

Bibliography Section

- ABDUL'MANOV, R. R., VETTEGREN, V. I., VOROB'EV, V. M. (V. I. Lenin State Teachers Inst, Moscow, USSR): Local temperature of overstressed interatomic bonds in polymer. *Vysokomol. Soedin Ser. A. SSSR*, 26 (1984) 1830
- ABE, O., UTSUNOMIYA, T., MOSHINO, Y. (Govt. Ind. Res. Inst. 1. Hirate Cho, Kita KU Nagoya, Aichi 462 Japan): The thermal stability of binary alkali metal nitrates. *Thermochim. Acta* 78 (1984) 251
- ABON, SEKKINA, M. M., ABOU EL-AZM, M. G. (Tanta Univ. Fac. Sci. Dept. Chem. Tanta, Egypt.): Thermochemical analyses of solid isonicotinic hydrazide transition metal complexes. *Thermochim. Acta* 79 (1984) 47
- ABOUSEKKINA, M. M., MEGAHED, A. A., GOHAR, I. A. (Mansoura Univ. Fac. Sci. Mansoura Egypt): Effects of temperature and Cu-doping on ionic conductivity of binary lithium borate glasses containing  $BO_3$  triangles. *J. Thermal Anal.* 29 (1984) 265
- ABRAHAMS, S. C., IHRINGER, J., MARSH, P., NASSAU, K. (AT and T. Bell Labs. Murray Hill, N. J. 07974, USA): Phase transition at 434 K, independent strain coupling in second transition at 400K and thermal expansivity in ferroelastic  $K_2TeBr_6$ . *J. Chem. Phys.* 81 (1984) 2082
- ABU-ZEID, M. E., NOFAL, E. E., TAHSEEN, V. A., ABDUL-ROSOUL, F. A., LEDWITH, A. (Kuwait Univ. Dept. Phys. Kuwait City, Kuwait): Photoacoustic study of UV, UV-thermal, and weathering degradation of rigid foam polyurethane. *J. Appl. Polym. Sci.* 29 (1984) 2443
- ADAMCHUK, V. K., AFANASEV, U. V. (A. S. Zhdanov, State Univ. Leningrad B-164, USSR): Band gap determination of thermal silicon dioxide on silicon. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2508
- ADEDIRAN, G. O., BARK, L. S. (Univ. Salford, Salford M5 4WT, Lancs, England): Assay of nitro and nitroso compounds by solution thermochemistry. *J. Thermal Anal.* 29 (1984) 153
- AGRAWAL, R. K., GANDHI, F., McCLUSKEY, R. J. (Clarkson Univ. Dept. Chem. Engr. Potsdam, NY, 13676, USA): Low-pressure pyrolysis of newsprint product formation. *J. Anal. Appl. Pyrol.* 6 (1984) 325
- AIELLO, R., NASTRO, A., COLELLA, C. (Univ. Calabria, Dipartimento Chim. Cosenza, Italy): Solar energy storage through water adsorption-desorption cycles in zeolitic tuffs. *Thermochim. Acta* 79 (1984) 271
- ALLEN, N. S., KOTTECHA, J., LUCGARDETTE, J., LEMAIRE, J. (Manchester Politech. John Dalton Fac. Technol. Dept. Chem. Manchester M1 5GD Lancs, England): Thermal and photochemical behaviour of structurally related hindered piperidine light stabilizers in polyolefins. *Polym. Commun.* 25 (1984) 235
- ALONSO, I. G., FLIERNANDEZ, O. S. L., HENRIQUES R. D. (Acad. Sci. Cuba. Inst. Chem. and Exptl. Biol., Havana, Cuba): Utilization of thermal analysis in gorgonia characterization. *J. Thermal Anal.* 29 (1984) 167
- ALTERMATT, D., AVEND, H., GRAMLICH, V., NIGGLI, A., PETTER, W. (McMaster Univ. Inst. Mat. Res. Hamilton Ontario, Canada, L8S 4M1): Low-temperature phases in  $Cs_2CdBr_4$  and  $Cs_2HgBr_4$ . *Acta Crystallogr. B-Struct. Sci.* 40 (1984) P4 347
- AMAT-GUERRI, F., MAR, M., LÓPEZ-GONZÁLEZ C., MARTINEZ-UTRILLA, R.

- (CSIC, Inst. Quim. Organ. Gen. Juan Cierva 3, Madrid, Spain): Thermal decarboxylation of rose bengal dye. *Tetrahedron Lett.* 25 (1984) 4285
- AMITIN, E. B., NABUTOVSKAYA, O., PAUKOV, I. E., SUKHOVEY, K. S. (Acad. Sci. USSR, Inst. Inorgan Chem. Novosibirsk, 630090, USSR): Heat capacity of  $\text{NH}_4\text{Cl}_{1-x}\text{Br}_x$  solid solutions in the vicinity of the  $\gamma$ -to  $\beta$  phase transition. *J. Chem. Thermodyn.* 16 (1984) 719
- ANDERS, H., BEHNISCH, J., ZIMMERMANN, H. (Akad. Wissensch. DDR. Inst. Polymerchem. Erich Correns, DDR. 1530 Teltow Seehof Ger. Dem. Rep.): On the kinetics of the thermal degradation of PVC. 2. Investigations on the kinetics of the formation of polyenes. *Acta Polym.* 35 (1984) 486
- ANDERSEN, B., BERRY, R. S., ONDRECHEN, M. J., SALAMON, P. (Univ. Chicago, Dept. Chem. Chicago, IL): Thermodynamics for process in finite time. *Account Chem. Res.* 17 (1984) 266
- ANDRIENKO, Y. A., BRILLIANTOV, N. V., REVOKATOV, O. P. (M. V. Lomonosov State Univ. Fac. Phys. Moscow 117234 USSR): Dependence of pressure and density of inert gases on temperature at the line of fusion. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1840
- ANISIMOV, B. B., DZHAMAGIDZE, SH. Z., MALTSEV, YU. A., PESHKOV, A. N., SHVANGIRADZE, R. R. Thermoelectric power, electrical conductivity, hall emf, and fundamental absorption edge of p- and n-type GeTe-InTe films and bulk samples. *Sov. Phys. Semicond. Engl. Tr.* 18 (1984) 512
- ANISIMOV, Y. N., CHOUDKURI, G., (II. Mechanikov State Univ., Odessa, UKSSR): Study of radical formation during the manganese triacetylacetonate heat decomposition with activators in vinyl monomers media. *Zh. Obshch. Khim. SSSR*, 54 (1984) 1460
- ANTONELLI, M. L., BALZAMO, S., CARUNCHIO, V., CERNIA, E. (Univ. Rome, Dipartimento Chim. 1-00100 Rome, Italy): Complex formation of 4,9-diazadodecane-1,12 diamine with copper (II) and zinc (II) ions in aqueous solution. *Thermochim. Acta* 78 (1984) 1
- APELBLAT, A., TAMIR, A., WAGNER, M. (Ben Gurion Univ. Negev, Dept. Chem. Engn. IL-84105 Beersheba, Israel): Excess Gibbs energy of (formic acid+benzyl alcohol) and (acetic acid+benzyl alcohol) *J. Chem. Thermodyn.* 16 (1984) 891
- ARAYA, A., BARBER, T. J., LOWE, B. M., SINCLAIR, D. M., VAUMA, A. (Univ. Edinburgh, Dept. Chem. Edinburgh EH9, 3JJ, Midlothian Scotland): Synthesis and thermal behaviour of zeolite  $\Omega$  *Zeolites* 4 (1984) 263
- ARBUZOV, B. A., POLOZOV, A. M., POLEZHAeva, N. A. (A. M. Butlerov Chem. Inst. Kazan 420008 USSR): Catalytic and thermal decomposition of 2-diazo 1,3-diphenylpropane 1,3-diones in dimethylphosphorus and diethylthiophosphorus acids. *Zh. Obshch. Khim. SSSR*, 54 (1984) 1517
- ARENA, G., CALI, R., CUCINOTTA, V., MUSUMECI, S., RIZZARELLI, E., SAMMARTANO, S. (Univ. Catania, 1st Dipartimentale Chim. and Chim. Ind. I-95125 Catania, Italy): Thermodynamics of metal complexes with ligand-ligand interaction. Mixed complexes of copper (II) and zinc (II) with adenosine 5' triphosphate and L-histidine or histamine. *J. Chem. Soc. Dalton Trans.* 8 (1984) 1651
- ARNDT, P. E., DUNN, J. G., WILLIX, R. L. S. (Western Australian Inst. Technol. Sch. Appl. Chem. S. Bentley WA 6102 Australia): Organic compounds as candidate phase change materials in thermal energy storage. *Thermochim. Acta* 79 (1984) 55
- ASPIALA, A., LOTTA, T., MURTO, J., RÄSÄNEN, M., GUPTA, U. P. (Univ. Helsinki, Dept. Phys. Chem. SF-00170 Helsinki 17, Finland): Thermal and IR-induced conformer interconversion processes for 2-chloroallyl alcohol in low-temperature matrices; wavelength-dependent conformer steady states. *Chem. Phys. Lett.* 109 (1984) 179
- AYLMER, D. M., ROWE, M. W. (Texas A and M Univ. Dept. Chem. College STN, TX 77843, USA): A new method for the simultaneous determination of pyrite content and proximate analysis in coal. *Thermochim. Acta* 78 (1984) 81

- BAIKER, A., MACIEJEWSKI, M. (Swiss Fed. Inst. Technol. Dept. Ind. and Engr. Chem. CH-8092 Zurich, Switzerland): Formation and thermal stability of copper and nickel nitrides. *J. Chem. Soc. Faraday Trans. I* 80 (1984) 2331
- BALEJ, J. (Rott. 1. D-5162 Niederzier, Fed. Res. Ger.): Thermodynamics of reactions during the electrosynthesis of peroxodisulphates. *Electrochim. Acta* 29 (1984) 1239
- BALICKI, R. (Polish Acad. Sci. Inst. Organ. Chem. PL-01224 Warsaw, Poland): Studies in the field of nitrogen heterocyclic compounds. Part XII. Thermal isomerization of some fluorinated pyrazolo [1,5-a] pyrimidines into the corresponding pyrazolo [3,4-b] pyridines. *Polish. J. Chem.* 57 (1983) 413
- BALLISTRERI, A., MONTAUDO, G., PUGLISI, C. (Univ. Catania, Ist. Dipartimentale Chim. and Chim. Ind. 1-95125 Catania, Italy): Reliability of the volatilization method for determination of the activation energy in the thermal decomposition of polymers. *J. Thermal Anal.* 29 (1984) 237
- BANNISTER, M. J. (Csiro, Div. Mat. Sci. Adv. Mat. Lab. 506 Lorimer St. Fishermans Bend, VIC, Australia): The standard molar Gibbs free energy of formation of PbO. Oxygen concentration-cell measurements at low temperatures. *J. Chem. Thermodyn.* 16 (1984) 787
- BANSAL, N. P., DOREMUS, R. H. (Rensselaer Polytech. Inst. Dept. Mat. Engr. Troy, NY, 12181 USA): Determination of reaction kinetic parameters from variable temperature DSC or DTA. *J. Thermal Anal.* 29 (1984) 115
- BARBOOTI, M. M., AL-SAMMERRAI, D. A., AL-ANSARI, R. M., AL-BADRI, H. T., ROOMAYA, A. F. (Council Sci. Res. Petr. Res. Ctr. POB 10039, Baghdad, Iraq): Thermoanalytical investigation on heterocyclic organic compounds. Part IV. Thermal decomposition of 1-benzyl-1, 2, 3-triazolino-4,5 (N-phenyl) dicarboximides. *Thermochim. Acta* 79 (1984) 139
- BARBOOTI, M. M., AL-ANI, R. R. (Council Sci. Res. Petr. Res. Ctr. POB 10039, Baghdad, Iraq): The copper-chlorine thermochemical cycle of water splitting for hydrogen production. *Thermochim. Acta* 78 (1984) 275
- BARBUCCI, R., CASOIARO, M., FERRUTI, P., TANZI, M. C., GRASSI, L., BAROZZI, C. (Univ. Siena, Dipartimento, Chim. I-53100 Siena, Italy): Synthesis and thermodynamic studies on the protonation behaviour of polymers containing acylpiperazinyl units in the backbone or in the side chain of a vinyl polymer. *Makromol. Chem. Macro Chem. Phys.* 185 (1984) 1525
- BARTELT, A., REISIG, H., HERRMANN, J., SCHNEIDER, M. (Ruhr Univ. Bochum, Dept. Chem. Phys. Chem. Lab. D-4630, Bochum, Fed. Rep. Ger.): Differential thermal analysis (DTA) and microscopic studies under high pressure. Phase behaviour of some TBAAS. *Mol. Cryst. Liquid Cryst.* 102 Letter (1984) 133
- BARTEN, H. (Kema Labs. Arnhem, Netherlands): On the high temperature stability of diarsenic tetroxide ( $As_2O_4$ ) *Thermochim. Acta* 78 (1984) 431
- BARTENEV, G. M. The temperature-dependence of the alpha-relaxation and Beta-relaxation processes in polymers. *Acta Polym.* 35 (1984) 606
- BARYAKHTAR, V. G., ZAVADSKII, E. A., MAMALYI, Yu. A., SIRYUK, YU. A. (Acad. Sci. UKSSR, Inst. Engr. Phys. Donetsk, UKSSR): Thermodynamical analysis of phase transition in magnetic bubble lattice. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2381
- BECKHAUS, H-D., RÜCHARDT, C., SMISEK, M. (Univ. Freiburg, Inst. Organ. Chem. and Biochem. D-7800 Freiburg, FRG.): Anwendung von Kraftfeldrechnungen. VI. Verbrennungsenthalpie und Bildungsenthalpie von 4-carbomethoxy-homocuban und homocuban-4-carbonsäure ein Testfall zur Berechnung von Bildungsenthalpien nach dem Kraftfeldverfahren. *Thermochim. Acta* 79 (1984) 149
- BEHRENS, R. G., RINEHART, G. H. (Univ. Calif. Los Alamos, Natl. Lab. Los Alamos NM 87545 USA): Vaporization thermodynamics and enthalpy of formation of aluminium silicon carbide. *J. Amer. Ceram. Soc.* 67 (1984) 575

- BELOKOPYTOV, G. V., IVANOV, I. V., RESNETNIKOV, M. E. (M. V. Lomonosov State Univ. Moscow, 117234, USSR): Dielectric properties of  $K_{1-x}Li_xTaO_3$  crystals in the centimeter wave range at helium temperatures, *Fiz. Tverd. Tela SSSR*, 26 (1984) 2543
- BELOUSOV, V. N., KOTSEV, B., Kh., MIKI-TAEV, A. K. (Kabardino Balkar State Univ. Nalchik, USSR): Dependence of glass transition temperature of polymers determined by reversed-phase gas chromatography on parameters of molecular probes. *Vysokomol. Soedin Ser. A SSSR*, 26 (1984) 1781
- BENDERSKII, V. A., FILIPPOV, P. G. (Acad. Sci. USSR, Inst. Chem. Phys. Chernogolovka, USSR): Critical phenomena in low-temperature solid-phase chemical reactions. *Khim. Fiz.* 3 (1984) 147
- BEN HASSEN, D., KBIR-ARIGUIB, N., TRABELSI, M. (Inst. Natl. Rech. Sci. and Techn. Ctr. Chim. Appl. École Norm. Super. Phys. Chim. Minerale Lab. 43 Rue Liberté, Tunis, Tunisia): Etude des équilibres solide-liquide des systèmes binaire  $M^I PO_3-LaP_3 O_9$  ( $M^I=Rb, Cs$ ) données cristallographiques sur  $M^I_2 La(PO_3)_3 + x$  ( $x=1,2$ ) *Thermochim. Acta* 79 (1984) 251
- BEN-NAIM, A., MARCUS, Y. (Hebrew Univ. Jerusalem, Dept. Phys. Chem. IL-91904): Solvation thermodynamics of nonionic solutes. *J. Chem. Phys.* 81 (1984) 2016
- BERGER, W., GRAFE, F., KAMMER, H. W. (Tech. Univ. Dresden, Sect. Chem. DDR-8027 Dresden, GDR): On the solid-state extrusion of high-density polyethylene-influence of rate and temperature of extrusion. *Acta Polym.* 35 (1984) 504
- BERSHTEIN, V. A., SAVITSKY, A. V., EGOROV, V. M., GORSHKOVA, I. A., DEMICHEVA, V. P. (AF Ioffe Phys. Tech. Inst. Leningrad, 194021 USSR): Polymer melting at an equilibrium temperature in a zero melting range as well as inter- and intramolecular stages of the process. *Polym. Bull.* 12 (1984) 165
- BHARADWAJ, S. R., DHARWADKAR, S. R., CHANDRASEKHARAI AH, M. S. (Bhabha Atom Res. Ctr. Water Chem. Sect. Bombay, 400085, India): Thermogravimetric study of some uranium molybdates. *Thermochim. Acta* 79 (1984) 377
- BHATEJA, S. K. (Three M. SO, 3M Ctr E and Sector Labs. 201-1C-0,1 St. Paul MN 55144 USA): Differential scanning calorimetric analysis of irradiated polytetrafluoroethylene films. *J. Thermal Anal.* 29 (1984) 297
- BHATTI, A., DOLLIMORE, D., DYER, A. (Univ. Toledo, Dept. Chem. Toledo OM 43606, USA): Decomposition kinetics of magnesium hydroxide using DTA. *Thermochim. Acta* 78 (1984) 55
- BHATTI, A. S., DOLLIMORE, D., FLETCHER, A. (Univ. Toledo, Dept. Chem. Toledo OM 43606, USA): The thermal decomposition of oxalates Part 18. The preparation and thermal decomposition of acid barium oxalates. *Thermochim. Acta* 78 (1984) 63
- BHATTI, A. S., DOLLIMORE, D., BLACKMORE, N. (Univ. Toledo, Dept. Chem. Toledo, OH 43606, USA): The thermal decomposition of copper chromium carbonate. *Thermochim. Acta* 79 (1984) 205
- BHATTI, A. S., DOLLIMORE, D., ARMSTRONG, B. (Univ. Toledo, Dept. Chem. Toledo, OH 43606, USA): The thermal decomposition of oxalates. Part 19. The thermal decomposition of barium oxalate hemihydrates. *Thermochim. Acta* 79 (1984) 217
- BHATTI, A. S., DOLLIMORE, D., FLETCHER, A. (Univ. Toledo, Dept. Chem. Toledo, OH, 43606, USA): The thermal decomposition of oxalates. Part 20. The decomposition kinetics of acid barium oxalates. *Thermochim. Acta* 79 (1984) 231
- BILLAUD, F., FREUND, E., (Inst. Natl. Polytech. Lorraine, Ecole Natl. Super Ind. Chim. Dept. Chim. Phys. React. CNRS, Lab. 328 F 54042 Nancy, France): Pyrolysis of a mixture of n-alkanes (chiefly  $C_{12}-C_{18}$ ) at ca 1053K. Kinetic study. *J. Anal. Appl. Pyrol.* 6 (1984) 341
- BLACHNIK, R., ENNINGA, E. (Univ. Osnabruck, Fachbereich Biol. Chem. D-4500 Osnabruck, FRG): Enthalpies of mixing of some binary liquid mixtures of rare earth halides. *Thermochim. Acta* 78 (1984) 427
- BLAGOVESCHENSKAJA, J. N., BABENKOVA, L. V., KINZA, H., POPOVA, N. M. (Acad.

- Sci. Kassr. Inst. Organ. Catalysis and Electrochem., Alma Ata 480021, KASSR): Thermodesorption of  $H_2$  from Ni/SiO<sub>2</sub> catalyst Kt-6500 after reactivation at various temperatures. *Zh. Phys. Chem. Leipzig*, 265 (1984) 697
- BLASIUS, E., KELLER, M. (Univ. Saarland Fachrichtung Anorgan. Analyt. and Radiochem. D-6600 Saarbrücken, FRG): Pyrolysis gas-chromatographic and pyrolysis mass-spectrometric examinations of polymeric crown ethers. *Fresenius Z. Anal. Chem.* 318 (1984) 390
- BLETRY, J., TAVERNIERE, P., SENILLOU, C., DESRE, P., MARET, M., CHIEUX, P. (St. Gobain Rech. 39. Quai Lefranc BP 135 F-93304 Aubervilliers, France): High temperature furnaces for small and large angle neutron scattering of disordered materials. *Rev. Phys. Appl.* 19 (1984) 725
- BLUMENSTOCK, H., DICKERT, F. L., HAMMERSCHMIDT, A. (Univ. Erlangen Nürnberg, Inst. Phys. and Theoret. Chem. D-8520 Erlangen FRG): The thermodynamic and kinetic behaviour of the four-coordinate carbonation  $(C_6H_5)_3C(DMF)^+$  - a NMR and relaxation study. *Z. Phys. Chem.-Wiesbaden*, 139 (1984) 123
- BOCEK, M., HOFFMANN, M. (Kernforschungszentrum Karlsruhe GMBH, Inst. Mat. and Festkörperforsch. Postfach 3640, D-7500 Karlsruhe 1, FRG): The influence of cavitation damage upon high temperature creep under stationary and non-stationary loading conditions. 2. Tensile creep at constant load and constant true stress resp. *J. Nucl. Mater.* 125 (1984) 7
- BODDINGTON, T., FENG, C-G, GRAY, P. (Univ. Leeds, Sch. Chem. Leeds LS2 9JT, W Yorkshire, England): Thermal explosion, times to ignition and near-critical behaviour in uniform-temperature system. Part 3. Effects of variable heat-transfer coefficients. *J. Chem. Soc. Faraday Trans. II.* 80 (1984) 1155
- BOGDANOVIC, V., DJORDJEVIC, B., TASIC, A. (Hemijska Ind. Pancevo, LDPE Plant Petrochem. Complex YU-26000, Panceno, Yugoslavia): Influence of the structural order on thermodynamic properties for three different polyethylenes. *J. Appl. Polym. Sci.* 29 (1984) 2671
- BOLSHOV, L. A. (Vologda Polytech. Inst. Vologda, USSR): Thermodynamic characteristics of an intervacancy reaction in aluminium. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1814
- BORISOV, A. A., ZAMANSKII, V. M., KONNOV, A. A., LISYANSKII, V. V., SKACHKOV, G. I. (Acad. Sci. USSR, Inst. Chem. Phys. Moscow, U-71. USSR): High-temperature oxide and acetaldehyde. *Khim. Fiz.* 3 (1984) 572
- BOTOR, J. P., EDWARDS, J. G. (Inst. Nonferrous Met. PL-44100 Gliwice, Poland): Thermodynamics of VS(s) and its equilibrium vapor by Knudsen-cell mass spectrometry. *J. Chem. Phys.* 81 (1984) 2185
- BOUANICH, J. P. (Univ. Paris 11, CNRS Infrarouge Lab. F-91405 Orsay, France): On the temperature dependence of self-broadening in the first overtone band of CO. *J. Quant. Spectrosc. Radiat.* 31 (1984) 561
- BREZEANU, M., TATU, E., BOCAI, S., BREZEANU, O., SEGAL, E., PATRON, L. (Polytech. Inst. Bucharest, Chair and Technol., BLUD Republ. 13. Bucharest, Romania): Non-isothermal decomposition kinetics of polynuclear coordination compounds. *Thermochim. Acta* 78 (1984) 351
- BREZEANU, M., BREZEANU, O., SEGAL, E. (Polytech. Inst. Bucharest, Chair and Technol. BLUD Republ. 13. Bucharest, Romania): Kinetic study of phase changes in some mixtures of oxides. *Thermochim. Acta* 78 (1984) 445
- BRITAIN, H. G., MEYER, G. (Seton Hall Univ. Dept. Chem. S Organe, NJ. 07079, USA): Low-temperature luminescence of  $Eu^{3+}$  in  $K_2EuCl_5$ . *J. Solid State Chem.* 54 (1984) 156
- BRITAIN, R. D., JOHNSON, S. M. LAMOREAUX, R. H., ROWCLIFFE, D. J. (Sri Int. Menlo PK, CA 94025, USA): High-temperature chemical phenomena affecting silicon nitride joints. *J. Amer. Ceram. Soc.* 67 (1984) 522
- BRODSKII, A. R., KAZIMOVA, A. Z., NOSKOVA, N. F. (Acad. Sci. Kassr. Inst. Organ. Catalysis and Electrochem. Alma Ata 480021, KASSR): Temperature effect on the composition and activity of iron (III) stearate based organometallic catalysts in hydrogenation reactions. *React. Kinet. Catal. Lett.* 25 (1984) 51

- BROEKMAN, A., VANRAAPHORST, J. G. (ECN Netherlands Energy Res. FDN. POB 1, 1755 ZG Petten, Netherlands): Stable isotope dilution analysis by thermal ionization mass spectrometry 2. The determination of cadmium and copper. *Fresenius Z. Anal. Chem.* 318 (1984) 398
- BUBACK, M., CHOE, C.-R., FRANCK, E.-V. (Univ. Göttingen, Inst. Phys. Chem. D-3400 Göttingen, FRG): Thermally and UV-photochemically initiated high-pressure polymerization of ethylene 1. Average values of molar masses. *Makromol. Chem. Macro. Chem. Phys.* 185 (1984) 1685
- BUBACK, M., CHOE, C.-R., FRANCK, E.-V. (Univ. Göttingen, Inst. Phys. Chem. D-3400 Göttingen, FRG): Thermally and UV-photochemically initiated high-pressure polymerization of ethylene. 2. Distribution of molar masses. *Makromol. Chem. Macro. Chem. Phys.* 185 (1984) 1699
- BUTCHER, P. N. (Univ. Warwick, Dept. Phys. Coventry CV4 7AL, W Midlands, England): The effect of temperature-dependent energies on semiconductor thermopower formulae. *Phil. Mag. B.* 50 (1984) L5
- CAO, J.-R., BACK, M. H. (Beijung Univ. Dept. Chem. Beijing Peoples R China): The heat of formation of the ethyl radical. *Int. J. Chem. Kinet.* 16 (1984) 961
- CARDILLO, P., GIRELLI, A. (Stazione Sperimentale Combustibili, Viale A Degasperi 3, 1-20097 San Donato Milane, Italy): Analysis of the thermal stability of dimethylformamide-carbon tetrachloride mixtures. *Ann. Chim.-Rome.* 74 (1984) 129
- CARELLA, J. M., CAPIATI, N. J. (Univ. Nacl. Sur Conuet., Plapiqui Inst. RA-8000 Bahia Blanca, Argentina): Effect of  $\beta$  relaxation on the ultradrawn polyethylene thermal expansion. *J. Polym. Sci. Polym. Lett. Ed.* 22 (1984) 443
- CARR, N. J., GALWEY, A. K. (Queens Univ. Dept. Chem. Belfast BT9 5AG North Ireland): Decomposition reactions of solids (an experiment in reviewing). *Thermochim. Acta* 79 (1984) 323
- CASEY, Jr, H. C. (Duke Univ. Dept. Elect. Engr. Durham, NC 27706, USA): Temperature dependence of the threshold current density in In-P-Ga<sub>0.28</sub>In<sub>0.27</sub>As<sub>0.27</sub>P<sub>0.4</sub> ( $\lambda = 1.3 \mu\text{m}$ ) double heterostructure lasers. *J. App. Phys.* 56 (1984) 1959
- CASTELLANOS-GUZMÁN, A. G. (Univ. Colima, Ctr. Invest. Ciencias Basicas, Colima, 28000, Mexico): A thermodynamic study of the cubic (43 m)  $\rightarrow$  orthorhombic ( $\text{mm}^2$ ) ferroelectric phase transition of a triad of boracites with Mn as a common metal. *J. Solid. State Chem.* 54 (1984) 78
- CESARI, E., VINALS, J., TORRA, V., ORTIN, J., MACQUERON, J. L., DUBES, J.-P., DUBES, KECHAVARZ, R., TACHOIRE, H. Microcalorimétrie et thermogenèse: identification des dispositifs expérimentaux de mesurer directement les enthalpies d'excès. *Thermochim. Acta* 79 (1984) 23
- CHACKO, J., PARAMESWARAN, G. (Univ. Calicut, Dept. Chem. Calicut 673635, Kerala, India): Thermal decomposition kinetics of vanillidene anthranilic acid complexes of cobalt (II), nickel (II), copper (II) and zinc (II). *J. Thermal Anal.* 29 (1984) 3
- CHALYKH, A. E., SAPOZHNIKOVA, I. N. (Acad. Sci. USSR, Inst. Phys. Chem. Moscow, U-71, USSR): Effect of the thermal stability of chlorine-containing polymers on their compatibility with poly(methyl methacrylate). *Acta. Polym.* 35 (1984) 592
- CHAN, Y. C., VELECKIS, E. (Argonne, Natl. Lab. 9700 S Cass Ave Argonne, IL, 60439, USA): A thermodynamic investigation of dilute solutions of hydrogen in liquid Li-Pb alloys. *J. Nucl. Mater.* 123 (1984) 935
- CHANG, S.-S. (NBS, Div. Polymer Sci. and Stand. Washington, DC, 20234, USA): Thermodynamic properties and glass transition of polystyrene. *J. Polym. Sci. Polym. Symp. Ed.* 71 (1984) 59
- CHIMISHKYAN, A. L., SVETLOVA, L. P., LEONOVA, T. V., GULYAEV, N. D. (DI Mendeleev Chem. Technol. Inst. Moscow, USSR): Thermal decomposition of substituted urates. *Zh. Obshch. Khim. SSSR.* 54 (1984) 1477
- CHOU, K.-S., SOONG, C.-S., (Natl. Tsinghua Univ. Dept. Chem. Engr. Hsinchu 300, Taiwan): Kinetics of thermal decomposition of aluminium sulfate. *Thermochim. Acta* 78 (1984) 285

- CHATTOPADHYAY, T., WERNER, A., VONSCHNERING, H. G., PANNETIER, J. (Univ. N Bengal Dept. Chem. Darjeeling 734430, India): Temperature and pressure induced phase transition in IV-VI compounds. *Rev. Phys. Appl.* 19 (1984) 807
- CHUGUNOVA, N. F., STARTSEV, V. M., BOLVTENEV, G. M., BARDYSHEV, I. I., SKVORTSOV, A. G. (Acad. Sci. USSR. Inst. Phys. Chem. Moscow, U-71, USSR): On kinetics of change of free volume of films during thermal imidization of polyamic acid. *Vysokomol. Soedin. Ser. A SSSR* 26 (1984) 1944
- CLAUDY, P., LETOFFE, J. M., CHAHINE, G., BONNETOT, B. (CNRS, Thermochim. Minerale, Lab. 116,20 Ave Albert Einstein F-69621 Villeurbanne, France): Etudes calorimetriques en milieu solvant organique. VI. Enthalpie de formation du tetrahydridoaluminat de sodium,  $\text{NaAlH}_4$ , enthalpie de dissolution de l'hydrure d'aluminium  $\alpha$  dans le THF. *Thermochim. Acta* 78 (1984) 323
- COBOS, J. C., VILLAMANAN, M. A., CASANOVA, C. (Univ. Valladolid Fac. Ciencias, Dept. Termol., Valladolid Spain): Excess enthalpies of (n-alkanol + 2,5-dioxahexane) at 298.15K. *J. Chem. Thermodyn.* 16 (1984) 861
- COULTER, L. V., GIBSON, J. K., MAMMANO, N. (Boston Univ. Dept. Chem. Boston, MA 02215, USA): Low temperature thermal effect in  $\text{Li}/\text{NO}_3$  system. *J. Phys. Chem.* 88 (1984) 3896
- COX, B. G., STROKA, J., FIRMAN, P., SCHNEIDER, I., SCHNEIDER, M. (Univ. Stirling, Dept. Chem. Stirling FK9 4LA, Scotland): Thermodynamic and kinetic studies of complex formation between  $\text{Ag}^+$  and cryptand (2, 1, 1) in acetonitrile + water mixtures. *Z. Phys. Chem.-Wiesbaden*, 139 (1984) 175
- CRiado, J. M., GONZÁLEZ, M. (Univ. Seville, Fac. Quim. Dept. Quim. Inorgan, Seville, Spain): Effect of grinding on the texture and kinetic stability of  $\text{MnCO}_3$ ,  $\text{CdCO}_3$  and  $\text{PbCO}_3$ . *Thermochim. Acta* 79 (1984) 91
- CRiado, J. M., GONZALEZ, M., ORTEGA, A., REAL, C. (Univ. Seville, Fac. Quim. Dept. Quim. Inorgan Seville, Spain): Some considerations regarding the determination of the activation energy of solid-state reactions from a series of isothermal data *J. Thermal Anal.* 29 (1984) 243
- DAHN, J. R., McKINNON, W. R. (Natl. Res. Council Canada, Div. Solid State, Chem. Ottawa, Ontario, Canada K1A 0R9): Thermodynamics of lithium intercalation from high resolution electrochemical measurements. *J. Electrochem. Soc.* 131 (1984) 1823
- DALLE, K. S., PARKHURST, W. A., LARRICK, B. F. (USN CTR Surface Wlap, Silver Spring MD, 20910, USA): Thermogravimetry of high-purity, chemically-prepared  $\text{AgO}$  cathode material. *Thermochim. Acta* 78 (1984) 333
- DAS, U. D., KARUNAKARAN, D. (Indian Inst. Technol. Dept. Phys. Thin Film Lab. Madras 600036, Tamil Nadu (India): Thermoelectric studies on semiconducting  $\text{Ag}_2\text{Te}$  thin films. Temperature and dimensional effects. *Phys. Rev. B. Condensed Matter*, 30 (1984) 2036
- DASGUPTA, S., SAHA, M., GHOSH, D. (Indian Assos. Cultivat. Sci. Dept. Magnetism, Calcutta 700032 W Bengal, India): Analysis of the thermophysical properties of some rare-earth hydroxides through crystal field effects. *J. Phys. Chem. Solids*, 45 (1984) 589
- DAVIES, J. H. (Univ. Cambridge, Cavendish Lab. Madingley RD, Cambridge CB3 0ME, England): Comment on temperature dependence of electrical conductivity and the probability density function by P Love. *J. Phys. C-Solid State Phys.* 17 (1984) L565
- DAY, F. R., HAMILTON, D. J. (Queensland Dept. Primary Ind. Agr. Chem. Branch, Brisbane, Old 4000 Australia): Ethylenebisdithiocarbamate fungicides. Differential thermal analysis. *J. Thermal Anal.* 29 (1984) 317
- DEGTYAREV, P. A., POKROVSKII, A. N. (SM Kirov Teachers Inst. Pskov, USSR): Thermal stabilities of binary potassium and rare earth element sulfates of the  $\text{K}_6\text{R}_4(\text{SO}_4)_9$  and  $\text{K}_7\text{R}_3(\text{SO}_4)_3$  composition. *Zh. Neorg. Khim. SSSR*, 29 (1984) 2136

- DE NAMOR, A. F., D., GHOSSEINI, L. (Univ. Surrey, Dept. Chem. Guildford GU2, 5XH, Surrey, England): Thermodynamics of metal-ion-cryptates and cryptand 222 in N,N-dimethylformamide and dimethyl sulphoxide. *J. Chem. Soc. Faraday Trans. I* 80 (1984) 2349
- DE OLIVEIRA, A. L., OLIVEIRA, J., LADEIRA, L. O., DAMASCENO, O. O. (Univ. Fed. Minas Gerais Icx. Dept. Fis. BR-30000 Belo Horizonte, Mg Brazil): High-temperature system for  $\gamma$ - $\gamma$  angular correlation experiments. *J. Phys. E-Sci Instrum.* 17 (1984) 860
- DIMITRIADIS, C. A. (Aristotelian Univ. Salonika, Dept. Phys. Salonika, Greece): Temperature dependence of the hole lifetime in n-type GaP. *Solid State Commun.* 52 (1984) 279
- DJUREK, D., JÉROME, D., BECHGOARD, K. (Univ. Paris 11, Phys. Solides Lab, F-91405 Orsay, France): Thermal transport properties of organic conductors: (TMTSF)<sub>2</sub>PF<sub>6</sub> and (TMTSF)<sub>2</sub>ClO<sub>4</sub>. *J. Phys. C: Solid State Phys.* 17 (1984) 4179
- DOMYSHEV, V. A., ASHCHEPKOV, V.-T., OSIPOV, A. Y., KUZNETSOVA, I. N. (Irkutsk State Teachers Inst., Irkutsk, USSR): Dependence of magnetostriction of iron-cobalt alloys on deformation texture, recrystallization and ordering heat treatment. *Fiz. Metal. Metalloved., SSSR*, 57 (1984) 1116
- DONBAUAND, J. (New Zealand Mincst. Works and Dev. Cent. Labs Lower Hutt, New Zealand): The use of thermogravimetry to detect and identify adhesion agents in bitumen. *Thermochim. Acta* 79 (1984) 161
- DOTSENKO, V. I., PUSTOVALOV, V. V., SIRENKO, V. A., FOMENKO, V. S. (Acad. Sci. UKSSR, Inst. Low Temp. Engr. Phys. Kharkov 31064 UKSSR): Effect of the magnetic flux troping upon the temperature dependence of the flow stress change at the superconducting transition. *Cryst. Res. Tech.* 19 (1984) 1031
- DOWNIE, D. B., MARTIN, J. F. (Univ. Strathclyde Dept. Met. Glasgow G1 1XN, Scotland): Heat capacities of transition-metal alloys 2. Alpha- and sigma-phase Fe<sub>0.525</sub>Cr<sub>0.475</sub> and Fe<sub>0.566</sub>Cr<sub>0.434</sub>. *J. Chem. Thermodyn.* 16 (1984) 743
- DUBES, J.-P., KECHAVARZ, R., TA-CHOIRE, H. (Univ. Provence, Thermochim. Lab. F-13331 Marseille 03 France): Microcalorimétrie et thermogenèse: identification des systèmes par ajustement simultané de la valeur des poles et des zéros de la fonction de transfert instrumentale sur la réponse à une entrée connue. *Thermochim. Acta* 79 (1984) 15
- DUNSTAN, P. O., VICENTINI, G., ZINNER, L. B. (Univ. Estadual Campinas, Inst. Quim. BR-13100 Campinas, SP. Brazil): Thermal study of rare-earth trifluoroacetate complexes with thioxane-oxid. *Thermochim. Acta* 78 (1984) 449
- DVURECHENSKAYA, S. Y., VOLKOV, V. V., LAURENTJEV, V. I., MYAKISHEV, K. G. (Acad. Sci. USSR, Inst. Inorgan. Chem. Novosibirsk, USSR): The study of pyrolysis of trimethylammonium dodecahydro-1,2-dicarbaundeca borate (1-), 1,2-B<sub>9</sub>C<sub>2</sub>H<sub>12</sub> (CH<sub>3</sub>)<sub>3</sub>NH- by a chromatomass-spectrometry technique. *Izv. Sl. Otd. Akad. Nauk. Khim* 3 (1984) 84
- DWORZANSKI, J. P., DEBOWSKI, M. T., WACLAWEK, R. (Silesian Med. Acad. Inst. Med. Chem. and Phys. Jagiellonska 4 PL-41200 Sosnowiec, Poland): Analysis of melanosomes from cattle eyes by pyrolysis-gas chromatography. *J. Anal. Appl. Pyrol.* 6 (1984) 391
- DZIEWIDEK, L., SZELMA, G., NORWISZ, J. (Inst. Nonferrous Met. Ul. Savinskiego 5, PL-44101 Gliwice, Poland): Thermodynamic behavior of dilute solutions of sulfur in molten copper-nickel alloys. *High Temp. Sci.* 18 (1984) 25
- DZHAFAROV, O. I., KULIEV, A. M., KUZNETSOVA, A. G. (Acad. Sci. AZSSR, Inst. Chem. Technol. Theoret. Problems, Baku, AZSSR): Heat capacity and thermodynamic properties of 1,1,1,3,5,5,5-heptamethyl 3-phenyltrisiloxane in the interval 5-300-K. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1630
- ECKHARDT, H., STEINHAUSER, S. W. (Allied Corp. Technol. Morristown, N. J. 07960 USA): Structural aspects of trans-polyacetylene: A comparison of thermally



- isomerized and doped/dedoped trans-(CH)<sub>x</sub>. *Mol. Cryst. Liquid Cryst.* 105 (1984) 219
- ELHADARY, M. S., KAMAR, A., FAYED, A., ELKADY, A. S., KANDIL, S. H., MORSI, S. E. (Univ. Trondheim, Norwegian Inst. Technol., Organ. Chem. Lab, N-7034, Trondheim NTH, Norway): Identification of mercury-containing phases in dental amalgams by differential scanning calorimetry. *J. Thermal Anal.* 29 (1984) 131
- EL-HEMALY, S. A. S., EL-SHEIKH, R., MOSALAMY, F. H., EL-DIDAMONY, H. (Natl. Res. Ctr. Cairo, Egypt): The hydration of alite in the presence of concrete admixtures. *Thermochim. Acta* 78 (1984) 219
- ELISEEV, N. A., STERLIGOV, O. D., BARKOVA, A. P., ISAGULYANTS, G. U. (NE Baumann Higher Tech. Sch. Dept. Gen. Chem. and Phys., Kalush, UKSSSR): Calculation of thermodynamic parameters of alkanes of normal formation with internal location of a double bond. *Izv. Vysch. Uch. Zav. Khim. Khan. T.* 27 (1984) 644
- EMELYANENKO, A. M., ZHUKHOVITSKII, A. A. (Moscow Steel and Alloys Inst. Moscow, USSR): Thermodynamics of paraffins. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1651
- EVANS, R. J., MILNE, T. A., SOLTYS, M. N., SCHULTEN, H.-R. (Solar Fuels Res. Div. Thermochem. and Electrochem. Res. Branch, 1617 Cole BLVD, Golden, CO 80401, USA): Mass spectrometric behavior of lenoglucosan under different ionization conditions and implications for studies of cellulose pyrolysis. *J. Anal. Appl. Pyrol.* 6 (1984) 273
- FAKIROV, S. (Univ. Sofia, Fac. Chem. BU-1126 Sofia, Bulgaria): Effect of the temperature on the chemical heating of poly (ethylene terephthalate). *Makromol. Chem. Macro Chem. Phys.* 85 (1984) 1607
- FARAGLIA, G., SINDELLARI, L., SITRAN, S. (Univ. Padua, Ist Chim. Gen. and Inorgan 1-35100 Padua, Italy): Infrared and thermal studies of platinum(II) halide complexes with 1-hexamine. *Thermochim. Acta* 78 (1984) 159
- FATEMI, N. S., WHITEHEAD, R., PRICE, D., DOLLIMORE, D. (Univ. Alberta, Dept. Chem. Edmonton, Alberta, Canada T6G 2G2): Determination of activation energy value from the maximum rate of reaction points obtained from non-isothermal experiments. *Thermochim. Acta* 78 (1984) 437
- FEDOTOVA, N. E., IGUMENOV, I. K. (Acad. Sci. USSR, Inst. Inorgan Chem. Novosibirsk, USSR): Thermochemical study of some Ni(II) beta-diketonates and its adducts with water and pyridine. *Izv. Sibir. Otd. Akad. Nauk. Khim.* 3 (1984) 20
- FERNANDEZ, M. J., BAILEY, P. M., BENTZ, P. O., RICCI, J. S., KOETZLE, T. F., MAITLIS, P. H. (Brookhaven Natl. Lab. Dept. Chem. Upton, NY, 11973, USA): Synthesis X-ray and low temperature neutron diffraction study of rhodium(V) complex: dihydridobis (triethylsilyl)-pentamethylcyclopentadienylnrhodium. *J. Amer. Chem. Soc.* 106 (1984) 5458
- FINKE, R. G., HAY, B. P. (Univ. Oregon Dept. Chem. Eugene OR 97403, USA): Thermolysis of adenosylcobalamin: A Product, Kinetic, and Co-CS' bond dissociation energy study. *Inorg. Chem.* 23 (1984) 3041
- FIORINI, E., NIINIKOSKI, T. O. (Univ. Milan, Dipartimento FIS-1-20122 Milan, Italy): Low-temperature calorimetry for rare decays. *Nucl. Instrum. Meth. Phys. Res. A.* 224 (1-2) (1984) 83
- FISCHER, W., WETZIG, K., SEIDLER, M. (Acad. Sci GDR, Zent. Inst. Festkorperphys. and Werkstofforsch. DDR-8027 Dresden, GDR): Investigations on mechanical properties and chemical composition of thermally treated TiC<sub>2</sub> coatings on steel (CUO technique). *Cryst. Res. Tech.* 19 (1984) 1133
- FLÓRA, T. (Res. Inst. Heavy Chem. Ind. Veszprém, Hungary): Beiträge zur Kinetik der Zeolithdehydratation. *Thermochim. Acta* 79 (1984) 1
- FOMIN, I. A., ESKA, G., WOLFE, P. (LD Landau Theoret. Phys. Inst. Moscow, USSR): Asymptotic approach to a theory of multiple spin echoes in the low temperature phases of <sup>3</sup>He. *J. Low Temp. Phys.* 56 (1984) 315.
- FRANKLIN, D. G., ROBERTS, J. T. A., LI, C. Y. (Elect. Power Res. Inst. Palo, Alto, CA, 94303, USA): Low temperature swelling and

- densification properties of LWR fuels. *J. Nucl. Mater.* 125 (1984) 96
- FRANZ, J. A., CAMAIONI, D. M., BEISHLINE, R. R., DALLING, D. K. (Battelle Mem. Inst. Pacific, NW., Labs. Richland WA, 99352 USA): Products, radical intermediates and hydrogen atom production in the thermal decomposition of 1,2-dihydronaphthalene. *J. Org. Chem.* 49 (1984) 3563
- FREIMAN, Y. A., EZHOVSKI, A. (Acad. Sci. UKSSR, Inst. Low Temp. Engn. Phys. Kharkov 108, UKSSR): The thermal expansion anomaly in  $N_2-O_2$  solid solutions consideration of spin-libration interactions. *Fiz. Nizkikh. Temp.* 10 (1984) 649
- FRIEDMAN, L. (GTE Labs. Inc. 40. Sylvan, RD, Waltham, MA, 02254, USA): Thermopower of superlattices as a probe of the density of state distribution. *J. Phys. C-Solid State Phys.* 17 (1984) 3999
- FYOKLINA, L. I., ZELENEV, YU, V., BARANOVSKII, V. M. (AM Gorkii State Teachers Inst. Kiev, UKSSR): Influence of thermal treatment on molecular mobility in polyvinylidene fluoride. *Vysokomol. Soedin. Ser. A SSSR*, 26 (1984) 1571
- GALITISYN, Y. G., MAKKAEV, A. M., POPOVA, V. P. (Acad. Sci. USSR, Inst. Solid State Chem. and Raw Mineral proc. Novosibirsk, USSR): Photochemical and thermal decomposition of palladium diamminooxalate  $Pd(NH_3)_2C_2O_4$ . *Izv. Sibir. Otd. Akad. Nauk Khim.* 3 (1984) 45
- GALLOWAY, R. B., SHARAF, J. M. (Univ. Edinburgh, Dept. Phys. Edinburgh EHB 94L, Midlothian, Scotland): The temperature dependence of pulse shape discrimination with NE213 Scintillation counters. *Nucl. Instrum. Meth. Phys. Res. A* 224 (1-2) (1984) 181
- GAL'PERINA, N. M., BUKHINA, M. F. (Moscow Rubber Ind. Res. Inst. Moscow, USSR): Influence of the rate of heating on melting of 1,4-cis-polybutadiene. *Vysokomol. Soedin. Ser. A SSSR*, 26 (1984) 1855
- GÁPLOVSKY, A. (Comenius Univ. Inst. Chem. Chem. CS-84215 Bratislava, Czechoslovakia): Temperature measurement in the spectrometer cell. *Chem. Listy* 78 (1984) 990
- GARDNER, F. J., MESSING, G. L. (Sandia Natl. Labs. Albuquerque, NM, 87185, USA): Magnesium salt decomposition and morphological development during evaporative decomposition of solutions. *Thermochim. Acta* 78 (1984) 17
- GEVORKYAN, A. A., AMITIN, A. V., GORELIK, A. G. Thermal conductivity of organic intermediates. *J. Appl. Chem. -Engl. Tr.* 56 (1984) 2563
- GINZBURG, V. L., ZHARKOV, G. F., SOBYANIN, A. A. (P. N. Lebedev Phys. Inst. Moscow, USSR): On the theory of the thermoelectric effect in superconducting bimetallic droop. *J. Low Temp. Phys.* 56 (1984) 195
- GIRAULT, H. H. J., SCHIFFRIN, D. J. (Univ. Southampton. Dept. Chem. Southampton SO9, 5NH, Hants, England): Thermodynamics of a polarised interface between two immiscible electrolyte solutions. *J. Electroanal. Chem. Interfac.* 170 (1984) 127
- GLIKMAN, Y. E., TRUBIN, S. V., KRASOV, A. A. (S Ordzhonikidze Met. Inst. Novokuznetsk, USSR): Effect of low-temperature reversibility of intergrain brittleness in alpha-Fe solid solutions. *Fiz. Metal. Metalloved. SSSR*, 57 (1984) 1147
- GODOVSKY, Y. K., MAKAROVA, N. N., PETROVA, I. M., ZNDANOV, A. A. (L. Y. Karpov, Physicochem. Res. Inst. Moscow, USSR): Thermotropic mesophases in cycloliner polymethylsiloxanes. *Makromol. Chem.-Rap. Comm.* 5 (1984) 427
- GOEL, S. P., MEHTOTRA, P. N. (Univ. Roorkee, Dept. Chem. Roorkee 247667, Uttar, Pradesh, India): Preparation of lithium tetra molybdate by the thermal decomposition of lithium oxomolybdenum (VI) oxalate. *Thermochim. Acta* 79 (1984) 385
- GOLDIN, D. M., KULIKOVA, G. V. (All Union Geol. Res. Inst. Leningrad, USSR): On the dissociation mechanism of carbonates and their isomorphous mixture. *J. Thermal Anal.* 29 (1984) 139
- GOLITSYN, A. V., LISIN, V. N., KHABIBULLIN, B. M., SHEGEDA, A. M. (Acad. Sci. USSR. Inst. Engn. Phys. Kazan, USSR): High-frequency acoustic phonon scattering

- and thermal impulse shape in YAG. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2043
- GOLODETS, G. I., VOROTYNTSEV, U. M. (Acad. Sci. UKSSR, Inst. Phys. Chem. Kiev. UKSSR): Temperature hysteresis in oxidation reactions on platinum. *React. Kinet. Catal. Lett.* 25 (1984) 75.
- GORBACHEV, A. K., ANDRYUSHCHENKO, F. K., LUGOVOI, S. P. (V. I. Lenin Polytech. Inst. Kharkov, UKSSR): Thermodynamics of a  $12.H_2O$  system at high temperatures. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1618
- GORBACHEV, V. M., VERZHBITSKY, F. R., MYAKISHEV, K. G., POTAPOVA, O. G. (Acad. Sci. USSR, Inst. Inorgan. Chem. Novosibirsk, USSR): Some supplementary data on particular features of the thermal behaviour of potassium persulfate. *J. Thermal Anal.* 29 (1984) 19
- GOROKHOV, L. N., SMIRNOV, U. K., KHODEEV, Y. S. (Acad. Sci. USSR, Inst. High Temp. Moscow, V-71, USSR): Thermochemical characteristics of uranium Ufn fluoride molecules. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1603
- GOVORCHIN, S. W., KANA'AN, A. S., KANA-MUELLER, J. M. (Western Michigan Univ. Dept. Chem. Kalamazoo, MI, 49008, USA): Sublimation study of triphenyl boron and the bond-dissociation enthalpy of B-C<sub>6</sub>H<sub>5</sub>. *J. Chem. Thermodyn.* 16 (1984) 703
- GRABERT, H., WEISS, U. (Univ. Stuttgart, Inst. Theoret Phys. D-7000, Stuttgart 80. Fed. Rep. Ger.): Thermal enhancement of the quantum decay rate in a dissipative system. *Z. Phys. B. Condens. Matter* 56 (1984) 171
- GRABOWSKI, J. J., SIMON, J. D., PETERS, K. S. (Univ. Colorado, Dept. Chem. Boulder, CO 80309, USA): Heat of formation of diphenylcyclopropenone by photoacoustic calorimetry. *J. Amer. Chem. Soc.* 106 (1984) 4615
- GRAHAM, R. G., MOK, L. K., BERGOUNOU, M. A., DE LASA, H. I., FREEL, B. A. (Univ. Western Ontario, Fac. Engn. Sci. London, Ontario Canada N6A 589): Fast pyrolysis (ultrapyrolysis) of cellulose. *J. Anal. Appl. Pyrol.* 6 (1984) 363
- GRASES, F., MARCH, J. G., FORTEZA, R. (Univ. Palma de Mallorca, Fac. Sci. Dept. Analyt. Chem. Palma de Mallorca, Spain): Reaction-rate determination of Cu(II) by use of a very simple monitored thermometric technique based on the action of this cation on the decomposition of hydrogen peroxide. *Thermochim. Acta* 78 (1984) 227
- GRASSIE, N., BEATTIE, S. R. (Univ. Glasgow, Dept. Chem. Glasgow G 12 8QQ Scotland): The thermal degradation of polysiloxanes: Part. 8-poly(methylphenyl-p-silphenylène-siloxane). *Polym. Degrad. Stabíl* 9 (1984) 23
- GRAY, G. W., KELLY, S. M. (Univ. Hull. Dept. Chem. Hull. HU6 7RX, N Humberside, England): Mesomorphic transition temperatures and viscosities for some cyanobiphenyls and-p-terphenyls with branched terminal alkyl groups. *Mol. Cryst. Liquid. Cryst.* 104 (1984) 335
- GRAYSON, M. A., WOLF, C. J. (McDonell Douglas Res. Labs. ST. Louis MO, 63166, USA): Low-temperature thermal decomposition of an epoxy resin. *J. Polym. Sci. Polym. Chem. Ed.* 22 (1984) 1897
- GREBOWICZ, J., LAU, S.-F., WUNDERLICH, B. (Rensselaer Polytech. Inst. Dept. Chem. Troy, NY, 12181, USA): The thermal properties polypropylene. *J. Polym. Sci. Polym. Symp. Ed.* 71 (1984) 19
- GREGORCZYK, Z., GÓRAL, J. (Wroclaw Tech. Univ. Inst. Inorgan. Chem. and Met. Rare Elements PL-50370 Wroclaw Poland): Thermodynamic properties of liquid (lead + silver + bismuth) by a potentiometric method. *J. Chem. Thermodyn.* 16 (1984) 833
- GREINER, R., SCHWARZI, F. R. (Univ. Erlangen Numberg, Dept. Polymer, D-8520 Erlangen, FRG.): Thermal contraction and volume relaxation of amorphous polymers. *Rheol. Acta* 23 (1984) 378
- GRISHKO, V. I., YUDELEVICH, I. G., NIKITINA, V. P. (Acad. Sci. USSR, Inst. Inorgan. Chem. Novosibirsk. USSR): Theory and applications of thermal lens calorimetry. *J. Anal. Chem. USSR. -Engl. Tr.* 39 (1984) 105
- GROCHULSKI, P., WAWARZAK, Z. (Tech. Univ. Lodz. Inst. Phys. PL-93005 Lodz,

- Poland): Thermal expansion of sodium-cadmium formate. Powder Data. *Phys. Status Solidi A. Appl. Res.* 84 (1984) K5
- GUDGIN-TEMPLETON, E. F., WARE, W. R. (Univ. Western, Ontario, Dept. Chem. Photochem. Unit. London, Ontario, Canada, 46A 587): The time dependence of the low-temperature fluorescence of tryptophan. *J. Phys. Chem.* 88 (1984) 4626
- GUILLOT, M., TCHÉOU, F., MARCHAND, A., FELDMANN, P. (Univ. Sci and Med. Grenoble, Luois Neel Lab, CNRS, F-38042 Grenoble, France): Temperature evolution of the umbrella structure in holmium iron garnet. *Z. Phys. B-Condensed Matter*, 56 (1984) 29
- GUILPIN, C. (Univ. Paris 06 Thermophys. liquides GRP, F-75230 Paris 05 France): Sur le lissage rationnel des diagrammes de phase binaires par la méthode des régularisants. *Thermochim. Acta* 79 (1984) 35
- HATEM, G., GAUNE-ESCARD, M. (Univ. Provence, Ctr St. Jerome, CNRS, Dynam. and Thermophys Fluides Lab. 72, F-13397, Marseille 13, France): The unsymmetrical reciprocal molten-salt mixture ( $\text{Na}^+ + \text{Rb}^+ \text{F} + \text{SO}_4^{2-}$ ) Calorimetric measurement and evaluation of the excess molar enthalpies. *J. Chem. Thermodyn.* 16 (1984) 897
- HELLER-KÁLLAI, L., ESTERSON, G., AIZENSHTAT, Z., PISMEN, M. (Hebrew Univ. Jerusalem, Inst. Earth Sci. Jerusalem, (Israel): Mineral reactions and pyrolysis of israeli oil shale. *J. Anal. Appl. Pyrol.* 6 (1984) 375
- HENGEMIHLE, F. M., MCGINNIS, G. D., PRINCE, S., TEMPLETON, C. (Mississippi State Univ. Mississippi Forest. Utilizat Lab. Mississippi State, MS 39762, USA): Thermal decomposition of anomeric glycopyranosides. *J. Anal. Appl. Pyrol.* 6 (1984) 317
- HERSEY, A., ROBINSON, B. H. (Univ. Kent Chem. Lab. Canterbury CTZ, 7NH, Kent, England): Thermodynamic and kinetic study of the binding of azo-dyes to  $\alpha$ -cyclodextrin. *J. Chem. Soc. Faraday Trans. I.* 80 (1984) 2039
- HIRAOKA, Y., FUYUI, T., OKADA, M. WATAHABE, R. (Natl. Res. Inst. Met. Tsukuba Labs, Sákura, Ibaraki 305, Japan): Surface effects on low temperature bend properties of molybdenum single crystals. *Z. Metallk.* 75 (1984) 492
- HO, J. C., DANDEKAR, D. P. (Wichita State Univ. Wichita, KS, 67208, USA): Low-temperature heat capacities of RbCl, RbBr, and CsCl. *Phys. Rev. B-Condensed Matter*, 30 (1984) 2117
- HOFFMANN, J., HUNGER, B., SCHLIEBS, R. (Karl Marx Univ., Wissenschaftsbereich Phys. Chem. Sekt. Chem. DDR, 7010, Leipzig, GDR): Thermal activation of ammonium forms of Y zeolites II. The dehydroxylation process of HNa-Y zeolites. *Zeolites* 4 (1984) 235
- HOFFMANN, J., DOMBROWSKI, D., HUNGER, B. (Karl Marx Univ. Wissenschaftsbereich, Phys. Chem. Sekt. Chem. DDR, 7010, Leipzig, GDR): Thermal activation of ammonium forms of Y zeolites III. T. p. d., n. m. r. i. r. and catalytic investigation of  $\text{MnNH}_4\text{Na}$ ,  $\text{NH}_4\text{Na}$  and  $\text{MnNa}$ . Y zeolites. *Zeolites* 4 (1984) 240
- HOFMANN, P., SPINO, J., (Kernforschungszentrum Karlsruhe GmbH, Inst. Mat. and Festkörperforsch. Postfach. s3640, D-7500 Karlsruhe 1, Fed. Ref. Ger.): Stress corrosion cracking of zircaloy-4 cladding at elevated temperatures and its relevance to transient LWR fuel rod behaviour. *J. Nucl. Mater.* 125 (1984) 85
- HOLDINESS, M. R. (Louisiana State Univ., Med. Ctr. Dept. Pharmacol. and Exptl. Therapeut, New Orleans, LA, 70112 USA): Resonance energy of hexaethylbenzene and hexamethylbenzene. *Thermochim. Acta* 78 (1984) 435
- HORLUCHI, H., SCHULTZ, A. J., LEUNG, P. C. W., WILLIAMS, J. M. (Osaka Univ. Ist. Sci and Ind. Res. Ibaraki, Osaka 567, Japan): Time-of-flight neutron diffraction study of a single-crystal of yttria-stabilized zirconia,  $\text{Zr(4)O}_{1.862}$  at high temperature and in an applied electrical field. *Acta Crystallogr. B. Struct. Sci.* 40 (1984) 84 367

- HOUSE, J. E., JEYARAJ, G. L. (Illinois State Univ. Dept. Chem. Normal, IL 61761, USA): Thermal studies ion dithionate compounds. 3. Dithionates of cobalt(II), nickel(II), copper(II), zinc(II) and cadmium(II). *J. Thermal Anal.* 29 (1984) 41
- HOYLE, C. E., HENSEL, R. D., GRUBB, M. B. (Univ. Sci. Mississippi, Dept. Polymer Sci. Hattiesburg, MS 39406, USA): Temperature dependence of the laser-initiated polymerization of a thiolene system. *J. Polym. Sci. Polym. Chem. Ed.* 22 (1984) 1865
- HSU, D., SKINNER, J. L. (Columbia Univ. Dept. Chem. New York N4 10027, USA): On the thermal broadening of zero-phonon impurity lines in absorption and fluorescence spectra. *J. Chem. Phys.* 81 (1984) 1604
- HUSBAND, J. B., McNAB, H. (Univ. Edinburgh, Dept. Chem. Edinburgh EH9 3JJ, Midlothian, Scotland): The thermolysis of penta-coordinate phosphorus heterocycles. *Phosphor Sulfur Relat. Elem.* 20 (1984) 207
- IBARAKI, N., FRITZSCHE, H. (Toshiba Electron Device Engn. Lab. Yokohama, Japan): Thermostimulated currents in a-Si:H and a-Si:N:H. *J. Non-Cryst. Solids* 66 (1984) 231
- IGLESIA, E., BOUDART, M. (Stanford Univ. Dept. Chem. Engr. Stanford, CA, 94305, USA): Decomposition of formic acid on copper, nickel and copper-nickel alloys. IV. Temperature-programmed decomposition of bulk nickel formate and formic acid preadsorbed on nickel powder. *J. Catal.* 88 (1984) 325
- IIDA, K., NAKAMURA, S., SAWA, G., WAKI, M., IEDA, M. (MIE Univ. Dept. Electr. Tsu. MIE 514, Japan): Low-temperature dielectric relaxation in poly(4,4'-pyridi-phenylene pyromellitimide). *J. Polym. Sci. Polym. Phys. Ed.* 22 (1984) 1399
- IIGE, H. D., PAETZOLD, R. (Friedrich Schiller Univ. Sekt. Chem. DDR 6900 Jena, GDR): Photochemistry of fulgides. 16. Studies on the thermal decomposition of 1,8-dihydronaphthalin fulgide isomers (1,8a-DHN). *Z. Phys. Chem. Leipzig*, 265 (1984) 831
- ILIC, P. B., TOLIC, A., PEKÁREK, V., RUVARAC, A. (Univ. Belgrade, Fac. Tech. Bor, Yugoslavia): Heats of immersion and heat of  $H^+/Cu^{2+}$  exchange for amorphous zirconium phosphate. *Collect. Czech. Chem. Commun.* 49 (1984) 1749, 1755
- LOUKHANI, H., DAYANANDA, REDDY, K., PRABHAKARA RAO, M. V. (SRI Venkateswara Univ. Chem. Labs, Tirupati 517502 Andhra Pradesh, India): Excess volumes of homologous series of aliphatic alcohols with tetrachloroethylene at 303.15 and 313.15K. *Thermochim. Acta* 78 (1984) 269
- ILYUSHIN, A. S., NIKANOROVA, I. A. (MV Lomonosov State Univ. Moscow 117234, USSR): Atomic order influence on the heat expansion of MN 12Al<sub>s</sub>-xFex alloys. *Fiz. Metal. Metalloved. SSSR*, 57 (1984) 1226
- IPSER, H. (Univ. Florida, Dept. Phys. Gainesville, FL 32611 USA): Thermodynamic properties of vanadium-tellurium alloys. *J. Solid. State. Chem.* 54 (1984) 114
- IRGASHOV, K., TARASOV, U. D., CHEKHOVSKOI, V. A. (Acad. Sci USSR, Inst. High Temp. Moscow, U-71, USSR): Enthalpy and heat capacity of Sro in the interval 1180-2650-K. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1839
- IVANOVA, L. L., SHAPOVALOV, V. L., DEMYASHKEVICH, A. B. (MV Lomonosov State Univ. Dept. Chem. Kinet Moscow 117234 USSR): Thermodynamics of proton transfer in the excited state and the non-radiative deactivation of the hydrogen bonded ionic pairs in aromatic hydroxycompounds with amines. *Vestn. Mosk. Univ. Khim. SSSR*, 25 (1984) 385
- JACOBS, D. A., MAJORS, T. J., McCORMICK, W. D. (Univ. Texas, Dept. Phys. Austin, TX, 78712, USA): Heat capacity of calcium hexaammine and strontium hexaammine. *J. Phys. Chem.* 88 (1984) 3877
- JAITLEY, V. K., PANNU, B. S. (Punjab, Agr. Univ. Dept. Chem. Ludhiana 141004, Punjab, India): Thermodynamics of zinc group complexes of p-acetylaminophenyl 3,5-dinitro salicylate. *Thermochim. Acta* 78 (1984) 423
- JASINSKI, T., WITT, A. F., ROHSENOW, W. M. (MIT, Dept. Mat. Sci. and Engn.

- Cambridge, MA 02139, USA): Heat transfer analysis of the bridgmanstockbarger configuration for crystal growth. 2. Analytical treatment of radial temperature variations. *J. Cryst. Growth* 67 (1984) 173
- JELINSKI, L. W., DUMAIS, J. J., LUONGO, J. A., CHOLLI, A. L. (AT and T Bell Labs. Murray Hill NJ 07974, USA): Thermal oxidation and its analysis at low levels in polyethylene. *Macromolecules*, 17 (1984) 1650
- JOHANSEN, T. H., FEDER, J., JESSANG, T. (Univ. Oslo, Inst. Phys. Oslo, Norway): High-resolution measurements of thermal expansion along the unique b-axis of squaric acid. *Z. Phys. B-Condensed Matter* 56 (1984) 41
- JORGENSEN, F. R. A., MOYLE, F. J. (Csiro, Div. Mineral Chem. POB 124, Port Melbourne, VIC 3207, Australia): Periodic thermal instability during the differential thermal analysis of pyrite. *J. Thermal Anal.* 28 (1984) 13
- JOSIAK, J., PLINSKA, S. (Sch. Med. Wroclaw Fac. Pharm. Dept. Inorgan. Chem. PL-50139 Wroclaw, Poland): Thermodynamic properties of molten Sn<sub>2</sub>-KI system. *Polish J. Chem.* 57 (1983) 363
- JULIANUS, J. A., BEKKER, F. F., DE CHATEL, P. F. (N Holland, Molenwerf 1, POB 1991, 1000 BZ Amsterdam, Netherlands): Low-temperature measurements of the thermoelectric power and resistivity of dilute AuY, AuZr, AuNb, AuRh, AuPd and AuPt alloys. I. Temperature dependence. *J. Phys. F. Metal. Phys.* 14 (1984) 2061
- JULIANUS, J. A., BEKKER, F. F., DE CHATEL, P. F. (N Holland, Molenwerf 1, POB 1991, 1000 BZ Amsterdam, Netherlands): Low-temperature measurements of the thermoelectric power and resistivity of dilute AuY, AuZr, AuNb, AuRh, AuPd and AuPt alloys: II. Phase-shift analysis. *J. Phys. F. Metal Phys.* 14 (1984) 2077
- JUN-YING, Y., SWARTZ, Jr. W. E. An XPS study of the effect of La<sub>2</sub>O<sub>3</sub> dopant on the dispersion and thermal stability of Pt/Al<sub>2</sub>O<sub>3</sub> catalysts. *Spectrosc. Lett.* 17 (1984) 331
- KALKUR, T. S., MORAVVEJ-FARSHI, M. K., NASSIBIAN, A. G., (Univ. Western, Australia, Dep. Elect. and Electr. Engr. Nedlands, WA 6009, Australia): Thermal diffusion of tin in GaAs from tin-silica film with RF sputtered SiO<sub>2</sub> cap. *J. Phys. D. Appl. Phys. D. Appl. Phys.* 17(1984) L115
- KARPOVA, S. G., POPOV, A. A., ZAIKOV, G. YE. (Acad. Sci. USSR, Inst. Chem. Phys. Moscow, V-71, USSR): Temperature effect on molecular mobility of oriented polyethylene and polypropylene under loading. The role of relaxational transitions. *Vysokomol. Soeding. Ser. B. SSSR*, 26 (1984) 529
- KASHMOULA, T. B., AL-SAMMERRAI, D. A. (Cellulose Unit., POB 10039, Baghdad, Iraq): Differential scanning calorimetric study of some Iraq: papers. *Thermochim. Acta* 78 (1984) 371
- KASPRZYCKAGUTTMAN, T., MYSLINSKI, A., WILCZURA, H. (Univ. Warsaw, Dept. Chem. Technol. PL-02093 Warsaw, Poland): Molar excess enthalpies of binary mixtures of pyridine bases + hexan-1-ol. *J. Thermal Anal.* 29 (1984) 173
- KASSEM, M. E., ELWAHIDY, E. F., KANDIL, S. H., ELGAMAL, M. A. (Univ. Alexandria, Inst. Postgrad Studies and Res. Dept. Mat. Sci. Alexandria, Egypt): Thermal anomaly in LiKSO<sub>4</sub> crystals in the temperature range 300-800K. *J. Thermal Anal.* 29 (1984) 325
- KATADA, T., EGUCHI, S., ESAKI, T., SASAKI, T. (Nagoya Univ. Fac. Engr. Appl. Organ. Chem. Chikusa KU, Nagoya, Aichi, 464 Japan): Thermal cycloaddition reactions of thiocarbonyl compounds. Part 1. A novel [4+2] cycloaddition reaction of adamantanethione with  $\alpha$ ,  $\beta$ -unsaturated carbonyl compounds. *J. Chem. Soc. Perkin Trans. I.* 8. (1984) 1869
- KEMATICK, R. J., FRANZEN, H. F. (Iowa State Univ. Sci. and Technol, US DOE Ames Lab. Ames, I. A. 50011, USA): Thermodynamic study of the zirconium-aluminium system. *J. Solid. State Chem.* 54 (1984) 226
- KHANNA, R. (Reactor Res. Ctr. Mat. Sci. Lab. Kalpakkam 603102, Tamil Nadu India): Separation of thermal component in diffuse scattering from disordered binary alloys. *Phys. Status Solidi A. Appl. Res.* 84 (1984) 95
- KHODAKOV, YU. S., KOTYAEV, K. P., MAKAROV, P. A., VYTNOVA, L. A., LIN, G. I., ROZOVSKII, A. YA., MINACHEV,

- KH., M. (ND Zelinskii Organ, Chem. Inst. Moscow, USSR): Thermal desorption study of surface properties of SNM-1 methanol synthesis catalyst. *Bull. Acad. Sci. USSR, D. Chem. Sci.* 33 (1984) 255
- KHOMUTOV, N. E., GROISMAN, A. S. Thermodynamics of oxygen solution in aqueous electrolyte solutions. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1776
- KILLAN, H. G., HÖHNE, G. W. M., TRÖGELE, P., AMBACHER, H. (Univ. Ulm, Exptl. Phys. Abt. D-7900, Ulm, FRG): Stretching calorimetry and thermoelasticity of rubbers at different temperatures. *J. Polym. Sci. Polym. Symp. Ed. 71* (1984) 221
- KINARD, D. A., HOEVE, C. A. J. (Texas A and M Univ. Dept. Chem. College Stn. TX 77843, USA): Heat capacity of water absorbed in methylcellulose. *J. Polym. Sci. Polym. Symp. Ed. 71* (1984) 183
- KINOSHITA, S., WAKITA, H., MASUDA, I. (Fukuoka Univ. Japan): Kinetic and thermodynamic characterization of thermal pyridine liberation-anation reactions of bis(2,3-alkanedione dioximato) dipyridinecobalt (III) Iodide in the solid state, *Bull. Chem. Soc. Jap.* 57 (1984) 1818
- KIRCHER, C. C., MARGITAN, J. J., SANDER, S. P. (Caltech. Jet. Prop. Lab. Pasadena, CA 91109, USA): Pressure and temperature dependence of the reaction  $\text{NO}_2 + \text{NO}_3 + \text{M} \rightarrow \text{N}_2\text{O}_5 + \text{M}$ . *J. Phys. Chem.* 88 (1984) 4370
- KIRILLOVA, T. I., TAGER, A. A., FRENKEL' R., Sh. (AM Gorkii State Univ. Sverdlovsk, USSR): Thermodynamics of interaction of components in rubber-rubber system. *Vysokomol. Soedin. Ser. A SSSR*, 26 (1984) 1584
- KLAVSUT, G. N. (AN Sevchenko Appl. Phys. Problems Res. Inst. Minsk, BESSR): Kinetics of the thermal dissociation of nitrosonium trinitrateuranylolate and nonaqueous uranyl nitrate. *Zh. Neorg. Khim. SSSR*, 29 (1984) 2051
- KOBAYASHI, T., ASANO, H., ISHIKAWA, T. (Kyoto Univ. Fac. Sci. Dept. Phys. Kyoto 606, Japan): The thermal degradation of polypropylene filled with  $\text{CaCO}_3$ . *Kobunshi Ronbunshu*, 41 (1984) 337
- KOCIRIK, M., STRUVE, P., BÜLOW, M. (Acad. Sci. GDR, Cent. Inst. Phys. Chem. DDR-1199 Berlin, GDR): Analytical solution of simultaneous mass and heat transfer in zeolite crystals under constant-volume/variable-pressure conditions. *J. Chem. Soc. Faraday Trans. I.* 80 (1984) 2167
- KOKKONEN, P., LAJUNEN, L. H. J., JAAKKO IA, A., ROUTSALAINEN, H. (Univ. Oulu Dept. Chem. SF-90570 Oulu, Finland): Kinetic and mechanistic studies on the decomposition of some hydrous iron (II) salicylate complexes. *Thermochim. Acta* 79 (1984) 289
- KOMENDATOV, A. M., BERENBLIT, V. V., SASS, U. P., SOKOLOV, S. V. (SV Lebedev Synthet. Rubber Res. Inst. Leningrad, USSR): Thermal decomposition of trifluoromethoxydi-fluoroacetyl in heptane as a method of generating trifluoromethoxy-fluoromethyl radicals. *Zh. Vses. Khim. Ob. Mendeleeva* 29 (1984) 353
- KOMNIK, S. N., DEMIRSKI, V. V. (Acad. Sci. UKSSR, Inst. Low Temp. Engr. Phys. Kharkov, 310184 UKSSR): Study of instability boundaries of plastic flow in  $\text{Cu}^{+14}$  at percent Al single crystals at low temperatures. *Cryst. Res. Tech.* 19 (1984) 863
- KOPACKA-KOZŁAK, Z., WACLAWEK, W. (Pedag. Univ. Dept. Chem. PL-45052 Opole, Poland): Thermodynamic data for H-complexes of some pyridine bases with lower alcohols as determined from gas-liquid partition chromatographic measurements. *J. Chromatogr.* 298 (1984) 319
- KOSOROTOV, V. F., KREMENCHUGSKII, L. S., LEVASH, L. V., SHCHEDRINA, L. V. Pyroelectric effect study at temperature gradient conditions (FTT, 1984. vol. 26, N 3, pp. 888-890) *Fiz. Tverd. Tela SSSR*, 26 (1984) 2554
- KOTOVSOV, L. S., POPOV, Y. I. (V. I. Lenin Elect. Engr. Inst. Leningrad 197022, USSR): Calculation of excess enthalpy of moderately dense gases according to data for compressed gases. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1621
- KOZŁOWSKA-RÓG, A., RÓG, G. (Sch. Min. and Met. Inst. Mat. Engr. PL-30059 Krakow, Poland): Thermodynamics properties of solid solutions  $\text{Cu}_x\text{N}_{1-x}\text{Cr}_2\text{O}_4$ . *Polish. J. Chem.* 57 (1984) 395

- KOZUB, V. I. (AD Joffe Engr. Phys. Inst. Leningrad, USSR): On low-temperature properties of normal metal point and bridge microcontacts with amorphous contact region. *Fiz. Tverd. Tela SSSR*, 26 (1984) 1955
- KRISHNAN, K., NINAN, K. N., MADHUSUDANAN, P. M. (Vikram Sarabhai Space Ctr. Div. Analyt. and Spectroscopy Trivandrum 695022, Kerala, India): Kinetic of isothermal dehydration of zinc oxalate dihydrate. *Thermochim. Acta* 79 (1984) 279
- KRISHNASWAMY, S. V., McAVOY, B. R. (Westinghouse Elect. Corp. Ctr. Res. and Dev. Pittsburgh, PA, 15235 USA): Temperature-compensated bulk shear microwave resonators in  $\text{LiTaO}_3$ . *Appl. Phys. Lett.* 45 (1984) 368
- KRIZ, J., BALEK, V. (Paint Res. Inst. Sokolovska 16, CS-18600 Prague 8. Czechoslovakia): Theory of emanation thermal analysis. II. Improvement and computer simulation of the mathematical model for inert gas release from a prous solid. *Thermochim. Acta* 78 (1984) 377
- KRJUKOVA, G. N., ZAIKOVSKII, V. I., PLYASOVA, L. M., KRIVORUCHKO, O. P., ZOLOTOVSKI, B. P., BUYANOV, R. A. (Acad. Sci. USSR, Inst. Catalysis Novosibirsk, USSR): Electron microdiffraction study of the properties of low-temperature states of Al(III) oxides. *Izv. Sibir. Otd. Akad. Nauk. Khim.* 3 (1984) 61
- KUBIN, L. P., ESTRIN, Y. (Fac. Sci. Poitiers. Met. Phys. Lab. 40 Ave Recteur Pineau F-86022 Poitiers, France): Thermal effects in low-temperature deformation - the response to strain rate changes. *Cryst. Res. Tech.* 19 (1984) 853
- KUBO, M. (Marward Univ. Massachusetts Gen. Hosp. Ctr. Canc. Sch. Med. Dept. Rachat Met. Div. Radiat. Biophys. Boston MA, 02114 USA): Self-heating thermal drift control of a polystyrene water calorimeter. *Int. J. Appl. Radiat. Isotop.* 35 (1984) 808
- KUHN, G., MÖLLER, W., ENGEL, W. (Karl Marx Univ. Wissensch. Bereich. Kristallog., Sekt. Chem. DDR. 7010 Leipzig, GDR): Heats and entropies of fusion of  $\text{ABC}_2$  chalcocopyrite semiconductors. *Thermochim. Acta* 78 (1984) 129
- KUNDYS, E. (Sch. Med. Wroclaw. Dept. Inorgan. Chem. PL-50139 Wroclaw, Poland): Thermodynamic properties of molten salt solutions. The AgBr-TiBr system. *Polish J. Chem.* 57 (1983) 369
- KURLAT, D. H., (Fac. Ingn. Buenos Aires, Paseo Colon 850, Buenos Aires, Argentina): Thermoelectric power of the Sn-Se liquid alloy. *J. Non-Cryst. Solids.* 65 (1984) 378
- KUZUYA, M., MIYAKE, F., OKUDA, T. (Gifu Coll. Pharm. Gifu 502, Japan): A novel regio-specific intramolecular cycloaddition of an aromatic ring. Molecular orbital study of conjugated ketenes thermally generated from six-membered  $\alpha$ -monocarbonyl azo-compounds. *J. Chem. Soc. Perkin Trans. II.* 9 (1984) 1471
- KVASHNINA, O. P., KAPITONOV, A. M., SMOKOTIN, E. M., TITOVA, A. G. (L. V. Kirenskii Phys. Inst. Krasnoyarsk, USSR): Acoustic properties of terbium ferrite-garnet at low temperatures. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2408
- LALAUZE, R., LETHIESSE, J. C. (Ecole Natl. Super Mines St. Etienne, F-42023 St Etienne, France): Influence of adsorbed oxygen on the sulfatation of nickel oxid by sulfur dioxide. *J. Thermal Anal.* 29 (1984) 29
- LALIAKANTOURI, M., CHRISTOFIDES, A. G., MANOUSSAKIS, G. E. (Dept. Gen. and Inorgan. Chem Thessaloniki, Greece): Thermal decomposition of tris(piperidyldithiocarbamates) of As(III), Sb(III) and Bi(III). *J. Thermal Anal.* 29 (1984) 279
- LANGEN, G., SCHWITZGEBEL, G., RUPPERSBERG, H. (Univ. Saarland, Fachbereich Phys. Chem., 132, D-6600 Saarbrücken, FRG): Thermodynamic and diffusion studies on solid (Li, Mg) and (Li, Cd) alloys. *Mater. Res. Bull.* 19 (1984) 1141
- LAPOSA, J. D., BRAMLEY, R. (Australian Natl. Univ. Res. Sch. Chem. Canberra, Act. 2601, Australia): Temperature-dependent phosphorescence of deuterium-substituted xanthenes. *J. Phys. Chem.* 88 (1984) 4641
- LEE, K. A., McLELLAN, R. B. (William Marsh Rice Univ. Dept. Mech. Engr. and Mat. Sci.



- Huston, TX, 77251, USA): The diffusivity of hydrogen in nickel at low temperatures. *Sci. Metall.* 18 (1984) 859
- LEGENRE, B., HAHNCHENG, C., BORDAS, S., CLAVUGUIERA-MORA, M. T. (Univ. Paris 11, Fac. Pharm. Chim. Minerale Lab. 2, F-92290 Chatenay Malabry, France): Phase diagram of the ternary system Ge-Sb-Te. I. The Subternary GeTe-Sb<sub>2</sub>Te<sub>3</sub>-Te. *Thermochim. Acta* 78 (1984) 141
- LETCHER, T. M. (Rhodes Univ. Dept. Chem. Grahamstown 6140, South Africa): Excess volumes of (benzene+a cycloalkane) and of (benzene+n-alkane) at two temperatures. *J. Chem. Thermodyn.* 16 (1984) 805
- LI, M. Q., MESSING, G. L. (Penn. State Univ. Dept. Mat. Sci. and Engr. University PK, PA, 16802 USA): Fluoride salt effects on the decomposition of dolomite. *Thermochim. Acta* 78 (1984) 9
- LI, Y. Y. (Chinese Acad. Sci. Inst. Phys. Beijing, Peoples R. China): High-temperature incommensurate phase and superstructure of LiKSO<sub>4</sub>. *Solid State Commun.* 51 (1984) 355
- LIE, L. N., TILLER, W. A., SARASWAT, K. C. (Stanford Univ. Dept. Chem. Engr. Stanford CA, 94305, USA): Thermal oxidation of silicides. *J. Appl. Phys.* 56 (1984) 2127
- LIEPINS, R., ALDISSI, M. (Univ. Calif. Los Alamos, Natl. Lab. Los Alamos, NH, 87545, USA): Electride doping of soluble high temperature polymers. *Mol. Cryst. Liquid. Cryst.* 105 (1984) 151
- LIMSATHAYOURAT, N., MELCHERT, H. V. (Bundesgesundheitsamt Inst. Sozialmed. and Epidemol., Thielalle 89-92, D-1000 Berlin, 33, FRG): High-temperature capillary GLC of hydrocarbons, fatty acid derivatives, cholesterol esters, wax esters, and triglycerides in Beeswax analysis. *Fresenius Z. Anal. Chem.* 318 (1984) 410
- LIN, S. B., KOENIG, J. L. (Case Western Reserve Univ. Dept. Macromolec. Sci. Cleveland, OH 44106, USA): The transitions and melting behavior of thermally crystallized poly(ethylene terephthalate) and their correlations with FTIR and density measurements. *J. Polym. Sci. Polym. Symp. Ed.* 71 (1984) 121
- LINSE, P. (Chem. Ctr S-22007, Lund, Sweden): Thermodynamics and structural aspects on liquid and solid benzene Monte Carlo study. *J. Amer. Chem. Soc.* 106 (1984) 5424
- LOBBIA, G. G., BERCHIESI, G., POFTI, G. (Univ. Camerion, Dipartimento Sci. Chim. I-62032 Camerino, Italy): Electrolytic solutions in succinimide cryoscopic behaviour. *Thermochim. Acta* 78 (1984) 297
- LOGVINENKO, S. P., MIKHINA, G. F., MENDE, G. T. (Acad. Sci. UKSSR, Inst. Low Temp. Engr. Phys. Kharkov, 108, UKSSR): Low temperature indium resistance thermometer. *Cryogenics* 24 (1984) 421
- LONNBERG, H., YLIKOSKI, J., VESALA, A. (Univ. Turku, Dept. Chem. and Biochem., SF-20500 Turku 50, Finland): Effect of alkyl substituents on the thermodynamics of the self-association of purine in aqueous. *J. Chem. Soc. Faraday Trans. I.* 80 (1984) 2439
- LÓPEZ-ALCALA, J. M., PUERTA, M. C., GONZÁLEZ-VILCHEZ, F. (Univ. Cadiz, Fac. Ciencias Dept. Quim. Inorgan. Cadiz, Spain): Thermal behaviour of dinitrogen complexes of Fe(II) with chelating agents. *Thermochim. Acta* 78 (1984) 135
- LOPEZ-QUINTELA, M. A., KNOCHÉ, W., WEITH, J. (Univ. Bielefeld, FAK Chem. D-4800 Bielefeld 1, FRG): Kinetics and thermodynamics of complex formation between aluminium(III) and citric acid in aqueous solution. *J. Chem. Soc. Faraday Trans. I.* 80 (1984) 2313
- LOVE, P. (Univ. Connecticut, Dept. Chem. Stamford, CT, 06903 USA): Aspect of the temperature dependence of electrical conductivity in polymeric materials. *Mol. Cryst. Liquid. Cryst.* 106 (1984) 331
- LOZAR, J., SCHUFFENECKER, L., CUDEY, G., BOUR DET, J. B. (Univ. Sci. and Technol. Houari Boumediene, Inst. Chim. Thermodynam. Solut. Lab. Alger. Algeria): Détermination à 25 °C des propriétés thermodynamiques des complexes chlorés du plomb divalent à partir de mesures de solubilité dans des solutions aqueuses de force ionique inférieure à 1 mol kg<sup>-1</sup>. *Thermochim. Acta* 79 (1984) 171

- LU, W. I., STECKL, A. I., CHOW, T. P., KATZ, W. (Rensselaer Polytech. Inst. Ctr. Integrated Electr. Troy, NY, 12181, USA): Thermal oxidation of sputtered silicon carbide thin films. *J. Electrochem. Soc.* **131** (1984) 1907
- LUDERWALD, I., SCHULTEN, H. R. 6th International Symposium on Analytical and Applied Pyrolysis. Wiesbaden. September 24-18, 1984. *Fresenius Z. Anal. Chem.* **318** (1984) 437, 452
- LUKAC, S. (Xerox Res. Ctr. Canada, Mississauga, Ontario, Canada L5K, RL1): Thermally induced variation in polarity and microviscosity of phospholipid and surfactant vesicles monitored with a probe forming an intramolecular charge transfer complex. *J. Amer. Chem. Soc.* **106** (1984) 4386
- LYASHCHENKO, A. K., CHURAGULOV, B. R., (NS Kurnakov, Gen. and Inorgan. Chem. Inst. Moscow, USSR): Change in the barometric dependence of salt solubility in water with temperature and pressure. *Zh. Neorg. Khim. SSSR*, **29** (1984) 2112
- LYNCH, R., (Univ. Petr. and Minerals Dept. Phys. Dhahran, Saudi Arabia): Low-Reynolds-number heat-exchange drop in liquid helium II. Exact calculation. *J. Low Temp. Phys.* **56** (1984) 259
- LYON, R. E., WANG, D. X., FARRIS, R. J., MACKNIGHT, W. J. (Univ. Massachusetts, Dept. Polymer Sci. and Engr. Amherst. MA 01003 USA): Polyurethane-urea elastomers as working substances in rubber heat engines. *J. Appl. Polym. Sci.* **29** (1984) 2857
- MACFARLANE, D. R., ANGELL, C. A. (Purdue Univ. Dept. Chem. W Lafayette, IN 47907, USA): Emulsion techniques for the study of glass formation. 2. Low melting point salt hydrates. *J. Phys. Chem.* **88** (1984) 4779
- MAIER, J., SIGMUND, E. (Univ. Stuttgart, Inst. Theoret. Phys. Teil. 3. D-7000, Stuttgart 80 FRG.): Thermal conductivity resonances of acceptor states in cubic semiconductors. *J. Phys. C. Solid State Phys.* **17** (1984) 4141
- MAIR, S. L. (Csiro, Div. Chem. Phys. POB 160 Clayton, Vic 3168, Australia): Thermal vibration in the cubic phase of  $K_2SnCl_6$ . *Solid State Commun.* **52** (1984) 335
- MAJER, V., UCHYTILOVÁ, V., SVOBODA, V., POSTA, A. (Prague, Inst. Chem. Technol. Dept. Phys. Chem. CS-16628 Prague, 6, Czechoslovakia): Enthalpies of vaporization and cohesive energies of 2-chloro-1,1,2-trifluoroethyl methylether, 2-chloro-1,1,2-trifluoroethyl isopropyl ether, 2-chloro-1,1,2-trifluoroethyl butyl ether, and 2-chloro-1,1,2-trifluoroethyl chloro-fluoromethyl ether. *J. Chem. Thermodyn.* **16** (1984) 761
- MAKEN, N. J. S., RAJU, G. U. R., GUPTA, B. (Indian Inst. Technol. Ctr. Energy studies New Delhi 110016 India): Thermoionically electron emitting matrix cathodes for magnetohydrodynamic generators analytical model. *J. Appl. Phys.* **56** (1984) 2033
- MAKITRA, R. G., PIRIG, Y. N., TSVETKOV, V. G.: Dependence of the enthalpy of  $SbCl_3$ ,  $AsCl_3$  and  $AlBr_3$  mixtures with organic donors from final properties. *Zh. Obshch. Khim. SSSR*, **54** (1984) 1449
- MALECKI, A., DOUMERC, J. P., TAREEN, J. A. K. (Inst. Mat. Sci. Sch. Mining and Met. Miczkiewicza 30, PL-30-059 Cracow AI, Poland): A simple but very close approximation to the serin-ellickson equation. *J. Thermal Anal.* **29** (1984) 367
- MANNAN, S. K., GANESAN, V., VIJAYALAKSMI, M., SEETHARAMAN, V. (Reactor Res. Ctr. Mat. Dev. Lab. Kalpahkam 603102, Tamil Nadu, India): Isothermal decomposition of the  $\beta$ , phase in a Cu-Zn-Al alloy. *J. Mater. Sci.* **19** (1984) 2465
- MANTOVANI, J. G., MANSON, J. R., ARMAND, G. (Clemson Univ. Dept. Phys. and Astron. Clemson SC. 29631 USA): Thermal attenuation in resonant atom-surface scattering. *Surface Sci.* **143** (1984) 536
- MARCHESONI, F. (Univ. Perugia, Dipartimento Fis., 1-06100 Perugia, Italy): Thermally activated chemical reactions in the presence of internal multiplicative noise. *Chem. Phys. Lett.* **110** (1984) 20
- MARGULOVA, T. K., NOVOSELTSEV, V. N., GRONSKII, R. K., MAKRAKOVA, V. P. (GM Krzhizhanovskii Power Engr. Inst. Dept. Atom Power Planst. Moscow, USSR):

- Purification and protection on thermal power and technological equipment with the use of complexes. *Zh. Vses. Khim. Ob. Mendeleeva* 29 (1984) 335
- MARIKKORDA, P., EROSSKISS, K., STRAUSS, H. (UEB Chem. Fabrik Fahrbrücke, Langenlach, GDR): Study and determination of the water content in finely dispersed silicic acids. *J. Thermal Anal.* 29 (1984) 157
- MARTIN, F., GONZALEZ, A., JIMENEZ, J., LARGO, J., DESAJA, J. A. (Univ. Valladolid, Fac. Ciencias, Fis. Estado, Solido Lab. Valladolid, Spain): Kinetics of thermal dehydration of  $Ce_2(SO_4)_2 \cdot 5(H, D)_2O$ ,  $Ce_2(SO_4)_2 \cdot 8(H, D)_2O$ ,  $Ce_2(SO_4)_2 \cdot 9(H, D)_2O$ . *J. Thermal Anal.* 29 (1984) 257
- MARTINEZ, M., IRABIEN, A., ARNAIZ, A. R., SANTIAGO, C. (Univ. Complutense Madrid, Fac. Quim., Madrid, Spain): Thermogravimetric study of  $(C_6H_5NH_2)_4 Mo_8O_{26} \cdot 2H_2O$ . Isothermal decomposition of aniline. *J. Thermal Anal.* 29 251
- MASLOWSKA, J., BARANOWSKA, A. (Tech. Univ. Lodz, Inst. Fundamental Food Chem. PL-90924 Lodz, Poland): Kinetic parameters of the thermal decomposition of Cu(II) and Zn(II) salts of carboxylic acids. *J. Thermal Anal.* 29 (1984) 309
- MASTRAL, A. M., MEMBRADO, L., RUBIO, B. (Csic. Inst. Carboquim Apartado 589 Zaragoza, Spain): Low temperature chemistry depolymerization of lignites in phenol. 2. Study of maltenes. *An. Quim. B. Inorg. Anal.* 80 (1984) 161
- McCARROLL, W. H., GREENBLATT, M. (Rutgers State, Univ. Dept. Chem. New Brunswick, NJ 08903, USA): Preparation of lithium molybdenum oxide bronzes by a temperature gradient flux growth technique. *J. Solid State Chem.* 54 L1984) 282
- McLELLAN, R. B. (William Marsh Rice Univ. Dept. Mech. Engr. and Mat. Sci. Houston TX, 77251, USA): Thermodynamics of hydrogen in iron. *Scr. Metall.* 18 (1984) 1017
- McMAHON, Jr., C. J. (Univ. Penn. Dept. Mat. Sci. and Engr. Philadelphia, PA, 19104, USA): High-temperature brittle fracture in low alloy steels. *Z. Metallk.* 75 (1984) 496
- McNELLEY, T. R., GAUG, A. (USN Postgrad. Sch. Dept. Mech. Engr. Mat. GRP, Monterey, CA 93943 USA): Development of structure and mechanical properties in Al-10,2 Wt Pct. Mg by thermochemical processing. *Scr. Metall.* 18 (1984) 917
- MELANDER, W. R., HORVÁTH, CS. (Yale Univ. Dept. Chem. Engr. New Haven, CT 06520, USA): Mobile phase effects in reversed-phase chromatography VI. Thermodynamics models for retention and its dependence on mobile phase composition and temperature. *Chromatographia* 18 (1984) 353
- MENDEZ, E. E., PRICE, P. J., HEIBLUM, M. (IBM Corp. Thomas J. Watson Res. Ctr. Yorktown HTS, Ny, 10598, USA): Temperature dependence of the electron mobility in GaAs-GaAlAs heterostructures. *Appl. Phys. Lett.* 45 (1984) 294
- MESSOW, U., FRUHNER, P., HERDEN, H. (Karl Marx Univ. Dept. Chem. DDR 7010, Leipzig, GDR): Heats of immersion of ZSM-5 zeolite in n-alkanes, 1-alkenes and 1-alcohols at 30 °C. *Zeolites* 4 (1984) 255
- MILLER, K. V., EMKEN, W. C., DUNCAN, L. C. (Cent. Washington, Univ. Dept. Chem. Ellensburg, WA 98926, USA): The low temperature infrared spectrum of thiazyl fluoride and the addition compounds of thiazyl fluoride with boron trifluoride, phosphorus pentafluoride and arsenic pentafluoride. *J. Fluorine Chem.* 26 (1984) 125
- MILLER, R. A. (NASA, Lewis Res. Ctr. Cleveland, OH, 44135 USA): Oxidation-based model for thermal barrier coating life. *J. Amer. Ceram. Soc.* 67 (1984) 517
- MILLER, R. C., WILLIAMSON, A. G. (Univ. Canterbury, Dept. Chem. Engr. Christchurch, New Zealand): Excess molar enthalpies for (n-hexane+n-hexadecane) and for three- and four-component alkane mixtures simulating this binary mixture. *J. Chem. Thermodyn.* 16 (1984) 793
- MILONYIC, S. K. (Boris Kidric Inst. Nucl. Sci. Chem. Dynam. Lab. POB 522, YU-11001 Belgrade, Yugoslavia): Heat of immersion of silica in water. *Thermochim. Acta* 78 (1984) 341

- MIWA, M., OHSAWA, T., Tomita, A. (Gifu Univ. Fac. Engn. Gifu 50111, Japan): Temperature and strain rate dependence of critical fiber length and interfacial yield shear strength for glass fiber-thermoplastic resin composites. *Kobunshi Robunshu* 41 (1984) 353
- MONTAUDO, G., PUGLISI, C., SCAMPORRINO, E., VITALINI, D. (Univ. Catania Ist. Dipartimentale, Chim. and Chim. Ind. 1-95125 Catania, Italy): Mechanism of thermal degradation of polyurethanes. Effect of ammonium polyphosphate. *Macromolecules* 17 (1984) 1605
- MONTERRAT, S., COLOMER, P. (Ets Ingn. Ind. Tarrasra, UPC, Dept. Thermodynam. and Fiscoquim. Colon 11, Farrosa, Sapin): The effect of the molecular weight on the glass transition temperature in amorphous poly(ethylene terephthalate). *Polym. Bull.* 12 (1984) 173
- MÓRI, E., PUKÁNSZKY, B., KELEN, T., TUDÓS, F. (Hungarian Acad Sci. Cent. Res. Inst. Chem. H-1525 Budapest, Hungary): Lewis acid initiated melt reactions of polystyrene and EPDM rubber. *Polym. Bull.* 12 (1984) 157
- MOSELEY, S. H., MATHER, J. C. (NASA, Goodard Space, Flight Ctr. Greenbelt, MO 20771, USA): Thermal detectors as x-ray spectrometers. *J. Appl. Phys.* 56 (1984) 1257
- MRAW, S. C., KLEPPA, O. J., (Exxon Res. and Engn. CO. Clinton Township Route 22E, Annandale NJ, 08801, USA): Calvet-type calorimeter for study of high-temperature processes. I. Description of an apparatus appropriate for organic materials. *J. Chem. Thermodyn.* 16 (1984) 865
- MRAW, S. C., KEWESHAN, C. F. (Exxon Res. and Engn. CO Clinton Township Route 22E, Annandale NJ 08801, USA): Calvet-type calorimeter for the study of high-temperature processes II. New ballistic method for the enthalpy of vaporization of organic materials at high-temperatures. *J. Chem. Thermodyn.* 16 (1984) 873
- MUCKLEJOHN, S. A., O'BRIEN, N. W. (Thorn. Emi Lighting Ltd. Div. Res. and Engn., Melton RD, Leicester LE4 7PD, England): The vapour pressure and evaporation thermodynamics of sodium iodide. *J. Chem. Thermodyn.* 16 (1984) 767
- MUKHERJEE, A. K., SANYAL, S. K. (Presidency Coll. Dept. Chem. Calcutta 700073, W Bengal, India): Thermoosmosis of a solution: A phenomenological approach. *Indian. J. Chem. Sect. A*, 23 (1984) 761
- MUKHERJEE, A. K., SANYAL, S. K. (Presidency Coll. Dept. Chem. Calcutta 700073 W Bengal, India): Thermoosmosis across cellulose acetate and cellulose nitrate membranes. *J. Indian. Chem. Soc.* 60 (1984) 1131
- MÜLLER-KRUMBHAAR, H., SAITO, Y. (European Molec. Biol. Lab. Postfach 1 02209, D-6900 Heidelberg, FRG): Melting of two-dimensional dislocation studies. *Surface Sci.* 144 (1984) 84
- NAGAISHI, T., ISHIYAMA, S., MATSUMOTO, M., YOSHINAGA, S. (Kyushu Sangyo Univ. Dept. Ind. Chem. Higoshi KU, Fukuoka, Japan): Reactions between ammonium sulphate and metal oxides (metal=Cr, Mn and Te) and thermal decomposition of the products. *J. Thermal Anal.* 29 (1984) 121
- NAGATA, I. (Kanazawa Univ. Dept. Chem. Engn. Kanazawa, Ishikawa 920, Japan): Liquid-liquid equilibria of (methanol + cyclohexane + chlorobenzene) and of (methanol + methylcyclohexane) benzene + ethanol and + toluene at 298,15K°. *J. Chem. Thermodyn.* 16 (1984) 737
- NAGLE, J. F., GUJRATI, P. D., GOLDSTEIN, M. (Carnegie Mellon, Univ. Dept. Phys. Pittsburgh, PA 15213, USA): Toward better theories of polymer melting. *J. Phys. Chem.* 88 (1984) 4599
- NAIR, S. M. K., JAMES, C. (Univ. Calast, Dept. Chem. Calcutt 673635, Kerala India): Evaluation of kinetic parameters for the thermal decomposition of gamma-irradiated strontium nitrate by dynamic thermogravimetry. *Thermochim. Acta* 78 (1984) 357
- NAKAJIMA, H., SHIMIZU, S., ONUKI, K., IKEZOE, Y., SATO, S. (Japan Atom Energy Res. Inst. Tokaj, Ibaraki 31911, Japan): Kinetics of the thermal decomposition of nickel iodide. *Nippon Kagaku Kaishi* 8 (1984) 1257

- NASSIF, N., HANNA, S. B. (Natl. Res. Ctr. CMRDI Cairo, Egypt): High temperature corrosion of reaction-sintered silicon nitride. *Thermochim. Acta* 79 (1984) 305
- NELANDER, K., OLOFSSON, G., BLACKBURN, G. M., KENT, H. E., LILLEY, T. H. (Univ. Lund Ctr. Chem. S-22007 Lund 7, Sweden): Aqueous solutions containing amino acids and peptides. Part 18. The enthalpy of solution of N-acetyl-L-phenylalaninamide in aqueous solutions containing formamide. *Thermochim. Acta* 78 (1984) 303
- NEUMANN, H., DEUS, P., TOMLINSON, R. D., KÜHN, G., HINTZE, B. (Karl Marx Univ. Sect. Phys. DDR 7010 Leipzig, GDR): Thermal expansion of  $\text{CuInTe}_2$  from 30 to 300 K. *Phys. Status Solidi A. Appl. Res.* 84 (1984) 87
- NEVSKII, A. V., SHORMANOV, V. A., KRESTOV, G. A., PIROGOVA, E. S. (Ivanovo Chem. Technol. Inst. Dept. Gen. Chem. Technol. Ivanovo, USSR): Thermodynamics of ion solvation in aqueous-ethanol solvents. *Izv. Vyssh. Uch. Zav. Khim. Khim. T* 27 (1984) 730
- NIEPMANN, R. (Ruhr Univ. Bochum, Inst. Thermo and Fluidodynam., D-4630 Bochum FRG): Thermodynamic properties of acetonitrile. I. Speed of sound between 240 and 475 and up to 60 MPa. *J. Chem. Thermodyn.* 16 (1984) 779
- NIEPMANN, R. (Ruhr Univ. Bochum Inst. Thermo and Fluidodynam., D-4630 Bochum FRG): Thermodynamic properties of propane and n-butane. 2. Speeds of sound in the liquid up to 60 MPa. *J. Chem. Thermodyn.* 16 (1984) 851
- NISHIMURA, T., KATAOKA, T. (Ind. Res. Inst. Nagano, Wakasato 188, Nagano 380, Japan): Die swell of filled polymer melts. *Rheol. Acta* 23 (1984) 401
- NOBES, R. H., RADOM, L. (Univ. Cambridge, Chem. Lab. Cambridge CB2, 1EW, England): The heats of formation of some protonated olefinic carbonyl compounds:  $[\text{C}_2\text{H}_5\text{O}]^+$  and  $[\text{C}_4\text{H}_7\text{O}_2]^+$  ions. *Org. Mass. Spectrom.* 19 (1984) 394
- NURIEVA, K. M., SMOLENSKII, G. A., TREPAKOV, V. A. (AF Ioffe Engr. Phys. Inst. Leningrad, USSR): Temperature dependence of thermopolarized effect in  $\text{PbMg}_{1/3}\text{Nb}_{2/3}\text{O}_3$  crystals. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2492
- OBOLENSKY, M. A., BELETSKY, U. I., BASTEEV, A. V., CHASHKA, K. B., MINENKO, E. V. (AM Gorkii, State Univ. Kharkov \*UKSSR): Features of resistance temperature dependence and critical parameters of a superconducting state in  $\text{HxNbSe}_2$ . *Fiz. Nizkikh. Temp.* 10 (1984) 590
- O'HARE, P. A. G., MALM, J. G. (Argonne Natl. Lab. Argonne, IL, 60439, USA): Thermochemistry of uranium compounds. XIV. Standard molar enthalpy of formation at 298.15K of  $\text{AgV F}_6$  and its relation to the thermodynamics of fluorination of  $\text{AgF}$  to  $\text{AgF}_2$ . *J. Chem. Thermodyn.* 16 (1984) 753
- OHBA, T., WATANABE, N., KOMURA, Y. (Hiroshima Univ. Fac. Sci. Dept. Mat. Sci. Naka Ku Hiroshima 730, Japan): Temperature dependence of the lattice constants and the structure of  $\text{Mn}_{11}\text{Ge}_8$  at 295 and 116K. *Acta Crystallogr. B-Struct. Sci.* 40 (1984) 84 351
- OHRBACH, K. H., KLUSMEIER, W., KETTRUP, A. (Univ. Paderborn, Dept. Appl. Chem. D-4790 Paderborn, FRG): TG-DTAMS Investigations of coal, and characterization of the volatile products released as a function of temperature. *J. Thermal Anal.* 29 (1984) 147
- OKAZAKI, K., SKINNER, D. J. (Allied Chem. Corp. Mat. Lab. Morristown NJ, 07960, USA): Al-Fe-Zr alloys for high temperature applications produced by rapid quenching from the melt. *Sci. Metall.* 18 (1984) 911
- ORCHARD, G. A. J., DAVIES, G. R., WARD, I. M. (Univ. Leeds, Dept. Phys. Leeds LS2 9IT, W Yorkshire, England): The thermal expansion behaviour of highly oriented polyethylene. *Polymer* 25 (1984) 1203
- USIPOVA, G. E., YURCHENKO, E. N., KOKOVIN, G. A. (Novosibirsk State Univ. Novosibirsk, USSR): Calculation of normal vibration frequencies and thermodynamic function of gaseous molybdenum and tungsten oxotetrahalogenides. *Izv. Sibir. Otd. Akad. Nauk. Khim.* 3 (1984) 11

- PACKAN, N. H. (Univ. Bombay, Dept. Chem. Technol. Bombay, 400019, India): Temperature aspects of pulsed ion bombardment in an austenitic alloy. *J. Nucl. Mater.* 122 (1984) 644
- PALCHEVSKII, V. V., KHORUNZHII, V. V., SCHERBAKOVA, V. I. (AA Zhdanov State Univ. Leningrad B. 164, USSR): Thermodynamic characteristics of complex compounds of bivalent and trivalent iron, including anions of some pyridinecarboxylic acids. *Koord. Khim.* 10 (1984) 1076
- PALECZ, B., TANIEWSKA-OSINSKA, S. (Univ. Lodz. Inst. Chem. Dept. Phys. Chem. PL-90131 Lodz, Poland): Enthalpy of thiourea and hydroxyurea solution in water-urea mixtures. *Thermochim. Acta* 79 (1984) 299
- PALKIN, V. A., KUZINA, T. A., KUZMINA, N. N., SHCHELOKOV, R. N. (NS Kurnakov Gen. and Inorgan. Chem. Inst. Moscow, USSR): Inner rotation of  $\text{NH}_3$  groups and the thermodynamic properties bivalent platinum tetramine chloride. *Zh. Neorg. Khim. SSSR*, 29 (1984) 2041
- PALLA, G., MANGIA, A., PREDIERI, G. (Univ. Parma Ist. Chim. Organ., I-43100 Parma, Italy): Detection of thermal E-Z isomerization of N-acylhydrazone and N-aroylethylhydrazone ligands by means of reverse phase HPLC. *Ann. Chim. Rome*, 74 (1984) 153
- PANEK, Z., FITZNER, K. (Polish, Acad. Sci. Inst. Met. Res. 25 Reymonto St. PL-30059 Cracow, Poland): Gibbs free energy of formation of solid  $\text{SnFe}_2\text{O}_4$ . *Thermochim. Acta* 78 (1984) 261
- PANEVCHIK, U. V., GORYAEV, V. M. (VV Kubyshev Natl. Econ. Inst. Technol., Minsk, BESSR): Thermal dissociation of cadmium propionate. *Izv. Vyssh. Uch. Zav. Khim. Khim. I.* 27 (1984) 627
- PAP, I. S., BERTQTI, I., MINK, GY. (Hungarian Acad. Sci. Inorgan. Chem. Res. Lab. POB 112 H-1502 Budapest, Hungary): TG Study on the reaction of  $\gamma\text{-Al}_2\text{O}_3$  by  $\text{CCl}_4$ . Part 1. Kinetic model for the chlorination process. *Thermochim. Acta* 79 (1984) 69
- PAREJA, R., GONZÁLEZ, R., PEDROSA, M. A. (Univ. Complutense Madrid, Fac. Ciencias Fis. Dept. Fis. Estado Solido, Madrid, Spain): Study of thermochemically reduced and electron-irradiated  $\text{LiNbO}_3$  single crystals by positron annihilation and optical absorption measurements. *Phys. Status Solidi A. Appl. Res.* 84 (1984) 179
- PASHITSKII, E. A. (Acad. Sci. UKSSR, Inst. Phys. Kiev UKSSR): Ion displacement correlation effects on critical temperature of superconducting solid solutions of transition metals. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2053.
- PASSVOGEL, T., TEWORDT, L., SCHOPOHL, N.: Stability, orientational effects and temperature dependence of nonunitary vortex structures in superfluid  $^3\text{He}$ . *J. Low. Temp. Phys.* 56 (1984) 383
- PASTUREL, A., COLINET, C., HICTER, P. (Ecole Natl. Super. Electrochim. and Electromet, Grenoble Thermodynam. and Physicochem. Met. and Lab. BP75, F-38202 St Martin Heres, France): Heats of formation in transition intermetallic alloys. *Acta. Met.* 32 (1984) 1061
- PAULIK, F., PAULIK, J., ARNOLD, M. (Tech. Univ. Budapest, Inst. Gen. And Analyt. Chem. H-1521 Budapest, Hungary): Simultaneous TG, DTG, DTA and EGA technique for the determination of carbonate, sulphate, pyrite and organic material in minerals, soil and rocks. 2. Operation of the thermo-gas-titrimetric device and examination procedure. *J. Thermal Anal.* 29 (1984) 333
- PAULIK, F., PAULIK, J., ARNOLD, M. (Tech. Univ. Budapest, Inst. Gen. and Analyt. Cham. H-1521 Budapest, Hungary): Simultaneous TG, DTG, DTA and EGA technique for the determination of carbonate, sulphate, pyrite and organic material in minerals, soil and rocks. 3. Operation of the thermo-gas-titrimetric equipment and the examination procedure in special cases. *J. Thermal Anal.* 29 (1984) 345
- PAULOSE, P. L., MALIK, S. K., NAGARAJAN, V., DHAR, S. K., RAMBABU, D., VIJAYARAGHAVAN, R. (Tata Inst. Fundamental Res. Bombay 400005 India): Preparation and magnetic ordering temperatures of amorphous  $\text{Gd}_{6-x}\text{Co}_{3-x}\text{Fe}_x$

- PAVLICEK, H., FREYTAG, L., SEIFERT, H., HUEBENER, R. P. (Univ. Tubingen, Inst. Phys. 2, D-7400 Tubingen 1, FRG): Resolution limit due to thermal effects in low-temperature scanning electron microscopy. *J. Low Temp. Phys.* 56 (1984) 237
- PAVLINOV, L. I., MARCHENKO, G. N., LEBEDEV, Y. A. (Kalinin State Univ. Kalinin, USSR): Calculations of polymer thermodynamic properties. *Usp. Khim. SSSR*, 53 (1984) 1172
- PELLETIER, J. M., VIGIER, G., MERLIN, J., MERLE, P., FOUQUET, F., BORRELLY, R. (Inst. Natl. Sci. Appl. Lyon, Etud. Met. Phys. and Phys. Mat. Grp. Lab. 341, B at 502, F-69621 Villeurbanne, France): Precipitation effects on thermopower in Al-Cu alloys. *Acta Met.* 32 (1984) 1069
- PEREPECHKO, I. I., GOLUB', P. D., NASONOV, A. D. (Barnaul Teachers, Inst. Barnaul USSR): Study of heat-physical properties of polymers with the aid of acoustic measurement. *Vysokomol. Soed. Ser. B SSSR*, 26 (1984) 470
- PETERSON-KENNEDY, S. E., MCGOURTY, J. L., HOFFMANN, B. M. (Northwestern Univ. Dept-Chem. Evanston IL, 60201, USA): Temperature dependence of long-range electron transfer in [Zn, Fe<sup>III</sup>] hybrid hemoglobin. *J. Amer. Chem. Soc.* 106 (1984) 5010
- PETTIT, C. J., LIN, J.-L., RENNER, K. E. (Boston Coll. Dept. Chem. Chestnut Hill, MA, 02167, USA): Thermal diffusion of alkali-bromide. *J. Solut. Chem.* 13 (1984) 419
- PETROV, G. S., VECHER, R. A., VOLODKOVICH, L. M., DUDUK, T. N. (V. I. Lenin State Univ. Minsk, BESSR): Thermodynamic properties of BaMnF<sub>4</sub>. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1816
- PLATERO, E. E., AVEAN, C. O., ARJONA, A. M. (Fac. Ciencias Oviedo, Dept. Quim. Inorgan, Oviedo, Spain): Effect of the thermal treatment on the crystalline structure and texture of aluminas prepared by thermolysis of aluminium sulphate and ammonium alum. *An. Quim. B. Inorg. Anal.* 80 (1984) 294
- POSPISIL, M. (Tech. Univ. Prague, Dept. Nucl. Sci. and Phys. Engn. CS-11519 Prague, Czechoslovakia): Effect of genesis and ionizing radiation on the kinetics of reduction of NiO-CeO<sub>2</sub> mixed oxides with hydrogen. *J. Thermal Anal.* 29 (1984) 49
- PALFI, S., LISOWSKI, W., SMUTEK, M., ČERNÝ, S. (Czechoslovak Acad. Sci. J. Heyrousky, Inst. Phys. Chem. and Electrochem. CS-12138 Prague, Czechoslovakia): Calorimetric studies of hydrocarbon adsorption of metal films. V. Hydrocarbons on platinum. *J. Catal.* 88 (1984) 300
- PRASAD, B. (Barnaras Hindu Univ. Inst. Technol. Appl. Phys. Sect. Varanasi 221005, Uttar Pradesh, India): First-principles thermal expansion in Rb and Cs. *Phys. Status Solidi B-Basic Res.* 124 (1984) 497
- PRICE, P. J. (IBM Corp. Thomas J. Watson Res. Ctr. Yorktown HTS, NY, 10598 USA): Low temperature two-dimensional mobility of a GaAs heterolayer. *Surface Sci.* 143 (1984) 145
- PSAREV, V. I., IVANOV, A. L. (IN Ulyanov State Univ. Cheboksary, USSR): Heat capacity anomaly close to the crystallization point for a substance from the amorphous state. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1828
- PURCELL, K. F., EDWARDS, M. P. (Kansas State Univ. Agr. and Appl. Sci. Dept. Chem. Manhattan, KS 66506 USA): Cooperativity in thermally induced intersystem crossing in solids. Fe(phen)<sub>2</sub>(NCR)<sub>2</sub> R=BH<sub>3</sub>, BPh<sub>3</sub>, S. *Se. Inorg. Chem.* 23 (1984) 2620
- PUSYNINA, N. I., KULJUKIN, V. N., TRIPOLSKI, A. A. (Acad. Sci. USSR, Inst. Solid State Chem. and Raw Mineral Proc. Novosibirsk, USSR): Determination of some thermodynamic properties of TaCl<sub>4</sub> and TaCl<sub>5</sub>. *Izv. Sibir. Otd. Akad. Nauk. Khim.* 3 (1984) 41
- PYATACHKOV, A. A., SHORMANOV, V. A., KRESTOV, G. A. (Ivanovo Chem. Technol. Inst. Dept. Gen. Chem. Technol. Ivanovo, USSR): Thermodynamics of nickel (II) complex formation with ethylenediamine in water-dioxane mixtures. *Izv. Vyssh. Uch. Zav. Khim.* 27 (1984) 635
- QUIRKE, N., SHENG, P. (Cornell Univ. Dept. Chem. Engr. Ithaca, NY, 14853, USA): The melting behavior of small clusters of atoms. *Chem. Phys. Lett.* 110 (1984) 63

- RAGHUVANSHI, G. S., KHANDELWAL, D. P., BIST, H. D. (Indian Inst. Technol. Dept. Phys. Kappur 208016, Uttar, Pradesh, India): Low-temperature infrared and Raman spectra of  $\text{Co}(\text{CH}_3\text{COO})_2 \cdot 4\text{X}_2\text{O}$  ( $\text{X}=\text{H}, \text{D}$ ). *Appl. Spectrosc.* 38 (1984) 710
- RAJAGOPOLAN, S., JOHARAPURKAR, D. N. (Nagpur Univ. Dept. Phys. Nagpur 440010, Maharashtra, India): Temperature variation of acoustic attenuation and non-linearity constant in Ge and GaAs. *J. Appl. Phys.* 56 (1984) 1333
- RAKOTOMAVO, J., GAUNE-ESCARD, M., BROS, J. P., GAUNE, P. (Univ. Provence Ctr. St. Jerome, CNRS Dynam. and Thermophys. Fluides Lab. F-13397): Enthalpies of formation at 1373K of the liquid alloys Ag+Au, Ag+Sn, Au+Sn and Ag+Au+Sn. *Ber. Bunsen Ges. Phys. Chem.* 88 (1984) 663
- RAMOS, A. R., MUTCHINSON, J. H., KOVACS, A. J. (Alfa Div. Ind. AP 5000, Monterrey, Nuevo Leon, Mexico): Isobaric thermal behavior of glasses during uniform cooling and heating. III. Predictions from the multiparameter KAHR mode. *J. Polym. Sci. Polym. Phys. Ed.* 22 (1984) 1655
- REDDY, V. P., RAO, V. B., RATNAM, C. U. (Osmania Univ. Univ. Coll. Sci. Dept. Chem. Hyderabad 500007, Andhra Pradesh, India): Thermal organic reactions. 2. substituted. 4. Quinazolinones from O-aminobenzamides and dihydroquinazolines. *Indian J. Chem. Sect. B.* 23/6 (1984) 560
- REZNITSKII, L. A. (MV Lomonosov State Univ. Fac. Chem. Moscow 117234, USSR): Crystal chemical description and real crystal structure as characteristics of substances in a thermochemical study. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1638
- RICHMOND, J., NILSSON, O., SANDBERG, O. (Univ. Reading Dept. Engr. Reading RG6, ZAH, Berks. England): Thermal properties of some lubricants under high pressure. *J. Appl. Phys.* 56 (1984) 2065
- RICKEN, M., NÖLTING, J., RIESS, I. (Univ. Göttingen, Inst. Phys. Chem. D-3400 Göttingen, FRG): Specific heat and phase diagram of nonstoichiometric ceria ( $\text{CeO}_{2-x}$ ). *J. Solid State Chem.* 54 (1984) 89
- REIBESEHL, W., TOMLINSON, E., GRÜNBAUER, H. J. M. (Univ. Amsterdam Dept. Pharm. Phys. Pharm. GRP, 1018 TV Amsterdam, Netherlands): Thermodynamics of solute transfer between alkanes and water. *J. Phys. Chem.* 88 (1984) 4775
- REIBESEHL, W., TOMLINSON, E. (Univ. Amsterdam Dept. Pharm. Phys. Pharm. GRP, 1018 TV Amsterdam, Netherlands): Enthalpies of solute transfer between alkanes and water determined directly by flow microcalorimetry. *J. Phys. Chem.* 88 (1984) 4770
- RIM, P. B., RUNT, J. P. (Penn State Univ. Dept. Mat. Sci. and Engr. Polymer Sci. Program, University PK, PA 16802, USA): Melting point depression in crystalline/compatible polymer blends. *Macromolecules* 17 (1984) 1520
- ROBERTS, R. M., SWEENEY, K. M. (Univ. Texas, Dept. Chem. Austin Tx 78712, USA): Low-temperature pyrolysis of Texas lignite, basic extracts and some related model compounds. *Fuel* 63 (1984) 904
- ROCHETTE, B., SADR, A., ABDUL, M., VERGNAUD, J. M. (Univ. St. Etienne, UER Sci. Mat. and Chem. Engr. Lab. F-42100 ST Etienne, France): Effect of a variation in the order of the overall reaction of cure on the profiles of temperature and state of cure developed at the midplane of rubber sheets. *Thermochim. Acta* 79 (1984) 187
- RODANTE, F., BONICELLI, M. G. (Univ. Rome, Dipartimento Ingn. Chim. Mat. Mat. Prime and Met., I-00100 Rome, Italy): Calorimetric basicity scale for some aniline and pyridine isomers in liquid phase. Substituent, tautomeric, steric and hydrogen bond effects. *Thermochim. Acta* 78 (1984) 123
- RODANTE, F., BONICELLI, M. G. (Univ. Rome, Dipartimento Ingn. Chim. Mat. Mat. Prime and Met. I-00100 Rome, Italy): Anomalous behaviour of 2,3 dicarboxypyridine in the calorimetric basicity scale for some pyridine and aniline isomers. The influence of the internal hydrogen bond on the steric effect. *Thermochim. Acta* 79 (1984) 197
- RODRIGUEZ, A. M., VALERGA JIMÉNEZ, P. (USN, Res. Lab. EO. Hulburt Ctr. Space



- Res. Washington, DC, 20375, USA): Thermal decomposition of the graphite oxidation products. *Thermochim. Acta* 78 (1984) 113
- ROGERS, D. E. (Dsr, Div. Chem. Petone New Zealand): Pyrolysis and hydrolysis of amberlite IRC50 and some of its metal-exchanged forms. *Thermochim. Acta* 79 (1984) 117
- RUBTSOV, YU. I., MANELIS, G. B. (Acad. Sci. USSR, Inst. Chem. Phys. Chernogolovka, USSR): Kinetics of thermal decomposition of hydrazine azide  $N_2H_5N_3$ . *Bull. Acad. Sci. USSR. D. Chem. Sci.* 33 (1984) 260
- RUDNEVA, S. I., CHUMAK, U. L. (Kiev Polytech. Inst. Kiev, UKSSR): Thermodynamics of ionic association of trifluoroacetic acid. *Ukr. Khim. Zh. SSSR*, 50 (1984) 709
- RUGGERI, B. (Politech. Turin, Dipartimento Sci. Mat. and Ingn. Chim. I-10128 Turin, Italy): Thermal analysis of anaerobic digesters. *Chim. Ind. Milan* 66 (1984) 477
- RYCHLA, L., RYCHLY, J., SVOBODA, J., SIMONIK, J. (Slovak Acad. Sci. Ctr. Chem. Res. Inst. Polymer, CS-80936 Bratislava, Czechoslovakia): DSC study of decomposition of azodicarbonamide in different media. I. Decomposition of pure azodicarbonamide- the search for the kinetic model. *J. Thermal Anal.* 29 (1984) 77
- SAFA, A. I., LEUNG, P. L., DAUGHERTY, K. E., MALLOW, W. A., DZIUK, J. J. (N Texas, State Univ. Dept. Chem. Deuton, TX 76203, USA): Catalytic effect of sodium 12-molybdosilicate and sodium 12-molybdophosphate on calcination of calcium carbonate. *Thermochim. Acta* 78 (1984) 309
- SAITO, K., YONEDA, Y., TAHARA, H., KIDOGUCHI, S., MURAKAMI, I. (Tokyo Metropolitan Isotope Res. Ctr. Setagaya KU, Tokyo 158, Japan): The thermal decomposition of  $CF_3I$  in Ar. *Bull. Chem. Soc. Jap.* 57 (1984) 2661
- SAITO, S., MAEDA, T., SOUMURA, T. (Sci. Univ. Tokyo Fac. Engr. Dept. Elect. Engr. Shijuku KU Tokyo 162 Japan): Temperature variation of the work function of sputter-cleaned nickel surface. *Surface Sci.* 143 (1984) L421
- SALVADOR, A. R., CALVO, G. E., ANDRES, M. V. (Univ. Complutense Quim. Dept. Fisicoquim. Proc. Ind. Madrid, Spain): Kinetic analysis of thermogravimetric data. Reaction rate determination. *Thermochim. Acta* 78 (1984) 93
- SAMBLES, J. R., ELSOM, K. C. (Univ. Exeter Dept. Phys. Exeter EX4 4QD, Devon, England): The temperature dependence of the electrical resistivity of gold films. *Solid State Commun.* 52 (1984) 367
- SAZANOV, Y. N., KOSTEREVO, T. A., DAUENGAUER, S. A., SHIBAEV, L. A., STEPANOV, N. G., DENISOV, U. M., KOLTSOV, A. I. (Acad. Sci. USSR, Inst. Macromolec. CPDS, Leningrad, USSR): Amino acid complexes with aprotic polar solvents 5. Complexes with amide solvents and isomerism of trimellite-dianilic acid. *J. Thermal Anal.* 29 (1984) 273
- SCHINDEWOLF, V. (Univ. Karlsruhe, Inst. Phys. Chem. and Electrochem. D-7500 Karlsruhe, FRG.): Thermodynamics, electrochemistry and kinetics of sodium-ammonia solutions. *J. Phys. Chem.* 88 (1984) 3820
- SCHLOTTMANN, P. (KFA Julich GMBH, Inst. Festkorperforsch. D-5170 Julich, 1, FRG.): Thermodynamics of the SU(N) Anderson impurity. II. Numerical Solution for  $S=1/2$ , 1,  $3/2$  and  $5/2$ . *Z. Phys. B. Condensed Matter* 56 (1984) 127
- SCHMID, R. L., FELSCHE, J. (Univ. Constance, FAK, Chem. D-7760 Constanca, FRG): Thermal studies on sodium silicate hydrates. III. Trisodium hydrogensilicate dihydrate,  $Na_3HSiO_4 \cdot 2H_2O$ ; thermal stability, thermal decomposition reactions and dimorphism. *Thermochim. Acta* 79 (1984) 243
- SCHROTER, W., SIETHOFF, M. (Univ. Göttingen, Inst. Phys-4, D-3400, Göttingen, FRG): New phenomens in the plasticity of semiconductors and FCC metals at high temperatures. Part. II. Analysis of experimental data. *Z. Metallk.* 75 (1984) 482
- SCHULTEN, H. R. (Each. HSCH Fresenius, Dept. Trace, Anal. Dambachtal 20, D-6200 Wiesbaden, FRG): Relevance of analytical

- pyrolysis studies to biomass conversion. *J. Anal. Appl. Pyrol.* 6 (1984) 251
- SCHWAB, H., SCHINDEWOLF, V. (Univ. Karlsruhe, Inst. Phys. Chem. and Electrochem. D-7500 Karlsruhe, FRG): Thermodynamics of dilute liquid sodium alloys with mercury, indium and gallium. *Z. Phys. Chem.-Wiesbaden*, 139 (1984) 11
- SCHWERTMANN, V. (Tech. Univ. Munich. Inst. Bodenkunde, D-8050 Freising, FRG): The double dehydroxylation peak of goethite. *Thermochim. Acta* 78 (1984) 39
- SEFAIN, M. Z., NADA, A. M. A. (Natl. Res. Ctr. Dept. Cellulose and Paper Cairo, Egypt): Thermal behaviour of paper sheets strenght. *Thermochim. Acta* 78 (1984) 211
- SEKKINA, M. M. A., TAWFIK, S. (Tanta Univ. Fac. Sci. Tanta, Egypt): Pyroelectricity and mechano-dielectricity of lead zirconate titanate niobate  $[Pb(1-y/2)(Zr_{1-(x+4)}Ti_xNb_4O_3)]$  ceramic transducers. *J. Mater. Sci. Lett.* 3 (1984) 733
- SEMENOVA, L. S., LISHANSKII, I. S., INARIONOVA, N. G. MIKHAILOVA, N. V. (Acad. Sci. USSR. Inst. Macromolec. Chem. Leningrad, USSR): The model of stress reinforcement of polymers and preparation of high-strength polyethylene fibers. *Vysokomol. Soedin. Ser. A. SSSR*, 26 (1984) 1809
- SERGEEV, G. B., ZAGORSKII, V. V., BADAIEV, F. Z. (MV Lomonosov State Univ. Moscow 117234 USSR): Low temperature reactions of magnesium with halohydrocarbons. *Khim. Fiz.* 3 (1984) 169
- SERGEEV, V. A., NEDEL'KIN, V. I., YUFEROV, YE. A., YERZH, B. V., KOMAROVA, L. I., BAKHMUTOV, V. I., TSYRYAPKIN, V. A. (AN Nesmeyonov Organoelement): Synthesis and properties thermoreactive polyaminomeleimides. *Vysokomol. Soedin. Ser. A SSSR*, 26 (1984) 1936
- SERRY, M. A., TAHA, A. S., EL-HEMALY, S. A. S., EL-PIDAMONY, H. (Natl. Res. Ctr. Cairo, Egypt.): Metakaolin-lime hydration products. *Thermochim. Acta* 79 (1984) 103
- SHAKHPARONOV, M. I. (MV Lomonosov State Univ. Fac. Chem. Moscow 117234, USSR): Curil principle, fluctuations and the theory of phenomenological coefficients of nonequilibrium thermodynamics. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1634
- SHARMA, V. (Dav. PG Coll. Dept. Chem. Dehra Dun 248001, India): Thermodynamic functions and stability constant of L-lysine monohydrochloride. *Thermochim. Acta* 79 (1984) 383
- SHASHIDHAR, R., RATNA, B. R., KRISHNA PRASAD, S. (Raman Res. Inst. Bangalore 560080, Karnataka, India): A new kind of A-A transition: studies of binary mixtures of terminally substituted cyano and nitro compounds. *Mol. Cryst. Liquid Cryst.* 102 (1984) 105
- SHI, G., HUANG, B., ZHANG, J. (Chinese Acad. Sci. Shanghai Inst. Organ. Chem. 345 Lingling Lu, Shanghai Peoples R China): Enthalpy of fusion and equilibrium melting point of the  $\beta$ -form of polypropylene. *Makromol. Chem. Rap. Com.* 5 (1984) 573
- SHISHKIN, Y. L. (V. I. Lenin State Teachers Inst. Dept. Pys. and Analyt. Chem. Moscow, USSR): Isothermal-surface transmitter with thermally insulated samples holder a novel approach to quantitative differential thermal analysis. *J. Thermal Anal.* 29 (1984) 105
- SHMYTKO, I. M., TONKOV, E. YU., RASHCHUPKIN, V. I., APTEKAR, I. L. (Acad. Sci. USSR, Inst. Solid State Phys. Chernogolovka, USSR): Temperature and external medium effect on SmS real structure at phase transition under pressure. *Fiz. Tverd. Tela SSSR*, 26 (1984) 2495
- SHUSTOROVICH, E. (Eastman Kodak CO, Res. Labs. Rochester, NY, 14650, USA): A self-consistent semiempirical model of the heat of chemisorption parametriaion for atomic radicals. *J. Phys. Chem.* 88 (1984) 3490
- SIEGEL, W., KÜHNEL, G. (Berg Akad. Freiberg, Sekt. Phys. Silbermannstr. 1. DDR-9200 Freiberg, GDR.): Influence of the temperature dependence of the thermal impurity activation energy on the analysis of hall measurements on GaP. *Phys. Status Solidi A. Appl. Res.* 84 (1984) 251
- SIETHOFF, H., SCHRÖTER, W. (Univ. Wurzburg, Inst. Phys. D-8700, Wurzburg, FRG): New phenomens in the plasticity of semiconductors and FCC metals at high

- temperatures. Part I. Theoretical Models. *Z. Metallk.* 75 (1984) 475
- SIGLI, C., SANCHEZ, J. M. (Columbia Univ. Henry Krumb Sch. Mines, New York, NY, 10027, USA): Calculation of temperature-concentration diagrams by the CU method with Lennard-Jones pair interactions. *Calphad-Comput. Coup Phase Dia*, 8 (1984) 221
- SINGH, B. R., JAIN, R. K., JAIN, M. K., GHOSH, R. (Sahu Jain Coll. Dept. Chem. Najibabad, 246763, India): Thermodynamics of interaction of some transition metal ions with some N-substituted thiobarbituric acids. *Thermochim. Acta* 78 (1984) 175
- SINGH, H. N., SWARUP, S., SINGH, R. P. (Aligarh Muslim Univ. Dept. Chem. Aligarh 202001, Uttar Pradesh, India): Study of thermodynamics and effect of electrolytes on the micellization of sodium dodecyl sulphate in n-alkanol-water mixtures. *Indian J. Chem. Sect. A*, 23 (1984) 175
- SINHA, N. K. (Natl. Res. Council Canada, Div. Bldg. Res. Ottawa, Ontario, Canada K1A 0R6): Role of transient creep in high temperature tensile failure of ice. *Scr. Metall.* 18 (1984) 777
- SLANINA, Z., (Czechoslovak Acad. Sci. J. Heyrovsky Inst. Phys. Chem. and Electrochem. Mochova 7, CS-12138 Prague 2, Czechoslovakia): Cp of equilibrium isomeric mixtures. the ethanol-ethanol system. *Thermochim. Acta* 78 (1984) 47
- SMITH, G. R., FAHY, M. J., WORMALD, C. J. (Univ. Bristol Sch. Chem. Bristol B58 1TS Avon, England): The excess molar enthalpy of  $x\text{H}_2\text{O} + (1-x)(n\text{H}_{n+2})$  (g) for  $n=5, 6, 7$  and 8. *J. Chem. Thermodyn.* 16 (1984) 825
- SLUSARSKI L., JANOWSKA, G. (Tech. Univ. Lodz, Inst. Polymer. PL-90924, Lodz, Poland): The effect of the network structure of the thermal properties of Cis-1,4-polysoprene vulcanizates. *J. Thermal Anal.* 29 (1984) 95
- SOKOLOV, V. N. (Leningrad, Shipbuilding Inst. Leningrad, USSR): Thermal conductivity of antimony-doped antimony selenide and sulfide melts. *Sov. Phys. Semicond. Engl. Tr.* 18 (1984) 495
- SOKOLOVA, N. P. (Acad. Sci. USSR, Inst. Inorgan Chem. Novosibirsk, USSR): Thermodynamic functions of solid solutions of praseodymium and neodymium salt crystallohydrates. *Izv. Sibir. Otd. Akad. Nauk, Khim.* 3 (1984) 6
- SOWINSKA, M., BARTECKI, A. (Wroclaw Tech. Univ. Inst. Inorgan. Chem. and Met. Rare Elements PL-50370 Wroclaw, Poland): Thermal investigations of some chromium (IV) complexes. *J. Thermal Anal.* 29 (1984) 61
- STANEK, V., VYCHODIL, P., FATEEV, G. A., TARASEVICH, V. L. (Czechoslovak Acad. Sci. Inst. Theoret. Bases Chem. Proc. CS-16502 Prague 6 Czechoslovakia): Calculation of dynamics of hydrogen heat desorption from the bed of intermetallide. *Collect. Czech. Chem. Commun.* 49 (1984) 1881-1890.
- STARKWEATHER, Jr. H. W., ZOLLER, P., JONES, G. A. (Dupont CO, Dept. Cent. Res. and Dev. Expt. Stn. Wilmington, DE 19898, USA): The heat of fusion of copolymers of tetrafluoroethylene and hexafluoropropylene. *J. Polym. Sci. Polym. Phys. Ed.* 22 (1984) 1431
- STARKWEATHER, Jr. H. W., ZOLLER, P., JONES, G. A. (Dupont Co Dept. Cent. Res. and Dev. Exptl. Stn. Wilmington DE, 19898, USA): The heat of fusion of 66 Nylon. *J. Polym. Sci. Polym. Phys. Ed.* 22 (1984) 1615
- STASZCZUK, P. (Marie Curie Sklodowska Univ. Inst. Chem. Dept. Phys. Chem. PL-20033 Lublin, Poland): Application of thermal analysis for determination of film pressure and film surface energy on silica gel surface. *J. Thermal Anal.* 29 (1984) 217
- STOCKMANN, H. J., HEITJANS, P. (Univ. Marburg, Fachbereich Phys. D-3550 Marburg, FRG): Low-temperature nuclear spin-lattice relaxation in glasses-homogeneous and inhomogeneous averaging. *J. Non. Cryst. Solid* 66 (1984)
- STRADELLA, L. (Univ. Turin, Fac. Farm. Ist. Chim. Gen. and Inorgan, I-10125, Turin, Italy): TG and DTA study of oxygen depletion and reoxidation of bismuth

- molybdates (2-1-2-3) *J. Thermal Anal.* 29 (1984) 301
- SUGUNAN, S. (Univ. Cochin, Dept. Appl. Chem. Cochin, 682022, India): Thermodynamic parameters of transfer of 2-nitrobenzoic acid and 3-nitrobenzoic acid from water to aqueous salt solutions. *Ind. J. Chem. Sect. A* 23 (1984) 763
- SUMITA, M., SHIZUMA, T., MIYASAKA, K., ISHIKAWA, K. (Ochanomizu Univ. Fac. Home Econ. Dept. Clothing, Tokyo, 112, Japan): Reducible properties of draw temperature, rate of strain and filler content in tensile yield stress of polymethylmethacrylate filled with ultrafine particles. *Rheol. Acta* 23 (1984) 396
- SUSKI, T., (Polish Acad. Sci. High Pressure Res. Ctr. Sokolowska 29 PL-OLL42 Warszawa, Poland): Low-temperature carrier scattering anomalies in ferroelectric  $Pb_{1-x}Ge_xTe$ . *J. Phys. C-Solid State Phys.* 17 (1984) L 689
- SUSS, B., MEIN, K., BUHRIG, E. (Akad. Freiberg, Sekt. Met. and Werkstofftech. DDR 9200 Freiberg GDR): On the thermal stability of binary cadmium phosphides. Received October 10th, 1983. *Z. Anorg. Allg. Chem.* 513 (1984) 222
- SUVOROVA, S. O., TKACHENKO, I. M., SARRAK, V. I., BASHNIN, Y. A. (I. P. Bardin Cent. Ferrous Met. Res. Inst. Met. and Met. Phys. Moscow, USSR): Influence of diffusion-mobile hydrogen on the martensite transformation temperature. *Fiz. Metal. Metalloved SSSR*, 57 (1984) 1155
- SVETTISOV, V. I., CHESNOKOVA, T. A. (Ivanovo Chem. Technol. Inst. Ivanovo USSR): Study of thermally activated reaction of chlorine with some metals at reduced pressures. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1774
- SZPOGANICZ, B., MARTELL, A. E. (Texas A and M Univ. Dept. Chem. College Stn. Tx 77843, USA): Thermodynamic and microscopic equilibrium constants of molecular species formed from pyridoxal 5' phosphate and 2-amino-3-phosphonopropionic acid in aqueous solution. *J. Amer. Chem. Soc.* 106 (1984) 5513
- TAKAHASHI, Y., SATO, K., MIYASHI, T., MUKAI, T. (Tohoku Univ. Fac. Sci. Photochem. Res. Lab. Sendai, Miyogi 970, Japan): Organic thermal reactions. 58. Electrode-catalyzed [2+2] cycloversion reaction of phenylated bis-homocubanes. *Chem. Lett.* 9 (1984) 1553
- TANAKA, H., TOKUMITSU, M. (Univ. Tokyo, Dept. Phys. Tokyo 113 Japan): Kinetics and thermodynamics of thermal dehydration of magnesium oxalate dihydrate. *J. Thermal Anal.* 29 (1984) 87
- TEITELBAUM, B. Y., YAGFAROVA, T. A., ALEYEV, K. M., KHASANOV, M. K., GAFUROV, F. S. (AE Arbutov Organ and Phys. Chem. Inst. Kazan, USSR): TMA Characterization of urethane elastomers with the structure varying from chain to network. *J. Thermal Anal.* 29 (1984) 227
- TEIXIDOR, F., LLOBET, A., CASABÓ, J., BORDAS, S. (Univ. Autonomia Barcelona, Fac. Ciencias, Dept. Quim. Inorgan. Bellaterra Barcelona, Spain): The preparation and thermal analysis studies of cobalt and zinc 1,3-bis(2-hydroxyphenyl)-1,3-propanedione alcohol complexes. *Thermochim. Acta* 79 (1984) 315
- TEWARI, Y. B., GOLDBERG, R. N. (NBS, Ctr. Chem. Phys. Div. Chem. Thermodynam, Gaithersburg, MD 20899, USA): Thermodynamics of the conversion of aqueous glucose to fructose. *J. Solut. Chem.* 23 (1984) 523
- TEYSSANDIER, F., DUCARROIR, M., BERNARD, C. (Establishment Techn. Cent. Armement, 16B IS Ave Prieur de la Côte d'Or, F-94114 Arcueil, France): Thermodynamic study of the titanium-carbon-nitrogen phase diagram at high temperature. *Calphad-Comput. Coup. Phase Dia.* 8 (1984) 233
- TOMASSETTI, M., CAMPANELLA, L., D'ASCENZO, G. (Univ. Rome, Dept. Chem. I-00100 Rome, Italy): Thermogravimetric analysis of conjugated and unconjugated sodium cholates. *Thermochim. Acta* 78 (1984) 235
- TONG, Z., EINAGA, Y. (Osaka Univ. Fac. Sci. Dept. Macromolec. Sci. Toyonako, Osaka,

- 560, Japan): Second virial coefficient of binary polystyrene mixtures in cyclohexane below the theta temperature. *Polym. J.* 16 (1984) 641
- TREFNY, J. U., PETERS, D. S., FOX, J. N. (Colorado Sch. Mines Dept. Phys. Golden CO, 80401, USA): Thermoelectric properties of amorphous antimony. *J. Non-Cryst. Solids.* 65 (1984) 215
- TRESSAUD, A., DARRIET, J., LAGASSIE, P., GRANNEC, J., HAGENMULLER, P. (CNRS, Chim. Solide Lab. 351 Cours Liberat, F-33405 Talence, France): On new  $K_2LiMF_6$  phases (M = d-element Al, Ga, In). Crystal structure of the rhombohedral high-temperature form a  $K_2LiAlF_6$ . *Mater. Res. Bull.* 19 (1984) 983
- TRIBUNSKI, V. V., SHAROV, V. A. (SM Kirov Polytech. Inst. Sverdlovsk, USSR): Thermodynamic analysis of the processes of thermal dissociation of anhydrous cobalt and nickel oxalates. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1610
- TSUCHIDA, T., FURUICHI, R., SUKEGAWA, T., FURUDATE, M., ISHII, T. (Hokkaido Univ. Fac. Engn. Dept. Appl. Chem. Sapporo Hokkaido 060, Japan): Thermo-analytical study on the reaction of the  $CuO-Al_2O_3$  ( $\eta$ ,  $\gamma$  and  $\phi$ ) systems. *Thermochim. Acta* 78 (1984) 71
- TSUZUKI, A., SAGO, S., HIRANO, S.-I., Naka, S. (Nagoya Univ. Fac. Engn. Synthet. Crystal Res. Lab. Chikusa KU, Nagoya Aichi 464, Japan): High temperature and pressure preparation and properties of iron carbides  $Fe_7C_3$  and  $Fe_3C$ . *J. Mater. Sci.* 19 (1984) 2513
- TSVETKOV, U. G., BUCHIKHIN, E. P. KLYSHEVICH, R. P., ALEKSANDROV, Y. A.: Thermochemical studies of uranyl nitrate aqueous and nonaqueous solutions. *Zh. Obshch. Khim. SSSR*, 54 (1984) 1456
- TURCHANIN, A. G., BABENKO, S. A., BILYK, I. I. (Kramatorsk Ind. Inst. Kramatorsk, UkSSR): Dependence of thermodynamic properties of cubic zirconium carbonitrides on the temperature and composition in the interval 298–1500K. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1625
- TURNER, A. G., DAVIS, L. P. (USA Acad Frank. J. Seiler Res. Lab. Colorado Springs, CO 80840, USA): Thermal decomposition of TNT: Use of 1-nitroprene to model the initial stages of decomposition. *J. Amer. Chem. Soc.* 106 (1984) 5447
- UKRAINTSEV, V. B., YAKOVLEV, S. V., KUKUSHKIN, Y. N. (Lensovet Technol. Inst. Leningrad, USSR): Thermal transformation of Ni(II) halide complexes with ethylenimine and its derivatives. *Zh. Obshch. Khim. SSSR*, 54 (1984) 1592
- URBANOVICI, E., SEGAL, E. (Polytech. Inst. Bucharest, Fac. Chem. Engn. Chair Phys. Chem. and Electrochem. Technol. BLUD Republ. 13. Bucharest, Romania): Integral method of kinetic data evaluation. *Thermochim. Acta* 78 (1984) 441
- VALENTI, G., SANTOVO, L., VOLPICELLI, G. (Univ. Naples 1st Cellular and Dev. Biol. 1–80138 Naples, Italy): Hydration of granulated blastfurnace slag in the presence of phosphogypsum. *Thermochim. Acta* 78 (1984) 101
- VAN HUMBEECK, J., JANSSEN, J., MWAMBA-NGOIE, DELAEY, L. (Catholic Univ. Leuven Dept. Met. and Mat. Engn. 8–3030 Heverle, Belgium): The stabilization of step-quenched copper-zinc-aluminium martensite Part 1.: The reverse transformation temperatures. *Sci. Metall.* 18 (1984) 893
- VARMA, I. K., SANGITA, VARMA, D. S. (Indian Inst. Technol. Ctr. Mat. Sci. and Technol. Delhi Hauz Khas, New Delhi, 110016, India): Addition polyimides IV. Effect of structure on thermal characteristics. *J. Appl. Polym. Sci.* 29 (1984) 2807
- VASEKINA, T. F., KUSHNIR, E. Y., SEREBRENNIKOVA, G. M. (All Union Chem. Reagent and Highly Pure Chem. Subst. Res. Inst., Moscow, USSR): Enthalpy of the solution of lithium tetrafluoroborate in water gamma-butyrolactone and its mixtures. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1845
- VASILEV, V. P. (Ivanovo Chem. Technol. Inst. Dept. Analyt. Chem., Ivanovo, USSR): Thermodynamics of the formation of coordination metal compounds with complexones. *Zh. Vses. Khim. Ob. Mendeleeva* 29 (1984) 308

- VASILEV, V. P., KOZLOVSKII, E. V., MARINA, T. B., BIKHMAN, B. I. (Ivanovo Chem. Technol. Inst. Ivanovo USSR): Thermodynamic characteristics of  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$  complex formation reactions with oxyethylidene phosphonic acid in aqueous solution. *Zh. Neorg. Khim. SSSR*, 29 (1984) 1943
- VASILEVA, I. A., SULEIMENOVA, G. S. (MV Lomonosov State Univ. Fac. Chem. Moscow, 117234 USSR): Effect of small mixtures of titanium and molybdenum dioxides on the thermodynamic properties of vanadium dioxide. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1832
- VASKO, M., ROMANOV, A. (Pulp. and Paper Res. Inst. CS-81521 Bratislava, Czechoslovakia): Study of the thermoelastic properties of polymers in open system-effect of the used diluent on the energetic ratio Fu/F. *Acta Polym.* 35 (1984) 600
- VELICH, V., RUZICKA, K., VASICKOVA, M. (TH Chem. Technol. CS-53210 Pardubice, Czechoslovakia): Kinetic study of azo-coupling reactions using injection enthalpimetry. *J. Thermal Anal.* 29 (1984) 353
- VICTORIA, M., GREEN, W. V., SINGH, B. N., LETTERS, T. (Swiss Fed. Inst. Reactor Res. CH-5305 Wurenlingen, Switzerland): The temperature dependence of void and double formation and growth in aluminium during 600 MEV Proton irradiation. *J. Nucl. Mater.* 122 (1984) 737
- VILLAR, V. P., REY, C., RODRIQUEZ, J. R. (Univ. Santiago de Compostela, La Coruna, Spain): A noise filter for calorimeter signals. *Thermochim. Acta* 79 (1984) 111
- VILLE, G. A., VOLLHARDT, K. P. C., WINTER, M. J. (Univ. Calif. Berkeley, Dept. Chem. Berkeley, CA 94720, USA): Thermally induced diastereoisomerization of (cyclobutadiene) cobalt complexes as a probe for the reversibility of their formation from complexed alkynes. *Organometallics* 3 (1984) 1177
- VOLODIN, A. M. (Acad. Sci. USSR, Inst. Catalysis Novosibirsk, USSR): ESR studies of thermal stability of anion radicals  $\sigma^-$  on MgO surface and their reactivity to molecular oxygen. *React. Kinet. Catal. Lett.* 25 (1984) 335
- VORONKOV, V. V., VORONKOVA, G. I. (Acad. Sci. USSR, Inst. Gen. Phys. Moscow, V-71, USSR): Temperature dependence of small-angle scattering of light by pure silicon crystals. *Sov. Phys. Semicond. Engl. Tr.* 18 (1984) 584
- WAGH, A. S., EZEGBUNAM, L. N. (Univ. W Indies, Dept. Phys. Mat. Sci. Lab. Kingston, Jamaica): The intermediate temperature ductility minimum in 70% Cu and 30% Zn  $\alpha$ -brass. *Sci. Metall.* 18 (1984) 933
- WALLIS, K. P., CLANCY, P., ZOLLWEG, J. A., STRETT, W. B. (Cornell Univ. Sch. Chem. Engr. Ithaca NY 14853, USA): Excess thermodynamic properties for  $x\text{CO}_2 + (1-x)\text{C}_2\text{H}_6$  (1): experiment and theory. *J. Chem. Thermodyn.* 86 (1984) 811
- WARNE, S. St. J., FRENCH, D. M. (Univ. Newcastle, Dept. Geol. Newcastle, NSW 2308, Australia): Siderite, pyrite and magnesite identification in oil shale by variable atmosphere DTA. *Thermochim. Acta* 79 (1984) 131
- WEGRZYN, T. F., HEDWIG, G. R. (Massey Univ. Dept. Chem. Biochem. and Biophys. Palmerston North, New Zealand): Excess enthalpies of aqueous solutions of (urea + one of four dipeptides). *J. Chem. Thermodyn.* 16 (1984) 843
- WESOLOWSKI, M. (Med. Acad. Gdansk, Inst. Chem. and Analyt. Al K Marksa 107, PL-80416 Gdansk, Poland): Thermal decomposition of tale a review. *Thermochim. Acta* 78 (1984) 395
- WHITE, M. A. (Dalhousie Univ. Dept. Chem. Halifax, NS, Canada, B3H 433): Phase transitions in  $\text{Mg}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$  as determined from the measurement of its heat capacity from 25 to 355K by adiabatic calorimetry. *J. Chem. Thermodyn.* 16 (1984) 885
- WIBERG, K. B., WASSERMAN, D. J., MARTIN, E. (Yale Univ. Dept. Chem. New Haven, CT, 06511, USA): Enthalpies of hydration of alkanes. 2. The n-heptenes and n-pentenes. *J. Phys. Chem.* 88 (1984) 3684

- WINDIG, W., MEUZELAAR, H. L. C., SHAFIZADEH, F., KELSEY, R. G. (Univ. Utah. Ctr. Biomat. Profiling, Salt Lake City, UT 84108, USA): Biochemical analysis of wood and wood products by pyrolysis-mass spectrometry and multivariate analysis. *J. Anal. Appl. Pyrol.* 6 (1984) 233
- WIPF, H., NEUMAIER, K., MAGERL, A., HEIDEMANN, A., STIRLING, W. (Tech. Univ. Munich, Inst. Phys. D-8046 Garching, FRG): Low-temperature hydrogen tunneling in  $\text{NbO}_x\text{H}_y$  ( $x \approx 0,002$ ;  $y \approx 0,002$ ) *J. Less-Common Metals* 101 (1984) 317
- WRIGHT, O. B., PHILLIPS, W. A. (Univ. Cambridge Cavendish Lab, Madingley RD, Cambridge CB3 0ME, England): Low-temperature thermoelastic effects in glasses. *Phil. Mag. B.* 50 (1984) 63
- WYPYCH, J. (Univ. IFE, Fac, Technol. Ile Ife, Nigeria): PVC thermal degradation. III. On the mechanism of action of metal carboxylates. *J. Polym. Sci. Polym. Lett. Ed.* 22 (1984) 425
- XIE, S. S., MACNIGHT, W. J., KARASZ, F. E. (Acad. Sinica, Chengdu, Inst. Organ. Chem. Chengdu, Peoples R China): Carboxylation of poly (2,6-dimethyl-1,4-phenylene oxide) and thermal properties of blends with atactic polystyrene. *J. Appl. Polym. Sci.* 29 (1984) 2679
- YABLOKOV, V. A., ZELYAEV, I. A., LOKHOV, N. S., MAKAROV, E. I. (VP. Chkalov Engn. Construct. Inst. Gorki USSR): Kinetics of antimony triethyl thermal decomposition in the aqueous phase. *Zh. Obshch. Khim. SSSR*, 54 (1984) 1549
- YAKOVLEV, V. F. (NK Krupskaya State Teachers Inst. Kherson, UKSSR): Heat transfer by radiation during stationary temperature gradients in molecular media. *Zh. Fiz. Khim. SSSR*, 58 (1984) 1821
- YANO, T., OHTSUBO, A., ISHII, T. (Mitsubishi Atom Power Ind. Ins. Tokyo, Japan): Investigation on high temperature vapor pressure of  $\text{UO}_2$  containing simulated fissionproduct elements. *J. Nucl. Mater.* 125 (1984) 71
- YUN, H. M., ENNIS, P. J., NICKEL, H., SCHUSTER, H. (KFA Julich GMBH, Inst. Reaktorwerkstoffe D-5170 Julich 1. FRG): The effect of high temperature reactor primary circuit helium on the formation and propagation of surface crack in alloy 800-H and Inconel-617. *J. Nucl. Mater.* 125 (1984) 258
- YURCHENKO, E. N., OLENKOVA, I. P., GONCHAROVA, O. I., DETUSHEVA, L. G., LITVAK, G. S. (Acad. Sci. USSR, Inst. Catalysis Novosibirsk, USSR): Study of the transformation of salts of 6-heteropoly anions during thermal treatment. *Izv. Sibir. Otd. Akad. Nauk. Khim.* 3 (1984) 50
- YURCHENKO, E. N., DETUSHEVA, L. G., OLENKOVA, I. P., GONCHAROVA, O. I., LITVAK, G. S. (Acad. Sci. USSR, Inst. Catalysis Novosibirsk, USSR): Study of the transformation of salts of 12-heteropoly acids during thermal treatment. *Izv. Sibir. Otd. Akad. Nauk. Khim.* 3 (1984) 56
- YOU, X. Z., DRAGO, R. S., MILLER, J. G. (Nanjing Univ. Dept. Chem. Nanjing, Peoples R China): Spectroscopic and thermodynamic studies of iodine and some pyridines system. *Acta. Chim. Sin.* 42 (1984) 660
- ZAKI, M. I., ABDEL-KHALIK, M. (Hinia Univ. Fac. Sci. Dept. Chem. Minia, Egypt): Thermal decomposition and creation of reactive solid surfaces. I. Characterization of the decomposition products of alkaline earth oxalates. *Thermochim. Acta* 78 (1984) 29
- ZEMAN, S., DIMUN, M., TRUHLIK, S. (Chemko, Dept. Res. CS-07222 Strasske, Czechoslovakia): The relationship between kinetic data of the low-temperature thermolysis and heats of explosion of organic polynitro compounds. *Thermochim. Acta* 78 (1984) 181
- ZIELENKIEWICZ, W. (Polish Acad. Sci. Inst. Phys. Chem. Kasprzaka 44-52, PL-01224, Warsaw, Poland): Calorimetry for thermokinetic determinations. *J. Thermal Anal.* 29 (1984) 179
- ZIELENKIEWICZ, A. (Polish Acad. Sci. Inst. Phys. Chem. Kasprzaka 4452, PL-01224

- Warsaw, Poland): Heat of dilution of aqueous mixtures of N-alkylated amides at 313.15K. *Thermochim. Acta* 79 (1984) 371
- ZOLNIKOV, K. P., PSAKHE, S. G., LANDA, A. I., PANIN, V. Y. (Acad. Sci. USSR, Inst. Atmospher. Opt. Tomsk, USSR): Theoretical studies of pressure influence on thermodynamic melting characteristics and self-diffusion coefficients of Mg and Zn melts. *Fiz. Metal. Metalloved. SSSR*, 57 (1984) 1045