J.-L. Puzzolante, M. Scibetta, R. Chaouadi and W. Vandermeulen 283–287 (2000) 428
- Tensile properties and damage microstructures in ORR/HFIR-irradiated austenitic stainless steels, E. Wakai, N. Hashimoto, J.P. Robertson, S. Jistukawa, T. Sawai and A. Hishinuma 283–287 (2000) 435
- Mechanical properties of hot isostatic pressed type 316LN steel after irradiation, A. Lind and U. Bergenlid 283–287 (2000) 451
- Thermal fatigue crack nucleation in ferritic–martensitic steels before and after neutron irradiation, L.A. Belyaeva, A.A. Zisman, C. Petersen, V.A. Potapova and V.V. Rybin 283–287 (2000) 461
- Effect of heat treatment and irradiation temperature on mechanical properties and structure of reduced-activation Cr–W–V steels of bainitic, martensitic, and martensitic–ferritic classes,

- I.V. Gorynin, V.V. Rybin, I.P. Kursevich, A.N. Lapin, E.V. Nesterova and E.Yu. Klepikov 283–287 (2000) 465
- Effect of low temperature irradiation on the mechanical properties of ternary V–Cr–Ti alloys as determined by tensile tests and shear punch tests, M.L. Hamilton and M.B. Toloczko 283–287 (2000) 488
- Mechanical behavior and microstructural evolution of vanadium alloys irradiated in ATR-A1, K.-i. Fukumoto, H. Matsui, H. Tsai and D.L. Smith 283–287 (2000) 492
- V-alloy embrittlement by irradiation in a cooling gas environment, H.D. Röhrig, M. Rieth, B. Dafferner and E. Materna-Morris 283–287 (2000) 498
- Defect microstructure and deformation behavior of V–Ti–Cr–Si–Al–Y alloy irradiated in ATR, T. Chuto, M. Satou and K. Abe 283–287 (2000) 503
- Effect of high-dose neutron irradiation on the mechanical properties and structure of copper alloys and Cu/SS joints for ITER applications, S.A. Fabritsiev, A.S. Pokrovsky, D.J. Edwards, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 523
- Deformation mechanisms in 316 stainless steel irradiated at 60 °C and 330 °C, N. Hashimoto, S.J. Zinkle, A.F. Rowcliffe, J.P. Robertson and S. Jitsukawa 283–287 (2000) 528
- Radiation-induced precipitation in V–(Cr,Fe)–Ti alloys irradiated at low temperature with low dose during neutron or ion irradiation, K.-i. Fukumoto, H. Matsui, Y. Candra, K. Takahashi, H. Sasanuma, S. Nagata and K. Takahiro 283–287 (2000) 535
- In situ thermal conductivity measurement of ceramics in a fast neutron environment, L.L. Snead, R. Yamada, K. Noda, Y. Katoh, S.J. Zinkle, W.S. Eatherly and A.L. Qualls 283–287 (2000) 545
- Evaluation of neutron irradiated near-stoichiometric silicon carbide fiber composites, L.L. Snead, Y. Katoh, A. Kohyama, J.L. Bailey, N.L. Vaughn and R.A. Lowden 283–287 (2000) 551
- Neutron wall loading of Tokamak reactors, C.P.C. Wong 283–287 (2000) 588
- Material science and manufacturing of heat-resistant reduced-activation ferritic–martensitic steels for fusion, A.G. Ioltukhovskiy, A.I. Blokhin, N.I. Budylnin, V.M. Chernov, M.V. Leont'eva-Smirnova, E.G. Mironova, E.A. Medvedeva, M.I. Solonin, S.I. Porollo and L.P. Zavyalsky 283–287 (2000) 652
- Features of radiation damage of vanadium and its alloys at a temperature of 330–340 °C, V.A. Kazakov, Z. Ostrovsky, Yu. Goncharenko and V. Chakin 283–287 (2000) 727
- On quantification of helium embrittlement in ferritic/martensitic steels, D.S. Gelles 283–287 (2000) 838
- Hydrogen-irradiated steel interaction during alternating hydrogenation and annealing, E.A. Krasikov and A.D. Amajev 283–287 (2000) 846
- Study on the damaging process of silica by in-reactor luminescence, T. Ii, T. Yoshida, T. Tanabe, T. Hara, M. Okada and K. Yamaguchi 283–287 (2000) 898
- Radiation-induced conductivity of doped silicon in response to photon, proton and neutron irradiation, N. Kishimoto, H. Amekura, O.A. Plaksin and V.A. Stepanov 283–287 (2000) 907
- Thermal stability and kinetics of defects in magnesium aluminate spinel irradiated with fast neutrons, K. Yasuda, C. Kinoshita, K. Fukuda and F.A. Garner 283–287 (2000) 937
- Neutron irradiation damage in aluminum oxide and nitride ceramics up to a fluence of 4.2×10^{26} n/m², T. Yano, K. Ichikawa, M. Akiyoshi and Y. Tachi 283–287 (2000) 947
- Status of international collaborative efforts on selected ITER materials, V.A. Belyakov, S.A. Fabritsiev, I.V. Mazul and A.F. Rowcliffe 283–287 (2000) 962
- Irradiation-coupling techniques using JMTR and another facility, Y. Matsui, Y. Itahashi, M. Shimizu and H. Tsuji 283–287 (2000) 997
- Neutron irradiation hardening of ODS alloy tested by miniature disk bend test method, C.Q. Chen, J.G. Sun and Y.C. Xu 283–287 (2000) 1011
- Specimen size effects on the tensile properties of JPCA and JFMS, Y. Kohno, A. Kohyama, M.L. Hamilton, T. Hirose, Y. Katoh and F.A. Garner 283–287 (2000) 1014
- Development of a small specimen test machine to evaluate irradiation embrittlement of fusion reactor materials, T. Ishii, M. Ohmi, J. Saito, T. Hoshiya, N. Ooka, S. Jitsukawa and M. Eto 283–287 (2000) 1023
- Microstructural development of neutron irradiated W–Re alloys, Y. Nemoto, A. Hasegawa, M. Satou and K. Abe 283–287 (2000) 1144
- Effect of neutron irradiation on thermal diffusivity of tungsten–rhenium alloys, M. Fujitsuka, B. Tsuchiya, I. Mutoh, T. Tanabe and T. Shikama 283–287 (2000) 1148
- Neutron-irradiation effects on high heat flux components – examination of plasma-facing materials and their

- joints, M. Rödiger, R. Conrad, H. Derz, R. Duwe, J. Linke, A. Lodato, M. Merola, G. Pott, G. Vieider and B. Wiechers 283–287 (2000) 1161
- Effect of ITER components manufacturing cycle on the irradiation behaviour of 316L(N)-IG steel, B.S. Rodchenkoy, V.I. Prokhorov, O.Yu. Makarov, V.K. Shamardin, G.M. Kalinin, Yu.S. Strebkov and O.A. Golosov 283–287 (2000) 1166
- Re-weldability tests of irradiated austenitic stainless steel by a TIG welding method, K. Tsuchiya, H. Kawamura and G. Kalinin 283–287 (2000) 1210
- Radiation resistance of weld joints of type 316 stainless steel containing about 10 appm He, S.A. Fabritsiev and A.S. Pokrovsky 283–287 (2000) 1215
- Effect of neutron irradiation on mechanical properties of Cu/SS joints after single and multiple HIP cycles, S. Tähtinen, B.N. Singh and P. Toft 283–287 (2000) 1238
- In-pile tritium-permeation measurements on T91 tubes with double walls or a Fe–Al/Al₂O₃ coating, R. Conrad, K. Bakker, C. Chabrol, M.A. Fütterer, J.G. van der Laan, E. Rigal and M.P. Stijkel 283–287 (2000) 1351
- Effects of helium production and radiation damage on tritium release behavior of neutron-irradiated beryllium pebbles, E. Ishitsuka, H. Kawamura, T. Terai and S. Tanaka 283–287 (2000) 1401
- Improvement of the model for surface process of tritium release from lithium oxide, D. Yamaki, A. Iwamoto and S. Jitsukawa 283–287 (2000) 1414
- Tritium release from neutron-irradiated Li₂O sintered pellets: porosity dependence, T. Tanifuji, D. Yamaki, T. Takahashi and A. Iwamoto 283–287 (2000) 1419
- Measurement and analysis of radioactivity induced in steels and a vanadium alloy by 14-MeV neutrons, D. Richter, R.A. Forrest, H. Freiesleben, Va.D. Kovalchuk, Vi.D. Kovalchuk, D.V. Markovskij, K. Seidel, V.I. Tereshkin and S. Unholzer 283–287 (2000) 1434
- Compositional optimisation of silicon carbide for various fusion blanket designs, C.B.A. Forty 283–287 (2000) 1443
- Material composition and nuclear data libraries' influence on nickel–chromium alloys activation evaluation: a comparison with decay heat experiments, D.G. Cefruga and G. Cambi 283–287 (2000) 1453
- Present status and future prospect of the Russian program for fusion low-activation materials, M.I. Solonin, V.M. Chernov, V.A. Gorokhov, A.G. Ioltukhovskiy, A.K. Shikov and A.I. Blokhin 283–287 (2000) 1468
- Rim structure formation of isothermally irradiated UO₂ fuel discs, K. Une, K. Nogita, T. Shiratori and K. Hayashi 288 (2001) 20
- Thermal conductivities of irradiated UO₂ and (U,Gd)O₂, K. Minato, T. Shiratori, H. Serizawa, K. Hayashi, K. Une, K. Nogita, M. Hirai and M. Amaya 288 (2001) 57
- Stress corrosion cracking on irradiated 316 stainless steel, G. Furutani, N. Nakajima, T. Konishi and M. Kodama 288 (2001) 179
- Physical property change of heavily neutron-irradiated Si₃N₄ and SiC by thermal annealing, T. Yano, M. Akiyoshi, K. Ichikawa, Y. Tachi and T. Iseki 289 (2001) 102
- Tritium retention in neutron-irradiated low-Z materials for use as plasma facing materials, F. Scaffidi-Argentina, C. Sand and C.H. Wu 290–293 (2001) 211
- Hydrogen analysis and slow strain rate test in Ar gas for irradiated austenitic stainless steel, J. Morisawa, M. Kodama, N. Yokota, K. Nakata, K. Fukuya, S. Shima and K. Asano 294 (2001) 241
- Annealing of hardening in copper after neutron irradiation hardening at 77 K, H.C. González and M.T. Miralles 295 (2001) 157
- Radiation resistance and thermal creep of ODS ferritic steels, V.V. Sagardze, V.I. Shalaev, V.L. Arbutov, B.N. Goshchitskii, Y. Tian, W. Qun and S. Jiguang 295 (2001) 265
- Optical phenomena in KU-1 silica core fiber waveguides under pulsed reactor irradiation, P.V. Demenkov, O.A. Plaksin, V.A. Stepanov, P.A. Stepanov, V.M. Chernov, K.M. Golant and A.L. Tomashuk 297 (2001) 1
- Post-irradiation examination of high burnup Mg doped UO₂ in comparison with undoped UO₂, Mg–Nb doped UO₂ and Ti doped UO₂, T. Fujino, T. Shiratori, N. Sato, K. Fukuda, K. Yamada and H. Serizawa 297 (2001) 176
- Nuclear microprobe analysis of ⁷Li profile induced in HfB₂ by a neutron irradiation, D. Simeone, X. Deschamps, D. Gosset, J.P. Bonal and E. Berthoumieux 297 (2001) 244
- Microstructural characterization of irradiation-induced Cu-enriched clusters in reactor pressure vessel steels, R.G. Carter, N. Soneda, K. Dohi, J.M. Hyde, C.A. English and W.L. Server 298 (2001) 211
- Strain hardening and plastic instability properties of austenitic stainless steels after proton and neutron irradiation,

- T.S. Byun, K. Farrell, E.H. Lee, J.D. Hunn and L.K. Mansur 298 (2001) 269
- Activation of stainless steel with high energy neutrons, O. Grégoire and J. Ladrière 298 (2001) 309
- Dependence of the non-swelling in-reactor steady-state creep component of austenitic phase alloys on the stacking fault energy, E. Gilbert and J. Foster 298 (2001) 321
- Varying temperature irradiation experiment in HFIR, T. Muroga, S.J. Zinkle, A.L. Qualls and H. Watanabe 299 (2001) 148
- Irradiation behavior of U–Nb–Zr alloy dispersed in aluminum, M.K. Meyer, G.L. Hofman, T.C. Wiencek, S.L. Hayes and J.L. Snelgrove 299 (2001) 175
- Effect of neutron irradiation and post-irradiation annealing on microstructure and mechanical properties of OFHC-copper, B.N. Singh, D.J. Edwards and P. Toft 299 (2001) 205
- Hardening of Fe–Cu alloys at elevated temperatures by electron and neutron irradiations, T. Tobita, M. Suzuki, A. Iwase and K. Aizawa 299 (2001) 267
- Neutron irradiation of sapphire for compressive strengthening. I. Processing conditions and compressive strength, T.M. Regan, D.C. Harris, R.M. Stroud and J.R. White 300 (2002) 39
- Neutron irradiation of sapphire for compressive strengthening. II. Physical properties changes T.M. Regan, D.C. Harris, D.W. Blodgett, K.C. Baldwin, J.A. Miragliotta, M.E. Thomas, M.J. Linevsky, J.W. Giles, T.A. Kennedy, M. Fatemi, D.R. Black, K.P.D. Lagerlöf 300 (2002) 47
- Thermal conductivities of irradiated UO₂ and (U, Gd)O₂ pellets, M. Amaya, M. Hirai, H. Sakurai, K. Ito, M. Sasaki, T. Nomata, K. Kamimura and R. Iwasaki 300 (2002) 57
- Comparison of microstructural features of radiation embrittlement of VVER-440 and VVER-1000 reactor pressure vessel steels, E.A. Kuleshova, B.A. Gurovich, Ya.I. Shtrombakh, D.Yu. Erak and O.V. Lavrenchuk 300 (2002) 127
- Nickel, Nickel Alloys and Compounds**
- Diffuse X-ray scattering studies of radiation defects in Ni and dilute Ni alloys, H. Yuya, H. Maeta, H. Ohtsuka, N. Matsumoto, H. Sugai, A. Iwase, T. Matsui, T. Suzuki, M. Jinchoh and K. Yamakawa 271&272 (1999) 7
- Computer simulation of the interaction between an edge dislocation and interstitial clusters in Fe and Ni, E. Kuramoto, K. Ohsawa, T. Tsutsumi and M. Koyanagi 271&272 (1999) 26
- Atom transport efficiency in heavy ion irradiated metals, P. Fielitz, V. Naundorf and H. Wollenberger 271&272 (1999) 52
- Dynamical process of defect clustering in Ni under the irradiation with low energy helium ions, K. Ono, K. Arakawa and N. Yoshida 271&272 (1999) 214
- Voids in fast-neutron-irradiated Cu, Ni and Cu–Ni concentrated alloys studied by TEM and positron annihilation methods, H. Fukushima, K. Ochiai and Y. Shimomura 271&272 (1999) 220
- Computer simulation on the void formation in neutron-irradiated Cu and Ni at high temperature, Y. Shimomura, I. Mukouda and K. Sugio 271&272 (1999) 225
- Damage evolution in neutron-irradiated Cu during neutron irradiation, I. Mukouda and Y. Shimomura 271&272 (1999) 230
- Disordering kinetics of Ni₃Al under ion irradiation, S. Müller, C. Abromeit, S. Matsumura, N. Wanderka and H. Wollenberger 271&272 (1999) 241
- Effect of solute concentration on grain boundary migration with segregation in stainless steel and model alloys, H. Kanda, N. Hashimoto and H. Takahashi 271&272 (1999) 311
- Effects of He implantation on radiation induced segregation in Cu–Au and Ni–Si alloys, A. Iwase, L.E. Rehn, P.M. Baldo and L. Funk 271&272 (1999) 321
- Behavior of ion-implanted helium and structural changes in nickel-base alloys under long-time exposure at elevated temperatures, I.I. Chernov, B.A. Kalin, A.N. Kalashnikov and V.M. Ananin 271&272 (1999) 333
- The mode of stress corrosion cracking in Ni-base alloys in high temperature water containing lead, S.S. Hwang, H.P. Kim, D.H. Lee, U.C. Kim and J.S. Kim 275 (1999) 28
- Synergistic interaction of fatigue and stress corrosion on the corrosion fatigue crack growth behavior in Alloy 600 in high temperature and high pressure water, W.Y. Maeng, Y.H. Kang, T.W. Nam, S. Ohashi, T. Ishihara 275 (1999) 194
- Stability of ordered phases under irradiation, C. Abromeit, H. Wollenberger, S. Matsumura and C. Kinoshita 276 (2000) 104
- Comparison between radiation effects in some fcc and bcc metals irradiated with energetic heavy ions – a review, A. Iwase and S. Ishino 276 (2000) 178

- Pitting corrosion of Alloy 690 in thio-sulfate-containing chloride solutions, W.-T. Tsai and T.-F. Wu 277 (2000) 169
- The corrosion of Alloy 718 during 800 MeV proton irradiation, R.S. Lillard, G.J. Willcutt, D.L. Pile and D.P. Butt 277 (2000) 250
- A study of absorption processes of hydrogen isotopes in some transition metals by LiOD + LiOH mixture electrolysis, Y. Oya, T. Suzuki, K. Inuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 278 (2000) 48
- A comparative evaluation of welding consumables for dissimilar welds between 316LN austenitic stainless steel and Alloy 800, M. Sireesha, S.K. Albert, V. Shankar and S. Sundarasan 279 (2000) 65
- The effect of alloying elements on the defect structural evolution in neutron irradiated Ni alloys, T. Yoshiie, Q. Xu, Y. Satoh, H. Ohkubo and M. Kiritani 283–287 (2000) 229
- Void swelling and irradiation creep of two high-nickel steels after irradiation at 400–410 °C to 84–91 dpa in the BN-350 fast reactor, S.I. Porollo, A.M. Dvoriashin, A.N. Vorobjev, Yu.V. Konobeev, V.M. Krigan, E.G. Mironova, N.I. Budylkin and F.A. Garner 283–287 (2000) 239
- Radiation-induced segregation in model alloys, T. Ezawa, E. Wakai and R. Oshima 283–287 (2000) 244
- Computer simulation of defects interacting with a dislocation in Fe and Ni, E. Kuramoto, K. Ohsawa and T. Tsutsumi 283–287 (2000) 778
- Positron-lifetime study of electrically hydrogen charged Ni, austenitic stainless steel and Fe, H. Ohkubo, S. Sugiyama, K. Fukuzato, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 858
- High-sensitivity quadrupole mass spectrometry system for the determination of hydrogen in irradiated materials, B.M. Oliver, F.A. Garner, L.R. Greenwood and J.A. Abrefah 283–287 (2000) 1006
- The oxidation kinetics of Incoloy 800 and its deuterium permeation behavior, A. Perujo, J. Reimann, H. Feuerstein and B. Mancinelli 283–287 (2000) 1292
- Material composition and nuclear data libraries' influence on nickel–chromium alloys activation evaluation: a comparison with decay heat experiments, D.G. Cepraga and G. Cambi 283–287 (2000) 1453
- Effects of temperature and contact stress on the sliding wear of Ni-base Deloro 50 hardfacing alloy, S. Kim and J. Kim 288 (2001) 163
- Microstructure and mechanical properties of inconel 625 superalloy, V. Shankar, K. Bhanu Sankara Rao and S.L. Mannan 288 (2001) 222
- Absorption of molten fluoride salts in glassy carbon, pyrographite and Hastelloy B, J. Vacik, H. Naramoto, J. Cervena, V. Hnatowicz, I. Peka and D. Fink 289 (2001) 308
- Work function change of first wall candidate metals due to ion beam irradiation, G.-N. Luo, K. Yamaguchi, T. Terai and M. Yamawaki 290–293 (2001) 116
- The corrosion of Alloy 690 in high-temperature aqueous media – thermodynamic considerations, R.J. Lemire and G.A. McRae 294 (2001) 141
- Effect of electrolyte composition on the electrochemical potentiokinetic reactivation behavior of Alloy 600, T.-F. Wu, T.-P. Cheng and W.-T. Tsai 295 (2001) 233
- Determination of helium and hydrogen yield from measurements on pure metals and alloys irradiated by mixed high energy proton and spallation neutron spectra in LANSCE, F.A. Garner, B.M. Oliver, L.R. Greenwood, M.R. James, P.D. Ferguson, S.A. Maloy and W.F. Sommer 296 (2001) 66
- The mechanical properties of 316L/304L stainless steels, Alloy 718 and Mod 9Cr–1Mo after irradiation in a spallation environment, S.A. Maloy, M.R. James, G. Willcutt, W.F. Sommer, M. Sokolov, L.L. Snead, M.L. Hamilton and F. Garner 296 (2001) 119
- The mechanical properties of an Alloy 718 window after irradiation in a spallation environment, M.R. James, S.A. Maloy, F.D. Gac, W.F. Sommer, J. Chen and H. Ullmaier 296 (2001) 139
- Correlation of radiation-induced changes in mechanical properties and microstructural development of Alloy 718 irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, S.A. Maloy and W.F. Sommer 296 (2001) 145
- Auger electron spectroscopy study of alloy 718 and 304L stainless steel irradiated with 800 MeV protons, M. García-Mazarío, M. Hernández-Mayoral and A.M. Lancha 296 (2001) 192
- Ion-irradiation-induced hardening in Inconel 718, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur 296 (2001) 203
- Thermal gradient mass transfer of type 316L stainless steel and alloy 718 in

- flowing mercury, S.J. Pawel, J.R. DiStefano and E.T. Manneschildt 296 (2001) 210
- Intergranular penetration and embrittlement of solid nickel through bismuth vapour condensation at 700 °C, N. Marié, K. Wolski and M. Biscondi 296 (2001) 282
- Diffusion reactions in titanium/Inconel-600 system, R.V. Patil, G.B. Kale and P.S. Gawde 297 (2001) 153
- Characterization of the new uranium–nickel alloy $U_{10}Ni_{13}$, A. Perricone and H. Noël 299 (2001) 260
- Diffusive transport parameters and surface rate constants of deuterium in Incoloy 800, G.A. Esteban, A. Perujo, L.A. Sedano, F. Legarda, B. Mancinelli and K. Douglas 300 (2002) 1
- Niobium, Niobium Alloys and Compounds**
- Trapping of deuterium by niobium at eV ion bombardment energies, A.A. Evanov, V.A. Kurnaev, D.V. Levchuk and A.A. Pisarev 271&272 (1999) 330
- Manufacturing technique of Nb_3Al super-conductive sheet by electrically heated powder rolling, C. Mochizuki and M. Mikami 271&272 (1999) 508
- A study of absorption processes of hydrogen isotopes in some transition metals by $LiOD + LiOH$ mixture electrolysis, Y. Oya, T. Suzuki, K. Iinuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 278 (2000) 48
- Oxidation of β -Nb and $Zr(Fe, V)_2$ precipitates in oxide films formed on advanced Zr-based alloys, D. Pêcheur 278 (2000) 195
- Deuterium pumping experiment with superpermeable Nb membrane in JFT-2M tokamak, Y. Nakamura, S. Sengoku, Y. Nakahara, N. Suzuki, H. Suzuki, N. Ohyabu, A. Busnyuk, M. Notkin and A. Livshits 278 (2000) 312
- Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161
- Russian superconducting materials for magnet systems of fusion reactors, A. Shikov, A. Nikulin, V. Pantsyrnyi, A. Vorobieva, G. Vedernikov, A. Silaev, E. Dergunova, S. Soudiev and I. Akimov 283–287 (2000) 968
- Effects of thin films on inventory, permeation and re-emission of energetic hydrogen, N. Ohyabu, Y. Nakamura, Y. Nakahara, A. Livshits, V. Alimov, A. Busnyuk, M. Notkin, A. Samartsev and A. Doroshin 283–287 (2000) 1297
- Membrane bias effects on plasma-driven permeation of hydrogen through niobium membrane, A. Busnyuk, Y. Nakamura, Y. Nakahara, H. Suzuki, N. Ohyabu and A. Livshits 290–293 (2001) 57
- Trapping of eV deuterium ions by niobium at glancing incidence, V.A. Kurnaev, A.V. Golubeva, A.A. Evanov, D.V. Levchuk, A.A. Pisarev and N.N. Trifonov 290–293 (2001) 112
- Oxidation and its effects on the mechanical properties of Nb–1Zr, J.R. DiStefano and L.D. Chitwood 295 (2001) 42
- Coarsening-densification transition temperature in sintering of uranium dioxide, P. Balakrishna, B. Narasimha Murthy, K.P. Chakraborty, R.N. Jayaraj and C. Ganguly 297 (2001) 35
- Nuclear Properties**
- Post-irradiation creep rupture properties of FBR grade 316 SS structural material, N. Miyaji, Y. Abe, S. Ukai and S. Onose 271&272 (1999) 173
- Evaluation of weld crack susceptibility for neutron irradiated stainless steels, T. Suzuki, A. Kohyama, T. Hirose and M. Narui 271&272 (1999) 179
- Corrosion of some V- and Nb-base alloys under irradiation in water, V.A. Kazakov, V.P. Chakin and Yu.D. Goncharenko 271&272 (1999) 463
- Superconducting transition in Nb_3Ge irradiated by neutrons in the superconducting state, L.S. Topchishvili and T.Sh. Kvirikashvili 271&272 (1999) 502
- Critical current in NbTi wires irradiated by neutrons at 20 K, L.S. Topchishvili and A.I. Naskidashvili 271&272 (1999) 505
- Slow neutron total cross-section of Al6061 at low temperatures, J.R. Granada 277 (2000) 346
- Comparison of nuclear irradiation parameters of fusion breeder materials in high flux fission test reactors and a fusion power demonstration reactor, U. Fischer, S. Herring, A. Hogenbirk, D. Leichtle, Y. Nagao, B.J. Pijlgroms and A. Ying 280 (2000) 151
- Selective excitation of odd gadolinium isotopes using two-colour photoionisation schemes, P.V. Kiran Kumar, M.V. Suryanarayana and S. Gangadharan 282 (2000) 255
- Experimental study on beryllium-7 production via sequential reactions in lithium-containing compounds irradiated by 14 MeV neutrons, F. Mae-kawa, Y.M. Verzilov, D.L. Smith and Y. Ikeda 283–287 (2000) 1448

Optical Microscopy

- Radiation effects of 200 keV and 1 MeV Ni ion on MgO single crystal, T. Mitamura, K. Kawatsura, R. Takahashi, T. Adachi, T. Igarashi, S. Arai, N. Masuda, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 15
- Microstructural aspects of Zircaloy nodular corrosion in steam, D.F. Taylor 277 (2000) 295
- Rim structure formation and high burn-up fuel behavior of large-grained UO₂ fuels, K. Une, M. Hirai, K. Nogita, T. Hosokawa, Y. Suzawa, S. Shimizu and Y. Etoh 278 (2000) 54
- Study on the damaging process of silica by in-reactor luminescence, T. Ii, T. Yoshida, T. Tanabe, T. Hara, M. Okada and K. Yamaguchi 283–287 (2000) 898
- Radiation-induced conductivity of doped silicon in response to photon, proton and neutron irradiation, N. Kishimoto, H. Amekura, O.A. Plaksin and V.A. Stepanov 283–287 (2000) 907
- Pre-transition oxidation behaviour of pre-hydrided Zircaloy-2, M. Oskarsson, E. Ahlberg, U. Södervall, U. Andersson and K. Pettersson 289 (2001) 315
- Influence of low-temperature air oxidation on the dissolution behaviour of high burn-up LWR spent fuel, J.A. Serrano, J.P. Glatz, E.H. Toscano, J. Barrero and D. Papaioannou 294 (2001) 339
- Permeation**
- Development of tritium permeation barriers on Al base in Europe, G. Benamati, C. Chabrol, A. Perujo, E. Rigal and H. Glasbrenner 271&272 (1999) 391
- Permeation of multi-component hydrogen isotopes through austenitic stainless steels, T. Shiraishi, M. Nishikawa, T. Yamaguchi and K. Kenmotsu 273 (1999) 60
- Hydrogen isotope permeation through and inventory in the first wall of the water cooled Pb–17Li blanket for DEMO, O.V. Ogorodnikova, M.A. Fütterer, E. Serra, G. Benamati, J.-F. Salavy and G. Aiello 273 (1999) 66
- Investigation on the suitability of plasma sprayed Fe–Cr–Al coatings as tritium permeation barrier, C. Fazio, K. Stein-Fechner, E. Serra, H. Glasbrenner and G. Benamati 273 (1999) 233
- Characterization of hydrogen permeation through recycled cast iron for subsurface disposal, A.M. Brass and F. Barbier 273 (1999) 265
- Effects of thermal cycles on ²²²Rn permeability in Au, S.K. Bhattacharyya and S.K. Pabi 275 (1999) 206
- Comparison of hydrogen gas–, atom– and ion–metal interactions, O.V. Ogorodnikova 277 (2000) 130
- Tritium diffusive transport parameters and trapping effects in the reduced activating martensitic steel OPTIFER-IVb, G.A. Esteban, A. Perujo, K. Douglas and L.A. Sedano 281 (2000) 34
- The surface rate constants of deuterium in the reduced activating martensitic steel OPTIFER-IVb, G.A. Esteban, A. Perujo, L.A. Sedano and B. Mancinelli 282 (2000) 89
- Diffusion and permeation of hydrogen in low-activation martensitic stainless steel – effect of irradiation, F. Schliefer, C. Liu and P. Jung 283–287 (2000) 540
- Heavy hydrogen isotopes penetration through austenitic and martensitic steels, Yu. Dolinski, I. Lyasota, A. Shestakov, Yu. Repritsev and Yu. Zouev 283–287 (2000) 854
- Permeation of hydrogen through vanadium under helium ion irradiation, Y. Hatano, Y. Nanjo, R. Hayakawa and K. Watanabe 283–287 (2000) 868
- Hydrogen and deuterium transport and inventory parameters through W and W-alloys for fusion reactor applications, G. Benamati, E. Serra and C.H. Wu 283–287 (2000) 1033
- Tritium permeation experiment using a tungsten armored divertor-simulating module, H. Nakamura, S. O'hira, W. Shu, M. Nishi, T.J. Venhaus, R.A. Causey, D.R. Hyatt and R.S. Willms 283–287 (2000) 1043
- The permeation of tritium through 316L stainless steel with multiple coatings, Z. Yao, J. Hao, C. Zhou, C. Shan and J. Yu 283–287 (2000) 1287
- The oxidation kinetics of Incoloy 800 and its deuterium permeation behavior, A. Perujo, J. Reimann, H. Feuerstein and B. Mancinelli 283–287 (2000) 1292
- Effects of thin films on inventory, permeation and re-emission of energetic hydrogen, N. Ohyabu, Y. Nakamura, Y. Nakahara, A. Livshits, V. Alimov, A. Busnyuk, M. Notkin, A. Samartsev and A. Doroshin 283–287 (2000) 1297
- Scale structure of aluminised MANET steel after HIP treatment, H. Glasbrenner, K. Stein-Fechner and J. Konys 283–287 (2000) 1302
- In-pile tritium-permeation measurements on T91 tubes with double walls or a Fe–Al/Al₂O₃ coating, R. Conrad, K. Bakker, C. Chabrol, M.A. Fütterer,

- J.G. van der Laan, E. Rigal and M.P. Stijkel 283–287 (2000) 1351
- Co-permeation of deuterium and hydrogen through Pd, K. Kizu, A. Pisarev and T. Tanabe 289 (2001) 291
- Membrane bias effects on plasma-driven permeation of hydrogen through niobium membrane, A. Busnyuk, Y. Nakamura, Y. Nakahara, H. Suzuki, N. Ohyabu and A. Livshits 290–293 (2001) 57
- Erosion and outgassing behavior of TiN-coated plasma facing components of the Uragan-3M torsatron, G.P. Glazunov, E.D. Volkov, V.P. Veremeyenko, N.A. Kosik, A.A. Kutsyn, J. Langner, E. Langner, Yu.K. Mironov, N.I. Nazarov, J. Piekoszewski, M. Sadowski, J. Stanislawski and V.I. Tereshin 290–293 (2001) 266
- Surface effects on plasma-driven tritium permeation through metals, O.V. Ogorodnikova 290–293 (2001) 459
- Permeation behavior of deuterium implanted in electro- and sputter-deposited copper coatings on aluminum alloy substrates, M. Alam and M.Y. Inal 295 (2001) 27
- Hydrogen isotope diffusive transport parameters in pure polycrystalline tungsten, G.A. Esteban, A. Perujo, L.A. Sedano and K. Douglas 295 (2001) 49
- Tritium permeation behavior implanted into pure tungsten and its isotope effect, H. Nakamura, T. Hayashi, T. Kakuta, T. Suzuki and M. Nishi 297 (2001) 285
- Diffusive transport parameters and surface rate constants of deuterium in Incoloy 800, G.A. Esteban, A. Perujo, L.A. Sedano, F. Legarda, B. Mancinelli and K. Douglas 300 (2002) 1
- Phase Equilibria** (*includes Constitution, Phase Stability, Phase Instability*)
- Disordering kinetics of Ni₃Al under ion irradiation, S. Müller, C. Abromeit, S. Matsumura, N. Wanderka and H. Wollenberger 271&272 (1999) 241
- Modelling of dissolution profiles of ordered particles under irradiation, C. Abromeit, E. Camus and S. Matsumura 271&272 (1999) 246
- Dynamical phase changes induced by point defect fluxes under irradiation, C. Abromeit and G. Martin 271&272 (1999) 251
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Semi-empirical models of actinide alloying, J.K. Gibson, R.G. Haire, T. Ogawa 273 (1999) 139
- In-pile irradiation of plutonium rock-like oxide fuels with yttria stabilized zirconia or thoria, spinel and corundum, T. Yamashita, N. Nitani, H. Kanazawa, M. Magara, T. Ohmichi, H. Takano and T. Muromura 274 (1999) 98
- Physical and chemical characteristics of baddeleyite (monoclinic zirconia) in natural environments: an overview and case study, G.R. Lumpkin 274 (1999) 206
- Equilibrium phase relations in the U–Zr–Fe ternary system, K. Nakamura, M. Kurata, T. Ogata, A. Itoh and M. Akabori 275 (1999) 151
- Reactions of U–Zr alloy with Fe and Fe–Cr alloy, K. Nakamura, T. Ogata, M. Kurata, A. Itoh and M. Akabori 275 (1999) 246
- The niobium–silicon–uranium system, T. Lebihan, P. Rogl and H. Noël 277 (2000) 82
- A new ternary compound in the Zr–Sn–Fe system, N. Nieva and D. Arias 277 (2000) 120
- Neutron diffraction study of U–10 wt% Mo alloy, B.-S. Seong, C.-H. Lee, J.-S. Lee, H.-S. Shim, J.-H. Lee, K. Kim, C. Kim and V. Em 277 (2000) 274
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. I. Effects of minor alloying elements on precipitate phases in melt products and implication in alloy fabrication, E.H. Lee and L.K. Mansur 278 (2000) 1
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. II. Effects of minor elements on precipitate phase stability during thermal aging, E.H. Lee and L.K. Mansur 278 (2000) 11
- Phase diagram and lattice instability in tungsten–rhenium alloys, M. Ekman, K. Persson and G. Grimvall 278 (2000) 273
- Crystallization sequence and microstructure evolution of Synroc samples crystallized from CaZrTi₂O₇ melts, H. Xu and Y. Wang 279 (2000) 100
- A thermodynamic evaluation of the U–O system from UO₂ to U₃O₈, Y. Soo Kim 279 (2000) 173
- Thermal and X-ray diffraction studies on the phase equilibria in the system UO₂(NO₃)₂ · 6H₂O–NaNO₃, B.B. Kalekar, K.V. Rajagopalan, C.G.S. Pillai, P.V. Ravindran and P.K. Mathur 279 (2000) 245
- Neutron diffraction study of U5.4 wt% Mo alloy, J.S. Lee, C.H. Lee, K.H. Kim and V. Em 280 (2000) 116
- Phase transition temperature in the Zr-rich corner of Zr–Nb–Sn–Fe alloys, M. Canay, C.A. Danón and D. Arias 280 (2000) 365

- Phase equilibria and magnetism in the Mo–Si–U system, P. Rogl, T. Le Bihan and H. Noël 288 (2001) 66
- The Sn–Ti–Zr system: equilibrium phases at 900 °C, S.F. Aricó and L.M. Gribaudo 288 (2001) 217
- Formation of nitrides at the surface of U–Zr alloys, M. Akabori, A. Itoh and T. Ogawa 289 (2001) 342
- Thermochemical data and modelling for ex-vessel corium behaviour during a severe accident, E.H.P. Cordfunke, M.E. Huntelaar, F. Funke, M.K. Koch, Ch. Kortz, P.K. Mason, M.A. Mignanelli and M.S. Newland 294 (2001) 18
- A qualitative comparison of barium behaviour in the PHEBUS FPT0 test and analytical tests, R. Dubourg and P. Taylor 294 (2001) 32
- Selected thermal properties of beryllium and phase equilibria in beryllium systems relevant for nuclear fusion reactor blankets, H. Kleykamp 294 (2001) 88
- Thermodynamic evaluation of the quaternary U–Pu–Zr–Fe system – assessment of cladding temperature limits of metallic fuel in a fast reactor, M. Kurata, K. Nakamura and T. Ogata 294 (2001) 123
- Thermal expansion of $(Ca_{1-x}Pu_x)TiO_3$, T. Sato, Y. Hanajiri, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 130
- Thermodynamic analysis of chemical states of fission products in uranium–zirconium hydride fuel, J. Huang, B. Tsuchiya, K. Konashi and M. Yamawaki 294 (2001) 154
- Thermal expansion and solubility limits of plutonium-doped lanthanum zirconates, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 183
- Solubility limits and bulk thermal expansion of $ThO_2:M^{n+}$ ($M = Y^{3+}$, Sr^{2+} and Ba^{2+}), A.K. Tyagi, M.D. Mathews and R. Ramachandran 294 (2001) 198
- An estimate of the high temperature, metal rich phase boundary of plutonium sesquioxide, R.I. Sheldon 297 (2001) 358
- The effect of clay on the dissolution of nuclear waste glass, K. Lemmens 298 (2001) 11
- Overview of actinides (Np, Pu, Am) and Tc release from waste glasses: influence of solution composition, V. Pirllet 298 (2001) 47
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- Database development of glass dissolution and radionuclide migration for performance analysis of HLW repository in Japan, M. Yui 298 (2001) 136
- Determination of sorption isotherms for Eu, Th, U and Am on the gel layer of corroded HLW glass, B. Luckscheiter and B. Kienzler 298 (2001) 155
- Release and retention of uranium during glass corrosion, T. Maeda, T. Banba, K. Sonoda, Y. Inagaki and H. Furuya 298 (2001) 163
- Leaching and migration of neptunium in a simulated engineered barrier system consisting of HLW glass and compacted bentonite, Y. Inagaki, H. Furuya, K. Idemitsu, T. Arima, H. Osako, T. Banba, T. Maeda, S. Matsumoto, I. Nomura, S. Kikkawa, M. Saito and H. Okamoto 298 (2001) 168
- Thermochemical and thermophysical properties of curium and its oxides, R.J.M. Konings 298 (2001) 255
- Phase Transformation (includes Evaporation, Sublimation)**
- Electron irradiation effects on Ti–Ni shape memory alloys, A. Okada, K. Hamada, T. Matsumoto, I. Ishida and Y. Abe 271&272 (1999) 189
- Modelling of dissolution profiles of ordered particles under irradiation, C. Abromeit, E. Camus and S. Matsumura 271&272 (1999) 246
- Radiation-induced electrical and optical processes in materials based on Al_2O_3 , O.A. Plaskin, V.A. Stepanov, P.A. Stepanov and V.M. Chernov 271&272 (1999) 496
- Irradiation swelling of explosively shocked materials, V.M. Kosenkov, A.V. Kolesnikov and S.A. Vorobjev 273 (1999) 228
- Radiation damage effects in zirconia, K.E. Sickafus, Hj. Matzke, Th. Hartmann, K. Yasuda, J.A. Valdez, P. Chodak III, M. Nastasi and R.A. Verrall 274 (1999) 66
- Oxidation of -Zr and related phases in ZrNb alloys: an electron microscopy investigation, Y.P. Lin and O.T. Woo 277 (2000) 11
- Orientation of γ to α transformation in Xe-implanted austenitic 304 stainless steel, G. Xie, M. Song, K. Mitsuishi and K. Furuya 281 (2000) 80
- Investigation on the zirconia phase transition under irradiation, D. Simeone, J.L. Bechade, D. Gosset, A. Chevarier, P. Daniel, H. Pilliaire and G. Baldinozzi 281 (2000) 171

- Neutron irradiation effects in magnesium-aluminate spinel doped with transition metals, V.T. Gritsyna, I.V. Afanasyev-Charkin, V.A. Kobayakov and K.E. Sickafus 283–287 (2000) 927
- Heavy-ion irradiation effects in $Gd_2(Ti_{2-x}Zr_x)O_7$ pyrochlores, B.D. Begg, N.J. Hess, D.E. McCready, S. Thevuthasan and W.J. Weber 289 (2001) 188
- The effect of manganese on the strain-induced martensitic transformation and high temperature wear resistance of Fe–20Cr–1C–1Si hardfacing alloy, J.-k. Kim, G.-m. Kim and S.-j. Kim 289 (2001) 263
- Attenuation of secondary electron emission from divertor plates due to magnetic field inclination, Yu. Igitkhanov and G. Janeschitz 290–293 (2001) 99
- Experimental study of lithium target under high power load, B.I. Khripunov, V.B. Petrov, V.V. Shapkin, A.S. Pleshakov, A.S. Rupyshev, N.V. Antonov, A.M. Litnovsky, P.V. Romanov, Yu.S. Shpansky, V.A. Evtikhin, I.E. Lyublinsky and A.V. Vertkov 290–293 (2001) 201
- Material erosion and erosion products under plasma heat loads typical for ITER hard disruptions, V. Safronov, N. Arkhipov, V. Bakhtin, S. Kurkin, F. Scaffidi-Argentina, D. Toporkov, S. Vasenin, H. Würz and A. Zhitlukhin 290–293 (2001) 1052
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Cloud drifts over eroding surfaces in magnetic field configurations with three field components, P. Lalouis, R. Schneider and L.L. Lengyel 290–293 (2001) 1084
- Vaporization chemistry of hypo-stoichiometric $(U,Pu)O_2$, R. Viswanathan and M.V. Krishnaiah 294 (2001) 69
- Application of a new thermochemical measurement method for nuclear materials at temperatures beyond 3000 K, J.W. Hastie, D.W. Bonnell and P.K. Schenck 294 (2001) 175
- Phase transformation of polycrystalline zirconia induced by swift heavy ion irradiation, C. Gibert-Mougel, F. Couvreur, J.M. Costantini, S. Bouffard, F. Levesque, S. Hémon, E. Paumier and C. Dufour 295 (2001) 121
- Enthalpy, heat capacity and enthalpy of transformation of Li_2TiO_3 , H. Kleykamp 295 (2001) 244
- Temperature programmed decomposition of thorium oxalate hexahydrate, S. Dash, R. Krishnan, M. Kamrudin, A.K. Tyagi and B. Raj 295 (2001) 281
- Effect of the expansion associated with the plutonium α – β – γ phase transitions on storage can integrity, D.R. Spearing, D.K. Veirs and F.C. Prenger 299 (2001) 111
- Analysis of the monoclinic–tetragonal phase transition of zirconia under irradiation, D. Simeone, D. Gosset, J.L. Bechade and A. Chevarier 300 (2002) 27
- A Raman study of the nanocrystallite size effect on the pressure–temperature phase diagram of zirconia grown by zirconium-based alloys oxidation, P. Bouvier, J. Godlewski and G. Lucazeau 300 (2002) 118
- Order–disorder phase transition induced by swift ions in $MgAl_2O_4$ and $ZnAl_2O_4$ spinels, D. Simeone, C. Dodane-Thiriet, D. Gosset, P. Daniel and M. Beauvy 300 (2002) 151
- Physical Properties (not listed elsewhere)**
- Measurements of the radiation resistant fused quartz radioluminescence spectral intensity under irradiation in the pulse nuclear reactor, A. Gorshkov, D. Orlinski, V. Sannikov, K. Vukolov, S. Goncharov, Yu. Sadovnikov and A. Kirillov 273 (1999) 271
- Determination of the solidus temperatures of Zircaloy-4/oxygen alloys, P.J. Hayward and I.M. George 273 (1999) 294
- Depth profiles of damage accumulation in UO_2 and $(U,Gd)O_2$ pellets irradiated with 100 MeV iodine ions, K. Nogita, K. Hayashi, K. Une and K. Fukuda 273 (1999) 302
- Thermophysical properties of rock-like oxide fuel with spinel–yttria stabilized zirconia system, N. Nitani, T. Yamashita, T. Matsuda, S.-i. Kobayashi and T. Ohmichi 274 (1999) 15
- Core design study on rock-like oxide fuel light water reactor and improvements of core characteristics, H. Akie, H. Takano and Y. Anoda 274 (1999) 139
- Design study of an irradiation experiment with inert matrix and mixed-oxide fuel at the Halden boiling water reactor, U. Kasemeyer, H.-K. Joo and G. Ledergerber 274 (1999) 160
- Selection of materials as diluents for burning of plutonium fuels in nuclear reactors, H. Kleykamp 275 (1999) 1
- Study of boron carbide evolution under neutron irradiation by Raman spectroscopy, D. Simeone, C. Mallet, P. Dubuisson, G. Baldinozzi, C. Gervais and J. Maquet 277 (2000) 1

- XPS investigations on cesium uranates: mixed valency behaviour of uranium, S. Van den Bergh, J.-P. Laval, B. Gaudreau, H. Terryn and M. Verwerft 277 (2000) 28
- Radiation damage in neutron-irradiated yttria-stabilized-zirconia single crystals, B. Savoini, D. Cáceres, I. Vergara, R. González and J.E. Muñoz Santiuste 277 (2000) 199
- Neutron irradiation effects on carbon based materials at 350 °C and 800 °C, J.P. Bonal and C.H. Wu 277 (2000) 351
- Pyrophoric potential of plutonium-containing salt residues, J.M. Haschke, H.K. Fauske and A.G. Phillips 279 (2000) 127
- Optical properties of γ -irradiated synthetic sapphire and yttria-stabilized zirconia spectroscopic windows, L. Fuks and C. Degueldre 280 (2000) 360
- Production behavior of irradiation defects in lithium silicates and silica under ion beam irradiation, K. Moritani, S. Tanaka and H. Moriyama 281 (2000) 106
- Discrete-variational Dirac–Slater calculations on the valence band XPS for α -uranium metal, M. Kurihara, M. Hirata, R. Sekine, J. Onoe and H. Nakamatsu 281 (2000) 140
- Impact of irradiation effects on design solutions for ITER diagnostics, S. Yamamoto, T. Shikama, V. Belyakov, E. Farnum, E. Hodgson, T. Nishitani, D. Orlinski, S. Zinkle, S. Kasai, P. Stott, K. Young, V. Zaveriaev, A. Costley, L. deKock, C. Walker and G. Janeschitz 283–287 (2000) 60
- The effect of transmutation and displacement in irradiated copper for heat-sink materials, S. Ishino, A. Kurui, S. Ichikawa, T. Inaba and T. Hasegawa 283–287 (2000) 215
- Solute interactions in pure vanadium and V–4Cr–4Ti alloy, D.T. Hoelzer, M.K. West, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 616
- KU1 quartz glass for remote handling and LIDAR diagnostic optical transmission systems, M. García-Matos, A. Morono and E.R. Hodgson 283–287 (2000) 890
- Radiation effects on laser damage in KU1 quartz glass, P. Martin, A. Morono and E.R. Hodgson 283–287 (2000) 894
- Russian superconducting materials for magnet systems of fusion reactors, A. Shikov, A. Nikulin, V. Pantsyrnyi, A. Vorobieva, G. Vedernikov, A. Silaev, E. Dergunova, S. Soudiev and I. Akimov 283–287 (2000) 968
- Effect of neutron irradiation on thermal diffusivity of tungsten–rhenium alloys, M. Fujitsuka, B. Tsuchiya, I. Mutoh, T. Tanabe and T. Shikama 283–287 (2000) 1148
- Detection of sputtered and evaporated carbon aggregates: relative and absolute electron ionization fragmentation yields, C. Mair, H. Deutsch, K. Becker, T.D. Märk and E. Vietzke 290–293 (2001) 291
- Some problems arising due to plasma–surface interaction for operation of the in-vessel mirrors in a fusion reactor, V.S. Voitsenya, A.F. Bardamid, V.N. Bondarenko, W. Jacob, V.G. Konovalov, S. Masuzaki, O. Motojima, D.V. Orlinskij, V.L. Popperenko, I.V. Ryzhkov, A. Sagara, A.F. Shtan, S.I. Solodovchenko and M.V. Vinnichenko 290–293 (2001) 336
- Interpretation of SOL flows and target asymmetries in JET using EDGE2D code calculations, A.V. Chankin, G. Corrigan, S.K. Erents, G.F. Matthews, J. Spence and P.C. Stangeby 290–293 (2001) 518
- Density fluctuations at high density in the ergodic divertor configuration of Tore Supra, P. Devynck, J. Gunn, Ph. Ghendrih, X. Garbet, G. Antar, P. Beyer, C. Boucher, C. Honore, F. Gervais, P. Hennequin, A. Quémeneur and A. Truc 290–293 (2001) 584
- Vitrification of gamma irradiated $^{60}\text{Co}^{2+}$ zeolites, S. Bulbulian and P. Bosch 295 (2001) 64
- Enthalpy, heat capacity and enthalpy of transformation of Li_2TiO_3 , H. Kleykamp 295 (2001) 244
- On the relationship among ‘ f ’ texture factors for the principal planes of zirconium, hafnium and titanium alloys, J.J. Kearns 299 (2001) 171
- Plasma-Materials Interaction**
- Trapping of deuterium by niobium at eV ion bombardment energies, A.A. Evanov, V.A. Kurnaev, D.V. Levchuk and A.A. Pisarev 271&272 (1999) 330
- Calculation and experimental investigation of fusion reactor divertor plate and first wall protection by capillary-pore systems with lithium, V.A. Evtikhin, I.E. Lyubinski, A.V. Vertkov, V.G. Belan, I.K. Konkashbaev and L.B. Nikandrov 271&272 (1999) 396
- Dependence of deuterium line-shape on the insertion depth of BN and C limiters in the TPE-IRM20 reversed field pinch plasma, S. Sekine, Y. Hirano, T. Shimada, Y. Yagi and H. Sakakita 271&272 (1999) 415
- Deuterium retention in codeposited layers and carbon materials exposed to high flux D-plasma, I.I. Arkhipov, A.E. Gorodetsky, R.Kh. Zalavutdinov,

- A.P. Zakharov, T.A. Burtseva, I.V. Mazul, B.I. Khripunov, V.V. Shapkin and V.B. Petrov 271&272 (1999) 418
- Hydrogen isotope retention in beryllium for tokamak plasma-facing applications, R.A. Anderl, R.A. Causey, J.W. Davis, R.P. Doerner, G. Federici, A.A. Haasz, G.R. Longhurst, W.R. Wampler and K.L. Wilson 273 (1999) 1
- Comprehensive physical models and simulation package for plasma/material interactions during plasma instabilities, A. Hassanein and I. Kon-kashbaev 273 (1999) 326
- Deposition of lithium on a plasma edge probe in TFTR. Behavior of lithium-painted walls interacting with edge plasmas, Y. Hirooka, K. Ashida, H. Kugel, D. Walsh, W. Wampler, M. Bell, R. Conn, M. Hara, S. Luckhardt, M. Matsuyama, D. Mansfield, D. Mueller, C. Skinner, T. Walters and K. Watanabe 274 (1999) 320
- Feedback control of highly radiative plasmas in Tore Supra, C. Grisolia, Ph. Ghendrih, A. Grosman, P. Monier-Garbet, D. Moulin and J.C. Vallet 275 (1999) 95
- Etching of UO_2 in NF_3 RF plasma glow discharge, J.M. Veilleux, M.S. El-Genk, E.P. Chamberlin, C. Munson and J. FitzPatrick 277 (2000) 315
- Theory of edge plasma in a spheromak, E.B. Hooper, R.H. Cohen and D.D. Ryutov 278 (2000) 104
- Interpretation of the impurity distribution in the divertor during divertor plate biasing using the DIVIMP code, E. Haddad, F. Meo, R. Marchand, G. Ratel, B.L. Stansfield, J. Gunn, P.C. Stangeby, J.D. Elder, S. Lisgo and K. Krieger 278 (2000) 111
- Interaction of ICRF power and edge plasma in Tore Supra ergodic divertor configuration, F. Nguyen, A. Grosman, V. Basiuk, D. Fraboulet, B. Beaumont, A. Bécoulet, Ph. Ghendrih, L. Ladurelle and B. Meslin 278 (2000) 117
- Deuterium pumping experiment with superpermeable Nb membrane in JFT-2M tokamak, Y. Nakamura, S. Sengoku, Y. Nakahara, N. Suzuki, H. Suzuki, N. Ohyabu, A. Busnyuk, M. Notkin and A. Livshits 278 (2000) 312
- MARFE phenomena in the HT-7 tokamak, X. Gao, J.R. Luo, Y.P. Zhao, N. Qiu, Y.X. Jie, Y. Yang, C.Y. Xia, B.N. Wan, G.L. Kuang, X.D. Zhang, J.G. Li, F.X. Yin, X.N. Liu, X.Z. Gong, S.Y. Zhang, J.Y. Zhao, L.Q. Hu, Z.W. Wu, Y.D. Li, K. Yang, Y. Bao, W.W. Ye, L. Chen, H.Y. Fan, S.X. Liu, Y.F. Chen, B.L. Lin, Y.H. Xu, Y.J. Shi, M. Song, X.M. Zhang, M.S. Wei, M. Zeng, A.G. Xie, N.Z. Cui, H.L. Ruan, L. Wang, B. Sheng, S. Liu, X.D. Tong, X.M. Gu, J.S. Mao, J.K. Xie and Y.X. Wan 279 (2000) 330
- XPS study of the process of oxygen getting by thin films of PACVD boron, M.M. Ennaceur and B. Terreault 280 (2000) 33
- Mechanism of chemical sputtering of graphite under high flux deuterium bombardment, Y. Ueda, T. Sugai, Y. Ohtsuka and M. Nishikawa 282 (2000) 216
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- The status of beryllium technology for fusion, F. Scaffidi-Argentina, G.R. Longhurst, V. Shestakov and H. Kawamura 283–287 (2000) 43
- Critical plasma-wall interaction issues for plasma-facing materials and components in near-term fusion devices, G. Federici, J.P. Coad, A.A. Haasz, G. Janeschitz, N. Noda, V. Philipps, J. Roth, C.H. Skinner, R. Tivey and C.H. Wu 283–287 (2000) 110
- Manufacturing and testing of a prototypical divertor vertical target for ITER, M. Merola, L. Plöchl, Ph. Chappuis, F. Escourbiac, M. Grattarola, I. Smid, R. Tivey and G. Vieider 283–287 (2000) 1068
- Infrared characterization and high heat flux testing of plasma sprayed layers, Ph. Chappuis, F. Escourbiac, M. Chantant, M. Febvre, M. Grattarola, M. Bet, M. Merola and B. Riccardi 283–287 (2000) 1081
- Graphite-tungsten twin limiters in studies of material mixing processes on high heat flux components, M. Rubel, T. Tanabe, V. Philipps, B. Emmoth, A. Kirschner, J. von Seggern and P. Wienhold 283–287 (2000) 1089
- Sputtering studies of beryllium with helium and deuterium using molecular dynamics approach, S. Ueda, T. Oh-saka and S. Kuwajima 283–287 (2000) 1100
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Development of functionally graded plasma-facing materials, C.-C. Ge, J.-T. Li, Z.-J. Zhou, W.-B. Cao, W.-P. Shen, M.-X. Wang, N.-M. Zhang, X. Liu and Z.-Y. Xu 283–287 (2000) 1116

- Changes of composition and microstructure of joint interface of tungsten coated carbon by high heat flux, K. Tokunaga, T. Matsubara, Y. Miyamoto, Y. Takao, N. Yoshida, N. Noda, Y. Kubota, T. Sogabe, T. Kato and L. Plöchl 283–287 (2000) 1121
- Application of tungsten for plasma limiters in TEXTOR, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, M. Rubel, A. Huber, J. von Seggern, K. Ohya, A. Pospieszczyk, B. Schweer and TEXTOR team 283–287 (2000) 1128
- Microstructure evolution in tungsten during low-energy helium ion irradiation, H. Iwakiri, K. Yasunaga, K. Morishita and N. Yoshida 283–287 (2000) 1134
- High heat flux simulation experiments with improved electron beam diagnostics, J. Linke, H. Bolt, R. Duwe, W. Kühnlein, A. Lodato, M. Rödiger, K. Schöpflin and B. Wiechers 283–287 (2000) 1152
- Erosion characteristics of neutron-irradiated carbon-based materials under simulated disruption heat loads, K. Sato, E. Ishitsuka, M. Uda, H. Kawamura, S. Suzuki, M. Taniguchi, K. Ezato and M. Akiba 283–287 (2000) 1157
- Hydrodynamic effects of eroded materials of plasma-facing component during a Tokamak disruption, A. Hassanein and I. Konkashbaev 283–287 (2000) 1171
- Armor and heat sink materials joining technologies development for ITER plasma facing components, V. Barabash, M. Akiba, A. Cardella, I. Mazul, B.C. Odegard Jr., L. Ploechl, R. Tivey and G. Vieider 283–287 (2000) 1248
- Refractory metal joining for first wall applications, C.H. Cadden and B.C. Odegard Jr. 283–287 (2000) 1253
- On the mechanisms associated with the chemical reactivity of Be in steam, D.A. Petti, G.R. Smolik and R.A. Anderl 283–287 (2000) 1390
- O₂ erosion of graphite tile substrates, J.W. Davis, C.G. Hamilton and A.A. Haasz 288 (2001) 148
- Evaluation of chemical erosion data for carbon materials at high ion fluxes using Bayesian probability theory, V. Dose, R. Preuss and J. Roth 288 (2001) 153
- XPS characterization of beryllium carbide thin films formed via plasma deposition, Y. Xie, N.C. Morosoff and W.J. James 289 (2001) 48
- Plasma-wall interaction issues in ITER, G. Janeschitz and ITER JCT and HTs 290–293 (2001) 1
- Review of initial experimental results of the PSI studies in the large helical device, S. Masuzaki, K. Akaishi, H. Funaba, M. Goto, K. Ida, S. Inagaki, N. Inoue, K. Kawahata, A. Komori, Y. Kubota, T. Morisaki, S. Morita, Y. Nakamura, K. Narihara, K. Nishimura, N. Noda, N. Ohyabu, B.J. Peterson, A. Sagara, R. Sakamoto, K. Sato, M. Shoji, H. Suzuki, Y. Takeiri, K. Tanaka, T. Tokuzawa, T. Watanabe, K. Tsuzuki, T. Hino, Y. Matsumoto, S. Kado, O. Motojima and LHD Experimental Group 290–293 (2001) 12
- Plasma-surface interactions on liquids, R. Bastasz and W. Eckstein 290–293 (2001) 19
- D, He and Li sputtering of liquid eutectic Sn–Li, J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 33
- Mechanism of the chemical erosion of SiC under hydrogen irradiation, M. Balden, S. Picarle and J. Roth 290–293 (2001) 47
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Membrane bias effects on plasma-driven permeation of hydrogen through niobium membrane, A. Busnyuk, Y. Nakamura, Y. Nakahara, H. Suzuki, N. Ohyabu and A. Livshits 290–293 (2001) 57
- Methane formation in graphite and boron-doped graphite under simultaneous O⁺ and H⁺ irradiation, A.Y.K. Chen, J.W. Davis and A.A. Haasz 290–293 (2001) 61
- Chemical erosion of boronized films from DIII-D tiles, J.W. Davis, P.B. Wright, R.G. Macaulay-Newcombe, A.A. Haasz and C.G. Hamilton 290–293 (2001) 66
- Formation of mixed layers and compounds on beryllium due to C⁺ and CO⁺ bombardment, P. Goldstrass and Ch. Linsmeier 290–293 (2001) 71
- Anisotropic radiation damage by charge exchange neutrals under tokamak discharges in TRIAM-1M, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, S. Itoh and TRIAM Group 290–293 (2001) 94
- Unified analytic representation of physical sputtering yield, R.K. Janev, Yu.V. Ralchenko, T. Kenmotsu and K. Hosaka 290–293 (2001) 104
- Synergistic effects by simultaneous bombardment of tungsten with hydrogen and carbon, K. Krieger and J. Roth 290–293 (2001) 107
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Chemical erosion of doped graphites for fusion devices, C. Garcia-Rosales and M. Balden 290–293 (2001) 173
- Measurements and modeling of D, He and Li sputtering of liquid lithium,

- J.P. Allain, D.N. Ruzic and M.R. Hendricks 290–293 (2001) 180
- Erosion/redeposition analysis of lithium-based liquid surface divertors, J.N. Brooks, T.D. Rognlien, D.N. Ruzic and J.P. Allain 290–293 (2001) 185
- Experimental study of lithium target under high power load, B.I. Khripunov, V.B. Petrov, V.V. Shapkin, A.S. Pleshakov, A.S. Rupyshev, N.V. Antonov, A.M. Litnovsky, P.V. Romanov, Yu.S. Shpansky, V.A. Evtikhin, I.E. Lyublinsky and A.V. Vertkov 290–293 (2001) 201
- Plasma operation with tungsten tiles at the central column of ASDEX Upgrade, R. Neu, V. Rohde, A. Geier, K. Krieger, H. Maier, D. Bolshukhin, A. Kallenbach, R. Pugno, K. Schmidtman, M. Zarrabian and ASDEX Upgrade Team 290–293 (2001) 206
- The porous vanadium as a plasma facing material for the fusion devices, A.V. Zhmendak, A. Huber, V.A. Kvitcinskiy, E.V. Mudretskaya, A.V. Nedospasov, V.V. Panechkina, S.N. Pavlov, A. Pospieszczyk, G.V. Sergienko and V.F. Virko 290–293 (2001) 220
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Surface reactions of hydrocarbon radicals: suppression of the re-deposition in fusion experiments via a divertor liner, A. von Keudell, T. Schwarz-Selinger, W. Jacob and A. Stevens 290–293 (2001) 231
- Modelling of erosion and deposition at limiter surfaces and divertor target plates, A. Kirschner, A. Huber, V. Philipps, A. Pospieszczyk, P. Wienhold and J. Winter 290–293 (2001) 238
- Dust characterization and analysis in Tore-Supra, Ph. Chappuis, E. Tsitrone, M. Mayne, X. Armand, H. Linke, H. Bolt, D. Petti and J.P. Sharpe 290–293 (2001) 245
- Characterisation of radiation and flux measurements on a neutraliser plate of the Tore Supra ergodic divertor, Y. Corre, R. Giannella, C. De Michelis, R. Guirlet, A. Az roual, E. Chareyre, L. Costanzo, A. Escarguel, E. Gauthier, Ph. Ghendrih, J. Gunn, J. Hogan, P. Monier-Garbet, B. P gour , A. Pospieszczyk and E. Tsitrone 290–293 (2001) 250
- Towards an improved understanding of the relationship between plasma edge and materials issues in a next-step fusion device, G.F. Counsell, J.P. Coad, G. Federici, K. Krieger, V. Philipps, C.H. Skinner and D.G. Whyte 290–293 (2001) 255
- Assessment of erosion and tritium codeposition in ITER-FEAT, G. Federici, J.N. Brooks, D.P. Coster, G. Janeschitz, A. Kukuskhin, A. Loarte, H.D. Pacher, J. Stober and C.H. Wu 290–293 (2001) 260
- Erosion and outgassing behavior of TiN-coated plasma facing components of the Uragan-3M torsatron, G.P. Glazunov, E.D. Volkov, V.P. Veremeyenko, N.A. Kosik, A.A. Kutsyn, J. Langner, E. Langner, Yu.K. Mironov, N.I. Nazarov, J. Piekoszewski, M. Sadowski, J. Stanislawski and V.I. Tereshin 290–293 (2001) 266
- Comparison of impurity production, recycling and power deposition on carbon and tungsten limiters in TEXTOR-94, A. Huber, V. Philipps, A. Pospieszczyk, A. Kirschner, M. Lehnen, T. Ohgo, K. Ohya, M. Rubel, B. Schweer, J. von Seggern, G. Sergienko, T. Tanabe and M. Wada 290–293 (2001) 276
- Rapid diffusion of lithium into bulk graphite in lithium conditioning, N. Itou, H. Toyoda, K. Morita and H. Sugai 290–293 (2001) 281
- Molybdenum sources and transport in Alcator C-Mod, B. Lipschultz, D.A. Pappas, B. LaBombard, J.E. Rice, D. Smith and S. Wukitch 290–293 (2001) 286
- Detection of sputtered and evaporated carbon aggregates: relative and absolute electron ionization fragmentation yields, C. Mair, H. Deutsch, K. Becker, T.D. M rk and E. Vietzke 290–293 (2001) 291
- Detailed structure analysis of deposit layer in TEXTOR by means of TEM techniques, S. Muto, N. Yokoya and T. Tanabe 290–293 (2001) 295
- Simulation calculations of mutual contamination between tungsten and carbon and its impact on plasma surface interactions, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, A. Huber, M. Rubel, G. Sergienko and N. Noda 290–293 (2001) 303
- Spectroscopic investigation on the impurity influxes of carbon and silicon in the ASDEX upgrade experiment, R. Pugno, A. Kallenbach, D. Bolshukhin, R. Dux, J. Gafert, R. Neu, V. Rohde, K. Schmidtman, W. Ullrich, U. Wenzel and ASDEX Upgrade Team 290–293 (2001) 308
- Interactions between liquid-wall vapor and edge plasmas, T.D. Rognlien and M.E. Rensink 290–293 (2001) 312

- Studies of tungsten erosion at the inner and outer main chamber wall of the ASDEX Upgrade tokamak, A. Tabasso, H. Maier, J. Roth, K. Krieger and ASDEX Upgrade Team 290–293 (2001) 326
- Net erosion measurements on plasma facing components of Tore Supra, E. Tsitrone, P. Chappuis, Y. Corre, E. Gauthier, A. Grosman and J.Y. Pascal 290–293 (2001) 331
- Erosion and deposition effects on the vessel wall of TEXTOR-94, J. von Seggern, M. Mayer, D. Reiser, M. Rubel and V. Philipps 290–293 (2001) 341
- Suppression of net erosion in the DIII-D divertor with detached plasmas, W.R. Wampler, D.G. Whyte, C.P.C. Wong and W.P. West 290–293 (2001) 346
- Extinction of CD band emission in the divertor of ASDEX Upgrade, U. Wenzel, M. Laux, R. Pugno and K. Schmidtman 290–293 (2001) 352
- Reduction of divertor carbon sources in DIII-D, D.G. Whyte, W.P. West, R. Doerner, N.H. Brooks, R.C. Isler, G.L. Jackson, G. Porter, M.R. Wade and C.P.C. Wong 290–293 (2001) 356
- Hydrogen inventories in nuclear fusion devices, M. Mayer, V. Philipps, P. Wienhold, H.G. Esser, J. von Seggern and M. Rubel 290–293 (2001) 381
- Particle trapping in carbon walls during ICRH heating in Tore Supra, C. Grisolia, J. Hogan, Ph. Ghendrih, T. Loarer, J. Gunn, P. Monier-Garbet, M. Becoulet and Th. Hutter 290–293 (2001) 402
- Comparison of hydrogen and tritium uptake and retention in JET, D.L. Hillis, J. Hogan, J.P. Coad, G. Duxbury, M. Groth, H.Y. Guo, L. Horton, G. Matthews, A. Meigs, P. Morgan, M. Stamp and M. von Hellermann 290–293 (2001) 418
- Modeling of wall recycling effects on the global particle balance in magnetic fusion devices, Y. Hirooka, S. Masuzaki, H. Suzuki, T. Kenmotsu and T. Kawamura 290–293 (2001) 423
- Local recycling coefficients and wall equilibration in tokamaks, P.K. Mioduszewski and L.W. Owen 290–293 (2001) 443
- Tritium detection in plasma facing component by imaging plate technique, K. Miyasaka, T. Tanabe, G. Mank, K.H. Finken, V. Philipps, D.S. Walsh, K. Nishizawa and T. Saze 290–293 (2001) 448
- Fuel accumulation in co-deposited layers on plasma facing components, M. Rubel, P. Wienhold and D. Hildebrandt 290–293 (2001) 473
- Hydrogen recycling study by Balmer lines emissions in linear plasma machine TPE, K. Shimada, T. Tanabe, R. Causey, T. Venhaus and K. Okuno 290–293 (2001) 478
- Studies of tritiated co-deposited layers in TFTR, C.H. Skinner, C.A. Gentile, G. Ascione, A. Carpe, R.A. Causey, T. Hayashi, J. Hogan, S. Langish, M. Nishi, W.M. Shu, W.R. Wampler and K.M. Young 290–293 (2001) 486
- Influence of hydrogen surface coverage on atomic particle reflection, I. Takagi, Y. Koga, H. Fujita and K. Higashi 290–293 (2001) 501
- Interpretation of SOL flows and target asymmetries in JET using EDGE2D code calculations, A.V. Chankin, G. Corrigan, S.K. Erents, G.F. Matthews, J. Spence and P.C. Stangeby 290–293 (2001) 518
- Radiation distribution and power balance in the ASDEX Upgrade LYRA divertor, J.C. Fuchs, D. Coster, A. Herrmann, A. Kallenbach, K.F. Mast and ASDEX Upgrade Team 290–293 (2001) 525
- Plasma edge fluid models for recycling at near tangential surfaces, M. Baelmans, D. Reiter, B. Küppers and P. Börner 290–293 (2001) 537
- Observations of cold, high density plasma in the private flux region of the Alcator C-Mod divertor, C.J. Boswell, J.L. Terry, B. LaBombard, B. Lipschultz and J.A. Goetz 290–293 (2001) 556
- Feedback control on edge plasma parameters with ergodic divertor in Tore Supra, J. Bucalossi, J.P. Gunn, A. Géraud, Ph. Ghendrih, C. Grisolia, A. Grosman, G. Martin, D. Moulin, J.-Y. Pascal and F. Saint-Laurent 290–293 (2001) 566
- Extension of the B2 code towards the plasma core for a self-consistent simulation of ASDEX upgrade scenarios, H. Bürbaumer, R. Neu, R. Schneider, D. Coster, J. Stober, F. Aumayr and H.P. Winter 290–293 (2001) 571
- Analysis of SOL behaviour in JET MkIIGB using an advanced onion-skin solver (OSM2), W. Fundamenski, S.K. Erents, G.F. Matthews, A.V. Chankin, V. Riccardo, P.C. Stangeby and J.D. Elder 290–293 (2001) 593
- Heat flux decay length in the midplane of ASDEX Upgrade, A. Herrmann, A. Carlson, J.C. Fuchs, O. Gruber, M. Laux, J. Neuhauser, R. Pugno, A. Sips, W. Treutterer, W. Schneider and ASDEX Upgrade Team 290–293 (2001) 619
- Impurity behavior before and during the x-point MARFE in JT-60U, S. Higashijima, H. Kubo, T. Sugie, T.

- Nakano, S. Konoshima, H. Tamai, K. Shimizu, A. Sakasai, N. Asakura, S. Sakurai and K. Itami 290–293 (2001) 623
- Effect of limiter recycling on measured poloidal impurity emission profiles in Tore Supra, J. Hogan, C. DeMichelis, P. Monier-Garbet, M. Becoulet, C. Bush, P. Ghendrih, R. Guirlet, W. Hess, M. Mattioli and J.C. Vallet 290–293 (2001) 628
- Heat load on the first wall materials and interaction of emitted neutrals with plasma, K. Kobayashi, S. Kado, B. Xiao and S. Tanaka 290–293 (2001) 648
- Energy flux measurements in a steady-state discharge at PSI-2, B. Koch, W. Bohmeyer, G. Fussmann, P. Kornepjew and H.-D. Reiner 290–293 (2001) 653
- Studies of edge plasmas in an anchor minimum-B region of the GAMMA 10 tandem mirror, Y. Nakashima, K.Md. Islam, A. Wada, D. Sato, S. Kobayashi, Y. Ishimoto, Y. Kawasaki, I. Katanuma, T. Saito, M. Yoshikawa, R. Baba, H. Aminaka, E. Ishinuki and K. Yatsu 290–293 (2001) 683
- Visible imaging of turbulence in the SOL of the Alcator C-Mod tokamak, J.L. Terry, R. Maqueda, C.S. Pitcher, S.J. Zweben, B. LaBombard, E.S. Marmor, A.Yu. Pigarov and G. Wurden 290–293 (2001) 757
- Multi-machine modelling of divertor geometry effects, A. Loarte 290–293 (2001) 805
- Experimental investigations of the SOL plasma in the MAST tokamak, J.-W. Ahn and G.F. Counsell 290–293 (2001) 820
- Analysis of energy flux deposition and sheath transmission factors during ergodic divertor operation on Tore Supra, L. Costanzo, J.P. Gunn, T. Loarer, L. Colas, Y. Corre, Ph. Ghendrih, C. Grisolia, A. Grosman, D. Guilhem, P. Monier-Garbet, R. Reichle, H. Roche and J.C. Vallet 290–293 (2001) 840
- Transport modelling of TEXTOR-DED laminar zone, Th. Eich, D. Reiser and K.H. Finken 290–293 (2001) 849
- Spectral profile analysis of the $D\alpha$ line in the divertor region of Tore-Supra, A. Escarguel, R. Guirlet, A. Azéroual, B. Pégourié, J. Gunn, T. Loarer, H. Capes, Y. Corre, C. De Michelis, L. Godbert-Mouret, M. Koubiti, M. Mattioli and R. Stamm 290–293 (2001) 854
- Divertor target heat load reduction by electrical biasing, and application to COMPASS-D, S.J. Fielding, R.H. Cohen, P. Helander and D.D. Ryutov 290–293 (2001) 859
- Noble gas enrichment studies at JET, M. Groth, P. Andrew, W. Fundamenski, H.Y. Guo, D.L. Hillis, J.T. Hogan, L.D. Horton, G.F. Matthews, A.G. Meigs, P.M. Morgan, M.F. Stamp and M. von Hellermann 290–293 (2001) 867
- Spectroscopic study of neon emission and retention in the Tore Supra ergodic divertor, R. Guirlet, J. Hogan, Y. Corre, C. De Michelis, A. Escarguel, W. Hess, P. Monier-Garbet and B. Schunke 290–293 (2001) 872
- Island divertor investigations on the W7-AS stellarator, R.W.T. König, K. McCormick, Y. Feng, S. Fiedler, P. Grigull, D. Hildebrandt, J. Kisslinger, J.P. Knauer, G. Kühner, D. Naujoks, J. Sallander, S. Sardei, F. Wagner and A. Werner 290–293 (2001) 882
- Narrow power deposition profiles on the JET divertor target, J. Lingertat, M. Laux and R. Monk 290–293 (2001) 896
- High radiation from intrinsic and injected impurities in Tore Supra ergodic divertor plasmas, P. Monier-Garbet, C. De Michelis, Ph. Ghendrih, C. Grisolia, A. Grosman, R. Guirlet, J. Gunn, T. Loarer, C.E. Bush, C. Clement, Y. Corre, L. Costanzo, B. Schunke and J.C. Vallet 290–293 (2001) 925
- Divertor geometry effects on detachment in TCV, R.A. Pitts, B.P. Duval, A. Loarte, J.-M. Moret, J.A. Boedo, D. Coster, I. Furno, J. Horacek, A.S. Kukushkin, D. Reiter and J. Rommers 290–293 (2001) 940
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M. Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- Modeling of Alcator C-Mod divertor baffling experiments, D.P. Stotler, C.S. Pitcher, C.J. Boswell, T.K. Chung, B. LaBombard, B. Lipschultz, J.L. Terry and R.J. Kanzleiter 290–293 (2001) 967
- Issues in the plasma wall interactions in RFX, M. Valisa, R. Bartiromo, D. Bettella, L. Carraro, S. Costa, P. Martin, S. Martini, R. Pasqualotto, M.E. Puiatti, P. Scarin, F. Sattin, G. Telesca, P. Zanca and B. Zaniol 290–293 (2001) 980
- Characterisation of the separatrix position in the ergodic divertor discharges of the Tore Supra tokamak, M. Zabiégo, Ph. Ghendrih, M. Bécoulet, L. Costanzo, C. De Michelis, C. Friant and J. Gunn 290–293 (2001) 985
- Impurity behavior in high performance radiative discharges of JT-60U, S. Sakurai, H. Kubo, A. Takenaga, N. Asakura, H. Tamai, T. Ishijima, S. Konoshima, K. Itami, A. Sakasai, S.

- Higashijima, T. Sugie and JT-60 Team 290–293 (2001) 1002
- Plasma–surface interaction effects during high ion temperature long pulse experiments in TRIAM-1M, N. Yoshida, T. Hirai, K. Tokunaga, S. Itoh and TRIAM Group 290–293 (2001) 1030
- Particle balance in NBI heated long pulse discharges on LHD, Y. Nakamura, H. Suzuki, Y. Oka, M. Osakabe, B.J. Peterson, S. Masuzaki, T. Morisaki, J. Miyazawa, Y. Takeiri, M. Sato, T. Shimozuma, T. Mutoh, N. Noda, K. Kawahata, N. Ohyabu, O. Motojima, LHD Experimental Groups 290–293 (2001) 1040
- Material erosion and erosion products under plasma heat loads typical for ITER hard disruptions, V. Safronov, N. Arkhipov, V. Bakhtin, S. Kurkin, F. Scaffidi-Argentina, D. Toporkov, S. Vasenin, H. Würz and A. Zhitlukhin 290–293 (2001) 1052
- Study of brittle destruction and erosion mechanisms of carbon-based materials during plasma instabilities, T. Burtseva, A. Hassanein, I. Ovchinnikov and V. Titov 290–293 (2001) 1059
- Peculiarity of deuterium ions interaction with tungsten surface in the condition imitating combination of normal operation with plasma disruption in ITER, M.I. Guseva, V.I. Vasiliev, V.M. Gureev, L.S. Danelyan, B.I. Khirpunov, S.N. Korshunov, V.S. Kulikauskas, Yu.V. Martynenko, V.B. Petrov, V.N. Strunnikov, V.G. Stolyarova, V.V. Zatekin and A.M. Litnovsky 290–293 (2001) 1069
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Cloud drifts over eroding surfaces in magnetic field configurations with three field components, P. Lalouis, R. Schneider and L.L. Lengyel 290–293 (2001) 1084
- Experimental study of radiation power flux on the target surface during high heat plasma irradiation, V.N. Litnovsky, I.B. Ovchinnikov and V.A. Titov 290–293 (2001) 1112
- Modeling of particulate production in the SIRENS plasma disruption simulator, J.P. Sharpe, B.J. Merrill, D.A. Petti, M.A. Bourham and J.G. Gilligan 290–293 (2001) 1128
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz, S. Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- Measurement of thermal wall-load distribution caused by the locked mode in a reversed-field pinch plasma, Y. Yagi, S. Sekine, H. Koguchi, T. Bolzonella and H. Sakakita 290–293 (2001) 1144
- Operational limits under different wall conditions on TEXTOR-94, J. Rapp, W. Biel, H. Gerhauser, A. Huber, H.R. Koslowski, M. Lehnen, V. Philipps, A. Pospieszczyk, D. Reiser, U. Samm, G. Sergienko, M.Z. Tokar and R. Zagórski 290–293 (2001) 1148
- Characterization and conditioning of SSPX plasma facing surfaces, D.A. Buchenauer, B.E. Mills, R. Wood, S. Woodruff, D.N. Hill, E.B. Hooper, D.F. Cowgill, M.W. Clift and N.Y. Yang 290–293 (2001) 1165
- Conditionings for plasma facing walls of large helical device, T. Hino, T. Ohuchi, M. Hashiba, Y. Yamauchi, Y. Hirohata, N. Inoue, A. Sagara, N. Noda and O. Motojima 290–293 (2001) 1176
- Wall conditioning and density control in the TJ-II stellarator, D. Tafalla and F.L. Tabarés 290–293 (2001) 1195
- Hydrogen isotope retention and recycling in fusion reactor plasma-facing components, R.A. Causey 300 (2002) 91
- Plasma Properties (includes Plasma Disruption)**
- Deuterium retention in codeposited layers and carbon materials exposed to high flux D-plasma, I.I. Arkhipov, A.E. Gorodetsky, R.Kh. Zalavutdinov, A.P. Zakharov, T.A. Burtseva, I.V. Mazul, B.I. Khripunov, V.V. Shapkin and V.B. Petrov 271&272 (1999) 418
- Plasma-facing materials mixing and mixed material properties, 271&272 (1999) 526
- Feedback control of highly radiative plasmas in Tore Supra, C. Grisolia, Ph. Ghendrih, A. Grosman, P. Monier-Garbet, D. Moulin and J.C. Vallet 275 (1999) 95
- Theory of edge plasma in a spheromak, E.B. Hooper, R.H. Cohen and D.D. Ryutov 278 (2000) 104
- Interpretation of the impurity distribution in the divertor during divertor plate biasing using the DIVIMP code, E. Haddad, F. Meo, R. Marchand, G. Ratel, B.L. Stansfield, J. Gunn, P.C. Stangeby, J.D. Elder, S. Lisgo and K. Krieger 278 (2000) 111
- Interaction of ICRF power and edge plasma in Tore Supra ergodic divertor configuration, F. Nguyen, A. Grosman, V. Basiuk, D. Fraboulet,

- B. Beaumont, A. Bécoulet, Ph. Ghendrih, L. Ladurelle and B. Meslin
MARFE phenomena in the HT-7 tokamak, X. Gao, J.R. Luo, Y.P. Zhao, N. Qiu, Y.X. Jie, Y. Yang, C.Y. Xia, B.N. Wan, G.L. Kuang, X.D. Zhang, J.G. Li, F.X. Yin, X.N. Liu, X.Z. Gong, S.Y. Zhang, J.Y. Zhao, L.Q. Hu, Z.W. Wu, Y.D. Li, K. Yang, Y. Bao, W.W. Ye, L. Chen, H.Y. Fan, S.X. Liu, Y.F. Chen, B.L. Lin, Y.H. Xu, Y.J. Shi, M. Song, X.M. Zhang, M.S. Wei, M. Zeng, A.G. Xie, N.Z. Cui, H.L. Ruan, L. Wang, B. Sheng, S. Liu, X.D. Tong, X.M. Gu, J.S. Mao, J.K. Xie and Y.X. Wan 278 (2000) 117
- Advances in fusion technology, C.C. Baker 279 (2000) 330
- Critical plasma-wall interaction issues for plasma-facing materials and components in near-term fusion devices, G. Federici, J.P. Coad, A.A. Haasz, G. Janeschitz, N. Noda, V. Philipps, J. Roth, C.H. Skinner, R. Tivey and C.H. Wu 283–287 (2000) 1
- Hydrogen-irradiated steel interaction during alternating hydrogenation and annealing, E.A. Krasikov and A.D. Amajev 283–287 (2000) 110
- Depth profile of tritium in plasma exposed CX-2002U, T. Tadokoro, K. Isobe, S. O'hira, W. Shu and M. Nishi 283–287 (2000) 846
- Graphite-tungsten twin limiters in studies of material mixing processes on high heat flux components, M. Rubel, T. Tanabe, V. Philipps, B. Emmoth, A. Kirschner, J. von Seggern and P. Wienhold 283–287 (2000) 1048
- Erosion mechanisms and products in graphite targets under simulated disruption conditions, F. Scaffidi-Argentina, V. Safronov, I. Arkhipov, N. Arkhipov, V. Bakhtin, V. Barsuk, S. Kurkin, E. Mironova, D. Toporkov, S. Vasenin, H. Werle, H. Würz and A. Zhitlukhin 283–287 (2000) 1089
- Erosion mechanisms and products in graphite targets under simulated disruption conditions, F. Scaffidi-Argentina, V. Safronov, I. Arkhipov, N. Arkhipov, V. Bakhtin, V. Barsuk, S. Kurkin, E. Mironova, D. Toporkov, S. Vasenin, H. Werle, H. Würz and A. Zhitlukhin 283–287 (2000) 1111
- Development of functionally graded plasma-facing materials, C.-C. Ge, J.-T. Li, Z.-J. Zhou, W.-B. Cao, W.-P. Shen, M.-X. Wang, N.-M. Zhang, X. Liu and Z.-Y. Xu 283–287 (2000) 1116
- High heat flux simulation experiments with improved electron beam diagnostics, J. Linke, H. Bolt, R. Duwe, W. Kühnlein, A. Lodato, M. Rödiger, K. Schöpflin and B. Wiechers 283–287 (2000) 1152
- Erosion characteristics of neutron-irradiated carbon-based materials under simulated disruption heat loads, K. Sato, E. Ishitsuka, M. Uda, H. Kawamura, S. Suzuki, M. Taniguchi, K. Ezato and M. Akiba 283–287 (2000) 1157
- Hydrodynamic effects of eroded materials of plasma-facing component during a Tokamak disruption, A. Hassanein and I. Konkashbaev 283–287 (2000) 1171
- Structure of materials deposited on the plasma facing surface in TRIAM-1M tokamak and the effect on hydrogen recycling, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, A. Komori, O. Motojima, S. Itoh and TRIAM group 283–287 (2000) 1177
- Simulation study of carbon and tungsten deposition on W/C twin test limiter in TEXTOR-94, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, B. Schweer, A. Huber, M. Rubel, J. von Seggern and N. Noda 283–287 (2000) 1182
- Effects of thin films on inventory, permeation and re-emission of energetic hydrogen, N. Ohyabu, Y. Nakamura, Y. Nakahara, A. Livshits, V. Alimov, A. Busnyuk, M. Notkin, A. Samartsev and A. Doroshin 283–287 (2000) 1297
- Plasma operation with tungsten tiles at the central column of ASDEX Upgrade, R. Neu, V. Rohde, A. Geier, K. Krieger, H. Maier, D. Bolshukhin, A. Kallenbach, R. Pugno, K. Schmidtman, M. Zarrabian and ASDEX Upgrade Team 290–293 (2001) 206
- Towards an improved understanding of the relationship between plasma edge and materials issues in a next-step fusion device, G.F. Counsell, J.P. Coad, G. Federici, K. Krieger, V. Philipps, C.H. Skinner and D.G. Whyte 290–293 (2001) 255
- Interactions between liquid-wall vapor and edge plasmas, T.D. Rognlien and M.E. Rensink 290–293 (2001) 312
- Characteristics of ELM activity and fueling efficiency of pellet injection from different locations on DIII-D, L.R. Baylor, T.C. Jernigan, R.J. Colchin, J.R. Ferron and M.R. Wade 290–293 (2001) 398
- Reversal of in-out asymmetry of the particle-recycling associated with X-point MARFE and plasma detachment, A. Hatayama, H. Segawa, N. Komatsu, R. Schneider, D.P. Coster, N. Hayashi, S. Sakurai and N. Asakura 290–293 (2001) 407
- Particle control in the sustained spheromak physics experiment, R.D. Wood, D.N. Hill, E.B. Hooper, D. Buchenauer, H. McLean, Z. Wang, S. Woodruff and G. Wurden 290–293 (2001) 513
- Interpretation of SOL flows and target asymmetries in JET using EDGE2D

- code calculations, A.V. Chankin, G. Corrigan, S.K. Erents, G.F. Matthews, J. Spence and P.C. Stangeby 290–293 (2001) 518
- Radiation distribution and power balance in the ASDEX Upgrade LYRA divertor, J.C. Fuchs, D. Coster, A. Herrmann, A. Kallenbach, K.F. Mast and ASDEX Upgrade Team 290–293 (2001) 525
- Large $\mathbf{E} \times \mathbf{B}$ convection near the divertor X -point, M.J. Schaffer, J.A. Boedo, R.A. Moyer, T.N. Carlstrom and J.G. Watkins 290–293 (2001) 530
- High resolution measurements of neutral density and ionization rate in the main chamber of the Alcator C-Mod tokamak, R.L. Boivin, J. Goetz, A. Hubbard, J.W. Hughes, J. Irby, B. LaBombard, E. Marmor, D. Mossessian and J.L. Terry 290–293 (2001) 542
- Study of the relation between density and temperature fall-off lengths in a detached divertor plasma, K. Borrass 290–293 (2001) 551
- Observations of cold, high density plasma in the private flux region of the Alcator C-Mod divertor, C.J. Boswell, J.L. Terry, B. LaBombard, B. Lipschultz and J.A. Goetz 290–293 (2001) 556
- Flow measurements in the edge plasma of Tore Supra, C. Boucher, L.-G. Thibault, J.P. Gunn, J.-Y. Pascal, P. Devynck and Tore Supra Team 290–293 (2001) 561
- Plasma profiles in the inner divertor of ASDEX Upgrade, A. Carlson, D. Coster, A. Herrmann, R. Pugno, U. Wenzel and ASDEX Upgrade Team 290–293 (2001) 575
- Plasma boundary and SOL studies of ECH-plasmas in TJ-II stellarator with diagnosed mobile poloidal limiters, E. de la Cal, B. Brañas, F.L. Tabarés, D. Tafalla, A.L. Fraguas, M.A. Pedrosa, V. Tribaldos, E. Ascasibar, J. Herranz and I. Pastor 290–293 (2001) 579
- Density fluctuations at high density in the ergodic divertor configuration of Tore Supra, P. Devynck, J. Gunn, Ph. Ghendrih, X. Garbet, G. Antar, P. Beyer, C. Boucher, C. Honore, F. Gervais, P. Hennequin, A. Quémeuneur and A. Truc 290–293 (2001) 584
- Performance of high triangularity plasmas as the volume of the secondary divertor is varied in DIII-D, M.E. Fenstermacher, T.H. Osborne, T.W. Petrie, R.J. Groebner, C.J. Lasnier, R.J. La Haye, A.W. Leonard, G.D. Porter, J.G. Watkins and DIII-D Team 290–293 (2001) 588
- Analysis of SOL behaviour in JET MkIIIGB using an advanced onion-skin solver (OSM2), W. Fundamenski, S.K. Erents, G.F. Matthews, A.V. Chankin, V. Riccardo, P.C. Stangeby and J.D. Elder 290–293 (2001) 593
- Turbulent transport studies in JET edge plasmas in X -point configurations, I. García-Cortés, A. Loarte, R. Balbín, J. Bleuel, A. Chankin, S.J. Davies, M. Endler, S.K. Erents, C. Hidalgo, G.F. Matthews and H. Thomsen 290–293 (2001) 604
- Calculation of 2D profiles for the plasma and electric field in the boundary layer of the TEXTOR-94 Tokamak, H. Gerhauser, R. Zagórski, H.A. Claassen and M. Lehnen 290–293 (2001) 609
- Impurity behavior before and during the x -point MARFE in JT-60U, S. Higashijima, H. Kubo, T. Sugie, T. Nakano, S. Konoshima, H. Tamai, K. Shimizu, A. Sakasai, N. Asakura, S. Sakurai and K. Itami 290–293 (2001) 623
- Observation of detachment in the JET MkIIIGB divertor using CCD camera tomography, K. Itami, P. Coad, W. Fundamenski, C. Ingesson, J. Lingertat, G.F. Matthews and A. Tabasso 290–293 (2001) 633
- Investigations on density and temperature asymmetries due to drift motions in the boundary layer of TEXTOR-94, M. Lehnen, M. Brix, H. Gerhauser, B. Schweer and R. Zagórski 290–293 (2001) 663
- Divertor energy distribution in JET H-modes, G.F. Matthews, S.K. Erents, W. Fundamenski, C. Ingesson, R.D. Monk and V. Riccardo 290–293 (2001) 668
- Studies of edge plasmas in an anchor minimum-B region of the GAMMA 10 tandem mirror, Y. Nakashima, K.Md. Islam, A. Wada, D. Sato, S. Kobayashi, Y. Ishimoto, Y. Kawasaki, I. Katanuma, T. Saito, M. Yoshikawa, R. Baba, H. Aminaka, E. Ishinuki and K. Yatsu 290–293 (2001) 683
- Evaluation of electron temperature in detached recombining plasmas, D. Nishijima, U. Wenzel, M. Motoyama, N. Ohno, S. Takamura and S.I. Krasheninnikov 290–293 (2001) 688
- Particle flows in pumped DIII-D discharges, G.D. Porter, T.D. Rognlien, M.E. Rensink, N.S. Wolf and W.P. West 290–293 (2001) 692
- Plasma rotation and structure of the radial electric field in RFX, M.E. Puiatti, L. Tramontin, V. Antoni, R. Bartiromo, L. Carraro, D. Desideri, E. Martinez, F. Sattin, P. Scarin, G. Serianni, M. Spolaore, M. Valisa and B. Zaniol 290–293 (2001) 696
- Simulation of power and particle flows in the NSTX edge plasma, M.E. Rensink, H. Kugel, R. Maingi, F.

- Paoletti, G.D. Porter, T.D. Rognlien, S. Sabbagh and X. Xu 290–293 (2001) 706
- Consistency check of Z_{eff} measurements in ergodic divertor plasmas on Tore Supra, B. Schunke, C. DeMichelis, R. Guirlet, P. Monier-Garbet, M. Mattioli, E. Chareyre and O. Meyer 290–293 (2001) 715
- Spectroscopic studies of stationary MARFEs in TEXTOR-94, G. Sergienko, A. Pospieszczyk, M. Lehnen, M. Brix, J. Rapp, B. Schweer and P.T. Greenland 290–293 (2001) 720
- Study of edge plasma properties comparing operation in hydrogen and helium in RFX, M. Spolaore, V. Antoni, M. Bagatin, D. Desideri, L. Fattorini, E. Martines, G. Serianni, L. Tramontin and N. Vianello 290–293 (2001) 729
- Onion-skin method (OSM) analysis of DIII-D edge measurements, P.C. Stangeby, J.G. Watkins, G.D. Porter, J.D. Elder, S. Lisgo, D. Reiter, W.P. West and D.G. Whyte 290–293 (2001) 733
- Density control and plasma edge characterisation of ECRH heated plasmas in the TJ-II stellarator, F.L. Tabarés, D. Tafalla, B. Brañas, E. de la Cal, I. García-Cortés, T. Estrada, I. Pastor, J. Herranz, E. de la Luna and F. Medina 290–293 (2001) 748
- Particle simulation of detached plasma in the presence of diffusive particle loss and radiative energy loss, T. Takizuka, M. Hosokawa and K. Shimizu 290–293 (2001) 753
- Visible imaging of turbulence in the SOL of the Alcator C-Mod tokamak, J.L. Terry, R. Maqueda, C.S. Pitcher, S.J. Zweben, B. LaBombard, E.S. Marmor, A.Yu. Pigarov and G. Wurden 290–293 (2001) 757
- Low-Z impurity transport in DIII-D – observations and implications, M.R. Wade, W.A. Houlberg, L.R. Baylor, W.P. West and D.R. Baker 290–293 (2001) 773
- Comparison of Langmuir probe and Thomson scattering measurements in DIII-D, J.G. Watkins, P. Stangeby, J.A. Boedo, T.N. Carlstrom, C.J. Lasnier, R.A. Moyer, D.L. Rudakov and D.G. Whyte 290–293 (2001) 778
- Modeling of carbon transport in the divertor and SOL of DIII-D during high performance plasma operation, W.P. West, G.D. Porter, T.E. Evans, P. Stangeby, N.H. Brooks, M.E. Fenstermacher, R.C. Isler, T.D. Rognlien, M.R. Wade, D.G. Whyte and N.S. Wolf 290–293 (2001) 783
- Control of divertor geometry and performance of the ergodic divertor of Tore Supra, Ph. Ghendrih, M. Bécoulet, L. Costanzo, Y. Corre, C. Grisolia, A. Grosman, R. Guirlet, J. Gunn, T. Loarer, P. Monier-Garbet, G. Mank, R. Reichle, J.-C. Vallet, M. Zabiégo, A. Azéroual, J. Bucalossi, P. Devynck, C. De Michelis, K.H. Finken, J. Hogan, F. Laugier, F. Nguyen, B. Pégourié, F. Saint-Laurent, B. Schunke and Tore Supra Team 290–293 (2001) 798
- Experimental investigations of the SOL plasma in the MAST tokamak, J.-W. Ahn and G.F. Counsell 290–293 (2001) 820
- Pumping effect on the divertor plasma and detachment in the JT-60U W-shaped divertor, N. Asakura, S. Sakurai, H. Tamai, Y. Koide, Y. Sakamoto, O. Naito, H. Kubo, K. Itami and K. Masaki 290–293 (2001) 825
- Analysis of energy flux deposition and sheath transmission factors during ergodic divertor operation on Tore Supra, L. Costanzo, J.P. Gunn, T. Loarer, L. Colas, Y. Corre, Ph. Ghendrih, C. Grisolia, A. Grosman, D. Guilhem, P. Monier-Garbet, R. Reichle, H. Roche and J.C. Vallet 290–293 (2001) 840
- Divertor target heat load reduction by electrical biasing, and application to COMPASS-D, S.J. Fielding, R.H. Cohen, P. Helander and D.D. Ryutov 290–293 (2001) 859
- Critical issues in divertor optimisation for ITER–FEAT, A.S. Kukushkin, G. Janeschitz, A. Loarte, H.D. Pacher, D. Coster, D. Reiter and R. Schneider 290–293 (2001) 887
- Narrow power deposition profiles on the JET divertor target, J. Lingertat, M. Laux and R. Monk 290–293 (2001) 896
- Particle collection and exhaust in ergodic divertor experiments on Tore Supra, T. Loarer, Ph. Ghendrih, J. Gunn, A. Azéroual, L. Costanzo, C. Grisolia, R. Guirlet, G. Mank, P. Monier-Garbet and B. Pégourié 290–293 (2001) 900
- Alternative schemes of power deposition with the ergodic divertor on Tore Supra, G. Mank, Ph. Ghendrih, C. Grisolia, J. Gunn, T. Loarer, P. Monier-Garbet, L. Costanzo, K.H. Finken, C. DeMichelis and R. Reichle 290–293 (2001) 910
- Effect of biasing on divertors in low and high ionization states, H. Matsuura, T. Yamamoto and M. Numano 290–293 (2001) 915
- On the way to divertor detachment in the W7-AS stellarator, K. McCormick, P. Grigull, R. König, R. Burhenn, H. Ehmler, Y. Feng, S. Fiedler, L. Giannone, D. Hildebrandt, J.P. Knauer, G. Kühner, D. Naujoks, J.

- Sallander, Ch. Wendland and W7-AS Team 290–293 (2001) 920
- High radiation from intrinsic and injected impurities in Tore Supra ergodic divertor plasmas, P. Monier-Garbet, C. De Michelis, Ph. Ghendrih, C. Grisolia, A. Grosman, R. Guirlet, J. Gunn, T. Loarer, C.E. Bush, C. Clement, Y. Corre, L. Costanzo, B. Schunke and J.C. Vallet 290–293 (2001) 925
- The effect of divertor magnetic balance on H-mode performance in DIII-D, T.W. Petrie, C.M. Greenfield, R.J. Grobener, A.W. Hyatt, R.J. La Haye, A.W. Leonard, M.A. Mahdavi, T.H. Osborne, M.J. Schaffer, D.M. Thomas, W.P. West, S.L. Allen, M.E. Fenstermacher, C.J. Lasnier, G.D. Porter, N.S. Wolf, J.G. Watkins, T.L. Rhodes and DIII-D Team 290–293 (2001) 935
- Divertor geometry effects on detachment in TCV, R.A. Pitts, B.P. Duval, A. Loarte, J.-M. Moret, J.A. Boedo, D. Coster, I. Furno, J. Horacek, A.S. Kukushkin, D. Reiter and J. Rommers 290–293 (2001) 940
- Helium exhaust in divertor-closure configuration with W-shaped divertor of JT-60U, A. Sakasai, H. Takenaga, H. Kubo, N. Akino, S. Higashijima, S. Sakurai, H. Tamai, K. Itami and N. Asakura 290–293 (2001) 957
- The influence of the poloidal variation of the density on the locally measured velocities induced by biasing experiments, M. van Schoor, H. van Goubergen and R. Weynants 290–293 (2001) 962
- Modeling of Alcator C-Mod divertor baffling experiments, D.P. Stotler, C.S. Pitcher, C.J. Boswell, T.K. Chung, B. LaBombard, B. Lipschultz, J.L. Terry and R.J. Kanzleiter 290–293 (2001) 967
- JET methane screening experiments, J.D. Strachan, K. Erements, W. Fundamentalski, M. von Hellermann, L. Horton, K. Lawson, G. McCracken, J. Spence, M. Stamp and K-D. Zastrow 290–293 (2001) 972
- Spectroscopic measurement of biasing effect on sheath electric field distribution in front of a metal plate inserted in a plasma flow, K. Takiyama, T. Oda and K. Sato 290–293 (2001) 976
- Characterisation of the separatrix position in the ergodic divertor discharges of the Tore Supra tokamak, M. Zabięgo, P. Ghendrih, M. Bécoulet, L. Costanzo, C. De Michelis, C. Friant and J. Gunn 290–293 (2001) 985
- Experiments and computational modeling focused on divertor and SOL optimization for advanced tokamak operation on DIII-D, S.L. Allen, J.A. Boedo, A.S. Bozek, N.H. Brooks, T.N. Carlstrom, T.A. Casper, R.J. Colchin, T.E. Evans, M.E. Fenstermacher, M.E. Friend, R.C. Isler, R. Jayakumar, C.J. Lasnier, A.W. Leonard, M.A. Mahdavi, R. Maingi, G.R. McKee, R.A. Moyer, M. Murakami, T.H. Osborne, R.C. O'Neill, T.W. Petrie, G.D. Porter, A.T. Ramsey, M.J. Schaffer, P.C. Stangeby, R.D. Stambaugh, M.R. Wade, J.G. Watking, W.P. West, D.G. Whyte and N.S. Wolf 290–293 (2001) 995
- Impurity behavior in high performance radiative discharges of JT-60U, S. Sakurai, H. Kubo, A. Takenaga, N. Asakura, H. Tamai, T. Ishijima, S. Konoshima, K. Itami, A. Sakasai, S. Higashijima, T. Sugie and JT-60 Team 290–293 (2001) 1002
- Edge transport barrier formation and ELM phenomenology in the W7-AS stellarator, P. Grigull, M. Hirsch, J. Baldzuhn, H. Ehmler, F. Gadelmeier, L. Giannone, H.-J. Hartfuss, D. Hildebrandt, R. Jaenicke, J. Kisslinger, R. Koenig, K. McCormick, F. Wagner, A. Weller, Ch. Wendland and W7-AS Team 290–293 (2001) 1009
- Gas puff fueled H-mode discharges with good energy confinement above the Greenwald density limit on DIII-D, T.H. Osborne, M.A. Mahdavi, M. Chu, M.E. Fenstermacher, R. La Haye, A.W. Leonard, G. McKee, T.W. Petrie, C. Rettig, M. Wade and J. Watkins 290–293 (2001) 1013
- Mitigation of plasma-wall interaction during quasi-single helicity states in RFX, G. Spizzo, P. Franz, L. Marrelli, P. Martin, A. Murari, T. Bolzonella, D. Terranova and P. Zanca 290–293 (2001) 1018
- Active cooling, calorimetry and energy balance in Tore Supra, J.C. Vallet, R. Reichle, M. Chantant, V. Basiuk and R. Mitteau 290–293 (2001) 1023
- Particle balance in NBI heated long pulse discharges on LHD, Y. Nakamura, H. Suzuki, Y. Oka, M. Osakabe, B.J. Peterson, S. Masuzaki, T. Morisaki, J. Miyazawa, Y. Takeiri, M. Sato, T. Shimozuma, T. Mutoh, N. Noda, K. Kawahata, N. Ohyabu, O. Motojima and LHD Experimental Groups 290–293 (2001) 1040
- Prediction and mitigation of disruptions in ASDEX Upgrade, G. Pautasso, S. Egorov, Ch. Tichmann, J.C. Fuchs,

- A. Herrmann, M. Maraschek, F. Mast, V. Mertens, I. Perchermeier, C.G. Windsor, T. Zehetbauer and ASDEX Upgrade Team 290–293 (2001) 1045
- Thermal load distribution on the ALT-II limiter of TEXTOR-94 during disruptions, K.H. Finken, A. Krämer-Flecken, G. Mank and S.S. Abdullaev 290–293 (2001) 1064
- Lateral deflection of the SOL plasma during a giant ELM, I.S. Landman and H. Würz 290–293 (2001) 1088
- Effect of magnetic geometry on ELM heat flux profiles, C.J. Lasnier, A.W. Leonard, T.W. Petrie and J.G. Watkins 290–293 (2001) 1093
- Tolerable ELMs at high density in DIII-D, A.W. Leonard, T.H. Osborne, M.E. Fenstermacher, C.J. Lasnier and M.A. Mahdavi 290–293 (2001) 1097
- Resonance radiation and high excitation of neutrals in plasma–gas interactions, A.M. Litnovsky, B.I. Khripunov, G.V. Sholin, V.B. Petrov, V.V. Shapkin and N.V. Antonov 290–293 (2001) 1107
- Experimental study of radiation power flux on the target surface during high heat plasma irradiation, V.N. Litnovsky, I.B. Ovchinnikov and V.A. Titov 290–293 (2001) 1112
- Dynamic behavior of detached recombining plasmas during ELM-like plasma heat pulses in the divertor plasma simulator NAGDIS-II, Y. Uesugi, N. Hattori, D. Nishijima, N. Ohno and S. Takamura 290–293 (2001) 1134
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz, S. Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- Operational limits under different wall conditions on TEXTOR-94, J. Rapp, W. Biel, H. Gerhauser, A. Huber, H.R. Koslowski, M. Lehnen, V. Philipps, A. Pospieszczyk, D. Reiser, U. Samm, G. Sergienko, M.Z. Tokar and R. Zagórski 290–293 (2001) 1148
- RF wall conditioning – a new technique for future large superconducting tokamak, J.K. Xie, Y.P. Zhao, J. Li, B.N. Wan, X.Z. Gong, J.S. Hu, X. Gao, X.M. Gu, S.D. Zhang, X.M. Wang, Y.Z. Mao, X.K. Yang, M. Zhen and S.Y. Zhang 290–293 (2001) 1155
- Measurement and simulation of edge flows induced by ergodization in Tore Supra, J.P. Gunn, C. Boucher, Y. Corre, P. Devynck, Ph. Ghendrih and J.-Y. Pascal 290–293 (2001) 877
- Plutonium, Plutonium Alloys and Compounds Point Defects** (*see Defects and Defect Structures, or Radiation Effects: Atomic Defects*)
- Behavior of metallic fission products in uranium–plutonium mixed oxide fuel, I. Sato, H. Furuya, T. Arima, K. Idemitsu and K. Yamamoto 273 (1999) 239
- Application of a linear free energy relationship to crystalline solids of MO_2 and $\text{M}(\text{OH})_4$, H. Xu, Y. Wang and L. L. Barton 273 (1999) 343
- Concepts for an inert matrix fuel, an overview, C. Degueldre and J.M. Paratte 274 (1999) 1
- Preliminary fabrication and characterisation of inert matrix and thorium fuels for plutonium disposition in light water reactors, F. Vettriano, G. Magnani, T.L. Torretta, E. Marmo, S. Coelli, L. Luzzi, P. Ossi and G. Zappa 274 (1999) 23
- In-pile irradiation of plutonium rock-like oxide fuels with yttria stabilized zirconia or thorium, spinel and corundum, T. Yamashita, N. Nitani, H. Kanazawa, M. Magara, T. Ohmichi, H. Takano and T. Muromura 274 (1999) 98
- Reactor physics aspects of plutonium burning in inert matrix fuels, J.L. Kloosterman and P.M.G. Damen 274 (1999) 112
- Validation efforts for the neutronics of a plutonium–erbium–zirconium oxide inert matrix light water reactor fuel, J.M. Paratte, R. Chawla, R. Früh, O.P. Joneja, S. Pelloni and C. Pralong 274 (1999) 120
- Burnup analysis of rock-like oxide fuel disks irradiated in the Japan Research Reactor No. 3, Y. Nakano, H. Akie, M. Magara and H. Takano 274 (1999) 127
- Alternative versions of inert matrix fuel for the use of civil and weapons-grade plutonium in reactors, A. Vatulin, V. Lysenko, V. Kostomarov and V. Sirotnin 274 (1999) 135
- Core design study on rock-like oxide fuel light water reactor and improvements of core characteristics, H. Akie, H. Takano and Y. Anoda 274 (1999) 139
- Conceptual studies for pressurised water reactor cores employing plutonium–erbium–zirconium oxide inert matrix fuel assemblies, A. Stanculescu, U. Kasemeyer, J.-M. Paratte and R. Chawla 274 (1999) 146
- Toward very high burnups, a strategy for plutonium utilization in pressurized water reactors, J. Porta and J.-Y. Doriath 274 (1999) 153
- Design study of an irradiation experiment with inert matrix and mixed-oxide fuel at the Halden boiling water

- reactor, U. Kasemeyer, H.-K. Joo and G. Ledergerber 274 (1999) 160
- Neutronic analysis of U-free inert matrix and thoria fuels for plutonium disposition in pressurised water reactors, C. Lombardi, A. Mazzola, E. Padovani and M.E. Ricotti 274 (1999) 181
- In situ purification, alloying and casting methodology for metallic plutonium, J.C. Lashley, M.S. Blau, K.P. Staudhammer and R.A. Pereyra 274 (1999) 315
- Selection of materials as diluents for burning of plutonium fuels in nuclear reactors, H. Kleykamp 275 (1999) 1
- Use of linear free energy relationship to predict Gibbs free energies of formation of zirconolite phases (MZrTi₂O₇ and MHfTi₂O₇), H. Xu and Y. Wang 275 (1999) 211
- Use of linear free energy relationship to predict Gibbs free energies of formation of pyrochlore phases (CaM-Ti₂O₇), H. Xu and Y. Wang 275 (1999) 216
- Vaporization behavior of NpN coloaded with PuN, K. Nakajima, Y. Arai and Y. Suzuki 275 (1999) 332
- Thermal conductivity of hypostoichiometric low Pu content (U,Pu)O_{2-x} mixed oxide, C. Duriez, J.-P. Alessandri, T. Gervais and Y. Philipponneau 277 (2000) 143
- Electrolysis of plutonium nitride in LiCl-KCl eutectic melts, O. Shirai, T. Iwai, K. Shiozawa, Y. Suzuki, Y. Sakamura and T. Inoue 277 (2000) 226
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in zircon, R.E. Williford, B.D. Begg, W.J. Weber and N.J. Hess 278 (2000) 207
- XAS and XRD study of annealed ²³⁸Pu- and ²³⁹Pu-substituted zircons (Zr_{0.92}-Pu_{0.08}SiO₄), B.D. Begg, N.J. Hess, W.J. Weber, S.D. Conradson, M.J. Schweiger and R.C. Ewing 278 (2000) 212
- Pyrophoric potential of plutonium-containing salt residues, J.M. Haschke, H.K. Fauske and A.G. Phillips 279 (2000) 127
- Actinide distribution in a stainless steel–15 wt% zirconium high-level nuclear waste form, D.D. Keiser Jr., D.P. Abraham, W. Sinkler, J.W. Richardson Jr., and S.M. McDevitt 279 (2000) 234
- Analysis of constituent redistribution in the γ (bcc) U–Pu–Zr alloys under gradients of temperature and concentrations, Y.H. Sohn, M.A. Dayananda, G.L. Hofman, R.V. Strain and S.L. Hayes 279 (2000) 317
- Estimates of helium gas release in ²³⁸PuO₂ fuel particles for radioisotope heat sources and heater units, M.S. El-Genk and J.-M. Tournier 280 (2000) 1
- Simultaneous determination of X-ray Debye temperature and Grüneisen constant for actinide dioxides: PuO₂ and ThO₂, H. Serizawa, Y. Arai and Y. Suzuki 280 (2000) 99
- Volatile molecule PuO₃ observed from subliming plutonium dioxide, C. Ronchi, F. Capone, J.Y. Colle and J.P. Hiernaut 280 (2000) 111
- Thermal removal of gallium from gallia-doped ceria, Y. Park, H. Sohn and D.P. Butt 280 (2000) 285
- A method for determining an effective porosity correction factor for thermal conductivity in fast reactor uranium–plutonium oxide fuel pellets, M. Inoue, K. Abe and I. Sato 281 (2000) 117
- Preparation and characterization of PuN pellets containing ZrN and TiN, Y. Arai and K. Nakajima 281 (2000) 244
- Preparation and characterisation of Pu-pyrochlore: [La_{1-x}Pu_x]₂Zr₂O₇ (x = 0–1), N.K. Kulkarni, S. Sampath and V. Venugopal 281 (2000) 248
- Sintering studies on UO₂–PuO₂ pellets with varying PuO₂ content using dilatometry, T.R.G. Kutty, P.V. Hegde, K.B. Khan, S. Majumdar and D.S.C. Purushotham 282 (2000) 54
- Thermal conductivity of uranium–plutonium oxide fuel for fast reactors, M. Inoue 282 (2000) 186
- Thermally induced gallium removal from plutonium dioxide for MOX fuel production, D.G. Kolman, M.E. Griego, C.A. James and D.P. Butt 282 (2000) 245
- Ripple reduction and surface coating tests with ferritic steel on JFT-2M, K. Tsuzuki, M. Sato, H. Kawashima, Y. Miura, H. Kimura, T. Abe, K. Uehara, T. Ogawa, T. Akiyama, T. Shibata, M. Yamamoto and T. Koike 283–287 (2000) 681
- Computational study of plutonium–neodymium fluorobrotholite Ca₉Nd_{0.5}Pu_{0.5}(SiO₄)(PO₄)₅F₂ thermodynamic properties, C. Meis 289 (2001) 167
- Phase equilibria in the UO₂–PuO₂ system under a temperature gradient, H. Kleykamp 294 (2001) 8
- Carbothermic synthesis of (Cm,Pu)N, M. Takano, A. Itoh, M. Akabori, T. Ogawa, M. Numata and H. Okamoto 294 (2001) 24
- Vaporization chemistry of hypo-stoichiometric (U,Pu)O₂, R. Viswanathan and M.V. Krishnaiah 294 (2001) 69
- Thermodynamic evaluation of the quaternary U–Pu–Zr–Fe system – assessment of cladding temperature limits of metallic fuel in a fast reactor, M. Kurata, K. Nakamura and T. Ogata 294 (2001) 123

- Molecular dynamics study of mixed oxide fuel, K. Kurosaki, K. Yamada, M. Uno, S. Yamanaka, K. Yamamoto and T. Namekawa 294 (2001) 160
- Thermal expansion and solubility limits of plutonium-doped lanthanum zirconates, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 183
- Safe disposal of surplus plutonium, W.L. Gong, S. Naz, W. Lutze, R. Busch, A. Prinja and W. Stoll 295 (2001) 295
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55
- The effect of coprecipitation in some key spent fuel elements, J. Quiñones, J. Serrano and P. Diaz Arocas 298 (2001) 63
- Behavior of plutonium and americium at liquid cadmium cathode in molten LiCl–KCl electrolyte, M. Iizuka, K. Uozumi, T. Inoue, T. Iwai, O. Shirai and Y. Arai 299 (2001) 32
- Effect of the expansion associated with the plutonium α – β – γ phase transitions on storage can integrity, D.R. Spearing, D.K. Veirs and F.C. Prenger 299 (2001) 111
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in gadolinium zirconate, R.E. Williford and W.J. Weber 299 (2001) 140
- A review of the thermophysical properties of MOX and UO₂ fuels, J.J. Carbajo, G.L. Yoder, S.G. Popov and V.K. Ivanov 299 (2001) 181
- Pyrochemical reduction of uranium dioxide and plutonium dioxide by lithium metal, T. Usami, M. Kurata, T. Inoue, H.E. Sims, S.A. Beetham and J.A. Jenkins 300 (2002) 15
- Polymers**
- Development of SiC/SiC composites by PIP in combination with RS, M. Kotani, A. Kohyama and Y. Katoh 289 (2001) 37
- Wall conditioning by microwave generated plasmas in a toroidal magnetic field, J. Ihde, H.B. Störk, J. Winter, M. Rubel, H.G. Esser and H. Toyoda 290–293 (2001) 1180
- Pores (includes Porosity, Fabrication Pores)**
- Reduction of the open porosity of UO₂ pellets through pore structure control, K.W. Song, K.S. Kim, Y.M. Kim, K.W. Kang and Y.H. Jung 279 (2000) 253
- A method for determining an effective porosity correction factor for thermal conductivity in fast reactor uranium–plutonium oxide fuel pellets, M. Inoue, K. Abe and I. Sato 281 (2000) 117
- Effect of AlOOH on the microstructure of UO₂ pellets, H.-s. Yoo, S.-y. Lee, S.-j. Lee and K.-w. Song 281 (2000) 191
- Development of materials and fabrication of porous and pebble bed beryllium multipliers, D.A. Davydov, M.I. Solonin, Yu.E. Markushkin, V.A. Gorokhov, V.V. Gorlevsky and G.N. Nikolaev 283–287 (2000) 1409
- Tritium release from neutron-irradiated Li₂O sintered pellets: porosity dependence, T. Tanifuji, D. Yamaki, T. Takahashi and A. Iwamoto 283–287 (2000) 1419
- Development of SiC/SiC composites by PIP in combination with RS, M. Kotani, A. Kohyama and Y. Katoh 289 (2001) 37
- Pore migration in UO₂ and grain growth kinetics, L. Bourgeois, Ph. Dehaut, C. Lemaignan and J.P. Fredric 295 (2001) 73
- Powder Processes and Products**
- Radiation processing of powders for improved fusion structural materials, Yu.A. Zaykin, B.A. Aliyev, B.P. Chesnokov and O.A. Kiryushatov 271&272 (1999) 73
- Manufacturing technique of Nb₃Al super-conductive sheet by electrically heated powder rolling, C. Mochizuki and M. Mikami 271&272 (1999) 508
- Preparation of simulated inert matrix fuel with different powders by dry milling method, Y.-W. Lee, H.S. Kim, S.H. Kim, C.Y. Joung, S.H. Na, G. Ledergerber, P. Heimgartner, M. Pouchon and M. Burghartz 274 (1999) 7
- Preparation of rock-like oxide fuels for the irradiation test in the Japan Research Reactor No. 3, T. Shiratori, T. Yamashita, T. Ohmichi, A. Yasuda and K. Watarumi 274 (1999) 40
- Sintering of mixed UO₂ and U₃O₈ powder compacts, K. Song, K. Kim, Y. Kim and Y. Jung 277 (2000) 123
- Densification behavior of U₃O₈ powder compacts by dilatometry, K.W. Song, K.S. Kim and Y.H. Jung 279 (2000) 356
- The possible usage of ex-ADU uranium dioxide fuel pellets with low-temperature sintering, B. Ayaz and A.N. Bilge 280 (2000) 45
- Combustion synthesis and bulk thermal expansion studies of Ba and Sr thorates, R.D. Purohit, A.K. Tyagi, M.D. Mathews and S. Saha 280 (2000) 51
- Preparation and characterization of PuN pellets containing ZrN and TiN, Y. Arai and K. Nakajima 281 (2000) 244
- Sintering studies on UO₂–PuO₂ pellets with varying PuO₂ content using dilatometry, T.R.G. Kutty, P.V. Hegde,

- K.B. Khan, S. Majumdar and D.S.C. Purushotham 282 (2000) 54
- Mechanical properties of hot isostatic pressed type 316LN steel after irradiation, A. Lind and U. Bergenlid 283–287 (2000) 451
- Microstructure control to improve mechanical properties of vanadium alloys for fusion applications, T. Kuwabara, H. Kurishita and M. Hasegawa 283–287 (2000) 611
- High heat flux test of a HIP-bonded first wall panel of reduced activation ferritic steel F-82H, T. Hatano, S. Suzuki, K. Yokoyama, T. Kuroda and M. Enoeda 283–287 (2000) 685
- Nanocrystalline thoria powders via glycine-nitrate combustion, R.D. Purohit, S. Saha and A.K. Tyagi 288 (2001) 7
- A mechanism for the sintered density decrease of $\text{UO}_2\text{-Gd}_2\text{O}_3$ pellets under an oxidizing atmosphere, K.W. Song, K.S. Kim, J.H. Yang, K.W. Kang and Y.H. Jung 288 (2001) 92
- Preparation of homogeneous $(\text{Th}_{0.8}\text{U}_{0.2})\text{-O}_2$ powders by mechanical blending of $\text{Th}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$ and $\text{U}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$ powders, Y. Altaş, M. Eral and H. Tel 294 (2001) 344
- Preparation of 15 mol% $\text{YO}_{1.5}$ -doped ThO_2 disk electrolytes by a polymeric gel-combustion method, S. Arul Antony, K.S. Nagaraja and O.M. Sreedharan 295 (2001) 189
- Structural and thermal investigations on cerium oxalate and derived oxide powders for the preparation of $(\text{Th,Ce})\text{O}_2$ pellets, Y. Altaş and H. Tel 298 (2001) 316
- Activation energy of UO_2 and UO_{2+x} sintering, Ph. Dehaut, L. Bourgeois and H. Chevrel 299 (2001) 250
- A Raman study of the nanocrystallite size effect on the pressure–temperature phase diagram of zirconia grown by zirconium-based alloys oxidation, P. Bouvier, J. Godlewski and G. Lucazeau 300 (2002) 118
- Thoria doped with cations of group VB–synthesis and sintering, K. Ananthasivan, S. Anthonysamy, C. Sudha, A.L.E. Terrance and P.R. Vasudeva Rao 300 (2002) 217
- Precipitates and Precipitation**
- Modelling of dissolution profiles of ordered particles under irradiation, C. Abromeit, E. Camus and S. Matsumura 271&272 (1999) 246
- Observation of spatial distribution of tritium in zirconium alloy with microautoradiography, K. Isobe, Y. Hatano, M. Sugisaki, T. Hayashi, M. Nishi and K. Okuno 271&272 (1999) 326
- Influence of thermomechanical treatment on the corrosion behavior of Zr–1Nb–0.2Cu alloys, J.M. Kim and Y.H. Jeong 275 (1999) 74
- Fracture strength of hydride precipitates in Zr–2.5Nb alloys, S.-Q. Shi and M.P. Puls 275 (1999) 312
- Stability of ordered phases under irradiation, C. Abromeit, H. Wollenberger, S. Matsumura and C. Kinoshita 276 (2000) 104
- On the validity of the cluster model to describe the evolution of Cu precipitates in FeCu alloys, S.I. Golubov, A. Serra, Yu.N. Osetsyky and A.V. Barashev 277 (2000) 113
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. I. Effects of minor alloying elements on precipitate phases in melt products and implication in alloy fabrication, E.H. Lee and L.K. Mansur 278 (2000) 1
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. II. Effects of minor elements on precipitate phase stability during thermal aging, E.H. Lee and L.K. Mansur 278 (2000) 11
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. III. Phase stability during heavy ion irradiation, E.H. Lee and L.K. Mansur 278 (2000) 20
- Nitrogen effect on precipitation and sensitization in cold-worked Type 316L(N) stainless steels, Y. Oh and J. Hong 278 (2000) 242
- The precipitation behaviour of ITER-grade Cu–Cr–Zr alloy after simulating the thermal cycle of hot isostatic pressing, U. Holzwarth and H. Stamm 279 (2000) 31
- Stress tensor of a strained material with a linear row of stress concentrators, R.E. Voskoboynikov 280 (2000) 169
- Effects of the accumulated annealing parameter on the corrosion characteristics of a Zr–0.5Nb–1.0Sn–0.5Fe–0.25Cr alloy, J. Baek, Y. Jeong and I. Kim 280 (2000) 235
- Phase transition temperature in the Zr-rich corner of Zr–Nb–Sn–Fe alloys, M. Canay, C.A. Danón and D. Arias 280 (2000) 365
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319

- Microstructural examination of V–(3–6%)Cr–(3–5%)Ti irradiated in the ATR-A1 experiment, D.S. Gelles 283–287 (2000) 344
- Radiation-induced precipitation in V–(Cr,Fe)–Ti alloys irradiated at low temperature with low dose during neutron or ion irradiation, K.-i. Fukumoto, H. Matsui, Y. Candra, K. Takahashi, H. Sasanuma, S. Nagata and K. Takahiro 283–287 (2000) 535
- Solute interactions in pure vanadium and V–4Cr–4Ti alloy, D.T. Hoelzer, M.K. West, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 616
- Microstructure of welded and thermal-aged low activation steel F82H IEA heat, T. Sawai, K. Shiba and A. Hishinuma 283–287 (2000) 657
- Microstructural development of neutron irradiated W–Re alloys, Y. Nemoto, A. Hasegawa, M. Satou and K. Abe 283–287 (2000) 1144
- Observation of second-phase particles in bulk zirconium alloys using synchrotron radiation, K.T. Erwin, O. Delaire, A.T. Motta, Y.S. Chu, D.C. Mancini and R.C. Birtcher 294 (2001) 299
- The effect of coprecipitation in some key spent fuel elements, J. Quiñones, J. Serrano and P. Diaz Arocas 298 (2001) 63
- Effects of nitrogen on low-cycle fatigue properties of type 304L austenitic stainless steels tested with and without tensile strain hold, B. Rho and S. Nam 300 (2002) 65
- Fission product precipitates in irradiated uranium carbonitride fuel, H. Kleykamp 300 (2002) 273
- Pressure Vessel Materials**
- Neutron energy spectrum and temperature effects on freely migrating defect concentrations and grain boundary segregation in α -Fe, R.G. Faulkner, D.J. Bacon, S. Song and P.E.J. Flewitt 271&272 (1999) 1
- Justification of the new approach to the testing of the candidate iter materials in fission reactor, V.A. Nikolaenko, V.I. Karpukhin, E.A. Krasikov and V.N. Kuznetsov 271&272 (1999) 120
- Estimation of fracture toughness transition curves of RPV steels from ball indentation and tensile test data, T. Byun, S. Kim, B. Lee, I. Kim and J. Hong 277 (2000) 263
- Determination of the yield strength of nuclear reactor pressure vessel steels by means of amplitude-dependent internal friction, K. Van Ouytsel, A. Fabry, R. De Batist and R. Schaller 279 (2000) 51
- Hardening of ferritic alloys at 288 °C by electron irradiation, K. Farrell, R.E. Stoller, P. Jung and H. Ullmaier 279 (2000) 77
- Microstructural characterization of irradiation-induced Cu-enriched clusters in reactor pressure vessel steels, R.G. Carter, N. Soneda, K. Dohi, J.M. Hyde, C.A. English and W.L. Server 298 (2001) 211
- Hardening of Fe–Cu alloys at elevated temperatures by electron and neutron irradiations, T. Tobita, M. Suzuki, A. Iwase and K. Aizawa 299 (2001) 267
- Development of CaF₂ special refractory components, A. Ghosh, D.D. Upadhyaya, R. Prasad and A.K. Suri 299 (2001) 274
- Processing**
- Radiation processing of powders for improved fusion structural materials, Yu.A. Zaykin, B.A. Aliyev, B.P. Chesnokov and O.A. Kiryushatov 271&272 (1999) 73
- Study of oxygen influence on vanadium product for fusion structural materials, X. Hui, W. Yan, L. Ansheng, H. Xue and W. Lijun 271&272 (1999) 459
- Development of a reaction-sintered silicon carbide matrix composite, A. Sayano, C. Sutoh, S. Suyama, Y. Itoh and S. Nakagawa 271&272 (1999) 467
- In situ purification, alloying and casting methodology for metallic plutonium, J.C. Lashley, M.S. Blau, K.P. Staudhammer and R.A. Pereyra 274 (1999) 315
- Wet precipitate method for mixing magnesium and uranium in preparation of Mg_yU_{1-y}O_{2+x} solid solution, T. Fujino, Y. Hoshi, N. Sato and K. Yamada 275 (1999) 19
- Preparation and characterization of uranyl oxalate powders, H. Tel, M. Bülbül, M. Eral and Y. Altas, 275 (1999) 146
- The corrosion of Alloy 718 during 800 MeV proton irradiation, R.S. Lillard, G.J. Willcutt, D.L. Pile and D.P. Butt 277 (2000) 250
- Systematics of the thermodynamic properties of trivalent f-elements in a pyrometallurgical bi-phase extraction system, H. Yamana, N. Wakayama, N. Souda and H. Moriyama 278 (2000) 37
- Reaction sintered glass: a durable matrix for spinel-forming nuclear waste compositions, W.L. Gong, W. Lutze and R.C. Ewing 278 (2000) 73
- Nitrogen effect on precipitation and sensitization in cold-worked Type 316L(N) stainless steels, Y. Oh and J. Hong 278 (2000) 242
- Combustion synthesis of urania–thoria solid solutions, S. Anthonysamy, K. Ananthasivan, V. Chandramouli, I. Kaliappan and P.R. Vasudeva Rao 278 (2000) 346

- Pyrophoric potential of plutonium-containing salt residues, J.M. Haschke, H.K. Fauske and A.G. Phillips 279 (2000) 127
- Reduction of the open porosity of UO₂ pellets through pore structure control, K.M. Song, K.S. Kim, Y.M. Kim, K.W. Kang and Y.H. Jung 279 (2000) 253
- Mechanisms and kinetics of tempering in weldments of 9Cr–1Mo steel, M. Vijayalakshmi, S. Saroja, R. Mythili, V. Thomas Paul and V.S. Raghunathan 279 (2000) 293
- Densification behavior of U₃O₈ powder compacts by dilatometry, K. Song, K. Kim and Y. Jung 279 (2000) 356
- Thermal removal of gallium from gallia-doped ceria, Y. Park, H. Sohn and D.P. Butt 280 (2000) 285
- Combustion synthesis and thermal expansion measurements of the rare earth–uranium ternary oxides RE₆UO₁₂ (RE=La, Nd and Sm), H. Jena, R. Asuvathraman and K.V. Govindan Kutty 280 (2000) 312
- Impurity effects on reduced-activation ferritic steels developed for fusion applications, R.L. Klueh, E.T. Cheng, M.L. Grossbeck and E.E. Bloom 280 (2000) 353
- Li₄SiO₄ pebbles reduction in He + 0.1% H₂ purge gas and effects on tritium release properties, C. Alvani, P. Carconi and S. Casadio 280 (2000) 372
- Effect of silicon impurities and heat treatment on uranium hydriding rates, A.L. DeMint and J.H. Leckey 281 (2000) 208
- Solid state reactions of UO₂, ThO₂ and their mixed oxides with sulphates of potassium, M. Keskar, U.M. Kasar and K.D. Singh Mudher 282 (2000) 146
- Thermally induced gallium removal from plutonium dioxide for MOX fuel production, D.G. Kolman, M.E. Griego, C.A. James and D.P. Butt 282 (2000) 245
- Tensile strength and fracture surface characterization of Hi-Nicalon™ SiC fibers, G.E. Youngblood, C. Lewinsohn, R.H. Jones and A. Kohyama 289 (2001) 1
- Development of SiC/SiC composites by PIP in combination with RS, M. Kotani, A. Kohyama and Y. Katoh 289 (2001) 37
- Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC, Y. Katoh, M. Kotani, H. Kishimoto, W. Yang and A. Kohyama 289 (2001) 42
- Lithium titanate pebbles reprocessing by wet chemistry, C. Alvani, P.L. Carconi, S. Casadio, V. Contini, A. Di Bartolomeo, F. Pierdominici, A. Deptula, S. Lagos and C.A. Nannetti 289 (2001) 303
- Observation of second-phase particles in bulk zirconium alloys using synchrotron radiation, K.T. Erwin, O. Delaire, A.T. Motta, Y.S. Chu, D.C. Mancini and R.C. Birtcher 294 (2001) 299
- Effect of electrolyte composition on the electrochemical potentiokinetic reactivation behavior of Alloy 600, T.-F. Wu, T.-P. Cheng and W.-T. Tsai 295 (2001) 233
- Radiation resistance and thermal creep of ODS ferritic steels, V.V. Sagaradze, V.I. Shalaev, V.L. Arbutov, B.N. Goshchitskii, Y. Tian, W. Qun and S. Jiguang 295 (2001) 265
- Neutron irradiation of sapphire for compressive strengthening. I. Processing conditions and compressive strength, T.M. Regan, D.C. Harris, R.M. Stroud and J.R. White 300 (2002) 39
- Combustion synthesis of γ -lithium aluminate by using various fuels, F. Li, K. Hu, J. Li, D. Zhang and G. Chen 300 (2002) 82
- Radiation Effects: Atomic Defects**
- Diffuse X-ray scattering studies of radiation defects in Ni and dilute Ni alloys, H. Yuya, H. Maeta, H. Oh-tsuka, N. Matsumoto, H. Sugai, A. Iwase, T. Matsui, T. Suzuki, M. Jinchoh and K. Yamakawa 271&272 (1999) 7
- Radiation-induced amorphization and recrystallization of α -SiC single crystal, K. Kawatsura, N. Shimatani, T. Igarashi, T. Inoue, N. Terazawa, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 11
- Radiation effects of 200 keV and 1 MeV Ni ion on MgO single crystal, T. Mitamura, K. Kawatsura, R. Takahashi, T. Adachi, T. Igarashi, S. Arai, N. Masuda, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 15
- Radiation damage and radiation-induced segregation in single crystal stainless steel by RBS and PIXE channeling, T. Mitamura, K. Kawatsura, T. Nakae, T. Igarashi, T. Inoue, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno, K. Fujii, M. Terasawa, H. Uchida, K. Koterazawa, K. Takahiro, S. Nagata and S. Yamaguchi 271&272 (1999) 21
- A molecular dynamics simulation study of displacement cascades in vanadium, K. Morishita and T. Diaz de la Rubia 271&272 (1999) 35
- Simulation of the kinetics of defect accumulation in copper under neutron irradiation, H.L. Heinisch and B.N. Singh 271&272 (1999) 46

- Atom transport efficiency in heavy ion irradiated metals, P. Fielitz, V. Naundorf and H. Wollenberger 271&272 (1999) 52
- Subcascade formation in displacement cascade simulations: Implications for fusion reactor materials, R.E. Stoller and L.R. Greenwood 271&272 (1999) 57
- Defect cluster formation in vanadium irradiated with heavy ions, N. Sekimura, Y. Shirao, H. Yamaguchi, S. Yonamine and Y. Arai 271&272 (1999) 63
- High energy cascades in gold as studied by high energy self-ion irradiation, N. Sekimura, Y. Kanzaki, N. Ohtake, J. Saeki, Y. Shirao, S. Ishino, T. Iwata, A. Iwase and R. Tanaka 271&272 (1999) 68
- Strengthening, loss of strength and embrittlement of beryllium under high temperature neutron irradiation, G.A. Sernyayev, A.V. Kozlov and V.R. Barabash 271&272 (1999) 123
- Annealing of Cu₃Au irradiated with protons, α -particles and C ions at liquid nitrogen temperature, H. Sakairi, E. Yagi and A. Koyama 271&272 (1999) 194
- Interaction of solutes with irradiation-induced defects of electron-irradiated dilute iron alloys, H. Abe and E. Kuramoto 271&272 (1999) 209
- Dynamical process of defect clustering in Ni under the irradiation with low energy helium ions, K. Ono, K. Arakawa and N. Yoshida 271&272 (1999) 214
- Defect accumulation behavior in iron irradiated with energetic ions and electrons at ~ 80 K, Y. Chimi, A. Iwase and N. Ishikawa 271&272 (1999) 236
- Dynamical phase changes induced by point defect fluxes under irradiation, C. Abromeit and G. Martin 271&272 (1999) 251
- Structural change in graphite under electron irradiation at low temperatures, M. Takeuchi, S. Muto, T. Tanabe, H. Kurata and K. Hojou 271&272 (1999) 280
- Effect of solute concentration on grain boundary migration with segregation in stainless steel and model alloys, H. Kanda, N. Hashimoto and H. Takahashi 271&272 (1999) 311
- Radiation-induced segregation of deuterium in austenitic steels and vanadium alloys, V.L. Arbuzov, G.A. Raspopova and V.B. Vykhodets 271&272 (1999) 340
- Triple ion beam studies of radiation damage in 9Cr–2WVTa ferritic/martensitic steel for a high power spallation neutron source, E.H. Lee, J.D. Hunn, G.R. Rao, R.L. Klueh and L.K. Mansur 271&272 (1999) 385
- Research progress of fusion materials in CIAE, J. Yu and C. Shan 271&272 (1999) 512
- Damage production and accumulation 271&272 (1999) 540
- Effect of Ti solute on the recovery of cold-rolled V–Ti alloys, T. Leguey, A. Muñoz, R. Pareja 275 (1999) 138
- The primary damage state in fcc, bcc and hcp metals as seen in molecular dynamics simulations, D.J. Bacon, F. Gao and Yu.N. Osetsky 276 (2000) 1
- Comparative study of radiation damage accumulation in Cu and Fe, M.J. Caturla, N. Soneda, E. Alonso, B.D. Wirth, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 13
- The role of cascade energy and temperature in primary defect formation in iron, R.E. Stoller 276 (2000) 22
- Dislocation loop structure, energy and mobility of self-interstitial atom clusters in bcc iron, B.D. Wirth, G.R. Odette, D. Maroudas and G.E. Lucas 276 (2000) 33
- Kinetic Monte Carlo studies of the effects of Burgers vector changes on the reaction kinetics of one-dimensionally gliding interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 276 (2000) 59
- Stability and mobility of defect clusters and dislocation loops in metals, Yu.N. Osetsky, D.J. Bacon, A. Serra, B.N. Singh and S.I. Golubov 276 (2000) 65
- The microstructure and associated tensile properties of irradiated fcc and bcc metals, M. Victoria, N. Baluc, C. Bailat, Y. Dai, M.I. Luppó, R. Schäublin and B.N. Singh 276 (2000) 114
- Comparison between radiation effects in some fcc and bcc metals irradiated with energetic heavy ions – a review, A. Iwase and S. Ishino 276 (2000) 178
- Heavy ion irradiation and annealing of lead: atomistic simulations and experimental validation, M.-J. Caturla, M. Wall, E. Alonso, T. Díaz de la Rubia, T. Felter and M.J. Fluss 276 (2000) 186
- Collision cascades in metals and semiconductors: defect creation and interface behavior, K. Nordlund and R.S. Averback 276 (2000) 194
- Properties and evolution of sessile interstitial clusters produced by displacement cascades in α -iron, F. Gao, D.J. Bacon, Yu.N. Osetsky, P.E.J. Flewitt and T.A. Lewis 276 (2000) 213
- Simulation of damage production and accumulation in vanadium, E. Alonso, M.-J. Caturla, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 221
- Analysis of displacement cascades and threshold displacement energies in β -SiC, J.M. Perlado, L. Malerba, A. Sánchez-Rubio and T. Díaz de la Rubia 276 (2000) 235

- Study of defect annealing behaviour in neutron irradiated Cu and Fe using positron annihilation and electrical conductivity, M. Eldrup and B.N. Singh 276 (2000) 269
- Basic aspects of differences in irradiation effects between fcc, bcc and hcp metals and alloys, A. Almazouzi, T. Díaz de la Rubia, B.N. Singh and M. Victoria 276 (2000) 295
- Theory of the late stage of radiolysis of alkali halides, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 277 (2000) 184
- XAS and XRD study of annealed ^{238}Pu - and ^{239}Pu -substituted zircons ($\text{Zr}_{0.92}\text{Pu}_{0.08}\text{SiO}_4$), B.D. Begg, N.J. Hess, W.J. Weber, S.D. Conradson, M.J. Schweiger and R.C. Ewing 278 (2000) 212
- Displacement energy surface in 3C and 6H SiC, R. Devanathan and W.J. Weber 278 (2000) 258
- Recovery of electron irradiated V–Ga alloys, T. Leguey, M. Monge, R. Pareja and E.R. Hodgson 279 (2000) 364
- Influence of the interatomic potentials on molecular dynamics simulations of displacement cascades, C.S. Becquart, C. Domain, A. Legris and J.C. Van Duysen 280 (2000) 73
- Heavy-ion cascade effects on radiation-induced segregation kinetics in Cu–1%Au alloys, M.J. Giacobbe, N.Q. Lam, L.E. Rehn, P.M. Baldo, L. Funk and J.F. Stubbins 281 (2000) 213
- Effect of partial damage efficiencies on the radiation-induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 282 (2000) 47
- Progress in modelling the microstructural evolution in metals under cascade damage conditions, H. Trinkaus, B.N. Singh and S.I. Golubov 283–287 (2000) 89
- Recovery of electrical resistivity of high-purity iron irradiated with 30 MeV electrons at 77 K, H. Abe and E. Kuramoto 283–287 (2000) 174
- Effects of grain boundary misorientation on solute segregation in thermally sensitized and proton-irradiated 304 stainless steel, T.S. Duh, J.J. Kai and F.R. Chen 283–287 (2000) 198
- Correlation of simulated TEM images with irradiation induced damage, R. Schäublin, P. de Almeida, A. Almazouzi and M. Victoria 283–287 (2000) 205
- Study of point defect behaviors in vanadium and its alloys by using HVEM, T. Hayashi, K. Fukumoto and H. Matsui 283–287 (2000) 234
- Differences in the microstructure of the F82H ferritic/martensitic steel after proton and neutron irradiation, R. Schäublin and M. Victoria 283–287 (2000) 339
- Tensile properties and microstructure of 590 MeV proton-irradiated pure Fe and a Fe–Cr alloy, M.I. Luppó, C. Bailat, R. Schäublin and M. Victoria 283–287 (2000) 483
- Mechanical properties and microstructure in low-activation martensitic steels F82H and Optimax after 800-MeV proton irradiation, Y. Dai, S.A. Maloy, G.S. Bauer and W.F. Sommer 283–287 (2000) 513
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- The effects of one-dimensional glide on the reaction kinetics of interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 283–287 (2000) 737
- Statistical analysis of a library of molecular dynamics cascade simulations in iron at 100 K, R.E. Stoller and A.F. Calder 283–287 (2000) 746
- Modeling of cascade damage interactions by Monte-Carlo method, N. Sekimura, T. Morioka and K. Morishita 283–287 (2000) 758
- Interstitial cluster motion in displacement cascades, N.V. Doan 283–287 (2000) 763
- Computer simulation of defects interacting with a dislocation in Fe and Ni, E. Kuramoto, K. Ohsawa and T. Tsutsumi 283–287 (2000) 778
- Molecular dynamics simulation of defect production in irradiated β -SiC, L. Malerba, J.M. Perlado, A. Sánchez-Rubio, I. Pastor, L. Colombo and T. Diaz de la Rubia 283–287 (2000) 794
- An initial model for the RIED effect, E.R. Hodgson and A. Morono 283–287 (2000) 880
- Positron lifetime calculation for defects and defect clusters in graphite, T. Onitsuka, H. Ohkubo, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 922
- Neutron irradiation effects in magnesium-aluminate spinel doped with transition metals, V.T. Gritsyna, I.V. Afanasyev-Charkin, V.A. Kobayakov and K.E. Sickafus 283–287 (2000) 927
- Thermal stability and kinetics of defects in magnesium aluminate spinel irradiated with fast neutrons, K. Yasuda, C. Kinoshita, K. Fukuda and F.A. Garner 283–287 (2000) 937
- Cation disordering in magnesium aluminate spinel crystals induced by electron or ion irradiation, T. Soeda, S. Matsumura, C. Kinoshita and N.J. Zaluzec 283–287 (2000) 952

- Post-irradiation examinations of Li_4SiO_4 pebbles irradiated in the EXOTIC-7 experiment, G. Piazza, F. Scaffidi-Argentina and H. Werle 283–287 (2000) 1396
- Cracks as sink of irradiation created point defects, A. Sarce 288 (2001) 130
- New mechanism for radiation defect production and aggregation in crystalline ceramics, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 289 (2001) 86
- Accumulation and recovery of disorder on silicon and carbon sublattices in ion-irradiated 6H-SiC, W. Jiang, W.J. Weber, S. Thevuthasan and V. Shutthanandan 289 (2001) 96
- Computational study of plutonium–neodymium fluorobrotholite $\text{Ca}_9\text{Nd}_{0.5}\text{Pu}_{0.5}(\text{SiO}_4)(\text{PO}_4)_3\text{F}_2$ thermodynamic properties, C. Meis 289 (2001) 167
- Optical emission due to ionic displacements in alkaline earth titanates, R. Cooper, K.L. Smith, M. Colella, E.R. Vance and M. Phillips 289 (2001) 199
- Accumulation and thermal recovery of disorder in Au^{2+} -irradiated SrTiO_3 , S. Thevuthasan, W. Jiang, V. Shutthanandan and W.J. Weber 289 (2001) 204
- Carbothermic synthesis of (Cm,Pu)N, M. Takano, A. Itoh, M. Akabori, T. Ogawa, M. Numata and H. Okamoto 294 (2001) 24
- Temperature-dependence of defect creation and clustering by displacement cascades in α -zirconium, F. Gao, D.J. Bacon, L.M. Howe and C.B. So 294 (2001) 288
- Effects of phosphorus on defects accumulation and annealing in electron-irradiated Fe–Ni austenitic alloys, V.L. Arbusov, A.P. Druzhkov and S.E. Danilov 295 (2001) 273
- Effect of defect sink strengths on the radiation induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 295 (2001) 290
- Multiscale modeling of radiation damage: applications to damage production by GeV proton irradiation of Cu and W, and pulsed irradiation effects in Cu and Fe, M. Caturla, T. Diaz de la Rubia, M. Victoria, R.K. Corzine, M.R. James and G.A. Greene 296 (2001) 90
- Does pulsing in spallation neutron sources affect radiation damage? H. Trinkaus and H. Ullmaier 296 (2001) 101
- D.J. Bacon, S. Song and P.E.J. Flewitt 271&272 (1999) 1
- Formation mechanism of clustered small loops (rafts) in fission-neutron irradiated Mo at high temperatures, K. Yamakawa and Y. Shimomura 271&272 (1999) 41
- Defect cluster formation in vanadium irradiated with heavy ions, N. Sekimura, Y. Shirao, H. Yamaguchi, S. Yonamine and Y. Arai 271&272 (1999) 63
- Influence of post-irradiation thermal annealing on the mechanical properties of ion irradiated layers in 316L stainless steel, C. Robertson, L. Boulanger and S. Poissonnet 271&272 (1999) 102
- Microstructure and mechanical properties of neutron irradiated TiNi shape memory alloy, Y. Matsukawa, T. Suda, S. Ohnuki and C. Namba 271&272 (1999) 106
- Microstructural examination of Ni-ion irradiated Fe–Ni–Cr alloys followed to micro-zone deformation, M. Ando, Y. Katoh, H. Tanigawa and A. Kohyama 271&272 (1999) 111
- High-resolution electron microscopy of γ -TiAl irradiated with 15 keV helium ions at room temperature, M. Song, K. Furuya, T. Tanabe and T. Noda 271&272 (1999) 200
- Disordering kinetics of Ni_3Al under ion irradiation, S. Müller, C. Abromeit, S. Matsumura, N. Wanderka and H. Wollenberger 271&272 (1999) 241
- Invisible and visible point defect clusters in neutron irradiated iron, M. Horiki, T. Yoshiie, M. Iseki and M. Kiritani 271&272 (1999) 256
- Void formation close to stacking fault tetrahedra in heavily electron irradiated pure Ag and Cu, K. Niwase, F. Philipp, W. Sigle and A. Seeger 271&272 (1999) 261
- TEM analyses of surface ridge network in an ion-irradiated graphite thin film, S. Muto, T. Tanabe, M. Takeuchi, Y. Kobayashi, S. Furuno and K. Hojou 271&272 (1999) 285
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Destination of point defects and microstructural evolution under collision cascade damage, T. Yoshiie and M. Kiritani 271&272 (1999) 296
- Microstructural evolution and hardening of neutron irradiated vanadium alloys at low temperatures in Japan Material Testing Reactor, Y. Candra, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 301
- Microstructures of type 316 model alloys neutron-irradiated at 513 K to 1 dpa, Y. Miwa, T. Tsukada, H. Tsuji and H. Nakajima 271&272 (1999) 316
- Radiation Effects: Extended Defects, Microstructures**
- Neutron energy spectrum and temperature effects on freely migrating defect concentrations and grain boundary segregation in α -Fe, R.G. Faulkner,

- Behavior of ion-implanted helium and structural changes in nickel-base alloys under long-time exposure at elevated temperatures, I.I. Chernov, B.A. Kalin, A.N. Kalashnikov and V.M. Ananin 271&272 (1999) 333
- Effects of varying temperature irradiation on the neutron irradiation hardening of reduced-activation 9Cr–2W martensitic steels, R. Kasada, A. Kimura, H. Matsui, M. Hasegawa and M. Narui 271&272 (1999) 360
- Microstructural evolution in vanadium irradiated during ion irradiation at constant and varying temperature, K. Ochiai, H. Watanabe, T. Muroga, N. Yoshida and H. Matsui 271&272 (1999) 376
- Fluence dependence of defect evolution in austenitic stainless steels during fission neutron irradiation, H. Watanabe, T. Muroga and N. Yoshida 271&272 (1999) 381
- Influence of neutron irradiation on deformability and fracture micromechanisms of titanium α -alloys, O.A. Kozhevnikov, E.V. Nesterova, V.V. Rybin and I.I. Yarmolovich 271&272 (1999) 472
- Damage production and accumulation 271&272 (1999) 540
- Irradiation effects in ceramics for fusion reactor applications, T. Shikama, K. Yasuda, S. Yamamoto, C. Kinoshita, S.J. Zinkle and E.R. Hodgson 271&272 (1999) 560
- Relationship between hardening and damage structure in austenitic stainless steel 316LN irradiated at low temperature in the HFIR, N. Hashimoto, E. Wakai and J.P. Robertson 273 (1999) 95
- Radiation damage effects in zirconia, K.E. Sickafus, H.J. Matzke, Th. Hartmann, K. Yasuda, J.A. Valdez, P. Chodak III, M. Nastasi and R.A. Verrall 274 (1999) 66
- In-pile studies of inert matrices with emphasis on magnesia and magnesium aluminate spinel, N. Chauvin, T. Albiol, R. Mazoyer, J. Noirot, D. Lespiaux, J.C. Dumas, C. Weinberg, J.C. Ménard and J.P. Ottaviani 274 (1999) 91
- Optimisation of inert matrix fuel concepts for americium transmutation, N. Chauvin, R.J.M. Konings and H.J. Matzke 274 (1999) 105
- Physical and chemical characteristics of baddeleyite (monoclinic zirconia) in natural environments: an overview and case study, G.R. Lumpkin 274 (1999) 206
- Influence of high-dose Kr⁺ irradiation on structural evolution and swelling of 16Cr–15Ni–3Mo–1Ti aging steel, V.V. Sagaradze, S.S. Lapin, M.A. Kirk and B.N. Goshchitskii 274 (1999) 287
- Radiation-induced material changes and susceptibility to intergranular failure of light-water-reactor core internals, S.M. Bruemmer, E.P. Simonen, P.M. Scott, P.L. Andresen, G.S. Was and J.L. Nelson 274 (1999) 299
- Assessment of the radial extent and completion of recrystallisation in high burn-up UO₂ nuclear fuel by EPMA, C.T. Walker 275 (1999) 56
- Damage observed in Mo irradiated with 14 MeV neutrons at RTNS-II, K. Yamakawa and Y. Shimomura 275 (1999) 101
- The primary damage state in fcc, bcc and hcp metals as seen in molecular dynamics simulations, D.J. Bacon, F. Gao and Yu.N. Osetsky 276 (2000) 1
- The role of cascade energy and temperature in primary defect formation in iron, R.E. Stoller 276 (2000) 22
- Dislocation loop structure, energy and mobility of self-interstitial atom clusters in bcc iron, B.D. Wirth, G.R. Odette, D. Maroudas and G.E. Lucas 276 (2000) 33
- Similarity and difference between fcc, bcc and hcp metals from the view point of point defect cluster formation, M. Kiritani 276 (2000) 41
- The search for interstitial dislocation loops produced in displacement cascades at 20 K in copper, M.A. Kirk, M.L. Jenkins and H. Fukushima 276 (2000) 50
- Stability and mobility of defect clusters and dislocation loops in metals, Yu.N. Osetsky, D.J. Bacon, A. Serra, B.N. Singh and S.I. Golubov 276 (2000) 65
- Defect accumulation in fcc and bcc metals and alloys under cascade damage conditions – Towards a generalisation of the production bias model, S.I. Golubov, B.N. Singh and H. Trinkaus 276 (2000) 78
- Stability of ordered phases under irradiation, C. Abromeit, H. Wollenberger, S. Matsumura and C. Kinoshita 276 (2000) 104
- The microstructure and associated tensile properties of irradiated fcc and bcc metals, M. Victoria, N. Baluc, C. Bailat, Y. Dai, M.I. Luppó, R. Schäublin and B.N. Singh 276 (2000) 114
- Collision cascades in metals and semiconductors: defect creation and interface behavior, K. Nordlund and R.S. Averback 276 (2000) 194
- Interactions between mobile dislocation loops in Cu and α -Fe, Yu.N. Osetsky, A. Serra and V. Priego 276 (2000) 202
- Properties and evolution of sessile interstitial clusters produced by displacement cascades in α -iron, F. Gao, D.J.

- Bacon, Yu.N. Osetsky, P.E.J. Flewitt and T.A. Lewis 276 (2000) 213
- Monte Carlo modelling of damage accumulation in metals under cascade irradiation, A.V. Barashev, D.J. Bacon and S.I. Golubov 276 (2000) 243
- Quantitative analysis of CTEM images of small dislocation loops in Al and stacking fault tetrahedra in Cu generated by molecular dynamics simulation, R. Schäublin, A. Almazouzi, Y. Dai, Yu.N. Osetsky and M. Victoria 276 (2000) 251
- In situ transmission electron microscopy study of ion-irradiated copper: comparison of the temperature dependence of cascade collapse in fcc- and bcc-metals, T.L. Daulton, M.A. Kirk and L.E. Rehn 276 (2000) 258
- Deformation modes of proton and neutron irradiated stainless steels, C. Bailat, F. Gröschel and M. Victoria 276 (2000) 283
- Tensile properties and microstructure of martensitic steel DIN 1.4926 after 800 MeV proton irradiation, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 276 (2000) 289
- Basic aspects of differences in irradiation effects between fcc, bcc and hcp metals and alloys, A. Almazouzi, T. Díaz de la Rubia, B.N. Singh and M. Victoria 276 (2000) 295
- Theory of the late stage of radiolysis of alkali halides, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 277 (2000) 184
- An alternative explanation for evidence that xenon depletion, pore formation, and grain subdivision begin at different local burnups, J. Rest and G.L. Hofman 277 (2000) 231
- Irradiation-induced structural changes in surveillance material of VVER 440-type weld metal, M. Grosse, V. Denner, J. Böhmert and M.-H. Mathon 277 (2000) 280
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. III. Phase stability during heavy ion irradiation, E.H. Lee and L.K. Mansur 278 (2000) 20
- Variability of radiation-induced segregation in iron–chromium–nickel alloys, T.R. Allen, E.A. Kenik and G.S. Was 278 (2000) 149
- Hardness and defect structures in EC316LN austenitic alloy irradiated under a simulated spallation neutron source environment using triple ion-beams, E.H. Lee, J.D. Hunn, N. Hashimoto and L.K. Mansur 278 (2000) 266
- Recovery characteristics of neutron-irradiated V–Ti alloys, T. Leguey and R. Pareja 279 (2000) 216
- Microstructure of austenitic stainless steels irradiated at 400 °C in the ORR and the HFIR spectral tailoring experiment, N. Hashimoto, E. Wakai, J.P. Robertson, T. Sawai and A. Hishinuma 280 (2000) 186
- Defect and void evolution in oxide dispersion strengthened ferritic steels under 3.2 MeV Fe⁺ ion irradiation with simultaneous helium injection, I.-S. Kim, J.D. Hunn, N. Hashimoto, D.L. Larson, P.J. Maziasz, K. Miyahara and E.H. Lee 280 (2000) 264
- Synthesis of atom probe experiments on irradiation-induced solute segregation in French ferritic pressure vessel steels, P. Auger, P. Pareige, S. Welzel and J.-C. Van Duysen 280 (2000) 331
- Non-equilibrium intragrain concentration redistribution of the alloying elements in austenitic steels under irradiation, V.V. Sagaradze, S.S. Lapin and M.A. Kirk 280 (2000) 345
- Lattice parameter changes associated with the rim-structure formation in high burn-up UO₂ fuels by micro X-ray diffraction, J. Spino and D. Papaioannou 281 (2000) 146
- Embrittlement of low copper VVER 440 surveillance samples neutron-irradiated to high fluences, M.K. Miller, K.F. Russell, J. Kocik and E. Keilova 282 (2000) 83
- The effects of long-time irradiation and thermal aging on 304 stainless steel, T.R. Allen, J.I. Cole, C.L. Trybus and D.L. Porter 282 (2000) 171
- Critical issues and current status of SiC/SiC composites for fusion, A. Hasegawa, A. Kohyama, R.H. Jones, L.L. Snead, B. Riccardi and P. Fenici 283–287 (2000) 128
- Sink effect of grain boundary on radiation-induced segregation in austenitic stainless steel, S. Watanabe, Y. Takamatsu, N. Sakaguchi and H. Takahashi 283–287 (2000) 152
- Correlation between defect structures and hardness in tantalum irradiated by heavy ions, K. Yasunaga, H. Watanabe, N. Yoshida, T. Muroga and N. Noda 283–287 (2000) 179
- Formation and migration of helium bubbles in Fe–16Cr–17Ni austenitic alloy at high temperature, K. Ono, K. Arakawa, M. Oohashi, H. Kurata, K. Hojou and N. Yoshida 283–287 (2000) 210
- Effects of dose rate on microstructural evolution and swelling in austenitic

- steels under irradiation, T. Okita, T. Kamada and N. Sekimura 283–287 (2000) 220
- The effect of alloying elements on the defect structural evolution in neutron irradiated Ni alloys, T. Yoshiie, Q. Xu, Y. Satoh, H. Ohkubo and M. Kiritani 283–287 (2000) 229
- Study of point defect behaviors in vanadium and its alloys by using HVEM, T. Hayashi, K. Fukumoto and H. Matsui 283–287 (2000) 234
- Effect of dual-beam-irradiation by helium and carbon ions on microstructure development of SiC/SiC composites, S. Nogami, A. Hasegawa, K. Abe, T. Taguchi and R. Yamada 283–287 (2000) 268
- Microstructures in Ti–Al intermetallic compounds irradiated at 673 K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer and A. Hishinuma 283–287 (2000) 273
- Defect structures introduced in iron under varying temperature neutron irradiation, M. Horiki, T. Yoshiie, Q. Xu, M. Iseki and M. Kiritani 283–287 (2000) 282
- Computer simulations of the effects of temperature change on defect accumulation in copper during neutron irradiation, Q. Xu, H.L. Heinisch and T. Yoshiie 283–287 (2000) 297
- Microstructure of Cu–Ni alloys neutron irradiated at 210 °C and 420 °C to 14 dpa, S.J. Zinkle and B.N. Singh 283–287 (2000) 306
- Simulating the influence of radiation temperature variations on microstructural evolution, Y. Katoh, R.E. Stoller, A. Kohyama and T. Muroga 283–287 (2000) 313
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Microstructural changes induced by post-irradiation annealing of neutron-irradiated austenitic stainless steels, J.I. Cole and T.R. Allen 283–287 (2000) 329
- Swelling of F82H irradiated at 673 K up to 51 dpa in HFIR, Y. Miwa, E. Wakai, K. Shiba, N. Hashimoto, J.P. Robertson, A.F. Rowcliffe and A. Hishinuma 283–287 (2000) 334
- On the relationship between uniaxial yield strength and resolved shear stress in polycrystalline materials, R.E. Stoller and S.J. Zinkle 283–287 (2000) 349
- Improvement in post-irradiation ductility of neutron irradiated V–Ti–Cr–Si–Al–Y alloy and the role of interstitial impurities, M. Satou, T. Chuto and K. Abe 283–287 (2000) 367
- In-pile and post-irradiation creep of type 304 stainless steel under different neutron spectra, Y. Kurata, Y. Itabashi, H. Mimura, T. Kikuchi, H. Amezawa, S. Shimakawa, H. Tsuji and M. Shindo 283–287 (2000) 386
- The contribution of various defects to irradiation-induced hardening in an austenitic model alloy, M. Ando, Y. Katoh, H. Tanigawa, A. Kohyama and T. Iwai 283–287 (2000) 423
- Tensile properties and microstructure of 590 MeV proton-irradiated pure Fe and a Fe–Cr alloy, M.I. Luppó, C. Bailat, R. Schäublin and M. Victoria 283–287 (2000) 483
- Defect microstructure and deformation behavior of V–Ti–Cr–Si–Al–Y alloy irradiated in ATR, T. Chuto, M. Satou and K. Abe 283–287 (2000) 503
- Effect of mechanical alloying parameters on irradiation damage in oxide dispersion strengthened ferritic steels, S. Yamashita, S. Watanabe, S. Ohnuki, H. Takahashi, N. Akasaka and S. Ukai 283–287 (2000) 647
- Features of radiation damage of vanadium and its alloys at a temperature of 330–340 °C, V.A. Kazakov, Z. Ostrovsky, Yu. Goncharenko and V. Chakin 283–287 (2000) 727
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- Modeling of cascade damage interactions by Monte-Carlo method, N. Sekimura, T. Morioka and K. Morishita 283–287 (2000) 758
- Interstitial cluster motion in displacement cascades, N.V. Doan 283–287 (2000) 763
- Atomistic simulation of stacking fault tetrahedra formation in Cu, B.D. Wirth, V. Bulatov and T. Diaz de la Rubia 283–287 (2000) 773
- Study of loop–loop and loop–edge dislocation interactions in bcc iron, Yu.N. Osetsky, D.J. Bacon, F. Gao, A. Serra and B.N. Singh 283–287 (2000) 784
- An initial model for the RIED effect, E.R. Hodgson and A. Morono 283–287 (2000) 880
- Temperature effect of electron-irradiation-induced structural modification in graphite, S. Muto and T. Tanabe 283–287 (2000) 917
- Positron lifetime calculation for defects and defect clusters in graphite, T. Onitsuka, H. Ohkubo, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 922
- Thermal stability and kinetics of defects in magnesium aluminate spinel irradiated with fast neutrons, K. Yasuda,

- C. Kinoshita, K. Fukuda and F.A. Garner 283–287 (2000) 937
- Deuterium retention in tungsten and molybdenum, S. Nagata and K. Takahiro 283–287 (2000) 1038
- Microstructure evolution in tungsten during low-energy helium ion irradiation, H. Iwakiri, K. Yasunaga, K. Morishita and N. Yoshida 283–287 (2000) 1134
- TEM study on deuterium-irradiation-induced defects in tungsten and molybdenum, T. Matsui, S. Muto and T. Tanabe 283–287 (2000) 1139
- Rim structure formation of isothermally irradiated UO₂ fuel discs, K. Une, K. Nogita, T. Shiratori and K. Hayashi 288 (2001) 20
- Properties and radiation effects in high-temperature pyrolyzed PIP-SiC/SiC, Y. Katoh, M. Kotani, H. Kishimoto, W. Yang and A. Kohyama 289 (2001) 42
- Molecular dynamics simulation of irradiation-induced amorphization of cubic silicon carbide, L. Malerba and J.M. Perlado 289 (2001) 57
- Molecular dynamics refinement of topologically generated reconstructions of simulated irradiation cascades in silica networks, X. Yuan, V. Pulim and L.W. Hobbs 289 (2001) 71
- Hydrogen–damage interactions in yttria-stabilized zirconia, V. Shutthanandan, S. Thevuthasan, J.S. Young, T.M. Orlando and W.J. Weber 289 (2001) 128
- Accumulation and thermal recovery of disorder in Au²⁺-irradiated SrTiO₃, S. Thevuthasan, W. Jiang, V. Shutthanandan and W.J. Weber 289 (2001) 204
- Anisotropic radiation damage by charge exchange neutrals under tokamak discharges in TRIAM-1M, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, S. Itoh and TRIAM Group 290–293 (2001) 94
- Non-destructive structural analysis of surface blistering by TEM and EELS in a reflection configuration, S. Muto, T. Matsui and T. Tanabe 290–293 (2001) 131
- Effect of helium irradiation on trapping and thermal release of deuterium implanted in tungsten, S. Nagata and K. Takahiro 290–293 (2001) 135
- Peculiarity of deuterium ions interaction with tungsten surface in the condition imitating combination of normal operation with plasma disruption in ITER, M.I. Guseva, V.I. Vasiliev, V.M. Gureev, L.S. Danelyan, B.I. Khirpunov, S.N. Korshunov, V.S. Kulikauskas, Yu.V. Martynenko, V.B. Petrov, V.N. Strunnikov, V.G. Stolyarova, V.V. Zatekin and A.M. Litnovsky 290–293 (2001) 1069
- Does pulsing in spallation neutron sources affect radiation damage? H. Trinkaus and H. Ullmaier 296 (2001) 101
- Microstructural origins of radiation-induced changes in mechanical properties of 316 L and 304 L austenitic stainless steels irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, M.L. Hamilton, F.A. Garner, S.A. Maloy and W.F. Sommer 296 (2001) 112
- Correlation of radiation-induced changes in mechanical properties and microstructural development of Alloy 718 irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, S.A. Maloy and W.F. Sommer 296 (2001) 145
- Impact of irradiation on the tensile and fatigue properties of two titanium alloys, P. Marmy and T. Leguey 296 (2001) 155
- Microstructure of both as-irradiated and deformed 304L stainless steel irradiated with 800 MeV protons, Y. Dai, X. Jia, J.C. Chen, W.F. Sommer, M. Victoria and G.S. Bauer 296 (2001) 174
- Origin of hardening and deformation mechanisms in irradiated 316 LN austenitic stainless steel, E.H. Lee, T.S. Byun, J.D. Hunn, K. Farrell and L.K. Mansur 296 (2001) 183
- Comparison of microstructural features of radiation embrittlement of VVER-440 and VVER-1000 reactor pressure vessel steels, E.A. Kuleshova, B.A. Gurovich, Ya.I. Shtrombakh, D.Yu. Erak and O.V. Lavrenchuk 300 (2002) 127
- Order–disorder phase transition induced by swift ions in MgAl₂O₄ and ZnAl₂O₄ spinels, D. Simeone, C. Dodane-Thiriet, D. Gosset, P. Daniel and M. Beauvy 300 (2002) 151
- Emulation of neutron irradiation effects protons: validation of principle, G.S. Was, J.T. Busby, T. Allen, E.A. Kenik, A. Jensson, S.M. Bruemmer, J. Gan, A.D. Edwards, P.M. Scott and P.L. Andreson 300 (2002) 198
- Amorphization and recrystallization of the ABO₃ oxides, A. Meldrum, L.A. Boatner, W.J. Weber and R.C. Ewing 300 (2002) 242
- Radiation Effects: Mechanical Properties**
- Radiation processing of powders for improved fusion structural materials, Yu.A. Zaykin, B.A. Aliyev, B.P. Chesnokov and O.A. Kiryushatov 271&272 (1999) 73
- Influence of irradiation on the dislocation kinetics with allowance for the

- dislocation velocity distribution, N.V. Kamyshanchenko, V.V. Krasil'nikov, I.M. Nekliudov and A.A. Parkhomenko 271&272 (1999) 84
- Effects of neutron irradiation on microstructure and mechanical properties of pure iron, B.N. Singh, A. Horsewell and P. Toft 271&272 (1999) 97
- Microstructure and mechanical properties of neutron irradiated TiNi shape memory alloy, Y. Matsukawa, T. Suda, S. Ohnuki and C. Namba 271&272 (1999) 106
- The influence of helium co-implantation on ion-induced hardening of low activation ferritic steel evaluated by micro-indentation technique, Y. Kato, H. Tanigawa, T. Muroga, T. Iwai and A. Kohyama 271&272 (1999) 115
- Strengthening, loss of strength and embrittlement of beryllium under high temperature neutron irradiation, G.A. Sernyaev, A.V. Kozlov and V.R. Barabash 271&272 (1999) 123
- Irradiation examination of CuNiCrSi alloy for ITER applications, A.D. Ivanov, A.V. Kozlov, M.V. Chernetsov and S.A. Averin 271&272 (1999) 139
- Postirradiation thermocyclic loading of ferritic–martensitic structural materials, L. Belyaeva, A. Orychtchenko, C. Petersen and V. Rybin 271&272 (1999) 151
- Mechanical properties and microstructure of advanced ferritic–martensitic steels used under high dose neutron irradiation, V.K. Shamardin, V.N. Golovanov, T.M. Bulanova, A.V. Povstianko, A.E. Fedoseev, Yu.D. Goncharenko and Z.E. Ostrovsky 271&272 (1999) 155
- Irradiation hardening of V–4Cr–4Ti, E.V. van Osch and M.I. de Vries 271&272 (1999) 162
- Post-irradiation mechanical properties of austenitic alloys at temperatures below 703 K, S. Jitsukawa, I. Ioka and A. Hishinuma 271&272 (1999) 167
- Post-irradiation creep rupture properties of FBR grade 316 SS structural material, N. Miyaji, Y. Abe, S. Ukai and S. Onose 271&272 (1999) 173
- Microstructural evolution and hardening of neutron irradiated vanadium alloys at low temperatures in Japan Material Testing Reactor, Y. Candra, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 301
- Effects of varying temperature irradiation on the neutron irradiation hardening of reduced-activation 9Cr–2W martensitic steels, R. Kasada, A. Kimura, H. Matsui, M. Hasegawa and M. Narui 271&272 (1999) 360
- Influence of neutron irradiation on deformability and fracture micro-mechanisms of titanium α -alloys, O.A. Kozhevnikov, E.V. Nesterova, V.V. Rybin and I.I. Yarmolovich 271&272 (1999) 472
- Research progress of fusion materials in CIAE, J. Yu and C. Shan 271&272 (1999) 512
- Common technologies and knowledge sharing, J.W. Davis, T. Kondo, G.R. Odette, P. Fenici and T. Kusnagi 271&272 (1999) 553
- Relationship between hardening and damage structure in austenitic stainless steel 316LN irradiated at low temperature in the HFIR, N. Hashimoto, E. Wakai and J.P. Robertson 273 (1999) 95
- Neutron irradiation induced amorphization of silicon carbide, L.L. Snead and J.C. Hay 273 (1999) 213
- Defect accumulation in fcc and bcc metals and alloys under cascade damage conditions – Towards a generalisation of the production bias model, S.I. Golubov, B.N. Singh and H. Trinkaus 276 (2000) 78
- The microstructure and associated tensile properties of irradiated fcc and bcc metals, M. Victoria, N. Baluc, C. Bailat, Y. Dai, M.I. Luppó, R. Schäublin and B.N. Singh 276 (2000) 114
- 3D dislocation dynamics: stress–strain behavior and hardening mechanisms in fcc and bcc metals, H.M. Zbib, T. Díaz de la Rubia, M. Rhee and J.P. Hirth 276 (2000) 154
- Interaction and accumulation of glissile defect clusters near dislocations, N.M. Ghoniem, B.N. Singh, L.Z. Sun and T. Díaz de la Rubia 276 (2000) 166
- Tensile properties and microstructure of martensitic steel DIN 1.4926 after 800 MeV proton irradiation, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 276 (2000) 289
- Basic aspects of differences in irradiation effects between fcc, bcc and hcp metals and alloys, A. Almazouzi, T. Díaz de la Rubia, B.N. Singh and M. Victoria 276 (2000) 295
- Radiation damage in neutron-irradiated yttria-stabilized-zirconia single crystals, B. Savoini, D. Cáceres, I. Vergara, R. González and J.E. Muñoz Santuste 277 (2000) 199
- Hardening of ferritic alloys at 288 °C by electron irradiation, K. Farrell, R.E. Stoller, P. Jung and H. Ullmaier 279 (2000) 77
- Intergranular and intragranular phosphorus segregation in Russian pressure vessel steels due to neutron irradiation, B.A. Gurovich, E.A.

- Kuleshova, Ya.I. Shtrombakh, O.O. Zabusov and E.A. Krasikov 279 (2000) 259
- The initial transient of the irradiation growth in a zirconium alloy, A.M. Fortis and H.C. González 279 (2000) 301
- Irradiation-induced embrittlement of a 2.25Cr1Mo steel, S.-H. Song, R.G. Faulkner, P.E.J. Flewitt, R.F. Smith, P. Marmy and M. Victoria 280 (2000) 162
- A method to study deformation mechanisms for irradiated steels using a disk-bend test, E.H. Lee, T.S. Byun, J.D. Hunn, N. Hashimoto and K. Farrell 281 (2000) 65
- Helium and hydrogen induced hardening in 316LN stainless steel, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur 282 (2000) 131
- The effects of long-time irradiation and thermal aging on 304 stainless steel, T.R. Allen, J.I. Cole, C.L. Trybus and D.L. Porter 282 (2000) 171
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- Progress and critical issues of reduced activation ferritic/martensitic steel development, B. van der Schaaf, D.S. Gelles, S. Jitsukawa, A. Kimura, R.L. Klueh, A. Möslang and G.R. Odette 283–287 (2000) 52
- Critical issues and current status of vanadium alloys for fusion energy applications, R.J. Kurtz, K. Abe, V.M. Chernov, V.A. Kazakov, G.E. Lucas, H. Matsui, T. Muroga, G.R. Odette, D.L. Smith and S.J. Zinkle 283–287 (2000) 70
- Neutron irradiation effects on plasma facing materials, V. Barabash, G. Federici, M. Rödig, L.L. Snead and C.H. Wu 283–287 (2000) 138
- Modeling of microstructure evolution and mechanical property change of reduced-activation martensitic steel during varying-temperature irradiation, R. Kasada and A. Kimura 283–287 (2000) 188
- Influence of neutron irradiation on Cu-NiCrSi alloy pre-implanted with helium, A.V. Kozlov, M.V. Chernetsov, S.A. Averin, V.Ya. Abramov, A.D. Ivanov, Yu.S. Strebkov and V.F. Reutov 283–287 (2000) 193
- The effect of transmutation and displacement in irradiated copper for heat-sink materials, S. Ishino, A. Kurui, S. Ichikawa, T. Inaba and T. Hasegawa 283–287 (2000) 215
- Application of the internal friction method to studying microstructural effects in fusion materials, S. Tähtinen, Y. Jagodzinski, O. Tarasenko, S. Smuk and H. Hänninen 283–287 (2000) 255
- On the relationship between uniaxial yield strength and resolved shear stress in polycrystalline materials, R.E. Stoller and S.J. Zinkle 283–287 (2000) 349
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- Tensile behavior of F82H with and without spectral tailoring, K. Shiba, R.L. Klueh, Y. Miwa, J.P. Robertson and A. Hishinuma 283–287 (2000) 358
- Effects of low-temperature neutron irradiation on mechanical properties of vanadium-base alloys, H. Tsai, T.S. Bray, H. Matsui, M.L. Grossbeck, K. Fukumoto, J. Gazda, M.C. Billone and D.L. Smith 283–287 (2000) 362
- Improvement in post-irradiation ductility of neutron irradiated V–Ti–Cr–Si–Al–Y alloy and the role of interstitial impurities, M. Satou, T. Chuto and K. Abe 283–287 (2000) 367
- The effect of neutron-irradiation on the shear properties of SiC/SiC composites with varied interface, T. Hinoki, L.L. Snead, Y. Katoh, A. Kohyama and R. Shinavski 283–287 (2000) 376
- In-pile and post-irradiation creep of type 304 stainless steel under different neutron spectra, Y. Kurata, Y. Itabashi, H. Mimura, T. Kikuchi, H. Amezawa, S. Shimakawa, H. Tsuji and M. Shindo 283–287 (2000) 386
- Irradiation creep at 60 °C in SUS 316 and its impact on fatigue fracture, J. Nagakawa, Y. Murase, N. Yamamoto and T. Fukuzawa 283–287 (2000) 391
- Effects of helium implantation on creep rupture properties of low activation ferritic steel F82H IEA heat, N. Yamamoto, J. Nagakawa and K. Shiba 283–287 (2000) 400
- Shear punch and tensile measurements of mechanical property changes induced in various austenitic alloys by high-energy mixed proton and neutron irradiation at low temperatures, M.L. Hamilton, F.A. Garner, M.B. Tolo-czko, S.A. Maloy, W.F. Sommer, M.R. James, P.D. Ferguson and M.R. Louthan Jr. 283–287 (2000) 418
- The contribution of various defects to irradiation-induced hardening in an austenitic model alloy, M. Ando, Y. Katoh, H. Tanigawa, A. Kohyama and T. Iwai 283–287 (2000) 423

- Tensile and low-cycle fatigue properties of solution annealed type 316L stainless steel plate and TIG-weld exposed to 5 dpa at low-temperature (42 °C), J.-L. Puzzolante, M. Scibetta, R. Chaouadi and W. Vandermeulen 283–287 (2000) 428
- Effect of helium to dpa ratio on fatigue behavior of austenitic stainless steel irradiated to 2 dpa, I. Ioka, M. Yonekawa, Y. Miwa, H. Mimura, H. Tsuji and T. Hoshiya 283–287 (2000) 440
- The effects of irradiation and testing temperature on tensile behaviour of stainless steels, C. Bailat, A. Almazouzi, N. Baluc, R. Schäublin, F. Gröschel and M. Victoria 283–287 (2000) 446
- Mechanical properties of hot isostatic pressed type 316LN steel after irradiation, A. Lind and U. Bergenlid 283–287 (2000) 451
- Analysis of tensile and fracture toughness results on irradiated molybdenum alloys, TZM and Mo–5%Re, M. Scibetta, R. Chaouadi and J.L. Puzzolante 283–287 (2000) 455
- Thermal fatigue crack nucleation in ferritic–martensitic steels before and after neutron irradiation, L.A. Belyaeva, A.A. Zisman, C. Petersen, V.A. Potapova and V.V. Rybin 283–287 (2000) 461
- Effects of helium implantation on hardness of pure iron and a reduced activation ferritic–martensitic steel, H. Tanigawa, S. Jitsukawa, A. Hishinuma, M. Ando, Y. Katoh, A. Kohyama and T. Iwai 283–287 (2000) 470
- Low-temperature irradiation effects on tensile and Charpy properties of low-activation ferritic steels, K. Shiba and A. Hishinuma 283–287 (2000) 474
- Tensile properties and microstructure of 590 MeV proton-irradiated pure Fe and a Fe–Cr alloy, M.I. Luppó, C. Bailat, R. Schäublin and M. Victoria 283–287 (2000) 483
- Effect of low temperature irradiation on the mechanical properties of ternary V–Cr–Ti alloys as determined by tensile tests and shear punch tests, M.L. Hamilton and M.B. Toloczko 283–287 (2000) 488
- V-alloy embrittlement by irradiation in a cooling gas environment, H.D. Röhrig, M. Rieth, B. Dafferner and E. Materna-Morris 283–287 (2000) 498
- Defect microstructure and deformation behavior of V–Ti–Cr–Si–Al–Y alloy irradiated in ATR, T. Chuto, M. Satou and K. Abe 283–287 (2000) 503
- Effect of strain rate on the tensile properties of unirradiated and irradiated V–4Cr–4Ti, A.F. Rowcliffe, S.J. Zinkle and D.T. Hoelzer 283–287 (2000) 508
- Deformation mechanisms in 316 stainless steel irradiated at 60 °C and 330 °C, N. Hashimoto, S.J. Zinkle, A.F. Rowcliffe, J.P. Robertson and S. Jitsukawa 283–287 (2000) 528
- Evaluation of neutron irradiated near-stoichiometric silicon carbide fiber composites, L.L. Snead, Y. Katoh, A. Kohyama, J.L. Bailey, N.L. Vaughn and R.A. Lowden 283–287 (2000) 551
- Uses of zirconium alloys in fusion applications, C.B.A. Forty and P.J. Karditsas 283–287 (2000) 607
- Effect of mechanical alloying parameters on irradiation damage in oxide dispersion strengthened ferritic steels, S. Yamashita, S. Watanabe, S. Ohnuki, H. Takahashi, N. Akasaka and S. Ukai 283–287 (2000) 647
- Material science and manufacturing of heat-resistant reduced-activation ferritic–martensitic steels for fusion, A.G. Ioltukhovskiy, A.I. Blokhin, N.I. Budylnkin, V.M. Chernov, M.V. Leont'eva-Smirnova, E.G. Mironova, E.A. Medvedeva, M.I. Solonin, S.I. Porollo and L.P. Zavyalsky 283–287 (2000) 652
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- Annealing behavior of irradiation hardening and microstructure in helium-implanted reduced activation martensitic steel, A. Kimura, R. Kasada, R. Sugano, A. Hasegawa and H. Matsui 283–287 (2000) 827
- Hydrogen-irradiated steel interaction during alternating hydrogenation and annealing, E.A. Krasikov and A.D. Amajev 283–287 (2000) 846
- Radiation effects on laser damage in KU1 quartz glass, P. Martin, A. Moroño and E.R. Hodgson 283–287 (2000) 894
- Neutron irradiation damage in aluminum oxide and nitride ceramics up to a fluence of 4.2×10^{26} n/m², T. Yano, K. Ichikawa, M. Akiyoshi and Y. Tachi 283–287 (2000) 947
- Mechanical properties of the ITER central solenoid model coil insulation under static and dynamic load after reactor irradiation, K. Humer, P. Rosenkranz, H.W. Weber, P.E. Fabian and J.A. Rice 283–287 (2000) 973
- Development of a small specimen test machine to evaluate irradiation

- embrittlement of fusion reactor materials, T. Ishii, M. Ohmi, J. Saito, T. Hoshiya, N. Ooka, S. Jitsukawa and M. Eto 283–287 (2000) 1023
- Effect of ITER components manufacturing cycle on the irradiation behaviour of 316L(N)-IG steel, B.S. Rodchenkov, V.I. Prokhorov, O.Yu. Makarov, V.K. Shamardin, G.M. Kalinin, Yu.S. Strebkov and O.A. Golosov 283–287 (2000) 1166
- Post-irradiation mechanical tests on F82H EB and TIG welds, J. Rensman, E.V. van Osch, M.G. Horsten and D.S. d'Hulst 283–287 (2000) 1201
- A fracture mechanics analysis of the PWR nuclear power plant reactor pressure vessel beltline weld, L.-j. Young 288 (2001) 197
- Material degradation and particle formation under transient thermal loads, J. Linke, M. Akiba, R. Duwe, A. Lodato, H.-J. Penkalla, M. Rödig and K. Schöpfkin 290–293 (2001) 1102
- Effect of bonding and bakeout thermal cycles on the properties of copper alloys irradiated at 350 °C, B.N. Singh, D.J. Edwards, M. Eldrup and P. Toft 295 (2001) 1
- Embrittlement behaviour of different international low activation alloys after neutron irradiation, H.-C. Schneider, B. Dafferner and J. Aktaa 295 (2001) 16
- Pore pressure and swelling in the rim region of LWR high burnup UO₂ fuel, Y.-H. Koo, B.-H. Lee, J.-S. Cheon and D.-S. Sohn 295 (2001) 213
- Microstructural origins of radiation-induced changes in mechanical properties of 316 L and 304 L austenitic stainless steels irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, M.L. Hamilton, F.A. Garner, S.A. Maloy and W.F. Sommer 296 (2001) 112
- The mechanical properties of 316L/304L stainless steels, Alloy 718 and Mod 9Cr–1Mo after irradiation in a spallation environment, S.A. Maloy, M.R. James, G. Willcutt, W.F. Sommer, M. Sokolov, L.L. Snead, M.L. Hamilton and F. Garner 296 (2001) 119
- Tensile properties of candidate SNS target container materials after proton and neutron irradiation in the LANSCE accelerator, K. Farrell and T.S. Byun 296 (2001) 129
- The mechanical properties of an Alloy 718 window after irradiation in a spallation environment, M.R. James, S.A. Maloy, F.D. Gac, W.F. Sommer, J. Chen and H. Ullmaier 296 (2001) 139
- Correlation of radiation-induced changes in mechanical properties and microstructural development of Alloy 718 irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, S.A. Maloy and W.F. Sommer 296 (2001) 145
- Impact of irradiation on the tensile and fatigue properties of two titanium alloys, P. Marmy and T. Leguey 296 (2001) 155
- Retention of implanted hydrogen and helium in martensitic stainless steels and their effects on mechanical properties, P. Jung, C. Liu and J. Chen 296 (2001) 165
- Ion-irradiation-induced hardening in Inconel 718, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur 296 (2001) 203
- Mechanical properties of pure tantalum after 800 MeV proton irradiation, J. Chen, H. Ullmaier, T. Floßdorf, W. Kühnlein, R. Duwe, F. Carsughi and T. Broome 298 (2001) 248
- Strain hardening and plastic instability properties of austenitic stainless steels after proton and neutron irradiation, T.S. Byun, K. Farrell, E.H. Lee, J.D. Hunn and L.K. Mansur 298 (2001) 269
- Dependence of the non-swelling in-reactor steady-state creep component of austenitic phase alloys on the stacking fault energy, E. Gilbert and J. Foster 298 (2001) 321
- Neutron irradiation of sapphire for compressive strengthening. I. Processing conditions and compressive strength, T.M. Regan, D.C. Harris, R.M. Stroud and J.R. White 300 (2002) 39
- Comparison of microstructural features of radiation embrittlement of VVER-440 and VVER-1000 reactor pressure vessel steels, E.A. Kuleshova, B.A. Gurovich, Ya.I. Shtrombakh, D.Yu. Erak and O.V. Lavrenchuk 300 (2002) 127
- Radiation Effects: Physical Properties**
- The mechanical properties of 590 MeV proton irradiated iron, Y. Chen, P. Spätig and M. Victoria 271&272 (1999) 128
- Effects of He implantation on radiation induced segregation in Cu–Au and Ni–Si alloys, A. Iwase, L.E. Rehn, P.M. Baldo and L. Funk 271&272 (1999) 321
- Radiation-induced electrical and optical processes in materials based on Al₂O₃, O.A. Plaskin, V.A. Stepanov, P.A. Stepanov and V.M. Chernov 271&272 (1999) 496
- Common technologies and knowledge sharing, J.W. Davis, T. Kondo, G.R. Odette, P. Fenici and T. Kusanagi 271&272 (1999) 553

- Irradiation effects in ceramics for fusion reactor applications, T. Shikama, K. Yasuda, S. Yamamoto, C. Kinoshita, S.J. Zinkle and E.R. Hodgson 271&272 (1999) 560
- Neutron irradiation induced amorphization of silicon carbide, L.L. Snead and J.C. Hay 273 (1999) 213
- Irradiation swelling of explosively shocked materials, V.M. Kosenkov, A.V. Kolesnikov and S.A. Vorobjev 273 (1999) 228
- Physical and chemical characteristics of baddeleyite (monoclinic zirconia) in natural environments: an overview and case study, G.R. Lumpkin 274 (1999) 206
- Basic aspects of differences in irradiation effects between fcc, bcc and hcp metals and alloys, A. Almazouzi, T. Díaz de la Rubia, B.N. Singh and M. Victoria 276 (2000) 295
- Ion beam-induced amorphisation of freudenbergite, K.L. Smith, M.G. Blackford, G.R. Lumpkin and N.J. Zaluzec 277 (2000) 159
- Radiation damage in neutron-irradiated yttria-stabilized-zirconia single crystals, B. Savoini, D. Cáceres, I. Vergara, R. González and J.E. Muñoz Santisteban 277 (2000) 199
- The corrosion of materials in water irradiated by 800 MeV protons, R.S. Lillard, D.L. Pile and D.P. Butt 278 (2000) 277
- Gamma-irradiation effect on heterogeneous short-range order in Fe+12 at.% Al alloy, L.I. Chyrko, V.I. Chyrko, E.U. Grynik, O.V. Drogayev, M.P. Krulikovska and V.I. Sugakov 279 (2000) 162
- Neutron irradiation effects on plasma facing materials, V. Barabash, G. Federici, M. Rödig, L.L. Snead and C.H. Wu 283–287 (2000) 138
- An initial model for the RIED effect, E.R. Hodgson and A. Moroño 283–287 (2000) 880
- Significance of sample thickness and surface segregation on the electrical conductivity of Wesgo AL995 alumina under ITER environments, M.M.R. Howlader, C. Kinoshita, K. Shiiyama, M. Kutsuwada and T. Higuchi 283–287 (2000) 885
- KU1 quartz glass for remote handling and LIDAR diagnostic optical transmission systems, M. García-Matos, A. Moroño and E.R. Hodgson 283–287 (2000) 890
- Radiation effects on laser damage in KU1 quartz glass, P. Martin, A. Moroño and E.R. Hodgson 283–287 (2000) 894
- Radiation-induced conductivity of doped silicon in response to photon, proton and neutron irradiation, N. Kishimoto, H. Amekura, O.A. Plaksin and V.A. Stepanov 283–287 (2000) 907
- Current-voltage characteristic of alumina and aluminum nitride with or without electron irradiation, K. Shiiyama, M.M.R. Howlader, Y. Izumi, M. Kutsuwada, S. Matsumura and C. Kinoshita 283–287 (2000) 912
- Neutron irradiation effects in magnesium-aluminate spinel doped with transition metals, V.T. Gritsyna, I.V. Afanasyev-Charkin, V.A. Kobayakov and K.E. Sickafus 283–287 (2000) 927
- Physical property change of heavily neutron-irradiated Si₃N₄ and SiC by thermal annealing, T. Yano, M. Akiyoshi, K. Ichikawa, Y. Tachi and T. Iseki 289 (2001) 102
- Effects of Xe ion irradiation and subsequent annealing on the structural properties of magnesium-aluminate spinel, I.V. Afanasyev-Charkin, R.M. Dickerson, D. Wayne Cooke, B.L. Bennett, V.T. Gritsyna and K.E. Sickafus 289 (2001) 110
- Determination of the defect creation mechanism in fluoroapatite, S. Soulet, J. Chaumont, J.-C. Krupa, J. Carpena and M.-O. Ruault 289 (2001) 194
- Impurity radiation modulations in an ergodic divertor, F. Laugier, M. Bécoulet, C. De Michelis, Ph. Ghendrih, J.P. Gunn, P. Monier-Garbet, R. Reichle and J.C. Vallet 290–293 (2001) 892
- Mitigation of plasma-wall interaction during quasi-single helicity states in RFX, G. Spizzo, P. Franz, L. Marrelli, P. Martin, A. Murari, T. Bolzonella, D. Terranova and P. Zanca 290–293 (2001) 1018
- Resonance radiation and high excitation of neutrals in plasma-gas interactions, A.M. Litnovsky, B.I. Khripunov, G.V. Sholin, V.B. Petrov, V.V. Shapkin and N.V. Antonov 290–293 (2001) 1107
- Annealing of hardening in copper after neutron irradiation hardening at 77 K, H.C. González and M.T. Miralles 295 (2001) 157
- Neutron irradiation of sapphire for compressive strengthening. II. Physical properties changes, T.M. Regan, D.C. Harris, D.W. Blodgett, K.C. Baldwin, J.A. Miragliotta, M.E. Thomas, M.J. Linevsky, J.W. Giles, T.A. Kennedy, M. Fatemi, D.R. Black, K.P.D. Lagerlöf 300 (2002) 47
- Concentration-triggered fission product release from zirconia: consequences for nuclear safety, A. Gentils, L. Thomé, J. Jagielski and F. Garrido 300 (2002) 266

Radiation Sources

- Materials research and development strategy in the next decade, 271&272 (1999) 578
- How to improve the irradiation conditions for the International Fusion Materials Irradiation Facility, E. Daum 283–287 (2000) 1001
- Characterisation of radiation and flux measurements on a neutraliser plate of the Tore Supra ergodic divertor, Y. Corre, R. Giannela, C. De Michelis, R. Guirlet, A. Azéroual, E. Chareyre, L. Costanzo, A. Escarguel, E. Gauthier, Ph. Ghendrih, J. Gunn, J. Hogan, P. Monier-Garbet, B. Pégourie, A. Pospieszczyk and E. Tsitrone 290–293 (2001) 250
- Net erosion measurements on plasma facing components of Tore Supra, E. Tsitrone, P. Chappuis, Y. Corre, E. Gauthier, A. Grosman and J.Y. Pascal 290–293 (2001) 331
- Local emission and core concentration of tungsten in TEXTOR-94 plasmas operated with tungsten test and poloidal limiters, M. Wada, T. Ohgo, A. Pospieszczyk, A. Huber, G. Sergienko, T. Tanabe, W. Biel, K. Kondo, K. Ohya, V. Philipps, G. Bertschinger, J. Rapp, B. Schweer and N. Noda 290–293 (2001) 768
- Current status of JAERI spallation target material program, K. Kikuchi, T. Sasa, S. Ishikura, K. Mukugi, T. Kai, N. Ouchi and I. Ioka 296 (2001) 34

Radiolysis

- The corrosion of materials in water irradiated by 800 MeV protons, R.S. Lillard, D.L. Pile and D.P. Butt 278 (2000) 277
- Copper corrosion and activation in water cooling loops under fusion irradiation conditions, P.J. Karditsas, S.M. Ali and D. Wan 283–287 (2000) 1346
- Alpha-radiolysis effects on UO₂ alteration in water, G. Sattonnay, C. Ardois, C. Corbel, J.F. Lucchini, M.-F. Barthe, F. Garrido and D. Gosset 288 (2001) 11
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55

Rare Earths

- Vaporization study on lanthanum–neodymium alloys by mass-spectrometry, Y. Shoji and T. Matsui 273 (1999) 310
- Mechanisms involved in thermal diffusion of rare earth elements in apatite, P. Martin, G. Carlot, A. Chevarier, C. Den-Auwer and G. Panczer 275 (1999) 268
- Dissolution of lanthanide aluminosilicate oxynitride glasses, L. Bois, N.

- Barré, S. Guillopé, M.J. Guittet, M. Gautier-Soyer, J.P. Duraud, P. Trocellier, P. Verdier and Y. Laurent 277 (2000) 57
- Systematics of the thermodynamic properties of trivalent f-elements in a pyrometallurgical bi-phase extraction system, H. Yamana, N. Wakayama, N. Souda and H. Moriyama 278 (2000) 37
- Diffusion under irradiation of rare earth elements in apatite, P. Martin, A. Chevarier and G. Panczer 278 (2000) 202
- Combustion synthesis and thermal expansion measurements of the rare earth–uranium ternary oxides RE₆-UO₁₂ (RE=La, Nd and Sm), H. Jena, R. Asuvathraman and K.V. Govindan Kutty 280 (2000) 312
- Thermodynamic properties of lanthanide metals in liquid bismuth, H. Yamana, J. Sheng, N. Souda and H. Moriyama 294 (2001) 232
- Aqueous corrosion of lanthanum aluminosilicate glasses: influence of inorganic anions, L. Bois, N. Barré, M.J. Guittet, S. Guillopé, P. Trocellier, M. Gautier-Soyer, P. Verdier and Y. Laurent 300 (2002) 141

Recrystallization, Recovery and Grain Growth

- Radiation-induced amorphization and recrystallization of α -SiC single crystal, K. Kawatsura, N. Shimatani, T. Igarashi, T. Inoue, N. Terazawa, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 11
- Radiation effects of 200 keV and 1 MeV Ni ion on MgO single crystal, T. Mitamura, K. Kawatsura, R. Takahashi, T. Adachi, T. Igarashi, S. Arai, N. Masuda, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 15
- Microstructure and impact properties of ultra-fine grained tungsten alloys dispersed with TiC, Y. Kitsunai, H. Kurishita, H. Kayano, Y. Hiraoka, T. Igarashi and T. Takida 271&272 (1999) 423
- Solute interactions in pure vanadium and V–4Cr–4Ti alloy, D.T. Hoelzer, M.K. West, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 616
- Molecular dynamics simulation of irradiation-induced amorphization of cubic silicon carbide, L. Malerba and J.M. Perlado 289 (2001) 57
- Effects of Xe ion irradiation and subsequent annealing on the structural properties of magnesium-aluminate spinel, I.V. Afanasyev-Charkin, R.M. Dickerson, D. Wayne Cooke, B.L. Bennett, V.T. Gritsyna and K.E. Sickafus 289 (2001) 110

- Hydrogen–damage interactions in yttria-stabilized zirconia, V. Shutthanandan, S. Thevuthasan, J.S. Young, T.M. Orlando and W.J. Weber 289 (2001) 128
- Accumulation and thermal recovery of disorder in Au²⁺-irradiated SrTiO₃, S. Thevuthasan, W. Jiang, V. Shutthanandan and W.J. Weber 289 (2001) 204
- Study of brittle destruction and erosion mechanisms of carbon-based materials during plasma instabilities, T. Burtseva, A. Hassanein, I. Ovchinnikov and V. Titov 290–293 (2001) 1059
- Redeposition**
- Removal of deuterium from co-deposited carbon–silicon layers, M. Balden and M. Mayer 283–287 (2000) 1057
- Graphite–tungsten twin limiters in studies of material mixing processes on high heat flux components, M. Rubel, T. Tanabe, V. Philipps, B. Emmoth, A. Kirschner, J. von Seggern and P. Wienhold 283–287 (2000) 1089
- Erosion mechanisms and products in graphite targets under simulated disruption conditions, F. Scaffidi-Argentina, V. Safronov, I. Arkhipov, N. Arkhipov, V. Bakhtin, V. Barsuk, S. Kurkin, E. Mironova, D. Toporkov, S. Vasenin, H. Werle, H. Würz and A. Zhitlukhin 283–287 (2000) 1111
- Structure of materials deposited on the plasma facing surface in TRIAM-1M tokamak and the effect on hydrogen recycling, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, A. Komori, O. Motojima, S. Itoh and TRIAM group 283–287 (2000) 1177
- Simulation study of carbon and tungsten deposition on W/C twin test limiter in TEXTOR-94, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, B. Schweer, A. Huber, M. Rubel, J. von Seggern and N. Noda 283–287 (2000) 1182
- Magnetic field effect on deposition of corrosion products in liquid Pb–17Li, F. Barbier 283–287 (2000) 1267
- Erosion/redeposition analysis of lithium-based liquid surface divertors, J.N. Brooks, T.D. Rognlien, D.N. Ruzic and J.P. Allain 290–293 (2001) 185
- Erosion/deposition issues at JET, J.P. Coad, N. Bekris, J.D. Elder, S.K. Erents, D.E. Hole, K.D. Lawson, G.F. Matthews, R.-D. Penzhorn and P.C. Stangeby 290–293 (2001) 224
- Surface reactions of hydrocarbon radicals: suppression of the re-deposition in fusion experiments via a divertor liner, A. von Keudell, T. Schwarzelinger, W. Jacob and A. Stevens 290–293 (2001) 231
- Modelling of erosion and deposition at limiter surfaces and divertor target plates, A. Kirschner, A. Huber, V. Philipps, A. Pospieszczyk, P. Wienhold and J. Winter 290–293 (2001) 238
- Characterisation of radiation and flux measurements on a neutraliser plate of the Tore Supra ergodic divertor, Y. Corre, R. Giannella, C. De Michelis, R. Guirlet, A. Azéroual, E. Chareyre, L. Costanzo, A. Escarguel, E. Gauthier, P. Ghendrih, J. Gunn, J. Hogan, P. Monier-Garbet, B. Pégourié, A. Pospieszczyk and E. Tsitrone 290–293 (2001) 250
- Transport of and deposition from hydrocarbon radicals in a flow tube downstream from a CH₄ RF discharge, A.E. Gorodetsky, I.I. Arkhipov, R.Kh. Zalavutdinov, A.P. Zakharov, Yu.N. Tolmachev, S.P. Vnukov and V.L. Bukhovets 290–293 (2001) 271
- Simulation calculations of mutual contamination between tungsten and carbon and its impact on plasma surface interactions, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, A. Huber, M. Rubel, G. Sergienko and N. Noda 290–293 (2001) 303
- Hydrogen inventories in nuclear fusion devices, M. Mayer, V. Philipps, P. Wienhold, H.G. Esser, J. von Seggern and M. Rubel 290–293 (2001) 381
- Laboratory study of the transport and condensation of hydrocarbon radicals and its consequences for mitigating the tritium inventory in the ITER-FEAT divertor, I.I. Arkhipov, G. Federici, A.E. Gorodetsky, C. Ibbott, D.A. Komarov, A.N. Makhankov, A.V. Markin, I.V. Mazul, R. Tivey, A.P. Zakharov and R.Kh. Zalavutdinov 290–293 (2001) 394
- In situ measurement of hydrogen retention in JET carbon tiles, D.D.R. Summers, M.N.A. Beurskens, J.P. Coad, G. Counsell, W. Fundamenski, G.F. Matthews and M.F. Stamp 290–293 (2001) 496
- Studies of edge plasmas in an anchor minimum-B region of the GAMMA 10 tandem mirror, Y. Nakashima, K.Md. Islam, A. Wada, D. Sato, S. Kobayashi, Y. Ishimoto, Y. Kawasaki, I. Katanuma, T. Saito, M. Yoshikawa, R. Baba, H. Aminaka, E. Ishinuki and K. Yatsu 290–293 (2001) 683
- Thermography of target plates with near-infrared optical fibres at Tore Supra, R. Reichle, V. Basiuk, V. Bergeaud,

- A. Cambe, M. Chantant, E. Delchambre, M. Druetta, E. Gauthier, W. Hess and C. Pocheau 290–293 (2001) 701
- Plasma–surface interaction effects during high ion temperature long pulse experiments in TRIAM-1M, N. Yoshida, T. Hirai, K. Tokunaga, S. Itoh and TRIAM Group 290–293 (2001) 1030
- Wall conditioning by microwave generated plasmas in a toroidal magnetic field, J. Ihde, H.B. Störk, J. Winter, M. Rubel, H.G. Esser and H. Toyoda 290–293 (2001) 1180
- Refractory Metals, Alloys and Compounds** (*not listed elsewhere*)
- Investigation of palladium alloy properties degradation during long-time tritium exposure, V. Tebus, L. Rivkis, G. Arutunova, E. Dmitrievsky, V. Filin, Y. Golikov, V. Krivova and V. Kaprychev 271&272 (1999) 345
- Correlation between defect structures and hardness in tantalum irradiated by heavy ions, K. Yasunaga, H. Watanabe, N. Yoshida, T. Muroga and N. Noda 283–287 (2000) 179
- Swelling, irradiation creep and growth of pure rhenium irradiated with fast neutrons at 1030–1330°C, F.A. Garner, M.B. Toloczko, L.R. Greenwood, C.R. Eiholzer, M.M. Paxton and R.J. Puigh 283–287 (2000) 380
- Thermomechanical characteristics of the low activation materials chromium and Cr-5Fe-1Y₂O₃ alloy, H. Stamm, U. Holzwarth, F. Lakestani, R. Valiev, V. Provenzano and A. Volcan 283–287 (2000) 597
- R&D for the Spallation Neutron Source mercury target, L.K. Mansur, T.A. Gabriel, J.R. Haines and D.C. Lousseau 296 (2001) 1
- Reprocessing**
- Preparation and characterisation of platinum and platinum–iridium coated titanium electrodes, U. Kamachi Mudali, V.R. Raju and R.K. Dayal 277 (2000) 49
- Electrolysis of plutonium nitride in LiCl–KCl eutectic melts, O. Shirai, T. Iwai, K. Shiozawa, Y. Suzuki, Y. Sakamura and T. Inoue 277 (2000) 226
- Systematics of the thermodynamic properties of trivalent f-elements in a pyrometallurgical bi-phase extraction system, H. Yamana, N. Wakayama, N. Souda and H. Moriyama 278 (2000) 37
- Single-pass flow-through experiments on a simulated waste glass in alkaline media at 40 °C. I. Experiments conducted at variable solution flow rate to glass surface area ratio, P.K. Abraitis, B.P. McGrail, D.P. Trivedi, F.R. Livens and D.J. Vaughan 280 (2000) 196
- Single-pass flow-through experiments on a simulated waste glass in alkaline media at 40 °C. II. Experiments conducted with buffer solutions containing controlled quantities of Si and Al, P.K. Abraitis, B.P. McGrail, D.P. Trivedi, F.R. Livens and D.J. Vaughan 280 (2000) 206
- Thermodynamic systematics of the formation of liquid alloys of f-elements with bismuth, H. Yamana, J. Sheng, K. Kawamoto and H. Moriyama 294 (2001) 53
- Thermodynamic studies on ThGa₂, B. Prabhakara Reddy, R. Kandan, R. Babu, K. Nagarajan and P.R. Vasudeva Rao 294 (2001) 112
- Pyrochemical reduction of uranium dioxide and plutonium dioxide by lithium metal, T. Usami, M. Kurata, T. Inoue, H.E. Sims, S.A. Beetham and J.A. Jenkins 300 (2002) 15
- Safety of Nuclear Reactors**
- Materials research and development strategy in the next decade, 271&272 (1999) 578
- Concepts for an inert matrix fuel, an overview, C. Degueldre and J.M. Paratte 274 (1999) 1
- Pulse irradiation tests of rock-like oxide fuel, K. Okonogi, T. Nakamura, M. Yoshinaga, K. Ishijima, H. Akie and H. Takano 274 (1999) 167
- Core severe accidents with cermet fuels – a specific study for pressurized water reactors, J. Porta, C. Aillaud and S. Baldi 274 (1999) 174
- Effects of the porosity in uranium dioxide on microacoustic and elastic properties, V. Roque, B. Cros, D. Baron and P. Dehaut 277 (2000) 211
- Characterization of uranium corrosion products involved in a uranium hydride pyrophoric event, T.C. Tote-meier 278 (2000) 301
- On the mechanisms associated with the chemical reactivity of Be in steam, D.A. Petti, G.R. Smolik and R.A. Anderl 283–287 (2000) 1390
- Oxidation and volatilization of TZM alloy in air, G.R. Smolik, D.A. Petti and S.T. Schuetz 283–287 (2000) 1458
- Dust characterization and analysis in Tore-Supra, Ph. Chappuis, E. Tsi-trone, M. Mayne, X. Armand, H. Linke, H. Bolt, D. Petti and J.P. Sharpe 290–293 (2001) 245
- Thermochemical data and modelling for ex-vessel corium behaviour during a severe accident, E.H.P. Cordfunke,

- M.E. Huntelaar, F. Funke, M.K. Koch, Ch. Kortz, P.K. Mason, M.A. Mignanelli and M.S. Newland 294 (2001) 18
- A qualitative comparison of barium behaviour in the PHEBUS FPTO test and analytical tests, R. Dubourg and P. Taylor 294 (2001) 32
- Mass spectrometric study of $\text{UO}_2\text{-ZrO}_2$ pseudo-binary system, M. Baïchi, C. Chatillon, C. Guèneau and S. Chatain 294 (2001) 84
- The oxidation kinetics and the structure of the oxide film on Zircaloy before and after the kinetic transition, T. Arima, T. Masuzumi, H. Furuya, K. Idemitsu and Y. Inagaki 294 (2001) 148
- Multi-component gas transport in the fuel-to-clad gap of candu fuel rods during severe accidents, B. Szpunar, B.J. Lewis, V.I. Arimescu, R.S. Dickson and L.W. Dickson 294 (2001) 315
- Segregation**
- Radiation damage and radiation-induced segregation in single crystal stainless steel by RBS and PIXE channeling, T. Mitamura, K. Kawatsura, T. Nakae, T. Igarashi, T. Inoue, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno, K. Fujii, M. Terasawa, H. Uchida, K. Koterazawa, K. Takahiro, S. Nagata and S. Yamaguchi 271&272 (1999) 21
- An analysis of void swelling dose dependence in ion irradiated V-Fe alloys, V.A. Pechenkin, Yu.V. Konobeev, S.I. Rudnev and G.A. Epov 271&272 (1999) 266
- The effect of the solute atomic size on the swelling of vanadium alloys, V.A. Borodin and A.I. Ryzanov 271&272 (1999) 270
- Effects of He implantation on radiation induced segregation in Cu–Au and Ni–Si alloys, A. Iwase, L.E. Rehn, P.M. Baldo and L. Funk 271&272 (1999) 321
- Radiation-induced segregation of deuterium in austenitic steels and vanadium alloys, V.L. Arbuzov, G.A. Raspopova and V.B. Vykhodets 271&272 (1999) 340
- Radiation-induced material changes and susceptibility to intergranular failure of light-water-reactor core internals, S.M. Bruemmer, E.P. Simonen, P.M. Scott, P.L. Andresen, G.S. Was and J.L. Nelson 274 (1999) 299
- An Auger electron spectroscopy analysis of thermally-sensitized type 304 stainless steels irradiated to low neutron fluences, T. Onchi, K. Hide and H.M. Chung 274 (1999) 341
- Variability of radiation-induced segregation in iron–chromium–nickel alloys, T.R. Allen, E.A. Kenik and G.S. Was 278 (2000) 149
- Intergranular and intragranular phosphorus segregation in Russian pressure vessel steels due to neutron irradiation, B.A. Gurovich, E.A. Kuleshova, Ya.I. Shtrombakh, O.O. Zabusov and E.A. Krasikov 279 (2000) 259
- Zr–silicide particles in Zr–2.5Nb pressure tube material: influence of oxidation and irradiation, Y.P. Lin and V. Perovic 280 (2000) 120
- Non-equilibrium intragrain concentration redistribution of the alloying elements in austenitic steels under irradiation, V.V. Sagaradze, S.S. Lapin and M.A. Kirk 280 (2000) 345
- Heavy-ion cascade effects on radiation-induced segregation kinetics in Cu–1%Au alloys, M.J. Giacobbe, N.Q. Lam, L.E. Rehn, P.M. Baldo, L. Funk and J.F. Stubbins 281 (2000) 213
- Effect of partial damage efficiencies on the radiation-induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 282 (2000) 47
- Embrittlement of low copper VVER 440 surveillance samples neutron-irradiated to high fluences, M.K. Miller, K.F. Russell, J. Kocik and E. Keilova 282 (2000) 83
- Radiation-induced inter-granular segregation in first wall fusion reactor materials, R.G. Faulkner, S. Song and P.E.J. Flewitt 283–287 (2000) 147
- Sink effect of grain boundary on radiation-induced segregation in austenitic stainless steel, S. Watanabe, Y. Takamatsu, N. Sakaguchi and H. Takahashi 283–287 (2000) 152
- Synergistic effect of hydrogen and impurity segregations on the grain boundary embrittlement in Nb, A.M. Ilyin, V.P. Shestakov and I.L. Tazhibaeva 283–287 (2000) 161
- Effects of grain boundary misorientation on solute segregation in thermally sensitized and proton-irradiated 304 stainless steel, T.S. Duh, J.J. Kai and F.R. Chen 283–287 (2000) 198
- Radiation-induced segregation in model alloys, T. Ezawa, E. Wakai and R. Oshima 283–287 (2000) 244
- Microstructural changes of austenitic steels caused by proton irradiation under various conditions, T. Fukuda, M. Sagisaka, Y. Isobe, A. Hasegawa, M. Sato, K. Abe, Y. Nishida, T. Kamada and Y. Kaneshima 283–287 (2000) 263
- Chemical segregation behavior under thermal aging of the low-activation

- F82H-modified steel, J. Lapeña, M. Garcia-Mazario, P. Fernández and A.M. Lancha 283–287 (2000) 662
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenkoa 283–287 (2000) 694
- Structural stability of irradiated ceramics, P.M. Ossi 289 (2001) 80
- Numerical simulation modeling on the effects of grain boundary misorientation on radiation-induced solute segregation in 304 austenitic stainless steels, T.S. Duh, J.J. Kai, F.R. Chen and L.H. Wang 294 (2001) 267
- Effect of defect sink strengths on the radiation induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 295 (2001) 290
- Emulation of neutron irradiation effects protons: validation of principle, G.S. Was, J.T. Busby, T. Allen, E.A. Kenik, A. Jansson, S.M. Bruemmer, J. Gan, A.D. Edwards, P.M. Scott and P.L. Andreson 300 (2002) 198
- Semiconductors**
- Collision cascades in metals and semiconductors: defect creation and interface behavior, K. Nordlund and R.S. Averback 276 (2000) 194
- Radiation-induced conductivity of doped silicon in response to photon, proton and neutron irradiation, N. Kishimoto, H. Amekura, O.A. Plaksin and V.A. Stepanov 283–287 (2000) 907
- X-ray photoelectron spectroscopy on uranium oxides: a comparison between bulk and thin layers, S. Van den Berghe, F. Miserque, T. Gouder, B. Gaudreau and M. Verwerft 294 (2001) 168
- Silicon and Silicon Compounds**
- Radiation-induced amorphization and recrystallization of α -SiC single crystal, K. Kawatsura, N. Shimatani, T. Igarashi, T. Inoue, N. Terazawa, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno and K. Fujii 271&272 (1999) 11
- Development of a reaction-sintered silicon carbide matrix composite, A. Sayano, C. Sutoh, S. Suyama, Y. Itoh and S. Nakagawa 271&272 (1999) 467
- Neutron irradiation induced amorphization of silicon carbide, L.L. Snead and J.C. Hay 273 (1999) 213
- Measurements of the radiation resistant fused quartz radioluminescence spectral intensity under irradiation in the pulse nuclear reactor, A. Gorshkov, D. Orlinski, V. Sannikov, K. Vukolov, S. Goncharov, Yu. Sadovnikov and A. Kirillov 273 (1999) 271
- Silicon carbide as an inert-matrix for a thermal reactor fuel, R.A. Verrall, M.D. Vlajic and V.D. Krstic 274 (1999) 54
- Analysis of displacement cascades and threshold displacement energies in β -SiC, J.M. Perlado, L. Malerba, A. Sánchez-Rubio and T. Díaz de la Rubia 276 (2000) 235
- Joining of SiC/SiC_f ceramic matrix composites for fusion reactor blanket applications, P. Colombo, B. Riccardi, A. Donato and G. Scarinci 278 (2000) 127
- Displacement energy surface in 3C and 6H SiC, R. Devanathan and W.J. Weber 278 (2000) 258
- Comparison of the chemical erosion of Si, C and SiC under deuterium ion bombardment, M. Balden and J. Roth 279 (2000) 351
- Zr–silicide particles in Zr–2.5Nb pressure tube material: influence of oxidation and irradiation, Y.P. Lin and V. Perovic 280 (2000) 120
- Production behavior of irradiation defects in lithium silicates and silica under ion beam irradiation, K. Moritani, S. Tanaka and H. Moriyama 281 (2000) 106
- Multi-layer coating of silicon carbide and pyrolytic carbon on UO₂ pellets by a combustion reaction, B.G. Kim, Y. Choi, J.W. Lee, Y.W. Lee, D.S. Sohn and G.M. Kim 281 (2000) 163
- Basaltic glass: alteration mechanisms and analogy with nuclear waste glasses, I. Techer, T. Advocat, J. Lancelot and J.-M. Liotard 282 (2000) 40
- Interactions between fusion materials R&D and other technologies, A. Kohyama, M. Seki, K. Abe, T. Muroga, H. Matsui, S. Jitsukawa and S. Matsuda 283–287 (2000) 20
- Critical issues and current status of SiC/SiC composites for fusion, A. Hasegawa, A. Kohyama, R.H. Jones, L.L. Snead, B. Riccardi and P. Fenici 283–287 (2000) 128
- Effect of dual-beam-irradiation by helium and carbon ions on microstructure development of SiC/SiC composites, S. Nogami, A. Hasegawa, K. Abe, T. Taguchi and R. Yamada 283–287 (2000) 268
- Irradiation creep of advanced silicon carbide fibers, R. Scholz and G.E. Youngblood 283–287 (2000) 372

- The effect of neutron-irradiation on the shear properties of SiC/SiC composites with varied interface, T. Hinoki, L.L. Snead, Y. Katoh, A. Kohyama and R. Shnavski 283–287 (2000) 376
- In situ thermal conductivity measurement of ceramics in a fast neutron environment, L.L. Snead, R. Yamada, K. Noda, Y. Katoh, S.J. Zinkle, W.S. Eatherly and A.L. Qualls 283–287 (2000) 545
- Evaluation of neutron irradiated near-stoichiometric silicon carbide fiber composites, L.L. Snead, Y. Katoh, A. Kohyama, J.L. Bailey, N.L. Vaughn and R.A. Lowden 283–287 (2000) 551
- Room and high-temperature mechanical and thermal properties of SiC fiber-reinforced SiC composite sintered under pressure, K. Yoshida and T. Yano 283–287 (2000) 560
- High thermal conductivity SiC/SiC composites for fusion applications, W. Kowbel, C.A. Bruce, K.L. Tsou, K. Patel, J.C. Withers and G.E. Youngblood 283–287 (2000) 570
- Mechanical and thermal properties of 2D and 3D SiC/SiC composites, R. Yamada, T. Taguchi and N. Igawa 283–287 (2000) 574
- Time-dependent failure mechanisms in silicon carbide composites for fusion energy applications, C.A. Lewinsohn, G.E. Youngblood, C.H. Henager Jr., E.P. Simonen and R.H. Jones 283–287 (2000) 584
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- Molecular dynamics simulation of defect production in irradiated β -SiC, L. Malerba, J.M. Perlado, A. Sánchez-Rubio, I. Pastor, L. Colombo and T. Diaz de la Rubia 283–287 (2000) 794
- A comparison of defects in helium implanted α - and β -SiC, P. Jung, H. Klein and J. Chen 283–287 (2000) 806
- Study of helium effects in SiC/SiC composites under fusion reactor environment, A. Hasegawa, B.M. Oliver, S. Nogami, K. Abe and R.H. Jones 283–287 (2000) 811
- Study on the damaging process of silica by in-reactor luminescence, T. Ii, T. Yoshida, T. Tanabe, T. Hara, M. Okada and K. Yamaguchi 283–287 (2000) 898
- Radiation-induced conductivity of doped silicon in response to photon, proton and neutron irradiation, N. Kishimoto, H. Amekura, O.A. Plaksin and V.A. Stepanov 283–287 (2000) 907
- Removal of deuterium from co-deposited carbon–silicon layers, M. Balden and M. Mayer 283–287 (2000) 1057
- Joining of silicon carbide composites for fusion energy applications, C.A. Lewinsohn, M. Singh, T. Shibayama, T. Hinoki, M. Ando, Y. Katoh and A. Kohyama 283–287 (2000) 1258
- Compatibility of structural candidate materials with LiF–BeF₂ molten salt mixture, H. Nishimura, T. Terai, T. Yoneoka, S. Tanaka, A. Sagara and O. Motojima 283–287 (2000) 1326
- Chemical reactivity of SiC fibre-reinforced SiC with beryllium and lithium ceramic breeder materials, H. Kleykamp 283–287 (2000) 1385
- Compositional optimisation of silicon carbide for various fusion blanket designs, C.B.A. Forty 283–287 (2000) 1443
- Waste management for different fusion reactor designs, P. Rocco and M. Zucchetti 283–287 (2000) 1473
- Failure mechanisms in continuous-fiber ceramic composites in fusion energy environments, C.A. Lewinsohn, C.H. Henager, G.E. Youngblood, R.H. Jones, E. Lara-Curzio and R. Scholz 289 (2001) 10
- Improvement of mechanical properties of SiC/SiC composites by various surface treatments of fibers, T. Hinoki, W. Yang, T. Nozawa, T. Shibayama, Y. Katoh and A. Kohyama 289 (2001) 23
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- Molecular dynamics simulation of irradiation-induced amorphization of cubic silicon carbide, L. Malerba and J.M. Perlado 289 (2001) 57
- Accumulation and recovery of disorder on silicon and carbon sublattices in ion-irradiated 6H-SiC, W. Jiang, W.J. Weber, S. Thevuthasan and V. Shutthanandan 289 (2001) 96
- Physical property change of heavily neutron-irradiated Si₃N₄ and SiC by thermal annealing, T. Yano, M. Akiyoshi, K. Ichikawa, Y. Tachi and T. Iseki 289 (2001) 102
- Alpha-decay damage and aqueous durability of actinide host phases in natural systems, G.R. Lumpkin 289 (2001) 136
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Mechanism of the chemical erosion of SiC under hydrogen irradiation, M. Balden, S. Picarle and J. Roth 290–293 (2001) 47
- Chemical erosion of carbon doped with different fine-grain carbides,

- M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- TOF analysis of reflection of low-energy light ions from solid targets using coaxial impact collision ion scattering spectroscopy (CAICISS), K. Morita, N. Kishi, A. Grigoriev, S. Masuzaki and T. Muroga 290–293 (2001) 126
- Non-destructive structural analysis of surface blistering by TEM and EELS in a reflection configuration, S. Muto, T. Matsui and T. Tanabe 290–293 (2001) 131
- Silicon diffusion in amorphous carbon films, E. Vainonen-Ahlgren, T. Ahlgren, L. Khriachtchev, J. Likonen, S. Lehto, J. Keinonen and C.H. Wu 290–293 (2001) 216
- Spectroscopic investigation on the impurity influxes of carbon and silicon in the ASDEX upgrade experiment, R. Pugno, A. Kallenbach, D. Bolshukhin, R. Dux, J. Gafert, R. Neu, V. Rohde, K. Schmidtman, W. Ullrich and U. Wenzel 290–293 (2001) 308
- ICRF siliconization in HT-7 superconducting tokamak, X. Gong, J. Li, B. Wan, Y. Zhao, X. Zhang, X. Gu, C. Li, M. Zhen, Y. Jie, S. Zhang and Z. Wu 290–293 (2001) 1171
- Impurity release and recycling behaviour in TEXTOR-94 with siliconised walls, V. Philipps, A. Huber, H.G. Esser, A. Pospieszczyk, B. Schweer, J. von Seggern, W. Biel, J. Rapp and U. Samm 290–293 (2001) 1190
- Thermoelectric properties of Rh-doped Ru_2Si_3 prepared by floating zone melting method, Y. Arita, S. Mitsuda, Y. Nishi, T. Matsui and T. Nagasaki 294 (2001) 202
- Thermoelectric properties of URu_2Si_2 and $\text{U}_2\text{Ru}_3\text{Si}_5$, Y. Arita, K. Terao, S. Mitsuda, Y. Nishi, T. Matsui and T. Nagasaki 294 (2001) 206
- Stability of SiC/SiC fibre composites exposed to Li_4SiO_4 and Li_2TiO_3 in fusion relevant conditions, A. La Barbera, B. Riccardi, A. Donato, C.A. Nannetti and L.F. Moreschi 294 (2001) 223
- Steels, Austenitic**
- Radiation damage and radiation-induced segregation in single crystal stainless steel by RBS and PIXE channeling, T. Mitamura, K. Kawatsura, T. Nakae, T. Igarashi, T. Inoue, S. Arai, Y. Aoki, S. Yamamoto, K. Narumi, H. Naramoto, Y. Horino, Y. Mokuno, K. Fujii, M. Terasawa, H. Uchida, K. Koterazawa, K. Takahiro, S. Nagata and S. Yamaguchi 271&272 (1999) 21
- Subcascade formation in displacement cascade simulations: Implications for fusion reactor materials, R.E. Stoller and L.R. Greenwood 271&272 (1999) 57
- Microstructural examination of Ni-ion irradiated Fe–Ni–Cr alloys followed to micro-zone deformation, M. Ando, Y. Katoh, H. Tanigawa and A. Kohyama 271&272 (1999) 111
- Post-irradiation mechanical properties of austenitic alloys at temperatures below 703 K, S. Jitsukawa, I. Ioka and A. Hishinuma 271&272 (1999) 167
- Post-irradiation creep rupture properties of FBR grade 316 SS structural material, N. Miyaji, Y. Abe, S. Ukai and S. Onose 271&272 (1999) 173
- Evaluation of weld crack susceptibility for neutron irradiated stainless steels, T. Suzuki, A. Kohyama, T. Hirose and M. Narui 271&272 (1999) 179
- Defect-flow-induced heterogeneous dislocation formation and solute redistribution near a grain boundary in austenitic stainless steel under electron irradiation, S. Watanabe, N. Sakaguchi, S. Mochizuki and H. Takahashi 271&272 (1999) 184
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Surface morphology and void formation in 316L stainless steel irradiated with high energy C-ions, Z.G. Wang, K.Q. Chen, L.W. Li, C.H. Zhang, J.M. Quan, M.D. Hou, R.H. Xu, F. Ma, Y.F. Jin, C.L. Li and Y.M. Sun 271&272 (1999) 306
- Effect of solute concentration on grain boundary migration with segregation in stainless steel and model alloys, H. Kanda, N. Hashimoto and H. Takahashi 271&272 (1999) 311
- Microstructures of type 316 model alloys neutron-irradiated at 513 K to 1 dpa, Y. Miwa, T. Tsukada, H. Tsuji and H. Nakajima 271&272 (1999) 316
- Radiation-induced segregation of deuterium in austenitic steels and vanadium alloys, V.L. Arbuzov, G.A. Raspopova and V.B. Vykhodets 271&272 (1999) 340
- Effect of temperature change on void swelling in P, Ti-modified 316 stainless steel, N. Akasaka, K. Hattori, S. Onose and S. Ukai 271&272 (1999) 370
- Fluence dependence of defect evolution in austenitic stainless steels during fission neutron irradiation, H. Watanabe, T. Muroga and N. Yoshida 271&272 (1999) 381
- Present status of Data-Free-Way (distributed database system for ad-

- vanced nuclear materials), H. Tsuji, N. Yokoyama, M. Fujita, Y. Kurihara, S. Kano, Y. Tachi, K. Shimura, R. Nakajima and S. Iwata 271&272 (1999) 486
- ITER and beyond 271&272 (1999) 569
- Kohler solution model for prediction of activities of constituent metals in austenitic steels and other iso-structural alloys and a comparison with experimental data, H.P. Nawada and O.M. Sreedharan 273 (1999) 37
- Permeation of multi-component hydrogen isotopes through austenitic stainless steels, T. Shiraiishi, M. Nishikawa, T. Yamaguchi and K. Kenmotsu 273 (1999) 60
- Relationship between hardening and damage structure in austenitic stainless steel 316LN irradiated at low temperature in the HFIR, N. Hashimoto, E. Wakai and J.P. Robertson 273 (1999) 95
- Chemical interactions in the EXOTIC-7 experiment, H. Kleykamp 273 (1999) 171
- Amplitude dependent damping study in austenitic stainless steels 316H and 304H. Its relation with the microstructure, G.I. Zelada-Lambri, O.A. Lambri and G.H. Rubiolo 273 (1999) 248
- Creep deformation and fracture behaviour of a nitrogen-bearing type 316 stainless steel weld metal, G. Sasikala, M.D. Mathew, K. Bhanu Sankara Rao and S.L. Mannan 273 (1999) 257
- Influence of high-dose Kr^+ irradiation on structural evolution and swelling of 16Cr–15Ni–3Mo–1Ti aging steel, V.V. Sagaradze, S.S. Lapin, M.A. Kirk and B.N. Goshchitskii 274 (1999) 287
- Radiation-induced material changes and susceptibility to intergranular failure of light-water-reactor core internals, S.M. Bruemmer, E.P. Simonen, P.M. Scott, P.L. Andresen, G.S. Was and J.L. Nelson 274 (1999) 299
- An Auger electron spectroscopy analysis of thermally-sensitized type 304 stainless steels irradiated to low neutron fluences, T. Onchi, K. Hide and H.M. Chung 274 (1999) 341
- Mechanical properties of 304L stainless steel irradiated with 800 MeV protons, J. Chen, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 275 (1999) 115
- Comparison of swelling and irradiation creep behavior of fcc-austenitic and bcc-ferritic/martensitic alloys at high neutron exposure, F.A. Garner, M.B. Toloczko and B.H. Sencer 276 (2000) 123
- Deformation modes of proton and neutron irradiated stainless steels, C. Bailat, F. Gröschel and M. Victoria 276 (2000) 283
- Texture of welded joints of 316L stainless steel, multi-scale orientation analysis of a weld metal deposit, G. Bouche, J.L. Béchade, M.H. Mathon, L. Allais, A.F. Gourgues and L. Nazé 277 (2000) 91
- Tritium trapping capacity on metal surface, M. Nishikawa, N. Nakashio, T. Shiraiishi, S. Odoi, T. Takeishi and K. Kamimae 277 (2000) 99
- Etching of UO_2 in NF_3 RF plasma glow discharge, J.M. Veilleux, M.S. El-Genk, E.P. Chamberlin, C. Munson and J. FitzPatrick 277 (2000) 315
- Influence of technetium on the microstructure of a stainless steel–zirconium alloy, D.D. Keiser Jr., D.P. Abraham and J.W. Richardson Jr. 277 (2000) 333
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. I. Effects of minor alloying elements on precipitate phases in melt products and implication in alloy fabrication, E.H. Lee and L.K. Mansur 278 (2000) 1
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. II. Effects of minor elements on precipitate phase stability during thermal aging, E.H. Lee and L.K. Mansur 278 (2000) 11
- Fe–15Ni–13Cr austenitic stainless steels for fission and fusion reactor applications. III. Phase stability during heavy ion irradiation, E.H. Lee and L.K. Mansur 278 (2000) 20
- AFM study of the surface deformation of austenitic stainless steel irradiated by He^+ ions, L. Liu, T. Mitamura, M. Niibe, H. Tsubakino and M. Terasawa 278 (2000) 30
- Investigation on oxygen controlled liquid lead corrosion of surface treated steels, G. Müller, G. Schumacher and F. Zimmermann 278 (2000) 85
- Evaluation of thermal aging embrittlement in CF8 duplex stainless steel by small punch test, J.S. Cheon and I.S. Kim 278 (2000) 96
- Variability of radiation-induced segregation in iron–chromium–nickel alloys, T.R. Allen, E.A. Kenik and G.S. Was 278 (2000) 149
- Nitrogen effect on precipitation and sensitization in cold-worked Type 316L(N) stainless steels, Y. Oh and J. Hong 278 (2000) 242
- Hardness and defect structures in EC316LN austenitic alloy irradiated under a simulated spallation neutron source environment using triple ion-beams, E.H. Lee, J.D. Hunn, N. Hashimoto and L.K. Mansur 278 (2000) 266

- In-reactor creep rupture properties of 20% CW modified 316 stainless steel, S. Ukai, S. Mizuta, T. Kaito and H. Okada 278 (2000) 320
- A comparative evaluation of welding consumables for dissimilar welds between 316LN austenitic stainless steel and Alloy 800, M. Sireesha, S.K. Albert, V. Shankar and S. Sundaresan 279 (2000) 65
- Microchemistry characterization by Auger electron spectroscopy of a cold-worked AISI-304L stainless steel, M. Hernández-Mayoral, G. de Diego and M. García-Mazarío 279 (2000) 189
- Actinide distribution in a stainless steel–15 wt% zirconium high-level nuclear waste form, D.D. Keiser Jr., D.P. Abraham, W. Sinkler, J.W. Richardson Jr. and S.M. McDevitt 279 (2000) 234
- Effects of helium on radiation-induced defect microstructure in austenitic stainless steel, E.H. Lee, J.D. Hunn, T.S. Byun and L.K. Mansur 280 (2000) 18
- Microstructure of austenitic stainless steels irradiated at 400 °C in the ORR and the HFIR spectral tailoring experiment, N. Hashimoto, E. Wakai, J.P. Robertson, T. Sawai and A. Hishinuma 280 (2000) 186
- Non-equilibrium intragrain concentration redistribution of the alloying elements in austenitic steels under irradiation, V.V. Sagaradze, S.S. Lapin and M.A. Kirk 280 (2000) 345
- A method to study deformation mechanisms for irradiated steels using a disk-bend test, E.H. Lee, T.S. Byun, J.D. Hunn, N. Hashimoto and K. Farrell 281 (2000) 65
- Orientation of γ to α transformation in Xe-implanted austenitic 304 stainless steel, G. Xie, M. Song, K. Mitsuishi and K. Furuya 281 (2000) 80
- Comparative study on the fatigue crack growth behavior of 316L and 316LN stainless steels: effect of microstructure of cyclic plastic strain zone at crack tip, W.-Y. Maeng and M.-H. Kim 282 (2000) 32
- Helium and hydrogen induced hardening in 316LN stainless steel, J.D. Hunn, E.H. Lee, T.S. Byun and L.K. Mansur 282 (2000) 131
- The effects of long-time irradiation and thermal aging on 304 stainless steel, T.R. Allen, J.I. Cole, C.L. Trybus and D.L. Porter 282 (2000) 171
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- Evaluation of hot isostatic pressing for joining of fusion reactor structural components, A.D. Ivanov, S. Sato and G. Le Marois 283–287 (2000) 35
- Sink effect of grain boundary on radiation-induced segregation in austenitic stainless steel, S. Watanabe, Y. Takamatsu, N. Sakaguchi and H. Takahashi 283–287 (2000) 152
- Effect of temperature gradients on void formation in modified 316 stainless steel cladding, N. Akasaka, I. Yamagata and S. Ukai 283–287 (2000) 169
- Effects of grain boundary misorientation on solute segregation in thermally sensitized and proton-irradiated 304 stainless steel, T.S. Duh, J.J. Kai and F.R. Chen 283–287 (2000) 198
- Formation and migration of helium bubbles in Fe–16Cr–17Ni austenitic alloy at high temperature, K. Ono, K. Arakawa, M. Oohashi, H. Kurata, K. Hojou and N. Yoshida 283–287 (2000) 210
- Effects of dose rate on microstructural evolution and swelling in austenitic steels under irradiation, T. Okita, T. Kamada and N. Sekimura 283–287 (2000) 220
- Microstructural changes in a low-activation Fe–Cr–Mn alloy irradiated with 92 MeV Ar ions at 450 °C, C. Zhang, K. Chen, Y. Wang, J. Sun, B. Hu, Y. Jin, M. Hou, C. Liu, Y. Sun, J. Han and C. Chen 283–287 (2000) 259
- Microstructural changes of austenitic steels caused by proton irradiation under various conditions, T. Fukuda, M. Sagisaka, Y. Isobe, A. Hasegawa, M. Sato, K. Abe, Y. Nishida, T. Kamada and Y. Kaneshima 283–287 (2000) 263
- Simulating the influence of radiation temperature variations on microstructural evolution, Y. Katoh, R.E. Stoller, A. Kohyama and T. Muroga 283–287 (2000) 313
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Microstructural changes induced by post-irradiation annealing of neutron-irradiated austenitic stainless steels, J.I. Cole and T.R. Allen 283–287 (2000) 329
- In-pile and post-irradiation creep of type 304 stainless steel under different neutron spectra, Y. Kurata, Y. Itabashi, H. Mimura, T. Kikuchi, H. Amezawa, S. Shimakawa, H. Tsuji and M. Shindo 283–287 (2000) 386

- Irradiation creep at 60 °C in SUS 316 and its impact on fatigue fracture, J. Nagakawa, Y. Murase, N. Yamamoto and T. Fukuzawa 283–287 (2000) 391
- Irradiation creep of 11Cr–0.5Mo–2W, V, Nb ferritic–martensitic, modified 316, and 15Cr–20Ni austenitic S.S. irradiated in FFTF to 103–206 dpa, A. Uehira, S. Mizuta, S. Ukai and R.J. Puigh 283–287 (2000) 396
- Application of generalized deformation theory to irradiation creep of fcc and bcc stainless steels, M.B. Toloczko, J.P. Hirth and F.A. Garner 283–287 (2000) 409
- Proton irradiation creep of Inconel 718 at 300 °C, R. Scholz and R. Matera 283–287 (2000) 414
- Shear punch and tensile measurements of mechanical property changes induced in various austenitic alloys by high-energy mixed proton and neutron irradiation at low temperatures, M.L. Hamilton, F.A. Garner, M.B. Toloczko, S.A. Maloy, W.F. Sommer, M.R. James, P.D. Ferguson and M.R. Louthan Jr. 283–287 (2000) 418
- Tensile and low-cycle fatigue properties of solution annealed type 316L stainless steel plate and TIG-weld exposed to 5 dpa at low-temperature (42 °C), J.-L. Puzzolante, M. Scibetta, R. Chaouadi and W. Vandermeulen 283–287 (2000) 428
- Tensile properties and damage microstructures in ORR/HFIR-irradiated austenitic stainless steels, E. Wakai, N. Hashimoto, J.P. Robertson, S. Jistukawa, T. Sawai and A. Hishinuma 283–287 (2000) 435
- Effect of helium to dpa ratio on fatigue behavior of austenitic stainless steel irradiated to 2 dpa, I. Ioka, M. Yonekawa, Y. Miwa, H. Mimura, H. Tsuji and T. Hoshiya 283–287 (2000) 440
- The effects of irradiation and testing temperature on tensile behaviour of stainless steels, C. Bailat, A. Almazouzi, N. Baluc, R. Schäublin, F. Gröschel and M. Victoria 283–287 (2000) 446
- Deformation mechanisms in 316 stainless steel irradiated at 60 °C and 330 °C, N. Hashimoto, S.J. Zinkle, A.F. Rowcliffe, J.P. Robertson and S. Jitsukawa 283–287 (2000) 528
- Characterization of non-magnetic Mn–Cr steel as a low induced activation material for vacuum vessels, S. Saito, K. Fukaya, S. Ishiyama, M. Eto, I. Sato, M. Kusuhashi, T. Hatakeyama, H. Takahashi and M. Kikuchi 283–287 (2000) 593
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibaeva and V.A. Krivchenkoa 283–287 (2000) 694
- On quantification of helium embrittlement in ferritic/martensitic steels, D.S. Gelles 283–287 (2000) 838
- The interaction of deuterium and tritium with radiation and other defects in austenitic steel and nickel, V.L. Arbuzov, G.A. Raspopova, S.E. Danilov, A.P. Druzhkov and Yu.N. Zouev 283–287 (2000) 849
- Positron-lifetime study of electrically hydrogen charged Ni, austenitic stainless steel and Fe, H. Ohkubo, S. Sugiyama, K. Fukuzato, M. Takenaka, N. Tsukuda and E. Kuramoto 283–287 (2000) 858
- The effect of electrical hydrogen charging on the strength of 316 stainless steel, S. Sugiyama, H. Ohkubo, M. Takenaka, K. Ohsawa, M.I. Ansari, N. Tsukuda and E. Kuramoto 283–287 (2000) 863
- Evaluation of the deformation fields and bond integrity of Cu/SS joints, J.F. Stubbins, J. Collins and J. Min 283–287 (2000) 982
- The removal of ion implanted deuterium from tungsten and stainless steel by transferred-arc cleaning, K.J. Hollis, R.G. Castro, C.J. Maggiore and A. Ayala 283–287 (2000) 1085
- Effect of ITER components manufacturing cycle on the irradiation behaviour of 316L(N)-IG steel, B.S. Rodchenkov, V.I. Prokhorov, O.Yu. Makarov, V.K. Shamardin, G.M. Kalinin, Yu.S. Strebkov and O.A. Golosov 283–287 (2000) 1166
- Re-weldability tests of irradiated austenitic stainless steel by a TIG welding method, K. Tsuchiya, H. Kawamura and G. Kalinin 283–287 (2000) 1210
- Effect of weld thermal cycle and restraint stress on helium bubble formation in stainless steels, S. Kawano, K. Fukuya, F. Kano, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1220
- Low cycle fatigue strength of diffusion bonded joints of alumina dispersion-strengthened copper to stainless steel, H. Nishi and T. Araki 283–287 (2000) 1234
- Measurement and analysis of radioactivity induced in steels and a vanadium alloy by 14-MeV neutrons, D. Richter, R.A. Forrest, H. Freiesleben, Va.D. Kovalchuk, Vi.D. Kovalchuk, D.V. Markovskij, K. Seidel, V.I. Tereshkin and S. Unholzer 283–287 (2000) 1434
- Stress corrosion cracking on irradiated 316 stainless steel, G. Furutani, N. Nakajima, T. Konishi and M. Kodama 288 (2001) 179

- Microstructure and mechanical properties of inconel 625 superalloy, V. Shankar, K. Bhanu Sankara Rao and S.L. Mannan 288 (2001) 222
- Investigation of models to predict the corrosion of steels in flowing liquid lead alloys, F. Balbaud-Célérier and F. Barbier 289 (2001) 227
- Conditionings for plasma facing walls of large helical device, T. Hino, T. Ohuchi, M. Hashiba, Y. Yamauchi, Y. Hirohata, N. Inoue, A. Sagara, N. Noda and O. Motojima 290–293 (2001) 1176
- Hydrogen analysis and slow strain rate test in Ar gas for irradiated austenitic stainless steel, J. Morisawa, M. Kodama, N. Yokota, K. Nakata, K. Fukuya, S. Shima and K. Asano 294 (2001) 241
- Characterization of plastic deformation in a disk bend test, T.S. Byun, E.H. Lee, J.D. Hunn, K. Farrell and L.K. Mansur 294 (2001) 256
- Numerical simulation modeling on the effects of grain boundary misorientation on radiation-induced solute segregation in 304 austenitic stainless steels, T.S. Duh, J.J. Kai, F.R. Chen and L.H. Wang 294 (2001) 267
- Compatibility tests of steels in flowing liquid lead–bismuth, F. Barbier, G. Benamati, C. Fazio and A. Rusanov 295 (2001) 149
- Radiation damage to the 316 stainless steel target container vessel at SNS, M.H. Barnett, M.S. Wechsler, D.J. Dudziak, L.K. Mansur and B.D. Murphy 296 (2001) 54
- Simulation of the implantation of recoils and displacement production in the 316 stainless steel mercury-container vessel at SNS, Y. Zheng, M.S. Wechsler, D.J. Dudziak, J.D. Hunn and L.K. Mansur 296 (2001) 61
- Determination of helium and hydrogen yield from measurements on pure metals and alloys irradiated by mixed high energy proton and spallation neutron spectra in LANSCE, F.A. Garner, B.M. Oliver, L.R. Greenwood, M.R. James, P.D. Ferguson, S.A. Maloy and W.F. Sommer 296 (2001) 66
- Microstructural origins of radiation-induced changes in mechanical properties of 316 L and 304 L austenitic stainless steels irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, M.L. Hamilton, F.A. Garner, S.A. Maloy and W.F. Sommer 296 (2001) 112
- The mechanical properties of 316L/304L stainless steels, Alloy 718 and Mod 9Cr–1Mo after irradiation in a spallation environment, S.A. Maloy, M.R. James, G. Willcutt, W.F. Sommer, M. Sokolov, L.L. Snead, M.L. Hamilton and F. Garner 296 (2001) 119
- Tensile properties of candidate SNS target container materials after proton and neutron irradiation in the LANSCE accelerator, K. Farrell and T.S. Byun 296 (2001) 129
- Microstructure of both as-irradiated and deformed 304L stainless steel irradiated with 800 MeV protons, Y. Dai, X. Jia, J.C. Chen, W.F. Sommer, M. Victoria and G.S. Bauer 296 (2001) 174
- Origin of hardening and deformation mechanisms in irradiated 316 LN austenitic stainless steel, E.H. Lee, T.S. Byun, J.D. Hunn, K. Farrell and L.K. Mansur 296 (2001) 183
- Auger electron spectroscopy study of alloy 718 and 304L stainless steel irradiated with 800 MeV protons, M. García-Mazarío, M. Hernández-Mayoral and A.M. Lancha 296 (2001) 192
- Thermal gradient mass transfer of type 316L stainless steel and alloy 718 in flowing mercury, S.J. Pawel, J.R. DiStefano and E.T. Manneschildt 296 (2001) 210
- A study on martensitic and austenitic steels after exposure in mercury at 573 K up to 5000 h, R.Kh. Zala-vutdinov, Y. Dai, A.E. Gorodetsky, G.S. Bauer, V.Kh. Alimov and A.P. Zakharov 296 (2001) 219
- The effect of mercury on the fatigue behavior of 316 LN stainless steel, J.P. Strizak, J.R. DiStefano, P.K. Liaw and H. Tian 296 (2001) 225
- Corrosion behavior of steels in flowing lead–bismuth, F. Barbier and A. Rusanov 296 (2001) 231
- Corrosion investigations of steels in flowing lead at 400 °C and 550 °C, H. Glasbrenner, J. Konys, G. Mueller and A. Rusanov 296 (2001) 237
- Compatibility tests on steels in molten lead and lead–bismuth, C. Fazio, G. Benamati, C. Martini and G. Palombarini 296 (2001) 243
- Behaviour of F82H mod. stainless steel in lead–bismuth under temperature gradient, D. Gómez Briceño, F.J. Martín, L. Soler Cespo, F. Esteban and C. Torres 296 (2001) 265
- Monitoring of low-cycle fatigue degradation in X6CrNiTi18-10 austenitic steel, M. Grosse, M. Niffenegger and D. Kalkhof 296 (2001) 305
- Accumulation of radioactive corrosion products on steel surfaces of VVER-

- type nuclear reactors. II. ^{60}Co , K. Varga, G. Hirschberg, Z. Németh, G. Myburg, J. Schunk and P. Tilky 298 (2001) 231
- Strain hardening and plastic instability properties of austenitic stainless steels after proton and neutron irradiation, T.S. Byun, K. Farrell, E.H. Lee, J.D. Hunn and L.K. Mansur 298 (2001) 269
- Activation of stainless steel with high energy neutrons, O. Grégoire and J. Ladrière 298 (2001) 309
- Dependence of the non-swelling in-reactor steady-state creep component of austenitic phase alloys on the stacking fault energy, E. Gilbert and J. Foster 298 (2001) 321
- Effects of nitrogen on low-cycle fatigue properties of type 304L austenitic stainless steels tested with and without tensile strain hold, B. Rho and S. Nam 300 (2002) 65
- Emulation of neutron irradiation effects protons: validation of principle, G.S. Was, J.T. Busby, T. Allen, E.A. Kenik, A. Jansson, S.M. Bruemmer, J. Gan, A.D. Edwards, P.M. Scott and P.L. Andreson 300 (2002) 198
- Steels, Ferritic**
- Neutron energy spectrum and temperature effects on freely migrating defect concentrations and grain boundary segregation in $\alpha\text{-Fe}$, R.G. Faulkner, D.J. Bacon, S. Song and P.E.J. Flewitt 271&272 (1999) 1
- Subcascade formation in displacement cascade simulations: Implications for fusion reactor materials, R.E. Stoller and L.R. Greenwood 271&272 (1999) 57
- The influence of helium co-implantation on ion-induced hardening of low activation ferritic steel evaluated by micro-indentation technique, Y. Kato, H. Tanigawa, T. Muroga, T. Iwai and A. Kohyama 271&272 (1999) 115
- Mechanical property changes of low activation ferritic/martensitic steels after neutron irradiation, Y. Kohno, A. Kohyama, T. Hirose, M.L. Hamilton and M. Narui 271&272 (1999) 145
- Postirradiation thermocyclic loading of ferritic–martensitic structural materials, L. Belyaeva, A. Orychtchenko, C. Petersen and V. Rybin 271&272 (1999) 151
- Mechanical properties and microstructure of advanced ferritic–martensitic steels used under high dose neutron irradiation, V.K. Shamardin, V.N. Golovanov, T.M. Bulanova, A.V. Povstianko, A.E. Fedoseev, Yu.D. Goncharenko and Z.E. Ostrovsky 271&272 (1999) 155
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Radiation-induced segregation of deuterium in austenitic steels and vanadium alloys, V.L. Arbusov, G.A. Raspopova and V.B. Vykhodets 271&272 (1999) 340
- Effects of varying temperature irradiation on the neutron irradiation hardening of reduced-activation 9Cr–2W martensitic steels, R. Kasada, A. Kimura, H. Matsui, M. Hasegawa and M. Narui 271&272 (1999) 360
- Triple ion beam studies of radiation damage in 9Cr–2WVTA ferritic/martensitic steel for a high power spallation neutron source, E.H. Lee, J.D. Hunn, G.R. Rao, R.L. Klueh and L.K. Mansur 271&272 (1999) 385
- Tensile and impact behaviour of BATMAN II steels, Ti-bearing reduced activation martensitic alloys, G. Filacchioni, E. Casagrande, U. De Angelis, G. De Santis, D. Ferrara and L. Pilloni 271&272 (1999) 445
- Influence of helium on impact properties of reduced-activation ferritic/martensitic Cr-steels, R. Lindau, A. Möslang, D. Preininger, M. Rieth and H.D. Röhrig 271&272 (1999) 450
- Influence of thermal aging on tensile and impact bending properties of the steel grades OPTIFER and F82H mod., L. Schäfer and M. Schirra 271&272 (1999) 455
- Evaluation of magnetic fields due to the ferromagnetic vacuum vessel and their influence on plasma discharge in tokamak devices, T. Nakayama, M. Abe, T. Tadokoro and M. Otsuka 271&272 (1999) 491
- Low activation materials, R.H. Jones, H.L. Heinisch and K.A. McCarthy 271&272 (1999) 518
- Hydrogen isotope permeation through and inventory in the first wall of the water cooled Pb–17Li blanket for DEMO, O.V. Ogorodnikova, M.A. Fütterer, E. Serra, G. Benamati, J.-F. Salavy and G. Aiello 273 (1999) 66
- The effect of tantalum on the mechanical properties of a 9Cr–2W–0.25V–0.07-Ta0.1C steel, R.L. Klueh, D.J. Alexander and M. Rieth 273 (1999) 146
- Influence of prior thermal ageing on tensile deformation and fracture behaviour of forged thick section 9Cr–1Mo ferritic steel, B.K. Choudhary, K. Bhanu Sankara Rao, S.L. Manman and B.P. Kashyap 273 (1999) 315
- Modification of microstructure and the alligatoring damage in a modified

- 9Cr–1Mo steel, R. Kishore and T.K. Sinha 273 (1999) 334
- Annealing behaviour of reactor pressure-vessel steels studied by positron-annihilation spectroscopy, Mössbauer spectroscopy and transmission electron microscopy, V. Slugeň, D. Segers, P.M.A. de Bakker, E. De Grave, V. Magula, T. Van Hoecke and B. Van Waeyenberge 274 (1999) 273
- Internal friction study of hydrogen behaviour in low activated martensitic F82H steel, Y. Jagodzinski, A. Tarasenko, S. Smuk, S. Tähtinen and H. Hänninen 275 (1999) 47
- Low temperature yield properties of two 7–9Cr ferritic/martensitic steels, P. Spätig, G.R. Odette and G.E. Lucas 275 (1999) 324
- Comparison of swelling and irradiation creep behavior of fcc-austenitic and bcc-ferritic/martensitic alloys at high neutron exposure, F.A. Garner, M.B. Toloczko and B.H. Sencer 276 (2000) 123
- Tensile properties and microstructure of martensitic steel DIN 1.4926 after 800 MeV proton irradiation, Y. Dai, F. Carsughi, W.F. Sommer, G.S. Bauer and H. Ullmaier 276 (2000) 289
- Estimation of fracture toughness transition curves of RPV steels from ball indentation and tensile test data, T. Byun, S. Kim, B. Lee, I. Kim and J. Hong 277 (2000) 263
- Irradiation-induced structural changes in surveillance material of VVER 440-type weld metal, M. Grosse, V. Denner, J. Böhmert and M.-H. Mathon 277 (2000) 280
- Investigation on oxygen controlled liquid lead corrosion of surface treated steels, G. Müller, G. Schumacher and F. Zimmermann 278 (2000) 85
- Evaluation of thermal aging embrittlement in CF8 duplex stainless steel by small punch test, J.S. Cheon and I.S. Kim 278 (2000) 96
- Determination of the yield strength of nuclear reactor pressure vessel steels by means of amplitude-dependent internal friction, K. Van Ouytsel, A. Fabry, R. De Batist and R. Schaller 279 (2000) 51
- A comparative evaluation of welding consumables for dissimilar welds between 316LN austenitic stainless steel and Alloy 800, M. Sireesha, S.K. Albert, V. Shankar and S. Sundaresan 279 (2000) 65
- Hardening of ferritic alloys at 288 °C by electron irradiation, K. Farrell, R.E. Stoller, P. Jung and H. Ullmaier 279 (2000) 77
- Effect of rhenium and osmium on mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M.A. Sokolov 279 (2000) 91
- Intergranular and intragranular phosphorus segregation in Russian pressure vessel steels due to neutron irradiation, B.A. Gurovich, E.A. Kuleshova, Ya.I. Shtrombakh, O.O. Zabusov and E.A. Krasikov 279 (2000) 259
- Mechanisms and kinetics of tempering in weldments of 9Cr–1Mo steel, M. Vijayalakshmi, S. Saroja, R. Mythili, V. Thomas Paul and V.S. Raghunathan 279 (2000) 293
- Behaviour of materials for accelerator driven systems in stagnant molten lead, G. Benamati, P. Buttol, V. Imbeni, C. Martini and G. Palombarini 279 (2000) 308
- Irradiation-induced embrittlement of a 2.25Cr1Mo steel, S.-H. Song, R.G. Faulkner, P.E.J. Flewitt, R.F. Smith, P. Marmy and M. Victoria 280 (2000) 162
- Defect and void evolution in oxide dispersion strengthened ferritic steels under 3.2 MeV Fe⁺ ion irradiation with simultaneous helium injection, I.-S. Kim, J.D. Hunn, N. Hashimoto, D.L. Larson, P.J. Maziasz, K. Miyahara and E.H. Lee 280 (2000) 264
- Synthesis of atom probe experiments on irradiation-induced solute segregation in French ferritic pressure vessel steels, P. Auger, P. Pareige, S. Welzel and J.-C. Van Duysen 280 (2000) 331
- Impurity effects on reduced-activation ferritic steels developed for fusion applications, R.L. Klueh, E.T. Cheng, M.L. Grossbeck and E.E. Bloom 280 (2000) 353
- Tritium diffusive transport parameters and trapping effects in the reduced activating martensitic steel OPTIFER-IVb, G.A. Esteban, A. Perujo, K. Douglas and L.A. Sedano 281 (2000) 34
- Corrosion behaviour of low activation steels in flowing Pb–17Li, H. Glasbrenner, J. Konys and Z. Voß 281 (2000) 225
- Embrittlement of low copper VVER 440 surveillance samples neutron-irradiated to high fluences, M.K. Miller, K.F. Russell, J. Kocik and E. Keilova 282 (2000) 83
- The surface rate constants of deuterium in the reduced activating martensitic steel OPTIFER-IVb, G.A. Esteban, A. Perujo, L.A. Sedano and B. Mancinelli 282 (2000) 89
- Interactions between fusion materials R&D and other technologies, A. Kohyama, M. Seki, K. Abe, T. Muroga, H. Matsui, S. Jitsukawa and S. Matsuda 283–287 (2000) 20
- Progress and critical issues of reduced activation ferritic/martensitic steel

- development, B. van der Schaaf, D.S. Gelles, S. Jitsukawa, A. Kimura, R.L. Klueh, A. Moeslang and G.R. Odette 283–287 (2000) 52
- Compositional and temperature dependence of void swelling in model Fe–Cr base alloys irradiated in the EBR-II fast reactor, B.H. Sencer and F.A. Garner 283–287 (2000) 164
- Study of He-bubble growth in α -particle implanted F82H-mod martensitic steel, R. Coppola, M. Magnani, R.P. May, A. Möslang and M. Valli 283–287 (2000) 183
- Modeling of microstructure evolution and mechanical property change of reduced-activation martensitic steel during varying-temperature irradiation, R. Kasada and A. Kimura 283–287 (2000) 188
- Swelling of F82H irradiated at 673 K up to 51 dpa in HFIR, Y. Miwa, E. Wakai, K. Shiba, N. Hashimoto, J.P. Robertson, A.F. Rowcliffe and A. Hishinuma 283–287 (2000) 334
- Differences in the microstructure of the F82H ferritic/martensitic steel after proton and neutron irradiation, R. Schäublin and M. Victoria 283–287 (2000) 339
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- Tensile behavior of F82H with and without spectral tailoring, K. Shiba, R.L. Klueh, Y. Miwa, J.P. Robertson and A. Hishinuma 283–287 (2000) 358
- Irradiation creep of 11Cr–0.5Mo–2W, V, Nb ferritic–martensitic, modified 316, and 15Cr–20Ni austenitic S.S. irradiated in FFTF to 103–206 dpa, A. Uehira, S. Mizuta, S. Ukai and R.J. Puigh 283–287 (2000) 396
- Effects of helium implantation on creep rupture properties of low activation ferritic steel F82H IEA heat, N. Yamamoto, J. Nagakawa and K. Shiba 283–287 (2000) 400
- Application of generalized deformation theory to irradiation creep of fcc and bcc stainless steels, M.B. Toloczko, J.P. Hirth and F.A. Garner 283–287 (2000) 409
- Thermal fatigue crack nucleation in ferritic–martensitic steels before and after neutron irradiation, L.A. Belyaeva, A.A. Zisman, C. Petersen, V.A. Potapova and V.V. Rybin 283–287 (2000) 461
- Effect of heat treatment and irradiation temperature on mechanical properties and structure of reduced-activation Cr–W–V steels of bainitic, martensitic, and martensitic–ferritic classes, I.V. Gorynin, V.V. Rybin, I.P. Kursevich, A.N. Lapin, E.V. Nesterova and E.Yu. Klepikov 283–287 (2000) 465
- Low-temperature irradiation effects on tensile and Charpy properties of low-activation ferritic steels, K. Shiba and A. Hishinuma 283–287 (2000) 474
- Embrittlement of reduced-activation ferritic/martensitic steels irradiated in HFIR at 300 °C and 400 °C, R.L. Klueh, M.A. Sokolov, K. Shiba, Y. Miwa and J.P. Robertson 283–287 (2000) 478
- Mechanical properties and microstructure in low-activation martensitic steels F82H and Optimax after 800-MeV proton irradiation, Y. Dai, S.A. Maloy, G.S. Bauer and W.F. Sommer 283–287 (2000) 513
- Diffusion and permeation of hydrogen in low-activation martensitic stainless steel – effect of irradiation, F. Schliefer, C. Liu and P. Jung 283–287 (2000) 540
- Development of an oxide dispersion strengthened, reduced-activation steel for fusion energy, G.R. Romanoski, L.L. Snead, R.L. Klueh and D.T. Hoelzer 283–287 (2000) 642
- Effect of mechanical alloying parameters on irradiation damage in oxide dispersion strengthened ferritic steels, S. Yamashita, S. Watanabe, S. Ohnuki, H. Takahashi, N. Akasaka and S. Ukai 283–287 (2000) 647
- Material science and manufacturing of heat-resistant reduced-activation ferritic–martensitic steels for fusion, A.G. Ioltukhovskiy, A.I. Blokhin, N.I. Budylnin, V.M. Chernov, M.V. Leont'eva-Smirnova, E.G. Mironova, E.A. Medvedeva, M.I. Solonin, S.I. Porollo and L.P. Zavyalsky 283–287 (2000) 652
- Microstructure of welded and thermal-aged low activation steel F82H IEA heat, T. Sawai, K. Shiba and A. Hishinuma 283–287 (2000) 657
- Chemical segregation behavior under thermal aging of the low-activation F82H-modified steel, J. Lapeña, M. Garcia-Mazarío, P. Fernández and A.M. Lancha 283–287 (2000) 662
- Mechanical properties of 8Cr–2WVTa steel aged for 30 000 h, M. Tamura, K. Shinozuka, H. Esaka, S. Sugimoto, K. Ishizawa and K. Masamura 283–287 (2000) 667
- Effect of thermal aging on the microstructure and mechanical properties of 7–11 CrW steels, Y. de Carlan, A. Alamo, M.H. Mathon, G. Geoffroy and A. Castaing 283–287 (2000) 672
- Low cycle fatigue properties of a low activation ferritic steel (JLF-1) at room temperature, A. Nishimura, T.

- Nagasaka, N. Inoue, T. Muroga and C. Namba 283–287 (2000) 677
- Ripple reduction and surface coating tests with ferritic steel on JFT-2M, K. Tsuzuki, M. Sato, H. Kawashima, Y. Miura, H. Kimura, T. Abe, K. Uehara, T. Ogawa, T. Akiyama, T. Shibata, M. Yamamoto and T. Koike 283–287 (2000) 681
- High heat flux test of a HIP-bonded first wall panel of reduced activation ferritic steel F-82H, T. Hatano, S. Suzuki, K. Yokoyama, T. Kuroda and M. Enoda 283–287 (2000) 685
- Phenomenological aspects of fatigue cracking in as-received and hardened F82H modified steel exposed to lithiated water with dissolved hydrogen at 240 °C, M.-F. Maday 283–287 (2000) 689
- Influence of combined thermomechanical treatment on impurity segregation in ferritic–martensitic and austenitic stainless steels, A.M. Ilyin, V.S. Neustroev, V.K. Shamardin, V.P. Shestakov, I.L. Tazhibavaeva and V.A. Krivchenkoa 283–287 (2000) 694
- A potential new ferritic/martensitic steel for fusion applications, R.L. Klueh, N. Hashimoto, R.F. Buck and M.A. Sokolov 283–287 (2000) 697
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283–287 (2000) 702
- Tensile and impact behavior of the reduced-activation steels OPTIFER and F82H mod, L. Schäfer 283–287 (2000) 707
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- Constitutive behavior and fracture toughness properties of the F82H ferritic/martensitic steel, P. Spätig, G.R. Odette, E. Donahue and G.E. Lucas 283–287 (2000) 721
- The mechanical properties and microstructure of the OPTIMAX series of low activation ferritic–martensitic steels, N. Baluc, R. Schäublin, C. Bailat, F. Paschoud and M. Victoria 283–287 (2000) 731
- Effect of helium production on swelling of F82H irradiated in HFIR, E. Wakai, N. Hashimoto, Y. Miwa, J.P. Robertson, R.L. Klueh, K. Shiba and S. Jistukawa 283–287 (2000) 799
- Annealing behavior of irradiation hardening and microstructure in helium-implanted reduced activation martensitic steel, A. Kimura, R. Kasada, R. Sugano, A. Hasegawa and H. Matsui 283–287 (2000) 827
- Hydrogen-irradiated steel interaction during alternating hydrogenation and annealing, E.A. Krasikov and A.D. Amajev 283–287 (2000) 846
- Confocal microscopy–fracture reconstruction and finite element modeling characterization of local cleavage toughness in a ferritic/martensitic steel in subsized Charpy V-notch impact tests, T. Yamamoto, G.R. Odette, G.E. Lucas and H. Matsui 283–287 (2000) 992
- Neutron irradiation hardening of ODS alloy tested by miniature disk bend test method, C.Q. Chen, J.G. Sun and Y.C. Xu 283–287 (2000) 1011
- Effect of specimen size on fatigue properties of reduced activation ferritic/martensitic steels, T. Hirose, H. Sakasegawa, A. Kohyama, Y. Katoh and H. Tanigawa 283–287 (2000) 1018
- Characterization of low-activation ferritic steel (JLF-1) weld joint by simulated heat-treatments, N. Inoue, T. Muroga, A. Nishimura, T. Nagasaka, O. Motojima, S. Uchida, H. Yabe, K. Oguri, Y. Nishi, Y. Katoh and A. Kohyama 283–287 (2000) 1187
- Effects of thermal aging on the mechanical behavior of F82H weldments, A. Alamo, A. Castaing, A. Fontes and P. Wident 283–287 (2000) 1192
- Diffusion welding parameters and mechanical properties of martensitic chromium steels, K. Schleisiek, T. Lechler, L. Schäfer and P. Weimar 283–287 (2000) 1196
- Scale structure of aluminised MANET steel after HIP treatment, H. Glasbrenner, K. Stein-Fechner and J. Konys 283–287 (2000) 1302
- A microstructural study of the oxide scale formation on ODS Fe–13Cr steel, D.T. Hoelzer, B.A. Pint and I.G. Wright 283–287 (2000) 1306
- Compatibility of AlN with liquid lithium, T. Terai, A. Suzuki, T. Yoneoka and T. Mitsuyama 283–287 (2000) 1322
- Compatibility of structural candidate materials with LiF–BeF₂ molten salt mixture, H. Nishimura, T. Terai, T. Yoneoka, S. Tanaka, A. Sagara and O. Motojima 283–287 (2000) 1326
- Corrosion of ferritic–martensitic steels in the eutectic Pb–17Li, H. Glasbrenner, J. Konys, H.D. Röhrig, K. Stein-Fechner and Z. Voss 283–287 (2000) 1332
- Liquid metal embrittlement (LME) susceptibility of the 8–9% Cr martensitic steels F82H-mod., OPTIFER IVb and their simulated welded structures in liquid Pb–17Li, T. Sample and H. Kolbe 283–287 (2000) 1336

- Water corrosion of F82H-modified in simulated irradiation conditions by heat treatment, J. Lapeña and F. Blázquez 283–287 (2000) 1341
- Measurement and analysis of radioactivity induced in steels and a vanadium alloy by 14-MeV neutrons, D. Richter, R.A. Forrest, H. Freiesleben, Va.D. Kovalchuk, Vi.D. Kovalchuk, D.V. Markovskij, K. Seidel, V.I. Tereshkin and S. Unholzer 283–287 (2000) 1434
- Present status and future prospect of the Russian program for fusion low-activation materials, M.I. Solonin, V.M. Chernov, V.A. Gorokhov, A.G. Ioltukhovskiy, A.K. Shikov and A.I. Blokhin 283–287 (2000) 1468
- Effect of hydrogen on the ductility reduction of F82H martensitic steel after different heat treatments, M. Beghini, G. Benamati, L. Bertini, I. Ricapito and R. Valentini 288 (2001) 1
- Studies on hydrogen permeability of 2.25% Cr–1% Mo ferritic steel: correlation with microstructure, N. Parvathavarthini, S. Saroja, R.K. Dayal and H.S. Khatak 288 (2001) 187
- The effects of tungsten addition on the microstructural stability of 9Cr–Mo Steels, S.G. Hong, W.B. Lee and C.G. Park 288 (2001) 202
- Investigation of models to predict the corrosion of steels in flowing liquid lead alloys, F. Balbaud-Célrier and F. Barbier 289 (2001) 227
- The effect of manganese on the strain-induced martensitic transformation and high temperature wear resistance of Fe–20Cr–1C–1Si hardfacing alloy, J.-k. Kim, G.-m. Kim and S.-j. Kim 289 (2001) 263
- Dissolution behaviour of magnetite film formed over carbon steel in dilute organic acid media, A.A.M. Prince, S. Velmurugan, S.V. Narasimhan, C. Ramesh, N. Murugesan, P.S. Raghavan and R. Gopalan 289 (2001) 281
- The effect of divertor tile material on radiation profiles in LHD, B.J. Peterson, S. Masuzaki, R. Sakamoto, K. Sato, S. Inagaki, A. Sagara, S. Ohdachi, Y. Nakamura, N. Noda, Y. Xu, J.E. Rice, N. Ashikawa, S. Yamamoto, M. Takechi, K. Toi, S. Morita, M. Goto, K. Narihara, N. Inoue, Y. Takeiri, M. Sato, M. Osakabe, K. Tanaka, T. Tokuzawa, S. Sakakibara, M. Shoji, K. Kawahata, O. Kaneko, N. Ohyabu, H. Yamada, A. Komori, K. Yamazaki, S. Sudo and O. Motojima 290–293 (2001) 930
- Characterization of plastic deformation in a disk bend test, T.S. Byun, E.H. Lee, J.D. Hunn, K. Farrell and L.K. Mansur 294 (2001) 256
- Embrittlement behaviour of different international low activation alloys after neutron irradiation, H.-C. Schneider, B. Dafferner and J. Aktaa 295 (2001) 16
- Compatibility tests of steels in flowing liquid lead–bismuth, F. Barbier, G. Benamati, C. Fazio and A. Rusanov 295 (2001) 149
- Radiation resistance and thermal creep of ODS ferritic steels, V.V. Sagardzde, V.I. Shalaev, V.L. Arbuzov, B.N. Goshchitskii, Y. Tian, W. Qun and S. Jiguang 295 (2001) 265
- Determination of helium and hydrogen yield from measurements on pure metals and alloys irradiated by mixed high energy proton and spallation neutron spectra in LANSCE, F.A. Garner, B.M. Oliver, L.R. Greenwood, M.R. James, P.D. Ferguson, S.A. Maloy and W.F. Sommer 296 (2001) 66
- The mechanical properties of 316L/304L stainless steels, Alloy 718 and Mod 9Cr–1Mo after irradiation in a spallation environment, S.A. Maloy, M.R. James, G. Willcutt, W.F. Sommer, M. Sokolov, L.L. Snead, M.L. Hamilton and F. Garner 296 (2001) 119
- Tensile properties of candidate SNS target container materials after proton and neutron irradiation in the LANSCE accelerator, K. Farrell and T.S. Byun 296 (2001) 129
- Retention of implanted hydrogen and helium in martensitic stainless steels and their effects on mechanical properties, P. Jung, C. Liu and J. Chen 296 (2001) 165
- A study on martensitic and austenitic steels after exposure in mercury at 573 K up to 5000 h, R.Kh. Zalavutdinov, Y. Dai, A.E. Gorodetsky, G.S. Bauer, V.Kh. Alimov and A.P. Zakharov 296 (2001) 219
- Corrosion behavior of steels in flowing lead–bismuth, F. Barbier and A. Rusanov 296 (2001) 231
- Corrosion investigations of steels in flowing lead at 400 °C and 550 °C, H. Glasbrenner, J. Konys, G. Mueller and A. Rusanov 296 (2001) 237
- Compatibility tests on steels in molten lead and lead–bismuth, C. Fazio, G. Benamati, C. Martini and G. Palombarini 296 (2001) 243
- Evaluation of the mechanical properties of T91 steel exposed to Pb and Pb–Bi at high temperature in controlled environment, B. Schmidt, S. Guerin,

- J.-L. Pastol, P. Plaindoux, J.-P. Dallas, C. Leroux and D. Gorse 296 (2001) 249
- Embrittlement of the martensitic steel 91 tested in liquid lead, G. Nicaise, A. Legris, J.B. Vogt and J. Foct 296 (2001) 256
- Behaviour of F82H mod. stainless steel in lead–bismuth under temperature gradient, D. Gómez Briceño, F.J. Martín, L. Soler Cespo, F. Esteban and C. Torres 296 (2001) 265
- Short-term static corrosion tests in lead–bismuth, L. Soler Crespo, F.J. Martín Muñoz and D. Gómez Briceño 296 (2001) 273
- Experimental setup for steel corrosion characterization in lead bath, V. Ghetta, F. Gamaoun, J. Fouletier, M. Hénault and A. Lemoulec 296 (2001) 295
- Microstructural characterization of irradiation-induced Cu-enriched clusters in reactor pressure vessel steels, R.G. Carter, N. Soneda, K. Dohi, J.M. Hyde, C.A. English and W.L. Server 298 (2001) 211
- Accumulation of radioactive corrosion products on steel surfaces of VVER-type nuclear reactors. II. ^{60}Co , K. Varga, G. Hirschberg, Z. Németh, G. Myburg, J. Schunk and P. Tilky 298 (2001) 231
- Comparison of microstructural features of radiation embrittlement of VVER-440 and VVER-1000 reactor pressure vessel steels, E.A. Kuleshova, B.A. Gurovich, Ya.I. Shtrombakh, D.Yu. Erak and O.V. Lavrenchuk 300 (2002) 127
- Influence of dynamic strain aging on the ductile tearing of C–Mn steels: modelling by a local approach method, D. Wagner, J.C. Moreno, C. Prioul, J.M. Frund and B. Houssin 300 (2002) 178
- Structural Materials Sublimation** (*see Phase Transformation*)
- Research progress of fusion materials in CIAE, J. Yu and C. Shan 271&272 (1999) 512
- Common technologies and knowledge sharing, J.W. Davis, T. Kondo, G.R. Odette, P. Fenici and T. Kusnagi 271&272 (1999) 553
- Texture of welded joints of 316L stainless steel, multi-scale orientation analysis of a weld metal deposit, G. Bouche, J.L. Béchade, M.H. Mathon, L. Allais, A.F. Gourgues and L. Nazé 277 (2000) 91
- Stress tensor of a strained material with a linear row of stress concentrators, R.E. Voskoboinikov 280 (2000) 169
- Critical issues and current status of vanadium alloys for fusion energy applications, R.J. Kurtz, K. Abe, V.M. Chernov, V.A. Kazakov, G.E. Lucas, H. Matsui, T. Muroga, G.R. Odette, D.L. Smith and S.J. Zinkle 283–287 (2000) 70
- International strategy for fusion materials development, K. Ehrlich, E.E. Bloom and T. Kondo 283–287 (2000) 79
- Sink effect of grain boundary on radiation-induced segregation in austenitic stainless steel, S. Watanabe, Y. Takamatsu, N. Sakaguchi and H. Takahashi 283–287 (2000) 152
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Microstructural evolution of Alloy 718 at high helium and hydrogen generation rates during irradiation with 600–800 MeV protons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, B.M. Oliver, L.E. Thomas, S.A. Maloy, W.F. Sommer, M.R. James and P.D. Ferguson 283–287 (2000) 324
- Mechanical behavior of reduced-activation and conventional martensitic steels after neutron irradiation in the range 250–450 °C, A. Alamo, M. Horsten, X. Averty, E.I. Materna-Morris, M. Rieth and J.C. Brachet 283–287 (2000) 353
- Effect of strain rate on the tensile properties of unirradiated and irradiated V–4Cr–4Ti, A.F. Rowcliffe, S.J. Zinkle and D.T. Hoelzer 283–287 (2000) 508
- SYLRAMIC™ SiC fibers for CMC reinforcement, R.E. Jones, D. Petrak, J. Rabe and A. Szweda 283–287 (2000) 556
- Microstructure control to improve mechanical properties of vanadium alloys for fusion applications, T. Kuwabara, H. Kurishita and M. Hasegawa 283–287 (2000) 611
- Biaxial thermal creep of V–4Cr–4Ti at 700 °C and 800 °C, R.J. Kurtz and M.L. Hamilton 283–287 (2000) 628
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- Recovery and recrystallization behavior of vanadium at various controlled nitrogen and oxygen levels, T. Nagasaka, H. Takahashi, T. Muroga, T. Tanabe and H. Matsui 283–287 (2000) 816
- Effect of oxygen on the crack growth behavior of V–4Cr–4Ti at 600 °C, R.J. Kurtz 283–287 (2000) 822
- Mechanical properties of the ITER central solenoid model coil insulation under static and dynamic load after reactor irradiation, K. Humer, P. Rosenkranz, H.W. Weber, P.E. Fabian and J.A. Rice 283–287 (2000) 973
- Development of a small specimen test machine to evaluate irradiation em-

- embrittlement of fusion reactor materials, T. Ishii, M. Ohmi, J. Saito, T. Hoshiya, N. Ooka, S. Jitsukawa and M. Eto 283–287 (2000) 1023
- Characterization of low-activation ferritic steel (JLF-1) weld joint by simulated heat-treatments, N. Inoue, T. Muroga, A. Nishimura, T. Nagasaka, O. Motojima, S. Uchida, H. Yabe, K. Oguri, Y. Nishi, Y. Katoh and A. Kohyama 283–287 (2000) 1187
- Post-irradiation mechanical tests on F82H EB and TIG welds, J. Reinsman, E.V. van Osch, M.G. Horsten and D.S. d'Hulst 283–287 (2000) 1201
- Magnetic field effect on deposition of corrosion products in liquid Pb–17Li, F. Barbier 283–287 (2000) 1267
- Oxidation and hardness profile of V–Ti–Cr–Si–Al–Y alloys, M. Fujiwara, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1311
- Compatibility of structural candidate materials with LiF–BeF₂ molten salt mixture, H. Nishimura, T. Terai, T. Yoneoka, S. Tanaka, A. Sagara and O. Motojima 283–287 (2000) 1326
- Microstructure and mechanical properties of inconel 625 superalloy, V. Shankar, K. Bhanu Sankara Rao and S.L. Mannan 288 (2001) 222
- Microstructural and mechanical characteristics of SiC/SiC composites with modified-RS process, S.P. Lee, Y. Katoh, J.S. Park, S. Dong, A. Kohyama, S. Suyama and H.K. Yoon 289 (2001) 30
- Hydrogen concentrations near cracks in target materials for high-power spallation neutron sources, H. Rauh and H. Ullmaier 295 (2001) 109
- R&D for the Spallation Neutron Source mercury target, L.K. Mansur, T.A. Gabriel, J.R. Haines and D.C. Louston 296 (2001) 1
- Current status of JAERI spallation target material program, K. Kikuchi, T. Sasa, S. Ishikura, K. Mukugi, T. Kai, N. Ouchi and I. Ioka 296 (2001) 34
- Status of the first SINQ irradiation experiment, STIP-I, Y. Dai and G.S. Bauer 296 (2001) 43
- Radiation damage to the 316 stainless steel target container vessel at SNS, M.H. Barnett, M.S. Wechsler, D.J. Dudziak, L.K. Mansur and B.D. Murphy 296 (2001) 54
- Helium production for 0.8–2.5 GeV proton induced spallation reactions, damage induced in metallic window materials, D. Hilscher, C.-M. Herbach, U. Jahnke, V. Tishchenko, M. Enke, D. Filges, F. Goldenbaum, R.-D. Neef, K. Nünighoff, N. Paul, H. Schaal, G. Sterzenbach, A. Letourneau, A. Böhm, J. Galin, B. Lott, A. Péghaire and L. Pienkowski 296 (2001) 83
- Correlation of radiation-induced changes in mechanical properties and microstructural development of Alloy 718 irradiated with mixed spectra of high-energy protons and spallation neutrons, B.H. Sencer, G.M. Bond, F.A. Garner, M.L. Hamilton, S.A. Maloy and W.F. Sommer 296 (2001) 145
- Superconductors**
- Effect of size and configuration of 3-point bend bar specimens on *J–R* curves, S. Jitsukawa, A. Naito and J. Segawa 271&272 (1999) 87
- Superconducting transition in Nb₃Ge irradiated by neutrons in the superconducting state, L.S. Topchishvili and T.Sh. Kvirikashvili 271&272 (1999) 502
- Critical current in NbTi wires irradiated by neutrons at 20 K, L.S. Topchishvili and A.I. Naskidashvili 271&272 (1999) 505
- Manufacturing technique of Nb₃Al super-conductive sheet by electrically heated powder rolling, C. Mochizuki and M. Mikami 271&272 (1999) 508
- ITER and beyond 271&272 (1999) 569
- Russian superconducting materials for magnet systems of fusion reactors, A. Shikov, A. Nikulin, V. Pantsyrnyi, A. Vorobieva, G. Vedernikov, A. Silaev, E. Dergunova, S. Soudiev and I. Akimov 283–287 (2000) 968
- Surface Effects**
- Atom transport efficiency in heavy ion irradiated metals, P. Fielitz, V. Naundorf and H. Wollenberger 271&272 (1999) 52
- Radiation processing of powders for improved fusion structural materials, Yu.A. Zaykin, B.A. Aliyev, B.P. Chesnokov and O.A. Kiryushatov 271&272 (1999) 73
- Destination of point defects and microstructural evolution under collision cascade damage, T. Yoshiie and M. Kiritani 271&272 (1999) 296
- Surface morphology and void formation in 316L stainless steel irradiated with high energy C-ions, Z.G. Wang, K.Q. Chen, L.W. Li, C.H. Zhang, J.M. Quan, M.D. Hou, R.H. Xu, F. Ma, Y.F. Jin, C.L. Li and Y.M. Sun 271&272 (1999) 306
- TEM and SEM studies of radiation blistering in helium-implanted copper, P.B. Johnson, R.W. Thomson and K. Reader 273 (1999) 117
- Characterization of Zircaloy-4 oxide layers by impedance spectroscopy, P. Barberis and A. Fricht 273 (1999) 182

- Comprehensive physical models and simulation package for plasma/material interactions during plasma instabilities, A. Hassanein and I. Konkashbaev 273 (1999) 326
- Deposition of lithium on a plasma edge probe in TFTR. Behavior of lithium-painted walls interacting with edge plasmas, Y. Hirooka, K. Ashida, H. Kugel, D. Walsh, W. Wampler, M. Bell, R. Conn, M. Hara, S. Luczkhardt, M. Matsuyama, D. Mansfield, D. Mueller, C. Skinner, T. Walters and K. Watanabe 274 (1999) 320
- Reexamination of the fundamental interactions of water with uranium, W.L. Manner, J.A. Lloyd and M.T. Paffett 275 (1999) 37
- Nitrogen implantation into carbon: retention, release and target-erosion processes, S. Grigull, R. Behrisch and S. Parascandola 275 (1999) 158
- Electrolytic hydrogenation and its isotope effect in Zr and Pd studied by ERDA and SIMS techniques, Y. Oya, T. Suzuki, K. Inuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 275 (1999) 186
- Tritium trapping capacity on metal surface, M. Nishikawa, N. Nakashio, T. Shiraishi, S. Odoi, T. Takeishi and K. Kamimae 277 (2000) 99
- Pitting corrosion of Alloy 690 in thio-sulfate-containing chloride solutions, W.-T. Tsai and T.-F. Wu 277 (2000) 169
- AFM study of the surface deformation of austenitic stainless steel irradiated by He⁺ ions, L. Liu, T. Mitamura, M. Niibe, H. Tsubakino and M. Terasawa 278 (2000) 30
- A study of absorption processes of hydrogen isotopes in some transition metals by LiOD+LiOH mixture electrolysis, Y. Oya, T. Suzuki, K. Inuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 278 (2000) 48
- Ab initio molecular orbital calculations on chemical nature of hydrogen on surface of lithium silicate, T. Nakazawa, K. Yokoyama, V. Grismanovs and Y. Katano 279 (2000) 201
- Comparison of the chemical erosion of Si, C and SiC under deuterium ion bombardment, M. Balden and J. Roth 279 (2000) 351
- XPS study of the process of oxygen getting by thin films of PACVD boron, M.M. Ennaceur and B. Terreault 280 (2000) 33
- New weight-loss measurements of the chemical erosion yields of carbon materials under hydrogen ion bombardment, M. Balden and J. Roth 280 (2000) 39
- Ultra-high vacuum investigation of the surface chemistry of zirconium, Y.C. Kang, M.M. Milovancev, D.A. Clauss, M.A. Lange and R.D. Ramsier 281 (2000) 57
- Measurement of backward sputtering yields induced by fast neutrons, B. Ye, Y. Kasugai, Y. Ikeda, Y. Fan, J. Du, X. Zhou and R. Han 281 (2000) 112
- Dynamic behaviour of the systems Be–C, Be–W and C–W, W. Eckstein 281 (2000) 195
- The status of beryllium technology for fusion, F. Scaffidi-Argentina, G.R. Longhurst, V. Shestakov and H. Kawamura 283–287 (2000) 43
- Critical plasma–wall interaction issues for plasma-facing materials and components in near-term fusion devices, G. Federici, J.P. Coad, A.A. Haasz, G. Janeschitz, N. Noda, V. Philipps, J. Roth, C.H. Skinner, R. Tivey and C.H. Wu 283–287 (2000) 110
- Hydrogen permeation through vanadium alloy V–4Cr–4Ti ‘in situ’ of reactor irradiation, T.V. Kulsartov, V.P. Shestakov, I.L. Tazhibaeva and E.A. Kenzhin 283–287 (2000) 872
- Removal of deuterium from co-deposited carbon–silicon layers, M. Balden and M. Mayer 283–287 (2000) 1057
- The behavior of coatings and SiC_f/SiC composites under thermal shock, J. Yu, Z. Yao, G. Yu, F. Chu, X. Tang, Y. Zeng and T. Noda 283–287 (2000) 1077
- Codeposition of deuterium ions with beryllium oxide at elevated temperatures, A.V. Markin, V.P. Dubkov, A.E. Gorodetsky, M.A. Negodaev, N.V. Rozhanskii, F. Scaffidi-Argentina, H. Werle, C.H. Wu, R.Kh. Zhalvutdinov and A.P. Zakharov 283–287 (2000) 1094
- Sputtering studies of beryllium with helium and deuterium using molecular dynamics approach, S. Ueda, T. Oh-saka and S. Kuwajima 283–287 (2000) 1100
- Erosion mechanisms and products in graphite targets under simulated disruption conditions, F. Scaffidi-Argentina, V. Safronov, I. Arkhipov, N. Arkhipov, V. Bakhtin, V. Barsuk, S. Kurkin, E. Mironova, D. Toporkov, S. Vasenin, H. Werle, H. Würz and A. Zhitlukhin 283–287 (2000) 1111
- Development of functionally graded plasma-facing materials, C.-C. Ge, J.-T. Li, Z.-J. Zhou, W.-B. Cao, W.-P. Shen, M.-X. Wang, N.-M. Zhang, X. Liu and Z.-Y. Xu 283–287 (2000) 1116
- Erosion characteristics of neutron-irradiated carbon-based materials under simulated disruption heat loads,

- K. Sato, E. Ishitsuka, M. Uda, H. Kawamura, S. Suzuki, M. Taniguchi, K. Ezato and M. Akiba 283–287 (2000) 1157
- Hydrodynamic effects of eroded materials of plasma-facing component during a Tokamak disruption, A. Hassanein and I. Konkashbaev 283–287 (2000) 1171
- Structure of materials deposited on the plasma facing surface in TRIAM-1M tokamak and the effect on hydrogen recycling, T. Hirai, T. Fujiwara, K. Tokunaga, N. Yoshida, A. Komori, O. Motojima, S. Itoh and TRIAM group 283–287 (2000) 1177
- Simulation study of carbon and tungsten deposition on W/C twin test limiter in TEXTOR-94, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, B. Schweer, A. Huber, M. Rubel, J. von Seggern and N. Noda 283–287 (2000) 1182
- The oxidation kinetics of Incoloy 800 and its deuterium permeation behavior, A. Perujo, J. Reimann, H. Feuerstein and B. Mancinelli 283–287 (2000) 1292
- Effects of thin films on inventory, permeation and re-emission of energetic hydrogen, N. Ohyabu, Y. Nakamura, Y. Nakahara, A. Livshits, V. Alimov, A. Busnyuk, M. Notkin, A. Samartsev and A. Doroshin 283–287 (2000) 1297
- XPS and UPS studies on electronic structure of Li_2O , S. Tanaka, M. Taniguchi and H. Tanigawa 283–287 (2000) 1405
- O_2 erosion of graphite tile substrates, J.W. Davis, C.G. Hamilton and A.A. Haasz 288 (2001) 148
- XPS characterization of beryllium carbide thin films formed via plasma deposition, Y. Xie, N.C. Morosoff and W.J. James 289 (2001) 48
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Mechanism of the chemical erosion of SiC under hydrogen irradiation, M. Balden, S. Picarle and J. Roth 290–293 (2001) 47
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. Garcia-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Membrane bias effects on plasma-driven permeation of hydrogen through niobium membrane, A. Busnyuk, Y. Nakamura, Y. Nakahara, H. Suzuki, N. Ohyabu and A. Livshits 290–293 (2001) 57
- Mixed-material coating formation on tungsten surfaces during plasma exposure in TEXTOR-94, D. Hildebrandt, P. Wienhold and W. Schneider 290–293 (2001) 89
- Attenuation of secondary electron emission from divertor plates due to magnetic field inclination, Yu. Igitkhanov and G. Janeschitz 290–293 (2001) 99
- Work function change of first wall candidate metals due to ion beam irradiation, G.-N Luo, K. Yamaguchi, T. Terai and M. Yamawaki 290–293 (2001) 116
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Energy distributions of CD_4 and CD_3 chemically released from graphite by D^+ and D^0/Ne^+ impact, E. Vietzke 290–293 (2001) 158
- Implantation, erosion, and retention of tungsten in carbon, R.A. Zuhr, J. Roth, W. Eckstein, U. von Toussaint and J. Luthin 290–293 (2001) 162
- Chemical erosion of doped graphites for fusion devices, C. Garcia-Rosales and M. Balden 290–293 (2001) 173
- Experimental study of lithium target under high power load, B.I. Khripunov, V.B. Petrov, V.V. Shapkin, A.S. Pleshakov, A.S. Rupyshev, N.V. Antonov, A.M. Litnovsky, P.V. Romanov, Yu.S. Shpansky, V.A. Evtikhin, I.E. Lyublinsky and A.V. Vertkov 290–293 (2001) 201
- Simulation calculations of mutual contamination between tungsten and carbon and its impact on plasma surface interactions, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, A. Huber, M. Rubel, G. Sergienko and N. Noda 290–293 (2001) 303
- Some problems arising due to plasma-surface interaction for operation of the in-vessel mirrors in a fusion reactor, V.S. Voitsenya, A.F. Bardamid, V.N. Bondarenko, W. Jacob, V.G. Konovalov, S. Masuzaki, O. Motojima, D.V. Orlinskij, V.L. Popperenko, I.V. Ryzhkov, A. Sagara, A.F. Shtan, S.I. Solodovchenko and M.V. Vinnichenko 290–293 (2001) 336
- In situ measurement of hydrogen retention in JET carbon tiles, D.D.R. Summers, M.N.A. Beurskens, J.P. Coad, G. Counsell, W. Fundamenski, G.F. Matthews and M.F. Stamp 290–293 (2001) 496
- Influence of hydrogen surface coverage on atomic particle reflection, I. Takagi, Y. Koga, H. Fujita and K. Higashi 290–293 (2001) 501
- Study of brittle destruction and erosion mechanisms of carbon-based materials during plasma instabilities, T. Burtseva, A. Hassanein, I. Ovchinnikov and V. Titov 290–293 (2001) 1059

- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Experimental study of radiation power flux on the target surface during high heat plasma irradiation, V.N. Litunovskiy, I.B. Ovchinnikov and V.A. Titov 290–293 (2001) 1112
- X-ray photoelectron spectroscopy on uranium oxides: a comparison between bulk and thin layers, S. Van den Berghe, F. Miserque, T. Gouder, B. Gaudreau and M. Verwerft 294 (2001) 168
- Study of surface modification of uranium and UFe₂ by various surface analysis techniques, O. Bonino, O. Dugne, C. Merlet, E. Gat, Ph. Holliger and M. Lahaye 294 (2001) 305
- Simulation of the implantation of recoils and displacement production in the 316 stainless steel mercury-container vessel at SNS, Y. Zheng, M.S. Wechsler, D.J. Dudziak, J.D. Hunn and L.K. Mansur 296 (2001) 61
- Role and properties of the gel formed during nuclear glass alteration: importance of gel formation conditions, S. Gin, I. Ribet and M. Couillard 298 (2001) 1
- Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling, E. Vernaz, S. Gin, C. Jégou and I. Ribet 298 (2001) 27
- Glass dissolution: testing and modeling for long-term behavior, D.M. Strachan 298 (2001) 69
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- First-order dissolution rate law and the role of surface layers in glass performance assessment, B. Grambow and R. Müller 298 (2001) 112
- Waste glass behavior in a loamy soil of a wet repository site, M.I. Ojovan, N.V. Ojovan, I.V. Startceva, G.N. Tchuikova, Z.I. Golubeva and A.S. Barinov 298 (2001) 174
- A comparison of HLW-glass and PWR-borate waste glass, S. Luo, J. Sheng and B. Tang 298 (2001) 180
- Effect of a siliceous additive on aqueous alteration of waste glass with engineered barrier materials, S. Mitsui and R. Aoki 298 (2001) 184
- In-depth distributions of elements in leached layers on two HLW waste glasses after burial in clay; step-scan by SIMS, A. Lodding and P. Van Iseghem 298 (2001) 197
- In situ Raman spectroscopic investigation of zirconium–niobium alloy corrosion under hydrothermal conditions, J.E. Maslar, W.S. Hurst, W.J. Bowers and J.H. Hendricks 298 (2001) 239
- Use of UO₂ films for electrochemical studies, F. Miserque, T. Gouder, D.H. Wegen and P.D.W. Bottomley 298 (2001) 280
- Thermal conductivities of irradiated UO₂ and (U, Gd)O₂ pellets, M. Amaya, M. Hirai, H. Sakurai, K. Ito, M. Sasaki, T. Nomata, K. Kamimura and R. Iwasaki 300 (2002) 57
- Aqueous corrosion of lanthanum aluminosilicate glasses: influence of inorganic anions, L. Bois, N. Barré, M.J. Guittet, S. Guillopé, P. Trocellier, M. Gautier-Soyer, P. Verdier and Y. Laurent 300 (2002) 141
- Swelling**
- Contribution to irradiation creep arising from gas-driven bubble growth, C.H. Woo and F.A. Garner 271&272 (1999) 78
- An analysis of void swelling dose dependence in ion irradiated V–Fe alloys, V.A. Pechenkin, Yu.V. Kono-beev, S.I. Rudnev and G.A. Epov 271&272 (1999) 266
- The effect of the solute atomic size on the swelling of vanadium alloys, V.A. Borodin and A.I. Ryazanov 271&272 (1999) 270
- Microstructural evolution and radiation stability of steels and alloys, V.N. Voyevodin, I.M. Neklyudov, V.V. Bryk and O.V. Borodin 271&272 (1999) 290
- Surface morphology and void formation in 316L stainless steel irradiated with high energy C-ions, Z.G. Wang, K.Q. Chen, L.W. Li, C.H. Zhang, J.M. Quan, M.D. Hou, R.H. Xu, F. Ma, Y.F. Jin, C.L. Li and Y.M. Sun 271&272 (1999) 306
- Theory of gas bubble nucleation in supersaturated solution of vacancies, interstitials and gas atoms, A.E. Volkov and A.I. Ryazanov 273 (1999) 155
- Irradiation swelling of explosively shocked materials, V.M. Kosenkov, A.V. Kolesnikov and S.A. Vorobjev 273 (1999) 228
- Neutron irradiation of polycrystalline yttrium aluminate garnet, magnesium aluminate spinel and α -alumina., E.A.C. Neeft, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, R.P.C. Schram, A. van Veen and R. Conrad 274 (1999) 78

- Influence of high-dose Kr^+ irradiation on structural evolution and swelling of 16Cr–15Ni–3Mo–1Ti aging steel, V.V. Sagaradze, S.S. Lapin, M.A. Kirk and B.N. Goshchitskii 274 (1999) 287
- Influence of isothermal and cyclic annealing on structure and swelling of neutron-irradiated beryllium, D.V. Andreev, V.N. Bespalov, A.Yu. Biryukov and E.A. Krasikov 274 (1999) 329
- Comments on 'Thermal treatment of uranium oxide irradiated in pressurized water reactor: swelling and release of fission gases' by I. Zacharie, S. Lansiart, P. Combette, M. Trotabas, M. Coster and M. Groos, J.H. Evans 275 (1999) 108
- The behaviour of control rod absorber under irradiation, J. Bourgoin, F. Couvreur, D. Gosset, F. Defoort, M. Monchanin and X. Thibault 275 (1999) 296
- Comparison of swelling and irradiation creep behavior of fcc-austenitic and bcc-ferritic/martensitic alloys at high neutron exposure, F.A. Garner, M.B. Toloczko and B.H. Sencer 276 (2000) 123
- Modelling intergranular fuel swelling in severe accidents, N. Kourti and I. Shepherd 277 (2000) 37
- AFM study of the surface deformation of austenitic stainless steel irradiated by He^+ ions, L. Liu, T. Mitamura, M. Niibe, H. Tsubakino and M. Terasawa 278 (2000) 30
- Recovery characteristics of neutron-irradiated V–Ti alloys, T. Leguey and R. Pareja 279 (2000) 216
- Analysis of fission gas release and gaseous swelling in UO_2 fuel under the effect of external restraint, Y.-H. Koo, B.-H. Lee and D.-S. Sohn 280 (2000) 86
- Kinetics of gas bubble ensemble in supersaturated solid solution of point defects and gas atoms, R.E. Voskoboinikov and A.E. Volkov 282 (2000) 66
- The effects of long-time irradiation and thermal aging on 304 stainless steel, T.R. Allen, J.I. Cole, C.L. Trybus and D.L. Porter 282 (2000) 171
- Progress in modelling the microstructural evolution in metals under cascade damage conditions, H. Trinkaus, B.N. Singh and S.I. Golubov 283–287 (2000) 89
- Influence of cold work to increase swelling of pure iron irradiated in the BR-10 reactor to ~ 6 and ~ 25 dpa at ~ 400 °C, A.M. Dvoriashin, S.I. Porollo, Yu.V. Konobeev and F.A. Garner 283–287 (2000) 157
- Compositional and temperature dependence of void swelling in model Fe–Cr base alloys irradiated in the EBR-II fast reactor, B.H. Sencer and F.A. Garner 283–287 (2000) 164
- Effect of temperature gradients on void formation in modified 316 stainless steel cladding, N. Akasaka, I. Yamagata and S. Ukai 283–287 (2000) 169
- The effect of alloying elements on the defect structural evolution in neutron irradiated Ni alloys, T. Yoshiie, Q. Xu, Y. Satoh, H. Ohkubo and M. Kiritani 283–287 (2000) 229
- Void swelling and irradiation creep of two high-nickel steels after irradiation at 400–410 °C to 84–91 dpa in the BN-350 fast reactor, S.I. Porollo, A.M. Dvoriashin, A.N. Vorobjev, Yu.V. Konobeev, V.M. Krigan, E.G. Mironova, N.I. Budykin and F.A. Garner 283–287 (2000) 239
- Microstructural changes of austenitic steels caused by proton irradiation under various conditions, T. Fukuda, M. Sagisaka, Y. Isobe, A. Hasegawa, M. Sato, K. Abe, Y. Nishida, T. Kamada and Y. Kaneshima 283–287 (2000) 263
- Microstructures in Ti–Al intermetallic compounds irradiated at 673 K in HFIR, Y. Miwa, T. Sawai, K. Fukai, D.T. Hoelzer and A. Hishinuma 283–287 (2000) 273
- Microstructure of Cu–Ni alloys neutron irradiated at 210 °C and 420 °C to 14 dpa, S.J. Zinkle and B.N. Singh 283–287 (2000) 306
- Influence of variable temperatures irradiation on microstructural evolution in phosphorus doped Fe–Cr–Ni alloys, D. Hamaguchi, H. Watanabe, T. Muroga and N. Yoshida 283–287 (2000) 319
- Swelling of F82H irradiated at 673 K up to 51 dpa in HFIR, Y. Miwa, E. Wakai, K. Shiba, N. Hashimoto, J.P. Robertson, A.F. Rowcliffe and A. Hishinuma 283–287 (2000) 334
- Swelling, irradiation creep and growth of pure rhenium irradiated with fast neutrons at 1030–1330 °C, F.A. Garner, M.B. Toloczko, L.R. Greenwood, C.R. Eiholzer, M.M. Paxton and R.J. Puigh 283–287 (2000) 380
- Effect of helium production on swelling of F82H irradiated in HFIR, E. Wakai, N. Hashimoto, Y. Miwa, J.P. Robertson, R.L. Klueh, K. Shiba and S. Jistukawa 283–287 (2000) 799
- A comparison of defects in helium implanted α - and β -SiC, P. Jung, H. Klein and J. Chen 283–287 (2000) 806
- Neutron irradiation damage in aluminum oxide and nitride ceramics up to a fluence of 4.2×10^{26} n/m², T. Yano, K. Ichikawa, M. Akiyoshi and Y. Tachi 283–287 (2000) 947

- Mechanical properties of the ITER central solenoid model coil insulation under static and dynamic load after reactor irradiation, K. Humer, P. Rosenkranz, H.W. Weber, P.E. Fabian and J.A. Rice 283–287 (2000) 973
- Rim structure formation of isothermally irradiated UO₂ fuel discs, K. Une, K. Nogita, T. Shiratori and K. Hayashi 288 (2001) 20
- Fission gas release and swelling model of metallic fast reactor fuel, C.B. Lee, D.H. Kim and Y.H. Jung 288 (2001) 29
- Physical property change of heavily neutron-irradiated Si₃N₄ and SiC by thermal annealing, T. Yano, M. Akiyoshi, K. Ichikawa, Y. Tachi and T. Iseki 289 (2001) 102
- Thermodynamic analysis of chemical states of fission products in uranium–zirconium hydride fuel, J. Huang, B. Tsuchiya, K. Konashi and M. Yamawaki 294 (2001) 154
- Pore pressure and swelling in the rim region of LWR high burnup UO₂ fuel, Y.-H. Koo, B.-H. Lee, J.-S. Cheon and D.-S. Sohn 295 (2001) 213
- Theory and Modelling**
- Neutron energy spectrum and temperature effects on freely migrating defect concentrations and grain boundary segregation in α -Fe, R.G. Faulkner, D.J. Bacon, S. Song and P.E.J. Flewitt 271&272 (1999) 1
- A molecular dynamics simulation study of displacement cascades in vanadium, K. Morishita and T. Diaz de la Rubia 271&272 (1999) 35
- Simulation of the kinetics of defect accumulation in copper under neutron irradiation, H.L. Heinisch and B.N. Singh 271&272 (1999) 46
- Contribution to irradiation creep arising from gas-driven bubble growth, C.H. Woo and F.A. Garner 271&272 (1999) 78
- Modelling of dissolution profiles of ordered particles under irradiation, C. Abromeit, E. Camus and S. Matsumura 271&272 (1999) 246
- An analysis of void swelling dose dependence in ion irradiated V–Fe alloys, V.A. Pechenkin, Yu.V. Konobeev, S.I. Rudnev and G.A. Epov 271&272 (1999) 266
- Research progress of fusion materials in CIAE, J. Yu and C. Shan 271&272 (1999) 512
- Modeling and analysis of time-dependent tritium transport in lithium oxide, A. Badawi, A.R. Raffray and M.A. Abdou 273 (1999) 79
- Theory of gas bubble nucleation in supersaturated solution of vacancies, interstitials and gas atoms, A.E. Volkov and A.I. Ryazanov 273 (1999) 155
- Intrinsic hydrogen transport constants in the CFC matrix and fibres derived from isovolumetric desorption experiments, L.A. Sedano, A. Perujo and C.H. Wu 273 (1999) 285
- Application of a linear free energy relationship to crystalline solids of MO₂ and M(OH)₄, H. Xu, Y. Wang and L.L. Barton 273 (1999) 343
- Low temperature yield properties of two 7–9Cr ferritic/martensitic steels, P. Spätig, G.R. Odette and G.E. Lucas 275 (1999) 324
- Kinetic Monte Carlo studies of the effects of Burgers vector changes on the reaction kinetics of one-dimensionally gliding interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 276 (2000) 59
- Stability of ordered phases under irradiation, C. Abromeit, H. Wollenberger, S. Matsumura and C. Kinoshita 276 (2000) 104
- Monte Carlo modelling of damage accumulation in metals under cascade irradiation, A.V. Barashev, D.J. Bacon and S.I. Golubov 276 (2000) 243
- Modelling intergranular fuel swelling in severe accidents, N. Kourti and I. Shepherd 277 (2000) 37
- On the theory of fission gas bubble evolution in irradiated UO₂ fuel, M.S. Veshchunov 277 (2000) 67
- Theory of the late stage of radiolysis of alkali halides, V.I. Dubinko, A.A. Turkin, D.I. Vainshtein and H.W. den Hartog 277 (2000) 184
- An alternative explanation for evidence that xenon depletion, pore formation, and grain subdivision begin at different local burnups, J. Rest and G.L. Hofman 277 (2000) 231
- Theory of edge plasma in a spheromak, E.B. Hooper, R.H. Cohen and D.D. Ryutov 278 (2000) 104
- A model of the threshold stress intensity factor, K_{IH}, for delayed hydride cracking of Zr–2.5Nb alloy, Y.S. Kim, Y.G. Matvienko, Y.M. Cheong, S.S. Kim and S.C. Kwon 278 (2000) 251
- Delayed hydride cracking in zirconium alloys in a temperature gradient, S. Sagat, C.K. Chow, M.P. Puls and C.E. Coleman 279 (2000) 107
- Pyrophoric potential of plutonium-containing salt residues, J.M. Haschke, H.K. Fauske and A.G. Phillips 279 (2000) 127

- A reaction–diffusion analysis of the hydriding kinetics of zirconium-based alloys, G.E. Fernández and G. Meyer 279 (2000) 167
- Ab initio molecular orbital calculations on chemical nature of hydrogen on surface of lithium silicate, T. Nakazawa, K. Yokoyama, V. Grismanovs and Y. Katano 279 (2000) 201
- Simulation of hydrogen embrittlement in zirconium alloys under stress and temperature gradients, A.G. Varias and A.R. Massih 279 (2000) 273
- Numerical algorithms for intragranular fission gas release, K. Lassmann and H. Benk 280 (2000) 127
- Stress tensor of a strained material with a linear row of stress concentrators, R.E. Voskoboinikov 280 (2000) 169
- Modelling the variable precipitation of fission products at grain boundaries, P. Van Uffelen 280 (2000) 275
- Lithium and tritium diffusion in lithium oxide (Li₂O), a molecular dynamics simulation, H. Pfeiffer, J. Sánchez-Sánchez and L.J. Álvarez 280 (2000) 295
- Discrete-variational Dirac-Slater calculations on the valence band XPS for α -uranium metal, M. Kurihara, M. Hirata, R. Sekine, J. Onoe and H. Nakamatsu 281 (2000) 140
- Heavy-ion cascade effects on radiation-induced segregation kinetics in Cu–1%Au alloys, M.J. Giacobbe, N.Q. Lam, L.E. Rehn, P.M. Baldo, L. Funk and J.F. Stubbins 281 (2000) 213
- Effect of partial damage efficiencies on the radiation-induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 282 (2000) 47
- Kinetics of gas bubble ensemble in supersaturated solid solution of point defects and gas atoms, R.E. Voskoboinikov and A.E. Volkov 282 (2000) 66
- RAPID model to predict radial burnup distribution in LWR UO₂ fuel, C.B. Lee, D.H. Kim, J.S. Song, J.G. Bang and Y.H. Jung 282 (2000) 196
- Theoretical oxygen potential change of quaternary solid solution, A_y²⁺B_z³⁺U_{1–y–z}O_{2+x}, by configurational entropy calculation, T. Fujino and N. Sato 282 (2000) 232
- Progress in modelling the microstructural evolution in metals under cascade damage conditions, H. Trinkaus, B.N. Singh and S.I. Golubov 283–287 (2000) 89
- Radiation-induced inter-granular segregation in first wall fusion reactor materials, R.G. Faulkner, S. Song and P.E.J. Flewitt 283–287 (2000) 147
- Sink effect of grain boundary on radiation-induced segregation in austenitic stainless steel, S. Watanabe, Y. Takamatsu, N. Sakaguchi and H. Takahashi 283–287 (2000) 152
- Modeling of microstructure evolution and mechanical property change of reduced-activation martensitic steel during varying-temperature irradiation, R. Kasada and A. Kimura 283–287 (2000) 188
- Computer simulations of the effects of temperature change on defect accumulation in copper during neutron irradiation, Q. Xu, H.L. Heinisch and T. Yoshiie 283–287 (2000) 297
- The effects of one-dimensional glide on the reaction kinetics of interstitial clusters, H.L. Heinisch, B.N. Singh and S.I. Golubov 283–287 (2000) 737
- A molecular dynamics simulation study of small cluster formation and migration in metals, K. Morishita, T. Diaz de la Rubia, E. Alonso, N. Sekimura and N. Yoshida 283–287 (2000) 753
- Modeling of cascade damage interactions by Monte-Carlo method, N. Sekimura, T. Morioka and K. Morishita 283–287 (2000) 758
- Computer simulation of defects interacting with a dislocation in Fe and Ni, E. Kuramoto, K. Ohsawa and T. Tsutsumi 283–287 (2000) 778
- An initial model for the RIED effect, E.R. Hodgson and A. Morono 283–287 (2000) 880
- Evaluation of the deformation fields and bond integrity of Cu/SS joints, J.F. Stubbins, J. Collins and J. Min 283–287 (2000) 982
- Confocal microscopy–fracture reconstruction and finite element modeling characterization of local cleavage toughness in a ferritic/martensitic steel in subsized Charpy V-notch impact tests, T. Yamamoto, G.R. Odette, G.E. Lucas and H. Matsui 283–287 (2000) 992
- In-pile tritium-permeation measurements on T91 tubes with double walls or a Fe–Al/Al₂O₃ coating, R. Conrad, K. Bakker, C. Chabrol, M.A. Fütterer, J.G. van der Laan, E. Rigal and M.P. Stijkel 283–287 (2000) 1351
- Fission gas release and swelling model of metallic fast reactor fuel, C.B. Lee, D.H. Kim and Y.H. Jung 288 (2001) 29
- Cracks as sink of irradiation created point defects, A. Sarce 288 (2001) 130
- Evaluation of chemical erosion data for carbon materials at high ion fluxes using Bayesian probability theory, V. Dose, R. Preuss and J. Roth 288 (2001) 153

- Structural stability of irradiated ceramics, P.M. Ossi 289 (2001) 80
- Attenuation of secondary electron emission from divertor plates due to magnetic field inclination, Yu. Igitkhanov and G. Janeschitz 290–293 (2001) 99
- Carbon erosion mechanisms in tokamak divertor materials: insight from molecular dynamics simulations, E. Salonen, K. Nordlund, J. Keinonen and C.H. Wu 290–293 (2001) 144
- Erosion/redeposition analysis of lithium-based liquid surface divertors, J.N. Brooks, T.D. Rognlien, D.N. Ruzic and J.P. Allain 290–293 (2001) 185
- Modelling of erosion and deposition at limiter surfaces and divertor target plates, A. Kirschner, A. Huber, V. Philipps, A. Pospieszczyk, P. Wienhold and J. Winter 290–293 (2001) 238
- Towards an improved understanding of the relationship between plasma edge and materials issues in a next-step fusion device, G.F. Counsell, J.P. Coad, G. Federici, K. Krieger, V. Philipps, C.H. Skinner and D.G. Whyte 290–293 (2001) 255
- Assessment of erosion and tritium codeposition in ITER-FEAT, G. Federici, J.N. Brooks, D.P. Coster, G. Janeschitz, A. Kukushkin, A. Loarte, H.D. Pacher, J. Stober and C.H. Wu 290–293 (2001) 260
- Simulation calculations of mutual contamination between tungsten and carbon and its impact on plasma surface interactions, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, A. Huber, M. Rubel, G. Sergienko and N. Noda 290–293 (2001) 303
- Interactions between liquid-wall vapor and edge plasmas, T.D. Rognlien and M.E. Rensink 290–293 (2001) 312
- Investigation of carbon transport in the scrape-off layer of TEXTOR-94, P. Wienhold, H.G. Esser, D. Hildebrandt, A. Kirschner, M. Mayer, V. Philipps and M. Rubel 290–293 (2001) 362
- Hydrogen molecules in the divertor of ASDEX Upgrade, U. Fantz, D. Reiter, B. Heger and D. Coster 290–293 (2001) 367
- Reversal of in–out asymmetry of the particle-recycling associated with X-point MARFE and plasma detachment, A. Hatayama, H. Segawa, N. Komatsu, R. Schneider, D.P. Coster, N. Hayashi, S. Sakurai and N. Asakura 290–293 (2001) 407
- Modeling of wall recycling effects on the global particle balance in magnetic fusion devices, Y. Hirooka, S. Masuzaki, H. Suzuki, T. Kenmotsu and T. Kawamura 290–293 (2001) 423
- Origins and spatial distributions of core fueling in the DIII-D tokamak, L.W. Owen, R.J. Colchin, R. Maingi, M.E. Fenstermacher, T.N. Carlstrom and R.J. Groebner 290–293 (2001) 464
- Interpretation of SOL flows and target asymmetries in JET using EDGE2D code calculations, A.V. Chankin, G. Corrigan, S.K. Erents, G.F. Matthews, J. Spence and P.C. Stangeby 290–293 (2001) 518
- W7-X edge modelling with the 3D SOL fluid code BoRiS, M. Borchardt, J. Riemann, R. Schneider and X. Bonnin 290–293 (2001) 546
- Study of the relation between density and temperature fall-off lengths in a detached divertor plasma, K. Borrass 290–293 (2001) 551
- Extension of the B2 code towards the plasma core for a self-consistent simulation of ASDEX upgrade scenarios, H. Bürbaumer, R. Neu, R. Schneider, D. Coster, J. Stober, F. Aumayr and H.P. Winter 290–293 (2001) 571
- Analysis of SOL behaviour in JET MkIIIGB using an advanced onion-skin solver (OSM2), W. Fundamenski, S.K. Erents, G.F. Matthews, A.V. Chankin, V. Riccardo, P.C. Stangeby and J.D. Elder 290–293 (2001) 593
- Calculation of 2D profiles for the plasma and electric field in the boundary layer of the TEXTOR-94 Tokamak, H. Gerhauser, R. Zagórski, H.A. Claassen and M. Lehnen 290–293 (2001) 609
- On the validity of collisional–radiative models, P.T. Greenland 290–293 (2001) 615
- Effect of limiter recycling on measured poloidal impurity emission profiles in Tore Supra, J. Hogan, C. DeMichelis, P. Monier-Garbet, M. Becoulet, C. Bush, P. Ghendrih, R. Guirlet, W. Hess, M. Mattioli and J.C. Vallet 290–293 (2001) 628
- ASDEX-Upgrade edge transport scalings from the two-dimensional interpretative code B2.5-I, J.-W. Kim, D.P. Coster, J. Neuhauser, R. Schneider and ASDEX Upgrade Team 290–293 (2001) 644
- Explorative studies for the development of fast He beam plasma diagnostics, S. Menhart, M. Proschek, H.-D. Falter, H. Anderson, H. Summers, A. Staebler, P. Franzen, H. Meister, J. Schweinzer, T.T.C. Jones, S. Cox, N. Hawkes, F. Aumayr and H.P. Winter 290–293 (2001) 673
- Island divertor in a helical-axis heliotron device (Heliotron J), T. Mizuuchi, M. Nakasuga, F. Sano, Y. Nakamura, K. Nagasaki, H. Okada, K. Kondo and T. Obiki 290–293 (2001) 678

- Particle flows in pumped DIII-D discharges, G.D. Porter, T.D. Rognlien, M.E. Rensink, N.S. Wolf and W.P. West 290–293 (2001) 692
- Simulation of power and particle flows in the NSTX edge plasma, M.E. Rensink, H. Kugel, R. Maingi, F. Paoletti, G.D. Porter, T.D. Rognlien, S. Sabbagh and X. Xu 290–293 (2001) 706
- Modeling of tokamak edge plasma for discharges with neutral beam injection, V. Rozhansky, S. Voskoboynikov, E. Kovaltsova, D. Coster and R. Schneider 290–293 (2001) 710
- Kinetic simulation of a source dominated plasma–wall interaction in an oblique magnetic field, D. Sharma and H. Ramachandran 290–293 (2001) 725
- Self-consistent description of the core and boundary plasma in the high-field ignition experiment, R. Stankiewicz and R. Zagórski 290–293 (2001) 738
- Particle simulation of detached plasma in the presence of diffusive particle loss and radiative energy loss, T. Takizuka, M. Hosokawa and K. Shimizu 290–293 (2001) 753
- Comparison of Langmuir probe and Thomson scattering measurements in DIII-D, J.G. Watkins, P. Stangeby, J.A. Boedo, T.N. Carlstrom, C.J. Lasnier, R.A. Moyer, D.L. Rudakov and D.G. Whyte 290–293 (2001) 778
- Modeling of carbon transport in the divertor and SOL of DIII-D during high performance plasma operation, W.P. West, G.D. Porter, T.E. Evans, P. Stangeby, N.H. Brooks, M.E. Fenstermacher, R.C. Isler, T.D. Rognlien, M.R. Wade, D.G. Whyte and N.S. Wolf 290–293 (2001) 783
- Numerical simulation of hydrogen molecular dissociation and the effects to H α profiles in low temperature plasmas, B. Xiao, S. Kado, K. Kobayashi and S. Tanaka 290–293 (2001) 793
- Multi-machine modelling of divertor geometry effects, A. Loarte 290–293 (2001) 805
- Electric fields and currents in an island divertor configuration, X. Bonnin, R. Schneider, D. Coster, V. Rozhansky and S. Voskoboynikov 290–293 (2001) 829
- B2–EIRENE modelling of He compression and enrichment, D.P. Coster, H.-S. Bosch, W. Ullrich and ASDEX Upgrade Team 290–293 (2001) 845
- Tore Supra divertor screening efficiency during density regime experiments, C. Grisolia, Ph. Ghendrih, J. Gunn, T. Loarer, P. Monier-Garbet, C. De Michelis, L. Costanzo and J.Y. Pascal 290–293 (2001) 863
- Critical issues in divertor optimisation for ITER–FEAT, A.S. Kukushkin, G. Janeschitz, A. Loarte, H.D. Pacher, D. Coster, D. Reiter and R. Schneider 290–293 (2001) 887
- Divertor geometry effects on detachment in TCV, R.A. Pitts, B.P. Duval, A. Loarte, J.-M. Moret, J.A. Boedo, D. Coster, I. Furno, J. Horacek, A.S. Kukushkin, D. Reiter, J. Rommers and TCV Team 290–293 (2001) 940
- Helium compression analysis for ASDEX Upgrade with fluid and kinetic codes, D. Reiser, R. Schneider, D. Coster, W. Ullrich and H.S. Bosch 290–293 (2001) 953
- Modeling of Alcator C-Mod divertor baffling experiments, D.P. Stotler, C.S. Pitcher, C.J. Boswell, T.K. Chung, B. LaBombard, B. Lipschultz, J.L. Terry and R.J. Kanzleiter 290–293 (2001) 967
- Characterisation of the separatrix position in the ergodic divertor discharges of the Tore Supra tokamak, M. Zabiégo, P. Ghendrih, M. Bécoulet, L. Costanzo, C. De Michelis, C. Friant and J. Gunn 290–293 (2001) 985
- Non-axisymmetric perturbation of the plasma surface in RFX: analysis of magnetic data versus CCD images of plasma–wall interaction, P. Zanca, D. Bettella, S. Martini and M. Valisa 290–293 (2001) 990
- Self-shadowing, gaps and leading edges on Tore Supra’s inner first wall, R. Mitteau, Ph. Chappuis, Ph. Ghendrih, A. Grosman, D. Guilhem, J. Gunn, J. Hogan, M. Lipa, G. Martin, J. Schlosser and E. Tsitrone 290–293 (2001) 1036
- Macroscopic erosion of plasma facing and nearby components during plasma instabilities: the droplet shielding phenomenon, A. Hassanein and I. Konkashbaev 290–293 (2001) 1074
- Heat and particle fluxes from collisionless scrape-off-layer during tokamak plasma disruptions, A. Hassanein, I. Konkashbaev and L. Nikandrov 290–293 (2001) 1079
- Cloud drifts over eroding surfaces in magnetic field configurations with three field components, P. Lalouis, R. Schneider and L.L. Lengyel 290–293 (2001) 1084
- Combined sheath and thermal analysis of overheated surfaces in fusion devices, D. Naujoks and J.N. Brooks 290–293 (2001) 1123
- An investigation of the Pu migration phenomena during irradiation in fast reactor, T. Ishii and T. Asaga 294 (2001) 13
- Fission gas release and volume diffusion enthalpy in UO₂ irradiated at low and high burnup, J.P. Hiernaut and C. Ronchi 294 (2001) 39

- The modelling of fuel volatilisation in accident conditions, H. Manenc, P.K. Mason and M.P. Kissane 294 (2001) 64
- Temperature-dependence of defect creation and clustering by displacement cascades in α -zirconium, F. Gao, D.J. Bacon, L.M. Howe and C.B. So 294 (2001) 288
- Multi-component gas transport in the fuel-to-clad gap of candu fuel rods during severe accidents, B. Szpunar, B.J. Lewis, V.I. Arimescu, R.S. Dickson and L.W. Dickson 294 (2001) 315
- The effects of moisture on LiD single crystals studied by temperature-programmed decomposition, L.N. Dinh, C.M. Cecala, J.H. Leckey and M. Balooch 295 (2001) 193
- Effect of defect sink strengths on the radiation induced segregation in binary alloys, M.V. Sorokin and A.E. Volkov 295 (2001) 290
- Multiscale modeling of radiation damage: applications to damage production by GeV proton irradiation of Cu and W, and pulsed irradiation effects in Cu and Fe, M.J. Caturla, T. Diaz de la Rubia, M. Victoria, R.K. Corzine, M.R. James and G.A. Greene 296 (2001) 90
- Does pulsing in spallation neutron sources affect radiation damage? H. Trinkaus and H. Ullmaier 296 (2001) 101
- New techniques for modelling glass dissolution, M. Aertsens and D. Ghaleb 298 (2001) 37
- Near-field performance assessment for a low-activity waste glass disposal system: laboratory testing to modeling results, B.P. McGrail, D.H. Bacon, J.P. Icenhower, F.M. Mann, R.J. Puigh, H.T. Schaefer and S.V. Mattigod 298 (2001) 95
- First-order dissolution rate law and the role of surface layers in glass performance assessment, B. Grambow and R. Müller 298 (2001) 112
- Performance assessment of the disposal of vitrified high-level waste in a clay layer, D. Mallants, J. Marivoet and X. Sillen 298 (2001) 125
- Numerical modelling of glass dissolution: gel layer morphology, F. Devreux and P. Barboux 298 (2001) 145
- Torsion texture development of zirconium alloys, P. Sanchez, A. Pochettino, T. Chauveau and B. Bacroix 298 (2001) 329
- Active control of oxygen in molten lead–bismuth eutectic systems to prevent steel corrosion and coolant contamination, N. Li 300 (2002) 73
- Thermal Reactor Materials**
- Post-irradiation thermocyclic loading of ferritic–martensitic structural materials, L. Belyaeva, A. Orychtchenko, C. Petersen and V. Rybin 271&272 (1999) 151
- Concepts for an inert matrix fuel, an overview, C. Degueldre and J.M. Paratte 274 (1999) 1
- Reactor physics aspects of plutonium burning in inert matrix fuels, J.L. Kloosterman and P.M.G. Damen 274 (1999) 112
- Validation efforts for the neutronics of a plutonium–erbium–zirconium oxide inert matrix light water reactor fuel, J.M. Paratte, R. Chawla, R. Früh, O.P. Joneja, S. Pelloni and C. Pralong 274 (1999) 120
- Core design study on rock-like oxide fuel light water reactor and improvements of core characteristics, H. Akie, H. Takano and Y. Anoda 274 (1999) 139
- Conceptual studies for pressurised water reactor cores employing plutonium–erbium–zirconium oxide inert matrix fuel assemblies, A. Stanculescu, U. Kasemeyer, J.-M. Paratte and R. Chawla 274 (1999) 146
- Neutronic analysis of U-free inert matrix and thoria fuels for plutonium disposition in pressurised water reactors, C. Lombardi, A. Mazzola, E. Padovani and M.E. Ricotti 274 (1999) 181
- Effect of rhenium and osmium on mechanical properties of a 9Cr–2W–0.25V–0.07Ta–0.1C steel, R.L. Klueh, D.J. Alexander and M.A. Sokolov 279 (2000) 91
- Comparison of nuclear irradiation parameters of fusion breeder materials in high flux fission test reactors and a fusion power demonstration reactor, U. Fischer, S. Herring, A. Hogenbirk, D. Leichte, Y. Nagao, B.J. Pijlgroms and A. Ying 280 (2000) 151
- A fracture mechanics analysis of the PWR nuclear power plant reactor pressure vessel beltline weld, L.-j. Young 288 (2001) 197
- Multi-component gas transport in the fuel-to-clad gap of candu fuel rods during severe accidents, B. Szpunar, B.J. Lewis, V.I. Arimescu, R.S. Dickson and L.W. Dickson 294 (2001) 315
- Thermal Shock**
- Development of a reaction-sintered silicon carbide matrix composite, A. Sayano, C. Sutoh, S. Suyama, Y. Itoh and S. Nakagawa 271&272 (1999) 467
- The behavior of coatings and SiC_f/SiC composites under thermal shock,

- J. Yu, Z. Yao, G. Yu, F. Chu, X. Tang, Y. Zeng and T. Noda 283–287 (2000) 1077
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Changes of composition and microstructure of joint interface of tungsten coated carbon by high heat flux, K. Tokunaga, T. Matsubara, Y. Miyamoto, Y. Takao, N. Yoshida, N. Noda, Y. Kubota, T. Sogabe, T. Kato and L. Plöchl 283–287 (2000) 1121
- High heat flux simulation experiments with improved electron beam diagnostics, J. Linke, H. Bolt, R. Duwe, W. Kühnlein, A. Lodato, M. Rödiger, K. Schöpflin and B. Wiechers 283–287 (2000) 1152
- Behaviour of Li_2ZrO_3 and Li_2TiO_3 pebbles relevant to their utilization as ceramic breeder for the HCPB blanket, J.D. Lulewicz, N. Roux, G. Piazza, J. Reimann and J. van der Laan 283–287 (2000) 1361
- Solid-state reaction between tungsten and hydrogen-containing carbon film at elevated temperature, K. Ashida, K. Fujino, T. Okabe, M. Matsuyama and K. Watanabe 290–293 (2001) 42
- Material degradation and particle formation under transient thermal loads, J. Linke, M. Akiba, R. Duwe, A. Lodato, H.-J. Penkalla, M. Rödiger and K. Schöpflin 290–293 (2001) 1102
- Performance of the different tungsten grades under fusion relevant power loads, A. Makhankov, V. Barabash, I. Mazul and D. Youchison 290–293 (2001) 1117
- Vertical target and FW erosion during off-normal events and impurity production and transport during ELMs typical for ITER-FEAT, H. Würz, S. Pestchanyi, B. Bazylev, I. Landman and F. Kappler 290–293 (2001) 1138
- Thermodynamic Properties**
- Kohler solution model for prediction of activities of constituent metals in austenitic steels and other iso-structural alloys and a comparison with experimental data, H.P. Nawada and O.M. Sreedharan 273 (1999) 37
- Semi-empirical models of actinide alloying, J.K. Gibson, R.G. Haire and T. Ogawa 273 (1999) 139
- Determination of the solidus temperatures of Zircaloy-4/oxygen alloys, P.J. Hayward and I.M. George 273 (1999) 294
- Vaporization study on lanthanum–neodymium alloys by mass-spectrometry, Y. Shoji and T. Matsui 273 (1999) 310
- Application of a linear free energy relationship to crystalline solids of MO_2 and $\text{M}(\text{OH})_4$, H. Xu, Y. Wang and L. L. Barton 273 (1999) 343
- Transmutation of actinides in inert-matrix fuels: fabrication studies and modelling of fuel behaviour, R.J.M. Konings, K. Bakker, J.G. Boshoven, H. Hein, M.E. Huntelaar and R.R. van der Laan 274 (1999) 84
- Design study of an irradiation experiment with inert matrix and mixed-oxide fuel at the Halden boiling water reactor, U. Kasemeyer, H.-K. Joo and G. Ledergerber 274 (1999) 160
- Modeling the solubility of zirconia in a repository for high-level radioactive waste, E. Curti and W. Hummel 274 (1999) 189
- Thermochemistry of binary Na–NaH and ternary Na–O–H systems and the kinetics of reaction of hydrogen/water with liquid sodium – a review, T. Gnanasekaran 274 (1999) 252
- Gibbs energy of formation of barium thorate (BaThO_3) by reactive carrier gas technique, S.R. Bharadwaj, R. Mishra, M. Ali (Basu), D. Das, A.S. Kerkar and S.R. Dharwadkar 275 (1999) 201
- Determination of thermodynamic stability of CrSbO_4 using oxide solid electrolyte, K. Swaminathan and O.M. Sreedharan 275 (1999) 225
- Volatilization of urania in steam at elevated temperatures, K. Hashizume, W.-E. Wang and D.R. Olander 275 (1999) 277
- A thermodynamic database for zirconium alloys, N. Dupin, I. Ansara, C. Servant, C. Toffolon, C. Lemaignan and J.C. Brachet 275 (1999) 287
- Vaporization behavior of NpN coloaded with PuN, K. Nakajima, Y. Arai and Y. Suzuki 275 (1999) 332
- Gibbs energy of formation of $\text{UPd}_3(\text{s})$, R. Prasad, S. Dash, S.C. Parida, Z. Singh and V. Venugopal 277 (2000) 45
- Thermal conductivity of hypostoichiometric low Pu content $(\text{U,Pu})\text{O}_{2-x}$ mixed oxide, C. Duriez, J.-P. Alessandri, T. Gervais and Y. Philipponneau 277 (2000) 143
- Systematics of the thermodynamic properties of trivalent f-elements in a pyrometallurgical bi-phase extraction system, H. Yamana, N. Wakayama, N. Souda and H. Moriyama 278 (2000) 37
- Temperature programmed decomposition of thorium nitrate pentahydrate, S. Dash, M. Kamruddin, P.K. Ajikumar, A.K. Tyagi, B. Raj, S. Bera and S.V. Narasimhan 278 (2000) 173

- Thermophysical properties of uranium dioxide, J.K. Fink 279 (2000) 1
- Calorimetric studies on the strontium–uranium–oxygen system, S. Dash, Z. Singh, R. Prasad and V. Venugopal 279 (2000) 84
- A thermodynamic evaluation of the U–O system from UO_2 to U_3O_8 , Y.S. Kim 279 (2000) 173
- Volatile molecule PuO_3 observed from subliming plutonium dioxide, C. Ronchi, F. Capone, J.Y. Colle and J.P. Hiernaut 280 (2000) 111
- Thermodynamic modelling of the N–U system, P.-Y. Chevalier, E. Fischer and B. Cheynet 280 (2000) 136
- Kinetic and thermodynamic study of the thorium phosphate–diphosphate dissolution, A.C. Thomas, N. Dacheux, P. Le Coustumer, V. Brandel and M. Genet 281 (2000) 91
- Henrian ideality of iron in liquid uranium solvent at high temperatures, D. Das, A.S. Kerkar, S.R. Bharadwaj, S. Mukherjee and S.R. Dharwadkar 281 (2000) 203
- A new method for determining oxygen solubility in molten carbonates and carbonate–chloride mixtures using the oxidation of UO_2 to uranate reaction, V.A. Volkovich, T.R. Griffiths, D.J. Fray and R.C. Thied 282 (2000) 152
- Theoretical oxygen potential change of quaternary solid solution, $\text{A}_y\text{B}_z^{2+\text{B}_z^{3+}}\text{U}_{1-y-z}\text{O}_{2+x}$, by configurational entropy calculation, T. Fujino and N. Sato 282 (2000) 232
- Vaporization behavior and Gibbs energy of formation of Cs_2ThO_3 , M. Ali (Basu), R. Mishra, K.N.G. Kaimal, S.R. Bharadwaj, A.S. Kerkar, D. Das and S.R. Dharwadkar 282 (2000) 261
- Computational study of plutonium–neodymium fluorobriholite $\text{Ca}_9\text{Nd}_{0.5}\text{Pu}_{0.5}(\text{SiO}_4)(\text{PO}_4)_5\text{F}_2$ thermodynamic properties, C. Meis 289 (2001) 167
- Gibbs energy of formation of $\text{Ba}(\text{OH})_2$ vapor species using the transpiration technique, M. Ali (Basu), R. Mishra, A.S. Kerkar, S.R. Bharadwaj and D. Das 289 (2001) 243
- Oxygen potential and defect structure of the solid solution, Mg–Gd–UO_2 , T. Fujino, N. Sato, K. Yamada, M. Okazaki, K. Fukuda, H. Serizawa and T. Shiratori 289 (2001) 270
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Heat capacity measurements on unirradiated and irradiated fuel pellets, M. Amaya, K. Une and K. Minato 294 (2001) 1
- Phase equilibria in the $\text{UO}_2\text{–PuO}_2$ system under a temperature gradient, H. Kleykamp 294 (2001) 8
- An investigation of the Pu migration phenomena during irradiation in fast reactor, T. Ishii and T. Asaga 294 (2001) 13
- Thermochemical data and modelling for ex-vessel corium behaviour during a severe accident, E.H.P. Cordfunke, M.E. Huntelaar, F. Funke, M.K. Koch, Ch. Kortz, P.K. Mason, M.A. Mignanelli and M.S. Newland 294 (2001) 18
- Thermodynamic systematics of the formation of liquid alloys of f-elements with bismuth, H. Yamana, J. Sheng, K. Kawamoto and H. Moriyama 294 (2001) 53
- High-temperature, Knudsen cell-mass spectroscopic studies on lanthanum oxide/uranium dioxide solid solutions, S. Sunder, R. McEachern and J.C. LeBlanc 294 (2001) 59
- Vaporization chemistry of hypo-stoichiometric $(\text{U}, \text{Pu})\text{O}_2$, R. Viswanathan and M.V. Krishnaiah 294 (2001) 69
- Thermodynamic study of liquid lithium–lead alloys using the EMF method, W. Gasior and Z. Moser 294 (2001) 77
- Mass spectrometric study of $\text{UO}_2\text{–ZrO}_2$ pseudo-binary system, M. Baichi, C. Chatillon, C. Guèneau and S. Chatain 294 (2001) 84
- Selected thermal properties of beryllium and phase equilibria in beryllium systems relevant for nuclear fusion reactor blankets, H. Kleykamp 294 (2001) 88
- Thermal properties of zirconium hydride, S. Yamanaka, K. Yamada, K. Kurosaki, M. Uno, K. Takeda, H. Anada, T. Matsuda and S. Kobayashi 294 (2001) 94
- Thermodynamics of $(\text{Mg}, \text{Ce}, \text{U})\text{O}_{2+x}$ ($x \geq 0$) solid solutions, T. Fujino, K. Park, N. Sato and M. Yamada 294 (2001) 104
- Thermodynamic studies on ThGa_2 , B. Prabhakara Reddy, R. Kandan, R. Babu, K. Nagarajan and P.R. Vasudeva Rao 294 (2001) 112
- Some properties of a lead vanadoapatite $\text{Pb}_{10}(\text{VO}_4)_6\text{I}_2$, M. Uno, M. Shinohara, K. Kurosaki and S. Yamanaka 294 (2001) 119
- Enthalpy and heat capacity of $(\text{Ca}_{1-x}\text{Pu}_x)\text{TiO}_3$ ($x = 0$ and 0.20), T. Sato, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 135
- Thermodynamic analysis of chemical states of fission products in uranium–zirconium hydride fuel, J. Huang, B. Tsuchiya, K. Konashi and M. Yamawaki 294 (2001) 154

- Molecular dynamics study of mixed oxide fuel, K. Kurosaki, K. Yamada, M. Uno, S. Yamanaka, K. Yamamoto and T. Namekawa 294 (2001) 160
- Application of a new thermochemical measurement method for nuclear materials at temperatures beyond 3000 K, J.W. Hastie, D.W. Bonnell and P.K. Schenck 294 (2001) 175
- Thermodynamic and mechanical properties of $Ce_{1-x}Hf_xO_2$ ($x = 0-0.10$) solid solutions, N. Nakajima, H. Mitani, Y. Yamamura and T. Tsuji 294 (2001) 188
- Thermodynamic properties of lanthanide metals in liquid bismuth, H. Yamana, J. Sheng, N. Souda and H. Moriyama 294 (2001) 232
- Mass-spectrometric investigation of $UO_3(g)$, K. Nakajima and Y. Arai 294 (2001) 250
- Estimation of the standard entropies of some Am(III) and Cm(III) compounds, R.J.M. Konings 295 (2001) 57
- Enthalpy and Gibbs energy of formation of lanthanum dicarbide, R. Vidhya, M.P. Antony, P.R. Vasudeva Rao and B. Viswanathan 295 (2001) 221
- Enthalpy and Gibbs energy of formation of neodymium dicarbide, R. Vidhya, M.P. Antony, P.R. Vasudeva Rao and B. Viswanathan 295 (2001) 228
- Enthalpy, heat capacity and enthalpy of transformation of Li_2TiO_3 , H. Kleykamp 295 (2001) 244
- Thermochemical and thermophysical properties of curium and its oxides, R.J.M. Konings 298 (2001) 255
- Active control of oxygen in molten lead-bismuth eutectic systems to prevent steel corrosion and coolant contamination, N. Li 300 (2002) 73
- Thermodynamic stability of Na_2ZrO_3 using the solid electrolyte galvanic cell technique, R. Subasri, T. Mathews, K. Swaminathan and O.M. Sreedharan 300 (2002) 237
- Redox condition in molten fluoride salts
Definition and control, D. Olander 300 (2002) 270
- Thermomechanical Treatment**
- Amplitude dependent damping study in austenitic stainless steels 316H and 304H. Its relation with the microstructure, G.I. Zelada-Lambri, O.A. Lambri and G.H. Rubiolo 273 (1999) 248
- Influence of prior thermal ageing on tensile deformation and fracture behaviour of forged thick section 9Cr-1Mo ferritic steel, B.K. Choudhary, K. Bhanu Sankara Rao, S.L. Manian and B.P. Kashyap 273 (1999) 315
- Modification of microstructure and the alligating damage in a modified 9Cr-1Mo steel, R. Kishore and T.K. Sinha 273 (1999) 334
- In situ purification, alloying and casting methodology for metallic plutonium, J.C. Lashley, M.S. Blau, K.P. Staudhammer and R.A. Pereyra 274 (1999) 315
- Influence of thermomechanical treatment on the corrosion behavior of Zr-1Nb-0.2Cu alloys, J.M. Kim and Y.H. Jeong 275 (1999) 74
- A new ternary compound in the Zr-Sn-Fe system, N. Nieva and D. Arias 277 (2000) 120
- Microstructural aspects of Zircaloy nodular corrosion in steam, D.F. Taylor 277 (2000) 295
- The effect of amorphization on the Cs ion exchange and retention capacity of zeolite-NaY, B.X. Gu, L.M. Wang and R.C. Ewing 278 (2000) 64
- Nitrogen effect on precipitation and sensitization in cold-worked Type 316L(N) stainless steels, Y. Oh and J. Hong 278 (2000) 242
- High temperature fatigue behaviour of TZM molybdenum alloy under mechanical and thermomechanical cyclic loads, H.J. Shi, L.S. Niu, C. Korn and G. Pluvinage 278 (2000) 328
- Microstructure of welded and thermal-aged low activation steel F82H IEA heat, T. Sawai, K. Shiba and A. Hishinuma 283-287 (2000) 657
- Effect of thermal aging on the microstructure and mechanical properties of 7-11 CrW steels, Y. de Carlan, A. Alamo, M.H. Mathon, G. Geoffroy and A. Castaing 283-287 (2000) 672
- Tube manufacturing and characterization of oxide dispersion strengthened ferritic steels, S. Ukai, S. Mizuta, T. Yoshitake, T. Okuda, M. Fujiwara, S. Hagi and T. Kobayashi 283-287 (2000) 702
- Water corrosion of F82H-modified in simulated irradiation conditions by heat treatment, J. Lapeña and F. Blázquez 283-287 (2000) 1341
- The corrosion of Alloy 690 in high-temperature aqueous media – thermodynamic considerations, R.J. Lemire and G.A. McRae 294 (2001) 141
- Oxidation and its effects on the mechanical properties of Nb-1Zr, J.R. DiStefano and L.D. Chitwood 295 (2001) 42
- Thermophysical Properties**
- Thermophysical properties of rock-like oxide fuel with spinel-yttria stabilized zirconia system, N. Nitani, T. Yamashita, T. Matsuda, S.-i. Kobayashi and T. Ohmichi 274 (1999) 15

- Materials research on inert matrices: a screening study, H.J. Matzke, V.V. Rondinella and T. Wiss 274 (1999) 47
- Design study of an irradiation experiment with inert matrix and mixed-oxide fuel at the Halden boiling water reactor, U. Kasemeyer, H.-K. Joo and G. Ledergerber 274 (1999) 160
- Thermal studies on alkaline earth uranates, S.K. Sali, S. Sampath and V. Venugopal 277 (2000) 106
- Thermal conductivity of ThO_2 and $\text{Th}_{0.98}\text{U}_{0.02}\text{O}_2$, C.G.S. Pillai and P. Raj 277 (2000) 116
- Thermophysical properties of uranium dioxide, J.K. Fink 279 (2000) 1
- On the recovery of the physical and mechanical properties of a CuCrZr alloy subjected to heat treatments simulating the thermal cycle of hot isostatic pressing, U. Holzwarth, M. Pisoni, R. Scholz, H. Stamm and A. Volcan 279 (2000) 19
- Calorimetric studies on the strontium–uranium–oxygen system, S. Dash, Z. Singh, R. Prasad and V. Venugopal 279 (2000) 84
- Combustion synthesis and bulk thermal expansion studies of Ba and Sr thorates, R.D. Purohit, A.K. Tyagi, M.D. Mathews and S. Saha 280 (2000) 51
- Simultaneous determination of X-ray Debye temperature and Grüneisen constant for actinide dioxides: PuO_2 and ThO_2 , H. Serizawa, Y. Arai and Y. Suzuki 280 (2000) 99
- Bulk and lattice thermal expansion of $\text{Th}_{1-x}\text{Ce}_x\text{O}_2$, M.D. Mathews, B.R. Ambekar and A.K. Tyagi 280 (2000) 246
- Combustion synthesis and thermal expansion measurements of the rare earth–uranium ternary oxides $\text{RE}_6\text{UO}_{12}$ (RE=La, Nd and Sm), H. Jena, R. Asuvathraman and K.V. Govindan Kutty 280 (2000) 312
- Studies on thermal expansion and XPS of urania–thoria solid solutions, S. Anthonysamy, G. Panneerselvam, S. Bera, S.V. Narasimhan and P.R. Vasudeva Rao 281 (2000) 15
- A method for determining an effective porosity correction factor for thermal conductivity in fast reactor uranium–plutonium oxide fuel pellets, M. Inoue, K. Abe and I. Sato 281 (2000) 117
- Thermal conductivity of uranium–plutonium oxide fuel for fast reactors, M. Inoue 282 (2000) 186
- In situ thermal conductivity measurement of ceramics in a fast neutron environment, L.L. Snead, R. Yamada, K. Noda, Y. Katoh, S.J. Zinkle, W.S. Eatherly and A.L. Qualls 283–287 (2000) 545
- Room and high-temperature mechanical and thermal properties of SiC fiber-reinforced SiC composite sintered under pressure, K. Yoshida and T. Yano 283–287 (2000) 560
- High thermal conductivity SiC/SiC composites for fusion applications, W. Kowbel, C.A. Bruce, K.L. Tsou, K. Patel, J.C. Withers and G.E. Youngblood 283–287 (2000) 570
- Mechanical and thermal properties of 2D and 3D SiC/SiC composites, R. Yamada, T. Taguchi and N. Igawa 283–287 (2000) 574
- Thermomechanical characteristics of the low activation materials chromium and Cr-5Fe-1Y₂O₃ alloy, H. Stamm, U. Holzwarth, F. Lakestani, R. Valiev, V. Provenzano and A. Volcan 283–287 (2000) 597
- Study of helium effects in SiC/SiC composites under fusion reactor environment, A. Hasegawa, B.M. Oliver, S. Nogami, K. Abe and R.H. Jones 283–287 (2000) 811
- Effect of neutron irradiation on thermal diffusivity of tungsten–rhenium alloys, M. Fujitsuka, B. Tsuchiya, I. Mutoh, T. Tanabe and T. Shikama 283–287 (2000) 1148
- Development of materials and fabrication of porous and pebble bed beryllium multipliers, D.A. Davydov, M.I. Solonin, Yu.E. Markushkin, V.A. Gorokhov, V.V. Gorlevsky and G.N. Nikolaev 283–287 (2000) 1409
- Thermal conductivities of irradiated UO_2 and $(\text{U,Gd})\text{O}_2$, K. Minato, T. Shiratori, H. Serizawa, K. Hayashi, K. Ue, K. Nogita, M. Hirai and M. Amaya 288 (2001) 57
- Physical properties of thorium oxalate powders and their influence on the thermal decomposition, E. Oktay and A. Yayli 288 (2001) 76
- Bulk thermal expansion studies of $\text{Th}_{1-x}\text{Ce}_x\text{O}_2$ in the complete solid solution range, M.D. Mathews, B.R. Ambekar and A.K. Tyagi 288 (2001) 83
- Thermal conductivity of U_3O_8 from 300 to 1100 K, C.G.S. Pillai, A.K. Dua and P. Raj 288 (2001) 87
- Thermodynamic modelling of the C–U and B–U binary systems, P.Y. Chevalier and E. Fischer 288 (2001) 100
- Thermophysical properties of zirconium hydride and uranium–zirconium hydride, B. Tsuchiya, J. Huang, K. Konashi, M. Teshigawara and M. Yamawaki 289 (2001) 329
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M.

- Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- Heat capacity measurements on unirradiated and irradiated fuel pellets, M. Amaya, K. Une and K. Minato 294 (2001) 1
- Thermal properties of hydride fuel 45% U–ZrH_{1.6}, K. Kakiuchi, N. Itagaki, T. Furuya, T. Hattori, Y. Nakazono, F. Ono, K. Yamaguchi and M. Yamawaki 294 (2001) 28
- Thermal properties of zirconium hydride, S. Yamanaka, K. Yamada, K. Kurosaki, M. Uno, K. Takeda, H. Anada, T. Matsuda and S. Kobayashi 294 (2001) 94
- Thermophysical properties of BaUO₃, S. Yamanaka, K. Kurosaki, T. Matsuda and M. Uno 294 (2001) 99
- Thermal properties of Mo₃Te₄, K. Kurosaki, A. Kosuga, M. Uno and S. Yamanaka 294 (2001) 179
- Thermal expansion and solubility limits of plutonium-doped lanthanum zirconates, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 183
- Thermodynamic and mechanical properties of Ce_{1-x}Hf_xO₂ (x = 0–0.10) solid solutions, N. Nakajima, H. Mitani, Y. Yamamura and T. Tsuji 294 (2001) 188
- Thermal conductivity of (U,Ce)O₂ with and without Nd or Zr, K. Kurosaki, R. Ohshima, M. Uno, S. Yamanaka, K. Yamamoto and T. Namekawa 294 (2001) 193
- Solubility limits and bulk thermal expansion of ThO₂:Mⁿ⁺ (M=Y³⁺, Sr²⁺ and Ba²⁺), A.K. Tyagi, M.D. Mathews and R. Ramachandran 294 (2001) 198
- Thermochemical and thermophysical properties of curium and its oxides, R.J.M. Konings 298 (2001) 255
- Thermal conductivities of irradiated UO₂ and (U, Gd)O₂ pellets, M. Amaya, M. Hirai, H. Sakurai, K. Ito, M. Sasaki, T. Nomata, K. Kamimura and R. Iwasaki 300 (2002) 57
- Mechanical and thermomechanical properties of commercially pure chromium and chromium alloys, U. Holzwarth and H. Stamm 300 (2002) 161
- Thorium, Thorium Alloys and Compounds**
- Preliminary fabrication and characterisation of inert matrix and thoria fuels for plutonium disposition in light water reactors, F. Vettraino, G. Magnani, T.L. Torretta, E. Marmo, S. Coelli, L. Luzzi, P. Ossi and G. Zappa 274 (1999) 23
- Neutronic analysis of U-free inert matrix and thoria fuels for plutonium disposition in pressurised water reactors, C. Lombardi, A. Mazzola, E. Padovani and M.E. Ricotti 274 (1999) 181
- Modeling the solubility of zirconia in a repository for high-level radioactive waste, E. Curti and W. Hummel 274 (1999) 189
- Gibbs energy of formation of barium thorate (BaThO₃) by reactive carrier gas technique, S.R. Bharadwaj, R. Mishra, M. Ali(Basu), D. Das, A.S. Kerkar and S.R. Dharwadkar 275 (1999) 201
- Thermal conductivity of ThO₂ and Th_{0.98}U_{0.02}O₂, C.G.S. Pillai and P. Raj 277 (2000) 116
- Thermal expansion of ThO₂ 2 wt% UO₂ by HT-XRD, A.K. Tyagi and M.D. Mathews 278 (2000) 123
- Temperature programmed decomposition of thorium nitrate pentahydrate, S. Dash, M. Kamruddin, P.K. Ajikumar, A.K. Tyagi, B. Raj, S. Bera and S.V. Narasimhan 278 (2000) 173
- Combustion synthesis of urania–thoria solid solutions, S. Anthonysamy, K. Ananthasivan, V. Chandramouli, I. Kaliappan and P.R. Vasudeva Rao 278 (2000) 346
- XPS and XRD studies of (Th,U)O₂ fuel corrosion in water, S. Sunder and N.H. Miller 279 (2000) 118
- Studies on the kinetics of oxidation of urania–thoria solid solutions in air, S. Anthonysamy, K. Joseph, T. Gnanasekaran and P.R. Vasudeva Rao 280 (2000) 25
- Combustion synthesis and bulk thermal expansion studies of Ba and Sr thorates, R.D. Purohit, A.K. Tyagi, M.D. Mathews and S. Saha 280 (2000) 51
- Simultaneous determination of X-ray Debye temperature and Grüneisen constant for actinide dioxides: PuO₂ and ThO₂, H. Serizawa, Y. Arai and Y. Suzuki 280 (2000) 99
- Bulk and lattice thermal expansion of Th_{1-x}Ce_xO₂, M.D. Mathews, B.R. Ambekar and A.K. Tyagi 280 (2000) 246
- Studies on thermal expansion and XPS of urania–thoria solid solutions, S. Anthonysamy, G. Panneerselvam, S. Bera, S.V. Narasimhan and P.R. Vasudeva Rao 281 (2000) 15
- Kinetic and thermodynamic study of the thorium phosphate–diphosphate dissolution, A.C. Thomas, N. Dacheux, P. Le Coustumer, V. Brandel and M. Genet 281 (2000) 91
- Kinetics of thermal decomposition of Th(C₂O₄)₂·6H₂O, K. Joseph, R. Sridharan and T. Gnanasekaran 281 (2000) 129
- Solid state reactions of UO₂, ThO₂ and their mixed oxides with sulphates of potassium, M. Keskar, U.M. Kasar and K.D. Singh Mudher 282 (2000) 146

- Long-term behaviour of a thorium-based fuel, B. Fourest, T. Vincent, G. Lagarde, S. Hubert and P. Baudoin 282 (2000) 180
- Vaporization behavior and Gibbs energy of formation of Cs_2ThO_3 , M. Ali (Basu), R. Mishra, K.N.G. Kaimal, S.R. Bharadwaj, A.S. Kerker, D. Das and S.R. Dharwadkar 282 (2000) 261
- Nanocrystalline thoria powders via glycine-nitrate combustion, R.D. Purohit, S. Saha and A.K. Tyagi 288 (2001) 7
- Physical properties of thorium oxalate powders and their influence on the thermal decomposition, E. Oktay and A. Yayli 288 (2001) 76
- Bulk thermal expansion studies of $\text{Th}_{1-x}\text{Ce}_x\text{O}_2$ in the complete solid solution range, M.D. Mathews, B.R. Ambekar and A.K. Tyagi 288 (2001) 83
- Preliminary study of irradiation effects on thorium phosphate-diphosphate, E. Pichot, N. Dacheux, J. Emery, J. Chaumont, V. Brandel and M. Genet 289 (2001) 219
- Solubility limits and bulk thermal expansion of $\text{ThO}_2:\text{M}^{n+}$ ($\text{M}=\text{Y}^{3+}$, Sr^{2+} and Ba^{2+}), A.K. Tyagi, M.D. Mathews and R. Ramachandran 294 (2001) 198
- Preparation of homogeneous $(\text{Th}_{0.8}\text{U}_{0.2})\text{O}_2$ powders by mechanical blending of $\text{Th}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$ and $\text{U}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$ powders, Y. Altaş, M. Eral and H. Tel 294 (2001) 344
- Preparation of 15 mol% $\text{YO}_{1.5}$ -doped ThO_2 disk electrolytes by a polymeric gel-combustion method, S. Arul Antony, K.S. Nagaraja and O.M. Sreedharan 295 (2001) 189
- Kinetic and thermodynamic studies of the dissolution of thorium–uranium (IV) phosphate–diphosphate solid solutions, A.C. Thomas, N. Dacheux, P. Le Coustumer, V. Brandel and M. Genet 295 (2001) 249
- Temperature programmed decomposition of thorium oxalate hexahydrate, S. Dash, R. Krishnan, M. Kamrudin, A.K. Tyagi and B. Raj 295 (2001) 281
- Structural and thermal investigations on cerium oxalate and derived oxide powders for the preparation of $(\text{Th,Ce})\text{O}_2$ pellets, Y. Altaş and H. Tel 298 (2001) 316
- Thoria doped with cations of group VB—synthesis and sintering, K. Ananthasivan, S. Anthonsamy, C. Sudha, A.L.E. Terrance and P.R. Vasudeva Rao 300 (2002) 217
- Titanium, Titanium Alloys and Compounds**
- High-resolution electron microscopy of γ -TiAl irradiated with 15 keV helium ions at room temperature, M. Song, K. Furuya, T. Tanabe and T. Noda 271&272 (1999) 200
- Influence of neutron irradiation on deformability and fracture micro-mechanisms of titanium α -alloys, O.A. Kozhevnikov, E.V. Nesterova, V.V. Rybin and I.I. Yarmolovich 271&272 (1999) 472
- Silicon carbide as an inert-matrix for a thermal reactor fuel, R.A. Verrall, M.D. Vljajic and V.D. Krstic 274 (1999) 54
- Determination of displacement threshold energies in pure Ti and in γ -TiAl alloys by electron irradiation, G. Sattonnay, F. Rullier-Albenque and O. Dimitrov 275 (1999) 63
- A study of absorption processes of hydrogen isotopes in some transition metals by $\text{LiOD} + \text{LiOH}$ mixture electrolysis, Y. Oya, T. Suzuki, K. Iinuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 278 (2000) 48
- Preparation and characterization of PuN pellets containing ZrN and TiN, Y. Arai and K. Nakajima 281 (2000) 244
- Role of α_2/γ and γ/γ phase boundaries in cavity formation in a TiAl intermetallic compound irradiated with He-ions, K. Nakata, K. Fukai, A. Hishinuma and K. Ameyama 283–287 (2000) 278
- Tensile and fatigue properties of two titanium alloys as candidate materials for fusion reactors, P. Marmy, T. Leguey, I. Belianov and M. Victoria 283–287 (2000) 602
- The Sn–Ti–Zr system: equilibrium phases at 900 °C, S.F. Aricó and L.M. Griboaldo 288 (2001) 217
- Alpha-decay damage and aqueous durability of actinide host phases in natural systems, G.R. Lumpkin 289 (2001) 136
- Optical emission due to ionic displacements in alkaline earth titanates, R. Cooper, K.L. Smith, M. Colella, E.R. Vance and M. Phillips 289 (2001) 199
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstraß 290–293 (2001) 25
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Stability of SiC/SiC fibre composites exposed to Li_4SiO_4 and Li_2TiO_3 in fusion relevant conditions, A. La Barbera, B. Riccardi, A. Donato, C.A. Nannetti and L.F. Moreschi 294 (2001) 223
- Impact of irradiation on the tensile and fatigue properties of two titanium alloys, P. Marmy and T. Leguey 296 (2001) 155
- Tritium and Tritides**
- Observation of spatial distribution of tritium in zirconium alloy with microautoradiography, K. Isobe, Y.

- Hatano, M. Sugisaki, T. Hayashi, M. Nishi and K. Okuno 271&272 (1999) 326
- Development of tritium permeation barriers on Al base in Europe, G. Benamati, C. Chabrol, A. Perujo, E. Rigal and H. Glasbrenner 271&272 (1999) 391
- Properties of lithium metatitanate pebbles produced by a wet process, J.G. van der Laan and R.P. Muis 271&272 (1999) 401
- Hydrogen isotope retention in beryllium for tokamak plasma-facing applications, R.A. Anderl, R.A. Causey, J.W. Davis, R.P. Doerner, G. Federici, A.A. Haasz, G.R. Longhurst, W.R. Wampler and K.L. Wilson 273 (1999) 1
- Hydrogen isotope permeation through and inventory in the first wall of the water cooled Pb–17Li blanket for DEMO, O.V. Ogorodnikova, M.A. Fütterer, E. Serra, G. Benamati, J.-F. Salavy and G. Aiello 273 (1999) 66
- Modeling and analysis of time-dependent tritium transport in lithium oxide, A. Badawi, A.R. Raffray and M.A. Abdou 273 (1999) 79
- Evaluation and mitigation of tritium memory in detritiation dryers, C. Malara, I. Ricapito, R.A.H. Edwards and F. Toci 273 (1999) 203
- Tritium trapping capacity on metal surface, M. Nishikawa, N. Nakashio, T. Shiraiishi, S. Odoi, T. Takeishi and K. Kamimae 277 (2000) 99
- TEM study of the aging of palladium-based alloys during tritium storage, S. Thiébaud, B. Décamps, J.M. Pénisson, B. Limacher and A. Percheron Guégan 277 (2000) 217
- Retention and release of deuterium implanted in copper coatings on Al-6061, M.Y. Inal, M. Alam, K. Kurz, D.F. Cowgill and R.A. Causey 278 (2000) 164
- Tritium profiles in tiles from the first wall of fusion machines and techniques for their detritiation, R.-D. Penzhorn, N. Bekris, W. Hellriegel, H.-E. Noppel, W. Nägele, H. Ziegler, R. Rolli, H. Werle, A. Haigh and A. Peacock 279 (2000) 139
- Tritium diffusive transport parameters and trapping effects in the reduced activating martensitic steel OPTIFER-IVb, G.A. Esteban, A. Perujo, K. Douglas and L.A. Sedano 281 (2000) 34
- Performance of a Li_2TiO_3 pebble-bed in the CRITIC-III irradiation, R.A. Verrall, J.M. Miller and P. Gierszewski 281 (2000) 71
- Critical plasma-wall interaction issues for plasma-facing materials and components in near-term fusion devices, G. Federici, J.P. Coad, A.A. Haasz, G. Janeschitz, N. Noda, V. Philipps, J. Roth, C.H. Skinner, R. Tivey and C.H. Wu 283–287 (2000) 110
- The interaction of deuterium and tritium with radiation and other defects in austenitic steel and nickel, V.L. Arbusov, G.A. Raspopova, S.E. Danilov, A.P. Druzhkov and Yu.N. Zouev 283–287 (2000) 849
- Heavy hydrogen isotopes penetration through austenitic and martensitic steels, Yu. Dolinski, I. Lyasota, A. Shestakov, Yu. Repritsev and Yu. Zouev 283–287 (2000) 854
- Tritium permeation experiment using a tungsten armored divertor-simulating module, H. Nakamura, S. O'hira, W. Shu, M. Nishi, T.J. Venhaus, R.A. Causey, D.R. Hyatt and R.S. Willms 283–287 (2000) 1043
- Depth profile of tritium in plasma exposed CX-2002U, T. Tadokoro, K. Isobe, S. O'hira, W. Shu and M. Nishi 283–287 (2000) 1048
- Tungsten filament mock-ups for gas box liner, C. Cazzola, J. Boscardy and R. Matera 283–287 (2000) 1073
- The permeation of tritium through 316L stainless steel with multiple coatings, Z. Yao, J. Hao, C. Zhou, C. Shan and J. Yu 283–287 (2000) 1287
- Scale structure of aluminised Manet steel after HIP treatment, H. Glasbrenner, K. Stein-Fechner and J. Konys 283–287 (2000) 1302
- Behaviour of Li_2ZrO_3 and Li_2TiO_3 pebbles relevant to their utilization as ceramic breeder for the HCPB blanket, J.D. Lulewicz, N. Roux, G. Piazza, J. Reimann and J. van der Laan 283–287 (2000) 1361
- Effects of helium production and radiation damage on tritium release behavior of neutron-irradiated beryllium pebbles, E. Ishitsuka, H. Kawamura, T. Terai and S. Tanaka 283–287 (2000) 1401
- Improvement of the model for surface process of tritium release from lithium oxide, D. Yamaki, A. Iwamoto and S. Jitsukawa 283–287 (2000) 1414
- Tritium release from neutron-irradiated Li_2O sintered pellets: porosity dependence, T. Tanifuji, D. Yamaki, T. Takahashi and A. Iwamoto 283–287 (2000) 1419
- Materials and fabrication technology of modules intended for irradiation tests of blanket tritium-breeding zones in Russian fusion reactor projects, V. Kapychev, D. Davydov, V. Gorokhov, A. Ioltukhovskiy, Yu. Kazennov, V. Tebus, V. Frolov, A. Shikov, N. Shishkov, V. Kovalenko, N. Shishkin and Yu. Strebkov 283–287 (2000) 1429

- O₂ erosion of graphite tile substrates, J.W. Davis, C.G. Hamilton and A.A. Haasz 288 (2001) 148
- Tritium depth profiles in graphite and carbon fibre composite material exposed to tokamak plasmas, R.-D. Penzhorn, N. Bekris, U. Berndt, J.P. Coad, H. Ziegler and W. Nägele 288 (2001) 170
- Lithium titanate pebbles reprocessing by wet chemistry, C. Alvani, P.L. Carconi, S. Casadio, V. Contini, A. Di-bartolomeo, F. Pierdominici, A. Deptula, S. Lagos and C.A. Nannetti 289 (2001) 303
- Tritium retention in neutron-irradiated low-Z materials for use as plasma facing materials, F. Scaffidi-Argentina, C. Sand and C.H. Wu 290–293 (2001) 211
- Assessment of erosion and tritium codeposition in ITER-FEAT, G. Federici, J.N. Brooks, D.P. Coster, G. Janeschitz, A. Kukushkin, A. Loarte, H.D. Pacher, J. Stober and C.H. Wu 290–293 (2001) 260
- Comparison of hydrogen and tritium uptake and retention in JET, D.L. Hillis, J. Hogan, J.P. Coad, G. Duxbury, M. Groth, H.Y. Guo, L. Horton, G. Matthews, A. Meigs, P. Morgan, M. Stamp and M. von Hellermann 290–293 (2001) 418
- Nondestructive measurement of surface tritium by β -ray induced X-ray spectrometry (BIXS), M. Matsuyama, T. Tanabe, N. Noda, V. Philipps, K.H. Finken and K. Watanabe 290–293 (2001) 437
- Tritium detection in plasma facing component by imaging plate technique, K. Miyasaka, T. Tanabe, G. Mank, K.H. Finken, V. Philipps, D.S. Walsh, K. Nishizawa and T. Saze 290–293 (2001) 448
- A study of tritium decontamination of deposits by UV irradiation, Y. Oya, W. Shu, S. O'hira, T. Hayashi, H. Nakamura, T. Sakai, T. Tadokoro, K. Kobayashi, T. Suzuki and M. Nishi 290–293 (2001) 469
- Tritium decontamination of TFTR carbon tiles employing ultra violet light, W.M. Shu, S. Ohira, C.A. Gentile, Y. Oya, H. Nakamura, T. Hayashi, Y. Iwai, Y. Kawamura, S. Konishi, M.F. Nishi and K.M. Young 290–293 (2001) 482
- Studies of tritiated co-deposited layers in TFTR, C.H. Skinner, C.A. Gentile, G. Ascione, A. Carpe, R.A. Causey, T. Hayashi, J. Hogan, S. Langish, M. Nishi, W.M. Shu, W.R. Wampler and K.M. Young 290–293 (2001) 486
- Behavior of tungsten exposed to high fluences of low energy hydrogen isotopes, T. Venhaus, R. Causey, R. Doerner and T. Abeln 290–293 (2001) 505
- Radioactive dust levitation and its consequences for fusion devices, J. Winter, V.E. Fortov and A.P. Nefedov 290–293 (2001) 509
- Hydrogen isotope retention and recycling in fusion reactor plasma-facing components, R.A. Causey 300 (2002) 91
- The effect of coatings on deuterium retention and permeation in aluminum 6061-T6 APT tritium production tubes, K.L. Hertz, R.A. Causey and D.F. Cowgill 300 (2002) 255
- Tungsten, Tungsten Alloys and Compounds**
- Microstructure and impact properties of ultra-fine grained tungsten alloys dispersed with TiC, Y. Kitsunai, H. Kurishita, H. Kayano, Y. Hiraoka, T. Igarashi and T. Takida 271&272 (1999) 423
- Phase diagram and lattice instability in tungsten-rhenium alloys, M. Ekman, K. Persson and G. Grimvall 278 (2000) 273
- Dynamic behaviour of the systems Be–C, Be–W and C–W, W. Eckstein 281 (2000) 195
- Retention of ion-implanted deuterium in tungsten pre-irradiated with carbon ions, V.Kh. Alimov, K. Ertl, J. Roth and K. Schmid 282 (2000) 125
- Assessment and selection of materials for ITER in-vessel components, G. Kalinin, V. Barabash, A. Cardella, J. Dietz, K. Ioki, R. Matera, R.T. Santoro, R. Tivey and The ITER Home Teams 283–287 (2000) 10
- Neutron irradiation effects on plasma facing materials, V. Barabash, G. Federici, M. Rödiger, L.L. Snead and C.H. Wu 283–287 (2000) 138
- Neutron wall loading of Tokamak reactors, C.P.C. Wong 283–287 (2000) 588
- High-sensitivity quadrupole mass spectrometry system for the determination of hydrogen in irradiated materials, B.M. Oliver, F.A. Garner, L.R. Greenwood and J.A. Abrefah 283–287 (2000) 1006
- Hydrogen and deuterium transport and inventory parameters through W and W-alloys for fusion reactor applications, G. Benamati, E. Serra and C.H. Wu 283–287 (2000) 1033
- Deuterium retention in tungsten and molybdenum, S. Nagata and K. Takahiro 283–287 (2000) 1038
- Tritium permeation experiment using a tungsten armored divertor-simulating module, H. Nakamura, S. O'hira, W. Shu, M. Nishi, T.J. Venhaus, R.A. Causey, D.R. Hyatt and R.S. Willms 283–287 (2000) 1043
- Effect of carbon pre-implantation on deuterium retention in tungsten, M. Poon, J.W. Davis and A.A. Haasz 283–287 (2000) 1062

- Tungsten filament mock-ups for gas box liner, C. Cazzola, J. Boscarly and R. Matera 283–287 (2000) 1073
- Infrared characterization and high heat flux testing of plasma sprayed layers, Ph. Chappuis, F. Escourbiac, M. Chantant, M. Febvre, M. Grattarola, M. Bet, M. Merola and B. Riccardi 283–287 (2000) 1081
- The removal of ion implanted deuterium from tungsten and stainless steel by transferred-arc cleaning, K.J. Hollis, R.G. Castro, C.J. Maggiore and A. Ayala 283–287 (2000) 1085
- Graphite–tungsten twin limiters in studies of material mixing processes on high heat flux components, M. Rubel, T. Tanabe, V. Philipps, B. Emmoth, A. Kirschner, J. von Seggern and P. Wienhold 283–287 (2000) 1089
- Effects of plasma disruption events on ITER first wall materials, A. Cardella, H. Gorenflo, A. Lodato, K. Ioki and R. Raffray 283–287 (2000) 1105
- Changes of composition and microstructure of joint interface of tungsten coated carbon by high heat flux, K. Tokunaga, T. Matsubara, Y. Miyamoto, Y. Takao, N. Yoshida, N. Noda, Y. Kubota, T. Sogabe, T. Kato and L. Plöchl 283–287 (2000) 1121
- Application of tungsten for plasma limiters in TEXTOR, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, M. Rubel, A. Huber, J. von Seggern, K. Ohya, A. Pospieszczyk, B. Schweer and TEXTOR team 283–287 (2000) 1128
- Microstructure evolution in tungsten during low-energy helium ion irradiation, H. Iwakiri, K. Yasunaga, K. Morishita and N. Yoshida 283–287 (2000) 1134
- TEM study on deuterium-irradiation-induced defects in tungsten and molybdenum, T. Matsui, S. Muto and T. Tanabe 283–287 (2000) 1139
- Microstructural development of neutron irradiated W–Re alloys, Y. Nemoto, A. Hasegawa, M. Satou and K. Abe 283–287 (2000) 1144
- Effect of neutron irradiation on thermal diffusivity of tungsten–rhenium alloys, M. Fujitsuka, B. Tsuchiya, I. Mutoh, T. Tanabe and T. Shikama 283–287 (2000) 1148
- High heat flux simulation experiments with improved electron beam diagnostics, J. Linke, H. Bolt, R. Duwe, W. Kühnlein, A. Lodato, M. Rödiger, K. Schöpflin and B. Wiechers 283–287 (2000) 1152
- Simulation study of carbon and tungsten deposition on W/C twin test limiter in TEXTOR-94, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, B. Schweer, A. Huber, M. Rubel, J. von Seggern and N. Noda 283–287 (2000) 1182
- Armor and heat sink materials joining technologies development for ITER plasma facing components, V. Barabash, M. Akiba, A. Cardella, I. Mazul, B.C. Odegard Jr., L. Ploechl, R. Tivey and G. Vieider 283–287 (2000) 1248
- Refractory metal joining for first wall applications, C.H. Cadden and B.C. Odegard Jr. 283–287 (2000) 1253
- ITER structural design criteria and their extension to advanced reactor blankets, S. Majumdar and G. Kalinin 283–287 (2000) 1424
- The effects of tungsten addition on the microstructural stability of 9Cr–Mo Steels, S.G. Hong, W.B. Lee and C.G. Park 288 (2001) 202
- Mixed material formation and erosion, Ch. Linsmeier, J. Luthin and P. Goldstrab 290–293 (2001) 25
- Deuterium retention in W, W1%La, C-coated W and W₂C, R.A. Anderl, R.J. Pawelko and S.T. Schuetz 290–293 (2001) 38
- Solid-state reaction between tungsten and hydrogen-containing carbon film at elevated temperature, K. Ashida, K. Fujino, T. Okabe, M. Matsuyama and K. Watanabe 290–293 (2001) 42
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Deuterium retention in single crystal tungsten, A.A. Haasz, M. Poon, R.G. Macaulay-Newcombe and J.W. Davis 290–293 (2001) 85
- Mixed-material coating formation on tungsten surfaces during plasma exposure in TEXTOR-94, D. Hildebrandt, P. Wienhold and W. Schneider 290–293 (2001) 89
- Synergistic effects by simultaneous bombardment of tungsten with hydrogen and carbon, K. Krieger and J. Roth 290–293 (2001) 107
- Influence of oxygen on the carbide formation on tungsten, J. Luthin and Ch. Linsmeier 290–293 (2001) 121
- Effect of helium irradiation on trapping and thermal release of deuterium implanted in tungsten, S. Nagata and K. Takahiro 290–293 (2001) 135
- Influence of diffusion on W sputtering by carbon, K. Schmid, J. Roth and W. Eckstein 290–293 (2001) 148
- Implantation, erosion, and retention of tungsten in carbon, R.A. Zuhr, J. Roth, W. Eckstein, U. von Toussaint and J. Luthin 290–293 (2001) 162
- Measurements of erosion mechanisms from solid and liquid materials in PISCES-B, R.P. Doerner, M.J. Baldwin, R.W. Conn, A.A. Grossman,

- S.C. Luckhardt, R. Seraydarian, G.R. Tynan and D.G. Whyte 290–293 (2001) 166
- Comparison of impurity production, recycling and power deposition on carbon and tungsten limiters in TEXTOR-94, A. Huber, V. Philipps, A. Pospieszczyk, A. Kirschner, M. Lehnen, T. Ohgo, K. Ohya, M. Rubel, B. Schweer, J. von Seggern, G. Sergienko, T. Tanabe and M. Wada 290–293 (2001) 276
- Simulation calculations of mutual contamination between tungsten and carbon and its impact on plasma surface interactions, K. Ohya, R. Kawakami, T. Tanabe, M. Wada, T. Ohgo, V. Philipps, A. Pospieszczyk, A. Huber, M. Rubel, G. Sergienko and N. Noda 290–293 (2001) 303
- Some problems arising due to plasma–surface interaction for operation of the in-vessel mirrors in a fusion reactor, V.S. Voitsenya, A.F. Bardamid, V.N. Bondarenko, W. Jacob, V.G. Konovalov, S. Masuzaki, O. Motojima, D.V. Orlinskij, V.L. Poperenko, I.V. Ryzhkov, A. Sagara, A.F. Shtan, S.I. Solodovchenko and M.V. Vinnichenko 290–293 (2001) 336
- Deuterium retention and lattice damage in tungsten irradiated with D ions, V.Kh. Alimov, K. Ertl and J. Roth 290–293 (2001) 389
- Isotope effects in thermal release of H and D implanted into WC layers on graphite, T. Horikawa, K. Morita and B. Tsuchiya 290–293 (2001) 428
- Role of grain boundaries and carbon deposition in deuterium retention behavior of deuterium plasma exposed tungsten, D.A. Komarov, A.V. Markin, S.Yu. Rybakov and A.P. Zakharov 290–293 (2001) 433
- Behavior of tungsten exposed to high fluences of low energy hydrogen isotopes, T. Venhaus, R. Causey, R. Doerner and T. Abeln 290–293 (2001) 505
- Particle control in the sustained spheromak physics experiment, R.D. Wood, D.N. Hill, E.B. Hooper, D. Buchenauer, H. McLean, Z. Wang, S. Woodruff and G. Wurden 290–293 (2001) 513
- Heat load on the first wall materials and interaction of emitted neutrals with plasma, K. Kobayashi, S. Kado, B. Xiao and S. Tanaka 290–293 (2001) 648
- Local emission and core concentration of tungsten in TEXTOR-94 plasmas operated with tungsten test and poloidal limiters, M. Wada, T. Ohgo, A. Pospieszczyk, A. Huber, G. Sergienko, T. Tanabe, W. Biel, K. Kondo, K. Ohya, V. Philipps, G. Bertschinger, J. Rapp, B. Schweer and N. Noda 290–293 (2001) 768
- Operation of TEXTOR-94 with tungsten poloidal main limiters, A. Pospieszczyk, T. Tanabe, V. Philipps, G. Sergienko, T. Ohgo, K. Kondo, M. Wada, M. Rubel, W. Biel, A. Huber, A. Kirschner, J. Rapp and N. Noda 290–293 (2001) 947
- Material erosion and erosion products under plasma heat loads typical for ITER hard disruptions, V. Safronov, N. Arkhipov, V. Bakhtin, S. Kurkin, F. Scaffidi-Argentina, D. Toporkov, S. Vasenin, H. Würz and A. Zhitlukhin 290–293 (2001) 1052
- Peculiarity of deuterium ions interaction with tungsten surface in the condition imitating combination of normal operation with plasma disruption in ITER, M.I. Guseva, V.I. Vasiliev, V.M. Gureev, L.S. Danelyan, B.I. Khirpunov, S.N. Korshunov, V.S. Kulikauskas, Yu.V. Martynenko, V.B. Petrov, V.N. Strunnikov, V.G. Stolyarova, V.V. Zatekin and A.M. Litnovsky 290–293 (2001) 1069
- Experimental study of radiation power flux on the target surface during high heat plasma irradiation, V.N. Litnovsky, I.B. Ovchinnikov and V.A. Titov 290–293 (2001) 1112
- Performance of the different tungsten grades under fusion relevant power loads, A. Makhankov, V. Barabash, I. Mazul and D. Youchison 290–293 (2001) 1117
- Characterization and conditioning of SSPX plasma facing surfaces, D.A. Buchenauer, B.E. Mills, R. Wood, S. Woodruff, D.N. Hill, E.B. Hooper, D.F. Cowgill, M.W. Clift and N.Y. Yang 290–293 (2001) 1165
- Hydrogen isotope diffusive transport parameters in pure polycrystalline tungsten, G.A. Esteban, A. Perujo, L.A. Sedano and K. Douglas 295 (2001) 49
- Multiscale modeling of radiation damage: applications to damage production by GeV proton irradiation of Cu and W, and pulsed irradiation effects in Cu and Fe, M.J. Caturla, T. Diaz de la Rubia, M. Victoria, R.K. Corzine, M.R. James and G.A. Greene 296 (2001) 90
- Fabrication of a tantalum-clad tungsten target for KENS, M. Kawai, K. Kikuchi, H. Kurishita, J.-F. Li and M. Furusaka 296 (2001) 312
- Uranium, Uranium Alloys and Compounds**
- Behavior of metallic fission products in uranium–plutonium mixed oxide fuel, I. Sato, H. Furuya, T. Arima, K. Idemitsu and K. Yamamoto 273 (1999) 239

- Depth profiles of damage accumulation in UO_2 and $(\text{U,Gd})\text{O}_2$ pellets irradiated with 100 MeV iodine ions, K. Nogita, K. Hayashi, K. Une and K. Fukuda 273 (1999) 302
- Application of a linear free energy relationship to crystalline solids of MO_2 and $\text{M}(\text{OH})_4$, H. Xu, Y. Wang and L. L. Barton 273 (1999) 343
- Preparation of rock-like oxide fuels for the irradiation test in the Japan Research Reactor No. 3, T. Shiratori, T. Yamashita, T. Ohmichi, A. Yasuda and K. Watarumi 274 (1999) 40
- Materials research on inert matrices: a screening study, H.J. Matzke, V.V. Rondinella and T. Wiss 274 (1999) 47
- Core severe accidents with cermet fuels – a specific study for pressurized water reactors, J. Porta, C. Aillaud and S. Baldi 274 (1999) 174
- Morphology of UO_2 , M. Abramowski, R.W. Grimes and S. Owens 275 (1999) 12
- Wet precipitate method for mixing magnesium and uranium in preparation of $\text{Mg}_y\text{U}_{1-y}\text{O}_{2+x}$ solid solution, T. Fujino, Y. Hoshi, N. Sato and K. Yamada 275 (1999) 19
- Reexamination of the fundamental interactions of water with uranium, W.L. Manner, J.A. Lloyd and M.T. Paffett 275 (1999) 37
- Assessment of the radial extent and completion of recrystallisation in high burn-up UO_2 nuclear fuel by EPMA, C.T. Walker 275 (1999) 56
- Comments on ‘Thermal treatment of uranium oxide irradiated in pressurized water reactor: swelling and release of fission gases’ by I. Zacharie, S. Lansart, P. Combette, M. Troabas, M. Coster and M. Groos, J.H. Evans 275 (1999) 108
- Reply to the comments by J.H. Evans about two papers ‘Thermal treatment of UO_2 irradiated in a pressurized water reactor: swelling and release of fission gases’ and ‘Microstructural analysis and modelling of intergranular swelling of an irradiated UO_2 fuel treated at high temperature’ by I. Zacharie, S. Lansart, P. Combette, M. Troabas, M. Coster and M. Groos, P. Combette and I. Zacharie 275 (1999) 112
- Location of krypton atoms in uranium dioxide, T. Petit, G. Jomard, C. Lemaignan, B. Bigot and A. Pasturel 275 (1999) 119
- Preparation and characterization of uranyl oxalate powders, H. Tel, M. Bülbül, M. Eral and Y. Altaş 275 (1999) 146
- Equilibrium phase relations in the U–Zr–Fe ternary system, K. Nakamura, M. Kurata, T. Ogata, A. Itoh and M. Akabori 275 (1999) 151
- Use of linear free energy relationship to predict Gibbs free energies of formation of zirconolite phases (MZrTi_2O_7 and MHfTi_2O_7), H. Xu and Y. Wang 275 (1999) 211
- Use of linear free energy relationship to predict Gibbs free energies of formation of pyrochlore phases (CaMTi_2O_7), H. Xu and Y. Wang 275 (1999) 216
- Fluorination of uranium dioxide particles: a review of physical and chemical properties of the compounds involved, S.S. Sazhin and A.P. Jeapes 275 (1999) 231
- Reactions of U–Zr alloy with Fe and Fe–Cr alloy, K. Nakamura, T. Ogata, M. Kurata, A. Itoh and M. Akabori 275 (1999) 246
- Volatilization of urania in steam at elevated temperatures, K. Hashizume, W.-E. Wang and D.R. Olander 275 (1999) 277
- Study by acoustic microscopy of irradiated and non-irradiated uranium dioxide, V. Roque, D. Baron, J. Bourgoin and J.M. Saurel 275 (1999) 305
- XPS investigations on cesium uranates: mixed valency behaviour of uranium, S. Van den Berghe, J.-P. Laval, B. Gaudreau, H. Terryn and M. Verwerft 277 (2000) 28
- Gibbs energy of formation of $\text{UPd}_3(\text{s})$, R. Prasad, S. Dash, S.C. Parida, Z. Singh and V. Venugopal 277 (2000) 45
- On the theory of fission gas bubble evolution in irradiated UO_2 fuel, M.S. Veshchunov 277 (2000) 67
- Thermal studies on alkaline earth uranates, S.K. Sali, S. Sampath and V. Venugopal 277 (2000) 106
- Thermal conductivity of ThO_2 and $\text{Th}_{0.98}\text{U}_{0.02}\text{O}_2$, C.G.S. Pillai and P. Raj 277 (2000) 116
- Sintering of mixed UO_2 and U_3O_8 powder compacts, K. Song, K. Kim, Y. Kim and Y. Jung 277 (2000) 123
- Micro-structures associated with uraninite alteration, M. Fayek, P. Burns, Y.-X. Guo and R.C. Ewing 277 (2000) 204
- Effects of the porosity in uranium dioxide on microacoustic and elastic properties, V. Roque, B. Cros, D. Baron and P. Dehaut 277 (2000) 211
- Neutron diffraction study of U–10 wt% Mo alloy, B.-S. Seong, C.-H. Lee, J.-S. Lee, H.-S. Shim, J.-H. Lee, K. Kim, C. Kim and V. Em 277 (2000) 274
- Transport and leaching of technetium and uranium from spent UO_2 fuel in compacted bentonite clay, H. Raméback, Y. Albinsson, M. Skälberg, U.B. Eklund, L. Kjellberg and L. Werme 277 (2000) 288

- Etching of UO_2 in NF_3 RF plasma glow discharge, J.M. Veilleux, M.S. El-Genk, E.P. Chamberlin, C. Munson and J. FitzPatrick 277 (2000) 315
- Non-stoichiometry, electrical conductivity and defect structure of hyper-stoichiometric UO_{2+x} at 1000 °C, S.-H. Kang, J.-H. Lee, H.-I. Yoo, H. Soo Kim and Y. Woo Lee 277 (2000) 339
- Rim structure formation and high burn-up fuel behavior of large-grained UO_2 fuels, K. Une, M. Hirai, K. Nogita, T. Hosokawa, Y. Suzawa, S. Shimizu and Y. Etoh 278 (2000) 54
- Thermal expansion of ThO_2 2 wt% UO_2 by HT-XRD, A.K. Tyagi and M.D. Mathews 278 (2000) 123
- Examination of melted fuel rods and released core material from the first Phebus-FP reactor accident experiment, P.D.W. Bottomley, A.D. Stallios, J.-P. Glatz, B. Sätmark and C.T. Walker 278 (2000) 136
- $\text{KNa}_3(\text{UO}_2)_2(\text{Si}_4\text{O}_{10})_2(\text{H}_2\text{O})_4$, a new compound formed during vapor hydration of an actinide-bearing borosilicate waste glass, P.C. Burns, R.A. Olson, R.J. Finch, J.M. Hanchar and Y. Thibault 278 (2000) 290
- Characterization of uranium corrosion products involved in a uranium hydride pyrophoric event, T.C. Tote-meier 278 (2000) 301
- Combustion synthesis of urania–thoria solid solutions, S. Anthonysamy, K. Ananthasivan, V. Chandramouli, I. Kaliappan and P.R. Vasudeva Rao 278 (2000) 346
- Irradiation behavior of U_6Mn –Al dispersion fuel elements, M.K. Meyer, T.C. Wiecek, S.L. Hayes and G.L. Hofman 278 (2000) 358
- Effect of grain-boundaries on uranium and oxygen diffusion in polycrystalline UO_2 , A.C.S. Sabioni, W.B. Ferraz and F. Millot 278 (2000) 364
- Thermophysical properties of uranium dioxide, J.K. Fink 279 (2000) 1
- Calorimetric studies on the strontium–uranium–oxygen system, S. Dash, Z. Singh, R. Prasad and V. Venugopal 279 (2000) 84
- A thermodynamic evaluation of the U–O system from UO_2 to U_3O_8 , Y. Soo Kim 279 (2000) 173
- An attempt to explain the high burnup structure formation mechanism in UO_2 fuel, C.B. Lee and Y.H. Jung 279 (2000) 207
- Actinide distribution in a stainless steel–15 wt% zirconium high-level nuclear waste form, D.D. Keiser Jr., D.P. Abraham, W. Sinkler, J.W. Richardson Jr. and S.M. McDevitt 279 (2000) 234
- Thermal and X-ray diffraction studies on the phase equilibria in the system $\text{UO}_2(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ – NaNO_3 , B.B. Kalekar, K.V. Rajagopalan, C.G.S. Pillai, P.V. Ravindran and P.K. Mathur 279 (2000) 245
- Reduction of the open porosity of UO_2 pellets through pore structure control, K.W. Song, K.S. Kim, Y.M. Kim, K.W. Kang and Y.H. Jung 279 (2000) 253
- Analysis of constituent redistribution in the γ (bcc) U–Pu–Zr alloys under gradients of temperature and concentrations, Y.H. Sohn, M.A. Dayananda, G.L. Hofman, R.V. Strain and S.L. Hayes 279 (2000) 317
- Densification behavior of U_3O_8 powder compacts by dilatometry, K.W. Song, K.S. Kim and Y.H. Jung 279 (2000) 356
- High-dose irradiation growth kinetics at 448 K in a zirconium alloy, H.C. González, A.M. Fortis and G.D.H. Cocoz 279 (2000) 360
- Estimates of helium gas release in $^{238}\text{PuO}_2$ fuel particles for radioisotope heat sources and heater units, M.S. El-Genk and J.-M. Tournier 280 (2000) 1
- Studies on the kinetics of oxidation of urania–thoria solid solutions in air, S. Anthonysamy, K. Joseph, T. Gnana-sekaran and P.R. Vasudeva Rao 280 (2000) 25
- The possible usage of ex-ADU uranium dioxide fuel pellets with low-temperature sintering, B. Ayaz and A.N. Bilge 280 (2000) 45
- Analysis of fission gas release and gaseous swelling in UO_2 fuel under the effect of external restraint, Y.-H. Koo and B.-H. Lee, D.-S. Sohn 280 (2000) 86
- Neutron diffraction study of U5.4 wt% Mo alloy, J.S. Lee, C.H. Lee, K.H. Kim and V. Em 280 (2000) 116
- Thermodynamic modelling of the N–U system, P.-Y. Chevalier, E. Fischer and B. Cheynet 280 (2000) 136
- Modelling the variable precipitation of fission products at grain boundaries, P. Van Uffelen 280 (2000) 275
- Combustion synthesis and thermal expansion measurements of the rare earth–uranium ternary oxides $\text{RE}_6\text{UO}_{12}$ (RE = La, Nd and Sm), H. Jena, R. Asuvathraman and K.V. Govindan Kutty 280 (2000) 312
- Studies on thermal expansion and XPS of urania–thoria solid solutions, S. Anthonysamy, G. Panneerselvam, S. Bera, S.V. Narasimhan and P.R. Vasudeva Rao 281 (2000) 15
- A method for determining an effective porosity correction factor for thermal

- conductivity in fast reactor uranium–plutonium oxide fuel pellets, M. Inoue, K. Abe and I. Sato 281 (2000) 117
- Discrete-variational Dirac–Slater calculations on the valence band XPS for α -uranium metal, M. Kurihara, M. Hirata, R. Sekine, J. Onoe and H. Nakamatsu 281 (2000) 140
- Lattice parameter changes associated with the rim-structure formation in high burn-up UO_2 fuels by micro X-ray diffraction, J. Spino and D. Papaioannou 281 (2000) 146
- Multi-layer coating of silicon carbide and pyrolytic carbon on UO_2 pellets by a combustion reaction, B.G. Kim, Y. Choi, J.W. Lee, Y.W. Lee, D.S. Sohn and G.M. Kim 281 (2000) 163
- Passivation of uranium towards air corrosion by N_2^+ and C^+ ion implantation, R. Arkush, M.H. Mintz and N. Shamir 281 (2000) 182
- Effect of AlOOH on the microstructure of UO_2 pellets, H.-s. Yoo, S.-y. Lee, S.-j. Lee and K.-w. Song 281 (2000) 191
- Henrian ideality of iron in liquid uranium solvent at high temperatures, D. Das, A.S. Kerkar, S.R. Bhargadwaj, S. Mukherjee and S.R. Dharwadkar 281 (2000) 203
- Effect of silicon impurities and heat treatment on uranium hydriding rates, A.L. DeMint and J.H. Leckey 281 (2000) 208
- Sintering studies on UO_2 – PuO_2 pellets with varying PuO_2 content using dilatometry, T.R.G. Kutty, P.V. Hegde, K.B. Khan, S. Majumdar and D.S.C. Purushotham 282 (2000) 54
- Dissolution of UO_2 in Boom clay water in oxidizing conditions: an XPS study, S. Guilbert, M.J. Guittet, N. Barré, M. Gautier-Soyer, P. Trocellier, D. Gosset and Z. Andriambololona 282 (2000) 75
- Preparation of uranium by electrolysis in chloride melt, K. Serrano, P. Taxil, O. Dugne, S. Bouvet and E. Puech 282 (2000) 137
- Solid state reactions of UO_2 , ThO_2 and their mixed oxides with sulphates of potassium, M. Keskar, U.M. Kasar and K.D. Singh Mudher 282 (2000) 146
- A new method for determining oxygen solubility in molten carbonates and carbonate–chloride mixtures using the oxidation of UO_2 to uranate reaction, V.A. Volkovich, T.R. Griffiths, D.J. Fray and R.C. Thied 282 (2000) 152
- Thermal conductivity of uranium–plutonium oxide fuel for fast reactors, M. Inoue 282 (2000) 186
- RAPID model to predict radial burnup distribution in LWR UO_2 fuel, C.B. Lee, D.H. Kim, J.S. Song, J.G. Bang and Y.H. Jung 282 (2000) 196
- Theoretical oxygen potential change of quaternary solid solution, $\text{A}_y^{2+}\text{B}_z^{3+}\text{U}_{1-y-z}\text{O}_{2+x}$, by configurational entropy calculation, T. Fujino and N. Sato 282 (2000) 232
- Comment on ‘Location of krypton atoms in uranium dioxide’ by T. Petit, G. Jomard, C. Lemaignan, B. Bigot and A. Pasturel, C.R. Stanek and R.W. Grimes 282 (2000) 265
- Alpha-radiolysis effects on UO_2 alteration in water, G. Sattonnay, C. Ardois, C. Corbel, J.F. Lucchini, M.-F. Barthe, F. Garrido and D. Gosset 288 (2001) 11
- Rim structure formation of isothermally irradiated UO_2 fuel discs, K. Une, K. Nogita, T. Shiratori and K. Hayashi 288 (2001) 20
- Measurement and analysis of fission gas release from BNFL’s SBR MOX fuel, R.J. White, S.B. Fisher, P.M.A. Cook, R. Stratton, C.T. Walker and I.D. Palmer 288 (2001) 43
- Thermal conductivities of irradiated UO_2 and $(\text{U,Gd})\text{O}_2$, K. Minato, T. Shiratori, H. Serizawa, K. Hayashi, K. Une, K. Nogita, M. Hirai and M. Amaya 288 (2001) 57
- Phase equilibria and magnetism in the Mo–Si–U system, P. Rogl, T. Le Bihan and H. Noël 288 (2001) 66
- Thermal conductivity of U_3O_8 from 300 to 1100 K, C.G.S. Pillai, A.K. Dua and P. Raj 288 (2001) 87
- A mechanism for the sintered density decrease of UO_2 – Gd_2O_3 pellets under an oxidizing atmosphere, K.W. Song, K.S. Kim, J.H. Yang, K.W. Kang and Y.H. Jung 288 (2001) 92
- Thermodynamic modelling of the C–U and B–U binary systems, P.Y. Chevalier and E. Fischer 288 (2001) 100
- On the role of grain boundary diffusion in fission gas release, D.R. Olander and P. Van Uffelen 288 (2001) 137
- Some aspects of the use of ZrN as an inert matrix for actinide fuels, M. Burghartz, G. Ledergerber, H. Hein, R.R. van der Laan and R.J.M. Konings 288 (2001) 233
- Kinetics of uranium release from Synroc phases, Y. Zhang, K.P. Hart, W.L. Bourcier, R.A. Day, M. Colella, B. Thomas, Z. Aly and A. Jostsons 289 (2001) 254
- Oxygen potential and defect structure of the solid solution, Mg–Gd–UO_2 , T. Fujino, N. Sato, K. Yamada, M. Okazaki, K. Fukuda, H. Serizawa and T. Shiratori 289 (2001) 270
- Thermophysical properties of zirconium hydride and uranium–zirconium

- hydride, B. Tsuchiya, J. Huang, K. Konashi, M. Teshigawara and M. Yamawaki 289 (2001) 329
- Formation of nitrides at the surface of U–Zr alloys, M. Akabori, A. Itoh and T. Ogawa 289 (2001) 342
- Heat capacity measurements on unirradiated and irradiated fuel pellets, M. Amaya, K. Une and K. Minato 294 (2001) 1
- Phase equilibria in the UO_2 – PuO_2 system under a temperature gradient, H. Kleykamp 294 (2001) 8
- Thermal properties of hydride fuel 45% U–ZrH_{1.6}, K. Kakiuchi, N. Itagaki, T. Furuya, T. Hattori, Y. Nakazono, F. Ono, K. Yamaguchi and M. Yamawaki 294 (2001) 28
- A qualitative comparison of barium behaviour in the PHEBUS FPT0 test and analytical tests, R. Dubourg and P. Taylor 294 (2001) 32
- High-temperature, Knudsen cell-mass spectroscopic studies on lanthanum oxide/uranium dioxide solid solutions, S. Sunder, R. McEachern and J.C. LeBlanc 294 (2001) 59
- The modelling of fuel volatilisation in accident conditions, H. Manenc, P.K. Mason and M.P. Kissane 294 (2001) 64
- Mass spectrometric study of UO_2 – ZrO_2 pseudo-binary system, M. Baïchi, C. Chatillon, C. Guèneau and S. Chatain 294 (2001) 84
- Thermophysical properties of BaUO_3 , S. Yamanaka, K. Kurosaki, T. Matsuda and M. Uno 294 (2001) 99
- Thermodynamics of $(\text{Mg}, \text{Ce}, \text{U}) \text{O}_{2+x}$ ($x \geq 0$) solid solutions, T. Fujino, K. Park, N. Sato and M. Yamada 294 (2001) 104
- Molecular dynamics study of mixed oxide fuel, K. Kurosaki, K. Yamada, M. Uno, S. Yamanaka, K. Yamamoto and T. Namekawa 294 (2001) 160
- X-ray photoelectron spectroscopy on uranium oxides: a comparison between bulk and thin layers, S. Van den Berghe, F. Miserque, T. Gouder, B. Gaudreau and M. Verwerft 294 (2001) 168
- Thermal conductivity of $(\text{U}, \text{Ce})\text{O}_2$ with and without Nd or Zr, K. Kurosaki, R. Ohshima, M. Uno, S. Yamanaka, K. Yamamoto and T. Namekawa 294 (2001) 193
- Thermoelectric properties of URu_2Si_2 and URu_3Si_5 , Y. Arita, K. Terao, S. Mitsuda, Y. Nishi, T. Matsui and T. Nagasaki 294 (2001) 206
- Boron isotope effects on the thermoelectric properties of UB_4 at low temperatures, Y. Nishi, Y. Arita, K. Terao, T. Matsui and T. Nagasaki 294 (2001) 209
- Mass-spectrometric investigation of $\text{UO}_3(\text{g})$, K. Nakajima and Y. Arai 294 (2001) 250
- Study of surface modification of uranium and UFe_2 by various surface analysis techniques, O. Bonino, O. Dugne, C. Merlet, E. Gat, Ph. Holliger and M. Lahaye 294 (2001) 305
- Preparation of homogeneous $(\text{Th}_{0.8}\text{U}_{0.2})\text{O}_2$ powders by mechanical blending of $\text{Th}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$ and $\text{U}(\text{C}_2\text{O}_4)_2 \cdot 6\text{H}_2\text{O}$ powders, Y. Altaş, M. Eral and H. Tel 294 (2001) 344
- Pore migration in UO_2 and grain growth kinetics, L. Bourgeois, Ph. Dehaut, C. Lemaignan and J.P. Fredric 295 (2001) 73
- The fractal nature of the surface of uranium dioxide: a resolution of the short-lived/stable gas release dichotomy, R.J. White 295 (2001) 133
- Pore pressure and swelling in the rim region of LWR high burnup UO_2 fuel, Y.-H. Koo, B.-H. Lee, J.-S. Cheon and D.-S. Sohn 295 (2001) 213
- Kinetic and thermodynamic studies of the dissolution of thorium–uranium (IV) phosphate–diphosphate solid solutions, A.C. Thomas, N. Dacheux, P. Le Coustumer, V. Brandel and M. Genet 295 (2001) 249
- Safe disposal of surplus plutonium, W.L. Gong, S. Naz, W. Lutze, R. Busch, A. Prinja and W. Stoll 295 (2001) 295
- The effect of coprecipitation in some key spent fuel elements, J. Quiñones, J. Serrano and P. Diaz Arocas 298 (2001) 63
- Release of boron and cesium or uranium from simulated borosilicate waste glasses through a compacted Cabentonite layer, K.S. Chun, S.S. Kim and C.H. Kang 298 (2001) 150
- Determination of sorption isotherms for Eu, Th, U and Am on the gel layer of corroded HLW glass, B. Luckscheiter and B. Kienzler 298 (2001) 155
- Release and retention of uranium during glass corrosion, T. Maeda, T. Banba, K. Sonoda, Y. Inagaki and H. Furuya 298 (2001) 163
- Use of UO_2 films for electrochemical studies, F. Miserque, T. Gouder, D.H. Wegen and P.D.W. Bottomley 298 (2001) 280
- Pyrochemical reduction of uranium dioxide and plutonium dioxide by lithium metal, T. Usami, M. Kurata, T. Inoue, H.E. Sims, S.A. Beetham and J.A. Jenkins 300 (2002) 15
- Thermal conductivities of irradiated UO_2 and $(\text{U}, \text{Gd})\text{O}_2$ pellets, M. Amaya, M. Hirai, H. Sakurai, K. Ito, M. Sasaki, T. Nomata, K. Kamimura and R. Iwasaki 300 (2002) 57

- Ultrasonic study of UO_2 : effects of porosity and grain size on ultrasonic attenuation and velocities, D. Laux, B. Cros, G. Despau and D. Baron 300 (2002) 192
- Fission product precipitates in irradiated uranium carbonitride fuel, H. Kleykamp 300 (2002) 273
- Vanadium, Vanadium Alloys and Compounds**
- A molecular dynamics simulation study of displacement cascades in vanadium, K. Morishita and T. Diaz de la Rubia 271&272 (1999) 35
- Defect cluster formation in vanadium irradiated with heavy ions, N. Sekimura, Y. Shirao, H. Yamaguchi, S. Yonamine and Y. Arai 271&272 (1999) 63
- Irradiation hardening of V–4Cr–4Ti, E.V. van Osch and M.I. de Vries 271&272 (1999) 162
- An analysis of void swelling dose dependence in ion irradiated V–Fe alloys, V.A. Pechenkin, Yu.V. Konobeev, S.I. Rudnev and G.A. Epov 271&272 (1999) 266
- The effect of the solute atomic size on the swelling of vanadium alloys, V.A. Borodin and A.I. Ryazanov 271&272 (1999) 270
- Atomic mechanisms and energetics of thermally activated processes of helium redistribution in vanadium, V.M. Chernov, V.A. Romanov and A.O. Krutskikh 271&272 (1999) 274
- Microstructural evolution and hardening of neutron irradiated vanadium alloys at low temperatures in Japan Material Testing Reactor, Y. Candra, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 301
- Radiation-induced segregation of deuterium in austenitic steels and vanadium alloys, V.L. Arbusov, G.A. Raspopova and V.B. Vykhodets 271&272 (1999) 340
- Effect of temperature change on microstructural evolution of vanadium alloys under neutron irradiation in JMTR, N. Nita, K. Fukumoto, A. Kimura and H. Matsui 271&272 (1999) 365
- Study of oxygen influence on vanadium product for fusion structural materials, X. Hui, W. Yan, L. Ansheng, H. Xue and W. Lijun 271&272 (1999) 459
- Corrosion of some V- and Nb-base alloys under irradiation in water, V.A. Kazakov, V.P. Chakin and Yu.D. Goncharenko 271&272 (1999) 463
- Low activation materials, R.H. Jones, H.L. Heinisch and K.A. McCarthy 271&272 (1999) 518
- Reactions of hydrogen with V–Cr–Ti alloys, J.R. DiStefano, J.H. De Van, D.H. Röhrig and L.D. Chitwood 273 (1999) 102
- Fatigue failure analysis of V–4Ti–4Cr alloy, H. Aglan, Y.X. Gan, B. Chin and M. Grossbeck 273 (1999) 192
- Effect of Ti solute on the recovery of cold-rolled V–Ti alloys, T. Leguey, A. Muñoz and R. Pareja 275 (1999) 138
- Simulation of damage production and accumulation in vanadium, E. Alonso, M.-J. Caturla, T. Díaz de la Rubia and J.M. Perlado 276 (2000) 221
- Effect of composition on the fatigue failure behavior of vanadium alloys, H.A. Aglan, Y.X. Gan, B.A. Chin and M.L. Grossbeck 278 (2000) 186
- Recovery characteristics of neutron-irradiated V–Ti alloys, T. Leguey and R. Pareja 279 (2000) 216
- Recovery of electron irradiated V–Ga alloys, T. Leguey, M. Monge, R. Pareja and E.R. Hodgson 279 (2000) 364
- Interactions between fusion materials R&D and other technologies, A. Kohyama, M. Seki, K. Abe, T. Muroga, H. Matsui, S. Jitsukawa and S. Matsuda 283–287 (2000) 20
- Critical issues and current status of vanadium alloys for fusion energy applications, R.J. Kurtz, K. Abe, V.M. Chernov, V.A. Kazakov, G.E. Lucas, H. Matsui, T. Muroga, G.R. Odette, D.L. Smith and S.J. Zinkle 283–287 (2000) 70
- Synergistic effects of hydrogen and helium on microstructural evolution in vanadium alloys by triple ion beam irradiation, N. Sekimura, T. Iwai, Y. Arai, S. Yonamine, A. Naito, Y. Miwa and S. Hamada 283–287 (2000) 224
- Study of point defect behaviors in vanadium and its alloys by using HVEM, T. Hayashi, K. Fukumoto and H. Matsui 283–287 (2000) 234
- Microstructure of vanadium alloys during ion irradiation with stepwise change of temperature, H. Watanabe, T. Arinaga, K. Ochiai, T. Muroga and N. Yoshida 283–287 (2000) 286
- Effects of temperature change on the microstructural evolution of vanadium alloys under ion irradiation, N. Nita, T. Iwai, K. Fukumoto and H. Matsui 283–287 (2000) 291
- Microstructural examination of V–(3–6%)Cr–(3–5%)Ti irradiated in the ATR-A1 experiment, D.S. Gelles 283–287 (2000) 344
- Effects of low-temperature neutron irradiation on mechanical properties of vanadium-base alloys, H. Tsai, T.S. Bray, H. Matsui, M.L. Grossbeck, K. Fukumoto, J. Gazda, M.C. Billone and D.L. Smith 283–287 (2000) 362
- Improvement in post-irradiation ductility of neutron irradiated V–Ti–Cr–Si–Al–Y alloy and the role of interstitial impurities, M. Satou, T. Chuto and K. Abe 283–287 (2000) 367

- Effect of low temperature irradiation on the mechanical properties of ternary V–Cr–Ti alloys as determined by tensile tests and shear punch tests, M.L. Hamilton and M.B. Toloczko 283–287 (2000) 488
- Mechanical behavior and microstructural evolution of vanadium alloys irradiated in ATR-A1, K.-i. Fukumoto, H. Matsui, H. Tsai and D.L. Smith 283–287 (2000) 492
- V-alloy embrittlement by irradiation in a cooling gas environment, H.D. Röhrig, M. Rieth, B. Dafferner and E. Materna-Morris 283–287 (2000) 498
- Defect microstructure and deformation behavior of V–Ti–Cr–Si–Al–Y alloy irradiated in ATR, T. Chuto, M. Saitou and K. Abe 283–287 (2000) 503
- Effect of strain rate on the tensile properties of unirradiated and irradiated V–4Cr–4Ti, A.F. Rowcliffe, S.J. Zinkle and D.T. Hoelzer 283–287 (2000) 508
- On the mechanisms and mechanics of fracture toughness of a V–4Cr–4Ti alloy, E.G. Donahue, G.R. Odette and G.E. Lucas 283–287 (2000) 518
- Radiation-induced precipitation in V–(Cr,Fe)–Ti alloys irradiated at low temperature with low dose during neutron or ion irradiation, K.-i. Fukumoto, H. Matsui, Y. Candra, K. Takahashi, H. Sasanuma, S. Nagata and K. Takahiro 283–287 (2000) 535
- Microstructure control to improve mechanical properties of vanadium alloys for fusion applications, T. Kuwabara, H. Kurishita and M. Hasegawa 283–287 (2000) 611
- Solute interactions in pure vanadium and V–4Cr–4Ti alloy, D.T. Hoelzer, M.K. West, S.J. Zinkle and A.F. Rowcliffe 283–287 (2000) 616
- Performance of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, W.R. Johnson, P.W. Trester, S. Sengoku, S. Ishiyama, K. Fukaya, M. Eto, T. Oda, Y. Hirohata, T. Hino and H. Tsai 283–287 (2000) 622
- Biaxial thermal creep of V–4Cr–4Ti at 700 °C and 800 °C, R.J. Kurtz and M.L. Hamilton 283–287 (2000) 628
- Tensile and impact properties of V–4Cr–4Ti alloy heats 832665 and 832864, T.S. Bray, H. Tsai, L.J. Nowicki, M.C. Billone, D.L. Smith, W.R. Johnson and P.W. Trester 283–287 (2000) 633
- A physically based constitutive model for a V–4Cr–4Ti alloy, E.G. Donahue, G.R. Odette and G.E. Lucas 283–287 (2000) 637
- NIFS program for large ingot production of a V–Cr–Ti alloy, T. Muroga, T. Nagasaka, A. Iiyoshi, A. Kawabata, S. Sakurai and M. Sakata 283–287 (2000) 711
- Performance limits for fusion first-wall structural materials, D.L. Smith, S. Majumdar, M. Billone and R. Mattas 283–287 (2000) 716
- Features of radiation damage of vanadium and its alloys at a temperature of 330–340 °C, V.A. Kazakov, Z. Ostrovsky, Yu. Goncharenko and V. Chakin 283–287 (2000) 727
- A molecular dynamics simulation study of small cluster formation and migration in metals, K. Morishita, T. Diaz de la Rubia, E. Alonso, N. Sekimura and N. Yoshida 283–287 (2000) 753
- Comparison of a microstructure evolution model with experiments on irradiated vanadium, S. Sharafat and N.M. Ghoniem 283–287 (2000) 789
- Recovery and recrystallization behavior of vanadium at various controlled nitrogen and oxygen levels, T. Nagasaka, H. Takahashi, T. Muroga, T. Tanabe and H. Matsui 283–287 (2000) 816
- Effect of oxygen on the crack growth behavior of V–4Cr–4Ti at 600 °C, R.J. Kurtz 283–287 (2000) 822
- Effects of oxygen and hydrogen at low pressure on the mechanical properties of V–Cr–Ti alloys, J.R. DiStefano, B.A. Pint, J.H. DeVan, H.D. Röhrig and L.D. Chitwood 283–287 (2000) 841
- Permeation of hydrogen through vanadium under helium ion irradiation, Y. Hatano, Y. Nanjo, R. Hayakawa and K. Watanabe 283–287 (2000) 868
- Hydrogen permeation through vanadium alloy V–4Cr–4Ti ‘in situ’ of reactor irradiation, T.V. Kulsartov, V.P. Shestakov, I.L. Tazhibaeva and E.A. Kenzhin 283–287 (2000) 872
- Effect of hydrogen accumulation on mechanical property and microstructure of V–Cr–Ti alloys, K. Aoyagi, E.P. Torres, T. Suda and S. Ohnuki 283–287 (2000) 876
- High-sensitivity quadrupole mass spectrometry system for the determination of hydrogen in irradiated materials, B.M. Oliver, F.A. Garner, L.R. Greenwood and J.A. Abrefah 283–287 (2000) 1006
- The effect of laser welding process parameters on the mechanical and microstructural properties of V–4Cr–4Ti structural materials, C.B. Reed, K. Natesan, Z. Xu and D.L. Smith 283–287 (2000) 1206
- Furnace brazing type 304 stainless steel to vanadium alloy (V–5Cr–5Ti), R.V. Steward, M.L. Grossbeck, B.A. Chin, H.A. Aglan and Y. Gan 283–287 (2000) 1224
- Corrosion of V–Ti–Cr alloys in liquid lithium: influence of alloy composition and concentration of nitrogen in

- lithium, O.I. Eliseeva, V.N. Fedirko, V.M. Chernov and L.P. Zaviatsky 283–287 (2000) 1282
- Oxidation and hardness profile of V–Ti–Cr–Si–Al–Y alloys, M. Fujiwara, M. Satou, A. Hasegawa and K. Abe 283–287 (2000) 1311
- Performance of V–Cr–Ti alloys in a hydrogen environment, K. Natesan and W.K. Soppet 283–287 (2000) 1316
- Impurity effects on gas tungsten arc welds in V–Cr–Ti alloys, M.L. Grossbeck, J.F. King and D.T. Hoelzer 283–287 (2000) 1356
- Multiplier, moderator, and reflector materials for advanced lithium–vanadium fusion blankets, Y. Gohar and D.L. Smith 283–287 (2000) 1370
- Measurement and analysis of radioactivity induced in steels and a vanadium alloy by 14-MeV neutrons, D. Richter, R.A. Forrest, H. Freiesleben, Va.D. Kovalchuk, Vi.D. Kovalchuk, D.V. Markovskij, K. Seidel, V.I. Tereshkin and S. Unholzer 283–287 (2000) 1434
- Present status and future prospect of the Russian program for fusion low-activation materials, M.I. Solonin, V.M. Chernov, V.A. Gorokhov, A.G. Ioltukhovskiy, A.K. Shikov and A.I. Blokhin 283–287 (2000) 1468
- Waste management for different fusion reactor designs, P. Rocco and M. Zucchetti 283–287 (2000) 1473
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Deuterium retention of V–4Cr–4Ti alloy exposed to the JFT-2M tokamak environment, Y. Hirohata, T. Oda, T. Hino and S. Sengoku 290–293 (2001) 196
- The porous vanadium as a plasma facing material for the fusion devices, A.V. Zhmendak, A. Huber, V.A. Kvitcinskiy, E.V. Mudretskaya, A.V. Nedospasov, V.V. Panechkina, S.N. Pavlov, A. Pospieszczyk, G.V. Sergienko and V.F. Virko 290–293 (2001) 220
- Vitrification**
- Single-pass flow-through experiments on a simulated waste glass in alkaline media at 40 °C. I. Experiments conducted at variable solution flow rate to glass surface area ratio, P.K. Abraitis, B.P. McGrail, D.P. Trivedi, F.R. Livens and D.J. Vaughan 280 (2000) 196
- Single-pass flow-through experiments on a simulated waste glass in alkaline media at 40 °C. II. Experiments conducted with buffer solutions containing controlled quantities of Si and Al, P.K. Abraitis, B.P. McGrail, D.P. Trivedi, F.R. Livens and D.J. Vaughan 280 (2000) 206
- The effect of alloying elements on the defect structural evolution in neutron irradiated Ni alloys, T. Yoshiie, Q. Xu, Y. Satoh, H. Ohkubo and M. Kiritani 283–287 (2000) 229
- Role and properties of the gel formed during nuclear glass alteration: importance of gel formation conditions, S. Gin, I. Ribet and M. Couillard 298 (2001) 1
- The effect of clay on the dissolution of nuclear waste glass, K. Lemmens 298 (2001) 11
- A proposition for an improved theoretical treatment of the corrosion of multi-component glasses, R. Conradt 298 (2001) 19
- Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling, E. Vernaz, S. Gin, C. Jégou and I. Ribet 298 (2001) 27
- New techniques for modelling glass dissolution, M. Aertsens and D. Ghaleb 298 (2001) 37
- Overview of actinides (Np, Pu, Am) and Tc release from waste glasses: influence of solution composition, V. Pirllet 298 (2001) 47
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55
- Glass dissolution: testing and modeling for long-term behavior, D.M. Strachan 298 (2001) 69
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- Near-field performance assessment for a low-activity waste glass disposal system: laboratory testing to modeling results, B.P. McGrail, D.H. Bacon, J.P. Icenhower, F.M. Mann, R.J. Puigh, H.T. Schaefer and S.V. Mattigod 298 (2001) 95
- First-order dissolution rate law and the role of surface layers in glass performance assessment, B. Grambow and R. Müller 298 (2001) 112
- Performance assessment of the disposal of vitrified high-level waste in a clay layer, D. Mallants, J. Marivoet and X. Sillen 298 (2001) 125
- Database development of glass dissolution and radionuclide migration for performance analysis of HLW repository in Japan, M. Yui 298 (2001) 136

- Numerical modelling of glass dissolution: gel layer morphology, F. Devreux and P. Barboux 298 (2001) 145
- Release of boron and cesium or uranium from simulated borosilicate waste glasses through a compacted Ca-bentonite layer, K.S. Chun, S.S. Kim and C.H. Kang 298 (2001) 150
- Determination of sorption isotherms for Eu, Th, U and Am on the gel layer of corroded HLW glass, B. Luckscheiter and B. Kienzler 298 (2001) 155
- Release and retention of uranium during glass corrosion, T. Maeda, T. Banba, K. Sonoda, Y. Inagaki and H. Furuya 298 (2001) 163
- Leaching and migration of neptunium in a simulated engineered barrier system consisting of HLW glass and compacted bentonite, Y. Inagaki, H. Furuya, K. Idemitsu, T. Arima, H. Osako, T. Banba, T. Maeda, S. Matsumoto, I. Nomura, S. Kikkawa, M. Saito and H. Okamoto 298 (2001) 168
- Waste glass behavior in a loamy soil of a wet repository site, M.I. Ojovan, N.V. Ojovan, I.V. Startceva, G.N. Tchuikova, Z.I. Golubeva and A.S. Barinov 298 (2001) 174
- A comparison of HLW-glass and PWR-borate waste glass, S. Luo, J. Sheng and B. Tang 298 (2001) 180
- Effect of a siliceous additive on aqueous alteration of waste glass with engineered barrier materials, S. Mitsui and R. Aoki 298 (2001) 184
- Application of electrochemical impedance spectroscopy (EIS) for in situ study of glass alteration, D. Chaulet, S. Martemianov, J.H. Thomassin and P. Le Coustumer 298 (2001) 192
- In-depth distributions of elements in leached layers on two HLW waste glasses after burial in clay; step-scan by SIMS, A. Lodding and P. Van Iseghem 298 (2001) 197
- Wastes**
- Low activation materials, R.H. Jones, H.L. Heinisch and K.A. McCarthy 271&272 (1999) 518
- Welds**
- Evaluation of weld crack susceptibility for neutron irradiated stainless steels, T. Suzuki, A. Kohyama, T. Hirose and M. Narui 271&272 (1999) 179
- Immobilization of spent nuclear fuel in iron phosphate glass, M.G. Mesko and D.E. Day 273 (1999) 27
- Semi-empirical models of actinide alloying, J.K. Gibson, R.G. Haire and T. Ogawa 273 (1999) 139
- Native vacancy migrations in zircon, R.E. Williford, W.J. Weber, R. Devanathan and A.N. Cormack 273 (1999) 164
- Application of a linear free energy relationship to crystalline solids of MO_2 and $\text{M}(\text{OH})_4$, H. Xu, Y. Wang and L. L. Barton 273 (1999) 343
- Modeling the solubility of zirconia in a repository for high-level radioactive waste, E. Curti and W. Hummel 274 (1999) 189
- A study of actinide decay chains on the environmental effect of a geologic disposal of 'rock-like oxide' fuels and uranium-plutonium oxide fuels, H. Kimura, H. Takano and T. Muromura 274 (1999) 197
- Selection of materials as diluents for burning of plutonium fuels in nuclear reactors, H. Kleykamp 275 (1999) 1
- ^{79}Se : geochemical and crystallo-chemical retardation mechanisms, F. Chen, P.C. Burns and R.C. Ewing 275 (1999) 81
- Use of linear free energy relationship to predict Gibbs free energies of formation of zirconolite phases (MZrTi_2O_7 and MHfTi_2O_7), H. Xu and Y. Wang 275 (1999) 211
- Use of linear free energy relationship to predict Gibbs free energies of formation of pyrochlore phases (CaMTi_2O_7), H. Xu and Y. Wang 275 (1999) 216
- Mechanisms involved in thermal diffusion of rare earth elements in apatite, P. Martin, G. Carlot, A. Chevarier, C. Den-Auwer and G. Panczer 275 (1999) 268
- Dissolution of lanthanide aluminosilicate oxynitride glasses, L. Bois, N. Barré, S. Guillopé, M.J. Guittet, M. Gautier-Soyer, J.P. Duraud, P. Trocellier, P. Verdier and Y. Laurent 277 (2000) 57
- Ion beam-induced amorphisation of freudenbergite, K.L. Smith, M.G. Blackford, G.R. Lumpkin and N.J. Zaluzec 277 (2000) 159
- Micro-structures associated with uraninite alteration, M. Fayek, P. Burns, Y.-X. Guo and R.C. Ewing 277 (2000) 204
- Zirconia ceramics for excess weapons plutonium waste, W.L. Gong, W. Lutze and R.C. Ewing 277 (2000) 239
- Transport and leaching of technetium and uranium from spent UO_2 fuel in compacted bentonite clay, H. Ramenbäck, Y. Albinsson, M. Skålberg, U.B. Eklund, L. Kjellberg and L. Werme 277 (2000) 288
- Oxidation kinetic changes of UO_2 by additive addition and irradiation,

- G.-S. You, K.-S. Kim, D.-K. Min and S.-G. Ro 277 (2000) 325
- Influence of technetium on the microstructure of a stainless steel–zirconium alloy, D.D. Keiser Jr., D.P. Abraham and J.W. Richardson Jr. 277 (2000) 333
- The effect of amorphization on the Cs ion exchange and retention capacity of zeolite-NaY, B.X. Gu, L.M. Wang and R.C. Ewing 278 (2000) 64
- Reaction sintered glass: a durable matrix for spinel-forming nuclear waste compositions, W.L. Gong, W. Lutze and R.C. Ewing 278 (2000) 73
- Diffusion under irradiation of rare earth elements in apatite, P. Martin, A. Chevarier and G. Panczer 278 (2000) 202
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in zircon, R.E. Williford, B.D. Begg, W.J. Weber and N.J. Hess 278 (2000) 207
- XAS and XRD study of annealed ²³⁸Pu- and ²³⁹Pu-substituted zircons (Zr_{0.92}Pu_{0.08}SiO₄), B.D. Begg, N.J. Hess, W.J. Weber, S.D. Conradson, M.J. Schweiger and R.C. Ewing 278 (2000) 212
- Near-field behavior of ⁹⁹Tc during the oxidative alteration of spent nuclear fuel, F. Chen, P.C. Burns and R.C. Ewing 278 (2000) 225
- Electron and ion irradiation of zeolites, S.X. Wang, L.M. Wang and R.C. Ewing 278 (2000) 233
- KNa₃(UO₂)₂(Si₄O₁₀)₂(H₂O)₄, a new compound formed during vapor hydration of an actinide-bearing borosilicate waste glass, P.C. Burns, R.A. Olson, R.J. Finch, J.M. Hanchar and Y. Thibault 278 (2000) 290
- Long-term corrosion of Zircaloy before and after irradiation, E. Hillner, D.G. Franklin and J.D. Smee 278 (2000) 334
- On the reactive occlusion of the (uranium trichloride + lithium chloride + potassium chloride) eutectic salt in zeolite 4A, D. Lexa, L. Leibowitz and J. Kropf 279 (2000) 57
- Crystallization sequence and microstructure evolution of Synroc samples crystallized from CaZrTi₂O₇ melts, H. Xu and Y. Wang 279 (2000) 100
- XPS and XRD studies of (Th,U)O₂ fuel corrosion in water, S. Sunder and N.H. Miller 279 (2000) 118
- Pyrophoric potential of plutonium-containing salt residues, J.M. Haschke, H.K. Fauske and A.G. Phillips 279 (2000) 127
- Thermal iodine release of surface-implanted iodine in zirconia and its affect on hull disposal, F. Brossard, N. Chevarier, N. Moncoffre, Ph. Sainot, D. Crusset and H. Jaffrezic 279 (2000) 153
- Dissolution kinetics of particles of irradiated Chernobyl nuclear fuel: influence of pH and oxidation state on the release of radionuclides in the contaminated soil of Chernobyl, V.A. Kashparov, V.P. Protsak, N. Ahamdach, D. Stammose, J.M. Peres, V.I. Yoschenko and S.I. Zvarich 279 (2000) 225
- Actinide distribution in a stainless steel–15 wt% zirconium high-level nuclear waste form, D.D. Keiser, D.P. Abraham, W. Sinkler, J.W. Richardson Jr. and S.M. McDeavitt 279 (2000) 234
- Single-pass flow-through experiments on a simulated waste glass in alkaline media at 40 °C. I. Experiments conducted at variable solution flow rate to glass surface area ratio, P.K. Abraitis, B.P. McGrail, D.P. Trivedi, F.R. Livens and D.J. Vaughan 280 (2000) 196
- Single-pass flow-through experiments on a simulated waste glass in alkaline media at 40 °C. II. Experiments conducted with buffer solutions containing controlled quantities of Si and Al, P.K. Abraitis, B.P. McGrail, D.P. Trivedi, F.R. Livens and D.J. Vaughan 280 (2000) 206
- Alteration kinetics of a simplified nuclear glass in an aqueous medium: effects of solution chemistry and of protective gel properties on diminishing the alteration rate, C. Jégou, S. Gin and F. Larché 280 (2000) 216
- Pressure building during the early stages of gas production in a radioactive waste repository, B. Bonin, M. Colin and A. Dutfoy 281 (2000) 1
- Beta radiation effects in ¹³⁷Cs-substituted pollucite, N.J. Hess, F.J. Espinosa, S.D. Conradson and W.J. Weber 281 (2000) 22
- Simulated alteration tests on non-radioactive SON 68 nuclear glass in the presence of corrosion products and environmental materials, P. Jollivet, Y. Minet, M. Nicolas and E. Vernaz 281 (2000) 231
- Preparation and characterisation of Pupyrochlore: [La_{1-x}Pu_x]₂Zr₂O₇ (x = 0–1), N.K. Kulkarni, S. Sampath and V. Venugopal 281 (2000) 248
- Fuel corrosion processes under waste disposal conditions, D.W. Shoesmith 282 (2000) 1
- Basaltic glass: alteration mechanisms and analogy with nuclear waste glasses, I. Techer, T. Advocat, J. Lancelot and J.-M. Liotard 282 (2000) 40

- Dissolution of UO₂ in Boom clay water in oxidizing conditions: an XPS study, S. Guilbert, M.J. Guittet, N. Barré, M. Gautier-Soyer, P. Trocellier, D. Gosset and Z. Andriambololona 282 (2000) 75
- An interlaboratory study of a standard glass for acceptance testing of low-activity waste glass, W.L. Ebert and S.F. Wolf 282 (2000) 112
- Long-term behaviour of a thorium-based fuel, B. Fourest, T. Vincent, G. Lagarde, S. Hubert and P. Baudoin 282 (2000) 180
- The impact of materials selection on long-term activation in fusion power plants, N.P. Taylor, C.B.A. Forty, D.A. Petti and K.A. McCarthy 283–287 (2000) 28
- Waste management for different fusion reactor designs, P. Rocco and M. Zucchetti 283–287 (2000) 1473
- Alpha-radiolysis effects on UO₂ alteration in water, G. Sattonnay, C. Ardois, C. Corbel, J.F. Lucchini, M.-F. Barthe, F. Garrido and D. Gosset 288 (2001) 11
- Heavy-ion irradiation effects on structures and acid dissolution of pyrochlores, B.D. Begg, N.J. Hess, W.J. Weber, R. Devanathan, J.P. Icenhower, S. Thevuthasan and B.P. McGrail 288 (2001) 208
- Computational study of plutonium–neodymium fluorobrotholite Ca₉Nd_{0.5}Pu_{0.5}(SiO₄)(PO₄)₅F₂ thermodynamic properties, C. Meis 289 (2001) 167
- Determination of the defect creation mechanism in fluoroapatite, S. Soulet, J. Chaumont, J.-C. Krupa, J. Carpena and M.-O. Ruault 289 (2001) 194
- Preliminary study of irradiation effects on thorium phosphate-diphosphate, E. Pichot, N. Dacheux, J. Emery, J. Chaumont, V. Brandel and M. Genet 289 (2001) 219
- Kinetics of uranium release from Synroc phases, Y. Zhang, K.P. Hart, W.L. Bourcier, R.A. Day, M. Colella, B. Thomas, Z. Aly and A. Jostsons 289 (2001) 254
- A study of tritium decontamination of deposits by UV irradiation, Y. Oya, W. Shu, S. O'hira, T. Hayashi, H. Nakamura, T. Sakai, T. Tadokoro, K. Kobayashi, T. Suzuki and M. Nishi 290–293 (2001) 469
- Tritium decontamination of TFTR carbon tiles employing ultra violet light, W.M. Shu, S. Ohira, C.A. Gentile, Y. Oya, H. Nakamura, T. Hayashi, Y. Iwai, Y. Kawamura, S. Konishi, M.F. Nishi and K.M. Young 290–293 (2001) 482
- Some properties of a lead vanado-iodoapatite Pb₁₀(VO₄)₆I₂, M. Uno, M. Shinohara, K. Kurosaki and S. Yamanaka 294 (2001) 119
- Influence of low-temperature air oxidation on the dissolution behaviour of high burn-up LWR spent fuel, J.A. Serrano, J.P. Glatz, E.H. Toscano, J. Barrero and D. Papaioannou 294 (2001) 339
- Vitrification of gamma irradiated ⁶⁰Co²⁺ zeolites, S. Bulbulian and P. Bosch 295 (2001) 64
- SON 68 nuclear glass alteration kinetics between pH 7 and pH 11.5, S. Gin and J.P. Mestre 295 (2001) 83
- Safe disposal of surplus plutonium, W.L. Gong, S. Naz, W. Lutze, R. Busch, A. Prinja and W. Stoll 295 (2001) 295
- Role and properties of the gel formed during nuclear glass alteration: importance of gel formation conditions, S. Gin, I. Ribet and M. Couillard 298 (2001) 1
- The effect of clay on the dissolution of nuclear waste glass, K. Lemmens 298 (2001) 11
- Present understanding of R7T7 glass alteration kinetics and their impact on long-term behavior modeling, E. Vernaz, S. Gin, C. Jégou and I. Ribet 298 (2001) 27
- Overview of actinides (Np, Pu, Am) and Tc release from waste glasses: influence of solution composition, V. Pirlet 298 (2001) 47
- Long-term alteration mechanisms in water for SON68 radioactive borosilicate glass, T. Advocat, P. Jollivet, J.L. Crovisier and M. del Nero 298 (2001) 55
- The effect of coprecipitation in some key spent fuel elements, J. Quiñones, J. Serrano and P. Diaz Arocas 298 (2001) 63
- Glass dissolution: testing and modeling for long-term behavior, D.M. Strachan 298 (2001) 69
- US field testing programs and results, G.G. Wicks 298 (2001) 78
- In situ testing of the chemical durability of vitrified high-level waste in a Boom Clay formation in Belgium: discussion of recent data and concept of a new test, P. Van Iseghem, E. Valcke and A. Lodding 298 (2001) 86
- Near-field performance assessment for a low-activity waste glass disposal system: laboratory testing to modeling results, B.P. McGrail, D.H. Bacon, J.P. Icenhower, F.M. Mann, R.J. Puigh, H.T. Schaeff and S.V. Mattigod 298 (2001) 95
- First-order dissolution rate law and the role of surface layers in glass performance assessment, B. Grambow and R. Müller 298 (2001) 112
- Performance assessment of the disposal of vitrified high-level waste in a clay

- layer, D. Mallants, J. Marivoet and X. Sillen 298 (2001) 125
- Database development of glass dissolution and radionuclide migration for performance analysis of HLW repository in Japan, M. Yui 298 (2001) 136
- Release of boron and cesium or uranium from simulated borosilicate waste glasses through a compacted Ca-bentonite layer, K.S. Chun, S.S. Kim and C.H. Kang 298 (2001) 150
- Determination of sorption isotherms for Eu, Th, U and Am on the gel layer of corroded HLW glass, B. Luckscheiter and B. Kienzler 298 (2001) 155
- Release and retention of uranium during glass corrosion, T. Maeda, T. Banba, K. Sonoda, Y. Inagaki and H. Furuya 298 (2001) 163
- Leaching and migration of neptunium in a simulated engineered barrier system consisting of HLW glass and compacted bentonite, Y. Inagaki, H. Furuya, K. Idemitsu, T. Arima, H. Osako, T. Banba, T. Maeda, S. Matsumoto, I. Nomura, S. Kikkawa, M. Saito and H. Okamoto 298 (2001) 168
- Waste glass behavior in a loamy soil of a wet repository site, M.I. Ojovan, N.V. Ojovan, I.V. Startceva, G.N. Tchuikova, Z.I. Golubeva and A.S. Barinov 298 (2001) 174
- A comparison of HLW-glass and PWR-borate waste glass, S. Luo, J. Sheng and B. Tang 298 (2001) 180
- Effect of a siliceous additive on aqueous alteration of waste glass with engineered barrier materials, S. Mitsui and R. Aoki 298 (2001) 184
- In-depth distributions of elements in leached layers on two HLW waste glasses after burial in clay; step-scan by SIMS, A. Lodding and P. Van Iseghem 298 (2001) 197
- Aqueous corrosion of lanthanum aluminosilicate glasses: influence of inorganic anions, L. Bois, N. Barré, M.J. Guittet, S. Guillopé, P. Trocellier, M. Gautier-Soyer, P. Verdier and Y. Laurent 300 (2002) 141
- Zirconium, Zirconium Alloys and Compounds**
- Observation of spatial distribution of tritium in zirconium alloy with microautoradiography, K. Isobe, Y. Hatano, M. Sugisaki, T. Hayashi, M. Nishi and K. Okuno 271&272 (1999) 326
- The effect of texture variation on delayed hydride cracking behavior of Zr–2.5%Nb plate, S.S. Kim, S.C. Kwon and Y.S. Kim 273 (1999) 52
- Metal and oxygen mobilities during Zircaloy-4 oxidation at high temperature, A. Grandjean and Y. Serruys 273 (1999) 111
- Effect of strain rate and test temperature on superplasticity of a Zr–2.5 wt% Nb alloy, S.V. Shukla, C. Chandrashekharayya, R.N. Singh, R. Fotedar, R. Kishore, T.K. Sinha and B.P. Kashyap 273 (1999) 130
- Native vacancy migrations in zircon, R.E. Williford, W.J. Weber, R. Devanathan and A.N. Cormack 273 (1999) 164
- Long-term oxidation characteristics of oxygen-added modified Zircaloy-4 in 360 °C water, H.S. Hong, S.J. Kim and K.S. Lee 273 (1999) 177
- Characterization of Zircaloy-4 oxide layers by impedance spectroscopy, P. Barberis and A. Frichet 273 (1999) 182
- Diffusion model for the oxidation of Zircaloy-4 at 400 °C in steam. The influence of metallurgical structure (precipitates and grain size), E.A. Garcia and G. Béranger 273 (1999) 221
- Determination of the solidus temperatures of Zircaloy-4/oxygen alloys, P.J. Hayward and I.M. George 273 (1999) 294
- Proton irradiation effects in Zr–1.0 Nb–1.0 Sn–0.1 Fe probed by positron annihilation, P. Mukherjee, P.M.G. Nambissan, P. Sen, P. Barat and S.K. Bandyopadhyay 273 (1999) 338
- Preparation of simulated inert matrix fuel with different powders by dry milling method, Y.-W. Lee, H.S. Kim, S.H. Kim, C.Y. Joung, S.H. Na, G. Ledergerber, P. Heimgartner, M. Pouchon and M. Burghartz 274 (1999) 7
- Preliminary fabrication and characterisation of inert matrix and thorium fuels for plutonium disposition in light water reactors, F. Vettrano, G. Magnani, T.L. Torretta, E. Marmo, S. Coelli, L. Luzzi, P. Ossi and G. Zappa 274 (1999) 23
- Preparation of rock-like oxide fuels for the irradiation test in the Japan Research Reactor No. 3, T. Shiratori, T. Yamashita, T. Ohmichi, A. Yasuda and K. Watarumi 274 (1999) 40
- Behavior of cesium implanted in zirconia based inert matrix fuel, M.A. Pouchon, M. Döbeli, C. Degueldre and M. Burghartz 274 (1999) 61
- Alternative versions of inert matrix fuel for the use of civil and weapons-grade plutonium in reactors, A. Vatulin, V. Lysenko, V. Kostomarov and V. Sitrotin 274 (1999) 135

- Conceptual studies for pressurised water reactor cores employing plutonium–erbium–zirconium oxide inert matrix fuel assemblies, A. Stanculescu, U. Kasemeyer, J.-M. Paratte and R. Chawla 274 (1999) 146
- Design study of an irradiation experiment with inert matrix and mixed-oxide fuel at the Halden boiling water reactor, U. Kasemeyer, H.-K. Joo and G. Ledergerber 274 (1999) 160
- Core severe accidents with cermet fuels – a specific study for pressurized water reactors, J. Porta, C. Aillaud and S. Baldi 274 (1999) 174
- Neutronic analysis of U-free inert matrix and thorium fuels for plutonium disposition in pressurised water reactors, C. Lombardi, A. Mazzola, E. Padovani and M.E. Ricotti 274 (1999) 181
- Modeling the solubility of zirconia in a repository for high-level radioactive waste, E. Curti and W. Hummel 274 (1999) 189
- A study of actinide decay chains on the environmental effect of a geologic disposal of ‘rock-like oxide’ fuels and uranium–plutonium oxide fuels, H. Kimura, H. Takano and T. Muro-mura 274 (1999) 197
- Physical and chemical characteristics of baddeleyite (monoclinic zirconia) in natural environments: an overview and case study, G.R. Lumpkin 274 (1999) 206
- Influence of thermomechanical treatment on the corrosion behavior of Zr–1Nb–0.2Cu alloys, J.M. Kim and Y.H. Jeong 275 (1999) 74
- Equilibrium phase relations in the U–Zr–Fe ternary system, K. Nakamura, M. Kurata, T. Ogata, A. Itoh and M. Akabori 275 (1999) 151
- Electrolytic hydrogenation and its isotope effect in Zr and Pd studied by ERDA and SIMS techniques, Y. Oya, T. Suzuki, K. Iinuma, K. Morita, T. Horikawa, K. Abe and M. Okamoto 275 (1999) 186
- Use of linear free energy relationship to predict Gibbs free energies of formation of zirconolite phases (MZrTi₂O₇ and MHfTi₂O₇), H. Xu and Y. Wang 275 (1999) 211
- Use of linear free energy relationship to predict Gibbs free energies of formation of pyrochlore phases (CaMTi₂O₇), H. Xu and Y. Wang 275 (1999) 216
- Cation incorporation into zirconium oxide in LiOH, NaOH, and KOH solutions, Y.H. Jeong, K.H. Kim and J.H. Baek 275 (1999) 221
- Computer simulation of SIA migration in bcc and hcp metals, R.C. Pasianot, A.M. Monti, G. Simonelli and E.J. Savino 276 (2000) 230
- Hydride distribution around a blister in Zr–2.5Nb pressure tubes, G. Domizzi, G. Vigna, S. Bermúdez and J. Ovejero-García 275 (1999) 255
- A thermodynamic database for zirconium alloys, N. Dupin, I. Ansara, C. Servant, C. Toffolon, C. Lemaignan and J.C. Brachet 275 (1999) 287
- Fracture strength of hydride precipitates in Zr–2.5Nb alloys, S.-Q. Shi and M.P. Puls 275 (1999) 312
- Diffusion-controlled hydride growth near crack tip in zirconium under temperature transients, S.-Q. Shi 275 (1999) 318
- Oxidation of β-Zr and related phases in Zr–Nb alloys: an electron microscopy investigation, Y.P. Lin and O.T. Woo 277 (2000) 11
- A new ternary compound in the Zr–Sn–Fe system, N. Nieva and D. Arias 277 (2000) 120
- Radiation damage in neutron-irradiated yttria-stabilized-zirconia single crystals, B. Savoini, D. Cáceres, I. Vergara, R. González and J.E. Muñoz Santiuste 277 (2000) 199
- Zirconia ceramics for excess weapons plutonium waste, W.L. Gong, W. Lutze and R.C. Ewing 277 (2000) 239
- Microstructural aspects of Zircaloy nodular corrosion in steam, D.F. Taylor 277 (2000) 295
- Influence of technetium on the microstructure of a stainless steel–zirconium alloy, D.D. Keiser Jr., D.P. Abraham and J.W. Richardson Jr. 277 (2000) 333
- Examination of melted fuel rods and released core material from the first Phebus-FP reactor accident experiment, P.D.W. Bottomley, A.D. Stalios, J.-P. Glatz, B. Sätmark and C.T. Walker 278 (2000) 136
- Oxidation of β-Nb and Zr(Fe, V)₂ precipitates in oxide films formed on advanced Zr-based alloys, D. Pêcheur 278 (2000) 195
- Computer simulation of Pu³⁺ and Pu⁴⁺ substitutions in zircon, R.E. Williford, B.D. Begg, W.J. Weber and N.J. Hess 278 (2000) 207
- XAS and XRD study of annealed ²³⁸Pu- and ²³⁹Pu-substituted zircons (Zr_{0.92}Pu_{0.08}SiO₄), B.D. Begg, N.J. Hess, W.J. Weber, S.D. Conradson, M.J. Schweiger and R.C. Ewing 278 (2000) 212
- A model of the threshold stress intensity factor, *K*_{IH}, for delayed hydride cracking of Zr–2.5Nb alloy, Y.S. Kim, Y.G. Matvienko, Y.M. Cheong, S.S. Kim and S.C. Kwon 278 (2000) 251
- Crystallization sequence and microstructure evolution of Synroc samples

- crystallized from $\text{CaZrTi}_2\text{O}_7$ melts, H. Xu and Y. Wang 279 (2000) 100
- Delayed hydride cracking in zirconium alloys in a temperature gradient, S. Sagat, C.K. Chow, M.P. Puls and C.E. Coleman 279 (2000) 107
- Thermal iodine release of surface-implanted iodine in zirconia and its affect on hull disposal, F. Brossard, N. Chevarier, N. Moncoffre, Ph. Sainsot, D. Crusset and H. Jaffrezic 279 (2000) 153
- A reaction–diffusion analysis of the hydriding kinetics of zirconium-based alloys, G.E. Fernández and G. Meyer 279 (2000) 167
- Simulation of hydrogen embrittlement in zirconium alloys under stress and temperature gradients, A.G. Varias and A.R. Massih 279 (2000) 273
- K_{IH} in radial textured Zr–2.5%Nb pressure tube, S. Kim and Y. Kim 279 (2000) 286
- The initial transient of the irradiation growth in a zirconium alloy, A.M. Fortis and H.C. González 279 (2000) 301
- Effects of Sn and Nb on massive hydriding kinetics of Zr–XSn–YNb alloy, Y.-s. Kim, S.-k. Kim, J.-g. Bang and Y.-h. Jung 279 (2000) 335
- Residual carbon impurities in Zr–2.5Nb and their effect on deuterium pickup, R.A. Ploc 279 (2000) 344
- High-dose irradiation growth kinetics at 448 K in a zirconium alloy, H.C. González, A.M. Fortis and G.D.H. Coccoz 279 (2000) 360
- Influence of irradiation on K_{ISCC} of Zr–1%Nb claddings, Yu.K. Bibilashvili, A.V. Medvedev, B.I. Nesterov, V.V. Novikov, V.N. Golovanov, S.G. Eremin and A.D. Yurtchenko 280 (2000) 106
- Zr–silicide particles in Zr–2.5Nb pressure tube material: influence of oxidation and irradiation, Y.P. Lin and V. Perovic 280 (2000) 120
- Effects of copper addition on the tensile properties and microstructures of modified Zircaloy-4, H.S. Hong, H.S. Kim, S.J. Kim and K.S. Lee 280 (2000) 230
- Effects of the accumulated annealing parameter on the corrosion characteristics of a Zr–0.5Nb–1.0Sn–0.5Fe–0.25Cr alloy, J.H. Baek, Y.H. Jeong and I.S. Kim 280 (2000) 235
- Crack growth pattern and threshold stress intensity factor, K_{IH} , of Zr–2.5Nb alloy with the notch direction, Y.S. Kim, S.C. Kwon and S.S. Kim 280 (2000) 304
- In situ XRD analysis of the oxide layers formed by oxidation at 743 K on Zircaloy 4 and Zr–1NbO, N. Pétigny, P. Barberis, C. Lemaignan, Ch. Valot and M. Lallemand 280 (2000) 318
- Optical properties of γ -irradiated synthetic sapphire and yttria-stabilized zirconia spectroscopic windows, L. Fuks and C. Degueldre 280 (2000) 360
- Phase transition temperature in the Zr-rich corner of Zr–Nb–Sn–Fe alloys, M. Canay, C.A. Danón and D. Arias 280 (2000) 365
- Ultra-high vacuum investigation of the surface chemistry of zirconium, Y.C. Kang, M.M. Milovancev, D.A. Clauss, M.A. Lange and R.D. Ramsier 281 (2000) 57
- Investigation on the zirconia phase transition under irradiation, D. Simeone, J.L. Bechade, D. Gosset, A. Chevarier, P. Daniel, H. Pilliaire and G. Baldinozzi 281 (2000) 171
- Preparation and characterization of PuN pellets containing ZrN and TiN, Y. Arai and K. Nakajima 281 (2000) 244
- Corrosion resistance of nitrogen-implanted Zircaloy-4 in high-temperature water, S. Lee, C. Park, H. Kwon and B. Choi 282 (2000) 223
- The Sn–Ti–Zr system: equilibrium phases at 900 °C, S.F. Aricó and L.M. Griboudo 288 (2001) 217
- Some aspects of the use of ZrN as an inert matrix for actinide fuels, M. Burghartz, G. Ledergerber, H. Hein, R.R. van der Laan and R.J.M. Konings 288 (2001) 233
- Raman spectra of tetragonal zirconia: powder to zircaloy oxide frequency shift, P. Barbéris, G. Corolleur-Thomas, R. Guinebrière, T. Merle-Mejean, A. Mirgorodsky and P. Quintard 288 (2001) 241
- Behaviour of implanted xenon in yttria-stabilised zirconia as inert matrix of a nuclear fuel, C. Degueldre, M. Pouchon, M. Döbeli, K. Sickafus, K. Hojou, G. Ledergerber and S. Abolhassani-Dadras 289 (2001) 115
- Effects of fission product incorporation on the microstructure of cubic zirconia, L.M. Wang, S.X. Wang, S. Zhu and R.C. Ewing 289 (2001) 122
- Short-time creep and rupture tests on high burnup fuel rod cladding, W. Goll, H. Spilker and E.H. Toscano 289 (2001) 247
- Pre-transition oxidation behaviour of pre-hydrided Zircaloy-2, M. Oskarsson, E. Ahlberg, U. Södervall, U. Andersson and K. Pettersson 289 (2001) 315
- Thermophysical properties of zirconium hydride and uranium–zirconium hydride, B. Tsuchiya, J. Huang, K. Konashi, M. Teshigawara and M. Yamawaki 289 (2001) 329

- Effect of molybdenum on electron radiation damage of Zr-base alloys, J.H. Lee, S.K. Hwang, K. Yasuda and C. Kinoshita 289 (2001) 334
- Shadow corrosion or crevice corrosion? F. Garzarolli, P.B. Hoffmann and A. Seibold 289 (2001) 338
- Formation of nitrides at the surface of U–Zr alloys, M. Akabori, A. Itoh and T. Ogawa 289 (2001) 342
- Chemical erosion of carbon doped with different fine-grain carbides, M. Balden, C. García-Rosales, R. Behrisch, J. Roth, P. Paz and J. Etxeberria 290–293 (2001) 52
- Thermal properties of hydride fuel 45% U–ZrH_{1.6}, K. Kakiuchi, N. Itagaki, T. Furuya, T. Hattori, Y. Nakazono, F. Ono, K. Yamaguchi and M. Yamawaki 294 (2001) 28
- Mass spectrometric study of UO₂–ZrO₂ pseudo-binary system, M. Baïchi, C. Chatillon, C. Guèneau and S. Chatain 294 (2001) 84
- Thermal properties of zirconium hydride, S. Yamanaka, K. Yamada, K. Kurosaki, M. Uno, K. Takeda, H. Anada, T. Matsuda and S. Kobayashi 294 (2001) 94
- The oxidation kinetics and the structure of the oxide film on Zircaloy before and after the kinetic transition, T. Arima, T. Masuzumi, H. Furuya, K. Idemitsu and Y. Inagaki 294 (2001) 148
- Application of a new thermochemical measurement method for nuclear materials at temperatures beyond 3000 K, J.W. Hastie, D.W. Bonnell and P.K. Schenck 294 (2001) 175
- Thermal expansion and solubility limits of plutonium-doped lanthanum zirconates, S. Yamazaki, T. Yamashita, T. Matsui and T. Nagasaki 294 (2001) 183
- Temperature-dependence of defect creation and clustering by displacement cascades in α -zirconium, F. Gao, D.J. Bacon, L.M. Howe and C.B. So 294 (2001) 288
- Observation of second-phase particles in bulk zirconium alloys using synchrotron radiation, K.T. Erwin, O. Delaire, A.T. Motta, Y.S. Chu, D.C. Mancini and R.C. Birtcher 294 (2001) 299
- Effect of plastic shearing on damage and texture on Zircaloy-4 cladding tubes: experimental and numerical study, E. Girard, R. Guillén, P. Weisbecker and M. François 294 (2001) 330
- Ductility and strain rate sensitivity of Zircaloy-4 nuclear fuel claddings, K.W. Lee, S.K. Kim, K.T. Kim and S.I. Hong 295 (2001) 21
- Effect of Mo addition on the crystal texture and deformation twin formation in Zr-based alloys, Y.B. Chun, S.K. Hwang, M.H. Kim, S.I. Kwun and S.W. Chae 295 (2001) 31
- Oxidation of Zircaloy-2 and Zircaloy-4 in water and lithiated water at 360 °C, M. Oskarsson, E. Ahlberg and K. Pettersson 295 (2001) 97
- Phase transformation of polycrystalline zirconia induced by swift heavy ion irradiation, C. Gibert-Mougel, F. Couvreur, J.M. Costantini, S. Bouffard, F. Levesque, S. Hémon, E. Paumier and C. Dufour 295 (2001) 121
- Phase transformation of stabilised zirconia in water and 1.0 M LiOH, M. Oskarsson, E. Ahlberg and K. Pettersson 295 (2001) 126
- Molecular dynamics modeling of irradiation damage in pure and uranium-doped zircon, J.-P. Crocombette and D. Ghaleb 295 (2001) 167
- In situ Raman spectroscopic investigation of zirconium–niobium alloy corrosion under hydrothermal conditions, J.E. Maslar, W.S. Hurst, W.J. Bowers and J.H. Hendricks 298 (2001) 239
- Dissolution of oxygen-enriched Zircaloy-2, M. Oskarsson, E. Ahlberg and K. Pettersson 298 (2001) 291
- In situ characterization of Zircaloy-4 oxidation at 500 °C in dry air, J.J. Vermoyal, L. Dessemond, A. Hammou and A. Fricbet 298 (2001) 297
- Torsion texture development of zirconium alloys, P. Sanchez, A. Pochettino, T. Chauveau and B. Bacroix 298 (2001) 329
- Analysis of the monoclinic–tetragonal phase transition of zirconia under irradiation, D. Simeone, D. Gosset, J.L. Bechade and A. Chevarier 300 (2002) 27
- A Raman study of the nanocrystallite size effect on the pressure–temperature phase diagram of zirconia grown by zirconium-based alloys oxidation, P. Bouvier, J. Godlewski and G. Lucazeau 300 (2002) 118
- In situ electrochemical impedance spectroscopy of Zr–1%Nb under VVER primary circuit conditions, G. Nagy, Z. Kerner and T. Pajkossy 300 (2002) 230
- Thermodynamic stability of Na₂ZrO₃ using the solid electrolyte galvanic cell technique, R. Subasri, T. Mathews, K. Swaminathan and O.M. Sreedharan 300 (2002) 237