

Subject index

Absorber Materials

- Synthesis and sintering studies on Dy₂TiO₅ prepared by polymer carrier chemical process, C.-H. Jung, C.-J. Kim and S.-J. Lee 354 (2006) 137

Actinides (minor, excludes Plutonium, Thorium and Uranium)

- Irradiation stability of R7T7-type borosilicate glass, S. Peugot, J.-N. Cachia, C. Jégou, X. Deschanel, D. Roudil, V. Broudic, J.M. Delaye and J.-M. Bart 354 (2006) 1
- An experimental study of the dissolution rates of Nd-britholite, an apatite-structured actinide-bearing waste storage host analogue, C. Chairat, E.H. Oelkers, J. Schott and J.-E. Lartigue 354 (2006) 14

Amorphization and Amorphous Materials

- Irradiation stability of R7T7-type borosilicate glass, S. Peugot, J.-N. Cachia, C. Jégou, X. Deschanel, D. Roudil, V. Broudic, J.M. Delaye and J.-M. Bart 354 (2006) 1
- Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143
- Aqueous alteration of Japanese simulated waste glass P0798: Effects of alteration-phase formation on alteration rate and cesium retention, Y. Inagaki, A. Shin-kai, K. Idemitsu, T. Arima, H. Yoshikawa and M. Yui 354 (2006) 171

Cavities (includes Voids, Holes)

- Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66
- Re-solution of fission gas – A review: Part I. Intragranular bubbles, D.R. Olander and D. Wongsawaeng 354 (2006) 94

Ceramics (not listed elsewhere)

- An experimental study of the dissolution rates of Nd-britholite, an apatite-structured actinide-bearing waste storage host analogue, C. Chairat, E.H. Oelkers, J. Schott and J.-E. Lartigue 354 (2006) 14
- Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49
- Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143

Chemical Reactions (includes Electrochemical and Thermochemical Reactions)

- Oxidation behaviour of unirradiated sintered UO₂ pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85
- Combustion treatment of Co²⁺ and Cs⁺ exchanged zeolites, R. Rodríguez-Trejo, P. Bosch and S. Bulbulian 354 (2006) 110

Compatibility and Corrosion (includes Stress Corrosion Cracking)

- An experimental study of the dissolution rates of Nd-britholite, an apatite-structured actinide-bearing waste storage host analogue, C. Chairat, E.H. Oelkers, J. Schott and J.-E. Lartigue 354 (2006) 14
- Deposition behaviour of corrosion products on the Zircaloy heat transfer surface, J.-W. Yeon, Y. Jung and S.-I. Pyun 354 (2006) 163

Crystallographic Properties

- Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49
- Strain hardening and long-range internal stress in the localized deformation of

- irradiated polycrystalline metals, T.S. Byun and N. Hashimoto 354 (2006) 123
- Dislocations**
Strain hardening and long-range internal stress in the localized deformation of irradiated polycrystalline metals, T.S. Byun and N. Hashimoto 354 (2006) 123
- Fission Products**
Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66
Re-resolution of fission gas – A review: Part I. Intragranular bubbles, D.R. Olander and D. Wongsawaeng 354 (2006) 94
Combustion treatment of Co^{2+} and Cs^+ exchanged zeolites, R. Rodríguez-Trejo, P. Bosch and S. Bulbulian 354 (2006) 110
Aqueous alteration of Japanese simulated waste glass P0798: Effects of alteration-phase formation on alteration rate and cesium retention, Y. Inagaki, A. Shin-kai, K. Idemitsu, T. Arima, H. Yoshikawa and M. Yui 354 (2006) 171
- Fuels and Fuel Elements**
Displacement cascade initiated with the realistic energy of the recoil nucleus in UO_2 matrix by molecular dynamics simulation, L. Van Brutzel, M. Rarivomanantsoa and D. Ghaleb 354 (2006) 28
Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66
Oxidation behaviour of unirradiated sintered UO_2 pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85
Re-resolution of fission gas – A review: Part I. Intragranular bubbles, D.R. Olander and D. Wongsawaeng 354 (2006) 94
Radiation enhanced reactivity of UO_2 , O. Roth, S. Nilsson and M. Jonsson 354 (2006) 131
- Gases in Materials** (*excludes Hydrogen, Helium and Tritium*)
Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66
- Grain Boundaries**
Oxidation behaviour of unirradiated sintered UO_2 pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85
- Helium**
First-principles study of alloying effect of transition metals on He in titanium ditritide, Y.X. Wu, R. Yang, H. Zheng and Y.M. Wang 354 (2006) 36
- Hydrogen and Hydrides** (*includes Deuterium and Deuterides*)
First-principles study of alloying effect of transition metals on He in titanium ditritide, Y.X. Wu, R. Yang, H. Zheng and Y.M. Wang 354 (2006) 36
- Interfaces**
Oxidation behaviour of unirradiated sintered UO_2 pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85
- Kinetics**
Oxidation behaviour of unirradiated sintered UO_2 pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85
Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143
- Mathematical and Computational Methods**
Displacement cascade initiated with the realistic energy of the recoil nucleus in UO_2 matrix by molecular dynamics simulation, L. Van Brutzel, M. Rarivomanantsoa and D. Ghaleb 354 (2006) 28
- Mechanical Properties** (*not listed elsewhere*)
Strain hardening and long-range internal stress in the localized deformation of irradiated polycrystalline metals, T.S. Byun and N. Hashimoto 354 (2006) 123

Microstructure and Texture (*excludes by Irradiation*)

Oxidation behaviour of unirradiated sintered UO₂ pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85

Phase Equilibria (*includes Constitution, Phase Stability, Phase Instability*)

Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49

Phase Transformation (*includes Evaporation, Sublimation*)

Oxidation behaviour of unirradiated sintered UO₂ pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85

Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143

Powder Processes and Products

Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49

Synthesis and sintering studies on Dy₂TiO₅ prepared by polymer carrier chemical process, C.-H. Jung, C.-J. Kim and S.-J. Lee 354 (2006) 137

Precipitates and Precipitation

Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66

Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143

Processing

Combustion treatment of Co²⁺ and Cs⁺ exchanged zeolites, R. Rodríguez-Trejo, P. Bosch and S. Bulbulian 354 (2006) 110

Radiation Effects: Atomic Defects

Displacement cascade initiated with the realistic energy of the recoil nucleus in

UO₂ matrix by molecular dynamics simulation, L. Van Brutzel, M. Rari-vomanantsoa and D. Ghaleb 354 (2006) 28

Radiation Effects: Extended Defects, Microstructures

Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66

Radiation Effects: Mechanical Properties

Irradiation stability of R7T7-type borosilicate glass, S. Peugeot, J.-N. Cachia, C. Jégou, X. Deschanel, D. Roudil, V. Broudic, J.M. Delays and J.-M. Bart 354 (2006) 1

Strain hardening and long-range internal stress in the localized deformation of irradiated polycrystalline metals, T.S. Byun and N. Hashimoto 354 (2006) 123

Radiation Effects: Physical Properties

Irradiation stability of R7T7-type borosilicate glass, S. Peugeot, J.-N. Cachia, C. Jégou, X. Deschanel, D. Roudil, V. Broudic, J.M. Delays and J.-M. Bart 354 (2006) 1

Rare Earths

Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49

Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143

Theory and Modelling

First-principles study of alloying effect of transition metals on He in titanium ditride, Y.X. Wu, R. Yang, H. Zheng and Y.M. Wang 354 (2006) 36

Oxidation behaviour of unirradiated sintered UO₂ pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85

Re-solution of fission gas – A review: Part I. Intragranular bubbles, D.R. Olander and D. Wongsawaeng 354 (2006) 94

Strain hardening and long-range internal stress in the localized deformation of irradiated polycrystalline metals, T.S. Byun and N. Hashimoto 354 (2006) 123

Thorium, Thorium Alloys and Compounds

Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49

Titanium, Titanium Alloys and Compounds

First-principles study of alloying effect of transition metals on He in titanium ditritide, Y.X. Wu, R. Yang, H. Zheng and Y.M. Wang 354 (2006) 36

Uranium Oxides and Compounds

Displacement cascade initiated with the realistic energy of the recoil nucleus in UO₂ matrix by molecular dynamics simulation, L. Van Brutzel, M. Rarivomanantsoa and D. Ghaleb 354 (2006) 28

Stereological evolution of the rim structure in PWR-fuels at prolonged irradiation: Dependencies with burn-up and temperature, J. Spino, A.D. Stalios, H. Santa Cruz and D. Baron 354 (2006) 66

Oxidation behaviour of unirradiated sintered UO₂ pellets and powder at different oxygen partial pressures, above 350 °C, F. Valdivieso, V. Francon, F. Byasson, M. Pijolat, A. Feugier and V. Peres 354 (2006) 85

Re-solution of fission gas – A review: Part I. Intragranular bubbles, D.R. Olander and D. Wongsawaeng 354 (2006) 94

Radiation enhanced reactivity of UO₂, O. Roth, S. Nilsson and M. Jonsson 354 (2006) 131

Waste: Behavior in Storage

Irradiation stability of R7T7-type borosilicate glass, S. Peugot, J.-N. Cachia, C. Jégou, X. Deschanel, D. Roudil, V. Broudic, J.M. Delaye and J.-M. Bart 354 (2006) 1

An experimental study of the dissolution rates of Nd-britholite, an apatite-structured actinide-bearing waste storage host analogue, C. Chaïrat, E.H. Oelkers, J. Schott and J.-E. Lartigue 354 (2006) 14

Synthesis and characterization of thorium-bearing britholites, O. Terra, F. Audubert, N. Dacheux, C. Guy and R. Podor 354 (2006) 49

Combustion treatment of Co²⁺ and Cs⁺ exchanged zeolites, R. Rodríguez-Trejo, P. Bosch and S. Bulbulian 354 (2006) 110

Radiation enhanced reactivity of UO₂, O. Roth, S. Nilsson and M. Jonsson 354 (2006) 131

Aqueous alteration of Japanese simulated waste glass P0798: Effects of alteration-phase formation on alteration rate and cesium retention, Y. Inagaki, A. Shin-kai, K. Idemitsu, T. Arima, H. Yoshikawa and M. Yui 354 (2006) 171

Waste Materials

Combustion treatment of Co²⁺ and Cs⁺ exchanged zeolites, R. Rodríguez-Trejo, P. Bosch and S. Bulbulian 354 (2006) 110

Crystallization of neodymium-rich phases in silicate glasses developed for nuclear waste immobilization, D. Caurant, O. Majerus, P. Loiseau, I. Bardez, N. Baffier and J.L. Dussossoy 354 (2006) 143

Aqueous alteration of Japanese simulated waste glass P0798: Effects of alteration-phase formation on alteration rate and cesium retention, Y. Inagaki, A. Shin-kai, K. Idemitsu, T. Arima, H. Yoshikawa and M. Yui 354 (2006) 171

Zirconium, Zirconium Alloys

Deposition behaviour of corrosion products on the Zircaloy heat transfer surface, J.-W. Yeon, Y. Jung and S.-I. Pyun 354 (2006) 163