

## Bibliography Section

---

- ABBASI, S. A. (Ctr. Water Resources Dev. and Management, Div. Water Qual. and Environm., Calicut, 673571 India): Heterocyclic hydroxymic acids. V. Thermodynamics of the interaction of some bivalent metal ions with N-phenyl-2-furohydroxamic acid and its analogues. *Thermochim. Acta* 38 (1980) 335
- ABRAHAM, M. H. IRFING, R. J. (Univ. Surrey, Dept. Chem., Guilford GU2 5XH, Surrey, England): Enthalpies of tetramethyltin, tetraethyltin, tetra-n-propyltin, and tetraethyl-lead, and a survey of the group IV tetramethyl and tetraethyl compounds. *J. Chem. Thermodyn.* 12 (1980) 539
- ABRAS, A., MACHADO, J. C., BERALDO, H. O. (Univ. Fed. Minas Gerais, Dept. Fis., Bello Horizonte MG, Brazil): A Mössbauer spectroscopic study on the thermal stability of Fe(III) tris-N-benzoyl-N phenyl-hydroxylamine chelate. *Radiochem. Radioanal. Lett.* 43 (1980) 301
- ADAMS, J. M., WALTI, G. (Univ. Wales, Univ. Coll., Edward Davies Chem. Labs., Aberystwyth SY23 1NE, Dyfed, Wales): Thermal decomposition of a kaolinite: dimethyl sulfoxide intercalate. *Clays Clay Miner.* 28 (1980) 130
- ADEOSUN, S. O., AKANNI, M. S.: Electrical conductance, density and viscosity of the system lead(II) dodecanoate/dodecanoic acid. *Thermochim. Acta* 39 (1980) 35
- AGRAWAL, Y. K. (MS Univ., Fac. Technol. and Engn., Dept. Pharm., Baroda, 390001 Gujarat, India): Thermal analysis of rare earth complexes of N-phenylbenzohydroxamate. *Thermochim. Acta* 38 (1980) 153
- AHTEE, M., HEWAT, A. W. (Univ. Helsinki, Dept. Phys., SF-00170 Helsinki 17, Finland): Structures of the high temperature phases of rubidium nitrate. *Phys. Status Solidi A* 58 (1980) 525
- AKHMEDOV, L. A., GYLMANOV, A. A., KERIMOV, A. M. (V. I. Lenin State Teachers Inst., Baku, AzSSR): Use of Tatevskov method to calculate thermal conductivity of liquid N-alkanes and aliphatic N-alcohols in wide interval of temperature and pressure. *Zh. Fiz. Khim.* 54 (1980) 1014 (in Russian)
- ALBERS, J. (Univ. Saarland, Fachbereich Phys., D-6600 Saarbrücken, GFR): Ferroelectric and other structural phase transitions at low temperatures. *Phys. Status Solidi B* 98 (1980) K 129
- ALEKSENKO, I. I., SUL, M. F., SHLAEN, Z. M. (Acad. Sci. UKSSR, Inst. Mineral. Fuel Geol. and Geochem., Lvov, UKSSR): Thermal stability of sulfur. *Dokl. Akad. Nauk SSSR* 252 (1980) 206 (in Russian)
- ALIYEV, M. I., DADASHEV, I. S., SAFARALIYEV, G. I. (V. I. Lenin State Teachers Inst., Baku, AzSSR): Study of kinetic properties of  $Ga_{1-x}Mn_xSb$  alloys in range of 80–1000 K. *Fiz. Metal. Metalloved.* 49 (1980) 1093 (in Russian)
- AMANO, R., SATO, A., SUZUKI, S. (c/o A. Sato, Tohoku Univ., Iron Steel and other Met. Res. Inst., Sendai, Miyagi 980, Japan): Thermal transition of dimeric tris(2,2,6,6-tetramethyl-3,5-heptanedionato)terbium (III). *Chem. Lett.* (1980) 537
- AMER, A. R., SHAPIRO, J. S. (Macquarie Univ., Sch. Chem., N. Ryde, NSW 2113 Australia): Hydrogen halide-catalyzed thermal decomposition of poly(vinyl chloride). *J. Macromol. Sci. A* 14 (1980) 185

- AMIRKHA NOV, K. I., ALIBEKOV, B. G., ABDULAGATOV, I. M., VIKHROV, D. I., MIRSKAYA, V. A. (Acad. Sci. USSR, Inst. Phys., Makhachkala, USSR): Equation for saturation curve close to the critical point based on measurements of isochoric heat capacity. *Zh. Fiz. Khim.* 54 (1980) 1422 (in Russian)
- AMIRTHALINGAM, V., KARKHANAVALA, M. D., RAO, U. R. K. (Bhabha Atom Res. Ctr., Div. Chem., Bombay, 400085 India): Crystallographic phase transition in  $\text{NaBF}_4$ . *Z. Kristallogr.* 152 (1980) 57
- AMOSSE, J., MATHIEU, J. C. (Inst. Dolomieu, Rue Maurice Gignoux, F-38031 Grenoble, France): The enthalpies of formation of  $\text{FeWO}_4$ ,  $\text{MnWO}_4$ , and their solid solutions. *J. Chem. Thermodyn.* 12 (1980) 683
- ANDRUZZI, F., PILCHER, G., HACKING, J. M., CAVELL, S. (c/o G. Pilcher, Univ. Manchester, Dept. Chem., Manchester, M13 9PL Lancashire, England): Enthalpies of polymerisation of 2-oxabicyclo[2.2.2]octan-3-one. *Makromol Chem.* 181 (1980) 923
- ARNERI, G., RICHARDSON, G. C., SAUER, J. A. (Univ. Zagreb, YU-41001 Zagreb, Yugoslavia): Microstructure and permeability of "dense" cellulose acetate reverse osmosis membranes. *Thermochim. Acta* 38 (1980) 139
- ARNETT, E. M., PIENTA, N. J. (Univ. Pittsburgh, Dept. Chem., Pittsburgh, Pa., 15260 USA): Stabilities of carbonium ions in solution. 12. Heats of formation of alkyl chlorides as an entrée to heats of solution of aliphatic carbonium ions. *J. Amer. Chem. Soc.* 102 (1980) 3329
- ARNTZ, H. (Ruhr Univ. Bochum, Inst. Phys. Chem., Dept. Chem., D-4630 Bochum, GFR): New high pressure low temperature differential scanning calorimeter. *Rev. Sci. Instr.* 51 (1980) 965
- ASKADSKII, A. A., KOCHERGIN, Y. S. (Acad. Sci. USSR, Inst. Organoelement Cpd., Moscow, V-71 USSR): Structure and properties of lattices on basis of heat-resistant polymers. *Usp. Khim.* 49 (1980) 848 (in Russian)
- ASHKINAZI, L. A., GORDIN, V. A., DEDKOV, A. F. (V. I. Lenin Elect. Engn. Inst., Moscow, USSR): Thermal region of coating of oxidic. *Zh. Tekn. Fiz.* 50 (1980) 814 (in Russian)
- ASHY, M. A., DIEFALLAH, E. M., KHALIL, A. M., MOUSA, M. A. (Univ. Assiut, Dept. Chem., Assiut, Egypt): Solvolysis rates in aqueous-organic mixed solvents. 7. Enthalpy and entropy of activation for benzoyl chloride solvolysis in methanol-water solutions. *Indian J. Chem. A* 17 (1979) 479
- BAEV, A. K. (Belorussian Technol. Inst., Minsk, BeSSR): Activation energies in thermal degradation of carbonyls and correlation with their thermodynamic characteristics. *Zh. Fiz. Khim.* 54 (1980) 1361 (in Russian)
- BAGIN, V. I., GENDLER, T. S., DAINYAK, L. G., KUZMIN, R. N. (Acad. Sci. USSR, Inst. Geophys., Moscow, V-71 USSR): Mössbauer, thermomagnetic, and X-ray study of cation ordering and high-temperature decomposition in biotite. *Clays Clay Miner.* 28 (1980) 188
- BALLISTRERI, A., FOTI, S., MARAVIGNA, P., MONTAUDO, G., SCAMPORRINO, E. (Univ. Catania, Ist. Dipartimentale Chim. e Chim. Ind., I-95125 Catania, Italy): Mechanism of thermal degradation of polyurethanes investigated by direct pyrolysis in the mass spectrometer. *J. Polym. Sci. Polym. Chem. Ed.* 18 (1980) 1923
- BANDOPADHYAY, S., ADITYA, S. (Calcutta Univ., Dept. Appl. Chem., Calcutta, 700009 India): Thermochemistry of copper(II)-glycinate in tert-butanol-water and glycerol-water mixtures at 25°. *J. Indian Chem. Soc.* 57 (1980) 76
- BARENDREGT, R. B., VAN DEN BERG, P. J. (RVO TNO, Prins Maurits Lab., POB 45, NL-2280 AA Ruswijk, Netherland): The degradation of polyurethane. *Thermochim. Acta* 38 (1980) 181
- BARKHATOV, L. S., KAGAN, D. N., KOROLEVA, V. V., SHPIL'RAIN, É. E. (Acad. Sci. USSR, Inst. High Temp., Moscow V-71, USSR): High temperature investigations of the enthalpy of the solid phase of scandium oxide. *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 646
- BART, G., IKRAMUDDIN, M., LIPSCHUTZ, M. E. (c/o M. E. Lipschutz, Purdue Univ., Dept. Chem., W. Lafayette, Ind., 47907 USA): Thermal metamorphism of primitive meteorites. 9. On the mechanism of trace element loss from Allende heated up to 1400 °C. *Geochim. Cosmochim. Acta* 44 (1980) 719

- BARTENEV, G. M., ALEKSEYEV, V. V., LYALINA, N. M. (Acad. Sci. USSR, Inst. Phys. Chem., Moscow, V-71 USSR): Relaxation transitions within high elasticity region according to thermomechanical data and according to thermomechanical data and relaxation time spectra. *Vysokomol. Soedin. B* 22 (1980) 377 (in Russian)
- BAYER, G. (Swiss Fed. Inst. Technol., Inst. Kristallog. and Petrograph., CH-8092 Zürich, Switzerland): Foaming of borosilicate glasses by chemical reactions in the temperature range 950–1150 °C. *J. Non-Cryst. Solids* 38 (1980) 855
- BECKER, D., ZIMMERMANN, H., DRIESEL, G., ANDERS, H. (Acad. Sci. GDR, Inst. Polymerenchem., Teltow, G. D. R.): Polymer and thermal analysis of thermostability of PVC. *Z. Chem.* 20 (1980) 196 (in German)
- BEHNISH, J., ZIMMERMANN, H., SCHAAF, E. (Acad. Sci. GDR, Inst. Polymerenchem., Teltow, GDR): Possibilities and limitations of formal kinetics studies on polymer degradation processes using thermogravimetry. *Z. Chem.* 20 (1980) 196 (in German)
- BÉRAR, J. F., CALVARIN, G., WEIGEL, D. (Ecole Cent. Arts et Mfs., CNRS, Equipe Rech. 456, Chim. Phys. Solide Lab., F-92290 Chatenay Malabry, France): Un goniométrie original très précis pour la diffraction des rayons X sur poudre à température contrôlée. *J. Appl. Cryst.* 13 (1980) 201
- BHATT, M. B., BANERJEE, S. P. (c/o S. P. Banerjee, Univ. Saugar, Dept. Chem., Saugar, 470003 Madhya Pradesh, India): Infrared and thermal studies of interaction of pyridine and triethanolamine with partially copper(II)-exchanged zeolite AW 500. *Indian J. Chem. A* 19 (1980) 472
- BHATTACHARYYA, S. N., PATTERSON, D. (Indian Assoc. Cultivat. Sci., Calcutta, 700032 India): Excess heat capacities and orientational order in systems containing hexadecane isomers of different molecular structure. *J. Solut. Chem.* 9 (1980) 247
- BIEBER, A., CHAKARI, A., KUENTZLER, R. (Inst. Phys., CNRS, Magnetisme and Struct. Electr. Solides Lab. 306, F-67084 Strasbourg, France): Heat capacity of ordered and disordered V-Pt alloys. *J. Magn. Mater.* 15 (1980) 1161
- BISTLINE, R. G., LINFIELD, W. M. (USDA SEA, Eastern Reg. Res. Ctr., 600 E. Mermaid Lane, Philadelphia, Pa., 19118 USA): Thermal rearrangement of sulfated tallow alkanolamides. *J. Amer. Oil Chem. Soc.* 57 (1980) 167
- BLACHNIK, R., RABE, U. (Univ. Siegen Gesamthsch., Anorgan. Chem. Lab., D-5900 Siegen, 21 GFR): Das thermische Verhalten der Mischungen  $\text{Na}_2\text{S}-\text{P}_4\text{S}_{10}$  und  $\text{Na}_4\text{Ge}_4\text{S}_{10}-\text{P}_4\text{S}_{10}$  des Systems  $\text{Na}_2\text{S}-\text{GeS}_2-\text{P}_4\text{S}_{10}$ . *Z. Anorg. Allg. Chem.* 462 (1980) 199
- BLACKBURN, G. M., LILLEY, T. H., WALMSLEY, E. (c/o T. H. Lilley, Univ. Sheffield, Dept. Chem., Sheffield S3 7HF, S. Yorkshire, England): Aqueous solutions containing amino acids and peptides. 11. Enthalpy of dilution of single and binary solute solutions of *N*-acetylglycine amide, *N*-acetyl-L-alanine amide, *N*-acetyl-L-valine amide and *N*-acetyl-L-leucine amide at 298.15 K. *J. Chem. Soc. Faraday Trans. I*, 76 (1980) 915
- BLACKMAN, M. (Univ. London Imperial Coll. Sci. and Technol., London, SW7 2A2 England): Heat capacity of crystals and the vibrational spectrum. *Proc. Royal Soc. A* 371 (1980) 116
- BOCYENET, Y., SIFFERT, B. (Ctr. Rech. Phys. Chim. Surfaces Solides, 24 Ave President Kennedy, F-68200 Mulhouse, France): Determination by flow microcalorimetry of preferential adsorption heats of organic sulfate and sulfonates in aqueous solution onto sandstone and aluminas. *J. Chim. Phys.* 77 (1980) 295
- BOGACHEVA, I. S., ZEMDIKHANOV, K. B., MUKHAMEDZYANOV, G. K., SADYKOV, A. K., USMANOV, A. G. (S. M. Kirov Chem. Technol. Inst., Kazan, USSR): Thermal conductivity of certain organic liquid solutions. *Zh. Fiz. Khim.* 54 (1980) 1468 (in Russian)
- BOLLINI, D., FRABETTI, P. L., HEIMAN, G., LAURENTI, G., MONARI, L., NAVARRIA, F. L. (Univ. Bologna, Ist. Fis., I-40126 Bologna, Italy): Study of the structure of hadronic and electromagnetic showers with a segmented iron-scintillator calorimeter. *Nucl. Instr. Methods* 171 (1980) 237
- BORCHI, E., DE GENNARO, S., PELOSI, G., RETTORI, A. (Univ. Florence, Inst. Fis., I-50125 Florence, Italy): The role of the normal phonon-phonon scattering in the lattice thermal conductivity and phonon

- drag in metals at low temperatures. *Phys. Status Solidi B* 98 (1980) 667
- BORODIN, V. A., TATARCHENKO, V. A. CHERNYSHOVA, L. I., YALOVETS, T. N. (Acad. Sci. USSR, Inst. Solid State Phys., Moscow, V-71 USSR): The influence of thermal conditions of a process on the faceting of corundum single crystals obtained by the Verneuil method. *Kristallografiya* 25 (1980) 590 (in Russian)
- BORSESE, A., BORZONE, G., FERRO, R. (Univ. Genoa, Ist. Chim. Gen., I-16132 Genoa, Italy): Thermochemistry of binary alloys of rare earths: a comparison between experimental and calculated heats of formation. *J. Less-Common Metals* 70 (1980) 213
- BOTTEI, R. S., KUBUCK, B., LUSARDI, D. A. (Univ. Notre Dame, Dept. Chem., Notre Dame, Ind., 46556 USA): Thermal and spectral study of some divalent metal chelate polymers of NN'-dihydroxybipyrazolyl NN'-oxide. *J. Inorg. Nucl. Chem.* 42 (1980) 493
- BOUSTER, C., VERMANDE, P., VERON, J. (Inst. Natl. Sci. Appl. Lyon, Chim. Appl. Lab., F-69621 Villeurbanne, France): Study of the pyrolysis of polystyrenes. I. Kinetics of thermal decomposition. *J. Anal. Appl. Pyrol.* 1 (1980) 297
- BRAZIER, D. W., SSHWARTZ, N. V. (Dunlop Res. Ctr., Sheridan Pk. Res. Community, Mississauga, Ontario, L5K 1Z8 Canada): The cure of elastomers by dicumyl peroxide as observed in differential scanning calorimetry. *Thermochim. Acta* 39 (1980) 7
- BRILL, T. B. REESE, C. O. (Univ. Delaware, Dept. Chem., Newark, Del., 19711 USA): Analysis of intra- and intermolecular interactions relating to the thermophysical behaviour of  $\alpha$ -,  $\beta$ - and  $\delta$ -octahydro-1,3,5,7-tetranitro-1,3,5,7-tetraazocine. *J. Phys. Chem.* 84 (1980) 1376
- BRINDLEY, G. W., KIKKAWA, S. (Penn. State Univ., University Pk., Pa., 16802 USA): Thermal behaviour of hydrotalcite and of anion-exchanged forms of hydrotalcite. *Clays Clay Miner.* 28 (1980) 87
- BRASTROM, L. R., COLEMAN, D. L., GREGONIS, D. E., ANDRADE, J. D. (c/o J. D. Andrade, Univ. Utah, Dept. Bioengn., Salt Lake City, Utah, 84112 USA): Thermal analysis of polymethacrylates and blends. *Macromol. Chem. Rap. Comm.* 1 (1980) 341
- BROWN, D. B., WALTON, E. G., DILTS, J. A. (Univ. Vermont, Dept. Chem., Burlington, Vt., 05405 USA): Thermal reactions of the mixed-valence iron fluorides,  $Fe_2F_5 \cdot nH_2O$ . *J. Chem. Soc. Dalton Trans.* (1980) 845
- BUCHHEIT, W., PETERSSON, J. (Univ. Saarland, Fachbereich Phys., D-6600 Saarbrücken, GFR): On the dielectric and thermal behaviour of the ferroelectric  $NaNO_2$ . *Solid State Commun.* 34 (1980) 649
- BULOU, A., NOUET, J., HEWAT, A. W., SCHÄFER, F. J. (Fac. Sci. Le Mans, Phys. Etat Condense Lab., F-72017 Le Mans, France): Structural phase transitions in  $KCaF_3$ . DSC, birefringence and neutron powder diffraction results. *Ferroelectrics* 25 (1980) 375
- BURGESS, J., KEMMITT, R. D. W., MORTON, N., MORTIMER, C. T., WILKINSON, M. P. (c/o C. T. Mortimer, Univ. Keele, Dept. Chem., Keele ST5 58G, Staffordshire, England): Enthalpies of reaction of bis(triphenylphosphine) (trans-stilbene) platinum(O) with diphenyl-cyclopropenone and benzocyclobutenedione. *J. Organometal. Chem.* 191 (1980) 477
- BUSICO, V., CARFAGNA, C., SALERNO, V., VACATELLO, M. (Univ. Naples, Ist. Chim., I-80134 Naples, Italy): Thermal behaviour of complexes of general formula  $(n-C_6H_{2n+1}NH_2)_2CuCl_2$ . *Thermochim. Acta* 39 (1980) 1
- BUTCHER, D. N., SEALY, B. J. (Univ. Surrey, Dept. Electr. and Elect. Engn., Guilford GU2 5XH Surrey, England): The effects of ion implantation on the thermal oxidation of GaAs. *Radiat. Eff.* 48 (1980) 203
- BUTYLKIN, Y. P., GRINENKO, A. A., LEVITSKII, A. A., POLAK, L. S., RYTOVA, N. M., SLOVETSKII, D. I. (A. V. Topchiev Petrochem. Synth. Inst., Moscow, USSR): Mathematical modeling of the kinetics of the thermal decomposition of carbon dioxide in an electric arc discharge and quenching of the products. *High Energy Chem. transl. Khim. Vysok. Energ.* 13 (1979) 456
- BUYS, J. A. H. M., SMEETS, J. P. M., DE JONGE, W. J. M. (Eindhoven Univ. Technol., Dept. Phys., Eindhoven, Netherlands): Thermal conductivity of  $CsMnCl_3 \cdot 2H_2O$ . *J. Magn. Magn. Mater.* 15 (1980) 923

- CALVARIN, G., BERAR, J. F., CHHOR, K., POMMIER, C. (Ecole Cent. Arts et Mfs., Chim. Phys. Solide Lab., CNRS, Equipe Rech. 456, F-92290 Chatenay Malabry, France): Etude de la transition de phase ordre-désordre du vanadocène  $V(C_5H_5)_2$ . *Mol. Cryst. Liquid Cryst.* 59 (1980) 149
- CAPRIO, V., LIGNOLA, P. G., INSOLA, A. (Univ. Napoli, Ist. Chim. Ind. ed Impianti Chim., I-80125 Napoli, Italy): Gas phase ozone evaluation by thermal decomposition technique. *Anal. Chem.* 52 (1980) 1123
- CARTWRIGHT, M., WOOLF, A. A. (c/o A. A. Woolf, Univ. Bath, Sch. Chem., Bath BA2 7AY, Avon, England): Heats of formation of sulphuryl chlorofluoride and lead chlorofluoride. *J. Chem. Soc. Dalton Trans.* (1980) 817
- CASEWIT, C. J., GODDARD III, W. A. (c/o W. A. Goddard, Caltech., Arthur Amos Noyes Lab. Chem. Phys., Pasadena, Calif, 91125 USA): Thermochemistry of trans-diiimide and 1,1-diazene. Ab initio studies. *J. Amer. Chem. Soc.* 102 (1980) 4057
- CASLAVSKY, J. L., VIECHNICKI, D. J. (USA, Mat. and Mech. Res. Ctr., Watertown, Mass., 02172 USA): Melting behaviour and metastability of yttrium aluminium garnet (YAG) and  $YAlO_3$  determined by optical differential thermal analysis. *J. Mater. Sci.* 15 (1980) 1709
- CAVELL, K. J., HILL, J. O., MAGEE, R. I. (c/o J. O. Hill, La Trobe Univ., Dept. Inorgan. and Analyt. Chem., Bundoora, Vic. 3083, Australia): Standard enthalpy of formation of bis(diethyl-dithiocarbamate)nickel(II) at 298 K and the nickel-sulphur bond energy. *J. Chem. Soc. Dalton Trans.* (1980) 763
- CECILE, B., OLLIVIER, P., BLOISE, R., KAUFFMANN, J. P. (Bur. Rech. Geol. et Minières, Dept. Mineralurgie, BP 6009, F-45060 Orleans, France): Contribution à l'étude du comportement du titane en milieu sulfurique à haute température (270 °C) et à pression élevée (56 bar). *J. Less-Common Metals* 70 (1980) 39
- CESARI, E., NAVARRO, J., TORRA, V., MACQUERON, J. L., DUBES, J. P., TACHOIRE, H. (Dept. Phys. Etseib, Barcelone, 28 Spain): Comportement des calorimètres à conduction dans le domaine des basses fréquences. *Thermochim. Acta* 39 (1980) 73
- CEZAIIRLIYAN, A., MIILLER, A. P., RIGHINI, F., ROSSO, A. (NBS, Washington, D. C., 20234 USA): Radiance temperature of vanadium at its melting point. *High Temp. Sci.* 11 (1979) 223
- CHARLES, R. G. (Westinghouse Elect. Corp., Ctr. Res. and Dev., Pittsburgh, Pa., 15235 USA): Vapor pressures by differential thermal analysis: application to some nickel chelates. *Thermochim. Acta* 38 (1980) 315
- CHAVRET, M., MERLIN, J. C. (Univ. Lyon 1, Chim. Analyt. Lab., 43, Blvd. 11 Novembre 1918, F-69622 Villeurbanne, France): Détermination du degré de pureté d'après les courbes de fusion dans le domaine  $-50\text{ }^\circ\text{C} + 70\text{ }^\circ\text{C}$ . *Analisis* 8 (1980) 191
- CHEKHOSKOL, V. Y., ZHUKOVA, I. A., TARASOV, V. D. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): Enthalpy and heat capacity of zirconium dioxide in the temperature region 1100–2500 °K. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 17 (1979) 637
- CHEN, H. H., LEE, F. (Natl. Tsing-Hua Univ., Inst. Phys., Hsinchu, Taiwan): A generalised equivalent neighbour model: I. Derivation of the high-temperature lattice constants. *J. Phys. C* 13 (1980) 2817
- CHENG, C. H., PEARCE, E. M. (Polytechn. Inst. New York, Dept. Chem., Brooklyn, N. Y., 11201 USA): Polymers containing fluorinated ketone groups. I. DSC and NMR studies of poly(p-vinyltrifluoroacetophenone) and polymers of similar structure. *J. Polym. Sci. Polym. Chem. Ed.* 18 (1980) 1871
- CHEKNOV, S. A. (Acad. Sci. LaSSR, Inst. Phys., Riga, LaSSR): On temperature dependence of Frenkel defect generation in alkali halide crystals. *Fiz. Tverd. Tela* 22 (1980) 1888 (in Russian)
- CHILDS, R. F., ROGERSON, C. V. (Mc Master Univ., Dept. Chem., Hamilton, Ontario, L8S 4M1 Canada): Photochemical and thermal rearrangements of protonated 2,3-homotropones. *J. Amer. Chem. Soc.* 102 (1980) 4159
- CHIN, D. H., LA MAR, G. N., BALCH, A. L. (c/o G. N. La Mar, Univ. Calif. Davis, Dept. Chem., Davis, Calif., 95616 USA): On the mechanism of autooxidation of iron(II) porphyrins. Detection of a peroxo-bridged iron(III) porphyrin dimer and the

- mechanism of its thermal decomposition to the oxo-bridged iron(III) porphyrin dimer. *J. Amer. Chem. Soc.* 102 (1980) 4344
- CHING, W. Y., HUBER, D. L., LEUNG, K. M. (Univ. Missouri, Dept. Phys., Kansas City, Mo., 64110 USA): Spin-wave modes and low-temperature specific heat in the spin-glass  $\text{Eu}_x\text{Sr}_{1-x}\text{S}$ :  $x = 0.54$  and  $0.40$ . *Phys. Rev. B* 21 (1980) 3708
- CHOY, C. L., CHEN, F. C., LUK, W. H. (Chinese Univ. Hong Kong, Dept. Phys., Shatin, Hong Kong): Thermal conductivity of oriented crystalline polymers. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1187
- COLEGRAVE, R. K., RASUL, J. W. (Univ. London, Chelsea Coll., Dept. Math., London, SW3 6LX England): Low-temperature behaviour of magnetic impurities in superconductors. I. *J. Phys. F* 10 (1980) 1507
- COLLINS, S. G., CHRISTENSEN, J. J., IZATT, R. M., HANKS, R. W. (Brigham Young Univ., Inst. Thermochem., Dept. Chem. Engn., Provo, Utah, 84602 USA): The excess enthalpies of 10(n-pentane + an n-alkanol) mixtures at 298.15 K. *J. Chem. Thermodyn.* 12 (1980) 609
- DALY, N. J., ZIOLKOWSKI, F. (Australian Natl. Univ., Dept. Chem., Canberra, Act., 2600 Australia): The thermal decompositions of carbamates. IV. The reactions of isopropyl N,N-dimethylcarbamate and t-butyl N,N-dimethylcarbamate. *Aust. J. Chem.* 33 (1980) 481
- DAROLLES, J. M., LEPETRE, T., DUSSRAU, J. M. (Univ. Montpellier, 2 CNRS Ctr. Etude Electr. Solides, F-34060 Montpellier, France): Conductibilité thermique de borures de silicium. *Phys. Status Solidi A* 58 (1980) K71
- DAS, N. C., MISRA, P. P., DAS, P. B. (Ravenshaw Coll., Dept. Chem., Cuttack, 753003 Orissa, India): Thermodynamics of the chlorides, bromides, nitrates, bromates, iodates and sulphates of potassium and sodium in dioxane-water mixtures from conductance data at different temperatures. *Thermochim. Acta* 38 (1980) 245
- DAVID, D., CREMERY, P., GARCIA, E. A., BERANGER, G. (Ecole Norm. Super. Phys. Solides Grp., F-75231 Paris 5, France): A concomitant use of some radioanalytical and metallurgical methods. Application to the study of the thermal oxidation of titanium. *J. Radioanal. Chem.* 55 (1980) 345
- DAVIES, C. K. L., CUCARELLA, M. C. M. (Univ. London, Queen Mary Coll., Dept. Mat., London, E1 4NS England): The effect of pressure on the melting temperature and lamellar thickness of trans-1,4-polyisoprene crystallized at pressures of 1 bar to 3 kbar. *J. Mater. Sci.* 15 (1980) 1547
- DE FREES, D. J., MCIVER, R. T., HEHRE, W. J., (c/o W. J. Hehre, Univ. Calif. Irvine, Dept. Chem., Irvine, Calif., 92717 USA): Heats of formation of gaseous free radicals via ion cyclotron double resonance spectroscopy. *J. Amer. Chem. Soc.* 102 (1980) 3334
- DELBECQ, C. J., MARSHALL, S. A., YUSTER, P. H. (Argonne Natl. Lab., 9700 S. Cass Ave., Argonne, Ill., 60439 USA): Optical and thermal stimulation of reactions in  $\alpha\text{-Al}_2\text{O}_3$  containing  $\text{V}^{3+}$ ,  $\text{V}^{4+}$ ,  $\text{Co}^{3+}$  and  $\text{Co}^{2+}$ . *Phys. Status Solidi B* 99 (1980) 377
- DE LISI, R., GOFFREDI, M., TURCO LIVERI, V. (c/o M. Goffredi, Ist. Chim. Fis., Via Archirafi 26, I-90123 Palermo, Italy): Calorimetric method for the direct evaluation of the thermodynamic functions for the transfer of non-ionic solutes between immiscible liquid phases. *J. Chem. Soc. Chem. Commun.* (1980) 380
- DE LISI, R., PERRON, G., DESNOYERS, J. E. (c/o J. E. Desnoyers, Univ. Sherbrooke, Dept. Chem., Sherbrooke, Quebec, J1K 2R1 Canada): Volumetric and thermochemical properties of ionic surfactants: sodium decanoate and octylamine hydrobromide in water. *Can. J. Chem.* 58 (1980) 959
- DERVAN, P. B., SANTILLI, D. S. (A. M. Gorkii State Univ., Sverdlovsk, USSR): Synthesis and thermal decomposition of cis 3,4,5,6-tetrahydropyridazine-3,4-d<sub>2</sub> relative rates of rotation cleavage and closure for tetramethylene. *J. Amer. Chem. Soc.* 102 (1980) 3863
- DERYAGIN, A. V., BARANOV, N. V. (A. M. Gorkii State Univ., Sverdlovsk, USSR): Magnetic properties, phase transitions and magnetic hysteresis in  $(\text{Tb}_{1-x}\text{Gd}_x)_3\text{Co}$  compounds. *Fiz. Metal. Metalloved.* 49 (1980) 1245 (in Russian)
- DERYAGINA, É. N., SUKHOMAZOVA, É. N., BANNIKOVA, O. B., VORONKOV, M. G. (Acad. Sci. USSR, Inst. Organ. Chem., Irkutsk, USSR): High-temperature organic

- synthesis. 9. Thermal transformations of dimethyl sulfide and thiirane. *Bull. Acad. Sci. USSR Div. Chem. Sci.* transl. *Izv. Akad. Nauk SSSR Khim.* 28 (1979) 1936
- DEY, A. N. (P.R. Mallory and Co. Inc., Phys. Sci. Lab., Burlington, Mass., 01803 USA): Safety studies on Li/SO<sub>2</sub> cells. 3. Differential thermal analysis of miniature Li/SO<sub>2</sub> cells. *J. Electrochem. Soc.* 127 (1980) 1000
- DOERING, W. v. E., BARSA, E. A. (Harvard Univ., Dept. Chem., Cambridge, Mass., 02138 USA): Rotational propensities and identity of bond rupture in 1-cyano-2-methyl-3-(cis-propenyl) cyclopropanes. (Thermal rearrangements — mechanism of isomerization-kinetics). *Proc. Nat. Acad. Sci. Unit. States Amer.* 77 (1980) 2355
- DOMICIANO, J. B., SANO, W., JURAITIS, K. R., ISOTANI, S. (Univ. Sao Paulo, Inst. Fis., Sao Paulo, Brazil): Phase transition study of Zn(BF<sub>4</sub>)<sub>2</sub>·6U<sub>3</sub>O<sub>8</sub> by EPR of diluted Ni<sup>2+</sup> between 98 and 298 K. *J. Phys. Soc. Jap.* 48 (1980) 1449
- DROTNING, W. D. (Sandia Labs., Albuquerque, N. M., 87115 USA): Thermal expansion of molten tin, lead, and aluminium to 1300 K. *High Temp. Sci.* 11 (1979) 265
- DRUMMOND, J. E., FARGO, V., BRISCOE, M., REED, H. (Power Convers Technol. Inc., San Diego, Calif., 92121 USA): Demonstration of a high power density electrocaloric heat engine. *Ferroelectrics* 17 (1980) 213
- DUA, A. K., GEORGE, V. C., AGARWALA, R. P. (Bhabha Atom Res. Ctr., Div. Chem., Trombay, Bombay, 400085 India): Thermal conductivity oxide coating on zircaloy-2. *Thin Solid Films* 69 (1980) L1
- DUBES, J. P., BARRES, M., BOITARD, E., TACHOIRE, H. (Univ. Aix Marseille, 1 Thermochim. Lab., F-13331 Marseille 3, France): Filtrage électronique inverse en microcalorimétrie application à la correction automatique des signaux. *Thermochim. Acta* 39 (1980) 63
- DYSZEL, S. M. (US Customs Serv., 1301 Constitution Ave., NW Washington, D. C., 20229 USA): A thermogravimetric method for distinguishing Alaskan crude oil from that of other world sources. *Thermochim. Acta* 38 (1980) 299
- EFIMOV, M. E., LEONIDOV, V. Y. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): New determination of enthalpy of formation of rubidium fluoride. *Zh. Fiz. Khim.* 54 (1980) 1323 (in Russian)
- EGORUSHKIN, V. E., SAVITSKII, E. M., FEDIAINOVA, N. I., FADIN, V. P.: Kinetic properties and high-temperature phase transition in NiTi and FeCO alloys. *Dokl. Akad. Nauk SSSR* 251 (1980) 1376 (in Russian)
- EICHLER, A., BOHN, H., GEY, W. (Tech. Univ. Braunschweig, Inst. Tech. Phys., D-3300 Braunschweig, G. F. R.): Specific heat of the superconducting high pressure phase GaII. *Z. Phys. B* 38 (1980) 21
- ELENBAAS, R. A., SCHINKEL, C. J., STORM VAN LEEUWEN, S., VAN DEUDEKOM, C. J. M. (Univ. Amsterdam, Nat. Kundig Lab., NL-1018 XE Amsterdam, Netherlands): Heat capacity, magnetization, electrical resistivity and neutron diffraction of CeTl<sub>3</sub>. *J. Magn. Magn. Mater.* 15 (1980) 1218
- ELENBAAS, R. A., SCHINKEL, C. J., VAN DEUDEKOM, C. J. M. (Univ. Amsterdam, Nat. Kundig Lab., NL-1018 XE Amsterdam, Netherlands): Heat capacity and electrical resistivity of (Ce, La)In<sub>3</sub> and Ce(In,Sn)<sub>3</sub>. *J. Magn. Magn. Mater.* 15 (1980) 979
- EL SALAAM, K. M. A., HASSAN, E. A. (Univ. Assiut, Dept. Chem., Assiut, Egypt.): Effect of metal oxide additives on the thermal decomposition of KMnO<sub>4</sub>. *Thermochim. Acta* 38 (1980) 271
- EMEL'YANOVA, A. T., KIRILLOVA, É. I., NIKOLAEV, A. F.: Increase of the thermal stability of ABS (acrylonitrile-butadiene-styrene) copolymer. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 52 (1979) 1943
- ENGEL, P. S. (Rice Univ., Dept. Chem., Houston, Tex., 77001 USA): Mechanism of the thermal and photochemical decomposition of azoalkanes. *Chem. Rev.* 80 (1980) 99
- ENGQUIST, H. L., GRIMVALL, G. (Royal Inst. Technol., Dept. Theoret. Phys., S-10044 Stockholm, 70 Sweden): Electrical and thermal conductivities of metals in weak magnetic fields. *J. Magn. Magn. Mater.* 15 (1980) 911
- ERDEN, I., BALCI, M. (Univ. Hamburg, Inst. Organ. Chem. and Biochem., D-2000 Hamburg, 13 GFR): Untersuchungen zum thermischen und photochemischen Verhalten von 8,9-Diaza-4,5-benzotricyclo

- [4.3.0.0<sup>37</sup>] octa-4,8-dien. *Tetrahedron Lett.* 21 (1980) 1825
- ETTER, D. E., WIEDENHEFT, C. J. (Monsanto Res. Corp., Mound Fac. Miamisburg, Ohio, 45342 USA): Reactions of cuprous chloride with container materials at elevated temperature. *Thermochim. Acta* 38 (1980) 351
- EVANS, F. W., FREY, H. (Sandoz Ltd., Chem. Entwicklung Pharma, CH-4002 Basel, Switzerland): Reaktionskinetik aus kalorimetrischen Untersuchungen, ein Beispiel der industriellen Verwendung. *Chimia* 34 (1980) 247
- FABRIZZI, L., MICHELONI, M., PAOLETTI, P. (c/o P. Paoletti, Univ. Florence, Ist. Chim. Gen. e Inorgan., I-50132 Florence, Italy): Thermochemistry of metal complexes with the rigid ligand 1,3,5-*cis*, *cis*-triaminocyclohexane. *J. Chem. Soc. Dalton Trans.* (1980) 1055
- FAGALY, R. L., BOHN, R. G. (NRS, Ctr. Rech. Tres Basses Temp., F-38042 Grenoble, France): A simple model for the enhancement of the low temperature heat capacity of vitreous silica above 1K. *Phys. Lett. A* 77 (1980) 85
- FAINBERG, E. Z. (Khimvolokno Sci. Ind. Assoc., Moscow, USSR): Low temperature heat capacity and conformational characteristics of polymers in solid-state. *Vysokomol. Soedin. A* 22 (1980) 1158 (in Russian)
- FAINBERG, E. Z. (Khimvolokno Sci. Ind. Assoc., Chernigov, UKSSR): The approximate approaches of polymer heat capacity determination. *Vysokomol. Soedin. A* 22 (1980) 1253 (in Russian)
- FARBER, M., SRIVASTAVA, R. D. (Space Sci. Inc., Monrovia, Calif., 91016 USA): Mass spectrometric determination of the heats of formation of the silicon bromides SiBr<sub>2(g)</sub>, SiBr<sub>2(g)</sub>, and SiBr<sub>3(g)</sub>. *High Temp. Sci.* 12 (1980) 21
- FILLER, R. L., LINDENFELD, P., WORTHINGTON, T., DEUTSCHER, G. (US Army Electr. Technol. and Devices Lab., Ft. Monmouth, N.J., 07703 USA): Heat-capacity measurements on granular aluminium. *Phys. Rev. B* 21 (1980) 5031
- FINCH, A., GATES, P. N., EDWARDS, A. J., HANA, A. K. (Univ. London, Royal Holloway Coll., Bourne Lab., Egham TW20 OEX, Surrey, England): Thermochemistry of fluorine compounds. 5. Di- $\mu$ -oxo-bis [trifluoro-oxiodine(VII)]. *J. Chem. Soc. Dalton Trans.* (1980) 869
- FITZER, E. (Univ. Karlsruhe, Inst. Chem. Tech., Kaiserstr. 12, D-7500 Karlsruhe, GFR): Thermal degradation of polymers to polymeric carbon. An approach to the synthesis of new materials. *Angew. Chem.* 19 (1980) 375
- FORSLUND, B., JELINSKI, B. (Univ. Stockholm, Arrhenius Lab., Dept. Inorgan. Chem., S-10691 Stockholm, Sweden): An instrument system for simultaneous differential thermal analysis (DTA), thermomicroscopy and evolved gas detection (EGD) up to 1000 °C. *Chem. Scr.* 15 (1980) 13
- FOUSKOVÁ, A. (Czechoslovak Acad. Sci., Inst. Phys., Na Slovance 2, CS-18200 Prague, 8 Czechoslovakia): Specific heat of (NH<sub>3</sub>-(CH<sub>2</sub>)<sub>n</sub>-NH<sub>3</sub>)CdCl<sub>4</sub> with n = 3,5. *Ferroelectrics* 25 (1980) 451
- FRANCESCHI, J. D., GAMBINO, M., BROS, J. P. (Univ. Provence, UER Chim., Pl. V. Hugo, F-13331 Marseille, 3 France): Étude calorimétrique du système ternaire bismuth-gallium-antimoine. *Ann. Chim.* 5 (1980) 473
- FUCHS, V., HARTEN, L., BERS, A. (Hydro Quebec, Inst. Rech., Varennes, Quebec, JOL 2PO Canada): On Tokamak ignition equilibria and thermal stability. *Nucl. Fusion* 20 (1980) 630
- FUGER, J., MORSS, L., BROWN, D. (Univ. Liège, Inst. Radichem., B-4000 Liège, Belgium): Thermodynamics of lanthanide elements. 2. Enthalpies of formation of erbium trichloride and of the aqueous erbium (3+) ion. *J. Chem. Soc. Dalton Trans.* (1980) 1076
- FULLER, M. J., PINKSTONE, J. (Thorn Lighting Ltd., Enfield, EN1 1UL Middlesex, England): Thermal analysis of the oxalate hexahydrates and decahydrates of yttrium and the lanthanide elements. *J. Less-Common Metals* 70 (1980) 127
- FUNK, R. L., VOLLHARDT, K. P. C. (Univ. Calif. Berkeley, Dept. Chem., Berkeley, Calif., 94720 USA): Thermal, photochemical, and transition-metal mediated routes to steroids by intramolecular Diels-Alder reactions of *o*-xylylenes (*o*-quinodimethanes). *Chem. Soc. Rev.* 9 (1980) 41
- FURUKAWA, J., KOBAYASHI, E., WAKUI, T. (Sci. Univ. Tokyo, Dept. Ind. Chem.,



- Noda, Chiba, 278 Japan): Phosphorus containing polystyrene derivatives as flame resistance. *Polym. J.* 12 (1980) 277
- GALY, S. A., KURILO, M. V. (Acad. Sci. UkSSR, Inst. Geochem. and Mineral. Phys., Kiev, UkSSR): Thermobarometrical investigations of sphalerites of the Nagolny Mountain range. *Dopov. Akad. Nauk Ukr. SSR B* (1980) 8 (in Ukrainian)
- GANGADEVI, T., RAO, M. S., KUTTY, T. R. N. (c/o M. S. Rao, Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore 560012, India): Thermal decomposition of zirconyl oxalates. 2. Thermal decomposition of zirconyl oxalic acid, ammonium zirconyl oxalate, zirconyl oxalate and its mixture with barium oxalate. *Indian J. Chem. A* 19 (1980) 303
- GANGADEVI, T., RAO, M. S., KUTTY, T. R. N. (c/o M. S. Rao, Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore, 560012 India): Thermal decomposition of zirconyl oxalates. 3. Strontium and calcium zirconyl oxalates. *Indian J. Chem. A* 19 (1980) 309
- GARCIA, J., NAVARRO, R., BARTOLOMÉ, J., BURRIEL, R., GONZÁLEZ, D., FRUCHART, D. (Univ. Zaragoza, Dept. Fis. Fundament., Zaragoza, Spain): Specific heat of the cubic metallic perovskites  $Mn_3ZnN$  and  $Mn_3GaN$ . *J. Magn. Magn. Mater.* 15 (1980) 1155
- GAROCHE, P., FERT, A., VEYSSIE, J. J., BOUCHER, B. (Univ. Paris, 11 Phys. Solides Lab., F-91405 Orsay, France): Specific heat of rare earth amorphous alloys. *J. Magn. Magn. Mater.* 15 (1980) 1397
- GAWORZEWSKI, P., SCHMALZ, K. (Akad. Wissensch. DDR, Inst. Phys. Werkstoffbearbeitung, Seestr 82, DDR-1166 Berlin): On the kinetics of thermal donors in oxygen-rich silicon in the range from 450 to 900 °C. *Phys. Status Solidi A* 58 (1980) K223
- GEORGE, G. A., RIDDELL, S. Z. (Def. Sci. and Technol. Org. Mat. Res. Labs., Melbourne, 3032 Australia): Kinetics of the thermo-oxidative degradation of nylon 66 by oxyluminescence methods. *J. Macromol. Sci. A* 14 (1980) 161
- GEST, K. (Japan Atom Energy Res. Inst., Tokai, Ibaraki, 31911 Japan): Dielectric properties and phase transitions in  $X_3H(SO_4)_2$  and  $X_3D(SO_4)_2$  crystals (X: K,Rb). *J. Phys. Soc. Jap.* 48 (1980) 886
- GHAISAS, S. V., CHAUDHARI, S. M., BHIDAY, M. R., BHORASKAR, V. N. (Univ. Poona, Dept. Phys., Poona 411007 Maharashtra, India): Thermal analysis of BeO, MgO and CaO heated on tungsten using mass spectrometric technique. *J. Phys. Soc. Jap.* 48 (1980) 1795
- GIBSON, A. G., GREIG, D., WARD, I. M. (Univ. Leeds, Dept. Phys., Leeds LS2 9JT, W. Yorkshire, England): Thermal conductivity of ultrahigh modulus polyethylene. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1481
- GIOLITO, I. (Univ. Sao Paulo, Inst. Quim., Sao Paulo, Brazil): Thermal decomposition of alkali metal selenates. *Thermochim. Acta* 38 (1980) 341
- GLADUN, A., GLADUN, C., HOFMANN, A., PIETRASS, B. (Akad. Wissensch. DDR, Zent. Inst. Festkörperphys. und Werkstofforsch., DDR-8027 Dresden, GDR): Thermal conductivity of  $RuO_2$ . *Phys. Status Solidi* 58 (1980) 149
- GLADUN, A., GLADUN, C., VINZELBERG, H. (Akad. Wissensch. DDR, Zent. Inst. Festkörperphys. und Werkstofforsch., DDR-8027 Dresden, GDR): Thermal conductivity of high-purity molybdenum. *Phys. Status Solidi A* 58 (1980) 409
- GLAZOV, V. M., LEBEDEV, V. V., MOLODYK, A. D. (Moscow Electr. Engr. Inst., Moscow, USSR): Thermal dissociation  $A^{II} B^{IV} As_2$  compounds. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1363
- GLAZOV, V. M., LEBEDEV, V. V., MOLODYK, A. D., PASHINKIN, A. S. (Moscow Electr. Engr. Inst., Moscow, USSR): Heats of formation of  $A^{II} B^{IV} C_2^Y$  and  $A^I B^{III} C_2^Y$  compounds. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1469
- GLOVER, S. A. (Univ. Port Elizabeth, Organ. Chem. Res. Labs., P. O. B. 1600, Port Elizabeth, 6000 South Africa): Mechanism of thermal decomposition of tetra-aryltellurium species. *J. Chem. Soc. Perkin Trans. I* (1980) 1338
- GMELIN, E., GUCKELBERGER, K. (Max Planck Inst. Festkörperforsch., Heisenbergstr. 1, D-7000 Stuttgart, 80 GFR): Specific heat of superconducting and normal  $Nb_{20}Zr_{80}$ . *J. Phys. C* 13 (1980) 1269

- GORBACHEV, V. M. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 630090 USSR): Characteristics of thermal stability of inorganic compounds. *Zh. Neorg. Khim.* 25 (1980) 1176 (in Russian)
- GOL'DBERG, V. M., NEVEROV, A. N., MAKASHOVA, T. N. (Acad. Sci. USSR Inst. Chem. Phys., Moscow V-71 USSR): A proportion of thermal and oxidative degradation of polystyrene in melt. *Vysokomol. Soedin. B* 22 (1980) 353 (in Russian)
- GOODMAN, F. O. (Univ. Waterloo, Dept. Appl. Math., Waterloo, Ontario, N2L 3G1 Canada): Thermal accommodation coefficients. *J. Phys. Chem.* 84 (1980) 1431
- GÖTZE, G., SCHNEIDER, G. M. (Ruhr Univ. Bochum., Inst. Phys. Chem., D-4630 Bochum, GFR): Excess volumes of liquid mixtures at high pressures. IV. Pressure dependence of excess Gibbs energies, excess entropies, and excess enthalpies of aqueous non-electrolyte mixtures up to 250 MPa. *J. Chem. Thermodyn.* 12 (1980) 661
- GRABOVSKIY, V. Y., LEVITIN, V. V., KANYUKA, V. I. (Ukrainian Special Steel Res. Inst., Zaporozhe, UkSSR): On  $\gamma'$ -phase influence on temperature dependence of rupture work of heat-resistant KhN35VTYu alloy. *Fiz. Metal. Metalloved.* 49 (1980) 880 (in Russian)
- GRANIER, B., COUTURES, J. P. (CNRS, Ultra-refractaires Lab., BP 5, F-66120 Odeillo, France): Heat of formation measurement of cubic titanium oxinitrides by high temperature reaction calorimetry. *Compt. Rend. C* 290 (1980) 275
- GREENBERG, F. H., SCHENERDORF, S. (SUNY Coll. Buffalo, Dept. Chem., Buffalo, N. Y., 14222 USA): Thermal cis-trans isomerization in 1,2-dibenzoyl-1,2-dihydroacenaphthylene. *J. Org. Chem.* 45 (1980) 2033
- GREIDANUS, F. J. A. M., DE JONGH, L. S., HUIKAMP, W. J., BUSCHOW, K. H. J. (State Univ. Leiden, Kamerlingh Onnes Lab., Leiden, Netherlands): Hyperfine specific heats of  $\text{PrX}_2$  ( $X = \text{Ir, Pt, Rh, Ru}$ ) Laves phase compounds. *J. Magn. Magn. Mater.* 15 (1980) 1231
- GRIKINA, O. E., YAROVOL, S. S., TATEVSKII, V. M., (M. V. Lomonosov State Univ., Fac. Chem., Moscow, 117234 USSR): Calculation of enthalpy of formation of hydrocarbons using different methods. *Zh. Fiz. Khim.* 54 (1980) 1384 (in Russian)
- GROENINCKX, G., REYNAERS, H. (Catholic Univ. Leuven, Dept. Chem., Macromolec. and Organ. Chem. Lab., B-3030 Heverlee, Belgium): Morphology and melting behaviour of semicrystalline poly(ethylene terephthalate). II. Annealed PET. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1323
- GROENINCKX, G., REYNAERS, H., BERGHMANS, H., SMETS, G. (Catholic. Univ. Leuven, Dept. Chem., Macromolec. and Organ. Chem., B-3030 Heverlee, Belgium): Morphology and melting behaviour of semicrystalline poly(ethylene terephthalate). I. Isothermally crystallized PET. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 13M
- GROMOVA, V. V., IRGA, S. P., YUTINA, G. A., IL'INA, T. V.: Influence of metals on thermal decomposition of neopentyl glycol dilaurate. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 52 (1979) 1959
- GROMZIN, D. E., MALAFAEV, N. T., MURAKHOVSKII, A. A. (A. M. Gorkii State Univ., Kharkov, 310077 UkSSR): Phase transformations in  $\text{Zn}_2\text{Y}$  single crystal. *Fiz. Tverd. Tela* 22 (1980) 1886 (in Russian)
- GUNNARSSON, G., WENNERSTRÖM, H., OLOFSSON, G., ZACHAROV, A. (Univ. Lund, Ctr. Chem., Dept. Phys. Chem. 2, P. O. B. 740, S-22007 Lund 7, Sweden): Enthalpies of proton dissociation of poly(acrylic acid). Comparison between experiment and theory for a polyelectrolyte system. *J. Chem. Soc. Faraday Trans. 1*, 76 (1980) 1287
- GUPTA, M. C., NATH, J. D. (Nagpur Univ., Dept. Chem., Nagpur 440010, Maharashtra, India): Thermal degradation of polystyrene. I. Chain scission at low temperature in air. *J. Appl. Polym. Sci.* 25 (1980) 1017
- GUPTA, P. K. (Owens Corning Fiberglas Corp. Tech. Ctr., Div. Sci. and Technol., Granville, Ohio, 43023 USA): An analysis of oxygen enrichment of combustion air in fossil fuel fired glass melting tanks. *J. Non-Cryst. Solids* 38 (1980) 761
- GUPTA, V. P., ST. PIERRE, L. E. (Carlew Chem. Ltd., 7435 Chester Ave., Montreal, Quebec, H4V 1M4 Canada): The effect of tin stabilizers on the thermal degradation of poly(vinyl chloride). *J. Polym. Sci. Polym. Chem. Ed.* 18 (1980) 1483

- HAIJEV, S. N., KERIMOV, K. K., HAIJEVA, F. S., IGNAT'YEV, V. L. (Kuzbass Polytech. Inst., Kemerovo 650026 USSR): Advances in experimental thermochemistry. 2. A modern bomb calorimeter. *J. Chem. Thermodyn.* 12 (1980) 509
- HAKL, J. (Sandoz Ltd., Dept. Dev., CH-4002 Basel, Switzerland): Sensitive detector of exothermic processes (Sedex). *Thermochim. Acta* 38 (1980) 253
- HANDA, Y. P., BENSON, G. C. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Thermodynamic properties of binary liquid mixtures involving weak specific interactions. I. Excess enthalpies of binary mixtures of tetrachloromethane with some aromatic hydrocarbons at 298.15 K. *Fluid Phase Equilibria* 4 (1980) 261
- HANDA, Y. P., BENSON, G. C. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Thermodynamic properties of binary liquid mixtures involving weak specific interactions. II. Excess enthalpies of binary mixtures of tetrachloroethene with some aromatic hydrocarbons at 298.15 K. *Fluid Phase Equilibria* 4 (1980) 269
- HANDA, Y. P., BENSON, G. C. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Thermodynamic properties of binary liquid mixtures involving weak specific interactions. III. Excess enthalpies of binary mixtures of tetrachloromethane and of tetrachloroethene with some alicyclic, pseudoaromatic, and aromatic hydrocarbons at 298.15 K. *Fluid Phase Equilibria* 4 (1980) 277
- HARES, G. B., SEWARD, T. P. (Corning Glass Works, Res. and Dev. Labs., Corning, N. Y., 14830 USA): Thermo-chemical effects in photochromic glasses. *J. Non-Cryst. Solids* 38 (1980) 205
- HARVEY, G., FLETCHER, N. H. (Capricornia Inst. Adv. Educ., Dept. Appl. Phys., Rockhampton, QLD 4700 Australia): Thermal expansion of  $\beta$  silver iodide at low temperatures. *J. Phys. C* 13 (1980) 2969
- HASELTON, H. T., WESTRUM, E. F. (US Geol. Survey, 959 Natl. Ctr., Reston, Va., 22092 USA): Low-temperature heat capacities of synthetic pyrope, grossular, and pyrope<sub>60</sub> grossular<sub>40</sub>. *Geochim. Cosmochim. Acta* 44 (1980) 701
- HAUSER, J. J. (Bell Tel. Labs. Inc., Murray Hill, N. J., 07974 USA): Low-temperature ac conductivity of chalcogenide glasses. *Phys. Rev. Lett.* 44 (1980) 1534
- HECK, H., WILLIAMS, I. S., GOPAL, E. S. R., JYOTHI, S. (Australian Natl. Univ., Res. Sch. Phys. Sci., Electr. Sect., Canberra, Act. 2600 Australia): An automated high precision calorimeter for the temperature range 200K–400K. II. Design of temperature controllers. *Pramana* 14 (1980) 349
- HEGENBARTH, E. (Tech. Univ. Dresden, Phys. Sect., DDR-8027 Dresden, GDR): Thermal conductivity of some ferroelectrics at low temperatures. *Ferroelectrics* 24 (1980) 107
- HENIG, E. T., LUKAS, H. L., PETZOW, G. (Max Planck Met. Forsch., Inst. Werkstoffwissensch., Heisenberger Str. 5, D-7000 Stuttgart, GRF): Enthalpy of formation and description of the defect structure of the ordered  $\beta$ -phase in Co–Al. *Z. Metallk.* 71 (1980) 398
- HENMI, T. (Ehime Univ., Fac. Agr., Matsuyama, 790 Japan): Effect of SiO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> ratio on the thermal reactions of allophane. *Clays Clay Miner.* 28 (1980) 92
- HENNING, D., WEIL, K. G. (TH Darmstadt, Inst. Phys. Chem., Petersenstr. 20, D-6100 Darmstadt, GFR): Der Zusammenhang zwischen Gefüge und der freien Überschussenthalpie in dünnen Aufdampfschichten. *Z. Metallk.* 71 (1980) 215
- HERREROS, J., TELLO, M. J., BOCANEGRA, E. H. (Univ. Bilbao, Fac. Ciencias, Dept. Fis., Apdo. 644, Bilbao, Spain): Solid-solid phase transitions in (C<sub>n</sub>H<sub>2n+1</sub>NH<sub>3</sub>)<sub>2</sub>CdCl<sub>2</sub>Br<sub>2</sub> compounds. *Solid State Commun.* 34 (1980) 515
- HILL, R. J., MAIRS, T. E., SWINTON, F. L. (New Univ. Ulster, Sch. Phys., Sci., Coleraine, North Ireland): The thermodynamic properties of binary mixtures containing an octane. III. Excess enthalpies and excess volumes. *J. Chem. Thermodyn.* 12 (1980) 581
- HILL, R. J., SWINTON, F. L. (New Univ. Ulster, Sch. Phys. Sci., Coleraine, North Ireland): The excess enthalpies of some mixtures containing carbon disulphide. *J. Chem. Thermodyn.* 12 (1980) 489
- HILLEL, R., BOUIX, J., MICHAÉLIDES, A. (Univ. Lyon 1, CNRS Physicochim. Minérale Lab. 1, 43 Blvd. 11 Novembre 1918,

- F-69621 Villeurbanne, France): Elaboration, caractérisation et stabilité thermique des arseniures de germanium et de silicium. *Thermochim. Acta* 38 (1980) 259
- HITIER, G. (Univ. Paris 6, Luminescence Lab. 1, F-75230 Paris, 05 France): Emission excitonique dans ZnSe: largeurs de raies, énergies d'activation thermiques et optiques. *J. Phys.* 41 (1980) 443
- HODGEMAN, D. K. C. (Def. Sci. and Technol. Org. Mat. Res. Labs., Melbourne, 3032 Australia): Reactions of stabilizer compounds. II. Formation and thermal decomposition of peroxy-cyclohexa-2,5-dienones from some phenolic antioxidants and light stabilizers. *J. Macromol. Sci. A14* (1980) 173
- HOLMES, J. L., LOSSING, F. P. (Univ. Ottawa, Dept. Chem., Ottawa, Ontario, K1N 9B4 Canada): Thermochemistry and unimolecular reactions of ionized acetic acid and its enol in the gas phase. *J. Amer. Chem. Soc.* 102 (1980) 3732
- HOLTERMAN, H. A. J., ENGBERTS, J. B. F. N. (c/o J. B. F. N. Engberts, State Univ. Groningen, Dept. Organ. Chem., NL-9747 AG Groningen, Netherlands): Hydrolysis of two acyl activated esters in water-rich 2-n-butoxyethanol-water mixtures. Effects of hydrophobic interactions on enthalpies, entropies, and heat capacities of activation. *J. Amer. Chem. Soc.* 102 (1980) 4256
- HOSHINO, K., YOUNG, W. H. (Univ. E. Anglia, Sch. Math. and Phys., Norwich NR4 7TJ Norfolk, England): Entropy of mixing of compound forming liquid binary alloys. *J. Phys. F* 10 (1980) 1365
- HOSHINO, Y., UTSUNOMIYA, T., UTSUGI, T., ABE, O. (Tokyo Inst. Technol., Engr. Mat. Res. Lab., Midorifuku, Yokohama, Kanagawa, 227 Japan): Reaction of sodium nitrate and silica at high temperatures. *J. Chem. Soc. Jap. Chem. Industr. Chem.* (1980) 690
- HOUSE, J. E., LUNDEEN, J. E. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): An averaging process for calculating the Madelung constant from the ion grouping method. *Thermochim. Acta* 38 (1980) 347
- HOUSE, J. E., MCCORMACK, D., JAGIELLA, J. A. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): Studies on amine hydrothiocyanates. III. Heats of fusion. *Thermochim. Acta* 38 (1980) 349
- HUMPHREY, R. S., HEDWIG, G. R., WATSON, I. D., MALCOLM, G. N. (Massey Univ., Dept. Chem. Biochem. and Biophysik, Palmerston North, New Zealand): The partial molar enthalpies in aqueous solution of some amino acids with polar and non-polar side chains. *J. Chem. Thermodyn.* 12 (1980) 595
- HUONG, P. V., HILCZER, B. (Univ. Bordeaux, 1 Spectr. Infrarouge et Raman Lab., F-33405 Talence, France): High temperature phase transition in  $\text{KH}_2\text{AsO}_4$  and  $\text{KD}_2\text{AsO}_4$ . *Ferroelectrics* 25 (1980) 581
- ICHINOSE, J., ISHIDA, T., MAEKAWA, T., YOKOKAWA, T. (Hokkaido Univ., Fac. Sci., Dept. Chem., Sapporo, Hokkaido, 060 Japan): Enthalpies of  $\text{NaBeF}_3$ ,  $\text{Na}_2\text{BeF}_4$ , and  $[(1-x)\text{NaF} + x\text{BeF}_2]$ . *J. Chem. Thermodynam.* 12 (1980) 567
- IDOKAGI, T., KIMURA, I. (Kyushu Univ., Fac. Engr., Dept. Appl. Sci., Fukuoka 812, Japan): Decoration-iteration transformation analysis of the paramagnetic specific heat of  $\text{Fe}(\text{HCOO})_2 \cdot 2\text{H}_2\text{O}$ . *Phys. Lett. A* 77 (1980) 77
- IHARA, Y., TSUCHIYA, R. (Kanazawa Univ., Fac. Educ., Chem. Lab., Kanazawa, Ishikawa, 920 Japan): Thermal square planar to octahedral transformation of nickel(II) complexes containing 2-aminobenzimidazole in the solid phase. *Bull. Chem. Soc. Jap.* 53 (1980) 1614
- IONASHIRO, M., GIOLITO, I. (Univ. Estadual Sao Paulo, Inst. Quim., Araraquara, Brazil): Studies on double selenates. I. Thermal decomposition of lanthanum and alkali metal double selenates. *Thermochim. Acta* 38 (1980) 285
- IRWIN, W. J. (Univ. Aston, Dept. Pharm., Birmingham B4 7ET, W. Midlands, England): Analytical pyrolysis. An overview. *J. Anal. Appl. Pyrol.* 1 (1979) 3
- IRWIN, W. J. (Univ. Aston, Dept. Pharm., Birmingham B4 7ET, W. Midlands, England): Analytical pyrolysis. An overview (II). *J. Anal. Appl. Pyrol.* 1 (1979) 89
- ISHIKAWA, T., NAGAI, S., KASAI, N. (Osaka Municipal Tech. Res. Inst., Kitaku, Osaka, 530 Japan): Thermal behaviour of  $\alpha$  nylon-12. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1413

- ISLAM, N., KUMAR, S., SINGH, K. P. (Aligarh Muslim Univ., Dept. Chem., Aligarh 202001, Uttar Pradesh, India): Temperature and concentration dependence of transport processes in glass-forming melts. *Z. Phys. Chem.* 261 (1980) 313
- IVAN, B., KENNEDY, J. P., KELEN, T., TÜDÖS, F. (Hungarian Acad. Sci., Cent. Res. Inst. Chem., POB 17, H-1525, Budapest, Hungary): Determination of labile chlorine content in polychloroprene, chlorobutyl rubber and chlorinated ethylene-propylene copolymer by thermal dehydrochlorination combined with  $\text{Me}_3\text{Al}$  treatment. *Polym. Bull.* 2 (1980) 461
- JACOBS, P. W. M., ONG, S. H. (Univ. Western Ontario, Dept. Chem., London, Ontario, NGA 587 Canada): Studies of defect clustering in  $\text{CaF}_2$ :  $\text{Y}^{3+}$  by ionic conductivity and thermal depolarization. *J. Phys. Chem. Solids* 41 (1980) 431
- JACOBS, P. W. M., ONG, S. H. (Univ. Western Ontario, Dept. Chem., London, Ontario, NGA 587 Canada): Thermal depolarization in crystals of calcium fluoride doped with oxygen. *J. Phys. Chem. Solids* 41 (1980) 437
- JELLINEK, H. H. G., DUNKLE, D. (Clarkson Coll. Technol., Dept. Chem., Potsdam, N. Y., 13676 USA): Evolution of HCN by thermal oxidative degradation from nylon 66 at high temperatures including burning. *J. Polym. Sci. Polym. Chem. Ed.* 18 (1980) 1471
- JOHNSON, G. K., GAYER, K. H. (Argonne Natl. Lab., Div. Chem. Engn., 9700 S. Cass Ave., Argonne, Ill., 60439 USA): The enthalpies of solution and formation of  $\text{Cs}_2\text{CO}_3$ . *J. Chem. Thermodyn.* 12 (1980) 705
- JOHNSON, G. K., PAPATHEODOROU, G. N., JOHNSON, C. E. (Argonne Natl. Labs., Div. Chem. Engn., 9700 S. Cass Ave., Argonne, Ill., 60439 USA): The enthalpies of formation and high-temperature thermodynamic functions of  $\text{As}_4\text{S}_4$  and  $\text{As}_2\text{S}_3$ . *J. Chem. Thermodyn.* 12 (1980) 545
- JOHRI, K. N., VENUGOPALAN, K. A. (Univ. Delhi, Dept. Chem., Delhi 110007, India): Thermogravimetric investigation of the decomposition of certain metal dithiocarbamates. *Rev. Roum. Chim.* 25 (1980) 215
- JÓNÁS, K., VASSÁNYI, I., UNGVÁRI, I. (Veszprém Univ. Chem. Engn., Dept. Gen. and Inorgan. Chem., H-8201 Veszprém, Hungary): The study of synthetic carbonate-hydroxyapatites and dental enamels by IR and derivatographic methods. *Phys. Chem. Miner.* 6 (1980) 55
- JONGBLOETS, H. W. H. M., VAN DE STEEG, M. J. H., STOELINGA, J. H. M., WYDER, P. (Catholic Univ. Nijmegen, Mat. Res. Inst., Nijmegen, Netherlands): Temperature dependence of the photothermal conductivity of semiconductors at low temperatures. *J. Phys. C* 13 (1980) 2139
- JOUGLAR, J., HETROIT, C., VUILLERMOZ, P. L., TRIBOULET, R. (Inst. Natl. Sci. Appl. Lyon, Phys. Mat. Lab., F-69621 Villeurbanne, France): Influence of growth parameters on CdTe low temperature thermal conductivity. *J. Appl. Phys.* 51 (1980) 3171
- JUDD, N. F., MAYHEW, C. J., McELROY, P. J., WILLIAMSON, A. G. (Univ. Canterbury, Dept. Chem. Engn., Christchurch, New Zealand): Enthalpies of mixing of binary vapours. *J. Chem. Thermodyn.* 12 (1980) 465
- KABANSKII, A. E. (Tomsk Autom. Control Syst. and Radioelectr. Inst., Tomsk, USSR): Calorimetric study of the interaction of hydrogen atoms with the surface of germanium. *Kinet. Catal. transl. Kinet. Katal.* 20 (1979) 873
- KALININ, V. A., BUBNOVA, N. Y. (O. Y. Shmidt Earth Phys. Inst., Moscow, USSR): Inference of thermal equation of state for solids from ultrasonic data. *Fiz. Zemli* (1980) 12 (in Russian)
- KAMEYAMA, H., YOSHIDA, K. (Univ. Tokyo, Engn. Res. Inst., Bunkyo-ku, Tokyo, 113 Japan): Thermochemical decompositions in hydrogen production by the "UT-3" cycle consisting of Br-Ca-Fe compounds reaction between magnetite and hydrogen bromide. *J. Chem. Soc. Jap.* (1980) 1060 (in Japanese)
- KARGER-KOCSIS, J., SENYEI, Zs., HEDVIG, P. (Res. Inst. Plast. Ind., H-1950 Budapest, Hungary): Comparative thermal and thermomechanical properties of hot melt adhesives. *Int. J. Adhesion Adhesives* (1980) 17
- KARIMOV, S. K. (Moscow Electr. Engn. Inst., Moscow, USSR): Linear expansion, heat capacity, and thermodynamic properties

- of the compound  $\text{CdTi}_2\text{Te}_4$ . *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 621
- KARVO, M. (Univ. Oulu, Dept. Chem., SF-90570 Oulu 57, Finland): Thermodynamic properties of binary and ternary mixtures containing sulfolane. V. Excess enthalpies of cyclohexane + benzene, cyclohexane + toluene, benzene + sulfolane, and toluene + sulfolane. *J. Chem. Thermodyn.* 12 (1980) 635
- KASTEN, A. (Univ. Karlsruhe, Inst. Phys., D-7500 Karlsruhe, 1 GFR): Phase transitions in  $\text{DyVO}_4$  and  $\text{DyAsO}_4$ . *Z. Phys. B* 38 (1980) 354
- KATO, E., DAIMON, K., TAKAHASHI, J. (Nagoya Inst. Technol., Showa-ku, Nagoya, Aichi, 466 Japan): Decomposition temperature of  $\beta\text{-Al}_2\text{TiO}_5$ . *J. Amer. Ceram. Soc.* 63 (1980) 34
- KELSEY, D. R. (Union Carbide Corp., Chem. and Plast., Res. and Dev., Bound Brook, N. J., 08805 USA): Orbital topology. I. A basic topological model for chemical systems, and orbital mapping technique, and analysis of model, thermal electrocyclic reactions. *J. Comput. Chem.* 1 (1980) 3
- KELSEY, D. R. (Union Carbide Corp., Chem. and Plast., Res. and Dev., Bound Brook, N. J., 08805 USA): Orbital topology. II. Orbital mapping of unsymmetrical molecules. A survey of the thermal isomerizations of Dewar isomers of isoelectronically substituted benzenes, cyclopentadienes, and cyclopentadienyl ions. *J. Comput. Chem.* 1 (1980) 21
- KHALIL, A. A. (Natl. Res. Ctr., Cairo, Egypt.): The correlation between weight loss and phase composition of the calcination products of gypsum. *Thermochim. Acta* 38 (1980) 329
- KHODOS, M. Y., KOUROV, N. I., FOTIEV, A. A., VOLKOV, V. L. (Acad. Sci. USSR, Ural Sci. Ctr., Inst. Chem., Sverdlovsk, UkSSR): Specific heat and entropy of alkaline earth oxide-vanadium bronzes of type  $\beta$ . *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1288
- KHVOSTANTSEV, L. G., ORLOV, A. I., ABRIKOSOV, N. K., IVANOVA, L. D. (Acad. Sci. USSR, Inst. High Pressure Phys., Troitsk, 142092 USSR): Thermoelectric properties and phase transition in  $\text{Sb}_2\text{Te}_3$  under hydrostatic pressure up to 9GPa. *Phys. Status Solidi A* 58 (1980) 37
- KIM, Y. C., OISHI, J. (Kyoto Univ., Dept. Nucl. Engn., Kyoto, 606 Japan): The enthalpy of formation of neodymium trifluoride. *J. Chem. Thermodyn.* 12 (1980) 407
- KING, K. D., GILBERT, R. G. (Univ. Adelaide, Dept., Chem. Engn., Adelaide, SA 5001 Australia): The thermal unimolecular decomposition of bromocyclobutane. *Int. J. Chem. Kinet.* 12 (1980) 339
- KINYONES, S. O., IVANOV-EMIN, B. I. (V. I. Lenin State Teachers Inst., Moscow, USSR): Thermal decomposition of alkali metal and ammonium hexamolybdenoferrate(III) hydrates. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1494
- KIRÁLY, R., TÓTH, I., BRÜCHER, E. (Lajos Kossuth Univ., Inst. Anorg. Chem., H-4010 Debrecen, Hungary): Determination of stability constants and formation enthalpies of rare earth(III)ethylenediaminetetraacetate-fluoride mixed ligand complexes. *Magy. Kém. Foly.* 86 (1980) 78 (in Hungarian)
- KISELEV, V. D., MAVRIN, G. V., KORSHIN, E. E., KONOVALOV, A. I. (V. I. Lenin State Univ., Kazan, USSR): Calorimetric study of influence of solvent on enthalpy of formation of iodide molecular complexes with N,N-dimethylacetamide, pyridine and benzene. *Zh. Obshh. Khim.* 50 (1980) 1135 (in Russian)
- KISHIMOTO, Y., SHIMOTSUMA, W. (Matsushita Elect. Ind. Co. Ltd., Mat. Res. Lab., Moriguchi, Osaka 570, Japan): The thermal stability of metal cation - TCNQ anion radical salts. *Bull. Chem. Soc. Jap.* 53 (1980) 1723
- KISHORE, K., PAI VERNEKER, V. R., GAYATHRI, V. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., High Energy Solids Lab., Bangalore, 560012 India): Kinetic studies on thermal decomposition of polystyrene peroxide. *J. Anal. Appl. Pyrol.* 1 (1980) 315
- KLEVTSOV, P. V., PEREPELITSA, A. P., SINKEVICH, A. V. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 630090 USSR): On the crystal structures and thermal stability of double copper tungstates (I) and rare-earth's elements  $\text{CuLn}(\text{WO}_4)_2$ . *Kristallografiya* 25 (1980) 624 (in Russian)

- KLIMONTOVICH, Y. L. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Effect of fluctuations in the critical region during a phase transition of the 2nd kind on nonequilibrium phase transitions. *Zh. Eksp. Teor. Fiz.* 78 (1980) 2384 (in Russian)
- KOCHUBEI, V. F., GAVRILIV, A. P., MOIN, F. B., PAZDERSKII, Y. A.: Kinetics of the thermal decomposition of vinyl fluoride. *Kinet. Catal.* transl. *Kinet. Katal.* 20 (1979) 852
- KOJIMA, S., OHI, K., NAKAMURA, T. (Univ. Tokyo, Inst. Solid State Phys., Minato-ku, Tokyo 106, Japan): Soft optic phonon responsible for the structural phase transition in  $\text{Sr}_2\text{Ta}_2\text{O}_7$  at 170 °C. *Solid State Commun.* 35 (1980) 79
- KOLESNIK, V. V., ZHIROV, A. I., DUNAIEVA, K. M., SPITSYN, V. I. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Study of process of thermal dissociation of uranium(IV) tetraformiate. *Zh. Neorg. Khim.* 25 (1980) 1329 (in Russian)
- KONDO, Y., YUKI, K., YOSHIDA, T., TOKURA, N. (Osaka Univ., Fac. Engn., Dept. Appl. Chem., Suita, Osaka 565, Japan): Nucleophilic substitution in binary mixed solvents. Kinetics and transfer enthalpies of anions in the mixed solvents methanol + propylene carbonate and methanol + *N*-methyl-2-pyrrolidone. *J. Chem. Soc. Faraday Trans. 1*, 76 (1980) 812
- KOROLCHENKO, A. Y., KRAVCHUK, G. N., SHEBEKO, Y. N., IVANOV, A. V., DMITRIEVA, T. M. (All Union Fire Prevention Res. Inst., Moscow, USSR): Combustion temperature of fuel liquids. *Zh. Fiz. Khim.* 54 (1980) 1569 (in Russian)
- KOROTKIKH, A. M., NABUTOVSKII, V. M. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 630090 USSR): Thermal Green's functions of the fluctuation electromagnetic field of a cylinder and a cylindrical layer embedded in an infinite medium. *Theoret. Math. Phys.* transl. *Teoret. Mat. Fiz.* 41 (1979) 1053
- KORSHAK, V. V., SERGEEV, V. A., GRIBOVA, I. A., PAVLOVA, S. S. A., ZHURAVLYOVA, I. V., KOLOSOVA, T. A., NADEL'KIN, V. I., YEGOROV, A. M., YUNNIKOV, V. V. (Acad. Sci. USSR, Inst. Organoelement. Cpds., Moscow, V-71 USSR): On the influence of antifriction fillers on thermal properties of polyphenylenesulfide. *Vysokomol. Soedin. A* 22 (1980) 1228 (in Russian)
- KOSHCHENKO, V. I., DEMIDENKO, A. F., SABANOVA, L. D., YACHMENEV, V. E., GRAN, Y. M., RADCHENKO, A. F. (O. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Temperature dependence of the thermodynamic properties of gallium nitride at 5–300 °K. *Inorg. Mater.* transl. *Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1329
- KROH, J., PIEKARSKA, J., SZAJDZIŃSKA-PIETEK, E., SWIATKOWSKI, W. (Tech. Univ. Łódź, Inst. Appl. Radiat. Chem., PL-93590 Łódź, Poland): Low temperature differential thermal analysis (DTA) of some matrices stabilizing primary  $\gamma$ -radiolysis products. *Radiat. Phys. Chem.* 15 (1980) 583
- KRYLOV, Y. I., SERGEEVA, T. S., PRISTAVKO, V. V.: High temperature compactibility of the components in tin-MgO/Al<sub>2</sub>O<sub>3</sub>, ZrO<sub>2</sub> systems. *Inorg. Mater.* transl. *Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1970) 1410
- KUENTZLER, R. (Inst. Phys., CNRS Lab. 306, F-67084 Strasbourg, France): Heat capacity of ordered and disordered FeCo-X alloys (X = Ti, V, Cr, Mn). *J. Magn. Magn. Mater.* 15 (1980) 1163
- KUKOLEV, G. V., VED', V. E., DOBROVOL'SKII, G. B., MIROSHNICHENKO, A. A. (Kharkov Aviat. Inst., Kharkov, UKSSR): Thermal stability of magnesian ceramics in a low-temperature plasma stream. *High Temp.* transl. *Teplotiz. Vysok. Temp.* 17 (1980) 918
- KUKUSHKIN, Y. N., AGEIEVA, E. D., ALESHIN, V. E., AVETIKYAN, G. B., SEDOVA, G. N. (Lensovet Technol. Inst., Leningrad, USSR): Thermal behaviour of alkyl-arylphosphonic complexes of cobalt(II). *Zh. Neorg. Khim.* 25 (1980) 1014 (in Russian)
- KUKUSHKIN, Y. N., AGEIEVA, E. D., ALESHIN, V. A., SEDOVA, G. N. (Lensovet Technol. Inst., Leningrad, USSR): Thermal oxidation of bidentate phosphonic ligands in solid iron(III) complexes. *Zh. Neorg. Khim.* 25 (1980) 1135 (in Russian)
- KUKUSHKIN, Y. N., SEDOVA, G. N., BELYAEV, A. N., KONOVALOV, L. V. (Lensovet Technol. Inst., Leningrad, USSR): Solid phase thermal conversion of ammoniate complexes of platinum(IV). *Zh. Neorg. Khim.* 25 (1980) 1036 (in Russian)

- KUKUSHKIN, Y. N., VRUBLEVSKAYA, L. V., BAKHIREVA, S. I., KALYUKOVA, E. N. (Lensovet Technol. Inst., Leningrad, USSR): Thermal conversion of rhodanine and cyanide platinum complexes of nagnus salt type. *Zh. Neorg. Khim.* 25 (1980) 1302 (in Russian)
- KUTYREVA, V. V., VARYUKHIN, V. A., SUVOROVA, O. N., NESTEROV, B. A., DOMRACHEV, G. A. (Acad. Sci. USSR, Inst. Chem., Gorki, USSR): Preparation of titanium carbonitride films by decomposition of titanium tetrakis-diethyl-amine in the vapor phase. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1335
- LAJUNEN, L. H. J., PASSOJA, A. (Univ. Oulu, Dept. Chem., SF-90570 Oulu 57, Finland): A study on the thermal decomposition of sodium 3-hydroxy-4-sulfo-2-naphthoic acid dihydrate. *Finn. Chem. Lett.* (1980) 54
- LAU, K. H., HILDENBRAND, D. L. (SRI Int., Menlo Pk., Calif., 94205 USA): Thermochemical studies of the  $\text{BF}_2$  radical. *J. Chem. Phys.* 72 (1980) 4928
- LAUKHIN, V. N., SHCHEGOLEV, I. F. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Investigation of phase transformations  $(\text{TseT})_2\text{Cl}$  under pressure at low temperatures. *Zh. Eksp. Teor. Fiz.* 78 (1980) 2332 (in Russian)
- LAVRENT'EV, V. K., TROITSKAYA, A. V., KORZHAVIN, L. N., SIDOROVICH, A. V., FRENKEL, S. Y. (Acad. Sci. USSR, Inst. Macromolec. Cpds., Leningrad, USSR): On the molecular mechanism of thermal cyclodehydration of poly(amic acids) in a solid phase. *Vysokomol. Soedin. A* 22 (1980) 1007 (in Russian)
- LAVROV, A. V., BYKANOVA, T. A. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, USSR): Thermal dehydration of neutral nickel pyrophosphate crystal hydrates. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1301
- LEDDY, B. P., MCKERVEY, M. A., MCSWEENEY, P. (c/o M. A. McKerverey, Natl. Univ. Ireland, Univ. Coll. Cork, Dept. Chem., Cork, Ireland): Some comments on the thermal stability of substituted ammonium, phosphonium, and arsonium permanganates and their use in alkane oxidation. *Tetrahedron Lett.* 21 (1980) 2261
- LEGRANGE, J. D., MOCHEL, J. M. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): High-resolution heat-capacity studies near the nematic-smectic-A-transition in octyloxycyanobiphenyl (8OCB). *Phys. Rev. Lett.* 45 (1980) 35
- LEVESQUE, B., CAUDRON, R., COSTA, P. (Univ. Maine, Physicochim. Organ. Lab., F-72017 Le Mans, France): Low-temperature specific heat of dilute iron-carbon martensite. *J. Magn. Magn. Mater.* 15 (1980) 1153
- LEWIS, A. V., NICHOLAS, R. J., RAMAGE, J. C., BAUER, G., LOPEZ-OTERO, A. (Univ. Oxford, Clarendon Lab., Parks Rd., OX1 3PU Oxford, England): Cyclotron resonance above and below the structural phase transition in  $\text{Pb}_{1-x}\text{Ge}_x\text{Te}$ . *J. Phys. C* 13 (1980) L443
- LEYENDEKERS, J. V. (Univ. Sydney, Dept. Biol. Sci., Sydney, NSW 2006, Australia): The Tammann-Tait-Gibson model. Application to the heat capacities of aqueous electrolyte solutions. *J. Chem. Soc. Faraday Trans. I*, 76 (1980) 1206
- LIETOILA, A., GIBBONS, J. F., STIGMON, T. W. (Stanford Univ., Stanford Electr. Labs., Stanford, Calif., 94305 USA): The solid solubility and thermal behaviour of metastable concentrations of As in Si. *Appl. Phys. Lett.* 36 (1980) 765
- LILLEY, T. H., MOSES, E., TASKER, I. R. (Univ. Sheffield, Dept. Chem., Sheffield S3 7HF, S. Yorkshire, England): Interaction of glycine with some alkali metal chlorides at 298.15 K. *J. Chem. Soc. Faraday Trans. I*, 76 (1980) 906
- LITOVSKII, E. Y., BONDARENKO, S. L., POLONSKII, Y. A., GASHICHEV, N. I. (All Union Refractory Mat. Inst., Moscow, USSR): Effect of fiber diameter on the effective thermal conductivity of refractory heat insulation. *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 823
- LOGUNOV, A. V., PETRUSHIN, N. V., ZVEREV, A. F., ZYULINA, N. P.: Thermal properties of the eutetic alloy of a Co-Cr-C system in the high-temperature region. *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 625
- LUNK, H. J., CUVAEV, V. F., VARFOLOMEEV, M. B. (Humboldt Univ., DDR-1040 Berlin): Derivatography and X-ray phase analysis of thermal decomposition of hetero-



- polyacids with Keggin structure. *Z. Chem.* 20 (1980) 192 (in German)
- LUSHINGTON, K. J., GARLAND, C. W. (MIT, Dept. Chem., Cambridge, Mass., 02139, USA): Critical heat capacity of  $\text{NH}_4\text{Br}$  and  $\text{NH}_4\text{Br}_x\text{Cl}_{1-x}$  single crystals. *J. Chem. Phys.* 72 (1980) 5752
- LYON, O. (Univ. Paris 11, CNRS Met. Phys. Lab., 177, F-91405 Orsay, France): Phase transformation of titanium niobium alloys (40% and 47% Nb in weight) during aging between 250 °C and 350 °C. *J. Microsc. Spectrosc. Electron.* 5 (1980) 303
- LYUBIMOVA, G. N., GRIGOROVICH, Z. I., RAZUMOVA, A. P.: Thermal dissociation of ammonium salt complexes and hydroxylammonium with hydroxylamine. *Zh. Neorg. Khim.* 25 (1980) 1532 (in Russian)
- MACINNES, D. A., CATLOW, C. R. A. (UKAEA, Directorate Safety and Reliabil., Warrington, WA3 4NE Lancashire, England): The specific heat anomaly in crystalline  $\text{UO}_2$ . *J. Nucl. Mater.* 89 (1980) 354
- MAGRI, A. L., MAGRI, A. D., BALESTRIERI, F., CARDARELLI, E., D'ASCENZO, G., CHIACCHIERINI, E. (Univ. Rome, Ist. Chim. Anal., I-00100 Rome, Italy): Thermal properties and spectroscopic characteristics of the complexes of pyrazine-2-carboxylic acid with divalent metal ions. *Thermochim. Acta* 38 (1980) 225
- MAIR, S. L. (CSIRO, Div. Chem. Phys., POB 160, Clayton, Vic., 3168 Australia): Temperature dependence of the anharmonic Debye-Waller factor. *J. Phys. C* 13 (1980) 2857
- MAKHMETOV, M. Z., GOROKHOVA, L. G., CHUPRAKOV, V. I.: Thermal stability of calcium arsenates. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 52 (1979) 1985
- MAKITRA, R. G., PIRIG, Y. N. (Acad. Sci. UkSSR, Inst. Mineral. Fuel Geol. and Geochem., Lvov, UkSSR): Connection between donor numbers of solvents and enthalpy of their mixture with chloroform. *Zh. Obshch. Khim.* 50 (1980) 961 (in Russian)
- MALAZGIRT, A., EVANS, J. W. (Tegal Corp., Novato, Calif., 94947 USA): Production of aluminium and aluminium coatings by thermal decomposition of aluminium alkyls. *Met. Trans. B* 11 (1980) 225
- MALYJ, M., SMITH, P. D., BALKO, B., BERGER, R. L. (NHLBI, Tech. Dev. Lab., Bethesda, Md., 20205 USA): Thermal kinetics using a modified commercial stopped flow apparatus. *Rev. Sci. Instr.* 51 (1980) 896
- MARCO, C., GÓMEZ FATOU, J., BELLO, A., BLANCO, A. (c/o J. Gomez Fatou, CSIC, Inst. Plastics y Caucho, Div. Polymer Phys., Juan Cierva 3, Madrid-6 Spain): Melting temperatures and enthalpies of polyethers. 2. Poly(octamethylene oxide). *Macromol. Chem.* 181 (1980) 1357
- MARINOV, M. R., WODENITSCHAROV, M. B., KOSHUCHAROV, U. S. (Fac. Inorgan. Chem., Inst. Chem. Technol., BU-1156 Sofia, Bulgaria): Phasengleichgewicht und Eigenschaften der Gläser in System  $\text{TeO}_2\text{-MoO}_3\text{-V}_2\text{O}_5$ . *J. Non-Cryst. Solids* 38 (1980) 123
- MARSDEN, J., HAVILL, R. L., TITMAN, J. M. (Univ. Sheffield, Dept. Phys., Sheffield, S3 7RH, S. Yorkshire, England): The temperature dependence of the quadrupole relaxation rate in liquid metals and alloys. *J. Phys. F* 10 (1980) 1589
- MASSON, D., MARTIN, R. (Univ. Nancy 1, Dept. Chim. Phys. React., CNRS, Equipe Rech. 136, C.O. 140, F-54037 Nancy, France): La réaction thermique du butene-2-trans induite par le diméthylmercure. *J. Chim. Phys.* 77 (1980) 343
- MATUSITA, K., SAKKA, S. (Mie Univ., Fac. Engn., Dept. Ind. Chem., Tsu, Mie 514, Japan): Kinetic study on crystallization of glass by differential thermal analysis — criterion on application of Kissinger plot. *J. Non Cryst. Solids* 38 (1980) 741
- MAYHEW, C. J., WILLIAMSON, A. G. (Univ. Canterbury, Dept. Chem. Engn., Christchurch, New Zealand): The excess enthalpy of (acetone + chloroform) vapour. *J. Chem. Thermodyn.* 12 (1980) 415
- McKENNA, T. J., CAMPBELL, S. J., CHAPLIN, D. H., WILSON, G. V. H. (Univ. New S. Wales, Royal Mil. Coll., Dept. Phys., Duntroon, Act., 2600 Australia): Examination of domains in Tb and Dy by thermal modulation studies. *J. Magn. Magn. Mater.* 15 (1980) 1497
- MELLE, W., GALLER, R. (Univ. Jena, Sekt. Phys., Max-Wien Pl. 1, DDR-69 Jena, GDR): Thermal analysis of laser-induced damage in a transparent dielectric (DKDP). *Phys. Status Solidi A* 58 (1980) 165

- MEL'NIKOVA, T. N., YAKIMOVICH, K. A. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): Specific heat at constant volume of crystalline lithium hydride and its isotopic modifications. *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 806
- MERZHANOV, V. A., PESOTSKII, S. I., TOPNIKOV, V. N. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): A phase transition in the organic metal TSeTBr<sub>0.5</sub>. *JETP-Lett. Amer. Inst. Phys. transl. Pizma Zh. Eksp. Teor. Fiz.* 30 (1979) 179
- MEYER, R. J., METZGER, J. V., KEHIAIAN, C., KEHIAIAN, H. V. (Fac. Sci. et Tech. Marseille, Chim. Organ. Lab., Ctr. St. Jerome, F-13397 Marseille, 4 France): Enthalpies de mélange des acetats avec les alcanes normaux, le benzène et le tétrachlore de carbone. *Thermochim. Acta* 381 (1980) 197
- MEZHOV-DEGLIN, L. P. (Acad. Sci. USSR, Inst. Solid State Phys., Chernogolovka, USSR): On possibility of Knudsen minimum observation in thermoconductivity of dielectro crystals. *Fiz. Tverd. Tela* 22 (1980) 1748 (in Russian)
- MICHON, J., RASSAT, A. (CEA, Dept. Rech. Fondamentale Grenoble, Chim. Organ. Phys. Lab., CNRS, Equipe Rech. 20, F-38041 Grenoble, France): Nitroxydes. 94: décomposition thermique d'un radical oxazolidine-oxyle. *Tetrahedron Lett.* 21 (1980) 1949
- MIZUTANI, U., MASSALSKI, T. B. (Nagoya Univ., Dept. Crystalline Mat. Sci., Nagoya, Aichi, 464 Japan): Low-temperature lattice specific heats of an amorphous Pd-Si alloy subjected to various heat treatments. *J. Phys. F* 10 (1980) 1093
- MONNIN, M., GOURCY, J., SOMOGYI, G., DAJKO, D. (Univ. Clermont Ferrand, 2 CNRS, Phys. Corpusculaire Lab., IN 2P3, B. P. 45, F-63170 Aubière, France): Thermal stability of dyed tracks and electrochemical tching sensitivity of some polymeric detectors. *Radiat. Phys. Chem.* 15 (1980) 473
- MORISHIGE, K., KITTAKA, S., MORIYASU, T., MORIMOTO, T. (Okayama Coll. Sci., Fac. Sci., Dept. Chem., 1-1 Ridaicho, Okayama 700, Japan): Thermal desorption study of surface hydroxyls on ZnO. *J. Chem. Soc. Faraday Trans. 1*, 76 (1980) 738
- MORITA, T., HORIGUCHI, T. (Tohoku Univ., Fac. Engn., Dept. Appl. Sci., Sendai, Miyagi, 980 Japan): Upper bound to the specific heat for the random-bond Ising model on Nishimori's line. *Phys. Lett. A* 76 (1980) 424
- MORRIS, E. R., REES, D. A., NORTON, I. T., GOODALL, D. M. (Unilever Res., Colworth Lab., Sharnbrook MK44 1LQ, Bedfordshire, England): Calorimetric and chiroptical evidence of aggregate-driven helix formation in carrageenan systems. *Carbohyd. Res.* 80 (1980) 317
- MRAW, S. C., NAAS-O'ROURKE, D. F. (Exxon Res. and Engn. Co., Corp. Res. Labs., POB 45 Linden, N. J., 07036 USA): Thermodynamic properties of cyclohexane-d<sub>12</sub>: low-temperature heat capacity and enthalpies of transition and fusion from accurate differential scanning calorimetry, and the entropy from spectroscopic results. *J. Chem. Thermodyn.* 12 (1980) 691
- MRAZ, T., RAJESHWAR, K., DUBOW, J. (c/o K. Rajeshwar, Colorado State Univ., Dept. Elect. Engn., F. Collins, Colo., 80523 USA): An automated technique for thermoacoustimetry of solids. *Thermochim. Acta* 38 (1980) 211
- MÜLLER, L. (Humboldt Univ., Sect. Chem., DDR-108 Berlin, GDR): Zur Kritik von H. J. Bittrich an der Kurzmittelung „Thermodynamische Begründung der Gültigkeit der linearen freien Enthalpiebeziehung für beliebige chemische Reaktionen“. *Z. Phys. Chem.* 261 (1980) 374
- MUNUKUTLA, L. V., CAPPELLETTI, R. L. (Texas A and M Univ., Dept. Phys., College Stn. Tex., 77843 USA): Specific-heat measurements in superconducting indium-thallium alloys and the pseudopotential form factor. *Phys. Rev. B* 21 (1980) 5111
- MURPHY, C. B. (Xerox Corp., Xerox Square, W-139, Rochester, N. Y., 14644 USA): Thermal analysis. *Anal. Chem.* 52 (1980) R106
- MÜSER, H. E., HELWIG, J., BARTH, E. (Univ. Saarland, Fachbereich Phys., D-6600 Saarbrücken, GFR): Specific heat of partially deuterated TGS and other uniaxial ferroelectrics near the transition temperature. *Ferroelectrics* 25 (1980) 371

- NAGATA, J., KATO, K. (Kanazawa Univ., Dept. Chem. Engn., Kanazawa, Ishikawa, 920 Japan): Ternary liquid-liquid equilibria for acetonitrile-ethanol-cyclohexane and acetonitrile 2-propanol-cyclohexane. *Thermochim. Acta* 39 (1980) 45
- NAGY, T. T., TÜDÖS, F., KELEN, T., GUPTA, S. N., KENNEDY, J. P. (Hung. Acad. Sci., Cent. Res. Inst. Chem., Pf. 17, H-1525, Budapest, Hungary): Thermal degradation of PVC treated with alkylaluminium compounds. *Magy. Kém. Foly.* 86 (1980) 117 (in Hungarian)
- NAITO, T., NINOMIYA, I. (Kobe Womens Coll. Pharm., Motoyamakita, Higashinada, Kobe 658, Japan): Thermal cyclization of enamides. *Heterocycles* 14 (1980) 959
- NAKAMURA, H., HARA, Y., OSADA, H. (Kyushu Inst. Technol., Dept. Environm. Sci., Tobata-ku, Kitakyushu, 804 Japan): The thermal decomposition of ammonium sulfate and its reaction with iron(III)oxide. *J. Chem. Soc. Jap. Chem. Industr. Chem.* (1980) 706
- NAZAROV, A. S., YAKOVLEV, I. I., ANTIMONOV, A. F., GRANKIN, V. M., DURASOV, V. B., SEMYANNIKOV, P. P. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 630090 USSR): Thermal dissociation of trichlorofluoride intercalation compounds with fluorographic matrix of  $C_4F$  compounds. *Zh. Neorg. Khim.* 25 (1980) 1506 (in Russian)
- NEMILOV, S. V.: Temperature dependence of heat capacity of supercooled water. *Zh. Fiz. Khim.* 54 (1980) 1059 (in Russian)
- NENTWIG, W., SINN, H. (Univ. Hamburg, Inst. Anorgan. und Angew. Chem., Angew. Chem. Abt., D-2000 Hamburg, 13 GFR): Multimodal molecular weight distribution of polydienyllithium compounds caused by thermolytic side reactions. *Makromol. Chem. Rap. Comm.* 1 (1980) 59
- NGO, H. T., LIPSCHUTZ, M. E. (c/o M. E. Lipschutz, Purdue Univ., Dept. Chem., W. Lafayette, Ind., 47907 USA): Thermal metamorphism of primitive meteorites. 10. Additional trace elements in Allende (C3V) heated to 1400 °C. *Geochim. Cosmochim. Acta* 44 (1980) 731
- NIKONOROV, Y. I., KHAIRETDINOV, É. F. (Novosibirsk, State Univ., Novosibirsk, USSR): Thermal stability and electrical conductivity of some fluorine-containing graphite compounds. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1254
- NOTIN, M., DJAMSHIDI, B. D., HERTZ, J. (Univ. Nancy 1, Thermodyn. Met. Lab., C. O. 140, F-54037 Nancy, France): Determination potentiométrique des enthalpies libres de formation des composés AuCa. *Thermochim. Acta* 38 (1980) 173
- NÜSSLER, H. D., HOSTER, T., KUBASCHEWSKI, O. (Rhein. Westfal. TH Aachen, Lehrstuhl Met. Kernbrennstoffe und Theoret. Hüttenkunde, D-5100 Aachen, GFR): The thermochemical properties of the system iron-molybdenum. *Z. Metallk.* 71 (1980) 396
- OGAWA, T., KUROKI, T., IKEMURA, T. (Nihon Univ., Coll. Sci. and Technol., Dept. Ind. Chem., Chiyoda-ku, Tokyo, 101 Japan): Thermal decomposition of 2,4-diphenyl-1-butene. *J. Chem. Soc. Jap. Chem. Industr. Chem.* (1980) 754 (in Japanese)
- OGUNI, M., MATSUO, T., SUGA, H., SEKI, S. (c/o H. Suga, Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka 560, Japan): Calorimetric study of the glassy state. XV. Thermodynamic study of pinacol hexahydrate and pinacol- $d_2$  hexadeuterate. *Bull. Chem. Soc. Jap.* 53 (1980) 1493
- OHSAKA, T. (Nat. Inst. Res. Inorgan. Mat., Sakura, Ibaraki 305, Japan): Temperature dependence of the Raman spectrum in anatase  $TiO_2$ . *J. Phys. Soc. Jap.* 48 (1980) 1661
- OPPERMANN, H., TOSCHEW, A. (Akad. Wissensch. DDR, Zent. Inst. Festkörperphys. und Werkstofforsch., DDR-8027 Dresden, GDR): Zur thermischen Zersetzung und Sublimation des  $NiI_2$ . *Z. Anorg. Allg. Chem.* 463 (1980) 45
- OSIPENKO, I. F., POLIKARPOV, A. P., PROKOPCHUK, N. R., KRUL, L. P. (Acad. Sci. BeSSR, Inst. Phys. Organ. Chem., Minsk, BeSSR): Heat-resistance of graft polyethylene copolymers with acrylic acid. *Dokl. Akad. Nauk BSSR* 24 (1980) 625 (in Russian)
- OSKOTSKII, V. S., KOPYAKOV, I. B., SOLODUKHIN, A. V. (A. F. Ioffe Engr. Phys. Inst., Leningrad, USSR): Temperature dependence of CdS heat expansion in the

- range of 20 to 300 K. *Fiz. Tverd. Tela* 22 (1980) 1478 (in Russian)
- OSTROVSKII, V. E., DYATLOV, A. A. (L. Y. Karpov Physicochem. Res. Inst., Moscow, USSR): Calorimetric investigation of the reaction mechanism for the oxidation of carbon monoxide and hydrogen and conversion of carbon monoxide on copper-chromium oxid catalysts. *Kinet. Catal.* transl. *Kinet. Katal.* 20 (1979) 783
- OSTROVSKII, V. E., MEDVEDKOVA, E. A. (L. Y. Karpov Physicochem. Res. Inst., Moscow, USSR): Calorimetric and adsorption research of the reaction of oxygen, hydrogen, and water with the surface of a silver catalyst. *Kinet. Catal.* transl. *Kinet. Katal.* 20 (1979) 789
- OTT, J. B., MARSH, K. N., STOKES, R. H. (Brigham Young Univ., Dept. Chem., Provo, Utah, 84602 USA): Excess enthalpies, excess volumes, and excess Gibbs free energies for benzene + p-xylene at 288.15, 298.15, 308.15 and 318.15 K. *J. Chem. Thermodyn.* 12 (1980) 493
- OTTONELLO, P., VALBUSA, U. (Ist. Sci. Fis., Genova, Italy): Measurement of thermal conductivity of gases in an undergraduate physics laboratory. *Amer. J. Phys.* 48 (1980) 489
- PAÁL, T., DAVID-KENÉZ, M. (Országos Gyógyszerészeti Intézet, Pf. 184, H-1441, Budapest, Hungary): Synthesis, derivatographic and infrared spectroscopic studies on borate complexes of diols and polyalcohols. *Magy. Kém. Foly.* 86 (1980) 218 (in Hungarian)
- PALKIN, V. A., KUZINA, T. A., KUZMINA, N. N., SHCHELOKOV, R. N. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, USSR): Specific heat and dissociation thermodynamics of tetramineplatino iodide. *Zh. Neorg. Khim.* 25 (1980) 1291 (in Russian)
- PANINA, N. I., AVERIYANOVA, V. M., GOL'BINA, T. G., ANAN'YEV, L. G., ZELENEV, Y. V. (N. G. Chernyshevskii State Univ., Saratov, USSR): Thermal properties of the systems produced on the basis of cellulose acetates. *Vysokomol. Soedin. B* 22 (1980) 326 (in Russian)
- PANNETIER, J. (Inst. Laue-Langevin, 156X, F-38042 Grenoble, France): Phase transition in  $\text{RbNbWO}_6$ : the pyrochlore structure revisited. *Solid State Commun.* 34 (1980) 405
- PAPON, P., MEIJER, P. H. E. (Ecole Super Phys. et Chim. Ville Paris, Resonance Magnet Lab., F-75005 Paris, France): Anomalous behaviour of the thermal conductivity and the viscosity in the super-cooled region as determined by mode-mode coupling. *Physica A* 10 (1980) 477
- PARLINSKI, K. (POB 79, Moscow 101000, USSR): Phase transitions in  $[\text{M}(\text{NH}_3)_6](\text{XY}_3)_2$  compounds. *Phys. Status Solidi B* 98 (1980) 487
- PARRY, W. T., BALLANTYNE, J. M., BRYANT, N. L. (Univ. Utah, Dept. Geol. and Geophys., Salt Lake City, Utah, 84112 USA): Hydrothermal alteration enthalpy and heat flow in the Roosevelt Hot-Springs thermal area, Utah. *J. Geophys. Res.* 85 (1980) 2559
- PATEL, G. N., WITT, J. D., KHANNA, Y. P. (Allied Chem. Corp., Chem. Res. Ctr., Morristown, N. J., 07960 USA): Thermochromism in polydiacetylene solutions. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1383
- PATEL, J., PATEL, R., PATEL, K. C. (Sardar Patel Univ., Dept. Chem., Vallabh Vidyanagar, 388120 Gujarat, India): Thermal behaviour of resorcinol-1,2-dichloroethane resin. *Proc. Indian Acad. Sci.* 89 (1980) 119
- PATIL, K. C., VITTAL, J. P., PATEL, C. C. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., Bangalore, 560012 India): Preparation, characterisation and thermal properties of hydrazinium derivatives. III. *Proc. Indian Acad. Sci.* 89 (1980) 87
- PAULIK, J., PAULIK, F., WIECZOREK-CIUROWA, K. (Tech. Univ. Budapest, Inst. Gen. and Analyt. Chem., H-1521 Budapest, Hungary): Influence of foreign materials upon the thermal decomposition of dolomite, calcite and magnesite. II. Influence of the presence of water. *Thermochim. Acta* 38 (1980) 165
- PECHKOVSKII, V. V., SOKOLOV, M. T., DZYUBA, E. D. (S. M. Kirov Technol. Inst., Minsk, BeSSR): Thermal and thermobarometric investigation of phosphorites. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 52 (1979) 1827
- PEIRO, J. M., GRACIA, M., GUTIÉRREZ LOSA, C. (Univ. Zaragoza, Fac. Ciencias, Dept. Quim. Fis., Zaragoza, Spain): Excess enthalpies and excess volumes of bromo-

- alkane + cyclohexane. *J. Chem. Thermodynam.* 12 (1980) 589
- PETRÚJ, J., MARCHAL, J. (CNRS, Ctr. Rech. Macromolec. Etude Degradat. et Stabilisat. Polymères Lab., 6, Rue Bousingault, F-67000 Strasbourg, France): Mechanism of ketone formation in the thermooxidation and radiolytic oxidation of low density polyethylene. *Radiat. Phys. Chem.* 16 (1980) 27
- PHILIP, J. (Univ. Tennessee, Dept. Phys., Knoxville, Tenn., 37916 USA): Grüneisen parameter and thermal expansion of  $V_3Si$  and  $V_3Ge$ . *J. Phys. Solids* 41 (1980) 461
- PLIES, V., GRUEHN, R. (Univ. Giessen, Inst. Anorgan. und Analyt. Chem., D-6300 Giessen, GFR): Beiträge zur Untersuchung anorganischer nichtstöchiometrischer Verbindungen. X. Zum thermischen Verhalten metastabiler H-Ta<sub>2</sub>O<sub>5</sub>-Varianten im System Ta<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub>. *Z. Anorg. Allg. Chem.* 463 (1980) 32
- POLANCO, S. E., BRETZ, M. (Bell Tel. Labs. Inc., Allentown, Pa., 18103 USA): Thermal resistivity of layered <sup>4</sup>He films on ZYX graphite below 2K. *Surface Sci.* 94 (1980) 1
- POPOV, A. A., KRYSYUK, B. E., ZAIKOV, G. Y. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): The role of mechanical loads in low temperature oxidation of polymers. Ozone-oxygenous action on isotactic polypropylene. *Vysokomol. Soedin. A* 22 (1980) 1366 (in Russian)
- POULIGNY, B., SEIN, E., LALANNE, J. R. (Res. Ctr. Paul Pascal, CNRS, Domaine Univ., F-33405 Talence, France): Additional contribution, with no critical thermal behavior, to the optical Kerr constant of nematogens in their isotropic phases. *Phys. Rev. A* 21 (1980) 1528
- POVSNER, A. A., ABELSKII, S. S., GELD, P. V. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Magnetic susceptibility and electron specific heat of almost ferromagnetic metal with Coulomb correlations. *Fiz. Tverd. Tela* 22 (1980) 1569 (in Russian)
- PRASHAD, M., SETH, M., BHADURI, A. P., SRIMAL, R. C. (c/o A. P. Bhaduri, Cent. Drug. Res. Inst., Div. Med. Chem., Lucknow, 226001 Uttar Pradesh, India): Anti-inflammatory agents. Synthesis of alpha substituted arylacetic acids. *Indian J. Chem. B* 17 (1979) 496
- PROSEN, E. J., COLBERT, J. C. (NBS, Natl. Measurement Lab., Ctr. Thermodynam. and Mol. Sci., Washington D. C., 20234 USA): A microcalorimeter for measuring self-discharge of pacemakers and pacemaker power cells. *J. Res. Nat. Bur. Stand.* 85 (1980) 193
- PTASZYŃSKI, B. (Tech. Univ. Łódź, Inst. Gen. Chem., PL-90924 Łódź, Poland): Thermal decomposition of complexes of antimony-(III) bromide with hydrobromides of some aromatic amines. *Thermochim. Acta* 38 (1980) 277
- RADEBAUGH, R. (NBS, Div. Thermophys. Properties, Boulder, Colo., 80303 USA): Electrocaloric refrigeration at cryogenic temperatures. *Ferroelectrics* 27 (1980) 205
- RADECKI, A., WESOŁOWSKI, M. (Med. Acad. Gdańsk, Inst. Chem. and Analyt., PL-80416 Gdańsk, Poland): Thermal decomposition of chemotherapeutic preparations and expectorants. *Talanta* 27 (1980) 507
- RESHIKOVA, L. M., MISHENKO, A. V., NIZHNIKOVA, V. O., KRYSIN, V. A. (A. M. Gorkii Teachers Inst., Omsk, USSR): Phase transition in R<sub>6</sub>(D<sub>x</sub>H<sub>1-x</sub>)<sub>3</sub>PO<sub>4</sub> crystals in the temperature range of 290–320K. *Fiz. Tverd. Tela* 22 (1980) 1881 (in Russian)
- RIVETT, D. E., STEWART, F. H. C. (CSIRO, Div. Prot. Chem., Parkville, Vic., 3052 Australia): Thermal cyclization experiments with benzoyl-DL-kynurenylglycine and related compounds. *Aust. J. Chem.* 33 (1980) 625
- RODANTE, F. (Fac. Ingegneria, Ist. Chim., Via Castro Laurenziano, 7 Rome, Italy): Study of the effect of the medium on the reaction constants for the dissociation of nitrophenols in water-dimethylsulfoxide mixtures at 25 °C. *Thermochim. Acta* 38 (1980) 311
- RODIONOVA, E. K., MARTYNOVA, N. A., TISHURE, T. A., CHERNEVA, L. I., BUDARINA, A. N. (G. M. Krzhizhanovskii Power Engn. Inst., Moscow, USSR): Enthalpy of fusion of salt eutectics on basis of alkaline metal halides. *Zh. Fiz. Khim.* 54 (1980) 1126 (in Russian)
- RODIONOVA, E. K., MARTYNOVA, N. M. (G. M. Krzhizhanovskii Power Engn. Inst., Moscow, USSR): Calculation of enthalpy of fusion of LiF-KF eutectics. *Zh. Fiz. Khim.* 54 (1980) 1129 (in Russian)

- ROGAN, F. H., LI, K. (Carnegie Mellon Univ., Dept. Chem. Engn., Pittsburgh, Pa., 15213 USA): Application of thermogravimetric analysis of the calcination of dolomite at high pressures. *Thermochim. Acta* 38 (1980) 125
- ROGEZ, J., LE COZE, J., LEMAIGNAN, C. CNRS, Ctr. Thermodynam. et Microcalorimétrie, 26 Rue 114 R. I. A., F-13003 Marseille, France): Chaleur spécifique de l'alliage Ag-Ge decomposition eutectique. *Compt. Rend. C* 290 (1980) 309
- ROSA, C. J., RUPF-BOLZ, N., SOMMER, F., PREDEL, B. (Max Planck Inst. Met. Res., Inst. Werkstoffwissensch., D-7000 Stuttgart, 1 GFR): Investigations on the temperature dependence of mixing enthalpies of liquid In-Sb alloys. *Z. Metallk.* 71 (1980) 320
- ROTH, W. R., KLÄRNER, F. G., LENNARTZ, H. W. (Ruhr Univ. Bochum, Chem. Abt., Pf. 102148, D-4630 Bochum, 1 GFR): Hydrierwärmen. II. Hydrierwärme des Bicyclo [2.1.0] pent-2-ens, ein antiaromatisches System. *Chem. Ber.* 113 (1980) 1818
- ROTH, W. R., LENNARTZ, H. W. (Ruhr Univ. Bochum, Chem. Abt., Pf. 102148 D-4630 Bochum, 1 GFR): Hydrierwärmen. I. Bestimmung von Hydrierwärmen mit einem isothermen Titrationskalorimeter. *Chem. Ber.* 113 (1980) 1806
- RUBTSOV, Y. I., TITOVA, K. V., LOGINOVA, E. N., KAZAKOV, A. I., ANDRIENKO, L. P. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Thermal decomposition kinetics of urea perchlorate. *Bull. Acad. Sci. USSR Div. Chem. Sci.* transl. *Izv. Akad. Nauk SSSR Khim.* 28 (1979) 1993
- RUDOLPH, J., BÄCHMANN, K. (TH Darmstadt, Fachbereich Anorgan. Chem. und Kernchem., D-6100 Darmstadt, GFR): Determination of adsorption enthalpies and entropies by "On-line" gas chromatography with short-lived nuclides. *Radiochim. Acta* 27 (1980) 105
- RUSOV, G. I., ZHERIKHOV, S. P., BOCHKAREV, V. F., TORBA, G. F. (Irkutsk State Teachers Inst., Irkutsk, USSR): Study of temperature stability of amorphous Gd-Co alloys. *Fiz. Metal. Metalloved.* 49 (1980) 1262
- SADEKOV, I. D., USACHEV, A. I., MINKIN, V. I. (Rostov Donstate Univ., Phys. and Org. Chem., Res. Inst., Rostov, USSR): Synthesis and formation of aromatic and heterocyclic tellurium compounds. 18. Unusual thermal decomposition of 2-diorganotelluranyldenedimedonylides. *Zh. Org. Chim.* 16 (1980) 1044 (in Russian)
- SAFFELL, J. R., WINDLE, A. (Poltimore Farway, Colyton, Devonshire, England): The influence of thermal history on internal stress distributions in sheets of PMMA and polycarbonate. *J. Appl. Polym. Sci.* 25 (1980) 1117
- SAINT-PAUL, M. (CNRS, Ctr. Rech. Très Basses Temp., BP 166 X, F-38042 Grenoble, France): Short-time-scale specific heat experiments on smoky quartz. *J. Phys. Lett.* 41 (1980) L169
- SAITO, K., TAHARA, H., KONDO, O., YOKUBO, T., HIGASHIHARA, T., MURAKAMI, I. (Hiroshima Univ. Fac. Sci., Dept. Chem., Naka-ku, Hiroshima 730, Japan): The thermal gas-phase decomposition of methyl iodide. *Bull. Chem. Soc. Jap.* 53 (1980) 1335
- SAITO, K., TORIYAMA, Y., YOKUBO, T., HIGASHIHARA, T., MURAKAMI, I. (Hiroshima Univ., Fac. Sci., Dept. Chem., Naka-ku, Hiroshima 730, Japan): A measurement of the thermal decomposition of CS<sub>2</sub> behind reflected shock waves. *Bull. Chem. Soc. Jap.* 53 (1980) 1437
- SAITO, K., YOKUBO, T., HIGASHIHARA, T., MURAKAMI, I. (Hiroshima Univ., Fac. Sci., Dept. Chem., Hiroshima, 730 Japan): On the thermal decomposition of shock-heated SO<sub>2</sub>. *Bull. Chem. Soc. Jap.* 53 (1980) 1439
- SAKUMA, T., HOSHINO, S. (Ibaraki Univ., Fac. Sci., Dept. Phys., Mito, Ibaraki, 310 Japan): Anharmonic thermal vibration of cations in  $\beta$ -Ag<sub>2</sub>SI. *J. Phys. Soc. Jap.* 48 (1980) 1036
- SAMUILOV, Y. D., SOLOVEVA, S. E., KONOVALOV, A. I. (V. I. Lenin State Univ., Kazan, USSR): Kinetic and thermochemical study of 1,3-dipolar cycloaddition reaction — reactivity of arylvinyl esters and alpha-piperidine styrenes in reaction with benzoyl nitrene. *Zh. Org. Khim.* 16 (1980) 1228 (in Russian)
- SANGEN, O., OKADA, T., ISHII, T., YAMAMOTO, Y. (Himeji Inst. Technol., Dept. Appl. Chem., Himeji, Hyogo, 67122 Japan): Differential scanning calorimetry

- of polyether-polyester elastomers by using of poly(oxy-1,4-butylene glycol) as a soft segment. *Jap. Polym. Sci. Techn.* 37 (1980) 367 (in Japanese)
- SANYAL, T. K., DASS, N. N. (Dibrugarh Univ., Dept. Chem., Dibrugarh, 786004 Assam, India): Synthesis and the thermal decomposition of iron(III) tris(oxalato) ferrate(III) tetrahydrate. *J. Inorg. Nucl. Chem.* 42 (1980) 811
- SAVELYANOV, V. P., UTROBIN, I. P., SAVELYANOVA, R. T., EVSEEV, N. N.: Study of process of xanthanation of alcohols in organic media. 2. Kinetics and thermochemistry of xanthanation of isopropanol in adiabatic conditions. *Zh. Fiz. Khim.* 54 (1980) 1264 (in Russian)
- SAWADA, A., SUGIYAMA, J., WADA, M., ISHIBASHI, Y. (Nagoya Univ., Fac. Engr. Synth. Crystal Res. Lab., Chikusa-ku, Nagoya, Aichi, 464 Japan): Evidence of incommensurate-ferroelastic (commensurate) phase transition in  $[N(CH_3)_4]_2CuCl_4$  crystal. *J. Phys. Soc. Jap.* 48 (1980) 1773
- SCHAFFNER, K., DEMUTH, M. (Max Planck Inst. Coal. Res., Inst. Strahlenchem., D-4330 Mülheim, GFR): Photochemistry and thermochemistry of a benzoyl-naphtholbarrelene system. Reaction mechanism of (Di-Pi-methane) rearrangement. *Chimia* 34 (1980) 184
- SCHICK, C., TANNEBERGER, H., DONTH, E. (c/o H. Tanneberger, TH Carl Schorlemmer, Sekt. Phys., DDR-42 Leuna Merseburg, GDR): Ergebnisse direkter Messungen der Enthalprietardation in PVC und ihr Zusammenhang mit dem Glasübergang und der Struktur. *Makromol. Chem. Rap. Comm.* 1 (1980) 407
- SCHNECK, J., JOUKOFF, B., MELLET, R. (Ctr. Natl. Etud. Telecommun., 196 Rue Paris, F-92220 Bagneux, France): Influence of the crystal composition on the low temperature phase transition in barium sodium niobate. *Ferroelectrics* 26 (1980) 775
- SCHNEIDER, H. A. (Univ. Freiburg, Inst. Makromolek. Chem., Stefan-Meier-Str. 31, D-7800 Freiburg, GFR): The influence of the volatility of reaction products on thermogravimetric results of polymer degradation. *Polym. Bull.* 2 (1980) 551
- SHARMA, K. K., VARMA, I. K. (Indian Inst. Technol., Sch. Mat. Sci. and Technol., New Delhi, 110029 India): Graft copolymerization of poly(vinyl chloride) with styrene. II. Thermal behaviour. *J. Appl. Polym. Sci.* 25 (1980) 1087
- SHEICHENKO, O. P., TOLKACHEV, O. N. (All Union Med. Plant Res. Inst., Moscow, USSR): Study of thermolysis and photolysis reaction of cycleanin. *Khim. Prir. Soedin.* (1980) 262 (in Russian)
- SHIMANO, N. (OKI Elect. Ind. Co. Ltd., Res. Lab., Hachioji, Tokyo 193, Japan): The effects of thermal stress on the temperature dependence of degradation in  $GaAs_{0.9}P_{0.1}$  LED's operating at high current densities. *J. Appl. Phys.* 51 (1980) 1818
- SHKLYAROVA, E. I., GOLUBEV, V. B., ZUBOV, V. P., KABANOV, V. A. (M. V. Lomonosov State Univ., Moscow 117234, USSR): Low-temperature radical postpolymerization of bifunctional methacrylic monomers. *Vysokomol. Soedin. A* 22 (1980) 1001 (in Russian)
- SHKODIN, A. M., RATIANIDZE, N. N., VYUNNIK, I. N.: Study of temperature dependence of physicochemical properties of binary ethyleneglycol dioxane solvent. *Zh. Obsh. Khim.* 50 (1980) 981 (in Russian)
- SHMYTKO, I. M., KUCHERENKO, I. V., SHOTOV, A. P., IVANOV, V. I., SHEKHTMAN, V. S. (Acad. Sci. USSR, Inst. Solid State Phys., Chernogolovka, USSR): Structure transitions in  $Pb_{1-x}Sn_xSe$  in the range 4.2 to 300K. *Fiz. Tverd. Tela* 22 (1980) 1384 (in Russian)
- SHIPILRAIN, É. É., KRAINOVA, I. F., KOROLEVA, V. V. (Acad. Sci. USSR, Inst. High Temp., Moscow V-71, USSR): Thermal conductivity of potassium-cesium alloys. *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 913
- SHU, P. H. C., BURCHELL, D. J., HSU, S. L. (c/o S. L. Shu, Univ. Massachusetts, Dept. Polymer Sci. and Engr., Mat. Res. Lab., Amherst, Mass., 01003 USA): Structure of polyethylene solid solutions from vibrational spectroscopy and thermal analysis. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1421
- SHULTZ, A. R., YOUNG, A. L. (G E. Ctr. Corp. Res. and Dev., Schenectady, N. Y., 12301 USA): DSC on freeze-dried poly(methyl methacrylate) - polystyrene blends. *Macromolecules* 13 (1980) 663
- SINGH, R. N. (Univ. Alberta, Inst. Theoret. Phys., Edmonton, Alberta, T6G 2J1

- Canada): Heat of mixing of equiatomic alkali-alkali alloys. *J. Phys. F* 10 (1980) 1411
- SINGH, Z., PRASAD, R., VANUGOPAL, V., SOOD, D. D. (Bhabha Atom Res. Ctr., Div. Radiochem., Bombay, 400085 India): Vaporisation thermodynamics of thorium tetrabromide. *Thermochim. Acta* 38 (1980) 235
- SINGLETON, D. M., EATOUGH, D. J. (Shell Dev. Co., POB 1380, Houston, Tex., 77001 USA): Calorimetric studies on a homogenous, olefin metathesis catalyst system. *J. Mol. Catal.* 8 (1980) 175
- SIPOWSKA, J., WIECZOREK, S. (Polish Acad. Sci., Inst. Phys. Chem., Warszawa, 42 Poland): Vapour pressures and excess Gibbs free energies of (propan-1-ol + n-heptane) between 278.164 and 303.147K. *J. Chem. Thermodyn.* 12 (1980) 459
- SKACHKOV, B. K., SOLOMONENKO, G. V., KOLTSOV, Y. I.: Thermal dissociation of photosensitive ortho-diazonaphthoquinones. *Zh. Nauch. Prikl. Foto. Kinemato.* 25 (1980) 102 (in Russian)
- SLIVNIK, J., MAČEK, J., RAHTEN, A., SEDEJ, B. (Univ. Ljubljana, Fac. Nat. Sci. and Technol., YU-61000 Ljubljana, Yugoslavia): Thermal properties of hydrazinium fluorometallates of the first row transition elements. *Thermochim. Acta* 39 (1980) 21
- SMETANA, A. J., POPOV, A. I. (c/o A. I. Popov, Michigan State Univ., Dept. Chem., E. Lansing, Mich., 48824 USA): Lithium 7 nuclear magnetic resonance and calorimetric study of lithium crown complexes in various solvents. *J. Solut. Chem.* 9 (1980) 183
- SMITH, G. R. (Univ. Alaska, Agr. Expt. Stn., Palmer, Al., 99645 USA): Rapid determination of total sulfur in plants and soils by combustion sulfur analysis. *Anal. Lett. A* 13 (1980) 465
- SMITH, R. L., PINNICK, H. R. (SE Missouri State Univ., Cape Girardeau, Mo., 63701 USA): The heat of protonation of pyridine and chloro substituted pyridines: a physical chemistry laboratory experiment. *J. Chem. Educ.* 57 (1980) 320
- SOCIAS, C., HERREROS, J., ARRIANDIAGA, M. A., FERNANDEZ, J., TELLO, M. J. (Univ. Bilbao, Fac. Sci., Dept. Phys., Bilbao, Spain): Calorimetric study of the phase transitions in long chain  $(C_nH_{2n+1}NH_3)_2LnCl_2Br_2$  compounds. *Ferroelectrics* 25 (1980) 453
- SOPICKA-LIZER, M., PAWLOWSKI, S. (Silesian Univ. Technol., Inst. Engn., Katowice, Poland): The applicability of DTA to the study of the crystallisation process of ceramic fibres. *Thermochim. Acta* 38 (1980) 293
- SORAI, M., TSUJI, K., SUGA, H., SEKI, S. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka 560, Japan): Studies on disc-like molecules. I. Heat capacity of benzene-hexa-*n*-hexanoate from 13 to 393K. *Mol. Cryst. Liquid Cryst.* 80 (1980) 33
- SOTNICHENKO, L. V., SHTESSEL, E. A. (Acad. Sci. USSR, Inst. Chem. Phys., Chernogolovka, USSR): Macrokinetics and thermochemistry of a transport reaction in a closed system. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 52 (1979) 1932
- SOUSA, J. B., PINTO, R. P., AMADO, M. M., PINHEIRO, M. F., MOREIRA, J. M., BRAGA, M. E. (Univ. Porto, Ctr. Fis., Porto, Portugal): Critical behaviour of the thermal conductivity near the Curie point of gadolinium. *J. Phys.* 41 (1980) 573
- STROTH, L., SCHÖNERT, H. (Rhein. Westfal. TH Aachen, Inst. Phys. Chem., Biopolymere Abt., D-5100 Aachen, GFR): Excess enthalpies of water + diglycine or triglycine or glycyl-L-alanine + urea at 298.15K. *J. Chem. Thermodyn.* 12 (1980) 653
- STRUKOV, B. A., TARASKIN, S. A., MINAEVA, K. A., FEDORIKHIN, V. A. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Critical phenomena in perfect and imperfect TGS crystals. *Ferroelectrics* 25 (1980) 399
- STRYGIN, V. D., LITMANOVICH, V. I., SAKHAROV, B. N., LEVIN, M. N., GOL'DFARB, V. A., SYNOROV, V. F. (Voronezh State Univ., Voronezh, USSR): Thermal oxidation of Si in the presence of lead oxides. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1189
- SUBHANI, M. S., (Univ. Nigeria, Dept. Chem., Nsukka, Nigeria): Thermochemical studies on solutions of monobromo-dibromo and tribromo-acetic acids in water and chloroform. *Rev. Roum. Chim.* 25 (1980) 333
- SUNNER, S., WULFF, C. A. (Univ. Lund, Ctr. Chem., Thermochem. Lab., P. O. B. 740, S-22007 Lund, 7 Sweden): On the question of a universal  $CH_2$  increment for enthalpies



- of formation. *J. Chem. Thermodyn.* 12 (1980) 505
- SUZUKI, T., ITOH, M., WATANABE, Y., MITSUDO, T. A., TAKEGAMI, Y. (Kyoto Univ., Fac. Engn., Dept. Hydrocarbon Chem., Sakyo-ku, Kyoto 606, Japan): Two-stage pyrolysis of vacuum residues for the production of olefins and gas with high calorific value. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1980) 999 (in Japanese)
- SVISTUNOV, V. S., PAPKOV, V. S., ZHDANOV, A. A. (Acad. Sci. USSR, Inst. Organoelement. Cpds., Moscow, V-71 USSR): The equilibrium in the system: octamethylcyclotetrasiloxane-polydimethylsiloxane at high temperatures. *Vysokomol. Soedin. A* 22 (1980) 1316 (in Russian)
- TAKABE, H., MIMA, K. (Osaka Univ., Inst. Laser Engn., Suita, Osaka, 565 Japan): Effect of thermal conduction and compressibility on Rayleigh-Taylor instability. *J. Phys. Soc. Jap.* 48 (1980) 1793
- TAKAHASHI, A., SAKAI, M., KATO, T. (Mie Univ., Fac. Engn., Chem. Dept. Ind. and Resources, Tsu, Mie, 514 Japan): Melting temperature of thermally reversible gel. VI. Effect of branching on the sol-gel transition of polyethylene gels. *Polym. J.* 12 (1980) 335
- THIERR-SOREL, A., TACQUENET, D., SIMONOT-GRANGE, M. H. (Fac. Sci. Mirande, CNRS, Rech. Reactivité Solides Lab., BP 138, F-21004 Dijon, France): Thermal dehydration of barium and calcium trimetaphosphate hexahydrates:  $Ba_3(P_3O_9)_2 \cdot 6 H_2O$  and  $Ca_3(P_3O_9)_2 \cdot 6 H_2O$ . *Phosphorus and Sulfur* 8 (1980) 73
- THYAGARAJAN, G., SUBHEDAR, M. K. (Indian Inst. Technol., Dept. Phys., Bombay 400076 India): Relationship between potential energy constants and heat of atomization. *Indian J. Pure Appl. Phys.* 18 (1980) 392
- TIWARI, M. D. (Garhwal Univ., Dept. Phys., Srinagar, 246174 Uttar Pradesh, India): Lattice specific heat of  $\alpha$ -phase alloys based on copper and silver. *Phys. Status Solidi B* 98 (1980) 559
- TIWARI, M. D., RAM, P. N. (Garhwal Univ. Dept. Phys., Srinagar, 246174 Uttar Pradesh, India): Magnon-phonon interactions in the thermal conductivity of antiferromagnetic  $FeCl_2$ . *J. Magn. Magn. Mater.* 15 (1980) 897
- TORKELSSON, S. A. (Chalmers Univ. Technol., Dept. Appl. Thermo- and Fluid Dynam., S-41296 Goteborg, Sweden): A new type of resistance thermometer for accurate temperature measurements in high gradient thermal boundary layers. *J. Phys. E* 13 (1980) 549
- TORRES, J., PRIMOT, J., POUQUET, A. M., AUBREE, J. (Ctr. Natl. Etud Telecommun., 196 Rue Paris, F-92220 Bagneux, France): Differential thermal analysis, dilatometric and Brillouin scattering measurements at the ferroelastic phase transition of lead phosphovanadate compounds. *Ferroelectrics* 26 (1980) 689
- TRAFARA, G. (Univ. Köln, Inst. Phys. Chem., Luxemburger Str. 116, D-5000 Köln, 4. GFR): Haupt- und Seitenkettenkristallinität bei isotaktischen Poly(1-alkylethylenen). 5. Röntgenographische und thermoanalytische Untersuchungen an den isotaktischen Homologen Poly(1-heptylethylen), Poly(1-octylethylen), Poly(1-nonylethylen), Poly(1-decylethylen), Poly(1-undecylethylen). *Makromol. Chem. Rap. Comm.* 1 (1980) 319
- TROITSKII, O. A. (Acad. Sci. USSR, Inst. Phys. Chem., Moscow, V-71 USSR): Relation between thermal, ponderomotive, and electron-plastic effects in zinc. *Dokl. Akad. Nauk SSSR* 251 (1980) 400 (in Russian)
- TSANG, T. W. E., GSCHNEIDNER, K. A., SCHMIDT, F. A. (Freie Univ. Berlin, Fachbereich Phys., Inst. Atom- und Festkörperphys., Boltzmannstr. 20, D-1000 Berlin, 33 GFR): Low-temperature heat capacity of Sc-Zr and Sc-Mg alloys. *Phys. Rev. B* 21 (1980) 3100
- UDUPA, M. R. (Indian Inst. Technol., Dept. Chem., Madras, 600036 India): Thermal behaviour of morpholinium perchlorate. *Thermochim. Acta* 38 (1980) 241
- UGAI, Y. A., ANOKHIN, V. Z., MITTOVA, I. Y., GORDIN, V. L., PONOMAREVA, N. I. (Voronezh State Univ., Voronezh, USSR): Thermal oxidation of silicon in dry oxygen in presence of phosphorus trichloride. *Zh. Fiz. Khim.* 54 (1980) 1133 (in Russian)
- UGAI, Y. A., GADEBSKAYA, T. A., MITTOVA, I. Y. (Voronezh State Univ., Voronezh, USSR): Thermal oxidation of silicon

- strongly alloyed by boron and antimony. *Zh. Fiz. Khim.* 54 (1980) 1548 (in Russian)
- UOBE, K., NISHIDA, K., INOUE, H., TSUTSUI, M. (Osaka Dent. Univ., Dept. Oral Pathol., Higashi-ku, Osaka, Japan): Thermal degradation of sugars in a gas chromatographic injection port. *J. Chromatogr.* 193 (1980) 83
- URBAS, E., KALJURAND, M., KULLIK, E. (Acad. Sci. EsSSR, Inst. Chem., Tallin, 200103 EsSSR): Study of the thermal decomposition of polymers by on-line cross-correlation gas chromatography. *J. Anal. Appl. Pyrol.* 1 (1980) 213
- UROV, K. E. (Acad. Sci. EsSSR, Inst. Chem., Tallin, 200026 USSR): Thermal decomposition of kerogens. Mechanism and analytical application. *J. Anal. Appl. Pyrol.* 1 (1980) 323
- VALERO, J., GRACIA, M., GUTIÉRREZ LOSA, C. (c/o M. Gracia, Univ. Zaragoza, Fac. Ciencias, Dept. Quim. Fis., Zaragoza, Spain): Excess enthalpies of some (chloroalkane + n-alkane) mixtures. *J. Chem. Thermodyn.* 12 (1980) 621
- VALERO, J., LOPEZ, M. C., GRACIA, M., GUTIÉRREZ LOSA, C. (c/o M. Gracia, Univ. Zaragoza, Fac. Ciencias, Dept. Quim. Fis., Zaragoza, Spain): Excess enthalpies of some (bromoalkane + n-alkane) mixtures. *J. Chem. Thermodyn.* 12 (1980) 627
- VAN DONGEN, J. C. M., VAN DER LINDEN, H. W. M., GREIDANUS, F. J. A. M., NIEUWENHUIS, G. J., MYDOSH, J. A., BUSCHOW, K. H. J. (State Univ. Leiden, Kamerlingh Onnes Lab., Leiden, Netherlands): Specific heat, differential susceptibility and electrical resistivity of  $\text{PrX}_2$  (X = Ir, Pt, Rh and Ru) laves phase compounds at temperatures  $1.4\text{K} < T < 4\text{K}$ . *J. Magn. Magn. Mater.* 15 (1980) 1245
- VAFOTSOS, P., ALEXOPOULOS, K. (Univ. Athens, Dept. Phys., Athens, 144 Greece): On the extraction of the vacancy formation parameters from specific heat data. *Phys. Status Solidi A* 58 (1980) 639
- VASS, M. I., BUDRUGEAC, P. (Ctr. Phys. Chem., Inst. Chem. Res., Splaiul Independentei 202, R-77208 Bucharest, 15 Romania): Calorimetric studies of oxygen adsorption on silver powder and of CO and  $\text{CO}_2$  interactions with preadsorbed oxygen on silver. *J. Catal.* 64 (1980) 68
- VELU, E. M. T., SUBBARAO, E. C., BONDA, N. R., GOEL, D. K., GUPTA, K. P., MAJUMDAR, A. K., PADMAVATHI SANKAR, T. A., SUBRAMANYAM, J. (Indian Inst. Technol., Kanpur 208016, Uttar Pradesh, India): Thermomagnetic analysis of intermetallic phases in mischmetal-cobalt system. *J. Appl. Phys.* 511 (1980) 3322
- VILKOVA, S. A., ARTEMENKO, S. E., LALAYAN, V. M., KHALTURINSKI, N. A. BERLIN, AL. AL., KOGERMAN, A. R., KHEINSOO, E. Y., KRULL, M. A. (Saratov Polytechn. Inst., Saratov, USSR): Study of the influence of flameproof viscose fabric on the burning of epoxyorganoplastics. *Vysokomol. Soedin.* 22 (1980) 1071 (in Russian)
- VOIGT-MARTIN, I. G. (Univ. Mainz, Inst. Phys. Chem., Jakob-Welder-Weg 15, D-6500 Mainz, GFR): Use of electron microscopy to obtain quantitative information about melting behavior of branched polyethylene. *J. Polym. Sci. Polym. Phys. Ed.* 18 (1980) 1513
- WALCH, S. P. (Argonne Natl. Lab., Div. Chem., Theoret. Chem. Grp., Argonne, Ill., 60439 USA): Calculated spectroscopic constants for the  $X^3\Sigma^-$ ,  $^1\Delta$ ,  $^1\Sigma_+^+$ ,  $^3\pi$  and  $^1\pi$  states of CCO. The heat of formation of CCO. *J. Chem. Phys.* 72 (1980) 5679
- WANET, P. M., APERS, D. J. (Catholic Univ. Louvain, Chim. Inorgan. and Nucl., B-1348 Louvain-la-Neuve, Belgium): Heat induced reactions in cobalt doped nickel oxinate. *J. Inorg. Nucl. Chem.* 42 (1980) 633
- WEBER, G., VOGEL, B. (Bayer A. G., Zent. Bereich Ingenieurwesen, Angew. Phys., D-4150 Krefeld-Verdingen, GFR): Thermoelektrische Analyse (TEA), eine neue Methode zum gleichzeitigen Studium elektrischer und thermischer Eigenschaften von Polymeren. *Angew. Makromol. Chem.* 86 (1980) 215
- WENDLANDT, R. F., EGGLER, D. H. (Lunar and Planetary Inst., 3303 NASA Rd. 1, Houston, Tex., 77058 USA): Melting relations in the systems  $\text{KAlSiO}_4\text{-MgSO}_4\text{-SiO}_2$  and  $\text{KAlSiO}_4\text{-MgO-SiO}_2\text{-CO}_2$  to 30 kilobars. *Amer. J. Sci.* 280 (1980) 385
- WENDLANDT, R. F., EGGLER, D. H. (Lunar and Planetary Inst., 3303 NASA Rd. 1,

- Houston, Tex., 77058, USA): Stability of phlogopite in natural spinel Ihercolite and in the system  $KAlSiO_4$ - $MgO$ - $SiO_2$ - $H_2O$ - $CO_2$  at high pressures and high temperatures. *Amer. J. Sci.* 280 (1980) 421
- WESTLAND, A. D. (Univ. Ottawa, Dept. Chem., Ottawa Ontario, K1N9B4 Canada): Thermochemistry of the lower bromides of tantalum. *Can. J. Chem.* 58 (1980) 938
- WESTPHAL, G. H., ROSENBERGER, F., CUNNINGHAM, P. R., AMES, L. L. (Univ. Utah, Dept. Phys., Salt Lake City, Utah, 84112 USA): Matrix isolation infrared and mass spectrometric studies of the vapors formed by the thermal decomposition of  $Te_6O_{11}Cl_2$ . *J. Chem. Phys.* 72 (1980) 5192
- WHITE, M. A., MORRISON, J. A. (Univ. Oxford, Inorgan. Chem. Lab., Oxford, England): Tunnel splittings in solid  $CD_4$  estimated from heat capacity data. *J. Chem. Phys.* 72 (1980) 5927
- WILCZOREK-CIUROWA, K., PAULIK, J., PAULIK, F. (Tech. Univ. Cracow, Inst. Inorgan. Chem. and Technol., Kraków, Poland): Influence of foreign materials upon the thermal decomposition of dolomite, calcite and magnesite. I. Influence of sodium chloride. *Thermochim. Acta* 38 (1980) 157
- WIEGELEBEN, A., RICHTER, L., DEVESCH, J., DEMUS, D. (Martin Luther Univ., Sect. Chem. Forsch. Abt., DDR-401 Halle, GDR): Calorimetric investigation of some homologous series with a high degree of smectic polymorphism. *Mol. Cryst. Liquid Cryst.* 59 (1980) 329
- WIGREN, J., ANDERSSON, P. (Umeå Univ., Dept. Phys., S-90187 Umeå, Sweden): Thermal conductivity and heat capacity of adamantane and hexamethylenetetramine under pressure. *Mol. Cryst. Liquid Cryst.* 59 (1980) 137
- WILKINS, C. A., ASH, R. L. (Caltech, Jet Prop. Lab., Edwards Test Stn., Pasadena, Calif., 91103 USA): An apparatus for measuring the thermal conductivity of cast insulation materials. *Rev. Sci. Instr.* 51 (1980) 998
- WUBBELS, G. G., HALVERSON, A. M., OXMAN, J. D. (Grinnell Coll., Dept. Chem., Grinnell, Ia., 50112 USA): Thermal and photochemical smiles rearrangements of  $\beta$ -(nitrophenoxy)ethylamines. *J. Amer. Chem. Soc.* 102 (1980) 4848
- WÜHL, H., COMBERG, A., EWERT, S. (KFA Jülich GmbH, Inst. Festkörperforsch., Postfach 1913, D-5170 Jülich 1, GFR): Effective phonon spectrum and lattice specific heat of superconducting amorphous thallium films. *Z. Phys. B* 38 (1980) 83
- WÜRZ, U., GRUBIĆ, M. (Max Planck Inst. Biophys. Chem., Karl Friedrich Bonhoeffer Inst., Postfach 968, D-3400 Göttingen, GFR): An adiabatic calorimeter of the scanning ratio type. *J. Phys. E* 13 (1980) 525
- YAMADA, B., KAMEI, H., OTSU, T. (Osaka City Univ., Fac. Engn., Dept. Appl. Chem., Sumiyoshi-ku, Osaka, 558 Japan): Effect of tin tetrachloride on thermal decomposition of  $\alpha, \alpha'$ -azobisisobutyronitrile and dimethyl  $\alpha, \alpha'$ -azobisisobutyrate. *J. Polym. Chem. Ed.* 18 (1980) 1917
- YERUKHIMOV, M. S., ZHIGALOV, V. S., FROLOV, G. I. (L. V. Kirenskii Phys. Inst., Krasnoyarsk, USSR): Temperature behaviour of permalloys containing impurity atoms. *Fiz. Metal. Metalloved.* 49 (1980) 1210 (in Russian)
- YONEDA, G., BLAKE, D. M. (Univ. Texas, Dept. Chem., Arlington, Tex., 76019 USA): Enthalpy changes in oxidative addition of iodo compounds with *trans*- $[IrCl(CO)(PMe_3)_2]$  and determination of a relative scale of iridium-ligand bond energies. *J. Organometal. Chem.* 190 (1980) C71
- ZAINULIN, Y. G., D'YACHKOVA, T. V., ALYAMOVSKII, S. I., MOKHRACHEVA, L. P. (Acad. Sci. USSR, Ural Sci. Ctr., Inst. Chem., Sverdlovsk, USSR): Thermal expansion of oxycarbides of niobium. *High Temp. transl. Teplofiz. Vysok. Temp.* 17 (1979) 727
- ZHDANOV, V. M., TURDAKIN, V. A., DVORETSKOV, G. A., VISHNYAKOV, A. V., KOVTUNENKO, P. V. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Low-temperature specific heat of  $CdGa_2Se_4$ . *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 1475
- ZHOGIN, D. Y., KOSARUKINA, E. A., KOLESOV, V. P. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Specific heat in range of 10–300K and thermodynamic functions of tetragonal tin dioxide. *Zh. Fiz. Khim.* 54 (1980) 916 (in Russian)