

Bibliography Section

- ABELIOV, Y. A., ARUTYUNOV, B. A., GUKHMAN, A. A., KIRILLOV, V. N.: The temperature heat conductivity coefficient of amorphous polymers. *Vysokomol. Soedin. B* 21 (1979) 397 (In Russian)
- ABO-EL-ENEIN, S. A., EL-WAKIL, H. A. (Ain Shams Univ., Fac. Sci., Dept. Chem., Cairo, Egypt): Heats of immersion in relation to water losses of chromium exchanged mordenite. *Thermochim. Acta* 31 (1979) 147
- ABO-EL-ENEIN, S. A., EL-WAKIL, H. A. (Ain Shams Univ., Fac. Sci., Dept. Chem., Cairo, Egypt): Heats of immersion in relation to water losses of synthetic sodium mordenite. *Thermochim. Acta* 31 (1979) 153
- ABUD, M., DACOROGNA, M., GALTO, R., SAVOY, C. A. (Univ. Geneva, Dept. Phys. Theor., CH-1211 Geneva, 4 Switzerland): Calorimetric experiments and two photon collisions. *Phys. Lett. B* 84 (1979) 229
- ADAME, I. E., VICHARELLI, P. A. (N. Texas State Univ., Dept. Chem., Denton, Tex., 76203 USA): Thermodynamic properties of normal and deuterated cyclopropanes. *Thermochim. Acta* 31 (1979) 203
- ALLAIN, C., LALLEMAND, P. (Ecole Norm. Supér., Spectroscopie, Hertzienne Lab., F-75231 Paris, 5 France): Phenomenological models compatible with acoustical and thermal properties of viscous liquids. *J. Phys.* 40 (1979) 679
- ALLAIN, C., LALLEMAND, P. (Ecole Norm. Supér., Spectroscopie, Hertzienne Lab., F-75231 Paris, 5 France): Light scattering and calorimetric study of the thermal diffusivity of glycerol, liquid and glass. *J. Phys.* 40 (1979) 693
- ALONSO, J. A., GONZÁLEZ, D. J., IÑIQUEZ, M. P. (Univ. Valladolid, Dept. Fis. Teórica, Valladolid, Spain): On the electronegativity parameters of the theory of heats of alloy formation. *Solid State Commun.* 31 (1979) 9
- AMIRKhanov, K. I., GADZHIEV, G. G., MAGOMEDOV, Y. B. (Acad. Sci. USSR, Inst. Phys., Makhachkala, USSR): Thermal conductivity of Cu_2SbS_4 and Cu_3AsS_4 . *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 1050
- AMIRKhanov, K. I., MAGOMEDOV, Y. B., ISMAILOV, S. M., KRAMYNINA, N. L. (Acad. Sci. USSR, Inst. Phys., Makhachkala, USSR): The thermal conductivity of semiconductors of the system $As_2(Se_{1-x}Te_x)_3$ depending on temperature and pressure. *Phys. Status Solidi* 53 (1979) 361
- ANDRIANOV, K. A., KHANANASHVILI, L. M., TALANOV, V. N., IL'IN, M. M., ZHURAKOVSKAYA, I. I., DIDENKO, T. V. (c/o L. M. Khananashvili, M. V., Lomonosov Fine Chem. Technol. Inst., Moscow, USSR): The study of thermal condensation reaction of tetracid-(trimethylsilylamino) silane. *Vysokomol. Soedin. B* 21 (1979) 346 (In Russian)
- ANDRIANOV, K. A., PAVLOVA, S. S. A., TOLCHINSKY, Y. I., ZHURAVLEVA, I. V., RAZMEROVA, M. V., MISINA, V. P., MAKAROVA, L. I., ZHDANOV, A. A. (c/o S. S. A. Pavlova, Acad. Sci. USSR, Inst. Organoelement. Cpds., Moscow, V-61 USSR): The study of the thermal degradation of polyurethane siloxanes. *Vysokomol. Soedin. B* 21 (1979) 540 (In Russian)
- ANDRIYKO, A. A., CHERNOV, R. V. (Acad. Sci. UkSSR, Inst. Gen. and Inorgan.

- Chem., Kiev, UkSSR): Kinetics and mechanism of thermal decomposition of sodium hexafluorogermanate. *Ukr. Khim. Zh.* 45 (1979) 298 (In Russian)
- ANNAMALAI, K., SIBULKIN, M. (AVCO Everett Res. Lab. Inc., Everett, Mass., 02149 USA): Flame spread over combustible surface for laminar flow systems. 1. Excess fuel and heat flux. *Combust. Sci. Technol.* 19 (1979) 167
- ANNAMALAI, K., SIBULKIN, M. (AVCO Everett Res. Lab. Inc., Everett, Mass., 02149 USA): Flame spread over combustible surfaces for laminar flow systems. 2. Flame heights and fire spread rates. *Combust. Sci. Technol.* 19 (1979) 185
- ARUGA, R. (Univ. Turin, Ist. Chim. Anal., I-10125 Turin, Italy): Coordinating properties of pyridinecarboxylate anions with metals in aqueous solution. A calorimetric study. *J. Inorg. Nucl. Chem.* 41 (1979) 845
- ARUGA, R. (Univ. Turin, Ist. Chim. Anal., I-10125 Turin, Italy): Calorimetric studies of the ethereal oxygen and thioethereal sulphur coordinating properties in aqueous solution. IV. Thermodynamics of association of dithiodiacetate and 3,3'-thiodipropionate ions with bivalent metals. *J. Inorg. Nucl. Chem.* 41 (1979) 849
- ATTIA, M. E., BISHARA, S. W., HASSAN, H. N. A., FARAG, A. B. (Univ. Mansoura, Fac. Sci., Dept. Chem., Mansoura, Egypt): Behaviour nitrogen in organic compounds after combustion with various methods. *Fresenius Z. Anal. Chem.* 296 (1979) 409
- AYREY, G., MAN, F. P., POLLER, R. C. (Univ. London, Queen Elizabeth Coll., Dept. Chem., London, W8 7AH England): Mechanism of thermal stabilization of PVC by organotin compounds: scavenging of chlorine atoms. *J. Organometal. Chem.* 173 (1979) 171
- BACK, M. H., MARTIN, R. (Univ. Ottawa, Dept. Chem., Ottawa, Ontario, Canada, K1N 984): The thermal reactions of ethylene at 500 °C in the presence and absence of small quantities of oxygen. *Int. J. Chem. Kinet.* 11 (1979) 757
- BACK, R. A., BACK, M. H. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Effect of oxygen on the thermal decomposition of cyclobutanone A thermal triplet reaction? *J. Phys. Chem.* 83 (1979) 2063
- BADR, Y. A., EL-KABBANY, F., TOSSON, M. (Univ. Cairo, Fac. Sci., Dept. Phys., Cairo, Egypt): DTA and dielectric study of the high temperature phase of Na₂SO₄. *Phys. Status Solidi A* 53 (1979) K51
- BAJAL, S. K., DAS, A. N. (Univ. Benin, Dept. Chem. Petr. Engr., Benin City, Nigeria): Thermal and oxidative degradation of cross-linked styrene-polyester copolymers. *Indian J. Chem. A* 16 (1978) 1036
- BAJAJ, P., BABU, G. N., KHANNA, D. N., VARSHNEY, S. K. (Indian Inst. Technol., Polymer and Fiber Sci. Lab., New Delhi, 110029 India): Room temperature-vulcanized silicone elastomer: effect of curing conditions and the nature of filler on mechanical and thermal properties. *J. Appl. Polym. Sci.* 23 (1979) 3505
- BAKHCHIEVA, S. R., KEKUA, M. G., PETROV, A. V. (A. F. Joffe Engr. Phys. Inst., Leningrad, USSR): Thermoconductivity and mobility of charge carriers in silicon doped with tin. *Fiz. Tverd. Tela* 21 (1979) 1554 (In Russian)
- BALAKINA, M. N., SERPUCHENKO, E. A., BRYK, I. I., ANISTRATENKO, G. A. (Acad. Sci. UkSSR, Inst. Colloid Chem. and Water Chem., Kiev, UkSSR): Metallopolymers on the basis of highly dispersed copper and carboxylate rubber and their thermostability. *Ukr. Khim. Zh.* 45 (1979) 338 (In Russian)
- BALLISTRERI, A., FOTI, S., MONTAUDO, G., PAPPALARDO, S., SCAMPORRINO, E. (Univ. Catania, Ist. Dipartimentale Chim. e Chim. Ind., I-95125 Catania, Italy): Thermal decomposition of flame retardants. Chlorine-bromine antagonism in mixtures of halogenated polymers with Sb₂O₃. *Polymer* 20 (1979) 783
- BALLISTRERI, A., FOTI, S., MONTAUDO, G., PAPPALARDO, S., SCAMPORRINO, E. (c/o G. Montaudo, Univ. Catania, Ist. Dipartimentale Chim. e Chim. Ind., I-95125 Catania, Italy): Thermal decomposition of flame retardants: mixtures of chlorinated polymers with Sb₂O₃ and (BiO)₂CO₃. *J. Polym. Sci. Polym. Chem. Ed.* 17 (1979) 2469
- BALOG, M., SCHIEBER, M., MICHMAN, M., PATAI, S. (Hebrew Univ. Jerusalem, Sch.

- Appl. Sci. and Technol., Dept. Mat. Sci., Jerusalem, 91000 Israel): Characteristics of growth of films of zirconium and hafnium oxides (ZrO_2 , HfO_2) by thermal decomposition of zirconium and hafnium beta-diketonate complexes in the presence and absence of oxygen. *J. Electrochem. Soc.* 126 (1979) 1203
- BANAVICHUS, R. B., MARMA, A. I., ASKADSKY, A. A. (A. Snechkus Polytech. Inst., Kaunas, LiSSR): The study of the mechanical workability of thermostable polymers under the conditions of stress relaxation (by example of polybenzoxazol). *Vysokomol. Soedin. A* 21 (1979) 1383 (In Russian)
- BANSAL, R. K., SAHOO, J. C. (Indian Inst. Technol., Dept. Chem., New Delhi, 110029 India): Thermal and dielectric properties of epoxy resins. *Angew. Makromol. Chem.* 79 (1979) 125
- BARAM, I. I., LAKHTIN, Y. M., KOGAN, Y. D. (Ust. Kamenogorsk Highway Construct. Inst., Ust. Kamenogorsk, KaSSR): Kinetics of processes of chemicothermal treatment of metals and alloys. *Metal Sci. Heat Treatment* transl. *Metall. Term. Obr. Met.* 21 (1979) 129
- BARRIERE, M. (Univ. Brest, Petrol. Lab., F-29269 Brest, France): Textural and thermal controls of plastic flow in a granitic pluton, ploumanach, brittany. *Bull. Mineral.* 102 (1979) 203
- BARTKOWSKI, K., WLOSEWICZ, D., RAFALOWICZ, J. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., PL-53529 Wrocław, Poland): Lorenz function and horizontal and vertical component of thermal resistivity of tin monocrystals. *Phys. Status Solidi A* 52 (1979) 397
- BATTISTE, M. A., MCRITCHIE, D. D., GASSMAN P. G., REUS, W. F., CHASMAN, J. N., HAYWOOD-FARMER, J. (Univ. Florida, Dept. Chem., Gainesville, Fla., 32611 USA): Methyl substituent probe of the transition state for thermal decarboxylation of endo-tricyclo[3.2.1.0^{2,4}]octan-8-one. *Tetrahedron Lett.* (1979) 2097
- BAUMSTARK, A. L., WILSON, C. E. (Georgia State Univ., Dept. Chem., Atlanta, Ga., 30303 USA): The unexpected thermal instability of 3,4-tetramethylene-1,2-dioxetane as compared to that of *cis*-3,4-diethyl-1,2-dioxetane. *Tetrahedron Lett.* (1979) 2569
- BAYOGLU, A. S., LORENZELLI, R. (Cenfar, Etude et Appl. Mat. Base Actinides Séct., BP6, F-92260 Fontenay Aux Rose, France): Study of chemical diffusion of oxygen in PuO_{2-x} by means of dilatometry and thermogravimetry. *J. Nucl. Mater.* 82(1979) 403
- BEEZER, A. E., ORBÁN, M., TYRREL, H. J. V. (Univ. London, Chelsea Coll. Sci. and Technol., Dept. Chem., London, SW3 6LX England): Thermometric titration studies of association equilibria: charge-transfer complexes between iodine and substituted pyridines in carbon tetrachloride. *Acta Chim. Acad. Sci. Hung.* 99 (1979) 415
- BENOIT, R. L., MILANOVA, E. (Univ. Montreal, Dept. Chem., Montreal, Quebec, H3C 3V1 Canada): Vapour pressure and calorimetric data for the solution of sulfur dioxide in aprotic solvents. *Can. J. Chem.* 57 (1979) 1319
- BENSON, S. W., NANGIA, P. S. (Univ. So. Calif., Hydrocarbon Res. Inst., Los Angeles, Calif., 90007 USA): Some unresolved problems in oxidation and combustion. *Accounts Chem. Res.* 12 (1979) 223
- BERGER, A. S., OCKERS, S. T., SIEGEL, R. W. (Argonne Natl. Lab., Div. Mat. Sci., Argonne, Ill., 60439 USA): Measurement of the monovacancy formation enthalpy in copper. *J. Phys. F* 9 (1979) 1023
- BERRY, K. H. (Natl. Phys. Lab., Teddington TW11 QLW Middlesex, England): NPL-75: A low temperature gas thermometry scale from 2.6 K to 27.1 K. *Metrologia* 15 (1979) 89
- BERTHON, G., ANGOT, B., BEDEN, B., ENEA, O. (Univ. Poitiers, Chim. Electrochim. et Interact. Lab, F-86022 Poitiers, France): Quantitative comparison of substituent effects on solvation and proton-ionization standard enthalpies of methylpiperidines. *J. Chem. Thermodyn.* 11 (1979) 539
- BERTRAM, H., WIEGHARDT, K. (c/o K. Wiegardt, Tech. Univ. Hannover, Inst. Anorgan. Chem. D-3000 Hannover, 1 GFR): Thermal intramolecular cobalt(III)-iron(II) and cobalt(III)-titanium(III) electron-transfer reactions involving outer-sphere and inner-sphere precursor complexes. *Inorg. Chem.* 18 (1979) 1799
- BEYER, R. P., DAUT, G. E.: Low-temperature heat capacities of potassium disilicate. *J. Chem. Eng. Data* 24 (1979) 170

- BHATTACHARYYA, A., ANDERSON, A. C. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): Low-temperature thermal conductivity of polyethylene. *J. Low Temp. Phys.* 35 (1979) 641
- BHATTACHARYYA, P., SARKAR, M., BISWAS, A. K., CHAKRABORTY, D. P. (Bose Inst., Calcutta, 700009 India): Iodine promoted thermal cyclisation of anthranilic acid. *J. Indian Chem. Soc.* 56 (1979) 328
- BIEGAŃSKI, Z., DRULIS, M. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., PL-50329 Wrocław, Poland): Low temperature specific heats of samarium trihydride. Second-order phase and crystal field splitting effects. *Solid State Commun.* 31 (1979) 501
- BISHOP, M. F., OVERHAUSER, A. W. (Purdue Univ., Dept. Phys., W. Lafayette, Ind., 47907 USA): Analysis of the anomalous temperature-dependent resistivity of potassium below 1.6K. *Phys. Rev. Lett.* 42 (1979) 1776
- BLACHNIK, R., HOPPE, A. (Gesamtsch. Siegen, Anorgan. Chem. Lab., Adolf Reichwein Str. 2, D-5900 Siegen, 21 GFR): Silver halide and silver chalcogenide systems. IV. Excess enthalpies of the liquid mixtures of $\text{AgCl} + \text{Ag}_2\text{Se}$, $\text{AgI} + \text{Ag}_2\text{Se}$, $\text{AgCl} + \text{Ag}_2\text{Te}$, $\text{AgBr} + \text{Ag}_2\text{Te}$, $\text{AgI} + \text{Ag}_2\text{Te}$. *Z. Anorg. Allg. Chem.* 453 (1979) 166
- BLACHNIK, R., RABE, U. (Univ. Siegen, Fachbereich Chem., Anorgan. Chem. Lab., D-5900 Siegen, 21 GFR): Mischungsenthalpien von flüssigen Vb-Seleniden mit Vb-Telluriden. *J. Less-Common Metals* 64 (1979) 295
- BLACKLEY, D. C., HAYNES, A. C. (Polytech. N. London, Natl. Coll. Rubber Technol., London, N7 808 England): Kinetics of thermal decomposition of 4,4'-azobis(4-cyanopentanoic acid) and its salts in aqueous solution. *J. Chem. Soc. Faraday Trans. 1*, 75 (1979) 935
- BLINOV, E. I. (Ukrainian Hydraul. Engr. Inst., Kiev, UkSSR): Analytical description of thermomechanical deformation in a crystal. *Izv. Vyssh. Uch. Zav. Fiz.* (1979) 45 (In Russian)
- BLOOR, D., KENNEDY, R. J., BATCHELDER, D. N. (Univ. London, Queen Mary Coll., Dept. Phys., London, El 4NS England): Raman spectroscopic studies of the solid-state polymerization of diacetylenes. I. Thermal polymerization of 1,6-di-*p*-toluenesulfonyloxy-2,4-hexadiyne. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 1355
- BODNAR, I. A., SHIRVINSKAIA, A. K., POPOVA, F. G., MOCHALOV, I. V., IVANOV, A. O. (I. V. Grebenshchikov Silicate Chem. Inst., Leningrad, USSR): Thermal stability of ortho-aluminates of rare-earth elements of the yttrium subgroup. *Dokl. Akad. Nauk SSSR* 246 (1979) 1132 (In Russian)
- BOGHOSSIAN, H., SAMUEL, S., MISHO, R. H., DUBEY, K. S. (Univ. Basrah, Coll. Sci., Dept. Phys., Basrah, Iraq): Effect of point-defects on lattice thermal conductivity at low temperature. *Indian J. Pure Appl. Phys.* 17 (1979) 41
- BOO, W. O. J., SROUT, J. W. (Univ. Mississippi, Dept. Chem., University, Miss., 38677 USA): Heat capacity and entropy of CuF_2 and CrF_2 from 10 to 300 °K. Anomalies associated with magnetic ordering and evaluation of magnetic contributions to the heat capacity. *J. Chem. Phys.* 71 (1979) 9
- BORCHI, E., DEGENNARO, S., PELOSI, G., RETTORI, A., TASSELLI, P. L. (Univ. Florence, Ist. Fis., I-50121 Florence, Italy): Electronic contribution to the thermal conductivity of noble metals in the low-temperature region. *Phys. Rev. B* 19 (1979) 6260
- BOREL, M. M., BUSNOT, A., BUSNOT, F., LECLERCQ, A. (Univ. Caen, Ismira, Cristallog. et Chim. Solide Lab., La 251 Chim. Minerale Lab. B., F-14032 Caen, France): Etude thermochimique de carboxylates de cuivre solvates par des amines aromatiques. *Thermochim. Acta* 51 (1979) 189
- BORISOV, E. A., TRUSOV, G. N., SHIRYAEV, V. K. (L. Y. Karpov Physicochem. Res. Inst., Moscow, USSR): An estimate of the promise of thermoelectrochemical and thermochemical cycles for hydrogen production from water. *Sov. Electrochem. transl. Elektrokhim.* 15 (1979) 44
- BORISOV, V. T., VONOGADOV, V. V., TYAZHELNIKOVA, I. L.: Analysis of the behaviour of the thermal properties of a solidifying alloy in the neighbourhood of particular points on the phase diagram. *Russ. Met. transl. Izv. Akad. Nauk SSSR Met.* (1978) 90
- BORSESE, A., BORZONE, G., CAPELLI, R. (Univ. Genoa, Ist. Chim. Gen. ed Inorgan., I-16132 Genoa, Italy): Recent studies on

- the thermochemistry of binary alloys. *Chim. Ind.* 61 (1979) 448
- BOTHE, N., DÖSCHER, F., KLEIN, J., WID-DECKE, H. (Tech. Univ. Braunschweig, Inst. Chem. Technol., D-3300 Braunschweig, GFR): Thermal stability of sulfonated styrene — divinyl benzene resins. *Polymer* 20 (1979) 850
- BOTTEL, R. S., CHANG, H., LUSARDI, D. A. (Univ. Notre Dame, Dept. Chem., Notre Dame, Ind., 46556 USA): Thermal and spectral studies of some divalent metal chelate polymers of DL-2,6-diaminopimelic acid and 4,4'-diamino-3,3'-dicarboxybi-phenyl. *J. Inorg. Nucl. Chem.* 41 (1979) 909
- BRESLAUER, K. J. (Rutgers State Univ. Douglass Coll., Dept. Chem., New Brunswick, N. J., 08903 USA): A calorimetric determination of enthalpies and heat capacities of protonation. *J. Chem. Thermodyn.* 11 (1979) 527
- BRIGGS, D., BREWIS, D. M. KONIECZKO, M. B. (Ici Ltd., Div. Plast., Bessemer Rd., Wellwyn Garden City, Hertfordshire, England): X-ray photoelectron spectroscopy studies of polymer surfaces 3. Flame treatment of polyethylene. *J. Mater. Sci.* 14 (1979) 1344
- BROWN, S. B., DEWAR, M. J. S. (c/o M. J. S. Dewar, Univ. Texas, Dept. Chem., Austin, Tex., 78712 USA): Thermal and electrical properties of transition metal complexes and coordination polymers of pyrazine-2,5-dicarboxylic acid. *Inorg. Chim. Acta* 34 (1979) 221
- BURGEMEISTER, E. A., SEAL, M. (D. Drukker and Zn Nv, Sarphatikade 12, NL-1017 Wv. Amsterdam, Netherlands): Thermal conductivities of diamonds with absorption at 3,22 μm . *Nature* 279 (1979) 785
- BURGESS, J., CARTWRIGHT, S. J., HAIGH, I., PEACOCK, R. D., TAYLOR, P., JENKINS, H. D. B., PRATL, K. F. (Univ. Leicester, Dept. Chem., Leicester, LE1 7RH, England): Thermochemistry of alkali-metal hexachloro- and hexabromo-tungstates (IV) and -rhenates(IV). *J. Chem. Soc. Dalton Trans.* (1979) 1143
- BUSFIELD, W. K., COWIE, I. M. G., MONDAL, M. A. S. (Griffith Univ., Sch. Sci., Nathan, 4111 Queensland, Australia): Block copolymers of fluoral oligomer with urethanes. Preparation and thermal properties. *Makromol. Chem.* 180 (1979) 1775
- BUSULINI, L., LORA, S., D'ESTE, C., BORDIN, P. L. (Univ. Padua, Ist., Chim. Phys., I-35100 Padua, Italy): Application of a calorimetric method in radiation induced polymerization. V. Determination of propagation and termination rate constants for iso-butyl and dodecyl methacrylates. *Eur. Polym. J.* 15 (1979) 515
- BUZÁS, I., KURUCZ, É., HOLLÓ, J. (Hungarian Acad. Sci., H-1361 Budapest, Hungary): Study of the thermooxidative behavior of edible oils by thermal analysis. *J. Amer. Oil Chem. Soc.* 56 (1979) 685
- BYKANOVA, T. A., LAVROV, A. V. (Voronezh State Teachers Inst., Voronezh, USSR): Thermal dehydration of double pyrophosphates of nickel and alkali metals. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1591
- CABANI, S., GIANNI, P. (Univ. Pisa, Ist. Fis., I-56100 Pisa, Italy): Thermodynamic functions of hydration of saturated uncharged organic compounds. Free energies, enthalpies and entropies at 25 °C. *J. Chem. Soc. Faraday Trans. I*, 75 (1979) 1184
- CAPLAN, D., SPROULE, G. I., HUSSEY, R. J., GRAHAM, M. J. (Natl. Res. Council, Canada, Div. Chem., Ottawa, Ontario, Canada): Oxidation of Fe—C alloys at 700 °C. *Oxidat. Metal* 13 (1979) 255
- CEPIDOR, V. B., D'ASCENZO, G., TOMASSETTI, M. (Univ. Rome, Ist. Chim. Analit., I-00100 Rome, Italy): Thermal analysis of cis- and trans-potassium bis-malonate and bis-monomethylmalonate chromate(III) complexes. *Thermochim. Acta* 31 (1979) 341
- CHAKRABARTI, S. K., SENGUPTA, S. (Presidency Coll., Solid State Phys. Res. Ctr., Dept. Phys., Calcutta, 700012 India): Temperature-induced phase transition and lattice mechanics of CsCl. *J. Phys. C* 12 (1979) 2249
- CHAMBERS, R. D., SARGEANT, C. R. (Union Carbide Corp., Parma Tech. Str., Div. Carbon Prod., Parma, Ohio, 44130 USA): Sensitisation of thermal aromatic rearrangements. *J. Chem. Soc. Chem. Commun.* (1979) 446
- CHAMBERS, R. D., SARGEANT, C. R., CLARK, M. (Union Carbide Corp., Parma Tech. Ctr., Div. Carbon Prod., Parma, Ohio, 44130 USA): Thermal rearrangements

- of fluorinated pyro diazine: mechanism. *J. Chem. Soc. Chem. Commun.* (1979) 445
- CHERNENKO, V. A., POLANDOV, I. N., BARANOV, A. I. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Study of thermal and dielectric properties of deuterated triglycine selenate at high hydrostatic pressure. *Fiz. Tverd. Tela* 21 (1979) 1381 (In Russian)
- CHEORNORUKOV, N. G., EGOROV, N. P., KUTSEPIN, V. F. (N. I. Lobachevskii State Univ., Gorki, USSR): Crystalline niobium phosphate of the $\text{NbOPO}_4 \cdot 2\text{H}_3\text{PO}_4 \cdot 5\text{H}_2\text{O}$ composition and its thermal decomposition products. *Zh. Neorg. Khim.* 24 (1979) 1782 (In Russian)
- CHEORNOV, R. V., YAKOVLEV, B. V. (Acad. Sci. UkSSR, Inst. Gen. and Inorgan. Chem., Kiev, UkSSR): Heating polytherm and viscosity change kinetic of sodium chloride melt. *Zh. Fiz. Khim.* 53 (1979) 1147 (In Russian)
- CHERTOV, V. M., OKOPNAYA, N. T. (L. V. Pizarzhevskii Phys. Chem. Inst., Kiev, UkSSR): Thermal and hydrothermal modification of silicon, titanium, zirconium and tin dioxides. *Kinet. Catal. transl. Kinet. Katal.* 19 (1978) 1299
- CHEVALIER, J., BAIXERAS, J., ANDRO, P. (Univ. Paris VI, CNRS Genie Elect. Lab., F-92260 Fontenay Aux Rose, France): Thermometrical properties of disordered Nb-N_x thin films. *Rev. Phys. Appl.* 14 (1979) 663 (In French)
- CHIZHIK, A. I., SHABES, S. V., TSUI, L. L., TETEREVA, N. G. (Leningrad Rubber Ind., Leningrad, USSR): The use of the spline-approximation method for the treatment of the thermoanalysis data. *Vysokomol. Soedin. A* 21 (1979) 1674 (In Russian)
- CHUMAREV, V. M., OKUNEV, A. I.: Reactions during heating FeS_2 - CaCO_3 -C mixtures. *Russ. Met. transl. Izv. Akad. Nauk SSSR Met.* (1978) 18
- CLADIS, P. E., GUILLON, D., STAMATOFF, J., AADSEN, D., DANIELS, W. B., NAUBERT, M. E., GRIFFITH, R. F. (Bell Tel. Labs. Inc., Murray Hill, N. J., 07974 USA): Temperature and pressure study of 8S5. *Mol. Cryst. Liquid Cryst.* 49 (1979) 279
- CLAY, R. M., MICHELONI, M. PAOLETTI, P., STEELE, W. N. (Univ. Stirling, Dept. Chem., Stirling FK9 4LA, Scotland): Enthalpies of formation and solution of macrocyclic and noncyclic tetraze ligands origins of the enthalpy term in the macrocyclic effect. *J. Amer. Chem. Soc.* 101 (1979) 4119
- COHEN, L. H., KLEMENT, W. (Univ. Calif. Riverside, Dept. Earth Sci., Riverside, Calif., 92521 USA): High-low cristobalite transitions in SiO_2 , AlPO_4 and GaPO_4 . Investigations by differential thermal analysis under hydrostatic pressures \lesssim 6kbar. *Phyl. Mag. A* 39 (1979) 399
- CUNAT, C., DIRAND, M., HILGER, J. P., HERTZ, J. (Univ. Nancy, 1 Thermodynam. Met. Lab., F-54037 Nancy, France): Etude par effusiométrie de torsion des propriétés thermodynamiques en phase solide des laitons binaires (Cu, Zn). *Thermochim. Acta* 31 (1979) 165
- CUNDALL, R. B., FUSSEY, D. E., HARRISON, A. J., LAMPARD, D. (Univ. Salford, Salford M5 4WT, Lancashire, England): High temperature pyrolysis of ethane and propylene. *J. Chem. Soc. Faraday Trans. I*, 75 (1979) 1390
- DAAMS, J. M., CARBOTTE, J. P., BAQUERO, R. (Univ. Toronto, Dept. Phys., Toronto, Ontario, M5S 1A1 Canada): Critical field and specific heat of superconducting Tl-Pb-Bi alloys. *J. Low Temp. Phys.* 35 (1979) 547
- DANCY, E. A., NGUYEN-DUY, P. (Inst. Rech. Hydro Quebec, Varennes Jol, Quebec, 2PO Canada): Comments on "heats of melting of sodium nitrate and indium by differential scanning calorimetry: a suggestion for a new calibration substance". *Thermochim. Acta* 31 (1979) 395
- DAVYDOR, E. Y., PARIJSKY, G. B., TOPTYGIN, D. Y. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): The study of the thermal degradation of macroradicals of polymethacrylic acid. *Vysokomol. Soedin. B* 21 (1979) 413 (In Russian)
- DE GROOT, S. R., VAN LEEUVEN, W. A., VAN WEERT, C. G. (Inst. Theoret. Phys., Vakkenierstr. 65, NL-1018 Amsterdam, Netherlands): Viscosity and heat conductivity of the primordial neutrino gas. *Proc. K. Ned. Akad. Wetenschap.* 82 (1979) 113
- DHILLON, M. S. (Guru Nanak Dev. Univ., Dept. Chem., Amritsar, 143005 Punjab,

- India): Second virial coefficient and excess thermodynamic functions in benzene of polymer 2-butane-1,4-diol with adipic acid. *Thermochim. Acta* 31 (1979) 375
- DIAZ PEÑA, M., COMPOSTIZO, A., CRESPO COLIN, A. (Univ. Complutense Madrid, Fac. Ciencias Quim., Dept. Quim. Fis., Madrid, Spain): Excess Gibbs free energies of mixtures of methylcyclohexane + *o*-xylene, + *m*-xylene, and + *p*-xylene at 348.15K. *J. Chem. Thermodyn.* 11 (1979) 447
- DOLLIMORE, D., GUPTA, J. P., MANNING, N. J., NOWELL, D. V. (Univ. Salford, Dept. Chem., Salford, M5 4WT, Lancashire, England): Simultaneous thermal/mass-spectral investigations of ammonium exchanged zirconium phosphate and zirconium arsenate. *Thermochim. Acta* 31 (1979) 357
- DRULIS, M., BIEGANSKI, Z. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., PL-50329 Wrocław, Poland): Low-temperature specific heats of cerium and praseodymium trihydrides. Second-order phase transitions and crystal field splitting effects. *Phys. Status Solidi A* 53 (1979) 277
- ERASTOV, P. A., KOLESOV, V. P. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Thermodynamics of nitrogen-containing organofluorine compounds: Enthalpy of formation of perfluorotriethylamine and perfluorotributylamine. *Zh. Obshch. Khim.* 49 (1979) 1351 (In Russian)
- ERKOVA, L. N., RUBAN, V. L., VITUKHNOVSKAYA, I. I. (Lensovet Technol. Inst., Leningrad, USSR): Calorimetric determination of the heats of micelle formation of some surfactants. *Colloid J. USSR transl. Kolloidn. Zh.* 40 (1978) 999
- ESIN, Y. O., KOLESNIKOV, S. P., BAEV, V. M., VALISHEV, M. G., GELD, P. V., ZAIHO, V. P., RYSS, M. A. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Enthalpy of formation of liquid alloys of strontium and silicon. *Zh. Fiz. Khim.* 53 (1979) 1624 (In Russian)
- FARBER, M., SRIVASTAVA, R. D. (Space Sci. Inc., Monrovia, Calif., 91016 USA): Mass spectrometric investigation of the thermal decomposition of RDX. *Chem. Phys. Lett.* 64 (1979) 307
- FERRO, D., PIACENTE, V., NAPPI, B. M.: Vaporization study of the SbBr₃ system by the torsion-effusion method. *Thermochim. Acta* 31 (1979) 181
- FITZNER, K. (Polish Acad. Sci., Univ. Dept. Math., Corvallis, Oreg., 97331 USA): Thermodynamic proportion and cation distribution of the ZnFe₂O₄ - Fe₃O₄ spinel solid solutions at 900 °C. *Thermochim. Acta* 31 (1979) 227
- FRANKKAMENETSKI, V. A., KOTELNIKOVA, E. N., KOTOV, N. V., STARKE, R. (A. A. Zhdanov State Univ., Fac. Geol., Dept. Crystallog., Leningrad, B-164 USSR): Influence of tetrahedral aluminium on the hydrothermal transformation of montmorillonite and beidellite to mixed-layer illite-montmorillonite and illite. *Kristall. Technik* 14 (1979) 303
- FUCHS, A. H., PRUZON, P., TER MINASSIAN, L. (Univ. Paris, 11 Phys. Chim. Rayonnements Lab., F-91405 Orsay, France): Thermal expansion of benzene at high pressure determined by a calorimetric method, its behavior near melting. *J. Phys. Chem. Solids* 40 (1979) 369
- FUJIOKA, K., BABA, Y., KAGEMOTO, A. (c/o Kagemoto A., Osaka Inst. Technol., Dept. Gen. Educ., Asahi-ku, Osaka, 535 Japan): Thermal properties of DNA-poly(L-lysine) system. *Polym. J.* 11 (1979) 509
- FÜREDI-MILHOFER, H., HLADY, V., BAKER, F. S., BEEBE, R. A., VIKHOLM, N. W., KITTELBERGER, J. S. (Rudjer Boskovic Inst., YU-41001 Zagreb, Yugoslavia): Temperature-programmed dehydration of hydroxyapatite. *J. Colloid Interface Sci.* 70 (1979) 1
- FURUTANI, Y., HONDA, T., TANNO, K. (Hitachi Ltd., Hitachi Res. Lab., 4026 Kuji Machi, Hitachi, Japan): Studies of hydrogen production by thermochemical cycles. II. A study of basic reactions in an I₂ - Na₂CO₃ thermochemical water-decomposition cycle. *J. Electrochem. Soc. Jap.* 47 (1979) 303
- GALLAGHER, P. K., GYORGY, E. M. (Bell Tel Labs. Inc., Murray Hill., N. J., 07974 USA): A precautionary note on thermogravimetry with magnetic materials. *Thermochim. Acta* 31 (1979) 380
- GALWEY, A. K., HOOD, W. J. (Queens Univ. Belfast, Dept. Chem., Belfast BT9 5AG,

- North Ireland): Thermal decomposition of sodium carbonate perhydrate in the solid state. *J. Phys. Chem.* **83** (1979) 1810
- GAPONENKO, O. I., GALICH, P. N. (Acad. Sci. USSR, Inst. Phys. Organ. Chem. and Coal Chem., Petr. Chem. Sect., Donetsk, UkSSR): Thermal analysis of coked redite MgA. *Dopov. Akad. Nauk UkrSSR B* (1979) 532 (In Russian)
- GARANTI, L., ZECCHI, G. (Univ. Milan, CNRS Ctr. Sintesi e Stereochim. Speciali Sistemi Organ., Ist. Chim. Ind., I-20133 Milan, Italy): Synthesis and thermochemical behaviour of 1H-1,2-benzodiazepine-3-carboxylic acids. *J. Heterocycl. Chem.* **16** (1979) 1061
- GARBATO, L., RUCCI, A. (Univ. Cagliari, CNR. Inst. Fis. Grp. Nazl. Strut. Mat., I-09100 Cagliari, Italy): Thermal conductivity and ionicity in chalcopyrite semiconductors. *Chem. Phys. Lett.* **64** (1979) 530
- GARDNER, J. W., ANDERSON, A. C. (Delco Electr., Kokomo, Ind., 46901 USA): Low-temperature thermal conductivity of a reticulated glassy carbon. *J. Appl. Phys.* **50** (1979) 3012
- GAROCHE, P., LIÉNARD, A., REBOUILLAT, J. P., VEYSSIÉ, J. J. (Univ. Paris, 11 CNRS Phys. Solides Lab., F-91405 Orsay, France): Low-temperature specific heat of the 'nearly ferromagnetic' amorphous alloy $Y_{0.22}Ni_{0.78}$. *J. Phys. F* **9** (1979) L 129
- GASTEIGER, J. (Tech. Univ. München, Inst. Organ. Chem., D-8046 Garching, GFR): Automatic estimation of heats of atomization and heats of reaction. *Tetrahedron* **35** (1979) 1419
- GAUNE-ESCARD, M., BROS, J. P. (Univ. Marseille, 1 Dynam et Thermophys. Fluides Lab., 72, F-13397 Marseille 4, France): Calorimetric determination of equilibrium phase diagrams of inorganic systems. *Thermochim. Acta* **31** (1979) 323
- GAWANDE, A. M., RAY, M. N. (c/o M. N. Ray, Nagpur Univ., Dept. Chem., Nagpur. 440010 Maharashtra, India): Thermal decomposition of irradiated lead bromate. *Indian J. Chem. A* **18** (1979) 16
- GERDT, D. W., MOODY, M. V., PATERSON, J. L. (Univ. Virginia, Dept. Phys., Charlottesville, Va., 22901 USA): A tunnel-junction relaxation oscillator: application to thermometry. *J. Appl. Phys.* **50** (1979) 3542
- GIBSON, H. W., BAILEY, F. C., POCHAN, J. M. (Xerox Corp., Webster Res. Ctr., Webster, N. Y., 14580 USA): Synthesis and thermal characterization of some novel phenol carbonates. *J. Polym. Sci. Polym. Chem. Ed.* **17** (1979) 2499
- GILBERT, J. C., KURZAWA, F. (Univ. Texas, Dept. Chem., Austin, Tex., 78712 USA): Thermal isomerization of arylmethylene-cyclopropanes to indenenes: the question of orbital symmetry control as a factor in hydrogen transport. *J. Org. Chem.* **44** (1979) 2123
- GILCHRIST, K. E. (UKAEA Springfields Nucl. Power Dew. Labs., Preston, PR4 ORR, England): Thermal conductivity of oxide deposited on zircaloy fuel tube material-continuation of previous work. *J. Nucl. Mater.* **82** (1979) 193
- GOLDSTEIN, L. (Univ. Calif., Los Alamos Sci. Lab., Los Alamos, N. M., 87544 USA): Formal treatment of some low-temperature properties of melting solid helium-3. *J. Low Temp. Phys.* **35** (1979) 299
- GOOD, W., INGHAM, D. B., GRIFFITHS, T. R., WIJAYANAYAKE, R. H., (Univ. Leeds, Leeds Matern Hosp., Dept. Obstet. and Gynecol., Leeds, LS2 9JT, W. Yorkshire, England): Enthalpy-entropy relations in the fluid kinetics of aqueous solvent systems. *J. Chem. Soc. Faraday Trans. I*, **75** (1979) 942
- GORELOV, Y. P., BULOVYATOVA, A. B., KHVILIVITSKY, R. Y., TERMAN, L. M.: Thermal degradation of polyphenyl and polypentafluorophenylacrylates. *Vysokomol. Soedin. B* **21** (1979) 410 (In Russian)
- GRASSIE, N., MACFARLANE, I. G., FRANCEY, K. F. (Univ. Glasgow, Dept. Chem., Glasgow, G12 8QQ Scotland): The thermal degradation of polysiloxanes. II. Poly(methylphenylsiloxane). *Eur. Polym. J.* **15** (1979) 415
- GRIBKOVA, P. N., BALYOVA, T. N., SILING, S. A., SOLOVIEV, V. N., PAVLOVA, S. S. A., VINOGRADOVA, S. V., KORSHAK, V. V. (Acad. Sci. USSR, Inst. Organoelement. Cpd., Moscow V-71 USSR): Thermal degradation of polyhexazocyclanes. *Vysokomol. Soedin. A* **21** (1979) 1294 (In Russian)

- GRIME, J. K., TAN, B. (Univ. Denver, Dept. Chem., Denver, Colo., 80208 USA): The determination of some selected penicillins by enzymatic enthalpimetry. *Anal. Chim. Acta* 107 (1979) 319
- GUNDARINE, É. I., LAVROV, A. V. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, UkSSR): Behavior of solid solutions of aluminium chromium phosphate binder during heat treatment. *Inorg. Mater.* transl. *Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1624
- GUPTA, S. K., GINGERICH, K. A. (Texas A and M Univ., Dept. Chem., College Stn., Tex., 77843 USA): Knudsen effusion mass spectrometric determination of the dissociation energy of diniobium, Nb₂(g), and the heat of sublimation of solid niobium. *J. Chem. Phys.* 70 (1979) 5350
- GUREVICH, M. E., MITSEK, A. I., ZHURAVLEV, A. F. (Acad. Sci. UkSSR, Inst. Met. Phys., Kiev, UkSSR): Anomalies in thermal expansion and heat capacity of ferromagnets. *Phys. Status Solidi B* 93 (1979) 127
- GUREVICH, V. M., KHLYUSTOV, V. G. (Acad. Sci. USSR, Inst. Exptl. Mineral., Chernogolovka, USSR): Calorimeter for determining of low-temperature heat capacity of minerals. Quartz heat capacity under the temperature 9-300K. *Geokhimiya* (1979) 829 (In Russian)
- HAASE, R., JANSEN, H. J., PUDER, K., WINTER, B. (Rhein, Westfal. TH Aachen, Inst. Phys. Chem., D-5100 Aachen, GFR): Enthalpies of mixing for the liquid system formic acid + acetic acid. *Z. Naturforsch. A* 34 (1979) 659
- HABERKORN, H., ILLERS, K. H., SIMAK, P. (BASF A. G., Mess- und Prüflab., D-6700 Ludwigshafen, GFR): Calorimetric, X-ray and infra-red investigations on poly-(hexamethylene adipamide). *Polym. Bull.* 1 (1979) 485
- HAGEMANN, J. W., ROTHFUS, J. A. (USDA Sea, So. Reg. Res., Ctr., Peoria, Ill., 61604 USA): Oxidative stability of waxy esters by thermogravimetric analysis. *J. Amer. Oil Chem. Soc.* 56 (1979) 629
- HARDER, J. M., SILBERT, M., YOKOYAMA, I., YOUNG, W. H. (Univ. E. Anglia, Sch. Math. and Phys., Norwich NR4 7TJ, Norfolk, England): The thermal pressure coefficients and heat capacities of simple liquid metals. *J. Phys. F* 9 (1979) 1005
- HARRIS, J. A., ARTHUR, J. C., GOYNES, W. R. (USDA Sea, So. Reg. Res. Ctr., New Orleans, La., 70179 USA): Flame resistant cotton by photoiniated graft copolymerization. *J. Appl. Polym. Sci.* 24 (1979) 201
- HATTORI, M., SUZUKI, H. (Hiroshima Univ., Fac. Engn., Dept. Appl. Chem., Hiroshima, 730 Japan): Heats of solution of As-S glasses in alkaline solution. *J. Amer. Ceram. Soc.* 62 (1979) 315
- HEINZ, B., RIED, W., DOSE, K. (Univ. Frankfurt, Inst. Organ. Chem., Niederrad Lab., D-6000 Frankfurt, 70 GFR): Thermal generation of pteridines and flavines from amino acid mixture. *Angew. Chem.* 18 (1979) 478
- HIKICHI, Y., HUKUO, K., SHIOKOWA, J. (Nagoya Inst. Technol., Mat. Res. Lab., Showa-ku, Nagoya, Aichi, 466 Japan): Synthesis of rhabdophane (Ce_{1-x}Y_x)PO₄·nH₂O (n = 0.5 ~ 1) and its thermal change. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1979) 733 (In Japanese)
- HOFMANN, G. E., KNIER, B. L., ALLEWELL, N. M. (c/o N. M. Allewell, Wesleyan Univ., Dept. Biol., Middletown, Conn., 06457 USA): Comparison of Van't Hoff and calorimetrically determined enthalpies of binding of N-phosphonacetyl L-aspartate to *E. coli* aspartate transcarbamylase. *Biophys. Chem.* 10 (1979) 47
- HOFMANN, W., SPENGLER, J., WEGENER, D., KROLZIG, A., SCHMIDT PARZEFALL, W., SCHUBERT, K. R. (Univ. Dortmund, Inst. Phys., Dortmund, GFR): Electron energy and position measurement using lead-scintillator calorimeters with a new light collection system. *Nucl. Instr. Methods* 163 (1979) 77
- HOUGHTON, D. C., JONES, D. R. H. (McMaster Univ., Dept. Met. and Mat. Sci., Hamilton, Ontario, Canada, L8S 4L8): Thermal stabilities of in situ composites in a temperature gradient. 2. Al-Al₃Ni and Cu-Cr eutectics. *Acta Met.* 27 (1979) 1031
- HOULE, F. A., BEAUCHAMP, J. I. (c/o Beauchamp, J. Y., Caltech., Arthur Amos Noyes Lab. Chem. Phys., Pasadena, Calif., 91125 USA): Photoelectron spectroscopy of methyl, ethyl, isopropyl, and tert-butyl

- radicals, implications for the thermochemistry and structures of the radicals and their corresponding carbonium ions. *J. Amer. Chem. Soc.* 101 (1979) 4067
- HUNTER, L. W., GRUNFELDER, C., HOSHALL, C. H., FRISTROM, R. M. (Johns Hopkins Univ., Appl. Phys. Lab., Laurel, Md., 20810 USA): Combustion of polyvinyl chloride studied by a low-pressure moving-wire technique. *Combust. Flame* 35 (1979) 169
- IKE, H., OKABE, H. (Osaka Prefectural Ind. Res. Inst., Osaka, 550 Japan): The oxidation behaviour of Fe-14Cr alloys with small additions of Al at high temperatures. *Trans. Jap. Inst. Metals* 20 (1979) 186
- IKEDA, S., ISHIKAWA, Y. (Tohoku Univ., Dept. Phys., Sendai, Miyagi, 980 Japan): Improvement of Al calorimetry. *Jap. J. Appl. Phys.* 18 (1979) 1367
- INAGAKI, N., KATSUURA, K. (Shizuoka Univ., Fac. Engn., Polymer Chem. Sect., Hamamatsu, Shizuoka, 432 Japan): Copolymerization of ethylene chlorophosphonite with 2-phenyl-1,3-dioxolane and its flame-retardant effect on polyester fabric. *J. Appl. Polym. Sci.* 24 (1979) 249
- INAGAKI, N., SKINTANI, T., KUNISADA, H., KATSUURA, K. (Shizuoka Univ., Fac. Engn. Polymer Chem. Sect., Hamamatsu, Shizuoka, 332 Japan): New attempt at flame-retardation of polyester/cotton fabric blends. *J. Appl. Polym. Sci.* 24 (1979) 1
- JACK, T. R., SULLIVAN, E. A., ZAJIC, J. E. (Univ. Toronto, Scarborough Coll., Phys. Sci. Grp., W. Hill, Ontario, Canada, M1C 1A4): Comparison of the structure and composition of cokes from the thermal cracking of Athabasca Oil Sands bitumen. *Fuel* 58 (1979) 585
- JAMIESON, D. T. (Natl. Engr. Lab., E. Kilbride, Glasgow, Scotland): Thermal conductivity of liquids. *J. Chem. Eng. Data* 24 (1979) 244
- JELLINEK, H. H. G., DAS, A.: HCN evolution during thermal oxidative degradation of nylon 66 and polyacrylonitrile. *J. Polym. Sci. Polym. Chem. Ed.* 17 (1979) 2349
- JOCHEMS, R., DEKKER, H., MOSSELMAN, C. (Free Univ. Amsterdam, Phys. Chem. Lab., Amsterdam, Netherlands): Application of direct current comparator apparatus in combustion calorimetry. *Rev. Sci. Instr.* 50 (1979) 859
- JOHNSON, G. C., BERGMAN, R. G. (Caltech., Div. Chem. and Chem. Engr., Pasadena, Calif., 91125 USA): Synthesis and thermal rearrangement of a potential butalene-anthracene adduct. *Tetrahedron Lett.* (1979) 2093
- JOHNSON, G. K. (Argonne Natl. Lab., Div. Chem. Engr., Argonne, Ill., 60439 USA): The enthalpy of formation of uranium hexafluoride. *J. Chem. Thermodyn.* 11 (1979) 483
- JOSHI, Y. P., SINGH, D. P. (Banaras Hindu Univ., Dept. Phys., Varanasi 221005, Uttar Pradesh, India): Thermal conductivity of yttrium iron garnet at low temperatures. *Indian J. Pure Appl. Phys.* 17 (1979) 62
- KAIMIN, I. F. (Acad. Sci. LaSSR, Inst. Wood Chem., Riga, LaSSR): The study of cellulose heat capacity. *Vysokomol. Soedin. B* 21 (1979) 331 (In Russian)
- KALEVICH, E. S., MARENKIN, S. F., PONOMAREV, V. F., SHEVCHENKO, V. Y. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, USSR): Thermal dissociation of Cd_3As_2 . *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1542
- KARGER-KOCSIS, J., KISS, L. (Res. Inst. Plast. Ind., Gen. Dept. Plast. Applicat., H-1950 Budapest, Hungary): Attempts of separation of the polymerization and crystallization processes by means of DSC thermograms of activated anionic polymerization of epsilon-caprolactam. *Makromol. Chem.* 180 (1979) 1593
- KATO, E., DAIMON, K. (Nagoya Inst. Technol., Showa-ku, Nagoya, Aichi, 466 Japan): Thermal decomposition of hydrated aluminium sulfate precipitated from acetic acid solution. *J. Amer. Ceram. Soc.* 62 (1979) 313
- KELEMEN, F., ARDELEAN, I. (Univ. Cluj Napoca, Fac. Phys., Cluj Napoca, Romania): Thermal conductivity of $xFe_2O_3 \cdot (1-x)[3B_2O_3 \cdot PbO]$ glasses. *Czech. J. Phys. B* 29 (1979) 680
- KHALIF, V. A., ROZENTULLER, B. V., APTEKAR', E. L., SPIRIDONOV, K. N., KRYLOV, O. V. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Adsorption microcalorimetric and ESR study of oxygen chemisorption on supported oxide catalysts. II. Chemisorption of oxygen on

- V_2O_5/MgO and V_2O_5/Al_2O_3 . *Kinet. Catal. transl. Kinet. Catal.* 19 (1978) 1001
- KHALIF, V. A., ROZENTULLER, B. V., FROLOV, A. M., APTEKAR', E. L., SPIRIDONOV, K. N., KRYLOV, O. V. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Adsorption calorimetric and ESR study of oxygen chemisorption on supported oxide catalysts. I. Chemisorption of oxygen on MoO_3/MgO and MoO_3/Al_2O_3 . *Kinet. Catal. transl. Kinet. Catal.* 19 (1978) 995
- KHODOS, M. Y., ZHURALEV, V. D., FOTIEV, A. A. (Acad. Sci. USSR, Ural Sci. Ctr., Inst. Chem., Sverdlovsk, USSR): A thermochemical investigation of vanadates of group II elements. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 15 (1979) 98
- KHRIPLOVICH, L. M., OPPERMAN, G., PAUKOV, I. E. (Acad. Sci. USSR, Inst. Inorgan. Chem., Novosibirsk, 630090 USSR): Heat capacity of Co_3O_4 in 5,1–307,34K range. *Zh. Fiz. Khim.* 53 (1979) 1608 (In Russian)
- KIM, Y. C., YANO, H., MISUMI, M., OISHI, J. (Kyoto Univ., Dept. Nucl. Engn., Kyoto, 606 Japan): The enthalpy of formation of erbium trifluoride. *J. Chem. Thermodyn.* 11 (1979) 429
- KISELEVA, I. A., OGORODOVA, L. P., TOPOR, N. D. (M. V. Lomonosov State Univ., Fac. Geol., Moscow, 117234 USSR): Determination of heat of solution of magnesium oxide by high temperature calorimetry technique. *Vest. Mosk. Univ. Khim.* 20 (1979) 243 (In Russian)
- KIYOHARA, O., D'ARCY, P. J., BENSON, G. C. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Ultrasonic velocities, compressibilities, and heat capacities of water + tetrahydrofuran mixtures at 298.15K. *Can. J. Chem.* 57 (1979) 1006
- KIYOHARA, O., HANDA, Y. P., BENSON, G. C. (c/o G. C. Benson, Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A 0R6 Canada): Thermodynamic properties of binary mixtures containing ketones. III. Excess enthalpies of n-alkanes + some aliphatic ketones. *J. Chem. Thermodyn.* 11 (1979) 453
- KLEIN, J., SCHOLZ, W. (Tech. Univ. Braunschweig, Inst. Chem. Technol., D-3300 Braunschweig, GFR): Kalorimetrische Untersuchungen zum Lösungsverhalten von Polyacrylsäure und Poly(natriumacrylat) in Wasser, Formamid und Ethylenglykol. *Makromol. Chem.* 180 (1979) 1477
- KNĚSL, Z., KUNA, M., BILEK, Z., SCHMIDT, V. (Czechoslovak Acad. Sci., Inst. Phys. Met., CS-61662 Brno, Czechoslovakia): The thermal properties of a crack tip plastic zone. *Czech. J. Phys.* 29 B (1979) 825
- KNIAZEV, S. P., BRATSEV, V. A., STANKO, V. I. (Minist. Publ. Hlth. USSR, Inst. Biophys., Moscow, USSR): Interconnection between the electronic structure and reactivity of dibarbanido-undecaborates. The role of stereochemistry in the process of chemically initiated thermal rearrangements. *Dokl. Akad. Nauk SSSR* 246 (1979) 368 (In Russian)
- KNITTEL, T., GOLDSMID, H. J. (Univ. New S. Wales, Dept. Appl. Phys., Kensington, 2033 New S. Wales, Australia): Effect of a magnetic field on the thermal conductivity of lead telluride – tin telluride. *J. Phys. C* 12 (1979) 1891
- KOBAYASHI, M., KATSUMATA, K., SATŌ, T. (Hokkaido Univ., Appl. Elect. Res. Inst., Sapporo, Hokkaido, 060 Japan): Specific heat measurement on a random mixture of two antiferromagnets with competing anisotropies. *J. Phys. Soc. Jap.* 46 (1979) 1467
- KOCHNEVA, L. S., KOPYLOVA, N. A., TERMAN, L. M., SEMCHIKOV, Y. D. (Acad. Sci. USSR, Dept. Chem., Gorki, USSR): Effect of zinc chloride on thermal decomposition of polymethacrylic and polyacrylic esters. *Eur. Polym. J.* 15 (1979) 575
- KONOVALOVA, E. S., PADERNO, Y. B., YACHMENEV, V. E., DUDNIK, E. M. (Acad. Sci. UkSSR, Inst. Mat. Sci., Kiev, UkSSR): Specific heat anomalies of SrB_6 . *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater* 14 (1979) 1709
- KONOVALOVA, I. V., MIRONOV, V. F., OFITSEROVA, E. K., PUDOVIK, A. N. (M. V. Lomonosov State Univ., Dept. Theory Funct. and Funct. Anal., Moscow, 117234 USSR): Effect of acidic admixtures on thermal stability of alpha-phosphorylated trialkyl phosphites. *Zh. Obshch. Khim.* 49 (1979) 1424 (In Russian)
- KORMACHEV, V. V., MITRASOV, Y. N., KUKHLIN, V. A. (I. N. Ulyanov State Univ.

- Cheboksary, USSR): Thermal conversions of phosphorus pentachloride adducts with alkyl-alkyl-ethers. *Zh. Obshch. Khim.* 49 (1979) 1426 (In Russian)
- KORTUNOVA, G. B., KOMAROVA, T. V., FEDOSEEV, S. D.: Pyrolysis of phenol-formaldehyde oligomer in the presence of hardener. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 51 (1978) 2213
- KORZUN, N. V., MAGARIL, R. Z., PLYUSNINA, G. N., SEMUKHINA, T. I. (Tyumen Ind. Inst., Tyumen, 625036 USSR): Effect of hydrogen and 1-hexene on thermal decomposition of cyclohexane. *Zh. Fiz. Khim.* 53 (1979) 1113 (In Russian)
- KOSOROTOV, V. I., ZEMLYAKOVA, Z. F., PLATONOV, V. A., OVCHINNIKOV, V. G., SIMULIN, Y. N., DZHAGATSPANYAN, R. V.: Determination of the heats of reaction for the synthesis of chloropicolines and chloroaminopicolines. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 51 (1978) 2262
- KOSTIKOV, R. R., MOLCHANOV, A. P. (A. A. Zhdanov State Univ., Leningrad, B-164 USSR): On the thermal isomerization of 2,2-dihalogen-1-methylenecyclopropanes. *Dokl. Akad. Nauk SSSR* 246 (1979) 1377 (In Russian)
- KOVACS, A. J., AKLONIS, J. J., HUTCHINSON, J. M., RAMOS, A. R. (Univ. So. Calif., Dept. Chem., Los Angeles, Calif., 90007 USA): Isobaric volume and enthalpy recovery of glasses. II. A transparent multiparameter theory. *J. Polym. Sci. Polym. Phys. Ed.* 17 (1979) 1097
- KRYUCHKOVA, V. E. (Kiev Light Ind. Technol. Inst., Kiev, UkSSR): Alkyl chlorophenols as stabilizers of thermo-oxidative polymer destruction. *Ukr. Khim. Zh.* 45 (1979) 678 (In Russian)
- KUKUSHKIN, Y. N., SEDOVA, G. N., VLA-SOVA, R. A., BELYAEV, A. N. (Lensovet Technol. Inst., Leningrad, USSR): Thermal method of preparation of bis(8-quinolinolato) chelate complexes of palladium(II) and platinum(II). *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 51 (1978) 2337
- KULSHRESHTHA, M. J., KHANNA, N. M. (c/o N. M. Khanna, Cent. Drug Res. Inst., Lucknow, 226001 Uttar Pradesh India): Synthesis of some camphor analogs as potential anti-inflammatory and CNS acting agents. *Indian J. Chem. B* 18 (1979) 90
- KURACHKIN, Y. V., POLAK, L. S., PUSTOGAROV, A. V., SLOVETSKII, D. I., UKOLOV, V. V.: Thermochemical nonequilibrium in an arc plasma stabilized by nitrogen injected through the porous wall of a channel. Particle excitation mechanisms and vibrational nonequilibrium. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 16 (1978) 995
- LANDAU, D. P., KEEN, B. E. (Yale Univ., Hammond Lab., New Haven, Conn., 06520 USA): Magnetic and thermal properties of dysprosium aluminium garnet. III. Multiaxis phase transitions. *Phys. Rev. B Condensed Mater.* 19 (1979) 4805
- LAW, C. K., LAW, H. K. (Northwestern Univ., Dept. Mech. Engr. and Astronaut. Sci., Evanston, Ill., 60201 USA): Thermal-ignition analysis in boundary-layer flows. *J. Fluid Mech.* 92 (1979) 97
- LAZAREV, V. B., PANASYUK, G. P., ONAIKO, V. A., BUDOVA, G. P., SERGEEVA, N. E. (N. S. KURNAKOV Gen. and Inorgan. Chem. Inst., Moscow, USSR): Mechanism of structural changes in silica gel during steam heat treatment. *Inorg. Mater.* transl. *Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1627
- LAZAREVA, S. Y., OSIPOV, A. V., MAL'KOV, Y. E. (Leningrad Appl. Chem. Inst., Leningrad, USSR): The study of the kinetics and mechanism of poly-p-xylylene thermal degradation. *Vysokomol. Soedin. A* 21 (1979) 1509 (In Russian)
- LEHN, J. M., SAUVAGE, J. P., ZIESSEL, R. (Univ. Louis Pasteur, Inst. Lebel, Equipe Rech. 265, F-67000 Strasbourg, France): Thermal and photoinduced oxidation of water continuous generation of oxygen by visible light irradiation of aqueous solutions of metal complexes. *Nouv. J. Chim.* 3 (1979) 423
- LEIGH, W. J., ARNOLD, D. R. (c/o D. R. Arnold, Dalhousie Univ., Dept. Chem., Halifax, N. S., B3H 4J3 Canada): Photochemical and thermal rearrangements of some 3H pyrazoles. *Can. J. Chem.* 57 (1979) 1186
- LEREBOURS, B., DURR, J., TELLIER, J. C., LENGLET, M. (Fac. Sci. et Tech. Ruen, Inst. Natl. Super Chim. Ind. Rouen, Chim. Minerale Lab., BP 08, F-76130, Mt. St. Aignan, France): Stabilité thermique de ferrites mixtes issus du système

- $\text{Li}_{0.5}\text{Fe}_{2.5}\text{O}_4 - \text{CuFe}_2\text{O}_4 - \text{ZnFe}_2\text{O}_4$ *Ann. Chim.* 4 (1979) 257
- LISTER, M. W. (Univ. Toronto, Dept. Chem., Toronto, Ontario, M5S 1A1, Canada): Lattice energies: calculations from pressure-volume data, and uncertainties in the results. *Thermochim. Acta* 31 (1979) 297
- LIU, M. T. H., YAMAMOTO, I. (Univ. Prince Edward Isl., Dept. Chem., Charlottetown, PEI, C1A 4P3 Canada): Thermal decomposition of diazirines in the presence of m-chloroperoxybenzoic acid. A method to determine the partitioning of reaction pathways. *Can. J. Chem.* 57 (1979) 1299
- LORENZINI, E., SPIGE, M. (Univ. Bologne, Fac. Ing., Ist. Tech., I-40126 Bologna, Italy): Thermal analysis in the focal spot of a solar furnace. *Sol. Energ.* 22 (1979) 515
- LUBIMOVA, E. A., MASLENNIKOV, A. I., GANIYEV, Y. A. (Oy Shmidt Earth Phys. Inst., Moscow, USSR): On the thermal conductivity of water- and oil-saturated rocks at high temperatures and pressure. *Fiz. Zemli* (1979) 87 (In Russian)
- LUCCHESI, A., DIMAINA, M., BORGHINI, A., MASCHIO, G.: Pyrolysis of polymers. I. Study of pyrolysis of polystyrene. *Chim. Ind.* 61 (1979) 427
- LUFF, B. B., REED, R. B. (Tennessee Valley Author., Natl. Fertilizer Dev. Ctr., Div. Chem. Dev., Muscle Shoals, Ala., 35660 USA): Enthalpy of solution of 32% nitrogen solutions at 25 °C. *J. Chem. Eng. Data* 24 (1979) 206
- LUFF, B. B., REED, R. B. (Tennessee Valley Author., Natl. Fertilizer Dev. Ctr., Div. Chem. Dev., Muscle Shoals, Ala., 35660 USA): Standard enthalpy of formation of tetrapotassium pyrophosphate. *J. Chem. Eng. Data* 24 (1979) 227
- LUFF, B. B., REED, R. B. (Tennessee Valley Author., Natl. Fertilizer Dev. Ctr., Div. Chem. Dev., Muscle Shoals, Ala., 35660 USA): Low-temperature heat capacity and entropy of tetrapotassium pyrophosphate. *J. Chem. Eng. Data* 24 (1979) 228
- LUNDEEN, J. E., HOUSE, J. E. (Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): An ion grouping method for calculating the Madelung constant for the sodium chloride lattice. *Thermochim. Acta* 31 (1979) 251
- MACKAY, H. B., WOOLF, L. D., MAPLE, M. B., JOHNSTON, D. C. (La Trobe Univ., Dept. Chem., Bundoora, 3083 Victoria, Australia): Specific-heat anomalies at the lower critical temperature in re-entrant ferromagnetic superconductors. *Phys. Rev. Lett.* 43 (1979) 89
- MACLEOD, A. C. (Univ. Strathclyde, Dept. Met., Glasgow, 61 IXN, Scotland): Calculation of excess enthalpies for binary mixtures of liquid metal halides. *J. Chem. Soc. Faraday Trans. I*, 75 (1979) 729
- MAGALINSKII, V. B. (P. Lumumba Univ., Moscow, USSR): Multi-layer adsorption isotherm with an estimation of the phase transitions in some layers. *Zh. Fiz. Khim.* 53 (1979) 1271 (In Russian)
- MAHL, B. S., KHURMA, J. R., DHILLON, M. S., KOONER, Z. S. (Punjab Agr. Univ., Dept. Chem., Ludhiana, 141004 Punjab, India): Excess enthalpies and weak interactions of *o*-dichlorobenzene with aromatic hydrocarbons. *Z. Phys. Chem.* 260 (1979) 309
- MAJER, V., SVOBODA, V., PICK, J. (Prague Inst. Chem. Technol., Dept. Phys. Chem., CS-16628 Prague, 6 Czechoslovakia): Calculation of the difference between molar heat capacity of liquid and ideal gas from the temperature dependence of heat of vaporization. *Collect.* 44 (1979) 1687
- MANCHE, E. P., CARROLL, B. (CUNY York Coll., Dept. Nat. Sci., Jamaica, N. Y., 11432 USA): Compensation and the Smith-Topley effects. *Thermochim. Acta* 31 (1979) 387
- MANOLIKAS, C., VAN LANDUYT, J. AMELINCKX, S. (Antwerpen State Univ. Ctr., B-2020 Antwerpen, Belgium): Electron microscopy and electron diffraction study of the domain structures, the dislocation fine structure, and the phase transformations in β - MoTe_2 . *Phys. Status Solidi A* 53 (1979) 327
- MARINI, A., BERBENNI, V., FLOR, G. (c/o G. Flor, Univ. Pavia, Ist. Chim. Fis. ed. Elettrochim., CNR I-27100 Pavia, Italy): Kinetic parameters from thermogravimetric data. *Z. Naturforsch. A* 34 (1979) 661
- MARKOWSKA, A., NOWICHI, T. (Tech. Univ. Łódź, Inst. Organ. Chem., PL-90924 Łódź, Poland): Mechanism of thermal isomerization of 0,0-diphenylester-0-methylester-thiophosphate. Kinetic study. *Nouv. J. Chim.* 3 (1979) 409

- MART, P. L., MURRAY, J. J., TAYLOR, J. B. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, K1A OR9 Canada): Phase relations and thermodynamics of refractory metal pnictides: the antimony decomposition pressures of Mo_3Sb_7 and its enthalpy of formation. *J. Less-Common Metals* 65 (1979) 71
- MARTIN, D. L. (Natl. Res. Council Canada, Div. Phys., Ottawa, Ontario, K1A OR6, Canada): Specific heat of spin-glass CuMn below 3K. *Phys. Rev. B* 20 (1979) 368
- MARTUSCELLI, E., DEMMA, G., DRIOLI, E., NICOLAIS, L., SPINA, S., HOPFENBERG, H. B., STANNETT, V. T. (CNR Arco Felice, Tecnol. Polimeri e Reol. Lab., Naples, Italy): Thermal transitions in cold-crystallized blends of isotactic and atactic polystyrene. *Polymer* 20 (1979) 571
- MASLOSH, V. Z., POPENKO, G. V., IZYNEEV, A. A., KORSHAK, V. V. (Acad. Sci. USSR, Inst. Nat. Sci., Ulan Ude, USSR): Synthesis and investigation of polyesters of reduced combustibility. *Dokl. Akad. Nauk SSSR* 246 (1979) 882 (In Russian)
- MATYNIA, T., WÓJCIK, A. (Maria Curie Skłodowska Univ., Inst. Chem., PL-20031 Lublin, Poland): Porous bead polyaromatic copolymers containing ester groups. I. Some thermal properties. *Angew. Makromol. Chem.* 79 (1979) 177
- MAZURENKO, E. A., BUBLIK, Z. N., VOLKOV, S. V. (Acad. Sci. UkSSR, Inst. Gen. and Inorgan. Chem., Kiev, UkSSR): Thermal stability of adducts of fluorinated β -diketonates of Mn(II), Co(II), Cu(II) with pyridine and dimethylphormamide. *Ukr. Khim. Zh.* 45 (1979) 591 (In Russian)
- MEYER, R., GIUSTI, G., VINCENT, E. J. (Fac. Sci. and Tech. Marseille, Ctr. St. Jérôme, Chim. Organ. Phys. Lab., Rue H. Poincaré, F-13397 Marseille, 4 France): Enthalpies de mélange du diétoxythane avec des n-alcanes à 298.15K. *Thermochim. Acta* 31 (1979) 262
- MIEDEMA, A. R., GINGERICH, K. A. (Philips Res. Labs., Eindhoven, Netherlands): On the formation enthalpy of metallic dimers. *J. Phys. B* 12 (1979) 2081
- MIEDEMA, A. R., GINGERICH, K. A. (Philips Res. Labs., Eindhoven, Netherlands): On the enthalpy of formation of diatomic intermetallic molecules. *J. Phys. B* 12 (1979) 2255
- MILLAN, J., MIJANGOS, C., MARTINEZ, J., BERTICAT, P., CHAUCHARD, J. (CSIC, Inst. Plast and Caucho, Madrid, Spain): Influence de la tacticité du polychlorure de vinyle sur son comportement physique en fonction de la température. *Eur. Polym. J.* 15 (1979) 615
- MINAGAWA, M., OKAMOTO, M., ISHIZUKA, O.: Specificity of the exothermic reaction of polyacrylonitrile. *J. Polym. Sci. Polym. Chem. Ed.* 17 (1979) 2650
- MITOMO, M., YAJIMA, Y., KURAMOTO, N. (Natl. Inst. Res. Inorgan. Mat., Nihari, Ibaraki, 30031 Japan): Thermal decomposition of Si—Al—O—N ceramics. *J. Amer. Ceram. Soc.* 62 (1979) 316
- MIYAKE, M., OKADA, K., IWAI, S. I., OHNO, H., FURUKAWA, K. (Tokyo Inst. Technol., Engn. Mat. Res. Lab., Meguro-ku, Tokyo, 152 Japan): Structural analysis of molten K_2SO_4 . *J. Chem. Soc. Faraday Trans. I*, 75 (1979) 1169
- MOROZOVA, M. P., KONOPEL'KO, M. V., KUDRYASHOVA, M. G. N.: Enthalpies of the formulation of solid solutions SnTe—PbTe. *Vestn. Leningr. Univ.* (1979) 111 (In Russian)
- MOSSÉ, A. L., KRASOVSKAYA, L. I., BUROV, I. S. (A V Lykov Heat and Mass. Transfer Inst., Minsk, BeSSR): Thermodynamic calculation of basic parameters in the thermal dissociation of phosphates. *High Energ. Chem. transl. Khim. Vysok. Energ.* 12 (1978) 447
- MOWFORTH, C. W., ROSSEINSKY, D. R., STEAD, K. (Univ. Exeter, Dept. Chem., Exeter EX4 4QD Devonshire, England): Calorimetric enthalpy of reaction of cobalt(III) with iron(II) in aqueous perchloric acid, and the standard electrode potential for cobalt(III)—(II). *J. Chem. Soc. Faraday Trans. I*, 75 (1979) 1268
- MRAW, S. C., NAAS, D. F. (Exxon Res. and Engn. Co., Corp. Pioneering Res. Labs., POB 45, Linden, N. J., 07036 USA): The measurement of accurate heat capacities by differential scanning calorimetry. Comparison of d.s.c. results on pyrite (100 to 800 K) with literature values from precision adiabatic calorimetry. *J. Chem. Thermodyn.* 11 (1979) 567
- MRAW, S. C., NAAS, D. F. (Exxon Res. and Engn. Co., Corp. Pioneering Res. Labs., POB 45, Linden, N. J., 07036 USA): The

- heat capacity of stoichiometric titanium disulfide from 100 to 700 K: absence of the previously reported anomaly at 420 K. *J. Chem. Thermodyn.* 11 (1979) 585
- MREVLISHVILI, G. M. (Acad. Sci. USSR, Inst. Phys., Moscow, V-71 USSR): The low temperature calorimetry of biological macromolecules. *Usp. Fiz. Nauk* 128 (1979) 273 (In Russian)
- MROZOWSKI, S. (Ball State Univ., Muncie, Ind., 47306 USA): Specific heat anomalies and spin-spin interactions in carbons. Review. *J. Low Temp. Phys.* 35 (1979) 231
- MUKHERJEE, S. D., MORGAN, D. V., HOWES, M. J., SMITH, J. G., BROOK, P. (Royal Signals and Radar Estab., Baldock SG7 6NG, Hertfordshire, England): The thermal reactions of thin (approximately 100 nm) Schottky Barrier metallizations with GaAs. *Thin Solid Films* 57 (1979) 55
- MULCAHY, M. F. R. (CSIRO, Div. Proc. Technol., N. Ryde 2113, New S. Wales, Australia): Kinetics of combustion of carbon and pulverized fuel. *Kém. Köz. 51* (1979) 99 (In Hungarian)
- MURATA, K., AKIMOTO, M. (Mitsui Engn. and Shipbldg. Co., Chiba Lab., Ichihara, 290 Japan): Thermal degradation of mixed polymer. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1979) 774 (In Japanese)
- NAGASE, K., YOKOBAYASHI, H., SONE, K. (Tohoku Univ., Coll. Gen. Educ., Sendai, Miyagi, 980 Japan): Dehydration of copper(II) sulfate and its double salts: comparison with the dehydration of cobalt(II) sulfate. *Thermochim. Acta* 31 (1979) 391
- NEGANOV, B. S., TROFIMOV, V. N. (Dubna Joint Nucl. Res. Inst., Dubna, USSR): Possibility of producing a bulky super-sensitive thermal detector at a temperature close to absolute zero. *JETP. Lett.* transl. *Pizma Zh. Eksp. Teoret. Fiz.* 28 (1978) 328
- NICHOLAS, P. P. (B. F. Goodrich Co., Ctr. Res. and Dev., Brecksville, Ohio, 44141 USA): Hexakis[μ -(ethyl-chlorocarbamate-N,O)]- μ_4 -oxo-tetrazinc and its thermolysis in simple olefins. *J. Org. Chem.* 44 (1979) 2126
- NOTTENBURG, R., FREEMAN, M., RAJESHWAR, K., DU BOW, J. (c/o K. Rajeshwar, Colorado State Univ., Dept. Elect. Engn., Ft. Collins, Colo., 80523 USA): Concurrent dielectric analysis — differential thermal analysis. *Anal. Chem.* 51 (1979) 1149
- NOVÁK, J., MALÁ, J., KODEJŠ, Z., SLÁMA, I. (Czechoslovak Acad. Sci., Inst. Inorgan. Chem., CS-25068 Řež, Czechoslovakia): Glass-transition temperature and molar conductivity of hydrated molten calcium nitrate and calcium chloride mixtures. *Chem. Zvesti* 33 (1979) 3
- NOVIKOV, I. I., GONCHAROV, V. G., ROSHCHUPKIN, V. V., SEMASHKO, N. A., CHERNYAK, L. I., YUDOLOVICH, M. D.: Examination of the thermal and electrical properties of die steels of enhanced heat resistance. *Russ. Met.* transl. *Izv. Akad. Nauk SSSR Met.* (1978) 163
- NOWAK, Z., NOWAK, M. (Inst. Nucl. Res., Dorodna, 16 PL-00681 Warsaw, 91 Poland): Thermal degradation of TBP-diluent systems. *Radiochem. Radioanal. Lett.* 38 (1979) 377
- NUYKEN, O., GERUM, J., STEINHAUSEN, R. (Tech. Univ. München, Lehrstuhl Makromolek. Stoffe, D-8046 Garching, GFR): Differentialkalorimetrie (DSC) einiger monomerer und polymerer Azoverbindungen. *Makromol. Chem.* 180 (1979) 1497
- ODA, T., MAESHIMA, T., SUGIYAMA, K. (Kinki Univ., Fac. Sci. and Engn., Dept. Appl. Chem., Osaka, 577 Japan): Thermal decomposition of 1,4-dimethyl,1,4-bis(methyl-substituted phenyl)-2-tetrazenes. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1979) 915 (In Japanese)
- OHSAWA, A., ARAI, H., IGETA, H. (Showa Univ., Sch. Pharmaceut. Sci., Shinagawaku, Tokyo, 142 Japan): Thermal decomposition of 2H-[1,2,4] oxadiazolo[2,3- α] pyridine-2-thione and 2H-[1,2,4] oxadiazolo[2,3-b] pyridazine-2-thione. *Heterocycles* 12 (1979) 917
- OKABE, H., IKE, H. (Osaka Prefectural Ind. Res. Inst., Osaka, 550 Japan): High temperature oxidation of Fe-14Cr alloys with small additions of Al in wet oxygen. *Trans. Jap. Inst. Metals* 20 (1979) 197
- OKUNEV, V. D. (Acad. Sci. UkSSR, Inst. Mech., Dnepropetrovsk, UkSSR): Thermal stability of the amorphous state of gallium arsenide. *Inorg. Mater.* transl. *Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1679

- OLOFSSON, I., SUNNER, S. (Univ. Lund, Ctr. Chem., Thermochem. Lab., S-22007, Lund, 7 Sweden): A modified reaction-solution rotating-bomb calorimeter with air thermostat. The enthalpy of ionization of water at 298.15, 373.65, and 415.15 K. *J. Chem. Thermodyn.* 11 (1979) 605
- OMIADZE, I. S., NADIRADZE, A. A., GVELESIANI, G. G. (Acad. Sci. GeSSR, Inst. Met., Tbilisi, GeSSR): Investigation of the high-temperature enthalpy and specific heat of samarium oxytungstates $\text{Sm}_{14}\text{W}_4\text{O}_{33}$ and Sm_2WO_6 by the method of mixtures. *Inorg. Mater. transl. Izv. Akad. Nauk SSSR Neorg. Mater.* 14 (1978) 1741
- ORBÁN, M., SZABÓ, K., ÓDOR, Zs. (Eötvös Loránd Univ. Inst. Inorg. and Anal. Chem., H-1088 Budapest, Hungary): Determination of the enthalpy change of some redox reactions. *Magy. Kém. Foly.* 85 (1979) 148 (In Hungarian)
- OTT, H. J. (Deutsch. Kunststoff Inst., Schlossgarten Str. 6R, D-6100 Darmstadt, GFR): Einfluss der thermischen Vorgesichte auf die Enthalpie amorpher Thermoplaste. *Colloid Polym. Sci.* 257 (1979) 486
- OTT, W. R., SPERONELLO, B. K. (Rutgers State Univ., Dept. Ceram., New Brunswick, N. J., 08903 USA): Expanding spherical shell kinetic model for diffusion-controlled solid-state reactions. *Thermochim. Acta* 31 (1979) 237
- PADWA, A., BLACKLOCK, T. J. (SUNY Buffalo, Dept. Chem., Buffalo, N. Y., 14214 USA): On the stereochemical course of the thermal and photosensitized intramolecular [2+2] cycloaddition reaction of alkyl substituted cyclopropenes. *J. Amer. Chem. Soc.* 101 (1979) 3390
- PANKRAT'EV, Y. D., MALYSHEV, E. M., RYNDIN, Y. A., TURKOV, V. M., KUZNETSOV, B. N., ERMAKOV, Y. I. (Acad. Sci. USSR, Inst. Catalysis, Novosibirsk, USSR): Catalysts obtained by interaction of organometallic compounds of transition elements with surface of support. Calorimetric study of hydrogen and oxygen adsorption on catalyst Pt/SiO₂, W/SiO₂ and (W + Pt)/SiO₂. *Kinet. Catal. transl. Kinet. Katal.* 19 (1978) 1253
- PATIL, K. C., BUDKULEY, J. S., PAI VERNEKER, V. R. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., High Energy Solids Grp., Bangalore, 560012 India): Thermoanalytical studies of hydrazidocarbonic acid derivatives. *J. Inorg. Nucl. Chem.* 41 (1979) 953
- PATIL, K. C., SOUNDARARAJAN, R., PAI VERNEKER, V. R. (c/o V. R. Pai Verneker, Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., High Energy Solids Grp., Bangalore, 560012 India): Differential thermal analysis of hydrazinium derivatives. *Thermochim. Acta* 31 (1979) 259
- PATTULLO, A. W., VAN DER SLUJS, J. C. A. (Univ. Wales Univ. Coll., N. Wales, Sch. Phys. and Molec. Sci., Bargoer LL57 2UW, Gwynedd, Wales): Model calculation on heat flow in inhomogeneous thermal systems. 1. Thermal conductivity and boundary resistance at low temperatures. *Cryogenics* 19 (1979) 453
- PAUL, R. C., GUPTA, P. K., BHATIA, J. C., CHADHA, S. L. (Panjab Univ., Dept. Chem., Chandigarh 160014 India): Enthalpies of complex formation between alkoxides of titanium(IV) and some oxygen donor ligands and pyridine. *Ind. J. Chem. A* 16 (1978) 1066
- PAULIK, J., PAULIK, F. (Techn. Univ., Dept. Gen. and Analyt. Chem., H-1521 Budapest, Hungary): Applications of quasi-isothermal, quasi-isobaric thermogravimetry and simultaneous thermo-gas titrimetry in the investigation of the mechanism of thermal decomposition reactions. *Hung. Sci. Instrum.* (1979) 23
- PELINO, M., PIACENTE, V., D'ASCENZO, G. (Univ. Rome, Inst. Phys. Chem., I-00100 Rome, Italy): Dissociation energy of the NaAg molecule. *Thermochim. Acta* 31 (1979) 383
- PETRANOVIĆ, N., SUŠIĆ, M. (Fac. Sci. Belgrade, Inst. Phys. Chem., Belgrade, Yugoslavia): The thermochemical behaviour of zeolite inclusion complexes. *Thermochim. Acta* 31 (1979) 211
- PETROVA, I. I., CHEKHOVSKOI, V. Y. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): True heat capacity of zirconium, niobium, and tantalum carbides. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 1045
- PETRUSHEVSKIY, M. S., ESIN, Y. O., BAYEV, V. M., GELD, P. V.: Influence of short-range ordering on the concentration dependence of the enthalpies of formation

- of liquid iron-tin alloys. *Russ. Met.* transl. *Izv. Akad. Nauk SSSR Met.* (1978) 61
- PIERRE, J., DECOMBARIEU, A., LAGNIER, R. (CNRS, Louis Neel Lab., F-38042 Grenoble, France): Specific heat, magnetisation and stabilities of canted structure in GdMg and related compounds. *J. Phys.* *F* 9 (1979) 1271
- PILLING, M. W., YATES, B., BLACK, M. A., TATTERSALL, P. (Chloride Tech. Ltd., Manchester, England): Thermal conductivity of carbon fibre — reinforced composites. *J. Mater. Sci.* *14* (1979) 1326
- PINCOCK, J. A., MURRAY, K. P. (Dalhousie Univ., Dept. Chem., Halifax, NS, B3H 4J3 Canada): Thermal chemistry of vinyl-diazo compounds as a method for the generation of vinylmethylenes. *Can. J. Chem.* *57* (1979) 1403
- PIRELAHI, H., HAGHGOOI, H. (Univ. Tehran, Dept. Chem., P. O. B. 314—1141, Tehran, Iran): The thermal rearrangement of thiobenzenes to their isomeric thiopyrans. *J. Heterocycl. Chem.* *16* (1979) 917
- PLATONOVA, N. V., GRACHEV, U. I., KLIMENKO, I. B., SMERNOV, L. V., KRIVOVA, T. I., ANDREEV, S. P., STOTSKY, A. A. (S. M. Kirov Text. and Light Ind. Inst., Leningrad, USSR): The spectroscopic study of the thermal degradation of poly- α -chloroacrylonitrile. *Vysokomol. Soedin. A* *21* (1979) 1278 (In Russian)
- PLONKA, A., BEDNAREK, J., KROH, J. (Tech. Univ., Inst. Appl. Radiat. Chem., PL-93590 Łódź, Poland): Thermal stability of electrons trapped in crosslinked dextran gels γ -irradiated at 77K. *Bull. Acad. Pol. Sci. Chim.* *27* (1979) 79
- POPOV, L. E., STARENCHENKO, V. A., KOBYTEV, V. S., KOZLOV, E. V. (Tomsk Construct. Engr. Inst., Tomsk, USSR): Thermally activated deformation processes in monocrystalline ordered Ni₃Fe alloy. *Izv. Vyssh. Uch. Zav. Fiz.* (1979) 86 (In Russian)
- POSTNIKOVA, E. S., KRYLOVA, G. S. (Lensovet Technol. Inst., Leningrad, USSR): Thermographic study of thermal conversions of pyridine complexes of Pt(II)—Pt(IV). *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* *51* (1978) 2340
- PREDEL, B., OEHME, G. (Max Planck Inst. Werkstoffwissensch., Stuttgart, GFR): Kalorimetrische Untersuchung flüssiger Lithium—Blei Legierungen. *Z. Metallkunde* *70* (1979) 450
- PRISYAZHNYUK, Z. P., LEVUSH, S. S., SHEVCHUK, V. U.: Effect of oxygen on reaction of thermal decomposition of titanium and aluminium reactors. *Ukr. Khim. Zh.* *45* (1979) 483 (In Russian)
- PUCHKOV, L. V., STYAZHKIN, P. S., FEDOROV, M. K. (Lensovet Technol. Inst., Leningrad, USSR): Influence of temperature up to 623 K and pressure up to 150 MPa on the integral enthalpies and entropies of solution of lithium, sodium and potassium chlorides. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* *51* (1978) 2565
- PUGACHEV, A. T., BRATSKYKHIN, V. M. (V. I. Lenin Polytech. Inst., Kharkov, UkSSR): Heat conductivity of thin polycrystalline aluminium films. *Fiz. Metal. Metalloved.* *47* (1979) 1300 (In Russian)
- PYLDME, Y. K., PYLDME, M. E., VEIDERMA, M. A. (Tallin Polytech. Inst., Tallin, EsSSR): Chemism of the phosphate-thermal reprocessing of kola apatite concentrate. *Zh. Neorg. Khim.* *24* (1979) 1795 (In Russian)
- RAMARAO, G. A., NAIR, P. K. R., SRINIVASULU, K. (Vikram Univ., Sch. Studies Chem., Ujjain 456010, Madhya Pradesh, India): Kinetic analysis of thermogravimetric data of thorium-AII-cis-1,2,3,4-cyclopentanetetracarboxylic acid complex. *J. Indian Chem. Soc.* *56* (1979) 19
- RAMAZANZADE, M. G., BASHSHALIEV, A. A. (M. Azizbekov Petr. and Chem. Inst., Baku, AzSSR): Thermal conductivity of manganese selenide. *Izv. Vyssh. Uch. Zav.* (1979) 98 (In Russian)
- RAO, K. V. R. (Indian Inst. Technol., Dept. Math., Kharagpur, 721302, W. Bengal, India): Numerical solution of the thermal instability of a micropolar fluid layer between rigid boundaries. *Acta Mech.* *32* (1979) 79
- RAO, R. R., RAJPUT, A. (Visva Bharati Univ., Dept. Chem., Santiniketan, 731235 W. Bengal, India): Lattice heat capacity, third-order elastic constants, and thermal expansion of scandium. *Can. J. Phys.* *57* (1979) 983
- RAYNOR, G. V. (Univ. Birmingham, Dept. Phys. Met. and Sci. Mat., Birmingham, B15 2TT W. Midlands, England): A note

- on relationships involving maximum or minimum liquidus temperatures for solid solutions in transition metals. *J. Less-Common Metals* 65 (1979) 299
- REDDY, V. B., MEHROTRA, P. N. (Univ. Roorkee, Roorkee, 247672, Uttar Pradesh, India): Infrared and thermal studies of strontium zirconyl oxalate hexahydrate. *Thermochim. Acta* 31 (1979) 349
- RENAUD, A., CARTRAUD, P., GRAVEREAU, P., GARNIER, E. (Lab. Chim. Phys., 40 Ave. Recteur Pineau, F-86022 Poitiers, France): Propriétés zéolithiques des ferrocyanures mixtes: isothermes d'adsorption et caractérisation de $K_2Zn_3[Fe(CN)_6]_2 \cdot 9H_2O$. *Thermochim. Acta* 31 (1979) 243
- RENJUN, Z. (Hebei Inst. Technol., Tianjin, Taiwan): Discussion on the prediction of conversion and product distribution for the simultaneous pyrolysis of light hydrocarbons. *Sci. Sinica* 22 (1979) 637
- RÉVAY, M., WAGNER, Z. (Cent. Res. and Design Inst. Silicate Ind., Pf. 112, H-1300 Budapest, Hungary): Determination of the expected decrease in strength of high alumina cement concrete by derivatography. *Thermochim. Acta* 31 (1979) 365
- RIMAI, D. S., SLADEK, R. J. (Purdue Univ., Dept. Phys., W. Lafayette, Ind., 47907 USA): Anomalies in the specific heat of PbF_2 . *Solid State Commun.* 31 (1979) 473
- RODANTE, F. (Univ. Rome, Fac. Ingn., Ist. Chim., I-00100 Rome, Italy): Enthalpic and entropic contributions to substituent effects on the ionization of meta- and para-chlorobenzoic acids in water — dimethylsulfoxide mixtures at 25 °C. *Thermochim. Acta* 31 (1979) 221
- ROSSI, M., GOLDEN, D. M. (Sci. Int., Thermochem. and Chem. Kinet. Grp., Menlo Pk., Calif., 94025 USA): Homogeneous decomposition of vinyl ethers. The heat of formation of ethanal-2-yl. *Int. J. Chem. Kinet.* 11 (1979) 715
- RUDIN, A., SAMANTA, M. C., REILLY, P. M. (Univ. Waterloo, Guelph Waterloo Ctr., Grad Work Chem., Waterloo, Ontario, N2L 361 Canada): Thermal decomposition of anionic and emulsion polymerized polystyrenes. *J. Appl. Polym. Sci.* 24 (1979) 171
- RUSZ-SZÓRÁD, J., HALÁSZ, H. (Landeszentrum Unterrichtstechn., H-8201 Veszprém, Hungary): Thermometric titration with sodiumhypobromite solution. *Acta Chim. Acad. Sci. Hung.* 99 (1979) 215 (In German)
- SACCHETTI, F. (Univ. Rome, Ist. Fis., I-00185, Italy): On the electronic specific heat of transition metals. *Solid State Commun.* 30 (1979) 795
- SADYKHOV, Z. A. (S. M. Kirov State Univ., Baku, AzSSR): Thermal degradation of modified polyisobutylene. *Vysokomol. Soedin. A* 21 (1979) 1229 (In Russian)
- SAGI, S. R., RAMANA, K. V., PRASADA RAO, M. S. (Andhra Univ., Inorgan. Chem. Labs., Waltair, 530003 Andhra Pradesh, India): Some studies on thallium oxalates. I. Thermal decomposition of ammonium bisoxalatothallate(III). *Thermochim. Acta* 31 (1979) 285
- SAHOO, P. K., BOSE, S. K., SIRCAR, S. C. (Reg. Res. Lab., Bhubaneswar, 7510 India): Sulfation of CuO , Fe_2O_3 , MnO_2 and NiO with $(NH_4)_2SO_4$. *Thermochim. Acta* 31 (1979) 303
- SAHOO, P. K., BOSE, S. K., SIRCAR, S. C. (Reg. Res. Lab., Bhubaneswar, 7510 India): Sulfation of Al_2O_3 , CaO , CdO , ZnO with $(NH_4)_2SO_4$. *Thermochim. Acta* 31 (1979) 315
- SAKAMI, H., IIDA, S., SASAKI, K. (Govt. Ind. Res. Inst., Hirate Machi 1 Chome, Kitaku, Nagoya, 462 Japan): Effects of heat treatment of fibrillar high-molecular weight polyethylene. *Jap. Polym. Sci. Techn.* 36 (1979) 365 (In Japanese)
- SAKHAROVA, Y. G., PEROV, V. N. (N. G. Chernyshevskii State Univ., Dept. Inorgan. Chem., Saratov, USSR): Thermal stability of thiocarbamide compounds of thulium, ytterbium, lutetium and yttrium chlorides. *Zh. Neorg. Khim.* 24 (1979) 1499 (In Russian)
- SALCE, B., DE GOËR, A. M. (CEN, Serv. Basses Temp. Ceng, BP 85X, F-38041 Grenoble, France): Studies of the Ni^{3+} : Al_2O_3 system by thermal conductivity measurements. *J. Phys. C* 12 (1979) 2081
- SANCHEZ, J. A., MONNIER, R. (Univ. Genève, Dept. Chim. Minérale Analyt. et Appl. Chim. et Electrochim. Appl. Lab., CH-1211 Genève 4, Switzerland): Étude du diagramme de phases du système $CaCl_2$ -Ca par ATD. *Rev. Int. Hautes Temp. Refract.* 16 (1979) 5
- SANDHU, A. M., SAVAGE, D. J., MARTIN, T. W. (Eastman Kodak Co., Res., Labs.,

- Rochester, N. Y., 14650 USA): Photo-reactive polyesters with unusual thermal properties: synthesis, structure-property relationships and applications. *Photogr. Sci. E* 23 (1979) 159
- SANTILLI, D. S., DERVAN, P. B. (c/o P. B. Dervan, Caltech., Crellin Lab. Chem., Pasadena, Calif., 91125 USA): Thermal decomposition of cis-tetrahydropyridazine 3-4-d₂. Relative rates of rotation, cleavage, and closure for tetramethylene. *J. Amer. Chem. Soc.* 101 (1979) 3663
- SATO, S., KLEPPA, O. J. (Kyushu Univ., Dept. Nucl. Engn., Fukuoka, 812 Japan): The enthalpy of fusion of γ -manganese at 1386K. *J. Chem. Thermodyn.* 21 (1979) 521
- SATO, T., WATANABE, H. (Shizuoka Univ., Fac. Engn. Dept. Appl. Chem., Hamamatsu, Shizuoka, 432 Japan): The thermal decomposition of the complexes of zirconium(IV) extracted from hydrochloric acid solutions with tri-n-octylamine and tri-caprylmethylammonium chloride. *Thermochim. Acta* 31 (1979) 159
- SAVIN, V. D., MIKHAILOVA, N. P., MOROZOVA, V. A. (Moscow, Rare Met. Ind. Res. Inst., Moscow, USSR): Thermochemistry of the reaction of calcium with lanthanum and praseodymium chlorides in melts. *Zh. Fiz. Khim.* 53 (1979) 1142 (In Russian)
- SAVIN, V. D., MIKHAILOVA, N. P., MOROZOVA, V. A. (Moscow Rare Met. Ind. Res. Inst., Moscow, USSR): Thermochemical characteristics of lanthanum and praseodymium chlorides and enthalpy of the formation of their solutions with calcium and potassium chlorides. *Zh. Fiz. Khim.* 53 (1979) 1410 (In Russian)
- SAZANOV, Y. N., FLORINSKY, F. S., FEDOROVA, G. N., KOTON, M. M. (Acad. Sci. USSR, Inst. Macromolec. Cpds., Leningrad, USSR): Thermal and thermo-oxidative degradation of rigid-chained polyimides. *Vysokomol. Soedin. B* 21 (1979) 463 (In Russian)
- SCHARF, H. D., DIERIS, C. G., LEISMANN, H. (Rhein. Westfal. TH Aachen, Lehrstuhl 2 Inst. Organ. Chem., D-5100 Aachen, GFR): Alpha-ketoimidgroups, one cause for luminescence in thermo-oxidatively damaged polycaprolactame. *Angew. Makromol. Chem.* 79 (1979) 193
- SCHENKLUHN, H., SCHEIDT, W., WEIMANN, B., ZAHRES, M. (Univ. Essen Gesamthsch., Fachbereich Chem. 8, D-4300 Essen, 1 GFR): Organometallic complex compounds. 4. Separation of steric and electronic effects in the reaction enthalpies of association of phosphorus ligands. *Angew. Chem. Int. Ed.* 18 (1979) 401
- SCIORA, C., MUTIN, J. C. (Fac. Sci. Mirande, CNRS Rech. Reactiv. Solides Lab., BP 138, F-21004 Dijon, France): Broyage de l'oxalate BaC₂O₄, H₂O: Déshydratation mécanique - modification des caractéristiques de sa thermolyse. *Ann. Chim.* 4 (1979) 203
- SEARS, W. M., MORRISON, J. A. (Univ. Guelph, Dept. Phys., Guelph, Ontario, N1G 2W1 Canada): Low temperature thermal properties of PbI₂. *J. Phys. Chem. Solids* 40 (1979) 503
- SESSOMS, A. L., GOODMAN, M. S., HOLCOMB, L., SADOWSKI, E. S., STROMINGER, A., EISENSTEIN, B., HOLLOWAY, L. E., WROBLICKA, W. T., WRIGHT, S. C., KEPHART, R. D. (Harvard Univ., Dept. Phys., Cambridge, Mass., 02138 USA): Segmented calorimeter. Study of hadron shower structure. *Nucl. Instr. Methods* 16 (1979) 371
- SHENKIN, Y. S., ROZEN, A. M., GARTMAN, V. L.: Temperature dependence of melting heats. *Zh. Fiz. Khim.* 53 (1979) 1314 (In Russian)
- SHINKODA, T., KUMAGAI, K., ASAYAMA, K. (Osaka Univ., Fac. Engn. Sci., Dept. Mat. Phys., Toyonaka, Osaka, 560 Japan): Effect of spin fluctuations on the specific heat in β Mn metal and alloys. *J. Phys. Soc. Jap.* 46 (1979) 1754
- SHIOTA, I., WATANABE, O. (Natl. Res. Inst. Met., 3-12, 2-chome, Meguro-ku, Tokyo, 153 Japan): High-temperature compatibility of pyrolytic carbon with nickel-copper alloys. *J. Mater. Sci.* 14 (1979) 1518
- SHLAPAK, A. N., BELOBORODOV, E. A., NIKOLAENKO, I. V., BATALIN, G. I. (T. G. Shevchenko State Univ., Kiev, UkSSR): Enthalpy of mixing germanium and chromium liquid solution. *Ukr. Khim. Zh.* 45 (1979) 670 (In Russian)
- SHLENSKII, O. F., VISHNEVSKII, G. E. (S. Ordzhonikidze Aviat. Inst., Moscow, USSR): Thermogravimetric investigations of the destruction of some polymer materials by the pulse method. *Dokl. Akad. Nauk SSSR* 246 (1979) 151 (In Russian)

- SHMIDT, N. E., LAZAREV, V. B. (N. S. Kurnakov Gen. and Inorgan. Chem. Inst., Moscow, USSR): Heat capacity and phase transitions of silver and thallium sulfates. *Zh. Fiz. Khim.* 53 (1979) 1605 (In Russian)
- SHORMANOV, V. A., SHARAIN, V. A., KRESTOV, G. A. (Ivanovo Chem. Technol. Inst., Ivanovo, USSR): Thermochemistry of solvation and acidic dissociation in water-acetone solutions of ethylene diamine. *Zh. Fiz. Khim.* 53 (1979) 1421 (In Russian)
- SHPIL'RAIN, É. É., YAKIMOVICH, K. A., SHERESHEVSKII, V. A., ANDRIANOVA, V. G. (Acad. Sci. USSR, Inst. High. Temp., Moscow, V-71 USSR): Experimental study of the diagram of vaporization of a lithium-lithium hydride system at high temperatures. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 1027
- SINGH, B. R., BALK, P. (Ceeri, Div. Solid State Pilani, Rajasthan, India): Thermal oxidation of silicon in O₂-trichloro-ethylene. *J. Electrochem. Soc.* 126 (1979) 1288
- SIRE, J., VOINOVITCH, I. A. (Lab. Res. Ponts and Chaussees Nancy, 50 Rue Grande Haie, F-54510 Tomblaine): An approach to comprehension of the phenomena in non flame atomic absorption spectroscopy by thermogravimetry, combined electron microscope microprobe and oscilloscopy. *Analisis* 7 (1979) 275
- SLUCHEVSKAYA, N. P., YABLOKOVA, N. V., GRANIK, L. A., YABLOKOV, V. A., ALEKSANDROV, Y. A. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Thermal decomposition kinetics of bis(trimethylsilylperoxycyclohexylidene) peroxide. *Zh. Obshch. Khim.* 49 (1979) 1255 (In Russian)
- SMALLDON, K. W., ARDREY, R. E., MULLINGS, L. R. (c/o R. E. Ardrey, Home Off. Cent. Res. Estab., Aldermaston, Reading RG7 4PN, Berkshire, England): The characterization of closely related polymeric materials by thermogravimetry — mass spectrometry. *Anal. Chim. Acta* 107 (1979) 327
- SOBOTKA, I., I. V. (A. A. Zhdanov State Univ., Phys. Res. Inst., Leningrad, B-164 USSR): The effect of crystallization conditions on thermodynamical characteristics of the melting process of certain comb-like polymers. *Vysokomol. Soedin. A* 21 (1979) 1322 (In Russian)
- SOKAL, A. D. (Princeton Univ., Joseph Henry Labs. Phys., Princeton, N. Y., 08540 USA): A rigorous inequality for the specific heat of an ising of ϕ^4 ferromagnet. *Phys. Lett. A* 71 (1979) 451
- SOKOLOV, I. D., KOPYLEV, B. A., BUKSHA, Y. V., NURAEVA, A. S., ELAGINA, M. N. (All Union Halurgy Res. and Design Inst., Leningrad, USSR): Thermal interaction of potassium chloride with tripotassium hydrogenbissulfate. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 51 (1979) 2324
- SORBA, J., FOSSEY, J., NEDELEC, J. Y., LEFORT, D. (CNRS, GR 12 2 Rue H. Dunant, F-94320 Thiais, France): Décomposition thermique des acides peroxybenzoïque et peroxydodécanoïque en milieu non polaire: rôle de l'oxygène. *Tetrahedron* 35 (1979) 1509
- STEGNY, A. I., SHEVCHENKO, O. V., LOPATO, L. M., RUBAN, O. K., DVERNYAKOV, V. S., PASICHNY, V. V. (Acad. Sci. UkSSR, Inst. Mat. Technol. Inst., Kiev, UkSSR): Thermal analysis of oxides using solar heating. *Dopov. Akad. Nauk UkSSR* (1979) 480 (In Ukrainian)
- STEWART, G. R., GIORGI, A. L. (Univ. Calif., Los Alamos Sci. Lab., Dept. Phys., Los Alamos, N. M., 87545 USA): Specific heat of bcc Mo_{1-x}Tc_x. *Phys. Rev. B* 19 (1979) 5704
- STOLYAROVA, T. A.: Heat of formation of zinc arsenide Zn₃As₂. *Zh. Fiz. Khim.* 53 (1979) 1331 (In Russian)
- STOUT, J. W., BOO, W. O. J. (Univ. Chicago, Dept. Chem., Chicago, Ill., 60637 USA): Crystalline vanadium(II) fluoride VF₂. Preparation, structure, heat capacity from 5 to 300 °K and magnetic ordering. *J. Chem. Phys.* 71 (1979) 1
- STUPIN, D. Y., GURIKOV, Y. V. (Leningrad Agr. Phys. Res. Inst., Leningrad, USSR): Isotopic effect in enthalpies of formation of CF₃Cl, CF₃Br, CF₃I, CF₂Cl₂, CF₂ClBr and SF₆ hydrates and deuterohydrates. *Zh. Fiz. Khim.* 53 (1979) 1603 (In Russian)
- SUNNER, S., SVENSSON, CH., ZEPEPUGA, A. S. (Univ. Lund, Ctr. Chem., Thermochem. Lab., S-22007 Lund, 7 Sweden): Enthalpies of vaporization at 298.15K for some 2-alkanones and methyl alkanooates. *J. Chem. Thermodyn.* 11 (1979) 491.
- SURIKOV, V. I., MILLER, I. I., YAROSH, E. M., SURIKOV, V. I., KONDRATEVA, N. A. (Omsk

- Polytech. Inst., Omsk, USSR): Specific heat of $\text{Fe}_x\text{V}_{2-x}\text{O}_n$ compounds in the region of phase transition. *Fiz. Tverd. Tela* 21 (1979) 1863
- SUROVTSEV, L. G., KISELEV, V. V., DVORTSOV, V. V., VOLNUKHIN, V. V., KHIZHENYAK, N. I. (Tyumen State Univ., Tyumen, USSR): A low inertial differential isothermal calorimeter for the investigation of photopolymerization processes. *Vysokomol. Soedin. A* 21 (1979) 1660 (In Russian)
- SUWA, T., TAKEHISA, M., MACHI, S. (Japan Atom Energy Res. Inst., Takasaki Radiat. Chem. Res. Estab., 1233 Watanukicho, Takasaki, 37012 Japan): Effect of thermal treatments on melting and crystallization behavior of poly(tetrafluoroethylene). *Jap. Polym. Sci. Techn.* 36 (1979) 393 (In Japanese)
- SUZUKI, Y., MARUYAMA, M. (Yamanashi Univ., Fac. Engn., Kofu-shi Yamanashi, 400 Japan): Thermal reaction thin layer chromatography of aromatic amines in rubber. *Bunseki Kagaku* 28 (1979) 337 (In Japanese)
- SVENSSON, CH. (Univ. Lund, Ctr. Chem., Thermochem. Lab., S-22007 Lund, 7 Sweden): Enthalpies of vaporization of 1-decanol and 1-dodecanol and their influence on the CH_2 -increment for the enthalpies of formation. *J. Chem. Thermodyn.* 11 (1979) 593
- SZEIMIES-SEEBACH, U., SZEIMIES, G., VANMEERSSCHE, M., GERMAIN, G., DECLERCQ, J. P. (Univ. München, Inst. Organ. Chem., D-8000 München, 2 GFR): Oxa[3.1.1]propellane derivatives. Synthesis, structure, and thermal behavior. *Nouv. J. Chim.* 3 (1979) 357
- TAKAGI, Y., NAKAMURA, T., SATA, T., OHNO H., FURUKAWA, K. (Tokyo Inst. Technol., Engn. Mat. Res. Lab., Meguroku, Tokyo, 152 Japan): Structural analysis of some molten materials by X-ray diffraction. 6. $\text{MnCl}_2 \cdot 2\text{RCl}$ (R = Li and K). *J. Chem. Soc. Faraday Trans. I*, 75 (1979) 1161
- TAKENO, T., SATO, K. (Univ. Tokyo, Inst. Space and Aeronaut. Sci., Meguro-ku, Tokyo, 113 Japan): An excess enthalpy flame theory. *Combust. Sci. Techn.* 20 (1979) 73
- TALLON, J. L. (DSIR, Phys. and Engn. Lab., Lower Hutt, New Zealand): The pressure dependence of melting temperatures for alkali halides. *Phys. Lett. A* 72 (1979) 150
- TANAKA, M., TAKAHASHI, K. (Okayama Univ., Fac. Sci. Dept. Phys., Okayama, 700 Japan): Phase transition of the Blume-Capel model. *Phys. Status Solidi B* 93 (1979) K85
- TANAKA, N. (Gunma Univ., Fac. Technol., Dept. Polymer Sci., Kiryu, Japan): Conformational effects on isobaric and constant volume specific heats in polymers. *Polymer* 20 (1979) 593
- TAPUHI, Y., KALISKY, O., AGRANAT, I. (Hebrew Univ. Jerusalem, Dept. Organ. Chem., Jerusalem, 91000 Israel): Thermochromism and thermal E, 2 isomerizations in bianthrones. *J. Org. Chem.* 44 (1979) 1949
- TERMAN, L. M., CHUDAKOVA, V. A., KOSTRIKOV, I. N., KOSOLAPOVA, I. G. (Acad. Sci. USSR, Inst. Chem., Gorki, USSR): Thermal degradation of certain silicon-containing polymethacrylates. *Vysokomol. Soedin.* 21 (1979) 555 (In Russian)
- TIEWHEY, J. D., HESS, P. C. (Univ. Calif., Lawrence Livermore Lab., Div. Earth Sci., Livermore, Calif., 94550 USA): The two phase region in the CaO-SiO_2 system: experimental data and thermodynamic analysis. *Phys. Chem. Glasses* 20 (1979) 41
- THAKUR, K. P., JHA, L. K. (Univ. Warwick, Sch. Molec. Sci., Coventry, CV4 74A Warwickshire, England): Anharmonic interaction in alkali halides and computation of coefficient of thermal expansion and specific heat at constant volume. *Indian J. Chem. A* 16 (1978) 1005
- TIMOFEEVA, V. R., NOVAKEVSKII, M. S. (A. M. Gorkii State Univ., Kharkov, UkSSR): Thermal decomposition of chlorozirconates of phenylhydrazinium halo-derivatives and nitro-derivatives. *Zh. Obshch. Khim.* 49 (1979) 1193 (In Russian)
- TIMROT, D. L., MAKHROV, V. V., REUTOV, B. F. (G. M. Krzhizhanovskii Power Engn. Inst., Moscow, USSR): Experimental study of the thermal conductivity of potassium vapor. *High Temp. transl. Teplofiz. Vysok. Temp.* 16 (1978) 1032
- TOY, M. S., STRINGHAM, R. S.: Thermal isomerization of perfluorobicyclo[2.2.0]hexene oxides. *J. Org. Chem.* 44 (1979) 2813
- UETAKE, K., UEDA, K., SAKIKAWA, N. (Nihon Univ., Coll. Sci. and Engn., Dept. Ind. Chem., Chiyoda-ku, Tokyo, 101 Japan):

- Thermal decompositions of dialkyl peroxides. *Bull. Chem. Soc. Jap.* 52 (1979) 2136
- UMLAUF, E., SCHMID, W., BREDL, C. D., STEGLICH, F., LOEWENHAUPT, M. (Bayer Akad. Wissensch., Hsch. Gelände, Zentralinst. Tieftemperaturforschung, D-8064 Garching, GFR): Low temperature properties of (La Nd) Sn₃ alloys. *Z. Phys. B* 34 (1979) 65
- URUSHIZAKI, M., AIDA, H. (Fukui Univ., Fac. Engn., Dept. Ind. Chem., Fukui 910, Japan): The thermal degradation of N-(p-substituted -phenyl) maleimide-styrene copolymers. *Jap. Polym. Sci. Technol.* 36 (1979) 447 (In Japanese)
- VAJDA, J. H., HARRISON, A. G. (Hungarian Acad. Sci., Cent. Res. Inst. Chem., Pf. 17, H-1525 Budapest, Hungary): Proton affinities of some olefinic carbonyl compounds and heats of formation of C_nH_{2n-1}O⁺ ions. *Int. J. Mass Spectr. Ion Phys.* 30 (1979) 293
- VARMA, C. M. (Bell Tel. Labs. Inc., Murray Hill, N. J., 07974 USA): Quantum theory of the heats of formation of metallic alloys. *Solid State Commun.* 3 (1979) 295
- VARMA, I. K., SHARMA, K. K. (Indian Inst. Technol., Dept. Chem., New Delhi, 110029 India): Thermal degradation of poly(vinyl chloride) in presence of additives. 3. Studies in molecular weight distribution. *Angew. Makromol. Chem.* 79 (1979) 147
- VELASCO, I., OTIN, S., GUTIÉRREZ LOSA, C. (Univ. Zaragoza, Fac. Ciencias, Dept. Quim. Fis., Zaragoza, Spain): Excess enthalpies of some aromatic amine + benzene mixtures. *J. Chim. Phys.* 76 (1979) 381
- WALKER, J. A., TSANG, W. (Univ. Illinois, Dept. Theoret. and Appl. Mech., Urbana, Ill., 61801 USA): Thermal decomposition of hexamethylethane in a flow system. *Int. J. Chem. Kinet.* 11 (1979) 867
- WEAVER, J. S., CHIPMAN, D. W., TAKAHASHI, T. (Columbia Univ., Lamont Doherty Geol. Observ., Palisades, N. Y., 10964 USA): Comparison between thermochemical and phase stability data for the quartz-coesite-stishovite transformations. *Amer. Mineral.* 64 (1979) 604
- WEISZ, H., MEINERS, W., FRITZ, G. (Univ. Freiburg, Lehrstuhl Analyt. Chem., Chem. Lab., D-7800 Freiburg, GFR): Double indication in catalytic-kinetic analysis: simultaneous photometric and thermometric indication of the iodine-azide reaction in closed and flow systems. *Anal. Chim. Acta* 107 (1979) 301
- WESOŁOWSKI, M. (Med. Acad. Gdańsk, Inst. Chem. and Analyt., PL-80416 Gdańsk, Poland): Thermal decomposition of salicylic acid and its salts. *Thermochim. Acta* 31 (1979) 133
- WHITE, G. S., LEE, K. H., CRAWFORD, J. H. (Univ. N. Carolina, Dept. Phys. and Astron., Chapel Hill, N. C., 27514 USA): Thermochemical coloration and annealing of spinel and magnesium oxide. *Appl. Phys. Lett.* 35 (1979) 1
- WHITE, R. C., SCOPY, J., ROBERTS, T. D. (Univ. Arkansas, Dept. Chem., Fayetteville, Ark., 72701 USA): Reduction as a probe for benzothiirene intermediates thermal and photochemical decomposition of 1,2,3-benzothiadiazoles. *Tetrahedron Lett.* (1979) 2785
- WIEGELEBEN, A., DERESCH, J., DEMUS, D., KONSTANTINOFF, I. I. (Martin Luther Univ., Sekt. Chem., Forsch. Abt., DDR-402 Halle, GDR): Umwandlungsenthalpien kristallin-flüssiger 4-n-Alkyloxy-benzoesäure-[4-acyl-phenylester] *Z. Phys. Chem.* 260 (1979) 357
- WIESMANN, H., GHOSH, A. K., McMAHON, T., STRONGIN, M. (Brookhaven Natl. Lab., Upton, N. Y., 11973 USA): a-Si:H produced by high-temperature thermal decomposition of silane. *J. Appl. Phys.* 50 (1979) 3752
- WINTER, J. K., GHOSE, S. (Univ. Washington, Dept. Geol. Sci., Seattle, Wash., 98195 USA): Thermal expansion and high-temperature crystal chemistry of the Al₂SiO₅-polymorphs. *Amer. Mineral.* 64 (1979) 573
- WOHLIJEN, H., DESSY, R. (c/o R. Dessy, Virginia Polytech. Inst. and State Univ., Dept. Chem., Blacksburg, Va., 24061 USA): Surface acoustic wave probes for chemical analysis. 3. Thermomechanical polymer analyzer. *Anal. Chem.* 51 (1979) 1470
- WOOD, G. C., STOTT, F. H., FOUNTAIN, J. G. (Univ. Manchester, Inst. Sci. and Technol., Ctr. Corros. and Protect., Manchester, M60 1QD Lancashire, England): The

- mechanism of high-temperature oxidation of directionally solidified $\text{Ni}_3\text{Al}-\text{Ni}_3\text{Nb}$ eutectic. *Corros. Sci.* 19 (1979) 441
- WOODLEY, R. E., ADAMSON, M. G. (Westinghouse Hanford Co., Hanford, Engn. Dev. Lab., Richland, Wash., 99352 USA): Oxygen potential of near-stoichiometric and non-stoichiometric uranium-25 mol-percent plutonia solid solutions — comparison of thermogravimetric and galvanic cell measurements. *J. Nucl. Mater.* 82 (1979) 65
- YOKOKAWA, H., TAKAHASHI, Y. (Univ. Tokyo, Dept. Nucl. Engn., Tokyo 113, Japan): Laser-flash calorimetry. II. Heat capacity of platinum from 80 to 1000 K and its revised thermodynamic functions. *J. Chem. Thermodyn.* 11 (1979) 411
- YOKOKAWA, H., TAKAHASHI, Y. (Natl. Chem. Lab. Ind., Tokyo, 151 Japan): Analysis of heat capacity of platinum: electron-phonon effects and anharmonic contribution. *J. Phys. Chem. Solids* 40 (1979) 445
- YOKOKAWA, H., TAKAHASHI, Y. (Natl. Chem. Lab. Ind., Tokyo, 151 Japan): Calorimetric study on the electronic structure in UP-US system. *J. Phys. Chem. Solids* 40 (1979) 603
- ZAUGG, N. S., KELLEY, A. J., WOOLLEY, E. M. (c/o E. M. Woolley, Brigham Young Univ., Dept. Chem., Provo, Utah, 84602 USA): Studies of self-association in non-aqueous solvents by titration calorimetry. Halogen-substituted acetic and propionic acids in benzene. *J. Chem. Eng. Data* 24 (1979) 218
- ZELDIN, A. N., KUKACKA, L. E., FONTANA, J. J., CARCIELLO, N. R., REAMS, W. (Brookhaven Natl. Lab., Dept. Energy and Environment, Div. Process Sci., Upton, N. Y., 11973 USA): Influence of curing agent concentration and curing temperatures on the thermostability of styrene-acrylonitrile-acrylamide-trimethylolpropane trimethacrylate copolymer systems. *J. Appl. Polym. Sci.* 24 (1979) 455
- ZEMAN, S. (Chemko, Dept. Res., CS-07222 Strážske, Czechoslovakia): Thermal stabilities of polynitroaromatic compounds and their derivatives. *Thermochim. Acta* 31 (1979) 269.
- ZHUBANOV, B. A., SMIRNOVA, T. J., ERGAZIEVA, K. I., NIKITINA, I. I. (Acad. Sci. KaSSR, Inst. Chem. Sci., Alma-Ata, 480021 KaSSR): Polycyanimides — a new class of thermostable ladder polymers. *Dokl. Akad. Nauk SSSR* 246 (1979) 365 (In Russian)
- ZIKMUND, M., HRNČIAROVÁ, K., HANDLOVIČ, M., BRILLA, M. (Slovak Acad. Sci., Inst. Inorgan. Chem., CS-80934 Bratislava, Czechoslovakia): Thermogravimetric analysis of the titanium(III) complexes containing coordinated aliphatic alcohols and structural aspects of their decomposition reactions. *Chem. Zvesti* 33 (1979) 206
- ZIKMUND, M., KOHÚTOVÁ, M., HANDLOVIČ, M., MIKLOŠ, D. (Slovak Acad. Sci., Inst. Inorgan. Chem., CS-80934 Bratislava, Czechoslovakia): Magnetochemical, electronic spectral, and crystal chemical characterization of thermal decomposition of trichlorotris(tetrahydrofuran)titanium(III). *Chem. Zvesti* 33 (1979) 180
- ZIKMUND, M., VALENT, A., KOHÚTOVÁ, M. (Slovak Acad. Sci., Inst. Inorgan. Chem., CS-80934 Bratislava, Czechoslovakia): Thermogravimetric and spectral study of some chloro(nitrile) titanium(III) complexes. *Chem. Zvesti* 33 (1979) 217
- ZLOBINTSEV, G. M., ILIYEV, L. B., KOZINETS, V. V., MERISOV, B. A., OVCHARENKO, V. I., OGNEVA, Y. M., PERVAKOV, V. A. (A. M. Gorkii State Univ., Kharkov, UkSSR): Heat conductivity of aluminium and tin solid solutions in titanium at low temperatures. *Fiz. Metal. Metalloved.* 47 (1979) 1310 (In Russian)
- ZVIGINTSEV, N. V., ZVIGINTSEVA, G. Y. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Calorimetric studies of reverse $\alpha \rightarrow \nu$ transformation in iron nickel alloys. *Fiz. Met. Metalloved.* 47 (1979) 1239 (In Russian)