

Bibliography Section

- ABBÅS, K. B., SÖRVIK, E. M. (Telefon AB LM Ericsson, Mat. Lab., S-12625 Stockholm, Sweden): On the thermal degradation of poly(vinyl chloride). IV. Initiation sites of dehydrochlorination. *J. Appl. Polym. Sci.* 20 (1976) 2395
- ABDURAGIMOV, I. M.: Actual problems of increase of fire prevention measures in industry. *Zh. Vses. Khim. Obshch. Mendeleeva* 21 (1976) 363 (In Russian)
- ABDURAGIMOV, I. M.: Substances for extinguishing fire and methods of their application. *Zh. Vses. Khim. Obshch. Mendeleeva* 21 (1976) 379 (In Russian)
- ABELL, J. S., HARRIS, I. R., COCKAYNE, B., PLANT, J. G. (Univ. Birmingham, Dept. Phys. Met. and Mat. Sci., Birmingham, England): A DTA study of zone-refined LiRF₄(R=Y,Er). *J. Mater. Sci.* 11 (1976) 1807
- ACHMATOWICZ, O., JURCZAK, J., PYREK, J. S. (Polish Acad. Sci., Inst. Org. Chem., PL-01224 Warsaw, Poland): Thermal rearrangement of 2-oxabicyclo[2.2.2]oct-5-eno-3-carboxylic acids. *Tetrahedron* 32 (1976) 2113
- AFONIN, Y. D., SHALAGINOV, V. N., BEZDENEZHNYKH, V. A., BEKETOV, A. R. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Thermogravimetric unit for studies of gas - solid body interaction processes. *Zh. Fiz. Khim.* 50 (1976) 2156 (In Russian)
- AGAPOVA, T. A., VISHNEVSKII, F. N., ZHIGALIN, G. Y., SKOROKHODOV, I. I., SOBDEVSKII, M. V.: Thermal stability of aryl(aryloxy) silanes. *Zh. Obshch. Khim.* 46 (1976) 2034 (In Russian)
- AHARONI, S. M. (Allied Chem. Corp., Ctr. Chem. Res., Morristown, N. J., 07960 USA): Molecular stiffness and thermal properties of polymers. *J. Appl. Polym. Sci.* 20 (1976) 2863
- AHTEE, M., GLAZER, A. M. (Univ. Helsinki, Dept. Phys., SF-00290 Helsinki, Finland): High-temperature phases of sodium niobate - potassium niobate solid solutions. *Ferroelectrics* 12 (1976) 205
- AKOPOV, E. K. (Krasnodar Polytech. Inst., Krasnodar, USSR): Thermal analysis of quaternary mutual system from lithium, potassium and cesium chlorides and sulphates. *Ukr. Khim. Zh.* 42 (1976) 815 (In Russian)
- ALCOCK, C. B., JACOB, K. T., ZADOR, S. (Univ. Toronto, Dept. Met. and Mat. Sci., Toronto, Ontario, Canada): Zirconium: physico-chemical properties of its compounds and alloys. I. Thermochemical properties. *At. Energ. Rev.* (1976) 7
- ALEKSANDROVA, G. A., FILATOVA, O. E., POKONOVA Y. V., PROSKURYAKOV, V. A. (Lensovet Technol. Inst., Leningrad, USSR): Thermal stability of phosphate cation-exchangers based on petroleum asphalts. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 49 (1976) 328
- ALEXANDROVICH, P., KARASZ, F. E., MACKNIGHT, W. J. (Univ. Massachusetts, Dept. Polymer Sci. and Engn., Amherst, Mass., 01002 USA): Thermally stimulated discharge in polymer electrets: compatibility and impurity effects. *J. Appl. Phys.* 47 (1976) 4251
- ANDREWS, G. D., BALDWIN, J. E. (c/o J. E. Baldwin, Univ. Oregon, Dept. Chem., Eugene, Oreg., 97403 USA): Thermal isomerization of (+)-(1s,2s)-trans,trans-2-methyl-1-propenylcyclopropane: quanti-

- fication of four stereochemical paths in a vinylcyclopropane rearrangement. *J. Amer. Chem. Soc.* 98 (1976) 6705
- ANDRIANOVA, G. P., POPOV, Y. V., ARUTYUNOV, B. A. (A. V. Topchiev Petrochem. Synth. Inst., Moscow, USSR): Thermal effects of the necking during stretching of poly(ethylene terephthalate). *Vysokomol. Soedin. A* 18 (1976) 2311 (In Russian)
- ANTHONEY, M. E., CARSON, A. S., LAYE, P. G., YÜREKLI, M. (Univ. Leeds, Dept. Phys. Chem., Leeds, LS2 9JT England): The enthalpy of formation of dimethyl oxalate. *J. Chem. Thermodyn.* 8 (1976) 1009
- ARDAY, Á. S., BODNÁR, J., NAGY, L. Gy. (Tech. Univ., Inst. Appl. Chem., H-1521 Budapest, Hungary): Thermogravimetric analysis of the various types of porous activated carbons. *Magy. Kém. Foly.* 82 (1976) 411 (In Hungarian)
- ARENA, G., CALI, R., MUSUMECI, S., RIZZARELLI, E., SAMMARTANO, S. (Univ. Catania, Ist. Chim. Gen., I-95125 Catania, Italia): Enthalpy and entropy variations in formation of ternary complexes — Cu(2,2'-dipyridyl)²⁺ — dicarboxylic acid complexes. *Chim. Ind.* 58 (1976) 657 (In Italian)
- ARENA, G., CALI, R., RIZZARELLI, E., SAMMARTANO, S. (Univ. Catania, Ist. Chim. Gen., I-95125 Catania, Italy): Thermodynamics of copper(II)-2,2'-dipyridyl complexes in aqueous-solution. *Thermochim. Acta* 17 (1976) 155
- ARITA, Y., KURANARI, K., SUNCHARA, Y. (Nippon Telegraph and Tel. Publ. Corp., Musashino Elect. Commun. Lab., Musashino, Tokyo, Japan): Thermal behavior of porous silicon. *Jap. J. Appl. Phys.* 15 (1976) 1655
- ASHCROFT, S. J. (Univ. Exeter, Dept. Chem. Engn., Exeter EX4 4GD, Devonshire, England): Vapor pressures and enthalpies of vaporization of benzyl halides. *J. Chem. Eng. Data* 21 (1976) 397
- AUE, D. H., DAVIDSON, W. R., BOWERS, M. T. (Univ. Calif. Santa Barbara, Dept. Chem., Santa Barbara, Calif., 93106 USA): Heats of formation of C₈H₅⁺ ions. Allyl, vinyl and cyclopropyl cations in gas-phase proton-transfer reactions. *J. Amer. Chem. Soc.* 98 (1976) 6700
- AZALYAN, V. V.: Effect of chemically active admixtures in promoting ignition and combustion. *Zh. Vses. Khim. Obshch. Mendeleeva* 21 (1976) 426 (In Russian)
- AZEVEDO, L. J., CLARK, W. G., HULIN, D., MCLEAN, E. O. (Univ. Calif., Dept. Phys., Los Angeles, Calif., 90024 USA): Low temperature specific heat of the one-dimensional Heisenberg antiferromagnet α -bis-(N-methylsalicylaldiminato)-copper(II) [α -CuN Sal]. *Phys. Lett. A* 58 (1976) 255
- BAFFIER, N., LETELLIER, P., LABBE, J. P. (Ecole Natl. Super Chim. Paris, F-75231 Paris, 05 France): Use of a microcalorimeter for determining reaction enthalpies in solution. *J. Chem. Educ.* 53 (1976) 597
- BAGDONENE, E. V., MACHYULIS, A. N. (Acad. Sci. LiSSR, Energetics Engn. Phys. Inst., Kaunas, LiSSR): Study of the thermal and chemical stabilities of diffusion-stabilized polycaproamide. *Vysokomol. Soedin. A* 18 (1976) 1776 (In Russian)
- BAKER, R. R. (British Amer. Tobacco Co. Ltd., Ctr. Grp. Res. and Dev., Southampton, SO9 1PE England): The kinetics of tobacco pyrolysis. *Thermochim. Acta* 17 (1976) 29
- BAKHADYRKHANOV, M. K., ZAINOBIDINOV, S., TESHABAEV, A. T., KHODZHAeva, M. A. (V. I. Lenin State Univ., Tashkent, UzSSR): Influence of heat treatment on the interaction of nickel atoms with oxygen in silicon. *Sov. Phys. Semicond. transl. Fiz. Tekh. Poluprov.* 10 (1976) 593
- BALAZYUK, V. N., MIKHAILOV, V. P., RARENKO, I. M., SHARLAI, B. M. (Chernovtsy State Univ., Chernovtsy, UkrSSR): Temperature dependence of elastic module of CdSb. *Fiz. Tverd. Tela* 18 (1976) 2843 (In Russian)
- BALDI, G., BUZZICHELLI, G., MASCANZONI, A. (Ctr. Sperimentale Met., I-10747 Roma, Italy): Identification of a (Nb, Fe)O₂ oxide in a Fe—Nb—N alloy internally oxidized in the range 1000 C—1300 C. *Metallography* 9 (1976) 341
- BALL, M. C., LADNER, N. G., TAYLOR, J. A. (Loughborough Univ. Technol., Dept. Chem., Loughborough LE11 3TU, Leicestershire, England): The dehydroxylation of tricalcium aluminate 6-hydrate. *Thermochim. Acta* 17 (1976) 207
- BANCIU, M. (Polytech. Inst. Bucharest,

- Org. Chem. Lab., Bucharest, Romania): On the pyrolysis of Nenitzescu's hydrocarbons. *Rev. Roum. Chim.* 21 (1976) 1083
- BARATOV, A. N.: New substances for extinguishing fire. *Zh. Vses. Khim. Obshch. Mendel'eva* 21 (1976) 369 (In Russian)
- BARCLAY, J. A., ROSENBLUM, S. S., STEYERT, W. A. (Univ. Calif., Los Alamos Sci. Lab., Los Alamos, N. M., 87545 USA): Low temperature thermal conductivity of some composite materials. *Cryogenics* 16 (1976) 539
- BASEVICH, V. Y., KOGARKO, S. M., NEIGAUZ, M. G. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Mechanism of combustion of methane. 4. Low-temperature oxidation. *Bull. Acad. Sci. USSR Div. Chem. Sci. transl. Izv. Akad. Nauk SSSR Ser. Khim.* 25 (1976) 33
- BASU, T. K., SEARCY, A. W. (c/o A. W. Searcy, Univ. Calif. Berkeley, Lawrence Berkeley Lab., Div. Mat. and Molec. Res., Berkeley, Calif., 94720 USA): Kinetics and thermodynamics of decomposition of barium carbonate. *J. Chem. Soc. Faraday Trans. I* 72 (1976) 1889
- BATRA, S. K. (MIT, Dept. Mech. Engn., Fibers and Polymers. Labs., Cambridge, Mass., 02130 USA): On the heat setting and thermomechanical behavior of polyethylene terephthalate and nylon 66 monofilaments. *J. Macromol. Sci. B* 12 (1976) 405
- BELIN, V. M., MEDVEDEVA, L. A., ROD'BERG, I. L., TARASOVA, T. F. (Moscow Alloy and Nonferrous Met. Proc. Res. and Design. Inst., Moscow, USSR): A high sensitivity Pd + Cr + Ru/AuFe thermocouple for measuring temperatures from 2 to 200 K. *Cryogenics* 16 (1976) 551
- BEKKER, F. F., HOOGKAMER, T. P. (Univ. Amsterdam, Natuurkundig Lab., Amsterdam, 1004 Netherlands): Thermolectric power and resistivity of dilute AgSc, AgY and AgLu alloys at low temperatures. *Phys. B* 84 (1976) 67
- BELYAKOVA, P. E.: The determination of the true heat capacity of technical and iodide titanium. *Russ. Met. transl. Izv. Akad. Nauk SSSR Met.* (1975) 60
- BENATTAR, A., HASIAK, B., GLACET, C. (Univ. Sci. et Techn. Lille, Chim. Org. Lab. 1, F-59650 Villeneuve d'Ascq, France): Pyrolyse de sels et d'hydroxydes de diméthyl-1,1(alkylphényl)-2 pipéridinium. *Compt. Rend. C* 283 (1976) 295
- BERGMAN, C., CASTANET, R. (CNRS 26, Ctr. Rech. Microcalorimétrie et Thermochim., F-13003 Marseille, France): Temperature dependence of the enthalpy of formation of liquid Ge—Te alloys. *Ber. Bunsen Ges. Phys. Chem.* 80 (1976) 774
- BERSON, J. A., DERVAN, P. B., MALHERBE, R., JENKINS, J. A. (Yale Univ., Dept. Chem., New Haven, Conn., 06520 USA): Formation and thermal rearrangements of some dimers of butadiene and piperylene. Tests of the validity of thermochemical-kinetic arguments for identification of common biradical intermediates. *J. Amer. Chem. Soc.* 98 (1976) 5937
- BERRY, G. C., MURAKAMI, M. (Carnegie Mellon Univ., Dept. Chem., Pittsburgh, Pa., 15213 USA): Thermal mechanical studies on a heterocyclic polymer (BBB). II. Dynamic mechanical studies at an elevated temperature. *J. Polym. Sci. Polym. Phys. Ed.* 14 (1976) 1721
- BETTLE, J., JESPERSEN, N. D. (Univ. Texas, Dept. Chem., Austin, Tex., 78712 USA): Differential thermal analysis of commercial fertilizers. *Thermochim. Acta* 17 (1976) 17
- BEZEMER, J., JONGERIUS, R. T. (Rijks Univ. Utrecht, Phys. Lab., Utrecht, Netherlands): The melting temperature of platinum measured from continually melting and freezing ribbons. *Phys. C* 83 (1976) 338
- BHATTACHARYA, P. K., BHATTACHARYA, S. K. (Banaras Hindu Univ., Dept. Chem., Varanasi, 221005 India): Physico-chemical properties of solid catalysts: studies on thermal analysis, infrared and X-ray diffraction of ceric molybdate. *J. Indian Chem. Soc.* 53 (1976) 561
- BIEGAŃSKY, Z., STALIŃSKI, B. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., PL-50950 Wrocław, Poland): Specific heat anomalies in rare earth dihydrides. *J. Less. Common Metals* 49 (1976) 421
- BIER, K., KUNZE, J., MAURER, G. (TH Karlsruhe, Inst. Tech. Thermodynam. und Kältetech., Karlsruhe, FRG): Thermodynamic properties of ethane from calorimetric measurements. *J. Chem. Thermodyn.* 8 (1976) 857
- BOREL, D., GELAS-MIALHE, Y., VESSIÈRE, R. (UER Sci. Exactes et Naturelles, Univ.

- Clermont-Ferrand, Grp. Rech. Chim. Org. 2, BP 45, 63170 Aubière, France): Isomérisation thermique de vinyl-2-aziridines N-substituées. *Can. J. Chem.* 54 (1976) 1590
- BORISENKO, V. A. (Acad. Sci. UkrSSR, Strength Probl. Inst., Kiev, UkrSSR): Analysis of temperature dependence of strength for tungsten-molybdenum alloys. *Dopov. Akad. Nauk SSSR* (1976) 843 (In Ukrainian)
- BOSWARVA, I. M. (Univ. London, Imperial Coll. Sci. and Technol., Dept. Met. and Mat. Sci., London SW7 2AZ, England): The lattice energies of precipitate phases and the heats of solution of divalent cations in alkali halide crystals. *Phys. Status Solidi A* 37 (1976) 65
- BOWSER, R. J., WEINBERG, F. J. (Univ. London, Imperial Coll. Sci. and Technol., London, SW7 2AZ England): Chemi-ionisation during pyrolysis. *Combust. Flame* 27 (1976) 21
- BOYANOV, A., DIMITROV, D. (Bulgarian Acad. Sci., Cent. Lab. Biophys., Sofia, Bulgaria): Applicability of the microcalorimetric method to studying pH-induced conformational change of lactate dehydrogenase. *Dokl. Bolg. Akad. Nauk* 29 (1976) 711
- BOYER, J. H., SRINIVASAN, K. G. (Univ. Illinois, Dept. Chem., Chicago, Ill., 60680 USA): Thermal and photochemical α -carbon-carbon cleavages in imines. *J. Chem. Soc. Perkin Trans. I* (1976) 1583
- BRAGINA, I. P., KORSHAK, V. V., BERESTNEVA, G. L., VINOGRADOVA, S. V., TUR, D. R., KHOMUTOV, V. A., KRYLOVA, V. V. (c/o V. V. Korshak, Acad. Sci. USSR, Inst. Organoelement Compds. Moscow, USSR): On the influence of the chemical structure of polymers on the regularities of the thermal cyclization reaction of polyhydrazides to poly-1,3,4-oxadiazoles. *Vysokomol. Soedin. A* 18 (1976) 2318 (In Russian)
- BROWN, R. F. C., EASTWOOD, F. W., TING LIM, S., McMULLEN, G. L. (Monash Univ., Dept. Chem., Clayton, 3168 Victoria, Australia): Methyleneketenes and methylene-carbenes. VI. Pyrolytic generation of acyloxy-carbenes and their rearrangement to 1,2-diketones. *Aust. J. Chem.* 29 (1976) 1705
- BURZO, E. (Inst. Atom. Phys., Bucharest 35 Romania): High temperature magnetic behaviour of $(\text{Gd}_x \text{Y}_{1-x})\text{Fe}_2$ compounds. *Solid State Commun.* 20 (1976) 565
- CAPACCIO, G., CROMPTON, T. A., WARD, I. M. (Univ. Leeds, Dept. Phys., Leeds, LS1 3EX England): The drawing behavior of linear polyethylene. I. Rate of drawing as a function of polymer molecular weight and initial thermal treatment. *J. Polym. Sci. Polym. Phys. Ed.* 14 (1976) 1641
- CARRÉ, J., KOLLMANNSSBERGER, M., THOUREY, J., PERACHON, G., BOUSQUET, J. (Inst. Natl. Sci. Appl. Lyon, CNRS, Phys., Chim. Minerale, F-69621 Villeurbanne, France): Determination de l'enthalpie de formation standard du tetrafluorure de tellure par calorimétrie de combustion dans le fluor et par calorimétrie de réaction. *J. Fluorine Chem.* 8 (1976) 401
- CAYLEY, G. R., SYKES, A. G. (c/o A. G. Sykes, Univ. Leeds, Dept. Inorg. and Struct. Chem., Leeds, LS2 9JT England): Temperature-jump studies on the equilibration of thiocyanate and pyridine with the di- μ -oxo-bis[aquo-oxalato-oxo-molybdenum(V)] complex. Substitution cis to a terminal oxo ligand. *Inorg. Chem.* 15 (1976) 2882
- CHAIGNEAU, M. (CNRS, Serv. Anal. Gaz., F-75270 Paris, 06 France): Composition of permanent gases issuing from pyrolysis of polyvinyl chloride. *Compt. Rend. C* 283 (1976) 131 (In French)
- CHAMBERLAIN, C. S., DRAGO, R. S. (c/o R. S. Drago, Univ. Illinois, Sch. Chem. Sci., W.A. Noyes Lab., Urbana, Ill., 61801 USA): Comparison of enthalpies of hydrogen bonding determined by a gas-liquid chromatography method with those obtained by calorimetric or frequency shift methods. *J. Amer. Chem. Soc.* 98 (1976) 6142
- CHAN, H. W. S., PRESCOTT, F. A. A., SWOBODA, P. A. T. (Food Res. Inst., A. R. C. Norwich, NR4 7UA England): Thermal decomposition of individual positional isomers of methyl linoleate hydroperoxide: evidence of carbon-oxygen bond scission. *J. Amer. Oil Chem. Soc.* 53 (1976) 572
- CHANDRA, T., JONAS, J. J., TAPLIN, D. M. R. (Univ. Wollongong, Dept. Met., Wollongong, New S. Wales, Australia): The mechanical behaviour of cerium-modified

- alpha-beta brass at high temperatures. *J. Mater. Sci.* 11 (1976) 1843
- CHEH, C. H. (Eastman Kodak Co., Res. Lab., Rochester, N. Y., 14650 USA): Thermal decomposition of S-2-benzothiazole thiocarbonates. *J. Heterocycl. Chem.* 13 (1976) 1079
- CHO, S. A., PUERTA, M. (Inst. Venezolano Invest. Cient., Dept. Met. J. Mat. Sci., Caracas, Venezuela): Debye temperature and allotropic transition of metals. *Z. Metallk.* 67 (1976) 546
- CHEW, S., LIELMEZS, J. (Univ. British Columbia, Dept. Chem. Engn., Vancouver V6T 1W5, British Columbia, Canada): Thermodynamic functions for 2-chlorocyclobutanone; 2-chloro-2,4,4-trideuterocyclobutanone; 2-bromocyclobutanone; and 2-bromo-2,4,4-trideuterocyclobutanone. *Thermochim. Acta* 17 (1976) 260
- CIOPEC, M., MARCHIDAN, D. I. (Ctr. Phys. Chem., Spl. Independenței 202, Bucharest, Romania): The influence of uranium oxides. A model of quantitative approach. *Rev. Roum. Chim.* 21 (1976) 997
- CLIFFORD, A. A., DICKINSON, E., GRAY, P. (Univ. Leeds, Dept. Phys. Chem., Leeds, LS2 9JT England): Thermal conductivities of gaseous alkane + perflouroalkone mixtures. *J. Chem. Soc. Faraday Trans. I.* 72 (1976) 1997
- COENEN, L. H. M., DE LANG, H. N., STOELINGA, J. H. M., VAN KEMPEN, H., WYDER, P. (Catholic Univ. Nijmegen, Phys. Lab., Nijmegen, Netherland): Low temperature lattice conductivity of some two-dimensional magnetic crystals. *Solid State Commun.* 20 (1976) 713
- COLLINS, W. C., SCHNEIDER, I. (USN, Res. Lab., Washington, D. C., 20375 USA): Optical and thermal properties of F and F aggregate centers in KF. *J. Phys. Chem. Solids* 37 (1976) 917
- COLLISTER, J. L., PRITCHARD, H. O. (York Univ., Dept. Chem., Downsview, M3J 1P3 Ontario, Canada): The thermal isomerisation of methyl isocyanide in the temperature range 120–320 °C. *Can. J. Chem.* 54 (1976) 2380
- COLOMINA, M., ROUX, M. V., TURRION, C. (CSIC, Inst. Phys. Chem. Rocasolano, Madrid-6, Spain): Thermochemical properties of naphthalene compounds. IV. Enthalpies of combustion and formation of 2-methoxynaphthalene, 2-ethoxynaphthalene, and 2,3- and 2,7-dihydroxynaphthalene. *J. Chem. Thermodyn.* 8 (1976) 869
- COMBERG, A., EWERT, S., WÜHL, H. (Rhein-Westfäl. TH., Inst. Phys., D-5100 Aachen, GFR): Lattice specific heat of superconducting amorphous indium films. *Z. Phys. B* 25 (1976) 173
- COUGHLAN, B., CARROLL, W. M. (Univ. Coll. Galway, Phys. Chem. Lab., Galway, Ireland): Water ion-exchanged L, A, X Y zeolites: a heat of immersion and thermogravimetric study. *J. Chem. Soc. Faraday Trans. I.* 72 (1976) 2016
- CRİADO, J. M., GONZALEZ GARCIA, F., MORALES, J. (Univ. Seville, Fac. Ciencias, CSIC, Ctr. Coordinado, Dept. Quim. Inorg., Sevilla, Spain): Critical study on Horowitz and Metzger method of kinetic analysis of thermogravimetric data. *An. Quim.* 72 (1976) 632 (In Spanish)
- CZANK, M., SCHULZ, H., WIEDEMANN, H. G. (ETH, Inst. Kristallog. und Petr., CH-8006 Zürich, Switzerland): The thermal behaviour of Li₂O. *Z. Kristallogr.* 143 (1976) 99
- DASH, U. N. (Gangadhar Meher Coll., Dept. Chem., Sambalpur, India): Behaviour of ampholytes in formamide. I. The ionization constants and related thermodynamic quantities of o-, m-, and p-aminobenzoic acids at different temperatures. *Thermochim. Acta* 17 (1976) 147
- DEARLOVE, T. J., KAAS, R. L., ATKINS, R. P. A. (Gen. Motors Res. Labs., Dept. Polymers, Warren, Mich., 48090 USA): Relative molar response factors for the thermal conductimetric analysis of silane compounds. *J. Chromatogr. Sci.* 14 (1976) 448
- DEDGAONKAR, V. G., BARVE, M. (Univ. Poona, Dept. Chem., Poona, 411007 India): Thermal and radiation annealing of recoil arsenic-76 in lithium arsenate. *Radiochem. Radioanal. Lett.* 27 (1976) 63
- DEGIOVANNI, A., GERY, A., LAURENT, M., SINICKI, G. (Inst. Natl. Sci. Appl. Lyon, Phys. Ind. Lab., F-69621 Villeurbanne, France): Détermination simultanée de la diffusivité, de la chaleur volumique et du comportement thermocinétique de ma-

- téraux solides. *Compt. Rend. Ser. B* 283 (1976) 167
- DENISOV, G. N., YAGODOVSKII, V. D., MAKEICHEVA, I. I. (P. Lumumba Univ., Moscow, USSR): Mechanism of ammonia decomposition on nickel films at temperatures below and above Curie point. *Zh. Fiz. Khim.* 50 (1976) 2278 (In Russian)
- DE SOUZA GOMES, A., FIREMAND, C. M. (Univ. Fed. Rio de Janeiro, Rio de Janeiro, Brazil): Formation of complexes of crown ethers in the absence of solvent observed by differential thermal analysis. *Thermochim. Acta* 17 (1976) 107
- DEWSBERRY, R. (Univ. Wales, Univ. Coll. Dept. Phys., Viriamu Jones Lab., Cardiff CF1 1XL, Glamorganshire, Wales): The electrical conductivity and its relationship to the glass transition temperature of plasticized polyacrylonitrile. *J. Phys. D* 9 (1976) 2049
- DICKINSON, E. (Univ. Oxford, Phys. Chem. Lab., Oxford, OX1 3QZ, England): Thermal conductivity of noble gas + hydrogen mixtures: the separability of translational and internal energy transport. *Chem. Phys. Lett.* 42 (1976) 64
- DITMARS, D. A. (NBS, Inst. Mat. Res., Washington, D.C., 20234 USA): Measurement of the average total decay power of two plutonium heat sources in a Bunsen ice calorimeter. *Int. J. Appl. Radiat. Isotop.* 27 (1976) 469
- DOBRYZNSKI, L., MARADUDIN, A. A. (Int. Super Electr. Nord, CNRS Equipe Rech., F-59046 Lille, France): Surface contribution to the low-temperature specific heat of a hexagonal crystal. *Phys. Rev. B* 14 (1976) 2200
- DOMRACHEV, G. A., ZINOV'EV, V. D. (Akad. Sci. USSR, Chem. Inst., Gorki, USSR): Thermodynamic treatment of dibenzene-chromium direct-synthesis reaction and its relation to decomposition reaction. *J. Organometal. Chem.* 117 (1976) 241
- DROSCHER, M., HERTWIG, K., RODRIGUEZB, M., WEGNER, G. (c/o G. Wegner, Univ. Freiburg, Inst. Makromol. Chem., D-7800 Freiburg, FRG): Extended-chain crystals of poly(oxymethylene)-copolymers-heat of melting. *Makromol. Chem.* 177 (1976) 2793
- DUBES, J. P., BARRES, M., TACHOIRE, H. (Univ. Provence, Thermochim. Lab., F-13231 Marseille 3, France): Correcteur automatique d'inertie pour calorimètres à conduction et analyseurs calorimétriques différentiels. *Compt. Rend. Ser. C* 283 (1976) 163
- DUTT, N. K., NAG, K., GUPTA, S. (c/o K. Nag, Indian Assoc. Cultivation Sci., Dept. Inorg. Chem., Calcutta, 700032 India): Thermal decomposition of oxalato and malonato complexes of Al(III), Ga(III), Fe(III), Cr(III) and In(III). *Indian J. Chem. A* 14 (1976) 491
- DWORKIN, A., FIGUIÈRE, P., GHELFENSTEIN, M., SZWARC, H. (Univ. Paris 11, CNRS, Phys. Chim. Rayonnements Lab., F-91405 Orsay, France): Heat capacities, enthalpies of transition and thermodynamic properties of the three solid phases of p-dichlorobenzene from 20 to 330 K. *J. Chem. Thermodyn.* 8 (1976) 835
- EASTON, D. S., KROEGER, D. M., MOAZED, A. (Oak Ridge Natl. Lab., Div. Met. and Ceramics, Oak Ridge, Tenn., 37830 USA): Thermomechanical heat generation in copper and a Nb-Ti superconducting composite. *Appl. Phys. Lett.* 29 (1976) 382
- ELIEZER, I., HOWALD, R. A. (Montana State Univ., Dept. Chem., Bozeman, Mont., 59715 USA): Thermodynamics of the vaporization processes for potassium sulfate. *J. Chem. Phys.* 65 (1976) 3053
- ELLIS, B. (Univ. Sheffield, Dept. Ceramics Glasses and Polymers, Sheffield, S10 2TZ England): The glass transition temperatures of phosphoric acids. *Nature* 263 (1976) 674
- ELLIOTT, K., WORMALD, C. J. (Univ. Bristol, Sch. Chem., Bristol BS18 9AF, Gloucestershire, England): A precision differential flow calorimeter. The excess enthalpy of benzene + cyclohexane between 280.15 K and 393.15 K. *J. Chem. Thermodyn.* 8 (1976) 881
- ELNATANOV, A. I.: Fires and explosions in chemical plants. *Zh. Vses. Khim. Obshch. Mendeleva* 21 (1976) 402 (In Russian)
- ESIN, YU. O., BAYEV, V. M., PETRUSHEVSKIY, M. S., GEL'D, P. V.: Enthalpy of formation of liquid binary alloys of cobalt and iron with boron. *Russ. Met. transl. Izv. Akad. Nauk SSSR Met.* (1975) 63

- FARBER, M., SRIVASTAVA, R. D. (Space Sci. Inc., Monrovia, Calif., 91016 USA): Thermochemical reactions of aluminium and fluorine in hydrogen-oxygen flames. *Combust. Flame* 27 (1976) 99
- FEATHERSTONE, J. D. B., DICKINSON, N. A. (Viktoria Univ., Dept. Chem., Wellington, New Zealand): An isothermal dilution calorimeter for enthalpy-of-mixing determinations in the region 288 to 343 K. *J. Chem. Thermodyn.* 8 (1976) 985
- FERRARO, J. R., BASILE, L. J., GARCIA-INEGUEZ, L. R., PAOLETTI, P., FABBRIZZI, L. (Argonne Natl. Lab., Div. Chem., Argonne, Ill., 60439 USA): Concerning the thermochromic mechanism of copper(II) and nickel(II) complexes of N,N-diethylethylenediamine. *Inorg. Chem.* 15 (1976) 2342
- FÈVRE, A., MURAT, M., COMEL, C. (Inst. Natl. Sci. Appl. Lyon, Chim. Appl. Lab., F-69621 Villeurbanne, France): Cinétique des réactions solide-gaz en programmation linéaire de vitesse de chauffe. Vérification expérimentale de la formulation des lois cinétiques dans le cas de réactions de déshydratation. *Compt. Rend. Ser. C* 283 (1976) 99
- FILISKO, F. E., RAGHAVA, R. S. (Univ. Michigan, Macromolec. Res. Ctr., Dept. Mat. and Met. Engn., Ann Arbor, Mich., 48104 USA): Amorphous structure heat: heats of solution versus temperature for polysulfone in o-dichlorobenzene. *J. Makromol. Sci. B* 12 (1976) 317
- FINKE, H. L., MESSERLY, J. F., DOUSLIN, D. R. (Energy Res. and Dev. Adm., Bartlesville Energy Res. Ctr., Bartlesville, Okla., 74003 USA): Low-temperature thermal quantities for five alkyl-substituted pentanes. *J. Chem. Thermodyn.* 8 (1976) 965
- FISHER, H. N. (Univ. Calif., Los Alamos, Sci. Lab., Los Alamos, N. M., 87544 USA): Thermal analysis of some subterrene penetrators. *J. Heat Transfer* 98 (1976) 485
- FLANDERS, N. A., TAPLIN, D. M. R., KERR, H. W. (Steel Co. Canada Ltd., Hamilton, Ontario, Canada): On the role of temperature fluctuations during microstructural degradation of the Cd-Zn eutectic. *J. Mater. Sci.* 11 (1976) 2051
- FURUKAWA, N., HATANAKA, T., HARADA, K., OAE, S. (Univ. Tsukuba, Dept. Chem., Nihari, Ibaraki, 30031 Japan): Pyrolysis of S-[2-(phenylthio, phenylsulfinyl- and phenylsulfonyl)ethyl]-N-p-tosylsulfilimine. *Bull. Chem. Soc. Jap.* 49 (1976) 2337
- GAKIS, N., MÄRKY, M., HANSEN, H. J., HEIMGARTNER, H., SCHMID, H., OBERHÄNSLI, W. E. (Univ. Zürich, Inst. Org. Chem., CH-8001 Zürich, Switzerland): Photochemische Synthese von 4-Phenyl-3-oxazolin-5-onen und deren thermische Dimerisierung. 45. Mitteilung über Photoreaktionen. *Helv. Chim. Acta* 59 (1976) 2149
- GALIULLINA, R. F., KRASNOK, Y. N., PANKRAKOVA, V. N., SHNOL, T. R. (N. I. Lobachevskii State Univ., Gorki, USSR): Synthesis and thermal decomposition of organometallic zinc and cadmium alkoxides and germanoxides. *Zh. Obshch. Khim.* 46 (1976) 1770 (In Russian)
- GAYER, K. H., HERRELL, A. Y., BUSEY, R. H. (Wayne State Univ., Dept. Chem., Detroit, Mich., 48202 USA): The enthalpies of formation of technetium heptaoxide and pertechnetate ion. *J. Chem. Thermodyn.* 8 (1976) 959
- GAYNOR, B. J., GILBERT, R. G., KING, K. D., MACKIE, J. C. (Univ. Sydney, Dept. Theoret. Chem., Sydney, 2006 New S. Wales, Australia): The isomerization of cycloheptatriene at high temperatures. *Int. J. Chem. Kinet.* 8 (1976) 695
- GAVRILOV, B. G. (A. A. Zhdanov State Univ., Leningrad, USSR): Pyrolysis as the principal process during the preignition and initial periods of combustion of petroleum hydrocarbons. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 49 (1976) 593
- GHIDALIA, W., LEGRAND, J. P., WINTERBERGER, M. (Univ. Paris 6, Phys. Lab. 12, F-75230 Paris, 05 France): Mise en évidence d'un changement de structure cristalline, avec la température, de $\text{CoCl}_2 \cdot 6\text{D}_2\text{O}$. Température de transition. *Compt. Rend. B* 283 (1976) 49
- GLAZUN, B. A., KURNOSOVA, R. N., DUBININ, M. M., ZHILENKOV, I. V., LEVCHENKO, S. S. (Acad. Sci. USSR, Phys. Chem. Inst., Moscow, USSR): Thermoelectret effects in NaA zeolite. *Bull. Acad. Sci.*

- USSR Div. Chem. Sci. transl. Izv. Akad. Nauk SSSR Ser. Khim.* 25 (1976) 8
- GOLDFARB, YU. YA., NECHITAILO, N. A., KISSIN, YU. V., NOVODERZHAKIN, YU. V., DZYUBINA, M. A. (A. V. Topchiev Petrochem. Inst., Moscow, USSR): Structure and thermal stability of 3-methylbutene-1-vinylcyclohexane copolymers. *Vysokomol. Soedin. A* 18 (1976) 1813 (In Russian)
- GOLDSCHMIDT, Z., MAUDA, S. (Bar Ilan Univ., Dept. Chem., Ramat-Gan, Israel): The photochemical and thermal rearrangements of 2-acetyl-methylenecyclopropane. *Tetrahedron Lett.* (1976) 4183
- GORELOV, Y. P., KHVILIVITSKII, R. Y., CHERNOVSKAYA, R. P., TERMAN, L. M. (Acad. Sci. USSR, Chem. Inst., Moscow, USSR): Thermal decomposition of poly(1,1,5-trihydroperfluoroamyl acrylate). *Vysokomol. Soedin. A* 18 (1976) 2256 (In Russian)
- GORYACHKOWSKI, Y. G., KOSTIKOV, V. I., SOLODKIN, G. A. (Moscow Steel and Alloy Inst., Moscow, USSR): Interaction of tungsten with water vapor at high temperatures. *Zh. Fiz. Khim.* 50 (1976) 1959 (In Russian)
- GRACE, J., PUTNIS, A. (Western Michigan Univ., Dept. Geol., Kalamazoo, Mich., 49001 USA): Thermal decomposition and cation mobility in bornite. *Econ. Geol.* 71 (1976) 1058
- GRIFFITHS, M. D., MAISEY, L. J. (Rubber and Plastics Res. Assoc. Great Britain, Shrewsbury, SY4 4NR England): On the reproducibility of Tg measurements on polystyrene using DSC. *Polymer* 17 (1976) 869
- GRUIA, M., JARJOUI, M., GRAVELLE, P. C. (Cent. Chim. Fiz., Bucarest 9, Romania): Simultaneous use of a heat-flow microcalorimeter and of a pulsed or dynamic reactor for the study of adsorption or heterogeneously catalyzed reactions. *J. Chim. Phys.* 73 (1976) 634
- GUPTA, R. N., JAIN, P. C., NANDA, V. S. (Univ. Delhi, Dept. Phys. and Astrophys., Delhi, 110007 India): Equation of state and related properties of light and heavy waters and their mixtures. *Thermochim. Acta* 17 (1976) 231
- GUPTA, T. K. (Westinghouse Elect. Corp., Ctr. Res. and Dev. Ceramics and Glasses Sect., Pittsburgh, Pa., 15235 USA): Kinetics of strengthening of thermally shocked MgO and Al₂O₃. *J. Amer. Ceram. Soc.* 59 (1976) 448
- GUSEINOV, K. D., MIRZOEV, B. M., GYLMANOV, A. A. (V. I. Lenin State Teachers Inst., Bdku, AzSSR): Experiments on heat conductivity of propylbenzene and isopropylbenzene. *Zh. Fiz. Khim.* 50 (1976) 1995 (In Russian)
- HAGIWARA, M., TAGAWA, T., AMEMIYA, H., ARAKI, K., SHINOHARA, I., KAGIYA, T. (Japan Atom Energy Res. Inst., Takasaki Radiat. Chem. Res. Estab., Takasaki, Gunma, Japan): Mechanism of thermal decomposition of peroxide radicals formed in polytetrafluoroethylene by γ -ray irradiation. *J. Polym. Sci.* 14 (1976) 2167
- HALEY, J. F., KEEHN, P. M. (Brandeis Univ., Dept. Chem., Waltham, Mass., 02154 USA): Cyclophanes. 6. Temperature dependent conformations of 3,6-diketo[8]-(1,4)-naphthaleneophane and 3,6-diketo-[8](2,5)-furanophane. *Chem. Lett.* (1976) 999
- HAMAD, S. E. D. (Univ. Kartoum, Dept. Geol., Khartoum, Sudan): A study of the reaction $\text{N}_2\text{SO}_4 \cdot 10 \text{H}_2\text{O} \rightarrow \text{Na}_2\text{SO}_4 + 10 \text{H}_2\text{O}$ in the temperature range 0 to 25°C. *Thermochim. Acta* 17 (1976) 85
- HAMILTON, W. S., THOMPSON, P., PUSTEJOVSKY, S. (Texas Womans Univ., Dept. Chem., Denton, Tex., 76204 USA): The enthalpies of combustion and formation of 2-methyl-2-oxazoline and 2-ethyl-2-oxazoline. *J. Chem. Eng. Data* 21 (1976) 428
- HAN, C. D., KIM, Y. W. (c/o Y. W. Kim, Polytech. Inst. Brooklyn, Dept. Chem. Engr., Brooklyn, N. Y. 11201 USA): Use of the coextrusion technique for producing flame-retardant and antistatic fibers. *J. Appl. Polym. Sci.* 20 (1976) 2913
- HANNEMANN, R. J., MIKIC, B. B. (Bell Tel. Labs. Inc., Whippany, N. J., 07981 USA): An analysis of the effect of surface thermal conductivity on the rate of heat transfer in dropwise condensation. *Int. J. Heat Mass Transfer* 19 (1976) 1299
- HANNEMANN, R. J., MIKIC, B. B. (Bell Tel. Labs. Inc., Whippany, N. J., 07981 USA): An experimental investigation into the effect of surface thermal conductivity on

- the rate of heat transfer in dropwise condensation. *Int. J. Heat. Mass Transfer* 19 (1976) 1309
- HARA, T., IKEUCHI, S., SUGIMOTO, D. (Kyoto Univ., Dept. Phys., Kyoto, 606 Japan): Thermal properties of self-gravitating plane-symmetric configuration. *Progr. Theor. Phys.* 56 (1976) 818
- HARTLEY, J. G., BLACK, W. Z. (Georgia Mental HLTH Inst., Sch. Mech. Engn., Atlanta, Ga., 30306 USA): Minimization of measurement errors involved in probe method of determining soil thermal conductivity. *J. Heat Transfer* 98 (1976) 530
- HATTA, I., IKUSHIMA, A. (Nagoya Univ., Dept. Appl. Phys., Nagoya 464, Japan): Temperature dependence of the heat capacity in BaTiO₃. *J. Phys. Soc. Jap.* 41 (1976) 558
- HEADLEY, T. J., HREN, J. J. (Sandia Labs., Albuquerque, N. M., 87115 USA): Influence of heat-treatment and solute content on repeated precipitation at dislocations in Al—Cu alloys. *J. Mater. Sci.* 11 (1976) 1867
- HEILBRON, M. A., GELLINGS, P. J. (Twente Univ. Technol., Dept. Chem. Engn., Inorg. Chem. and Mat. Sci. Lab., Enschede, Netherlands): Thermogravimetric investigations on A(H₂O)₆BX₆ complexes and the formation of ABX₆ and ABO₃ structures. *Thermochim. Acta* 17 (1976) 97
- HENNIG, H., HEMPEL, K. (Karl Marx Univ., Sekt. Chem., DDR-701 Leipzig, GDR): Über den Einfluss nichtkoordinierter Anionen auf das thermische Verhalten von Mono-oxalato-bis-phenanthrolin-kobalt(III)-Komplexen. *Z. Anorg. Allg. Chem.* 425 (1976) 81
- HERGENROTHER, P. M., SYKES, G. F., YOUNG, P. R. (NASA, Langley Res. Ctr., Hampton, Va., 23365 USA): Synthesis and thermal reaction of 2-[4-(ethynylphenoxy)phenylene]-3-phenylquinoxaline. *J. Heterocycl. Chem.* 13 (1976) 993
- HERRELL, A. Y., ARNOLD, C. (Knoxville Coll., Knoxville, Tenn., 37921 USA): Preliminary studies on the recovery of oil from Chattanooga shale. *Thermochim. Acta* 17 (1976) 165
- HEUVELSLAND, W. J. M., SOMSEN, G. (c/o G. Somsen, Free Univ. Amsterdam, Dept. Chem., Amsterdam, Netherlands): Hydrophobic hydration in mixtures of N,N-dimethylformamide and water. Enthalpies of solution and heat capacities of tetra-n-butylammonium bromide. *J. Chem. Thermodyn.* 8 (1976) 873
- HIGASHIGAKI, Y., CHIHARA, H. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka 560, Japan): Heat capacities and some vibrational properties of rubidium chloride. *Bull. Chem. Soc. Jap.* 49 (1976) 2089
- HILL, R. W., COSIER, J., HUKIN, D. A. (Oxford Univ., Clarendon Lab., Oxford, OX1 3BD England): The specific heats, of Ho, HoAg and LaAg from 0.8 to 4 K. *J. Phys. F* 6 (1976) 1731
- HOCH, M., VERNARDAKIS, T. (Univ. Cincinnati, Dept. Mat. Sci. and Met. Engn., Cincinnati, Ohio, 45221 USA): Thermo-physical properties of liquid metals. *Ber. Bunsen-Ges. Phys. Chem.* 80 (1976) 770
- HÖHNE, G., SCHMIDT, A. H., LECHTKEN, P. (c/o P. Lechtken, Univ. Erlangen Nürnberg, Inst. Org. Chem., D-8520 Erlangen, GFR): Thermoanalyse von kristallinem Adamantylidenadamantan-1,2-dioxetan. *Tetrahedron Lett.* (1976) 3587
- HUTCHINSON, J. M., KOVACS, A. J. (Cranfield Inst. Technol., Cranfield, Bedfordshire, England): A simple phenomenological approach to the thermal behavior of glasses during uniform heating or cooling. *J. Polym. Sci. Polym. Phys. Ed.* 14 (1976) 1575
- IGLESIAS-SICARDI, J. R., GOMES, A. A., JULLIEN, R., COQLIN, B. (Ctr. Orsay, Phys. Solides Lab., Orsay, France): Low-temperature specific heat and electrical resistivity of nearly ferromagnetic actinide systems within a coupled d and f band model. *J. Low Temp. Phys.* 25 (1976) 47
- IINO, M., VANAGISAWA, T., TAKAHASHI, Y., MATSUDA, M. (Tohoku Univ., Chem. Res. Inst. Non Aqueous Solut., Sendai, 980 Miyagi, 980 Japan): Studies of sulfonyl radicals. III. Solvent effects on the thermal decomposition of benzyl phenyl-azo sulfone. *Bull. Chem. Soc. Jap.* 49 (1976) 2272
- IMMONEN, E., KOSKENLINNA, M., NIINISTÖ, L., PAKKANEN, T. (Helsinki Univ. Technol., Dept. Chem., SF-02150 Espo, 15 Finland): Rare earth hydrogenselenites: crystal data and thermal decomposition

- in reducing atmospheres. *Finn. Chem. Lett.* (1976) 67
- INAGAKI, N., NAKAMURA, S., ASAI, H., KATSUURA, K. (Shizuoka Univ., Fac. Engn., Polymer Chem. Sect., Hamamatsu 432, Japan): Phosphorylation of cellulose with phosphorous acid and thermal degradation of the product. *J. Appl. Polym. Sci.* 20 (1976) 2829
- IRVING, R. J., RIBEIRO DA SILVA, M. A. V. (Univ. Surrey, Dept. Chem., Guildford GU2 5XH, England): Thermochemistry of tris (1,1,1-trifluoropentane-2,4-dionato)- and tris (2,2,6,6-tetramethylheptane-3,5-dionato)-aluminium(III). *J. Chem. Soc. Dalton Trans.* (1976) 1940
- IWABUCHI, S., JAACKS, V., KERN, W. (Chiba Univ., Fac. Engn., Dept. Appl. Chem., Chiba 280, Japan): On the thermal degradation of poly-epsilon-caprolactone. *Makromol. Chem.* 177 (1976) 2675
- IWASHITA, T., URYU, N. (Kyushu Univ., Fac. Engn., Dept. Appl. Sci., Fukuoka, 812 Japan): Effect of interchain interactions and anisotropy terms on the specific heat of the linear chain antiferromagnet $\text{CsMnCl}_3 \cdot 2 \text{H}_2\text{O}$. *J. Chem. Phys.* 65 (1976) 2794
- JACHYM, B., SZUMIŁO, A., SODOLKI, H., ZIELIŃSKI, R. (Tech. Univ. Gdańsk, Inst. Phys., PL-80952 Gdańsk, Poland): Thermal conductivity of polyester polymer-carbon black compositions. *Acta Phys. Pol. A* 50 (1976) 125
- JACOBS, J. K., MANCHESTER, F. D. (Univ. Toronto, Dept. Phys., Toronto M5S 1A7, Ontario, Canada): Thermal and motional aspects of the 50 K transition in PdH and PdD. *J. Less-Common Metals* 49 (1976) 67
- JAEGER, W., REINISCH, G. (Akad. Wissenschaft., Inst. Polymerenchem., DDR-153 Teltow-Seehof, GDR): Mikrogelbildung durch thermische Aktivierung. *Pure Appl. Chem.* 46 (1976) 29
- JENNINGS, B. M., LIU, M. T. H. (c/o M. T. H., Liu, Univ. Prince Edward Island, Dept. Chem., Charlottetown, C1A 4P3, Prince Edward, 1 Canada): Mechanism of thermal decomposition of diazirine. Evidence for diazomethane intermediate. *J. Amer. Chem. Soc.* 98 (1976) 6416
- JENSEN, T. E., HANSEN, L. D., EATOUGH, D. J., SAGERS, R. D., IZATT, R. M., CHRISTENSEN, J. J. (Brigham Young Univ., Ctr. Thermochem. Studies., Provo, Utah, 84602 USA): Influence of cytotoxic agents on thermogenesis in streptococcus faecalis. *Thermochim. Acta* 17 (1976) 65
- JESPERSEN, N. (Univ. Texas, Dept. Chem. Austin, Tex., 78712 USA): Thermochemistry of the reaction catalyzed by malate dehydrogenase. *Thermochim. Acta* 17 (1976) 23
- KAILA, M. M., HARRIS, L. B., GOLDSMID, H. J. (Univ. New S. Wales, Sch. Phys., Kensington, 2033 New S. Wales, Australia): Thermoelectric and thermomagnetic properties of plastically bent InSb samples. *Phys. Status A* 37 (1976) K43
- KARWAN, T., MALINOWSKI, C. (Acad. Min. and Met. Cracow, Inst. Non Ferrous Met., Kraków, Poland): Grain size and grain shape effect of zinc sulphide structure and of oxidizing process conditions. *Thermochim. Acta* 17 (1976) 195
- KAZRAGIS, A. P., RAUDELYUNE, A. A., SHESHTOKENE, Y. A. (Vilnius Construct. Engn. Inst., Vilnius, USSR): Interrelation between melting points of metals and their enthalpies at melting point in solid state. *Zh. Fiz. Khim.* 50 (1976) 2368 (In Russian)
- KEER, H. V., DICKERSON, D. L., KUWAMOTO, H., BARRAS, H. L. C., HONIG, J. M. (Indian Inst. Technol., Dept. Chem., Bombay 76, India): Heat capacity of pure and doped V_2O_3 single crystals. *J. Solid State Chem.* 19 (1976) 95
- KEKELIDZE, N. P., KVNIKADZE, Z. V., DAVITAYA, Z. F., LALYKIN, S. P. (Tbilisi State Univ., Tbilisi, GeSSR): Thermo-electric properties of InP-InAs solid solutions. *Sov. Phys. Semicond. transl. Fiz. Tekh. Poluprov.* 10 (1976) 442
- KERRIDGE, D. H., WALKER, S. J. (Univ. Southampton, Dept. Chem., Southampton, SO9, 5NH, Hampshire, England): Molten potassium thiocyanate: the reactions of some compounds of iron, cobalt, nickel, copper and zinc. *J. Inorg. Nucl. Chem.* 38 (1976) 1795
- KESSIS, J. J. (Univ. Paris 7 Ope, F-75005 Paris, France): New results on the theory of differential thermal analysis: the care of base-line shift. *Compt. Rend. C* 283 (1976) 83 (In French)
- KHANLAROV, T. G. (S. M. Kirov State Univ.,

- Baku, AzSSR): Inhibition of the thermal-oxidative degradation of poly-4-methylpentene-1. *Vysokomol. Soedin. A* 18 (1976) 1855 (In Russian)
- KHEMCHANDANI, G. V., SARKAR, S. (Indian Inst. Technol., Dept. Chem. Engn., Bombay, 76 India): Studies on artificial coal. 2. Thermogravimetry, plastometry hidrocarbons. *Fuel* 55 (1976) 303
- KIRILLOVA, É. I., MATVEEVA, E. N., FRATKINA, G. P. (Okhta Plastpolimer Sci. Ind. Assoc., Okhta, USSR): Dependence of the thermal stability of polystyrene on composition. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 49 (1976) 412
- KIRK, D. L., RAVEN, M. S. (Univ. Nottingham, Dept. Electr. and Elect. Engn. Interface Phys. Grp., Nottingham, NG7 2RD England): A theory dealing with the vacuum evaporation and deposition of binary semiconducting compounds with special reference to the thermal, evaporation of zinc selenide. *J. Phys. D* 9 (1976) 2015
- KISHORE, K., PAI VERNEKER, V. R., NAIR, M. N. R. (Indian Inst. Sci., Dept. Inorg. and Phys. Chem., High Energy Solids Lab., Bangalore, 560012 India): Thermal degradation of polystyrene. *J. Appl. Polym. Sci.* 20 (1976) 2355
- KLEMENT, W. (CSIR, Natl. Phys. Res. Lab., Pretoria, South Africa): Melting and solid-solid transition temperatures at high pressures for NH_4SCN , RbSCN , TlSCN and CsSCN . *Bull. Chem. Soc. Jap.* 49 (1976) 2148
- KOBAYASI, S., SHINOHARA, M., ÔNO, K. (Univ. Tokyo, Inst. Solid. State Phys., Minato-Ku, Tokyo 106, Japan): Thermo-metry using 1/8W carbon resistors in a temperature region around 10 mK. *Cryogenics* 16 (1976) 597
- KOBETS, L. V., UMREIKO, D. S. (V. I. Lenin State Univ., Appl. Phys. Inst., Minsk, BeSSR): Thermal stability of $\text{NH}_4\text{UO}_2\text{PO}_4 \cdot 3 \text{H}_2\text{O}$. *Zh. Neorg. Khim.* 21 (1976) 2161 (In Russian)
- KOCH, E., STILKERIEG, B. (Max Planck Inst. Kohlenforsch., Inst. Strahlenchem., D-4330 Mülheim, GFR): DTA curves and non-isothermal reaction rates. *Thermochim. Acta* 17 (1976) 1
- KOLESOV, V. P., SLAVUTSKAYA, G. M., DITYAT'eva, L. N. (Moscow State Univ., Chem. Dept., Moscow, 117234 USSR): Thermodynamic properties of oxygen-containing organofluorine compounds. Enthalpies of formation of dimethylperfluoroglutarate and perfluoro-di-n-amyl ether. *J. Chem. Thermodyn.* 8 (1986) 907
- KOL'TSOVA, S. V., SAMSONOV, G. V. (Acad. Sci. USSR, Inst. Macromolec. Cpd., Leningrad, USSR): Kinetics of heat inactivation of trypsin in complex with poly-4(5)-vinylimidazole. *Bull. Acad. Sci. USSR Div. Chem. Sci. transl. Izv. Akad. Nauk SSSR Ser. Khim.* 25 (1976) 157
- KORSHAK, V. V., PAVLOVA, S. S. A., GRIBKOVA, P. N., BALYKOVA, T. N., BEKASOVA, N. I., PRIGOZHINA, M. P., KOMAROVA, L. G. (Acad. Sci. USSR, Inst. Organo-element. Cpd., Moscow, USSR): On the comparative thermal stability of poly-amides containing m- and p-carborane fragments. *Vysokomol. Soedin. A* 18 (1976) 2040 (In Russian)
- KRASNOKUTSKII, Y. I., GANZ, S. N., PARKHOMENKO, V. D. (F. E. Dzerzhinskii Chem. Technol. Inst., Dnepropetrovsk, UkrSSR): Thermodynamic analysis of certain high-temperature methods for production of boron nitride. *J. Appl. Chem. USSR transl. Zh. Prikl. Khim.* 49 (1976) 307
- KRUG, R. R., HUNTER, W. G., GRIEGER, R. A. (Univ. Wisconsin, Dept. Chem. Engn., Madison, Wis., 53706 USA): Enthalpy-entropy compensations. 2. Separation of the chemical from the statistical effect. *J. Phys. Chem.* 80 (1976) 2341
- KRUG, R. R., HUNTER, W. G., GRIEGER, R. A. (Univ. Wisconsin, Dept. Chem. Engn., Madison, Wis., 53706 USA): Enthalpy-entropy compensations. 1. Some fundamental statistical problems associated with the analysis of van't Hoff and Arrhenius data. *J. Phys. Chem.* 80 (1976) 2335
- KSANDOPULO, G. I.: Properties of substances for extinguishing fire of gases and polymers. *Zh. Vses. Khim. Obshch. Mendeleyeva* 21 (1976) 396 (In Russian)
- KUCHARCZYK, D., PIETRASZKO, A., ŁUKASZEWCZ, K. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., PL-50329 Wrocław, Poland): Temperature dependence of lattice parameters of NaNO_2 single

- crystals. *Phys. Status Solidi A* 37 (1976) 287
- KULBA, F. Y., YAKOVLEV, Y. B., ZENCHENKO, D. A. (A. I. Gerssen Teachers Inst., Leningrad, USSR): Calorimetry of thallium(III) ion hydrolysis in aqueous-dimethyl sulfoxide and aqueous-acetonitrile solutions. *Zh. Fiz. Khim.* 50 (1976) 2216 (In Russian)
- KULIEV, A. M., KULIEV, A. B., GASANOV, M. S., ZEINALOVA, G. A., NECHITAILO, N. A., DZYUBINA, M. A.: Thermal decomposition of 1-(4-methoxyphenylthio)-2,2,2-trichloroethanol in presence of iron. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 49 (1976) 416
- KUNIHISA, K. S., HAGIWARA, S. (Natl. Chem. Lab. Ind., Shibuyaku, Tokyo 151, Japan): Apparatus for thermal analytic microscopy and its application to cholesteryl nonanoate. *Bull. Chem. Soc. Jap.* 49 (1976) 2658
- KUSZNIR, N. J., BOTT, M. H. P. (Univ. Durham, Dept. Geol. Sci., Durham, DH1 3LE England): A thermal study of the formation of oceanic crust. *Geophys. J. Roy. Astron. Soc.* 47 (1976) 83
- KUZNETSOVA, A. G., BOCHKAREV, V. N., IVANOV, V. I., KISIN, A. V., POLIVANOV, A. N., SOKOLOV, V. V., TURKELTAUB, G. N.: Thermal destruction products of methyl-phenylcyclotetrasiloxane. *Zh. Otkr. Khim.* 46 (1976) 2025 (In Russian)
- KVACHADZE, V. G., AKHVLEDIANI, Z. G. (Acad. Sci. GeSSR, Phys. Inst., Tbilisi, GeSSR): Influence of γ -irradiation on the thermal conductivity of KCl : KOH crystals. *Phys. Status Solidi B* 77 (1976) K21
- LA IGLESIAS, A., CABALLERO, M. A. (Univ. Complutense Madrid, Fac. Ciencias Geol., Dept. Cristalog. y Mineral., Madrid, Spain): Thermal decomposition of the villamaninite, CuNiCoFe(SeS)₂. *Bull. Soc. Fr. Mineral. Cristall.* 99 (1976) 243
- LALAUZE, R. L., SOUCHON, A. M., SOUSTELLE, M. M. P. (Ecole Natl. Super Mines, Ctr. Chim. Phys., St. Etienne, France): Theoretical study of heterogeneous reaction kinetics: a comparison between microcalorimetric and thermogravimetric curves. *Oxidat. Metal.* 10 (1976) 105
- LAURENKO, V. A., POMYTKIN, A. P., KISLYJ, P. S., GRABCHUK, B. L. (Acad. Sci. UkrSSR, Mat. Technol. Res. Inst., Kiev, UkrSSR): Kinetics of high-temperature oxidation of boron carbide in oxygen. *Oxidat. Metal.* 10 (1976) 85
- LAURENKO, V. A., POMYTKIN, A. P., LUGOVSKAYA, E. S. (Acad. Sci. UkrSSR, Mat. Technol. Res. Inst., Kiev, UkrSSR): High-temperature oxidation of SiC in a glow-discharge oxygen plasma. *Oxidat. Metal.* 10 (1976) 97
- LAWRENCE, W. R., ALLEN, R. E. (Texas A and M Univ., Dept. Phys., College Stn., Tex., 77843 USA): Calculations of heat capacities of adsorbates. *Phys. Rev. B* 14 (1976) 2910
- LAZAREV, V. M., PROSHINA, O. P., SUPONITSKII, Y. L., MAIER, A. I., KARAPETYANTS, M. K. (D. I. Mendeleev Chem., Technol. Inst., Moscow, USSR): High temperature calorimeter for determination of reaction enthalpies. *Zh. Fiz. Khim.* 50 (1976) 2160 (In Russian)
- LEBEDEVA, N. D., GUTNER, N. M., KISELEVA, N. N. (Leningrad Appl. Chem. Inst., Leningrad, USSR): Correlation of additivity deviation in formation enthalpies of ethylene and benzene derivatives with sigma-para-constants. *Zh. Org. Khim.* 12 (1976) 1618 (In Russian)
- LEMBERGER, T. R., GINSBERG, D. M. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): Comparison of the thermal conductivity of superconducting Zn-Mn alloys with Shiba's theory. *Phys. Rev. B* 14 (1975) 1785
- LEVITSKII, V. A., TSAGAREISHVILI, D. S., GVELESIANI, G. G. (Acad. Sci. GeSSR, Met. Inst., Tbilisi, GeSSR): Enthalpy and specific heat of strontium and barium zirconates at high temperatures. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 14 (1976) 69
- LIBMAN, B. Y., CHEREPANOV, S. I., SOSUNOV, A. A., RADCHENKO, S. P.: Methods for calculating of fire hazard of combustible substances. Temperature dependence of self ignition of alcohols on their boiling point. *Zh. Vses. Khim. Obshch. Mendeleyeva* 21 (1976) 549 (In Russian)
- LIFSHITZ, A., FRENKLACH, M., BURCAT, A. (Hebrew Univ. Jerusalem, Dept. Phys. Chem., Jerusalem, 91000 Israel): Pyrolysis of allene and propyne behind reflected shocks. *J. Phys. Chem.* 80 (1976) 2437

- LIN, L. Y., COURTNEY, T. H., STARK, J. P., RALLS, K. M. (Drexel Univ., Dept. Mat. Engn., Philadelphia, Pa., 19104 USA): The thermal stability of the fibrous copper-chromium eutectic. *Met. Trans. A* 7 (1976) 1435
- LISTER, M. W., POYNTZ, R. B. (Lash Miller Chem. Labs., Dept. Chem., Toronto, M5S 1A1 Ontario, Canada): Relative alkyne-metal bond strengths in some platinum(O) compounds. *Thermochim. Acta* 17 (1976) 577
- LIVANOVA, N. M., RAPORT, N. Y., MILLER, V. B., MUSAELYAN, I. N. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Durability of oriented polypropylene films under the conditions of thermal-oxidative degradation. *Vysokomol. Soedin. A* 18 (1976) 2260 (In Russian)
- LÓPEZZ, A. R., DIXON, G. S. (Oklahoma State Univ., Stillwater, Okla., 74074 USA): Thermal conductivity of $KMgF_3 : Cr^{2+}$. *Phys. Lett. A* 58 (1976) 267
- LOUDEN, K. E., FORSYTH, D. W. (MIT W. H. O. I. Joint Program Oceanog., Dept. Earth and Planetary Sci., Cambridge, Mass., 02139 USA): Thermal conduction across fracture zones and the gravitational edge effect. *J. Geophys. Res.* 8 (1976) 4869
- LUFF, B. B., REED, R. B., NASH, R. H. (Tennessee Valley Author., Div. Chem. Dev., Muscle Shoals, Ala., 35660 USA): Low-temperature heat capacity and entropy of diammoniumorthophosphate. *J. Chem. Eng. Data* 21 (1976) 418
- LUFF, B. B., WILLIARD, J. W. (Tennessee Valley Author., Div. Chem. Dev., Muscle Shoals, Ala., 35660 USA): Low-temperature heat capacity and entropy of pentammonium tripolyphosphate monohydrate. *J. Chem. Eng. Data* 21 (1976) 420
- LUMBIARRES, J., TORRA, V. (Univ. Autònoma Barcelona, Fac. Fis., Dept. Termol., Barcelona, 16 Spain): Calorimetry by power feedback. *An. Fis.* 72 (1976) 80
- LUPEIKO, T. G., BELYAEV, I. N., TARASOV, N. I. (Rostov State Univ., Rostov, USSR): Thermodynamics of melt-solid state equilibria according to data of thermal analysis. 1. Derivation and study of crystallization isotherm equations for components of ternary systems. *Zh. Fiz. Khim.* 50 (1976) 1985 (In Russian)
- LURE, B. A., SVETLOV, B. S. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Thermal decomposition of liquid butyl nitrate. *Zh. Fiz. Khim.* 50 (1976) 2240 (In Russian)
- LUTZ, H. D., ELSURADI, S. (Gesamthsch., Lehrstuhl Anorg. Chem., D-5000 Siegen, GFR): Zur Kenntnis der Calcium-, Strontium-, Barium-, Blei- und Cadmiumsulfite. Spektroskopische, röntgenographische und thermoanalytische Untersuchungen. *Z. Anorg. Allg. Chem.* 425 (1976) 134
- MADSEN, H. E. L., BOISTELLE, R. (Roy. Vet. and Agr. Univ., Dept. Chem., DK-1871 Copenhagen V, Denmark): Calculation of lattice sums and heats of sublimation of long-chain even n-alkanes. *Acta Crystallogr. A* 32 (1976) 828
- MAGRUPOV, M. A., YUSUPOV, B. D., AKHRAROV, M. K., GAFUROV, I., ABDURAKHMANOV, U. (V. I. Lenin State Univ., Tashkent, UzSSR): Study of the influence of the surface modification of mineral fillers by heat treated polyacrylonitrile on the degradation and electrical conductivity of polyethylene. *Vysokomol. Soedin. A* 18 (1976) 2203 (In Russian)
- MAHL, B. S., KOONER, Z. S., KHURMA, J. R. (Punjab Agr. Univ., Dept. Chem. and Biochem., Ludhiana, Punjab, India): Thermodynamics of binary mixtures: excess enthalpies of 1,2-dibromoethane mixtures with benzene, cyclohexane, carbon tetrachloride and dioxane at 25 °C. *Thermochim. Acta* 17 (1976) 256
- MARCHAJ, A., PLESIŃSKI, A., STASICKA, Z. (Jagiellonian Univ., Dept. Inorg. Chem., PL-30060 Kraków, Poland): Polarographic and spectrophotometric studies on photochemical and thermal reactions of octacyanomolybdate(V) complex. III. An oxidation path in redox decomposition. *Roczn. Chem.* 50 (1976) 1239
- MARCUS, Y. (Hebrew Univ. Jerusalem, Dept. Inorg. and Anal. Chem., Jerusalem, 91000 Israel): Enthalpy and entropy of transfer of lithium halides between water and long-chain alcohols. *J. Phys. Chem.* 80 (1976) 2451
- MARSCH, E. (Univ. Kiel, Inst. Theoret. Phys., D-23001 Kiel, GFR): Electrical

- and thermal conductivity of the neutral Hubbard model. *Z. Phys. B* 25 (1976) 83
- MARTENS, R., GENTSCH, H., FREUND, F. (Univ. Köln. Inst. Mineral., D-5000 Köln 1, FRG): Hydrogen release during the thermal decomposition of magnesium hydroxide to magnesium oxide. *J. Catal.* 44 (1976) 366
- MARTIN, G., BARROETA, N. (Inst. Venezolano Invest. Cient., Ctr. Petr. y Chem., Caracas, Venezuela): Gas-phase thermolysis of sulphur compounds. I. Di-t-butyl disulphide. *J. Chem. Soc. Perkin Trans. II* (1976) 1421
- MARTOSUDIRJO, S., PRATT, J. N. (Indonesian Natl. Phys. Inst., Bandung, Indonesia): Enthalpies of formation of solid nickel—gallium and nickel—germanium alloys. *Thermochim. Acta* 17 (1976) 183
- MASHIMA, M., TAKASE, T., FUKUDA, S., BABA, N. (Niigata Univ., Fac. Engn., Nagaoka 940, Japan): The heat of solution and solvation number of lithium salts in water—alcohol mixtures. *Bull. Chem. Soc. Jap.* 49 (1976) 2653
- MATSUSHIMA, T., WHITE, J. M. (Hokkaido Univ., Catalysis Res. Inst., Sapporo, Hokkaido 060, Japan): Thermal decomposition of methanol absorbed on alumina. *J. Catal.* 44 (1976) 183
- MCCALLUM, R. W., JOHNSTON, D. C., LUENGO, C. A., MAPLE, M. B. (Univ. Calif. San Diego, Inst. Pure and Appl. Phys. Sci., La Jolla, Calif., 92037 USA): Superconducting and normal state properties of $\text{Li}_{1+x}\text{Ti}_{2-x}\text{O}_4$ spinel compounds. II. Low temperature heat capacity. *J. Low Temp. Phys.* 25 (1976) 177
- MCDERMOTT, J. X., WHITE, J. F., WHITESIDES, G. M. (c/o G. M. Whitesides, MIT, Dept. Chem., Cambridge, Mass., 02139 USA): Thermal decomposition of bis-(phosphine) platinum(II) metallocycles. *J. Amer. Chem. Soc.* 98 (1976) 6521
- MEYER, R., GIUSTI, G., MEYER, M., VINCENT, E. J. (Fac. Sci. et Tech., St. Jerome, F-13397 Marseille 4, France): Enthalpies de mélange du diméthoxy-2,2 propane avec différents solvants. *Compt. Rend. C* 283 (1976) 87
- MILLER, J. F., CATON, R. H., SATTERTHWAITE, C. B. (Univ. Illinois, Dept. Phys., Urbana, Ill., 61801 USA): Low-temperature heat capacity of normal and superconducting thorium hydride and thorium deuteride. *Phys. Rev. B* 14 (1976) 2795
- MILLS, B. E., HUGHES, D. O. (North Staffordshire, Coll. Technol., Dept. Chem., Staffordshire, England): Effects of carbonation and hydrothermal treatments on some properties of calcium monoaluminate mortars. *J. Appl. Chem. Biotechnol.* 26 (1976) 506
- MITANI, T. (Nat'l. Aerosp. Lab., Kakuda Branch., Miyagi, Japan): Pit formation on the accelerated solid propellant combustion surface. *AIAA J.* 14 (1976) 1338
- MONAKHOV, V. T.: Fire prevention and classification of indicators, designating fire hazard of substances. *Zh. Vses. Khim. Obshch. Mendeleva* 21 (1976) 366 (In Russian)
- MORI, K., SAITO, Y. (Toyama Univ., Fac. Literature and Sci., Toyama 930, Japan): Electrical and thermal conductivity of zinc alloy. *Jap. J. Appl. Phys.* 15 (1976) 1997
- MORIMOTO, T., NAONO, H., NOSO, K., SHIGETOMI, Y. (Okayama Univ., Fac. Sci., Dept. Chem., Okayama 700, Japan): Heat of ion exchange reaction as determined by means of flow micro-calorimetry. I. Cation exchange in aqueous system. *Bull. Chem. Soc. Jap.* 49 (1976) 2374
- MOSIN, A. M.: Heat of atomization of vinyl trichlorosilane. *Zh. Fiz. Khim.* 50 (1976) 2131 (In Russian)
- MOSKALEV, P. N., MISHIN, V. Y., RUBSTOV, E. M., KRIN, I. S. (V. G. Khlopin Radium Inst., Leningrad, USSR): Synthesis and thermal stability of diphtalocyanine complexes in lanthanide series of hafnium, thoriun and uranium. *Zh. Neorg. Khim.* 21 (1976) 2259 (In Russian)
- MOURA RAMOS, J. J., STIEN, M. L., REISSE, J. (Univ. Libre Bruxelles, Chim. Org. E. P. Lab., B-1050 Brussels, Belgium): Calorimetric studies in solution solvent effect on the carbonyl $n \rightarrow \pi^*$ transition in relation with solvation of the ground and excited states. *Chem. Phys. Lett.* 42 (1976) 373
- MRAW, S. C., STAVELEY, L. A. K. (Rice Univ., Dept. Chem. Engn., Houston, Tex., 77001 USA): A calorimetric investigation of the polymorphism of caesium nitrite. *J. Chem. Thermodynam.* 8 (1976) 1001

- MULLER, J., JOUBERT, J. C., MAREZIO, M. (Lab. Rayons 10, 166X-25 Ave. Martyrs, F-38042 Grenoble, France): Etude des phases du système FeVO_4 — VO_2 , obtenues par synthèse hydrothermale à 70 kbar et 1000 °C. *J. Solid State Chem.* 18 (1976) 357
- MURAD, E., HILDEBRAND, D. L. (USAF, Geophys. Lab., LG Hanscom AFB, Mass., 01731 USA): Thermochemical properties of gaseous EuO. *J. Chem. Phys.* 6 (1976) 3250
- NABAR, M. A., PARALKAR, S. V. (Univ. Bombay, Dept. Chem., Bombay, 400029 India): Studies on selenates. II. Thermal decomposition of heavier rare-earth selenate hydrates. *Thermochim. Acta* 17 (1976) 239
- NAGAO, M., SAWA, G., FUKUI, M., IEDA, M. (Nagoya Univ., Dept. Elect. Engn., Nagoya, 464 Japan): Dielectric breakdown of polyimide film in high temperature region. *Jap. J. Appl. Phys.* 15 (1976) 1813
- NAG, K., ROY, A. (Indian Assoc. Cultivation Sci., Dept. Inorg. Chem., Calcutta, 700032 India): Rare earth trisoxalatocobaltates(III). A precursor for rare earth cobaltites(III). *Thermochim. Acta* 17 (1976) 247
- NAGY, M., KOVÁCS, R. (SziKKTI, 1300 Budapest, Pf. 112, Hungary): Utilisation of chemical gypsum in the cement industry. *Építőanyag* 28 (1976) 297 (In Hungarian)
- NAGY, T. T., KELEN, T., TURCSÁNYI, B., TÜDŐS, F. (Hungarian Acad. Sci., Cent. Res. Inst. Chem., H-1088 Budapest, Hungary): Oxidation of thermally degraded PVC. *React. Kinet. Catal. Lett.* 5 (1976) 303
- NAGY, T. T., TURCSÁNYI, B., KELEN, T., TÜDŐS, F. (Hungarian Acad. Sci., Cent. Res. Inst. Chem., H-1088 Budapest, Hungary): Cross-linking and gel formation in the thermal degradation of PVC. *React. Kinet. Catal. Lett.* 5 (1976) 309
- NAULIN, C., BARBERI, P., RIGNY, P. (Univ. Limoges, Chim. Minerale B. Lab., F-87100 Limoges, France): Calcul de la forme des pics de calorimetrie lors d'une transition cristalline. *J. Fluorine Chem.* 8 (1976) 429
- NAUMOVA, S. F., BALYKINA, M. V., AKULICH, Z. I., VELIKANOVA, L. V., BALBOTUNOVA, T. N. (Acad. Sci. BeSSR, Phys. Org. Chem. Inst., Minsk, BeSSR): Styrene alkylation of 4,4-dioxidifinyl propane and investigation of the inhibiting effect of synthesis products against thermooxidizing polyethylene destruction. *Dokl. Akad. Nauk BeSSR* 20 (1976) 809 (In Russian)
- NAVROTSKY, A., COONS, W. E. (Arizona State Univ., Dept. Chem., Tempe, Ariz., 85281 USA): Thermochemistry of some pyroxenes and related compounds. *Geochim. Cosmochim. Acta* 40 (1976) 1281
- NICHOLS, N., SKÖLD, R., SPINK, C., WADSÖ, I. (Perstorp AB, S-28400 Perstorp, Sweden): Thermochemistry of solutions of biochemical model compounds. $6\alpha, \omega$ -dicarboxylic acids, -diamines, and -diols in aqueous solution. *J. Chem. Thermodyn.* 8 (1976) 993
- NIKOKA, T., MITANI, T., ISHII, S. (Nat'l. Aerosp. Lab., Kakuda Branch, Miyagi, Japan): Transient period of the acceleration-produced burning rate augmentation. *AIAA J.* 14 (1976) 1165
- NISHIZAKI, H. (Govt. Ind. Dev. Lab., Toyohira-ku, Sapporo, 06101 Japan): Effect of contact particles on thermal decomposition of polystyrene in fluidized bed. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1976) 1481 (In Japanese)
- NOLTIMIER, H. C., KOPACZ, M. A. (Ohio State Univ., Dept. Geol. and Mineral., Columbus, Ohio, 43210 USA): Thermo-magnetic study of coal and associated roof shale. *IEEE Trans. Magn.* 12 (1976) 528
- NOMURA, Y., HATANAKA, N., TAKEUCHI, Y. (Univ. Tokyo, Coll. Gen. Educ., Dept. Chem., Meguro-ku, Tokyo 153, Japan): Thermal decomposition of vinyl azides in acrylic acid derivatives: synthesis of 1-vinylaziridines. *Chem. Lett.* (1976) 901
- NOMURA, T., YAMAGUCHI, T., KUNO, H. (Keio Univ., Fac. Engn., Kohoku-ku, Yokohama 223, Japan): Thermal decomposition of coprecipitated Fe-Al hydroxides. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1976) 1177 (In Japanese)
- NOVIKOV, I. I., ROSHCHUPKIN, V. V., FORDEEVA, L. K. (A. A. Baikov Met. Inst., Moscow, USSR): Enthalpy and specific heat of molten rubidium at 320–1220 K.

- High Temp.* transl. *Teplofiz. Vysok. Temp.* 14 (1976) 66
- OBERMANN, A., WANZL, W., MAHNIG, M., WICKE, F. (Univ. Münster, Inst. Phys. Chem., D-4400 Münster, GFR): Mössbauer effect, magnetic susceptibility and electronic heat capacities in the palladium-vanadium-hydrogen and vanadium-iron-hydrogen systems. *J. Less-Common Metals* 49 (1976) 75
- OBRATSOV, V. I., KHRUSTALEVA, A. A (N. K. Krupskaya Teachers Inst., Moscow, USSR): Heat of evaporation and degree of association of liquids. *Zh. Fiz. Khim.* 50 (1976) 2219 (In Russian)
- OCHIAI, T., YOSHIDA, M., SIMAMURA, O. (Univ. Tokyo, Fac. Sci., Dept. Chem., Tokyo, 113 Japan): A new type of induced decomposition. IV. Pyrolysis of t-butyl peroxy-3-butenoate in the gas phase. *Bull. Chem. Soc. Jap.* 49 (1976) 2641
- ODA, M., MIYAZAKI, H., KITAHARA, Y. (Tohoku Univ. Fac. Sci., Dept. Chem., Sendai, Miyagi, 980 Japan): Thermolyses of 1,8-cis and trans tricyclo[6.4.0.0.3,6]dodeca-4,10-diene-2,7-dione sequential ring opening and intramolecular Diels-Alder reaction leading to a cage molecule and marked dependence of reaction on configuration and substituent. *Chem. Lett.* (1976) 1011
- OGAWA, S. (Electrotech. Lab., Tokyo 188, Japan): Specific heat study of magnetic ordering and band structure of 3d transition metal disulfides having the pyrite structure. *J. Phys. Soc. Jap.* 41 (1976) 462
- OGURA, K., OZAWA, K., IWAKURA, Y., NAKAMURA, S. (Seikei Univ., Coll. Technol., Dept. Ind. Chem., Musashino 180, Japan): Thermally induced random coil β transition coexisted with the usual α - ω transition of poly(β -benzyl-L-aspartate). *Jap. Polym. Sci. Techn.* 33 (1976) 479 (In Japanese)
- O'HARE, P. A. G., BOERIO, J., HOEKSTRA, H. R. (Argonne Natl. Lab., Div. Chem. Engr., Argonne, Ill., 60439 USA): Thermochemistry of uranium compounds. VIII. Standard enthalpies of formation at 298.15 K of the uranates of calcium (CaUO_4) and barium (BaUO_4). Thermodynamics of the behavior of barium in nuclear fuels. *J. Chem. Thermodyn.* 8 (1976) 845
- OLAFSSON, P. G., BRYAN, A. M., LAU, K. (SUNY Albany, Dept. Chem., Albany, N. Y., 12222 USA): A differential scanning calorimetric - thin-layer chromatographic study of 5-halo-2'-deoxyribonucleosides. *J. Chromatogr.* 124 (1976) 388
- ONCESCU, T., JURCONI, E. (Polytech. Inst., Bucharest, Fac. Chem., Dept. Phys. Chem., Bucharest, Romania): Solvent effect on the kinetics of the thermal decomposition of dioxalatodiaquomanganate(III) in dimethylsulphoxide-water mixtures. *Rev. Roum. Chim.* 21 (1976) 985
- OOTA, A., MASUDA, Y. (Nagoya Univ., Dept. Phys., Chikusa-ku, Nagoya 464, Japan): Investigation of thermal conductivity of Nb within the framework of strong coupling theory. *J. Phys. Soc. Jap.* 41 (1976) 434
- OPYRCHAL, J., BIEGAŃSKI, Z. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., Wrocław, Poland): Low-temperature specific heats of erbium dihydride. Magnetic transition and crystal field splitting effects. *Solid State Commun.* 20 (1976) 261
- OSMAN, A. M., BADR, M. Z. A., ABDEL-RAHMAN, A. E. (c/o M. Z. A. Badr, Univ. Assiut, Fac. Sci., Dept. Chem., Assiut, Egypt): Molecular rearrangements. VII. IV-alkylarylamines(III). Thermal rearrangement of secondary aryl-amines. *Bull. Chem. Soc. Jap.* 49 (1976) 2611
- OTA, K., TSUKAMOTO, Y. (Kyushu Inst., Technol., Dept. Chem., Tobata-ku, Kitakyushu 804, Japan): Thermal behavior of lithium 4-hydroxyisophthalates. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1976) 1332 (In Japanese)
- PAI VERNEKER, V. R., KISHORE, K. (Indian Inst. Sci., Dept. Inorg. and Phys. Chem., High Energy Solids Lab., Bangalore, 560012 India): Combustion and thermal decomposition characteristic of composite solid propellants. *Thermochim. Acta* 17 (1976) 93
- PAI VERNEKER, V. R., KISHORE, K., PRASAD, G. (Indian Inst. Sci., Dept. Inorg. and Phys. Chem., High Energy Solids Lab., Bangalore, 560012 India): Effect of pre-heating on the burning rate of solid propellants. *AIAA J.* 14 (1976) 1330

- PARK, C. (Ames Res. Ctr., NASA Moffett Field, Calif., 94035 USA): High temperature reformation of aluminium and chlorine compounds behind the Mach disk of a solid-fuel rocket exhaust. *Atmos. Environ.* 10 (1976) 693
- PARVIN, M., WILLIAMS, J. G. (Aria Mehr Univ., Dept. Mech. Engn., Teheran, Iran): The effect of temperature on the fracture of rubber modified polystyrene. *J. Mater. Sci.* 11 (1976) 2045
- PATTERSON, D., BARBE, M. (McGill Univ., Dept. Chem., Montreal H3C 3G1, Quebec, Canada): Enthalpy-entropy compensation and order in alkane and aqueous systems. *J. Phys. Chem.* 80 (1976) 2435
- PAULIK, F., PAULIK, J. (Tech. Univ. Inst. Gen. Analyt. Chem., H-1521 Budapest, Hungary): Derivatograph — complex thermoanalytical measuring instrument. *Mérés és Automatika* 24 (1976) 323 (In Hungarian)
- PAVLOV, I. E., ALYAMOVSKII, S. I., SHVEIKIN, G. P. (Acad. Sci. USSR, Ural. Sci. Ctr., Chem. Inst., Sverdlovsk, USSR): Thermal stability of $TiC_xO_yH_m$ cubic phase. *Zh. Fiz. Khim.* 50 (1976) 2127 (In Russian)
- PEKSHEVA, N. P., VORONTSOV, E. S. (Voronezh Polytechn. Inst., Voronezh, USSR): Influence of the method of surface polishing on heat resistance of titanium alloys. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 49 (1976) 502
- PERSHKO, A. A., GLUSHCHENKO, V. Y.: Differential heats and entropies of adsorption of benzene derivatives from their aqueous solutions on graphite. *Zh. Fiz. Khim.* 50 (1976) 2080 (In Russian)
- PETIT, J., QUINTARD, M. (Ecole Natl. Super Mecanique et Aerotech., Mecanique et Phys. Mat. Lab., F-86034 Poitiers, France): Frottement intérieur du titane écroui dans le domaine des basses températures. *Phys. Status Solidi A* 37 (1976) 257
- PETROVA, ZH. K., KOFRMAN, N. A. (Acad. Sci. BeSSR, Solid State Phys. and Semicond. Phys. Inst., Minsk, BeSSR): Heat capacity and some thermodynamic properties of cadmium selenide. *Dokl. Akad. Nauk BeSSR* 20 (1976) 688 (In Russian)
- PHILLIPS, D. C., SMITH, J. D. B. (Westinghouse Res. Labs., Pittsburgh, Pa., 15235 USA): The organic particulate thermal analysis (OPTA) of amine arenesulfonates, malonic acids, and metal acetyl-acetonates. *Anal. Lett.* 9 (1976) 741
- PIERS, E., LAU, C. K., NAGAKURA, I. (Univ. British Columbia, Dept. Chem., Vancouver, V6T 1W5, British Columbia, Canada): Preparation and thermal rearrangement of β -cyclopropyl- α,β -unsaturated ketones. Convenient cyclopentane annelations. *Tetrahedron Lett.* (1976) 3233
- PIERS, E., NAGAKURA, I. (Univ. British Columbia, Dept. Chem., Vancouver, V6T 1W5 British Columbia, Canada): Efficient preparation and thermal rearrangement of β -(2-vinylcyclopropyl)- α,β -unsaturated ketones. Convenient cycloheptane annelations. *Tetrahedron Lett.* (1976) 3237
- PILAI, I. M., BELIKOV, A. B., KAZANSKAYA, L. L., ASHCHEULOV, A. A. (Chernovtsy State Univ., Chernovtsy, USSR): Influence of anisotropy of thermal conduction on the transverse thermoelectric power in anisotropic media. *Sov. Phys. Semicond.* transl. *Fiz. Tekh. Poluprov.* 10 (1976) 604
- PILLAI, P. K. C., NAIR, P. K., NATH, R. (Indian Inst. Technol., Dept. Phys., New Delhi, 110029 India): Study of polymer crosslinking by thermally stimulated current. *Polymer* 17 (1976) 921
- POINTUD, Y., MOREL, J. P., JUILLARD, J. (c/o J. Juillard, Univ. Clermont Ferrand, Etude Interactions Solutés Solvants Lab., F-63170 Aubière, France): Solute-solvent interactions in water-tert-butyl alcohol mixtures. 7. Enthalpies of transfer for LiCl and HCl as obtained through dilution of an aqueous concentrated electrolyte solution in hydroalcoholic media. *J. Phys. Chem.* 80 (1976) 2381
- POLYAKOV, V. F., MALKIN, A. YA., ARUTYUNOV, B. A., PLATONOV, V. A., VASIL'eva, N. V., KULICHIKHIN, V. G. (Moscow Chem. Machinery Inst., Moscow, USSR): Method of determination of the thermal effects in the shear flow of polymer systems. *Vysokomol. Soedin. A* 18 (1976) 2134 (In Russian)
- POLYAKOV, Y. A., SAFRONOV, V. I.: Efficiency of thin-film thermometry in measuring the radiant flux density of pulsed lasers. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 14 (1976) 139

- POPOVIĆ, S., KONJEVIC, N. (Inst. Phys., Yu-11001 Beograd, Yugoslavia): On the thermal conductivity of hydrogen at elevated temperatures. *Z. Naturforsch. A 31* (1976) 1042
- PORSHNEV, Y. N., ERIKHOV, V. I., ANDRONOVA, N. A. (Moscow Org. Intermed. Prod. and Dye Inst., Moscow, USSR): Thermal reaction of azulene with diphenyltriketone. *Zh. Org. Khim.* 12 (1976) 1827 (In Russian)
- PORSHNEV, Y. N., DVORIKOVA, T. N., MOCHALIN, V. B. (Moscow Org. Intermed. Prod. and Dye Inst., Moscow, USSR): High-temperature alkylation of thiocyanoderivatives of 4,6,8-trimethylazulene. *Zh. Org. Khim.* 12 (1976) 2019 (In Russian)
- PREDA, M., DINESCU, R. (Polytech. Inst. Bucharest, Bucharest, Romania): Thermal equilibria in the binary systems MgO—CeO₂, CaO—CeO₂, SrO—CeO₂, BaO—CeO₂. *Rev. Roum. Chim.* 21 (1976) 1023
- PRIKHODKO, E. V.: Physicochemical properties of I—VI group metals of periodic system. *Zh. Fiz. Khim.* 50 (1976) 1946 (In Russian)
- PRILEPIN, V. I., LAZNEV, V. K., IVANOV, N. P., BELALOV, V. Z. (Acad. Sci. BeSSR, Engn. Phys. Inst., Minsk, BeSSR): Electrical resistance and heat capacity of the eutectic alloys Ni—Nb—Al and Co—Nb—Al. *Dokl. Akad. Nauk BeSSR* 20 (1976) 793 (In Russian)
- PRINGLE, J. E. (Inst. Astron., Madingley Road, Cambridge CB3 OHA, England): Thermal instabilities in accretion discs. *Mon. Notic. Roy. Astron. Soc.* 177 (1976) 65
- RACCANELLI, A., MADDALENA, A. (Univ. Padua, Ist. Chim. Ind., I-35100 Padua, Italy): Electrical conductivity of heat-treated SnO₂ films. *J. Amer. Ceram. Soc.* 59 (1976) 425
- RADECKI, A., WESOŁOWSKI, M. (Med. Acad., Inst. Chem. and Anal., PL-80416 Gdańsk, Poland): The thermal decomposition of bismuth(III) compounds used in medicine. *Thermochim. Acta* 17 (1976) 217
- RADTSIG, V. A., RAINOV, M. M. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Kinetics of the elementary re-
- actions of the low-temperature oxidation of polystyrene. *Vysokomol. Soedin. A* 18 (1976) 2022 (In Russian)
- RAJESHWAR, K., SECCO, E. A. (c/o E. A. Secco, St. Francis Xavier Univ., Dept. Chem., Antigonish, BOH 1C0 Nova Scotia, Canada): Phase transformation studies on anthranilic acid by thermal analysis, infrared absorption and X-ray diffraction methods. *Can. J. Chem.* 54 (1976) 2509
- RAKOVA, L. V., GOLDSHTEIN, I. P., PEREPELKOVÁ, T. I., GURYANOVA, E. N., OFITSEROVA, E. K., KONOVALOVA, I. V., PUDOVÍK, A. N. (L. Y. Karpov Physico-chem. Chem. Inst., Moscow, USSR): Calorimetry of donor properties of trivalent phosphorus compounds. *Zh. Fiz. Khim.* 50 (1976) 1977 (In Russian)
- RASTOGI, R. P., SINGH, H. J. (Univ. Gorakhpur, Dept. Chem., Gorakhpur, Uttar Pradesh, India): Combustion of fuel droplets and spray(s). *J. Sci. Ind. Res.* 35 (1976) 278
- RAU, H. (Philips GmbH Forsch. Lab. Aachen, Aachen, GFR): Homogeneity range of high temperature Ni_{3±x}S₂. *J. Phys. Chem. Solids* 37 (1976) 929
- REZNITSKII, L. A. (Moscow State Univ., Chem. Fac., Moscow, USSR): Approximated method for calculation of heats of formation of hydroxides. *Zh. Fiz. Khim.* 50 (1976) 2108 (In Russian)
- RICHON, D., VIALLARD, A. (UER Sci. Exactes et Nat., Thermodynam. et Cinétique Chem. Lab., Chim. Phys. Grp., F-63170 Aubière, France): Les systèmes eau/ester. I. Etude calorimétrique des systèmes eau/acétate d'acyle. *Can. J. Chem.* 54 (1976) 2584
- RIETSCH, F., DAVELOOSE, D., FROELICH, D. (Univ. Sci. and Techn. Lille, Phys. Macromol. Lab., F-59650 Villeneuve, Dascq, France): Glass transition temperature of ideal polymeric networks. *Polymer* 17 (1976) 859
- ROGINSKAYA, B. S., BYCHKOV, N. V. (L. Y. Karpov Phys. Chem. Inst., Moscow, USSR): Effect of swelling water on thermal stability of AB-17 anionite of Cl-form. *Zh. Fiz. Khim.* 50 (1976) 2386 (In Russian)
- ROSSINI, F. D. (Rice Univ., Houston, Tex. 77001 USA): Fifty years of thermodynamics and thermochemistry. *J. Chem. Thermodyn.* 8 (1976) 803

- SAKARELLAS-DAITSIOTIS, M., GILON, C., SAKARELLOS, C., GOODMAN, M. (c/o M. Goodman, Univ. Calif., San Diego, Dept. Chem., La Jolla, Calif., 92093 USA): A new method for the preparation of sequential polypeptides using matrix-controlled thermal polymerization. *J. Amer. Chem. Soc.* 98 (1976) 7105
- SALOMON, R. E., LEE, H., BAK, C. S., LABES, M. M. (Temple Univ., Dept. Chem., Philadelphia, Pa., 19122 USA): Space charge, thermal expansion, and pyroelectricity in polymers. *J. Appl. Phys.* 47 (1976) 4206
- SANCHISMERINO, M. D., FATOV, I. M. G. (CSIC, Inst. Plast. and Caucha Patronato Juan de la Cierva, Madrid, Spain): Relation between structure and thermal properties in polyvinyl acetate. I. Influence of molecular weight on glass transition of heterotactic fractions. *An. Quim.* 72 (1976) 612
- SANDHU, R. S. (Guru Nanak Dev. Univ., Dept. Chem., Amritsar, India): Thermodynamic stability constants of gadolinium(III), dysprosium(III), erbium(III) and ytterbium(III) complexes with tyrosine. *Thermochim. Acta* 17 (1976) 270
- SAN JOSE, J. L., MELLINGER, G., REID, R. C. (c/o R. C. Reid, MIT Dept. Chem. Engn., Cambridge, Mass., 02139 USA): Measurement of the isobaric heat capacity of liquids and certain mixtures above the normal boiling point. *J. Chem. Eng. Data* 21 (1976) 414
- ŠATAVA, V., VEPŘEK, O. (Czechoslovak Acad. Sci., Joint Lab. Silicate Chem., CS-16200 Prague, 6 Czechoslovakia): Effect of the sample thermal conductivity on the calibration constant in differential thermal analysis. *Thermochim. Acta* 17 (1976) 252
- SAVITSKII, E. M., GELD, P. V., ZINOVIEV, V. E., GORINA, N. B., POLIAKOVA, V. P. (A. A. Baikov Met. Inst., Moscow, USSR): Kinetic and thermal properties of poly and monocrystalline ruthenium at high temperatures. *Dokl. Akad. Nauk SSSR* 229 (1976) 841 (In Russian)
- SAZANOV, YU. N., FEDOROVA, G. N., SHCHERBAKOVA, L. M. (Acad. Sci. USSR, Inst. Macromolec. Cpd., Leningrad, USSR): Thermoanalytical investigation of the role of the solvents in the prepara-
- tion of polyimide films. *Thermochim. Acta* 17 (1976) 119
- SELBACH, H., KANERT, O. (Univ. Dortmund, Inst. Phys., D-4600 Dortmund 50, GFR): High-temperature behaviour of spin-lattice relaxation and knightshift of Te¹²⁵ in tellurium. *Solid State Commun.* 20 (1976) 609
- SEMINARA, A., SIRACUSA, G., CUCINOTTA, V., GURRIERI, S. (Univ. Catania, Ist. Chim. Gen., Catania, Italia): Thermosynthesis and thermal decomposition of uranyl nitrate urea complexes. *Chim. Ind.* 58 (1976) 657
- SEREBORENNIKOV, V. V., NOVOZHENOV, V. A., SHKOLNIKOVA, T. M. (V. V. KUIBYSHEV State Univ., Tomsk, USSR): Heat of formation of praseodymium alloys with indium. *Zh. Fiz. Khim.* 50 (1976) 2401 (In Russian)
- SERGEeva, I. A. (A. M. Gorkii State Univ., Kharkov, UkrSSR): Calculation of temperature effect on enthalpy of ions chemical hydration. *Ukr. Khim. Zh.* 42 (1976) 804 (In Russian)
- SEYLER, R. J. (Eastman Kodak Co., Ind. Lab., Rochester, N. Y., 14650 USA): Parameters affecting the determination of vapor pressure by differential thermal methods. *Thermochim. Acta* 17 (1976) 129
- SHARMA, R. C. (Himachal Pradesh Univ., Dept. Math., Simla-5, India): Effect of rotation on thermal instability of a viscoelastic fluid. *Acta Phys.* 40 (1976) 11
- SHARMA, R. C. (Himachal Pradesh Univ., Dept. Math., Simla-5, India): Thermal instability of a compressible Hall plasma. *Z. Naturforsch.* 31 (1976) 1011
- SHARP, E. J., GARN, L. E. (USA, Electr. Command., Night Vision Lab., Ft Belvoir, Va., 22060 USA): Effects of aging on thermally stimulated currents in poly(vinylidene fluoride). *Appl. Phys. Lett.* 29 (1976) 480
- SHEIKH, S. U. (Univ. Islamabad, Dept. Chem., Islamabad, Pakistan): Thermo-gravimetric analysis of tetraalkylammonium haloborates. I. *Bull. Chem. Soc. Jap.* 49 (1976) 2879
- SHEVCHENKO, Y. N., DAVIDENKO, N. K., VYSOTSKAVA, G. A. (L. V. Pisarzhevski, Phys. Chem. Inst., Kiev, UkrSSR): The preparation and thermal decomposition of

- [Co(en)₃]PO₄.3 H₂O and [Cr(en)₃]PO₄.3 H₂O complexes. *Zh. Neorg. Khim.* 21 (1976) 2111 (In Russian)
- SHIMAKURA, K. (Nippon Elect. Co. Ltd., Div. I. C. Nakaharaku, Kawasaki, Japan): Instability of SiO₂-BSG structures at room temperature. *J. Electrochem. Soc. Jap.* 44 (1976) 514
- SIEGWARTH, J. D., LAWLESS, W. N., MORROW, A. J. (Natl. Bur. Stand., Boulder, Co., 80302 USA): Dielectric and thermal properties of Pb₂Nb₂O₇ at low temperature. *J. Appl. Phys.* 47 (1976) 3789
- ŠIMÁNEK, E. (Univ. Calif. Dept. Phys., Riverside, Calif., 92502 USA): Specific heat in an inhomogeneous superconducting film. *J. Phys. F* 6 (1976) 1661
- SINGH, B. S., DYBBS, A. (Case Western Reserve Univ., Dept. Fluid, Thermal and Aerosp. Sci., Cleveland, Ohio, 44106 USA): Error in temperature measurements due to conduction along the sensor leads. *J. Heat Transfer* 98 (1976) 491
- SINGH, P. P. (Univ. Lethbridge, Dept. Chem., Lethbridge, Alberta, Canada): Thermodynamic investigation of AB and AB₂ molecular species in binary liquid systems. Excess enthalpies of 1,4-dioxane with chloroform and bromoform. *Thermochim. Acta* 17 (1976) 113
- SINGLETON, D. L., CVETANOVIC, R. J. (Natl. Res. Council Canada, Div. Chem., Ottawa, Ontario, Canada): Temperature dependence of the reactions of oxygen atoms with olefins. *J. Amer. Chem. Soc.* 98 (1976) 6812
- SKVORTSOV, I. M. (N. G. Chernyshevskii State Univ., Saratov, USSR): Studies in the field of 1-azabicycles. XIV. About enthalpy difference of cis and trans-annealed forms of quinolizidine. *Khim. Geterot. Soed.* (1976) 1098 (In Russian)
- SMITH, A. B., KESTIGIAN, M., BEKEBREDE, W. R. (Sperry Rand Corp., Res. Ctr. Sudbury, Mass., 01776 USA): The temperature dependence of bubble-domain properties in YGdEu-, YGdEr-, YGdTm-, and YGdYb-garnets. *IEEE Trans. Magn.* 12 (1976) 579
- SOLDATOV, U. S., KUVAEVA, Z. I. (Acad. Sci. BeSSR, Minsk, BeSSR): Thermodynamics of ion exchange on sulfonates copolymers of styrene and divinylbenzene. 20. Enthalpies and entropies of Ba²⁺ exchange for H⁺ Li⁺ on ionites of various reticulation. *Zh. Fiz. Khim.* 50 (1976) 2060 (In Russian)
- SOULARD, A. (Univ. Paris 6, CNRS, Mineral. Cristallog. Lab., F-75230 Paris 05, France): Calcul des propriétés thermodynamiques du krypton solide. Comportement au voisinage de la fusion. *Compt. Rend. B* 282 (1976) 91
- SPRATTE, W., SCHNEIDER, G. M. (Univ. Bochum, Inst. Phys. Chem., Bochum, GFR): Differential thermal analysis (DTA) under high pressure. VI. Phase transitions of some liquid crystals up to 3 kbar. *Ber. Bunsen Ges. Phys. Chem.* 80 (1976) 886
- SRIVASTAVA, G. P. (Univ. Newcastle-upon-Tyne, Dept. Theoret. Phys., New-Castle Tyne NE1 7RU, England): Derivation and calculation of a sequence of lower-bound results for lattice thermal conductivity. *Phys. Status Solidi B* 77 (1976) 131
- SRIVASTAVA, G. P. (Univ. Newcastle-upon-Tyne, Dept. Theoret. Phys., Newcastle Tyne NE1 7RU, England): Derivation and calculation of complementary variational principles for the lattice thermal conductivity. *J. Phys. C* 9 (1976) 3037
- STEFANOV, B., ZARKOVA, L., OLIVER, D. (Bulgarian Acad. Sci., Inst. Electr., Sofia, Bulgaria): Measurement of the thermal-conductivity coefficient of gases and vapors up to 2500 K. Differential technique. *High Temp. transl. Teplofiz. Vysok. Temp.* 14 (1976) 48
- STRIDH, G. (Univ. Lund, Ctr. Chem., Thermochem. Lab., S-22007 Lund 7, Sweden): Enthalpies of formation of 1-dodecene and 1-hexadecene and the CH₂-increment in the 1-alkene series. *J. Chem. Thermodyn.* 8 (1976) 895
- STRIDH, G. (Univ. Lund, Ctr. Chem., Thermochem. Lab., S-22007 Lund 7, Sweden): Enthalpies of formation of 1-bromododecane and 1-bromoheptadecane and the CH₂-increment in the 1-bromoalkane series. *J. Chem. Thermodyn.* 8 (1976) 901
- STRIZHEVSKII, I. I.: Prevention of fires and explosions in unexpected backfires of combustible materials. *Zh. Vses. Khim. Obshch. Mendeleeva* 21 (1976) 388 (In Russian)
- STRIZHEVSKII, I. I., ZAKAZNOV, V. F.: Data on extinguishing fire in fire-barriers, *Zh.*

- Vses. Khim. Obshch. Mendeleeva 21 (1976) 433 (In Russian)
- SULTANOV, N., TUICHIEV, S., RASHIDOV, D. (V. I. Lenin State Univ., Dushanbe, TaSSR): Temperature changes of the long-period structure of polyethylene. *Vysokomol. Soedin. A* 18 (1976) 2185 (In Russian)
- SUTHERLAND, J. W. H., STURTEVANT, J. M. (Niamdo, Chem. Biol. Lab., Bethesda, Md., 20014 USA): Calorimetric studies of in vitro polymerization of brain tubulin. *Proc. Nat. Acad. Sci. US* 73 (1976) 3565
- TADASA, K., IMAI, N., INABA, T., KUBOKAWA, Y. (Shinshu Univ., Coll. Agr., Dept. Agr. Chem., Ina, Nagano 396, Japan): Thermal decomposition of dimethyl ether in the presence of nitrogen oxide. *Bull. Chem. Soc. Jap.* 49 (1976) 2403
- TAKESHITA, H., MAMETSUKA, H., MORI, A. (Kyushu Univ., Ind. Sci. Res. Inst., Fukuoka, 812 Japan): Thermal addition reaction of cycloheptatriene with 1,4-naphthoquinone. Experimental evidence on mechanism of viciditropylation to quinones. *Chem. Lett.* (1976) 881
- TATE, I., OISHI, S., SAKAI, Y. (Shinshu Univ., Fac. Engn., Dept. Ind. Chem., Wakasato, Nagano 380, Japan): Change in dielectric loss tangent of synthetic fluor-phlogopite crystal due to thermal decomposition. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1976) 1549 (In Japanese)
- TEZUKA, T., YAMASHITA, Y., MUKAI, T. (c/o T. Mukai, Tohoku Univ., Fac. Sci., Dept. Chem., Sendai 980, Japan): Thermally induced decarbonylation of cage ketones. *J. Amer. Chem. Soc.* 98 (1976) 6051
- THOMAS, T. J., NANDI, U. S. (Vikram Sarabhai Space Ctr., Div. Propellant Engn., Trivandrum, India): Ignition of composite solid propellant analogs. *AIAA J.* 14 (1976) 1334
- THOMPSON, R. T., KYDON, D. W., PINTAR, M. M. (Univ. Winnipeg, Dept. Phys., Winnipeg, Manitoba, Canada): Search for ultra slow molecular motion in liquid crystals by spin thermometry. *Chem. Phys. Lett.* 42 (1976) 586
- TIMROT, D. L., MAKHROV, V. V., SVRIDIENKO, V. I. (Moscow Power Inst., Mos-
- cow, USSR): Method of the heated filament (incorporating a null section) for use in corrosive media, and determination of the thermal conductivity of sodium vapor. *High Temp. transl. Teplofiz. Vysok. Temp.* 14 (1976) 58
- TOLMAN, C. A., REUTTER, D. W., SEIDEL, W. C. (Du Pont Co., Dept. Cent. Res. and Dev., Wilmington, Del., 19898 USA): A calorimetric study of steric effects in the reactions of phosphorus ligands with Ni(COD)₂. *J. Organometal. Chem.* 116 (1976) C 30
- TRYKOZKO, R., JABLONSKI, W., JAKUBOWSKI, W., PERYT, W. (Warsaw Tech. Univ., Inst. Phys., PL-02524 Warsaw, Poland): An automatic apparatus for measuring the high-temperature thermal conductivity of ceramic materials. *IEEE Trans. Instrum. Meas.* 25 (1976) 238
- TSAO, K. Y., SAH, C. T. (Univ. Illinois, Dept. Elect. Engn., Urbana, Ill., 61801 USA): Temperature dependence of resistivity and hole conductivity mobility in p-type silicon. *Solid-State Electr.* 19 (1976) 949
- TSUCHIMOTO, T., ITOH, K., KUMAGAYA, F. (Hitachi Ltd., Div. Semicond. and Integrated Circuits, Kodaira, Tokyo, Japan): Thermal history of sheet resistivity in arsenic implanted silicon. *Solid-State Electron.* 19 (1976) 892
- TSUCHIYA, R., KYUNO, E., UEHARA, A., JOBA, S., OHBA, S. (Kanazawa Univ., Fac. Sci., Dept. Chem., Kanazawa 920, Japan): Thermal square planar-to-octahedral transformation of [Ni(bimdm)₄](NO₃)₂ 2.5 C₂H₅OH in solid phase. *Chem. Lett.* (1976) 911
- TSUI, F. P., CHANG, Y. H., VOGEL, T. M., ZON, G. (c/o G. Zon, Catholic Univ. Amer., Maloney Chem. Lab., Washington, D. C., 20064 USA): Thermal α -deoxysilylation of N,O-bis(trimethylsilyl)-N-phenyl-hydroxylamine. *J. Org. Chem.* 41 (1976) 3381
- TUENGE, R. T., LAABS, F., FRANZEN, H. F. (US Erda, Ames. Lab., Ames, Ia., 50011 USA): The high temperature vaporization of defect scandium monosulfide. *J. Chem. Phys.* 65 (1976) 2400
- TURDAKIN, V. A., TARASOV, V. V., MALTSEV, A. K.: Calorimetry of polydiethylsiloxane

- and polydimethylsiloxane. *Zh. Fiz. Khim.* 50 (1976) 1980 (In Russian)
- TURRO, N. J., RENNER, C. A., KATZ, T. J., WIBERG, K. B., CONNON, H. A. (c/o T. J. Katz, Columbia Univ., Dept. Chem., New York, N. Y., 10027 USA): Kinetics and thermochemistry of the rearrangement of benzvalene to benzene. An energy sufficient but non-chemiluminescent reaction. *Tetrahedron Lett.* (1976) 4133
- UDUPA, M. R. (Indian Inst. Technol., Dept. Chem., Madras, 600036 India): Thermal decomposition of potassium nitrite in the presence of chromium(III)-oxide. *Thermochim. Acta* 17 (1976) 266
- UDUPA, M. R. (Indian Inst. Technol., Dept. Chem., Madras, 600036 India): Crystal data and thermal behaviour of morpholinium aluminium sulphate [$(\text{morphH}_2\text{SO}_4 \cdot \text{Al}_2(\text{SO}_4)_3 \cdot 24 \text{H}_2\text{O})$. *Indian J. Chem. A* 14 (1976) 526
- UEDA, Y., MORI, K., KOUNO, K., NIHYA, T. (Kyushu Univ., Fac. Pharm. Sci., Fukuoka 812, Japan): Mass spectra of sulphinamide derivatives and identification of their thermal decomposition products. *Org. Mass Spectrom.* 11 (1976) 1027
- UMEGAKI, T., NAKAYAMA, Y., KANAZAWA, T. (Tokyo Metropolitan Univ., Fac. Technol., Dept. Ind. Chem., Setagay Ku, Tokyo, 158 Japan): Thermal change of magnesium highpolyphosphate coacervates. *Bull. Chem. Soc. Jap.* 49 (1976) 2105
- VAN DRUMPT, J. D. (TNO, Inst. Org. Chem., Utrecht, Netherlands): The discharge-induced and the thermal reaction between methane and mixtures of bromine and chlorine. *Rec. Trav. Chim.* 95 (1976) 168
- VAN LOEF, J. J. (Interuniv. Reactor Inst., Delft, Netherlands): Hard-sphere results from experimental transport behaviour of molten salts and structural properties. *Z. Naturforsch. A* 31 (1976) 967
- VASILEV, V. P., RASHKOVA, O. G., VASILEVA, V. N., DMITRIEVA, N. G.: Standard enthalpy of the formation of Fe^{3+} ion in aqueous solution at 25 °C. *Zh. Neorg. Khim.* 21 (1976) 2253 (In Russian)
- VASILEVA, I. A., SAFRONOVA, S. N. (M. V. Lomonosov State Univ., Moscow, USSR): Thermodynamics of V_6O_{13} at high temperatures and 298 K. *Zh. Fiz. Khim.* 50 (1976) 2193 (In Russian)
- VISWANATHAN, R., JOHNSTON, D. C. (Brookhaven Natl. Lab., Upton, N. Y., 11973 USA): Low-temperature heat capacity of small Nb_3Sn polycrystals by ac calorimetry. *J. Low Temp. Phys.* 25 (1976) 1
- VOROPAEVA, T. I., PASSEL, B. V., MATASHKIN, V. G. (Leningrad Pharm. Chem. Inst., Leningrad, USSR): Dielkometric and calorimetric studies of sulfuric anhydride complexes with trialkyl phosphates. *Zh. Obshch. Khim.* 46 (1976) 1940 (In Russian)
- VOYTOVICH, R. F., GOLOVKO, E. I., D'YAKONOV, L. V.: High temperature oxidation of alloys of hafnium with cobalt. *Russ. Met. transl. Izv. Akad. Nauk SSSR Met.* (1975) 172
- VYLEGZHANINA, G. F., KEISER, L. S.: Determination of the heats of solution of the insecticide gardona and its metabolites in the stationary phase and their Kovats retention indices. *J. Anal. Chem. USSR* transl. *Zh. Anal. Khim.* 31 (1976) 171
- WEBER, R., BLANC, G. (Technicon Int. Div. S. A., CH-1208 Geneva, Switzerland): Corrections for interferences in a high-speed automatic thermometric analyzer. *Anal. Chim. Acta* 86 (1976) 79
- WELCH, G. J., MILLER, R. L. (Unilever Ltd., Port Sunlight Lab., Wirral L62 4XN, Cheshire, England): Crystallization of poly(vinylidene fluoride): equilibrium melting point and heat of fusion of the α -polymorph. *J. Polym. Sci. Polym. Phys. Ed.* 14 (1976) 1683
- WHITLOCK, C. B., NAWAR, W. W. (Univ. Massachusetts, Dept. Food Sci. and Nutr., Amherst, Mass., 01002 USA): Thermal oxidation of mono-unsaturated short chain fatty acids: I. Ethyl-3-hexenoate. *J. Amer. Oil Chem. Soc.* 53 (1976) 586
- WHITLOCK, C. B., NAWAR, W. W. (Univ. Massachusetts, Dept. Food Sci. and Nutr., Amherst, Mass., 01002 USA): Thermal oxidation of mono-unsaturated short chain fatty acids: II. Methyl hexenoate, hexenoic acids and octenoic acid. *J. Amer. Oil Chem. Soc.* 53 (1976) 592

- WILLIS, J. O., GINSBERG, D. M. (USN, Res. Lab., Washington, D. C., 20375 USA): Thermal conductivity of superconducting alloy films in a perpendicular magnetic field. *Phys. Rev. B* 14 (1976) 1916
- WOLF, G., ZIMMERMANN, M., BOHMHAMMEL, K. (Bergakad. Freiberg, Sekt. Chem., DDR-92 Freiburg, GDR): The molar heat capacity of non-superconducting PdH_x in the temperature range from 2 to 7 K. *Phys. Status Solidi A* 37 (1976) 179
- WOOD, C., OWEN, A. E. (No. Illinois Univ., Dept. Phys. DeKalb, Ill., 60115 USA): The thermal activation energy of crystalline As_2Se_3 . *Solid State Commun.* 20 (1976) 329
- WRIGHT, J. J., MORTON, J. B. (Schering Corp., Bloomfield, N. J., 07003 USA): Thermolysis and photolysis of 3β -lanostenyl azidocarbonate: functionalization of the 4α -methyl group. *J. Chem. Soc. Chem. Commun.* (1976) 668
- WU, C. H. (KFA Jülich GmbH, Inst. Chem., D-5170 Jülich 1, GFR): Thermochemical properties of gaseous Li_2 and Li_3 . *J. Chem. Phys.* 65 (1976) 3181
- WYNNE, A. M., WENDLANDT, W. W. (Univ. Massachusetts, Dept. Chem., Amherst, Mass., 01002 USA): Reactions of silver(I) salts in potassium halide matrices. A differential scanning calorimetry study. *Thermochim. Acta* 17 (1976) 137
- YAMAWAKI, M., KANNO, M., MUKAIBO, T. (Univ. Tokyo, Nucl. Sci. and Engn. Res. Ctr., Bunkyo- ku, Tokyo, 113 Japan): $B-Nb_2O_5$ formation in oxide scale on niobium with high temperature oxidation. *J. Electrochem. Soc. Jap.* 44 (1976) 443
- YANG, R. T., STEINBERG, M., SMOL, R. (Brookhaven Natl. Lab., Dept. Appl. Sci., Upton, N. Y., 11973 USA): Application of thermal analytical methods in characterization of carbonaceous materials. *Anal. Chem.* 48 (1976) 1696
- ZAMANSKI, V. M., KUZYAKOV, Y. Y., MOSKVITINA, E. N., PAULOV, A. A.: An investigation of thermal decomposition of difluoroamine. *Vestn. Mosk. Univ. Khim.* 17 (1976) 375 (In Russian)
- ZIMINA, N. K. (Moscow Railroad Transport Engr. Inst., Moscow, USSR): Effect of thermal accomodation of oxygen. *Zh. Fiz. Khim.* 50 (1976) 2185 (In Russian)
- ZIMINA, N. K., AGAPOVA, V. M. (Moscow Railroad Transport Engr. Inst., Moscow, USSR): Effect of thermal accomodation in oxygen metal (Pt—Ag) system at high temperatures. *Zh. Fiz. Khim.* 50 (1976) 2189 (In Russian)
- ZINOV'EV, O. S., LEBEDEV, S. V. (Acad. Sci. USSR, High Temp. Inst., Moscow, USSR): Specific heat of tungsten at high temperatures. *High Temp. transl. Teplofiz. Vysok. Temp.* 14 (1976) 73