

Bibliography Section

- ACTON, A., KELLNER, K. (Engn. Sci. Data Unit. Ltd., London, W1R 7AD, England): The low temperature thermal conductivity of ^4He . I. Measurements between 3.3 and 20 K on the dilute gas, the dense gas and the liquid. *Phys. B + C* 90 (1977) 192
- ADLER, P. N., DEIASI, R. (Grumman Aerosp. Corp., Dept. Res., Met. Branch, Mat. Lab. Bethpage, N. Y. 11714 USA): Calorimetric studies of 7000 series aluminium alloys. 2. Comparison of 7075, 7050 and R \times 720 alloys. *Met. Trans. A* 8 (1977) 1185
- AKIBA, M., KOSUGI, Y., TAKADA, T. (Tokyo Coll. Pharm., 1432-1 Horinouchi, Hachioji, Tokyo, 19203 Japan): Reactions of acyl-aminoquinone tosylhydrazones synthesis of pyrrolo [1,2-a] indoloquinone via benzoxazoline by thermolysis and photolysis. *Heterocycles* 6 (1977) 1125
- ALEKSANDROV, Y. A., DYAGILEVA, L. M., TSYGANNOVA, E. I. (N. I. Lobachevskii State Univ., Chem. Res. Inst., Gorki, USSR): Thermal decomposition of ethyl-substituted bisarene compounds of chromium. *Zh. Obshch. Khim.* 47 (1977) 1554 (In Russian)
- ALEKSEEVSKII, N. E., DOBROVOL'SKII, N. M., LEYAROVSKI, E. I., LEYAROVSKA, L. N., TSEBRO, V. I., WOLF, G. (Acad. Sci. USSR, Inst. Phys. Problems, Moscow, V-71 USSR): Specific heats of $\text{Mo}_5\text{SnGa}_{0.5}\text{S}_6$ and Mo_5GaS_6 . *J. Phys. C* 10 (1977) L 293
- ALI, S. A., SKOROPANOV, A. S., MECHKOVSKU, L. A., VECHER, A. A. (V. I. Lenin State Univ., Minsk, BeSSR): Formation enthalpy of melts in indium-tin-bismuth-lead system. *Zh. Fiz. Khim.* 51 (1977) 1365 (In Russian)
- ALTYMYSHEV, L. (Osha State Teachers Inst., Osha, USSR): On mono and bimolecular sequence of kinetics of thermal annealing process of colour centers. *Fiz. Tverd. Tela* 19 (1977) 1344 (In Russian)
- ANDRUZZI, F., PILCHER, G., VIRMANI, Y., PLESCH, P. H. (Univ. Pisa, Ist. Chim. Ind. and Appl., I-56100 Pisa, Italy): Enthalpy of polymerisation of 7-oxabicyclo [2.2.1] heptane, and exo-2-methyl-7-oxabicyclo [2.2.1] heptane and endo-2-methyl-7-oxabicyclo [2.2.1] heptane. *Makromol. Chem.* 178 (1977) 2367
- APTEKAR, I. L., TONKOV, E. Y. (Acad. Sci. USSR, Inst. Solid State Phys., Chernogolovka, USSR): Equilibrium of isomorphous phases and critical point in $\text{Sm}_{1-x}\text{Cd}_x\text{S}$ system. *Fiz. Tverd. Tela* 19 (1977) 2192 (In Russian)
- ARAI, N., SORAI, M., SUGA, H., SEKI, S. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka, 560 Japan): Construction of a ^3He calorimeter and heat capacity measurement of the 1965 Calorimetry Conference Copper Standard between 0.4 and 20K. *Bull. Chem. Soc. Jap.* 50 (1977) 1702
- AVERKIN, A. A., LOGACHEV, Y. A., PETROV, A. V., TSYPKINA, N. S. (A. F. Joffe Engn. Phys. Inst., Leningrad, USSR): Thermoconductivity of alkali halide crystals under pressure. *Fiz. Tverd. Tela* 19 (1977) 1692 (In Russian)
- AZOKPOTA, C., POMMIER, C., BERAR, J. F., CALVARIN, G. (Univ. Paris, CSP, Chim. Phys. Lab., 7-93430 Villejuif, France): Etudes calorimétrique et radiocristallographique du cobaltocène et du ruthénocène entre 77 et 298K. *J. Organometal. Chem.* 135 (1977) 125

- BABA, Y., TANAKA, S., KAGEMOTO, A. (Osaka Inst. Technol., Dept. Gen. Educ., Omiya Asahi-ku, Osaka 535, Japan): Heats of mixing of polyriboadenylic acid and polyribouridylic acid in aqueous NaCl solution. *Macromol. Chem.* 178 (1977) 2117
- BABAEVA, E. P., ZEMLYAKOVA, Z. F., NESTEROVA, E. I., SIMULIN, Y. N., RONKIN, G. M.: Calculated and experimental ways for determining heats of combustion of chlorinated polyethylene. *Zh. Fiz. Khim.* 51 (1977) 1640 (In Russian)
- BAEV, A. K., GAIDYM, I. L.: Analysis of kinetic data on thermal decomposition of dodecacarbonyl-triosmium on metals of inserted decades. *Zh. Obshch. Khim.* 47 (1977) 1557 (In Russian)
- BAGHAL-VAYJOOEE, M. H., COLLISTER, J. L., PRITCHARD, H. O. (York Univ., Dept. Chem., Downsview M3J 1P3, Ontario, Canada): The enthalpy of isomerization of methyl isocyanide. *Can. J. Chem.* 55 (1977) 2634
- BALL, M. C., CASSON, M. J. (Loughborough Univ., Technol., Dept. Chem., Loughborough LE11 3TU, Leicestershire, England): Thermal studies on lead(II) salts. V. Enthalpies of formation of lead(II) oxide carbonates by scanning calorimetry. *J. Inorg. Nucl. Chem.* 39 (1977) 1456
- BARRON, T. H. K., BIRCH, J. A., WHITE, G. K. (Univ. Bristol, Sch. Chem., Bristol BS8 1TS, Gloucestershire, England): Thermal expansion and heat capacity of cuprous chloride at low temperatures. *J. Phys. C* 10 (1977) 1617
- BARTA, CH., ZADOKHIN, B. S., MARKOV, Y. F., TIKHONOV, V. V. (A. F. Joffe Engn. Phys. Inst., Leningrad, USSR): Specific heat of Hg_2Br_2 crystals in the region of phase transition. *Fiz. Tverd. Tela* 19 (1977) 2206 (In Russian)
- BARTKOWSKI, K., WŁOSEWICZ, D., RAFALOWICZ, J. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., PL-53529 Wrocław, Poland): Anisotropy of thermal conductivity of tin monocrystals depending on chemical admixtures in the temperature range 5 to 70 K. *Phys. Status Solidi A* 42 (1977) 351
- BARTON, J. M. (Royal Aircraft Estab., Dept. Mat., Farnborough, Hampshire, England): Sample temperature lag in quantitative DTA (Dupont DSC). *Thermochim. Acta* 20 (1977) 249
- BATCHELOR, G. K., O'BRIEN, R. W. (Univ. Cambridge, Dept. Appl. Math. and Theoret. Phys., Cambridge, England): Thermal or electrical conduction through a granular material. *Proc. Royal Soc. London A* 355 (1977) 313
- BECK, A. E. (Univ. Western Ontario, Dept. Geophys., London, NGA 3K7, Ontario, Canada): A potential systematic error when measuring the thermal conductivity of porous rocks saturated with a low-conductivity fluid. *Tectonophysics* 41 (1977) 9
- BENDIG, J., DOBSLAW, B., EHMK, B., JUCHERT, I., KREYSIG, D. (Humboldt Univ., Sekt. Chem., DDR-104 Berlin, GDR): Auswertung von Spektren organischer π - π -Molekülkomplexe. 7. Bildungsenthalpien von Molekülkomplexen. *Z. Phys. Chem.* 258 (1977) 433
- BENDIG, J., DOBSLAW, B., KREYSIG, D. (Humboldt Univ., Sekt. Chem., DDR-104 Berlin, GDR): Evaluation of UV vis-spectra of organic pi-pi molecular complexes. 6. Determination of molar enthalpy of complexation of weak pi-pi molecular complexes in solution. *Z. Phys. Chem.* 258 (1977) 292
- BEYER, H. K., JACOBS, P. A., UYTTERHOEVEN, J. B., TILL, F. (Hungarian Acad. Sci., Cent. Res. Inst. Chem., H-1025 Budapest 17, Hungary): Thermal stability of NH_4 -chabazite. *J. Chem. Soc. Faraday Trans. I*, 73 (1977) 1111
- BIRCHLEY, J. C., RILEY, N. (Rocket Propuls. Estab. Aylesbury, Buckinghamshire, England): Transient evaporation and combustion of a composite water-oil droplet. *Combust. Flame* 29 (1977) 145
- BLAHO, D., ABBRENT, M., PEKÁREK, V. (Czechoslovak Acad. Sci., Inst. Nucl. Sci., CS-25068 Prague, Czechoslovakia): Differential quasi-isothermal microcalorimeter with a digital output. I. Electronic control unit. *Chem. Zvesti* 30 (1976) 621
- BLAIS, M. J., ENEA, O., BERTHON, G. (Univ. Poitiers, Thermodynam. Chim. et Electrochim. Lab., F-86022 Poitiers, France): Relations structure-réactivité. Grandeurs thermodynamiques de protonation d'hétérocycles saturés et non saturés. *Thermochim. Acta* 20 (1977) 335

- BOEKEL, C. P., JELLSMA, A., TEUBEN, J. H., DE LIEFDE MEIJER, H. J. (State Univ. Groningen, Anorgan. Chem. Lab., Groningen, Netherland): Thermal decomposition of dicyclopentadienylarylvanadium compounds. *J. Organometal. Chem.* 136 (1977) 211
- BOHLEN, S. R., ESSENE, E. J. (Univ. Michigan, Dept. Geol. and Mineral., Ann Arbor, Mich., 48104 USA): Feldspar and oxide thermometry of granulates in Adirondack highlands. *Contrib. Mineral. Petrol.* 62 (1977) 153
- BOLDYREV, V. V., VORONIN, A. P., NEVOLINA, T. A., MARUSIN, V. V. (Acad. Sci. USSR, Inst. Raw Mineral Reproc., Novosibirsk, 90 USSR): Existence of $K_3(MnO_4)_2$ as an interphase during thermal decomposition of potassium permanganate. *Zh. Neorg. Khim.* 22 (1977) 2179 (In Russian)
- BOLOGA, O. A., ZUBAREV, V. N. (Acad. Sci. MoSSR, Inst. Chem., Kishinev, MoSSR): Data on $CuCl_2(OH_2)$ conversion product at heating. *Zh. Neorg. Khim.* 22 (1977) 2050 (In Russian)
- BONSOR, D. H., BLOOR, D. (Univ. Exeter, Dept. Chem., Exeter, EX4 4QD, Devonshire, England): Phase transitions of N-alkane systems. 1. Calculation of heats of transition of order-disorder. Phase transition of pure paraffins. *J. Mater. Sci.* 12 (1977) 1552
- BONSOR, D. H., BLOOR, D. (Univ. Exeter, Dept. Chem., Exeter, EX4 4QD, Devonshire, England): Phase transitions of normal-alkane systems. 2. Melting and solid state transition of binary mixtures. *J. Mater. Sci.* 12 (1977) 1559
- BOY, S., BÖHME, K. (Forsch. Inst. NE Metalle, VEB Mansfeld Kombinat Wilhelm Pieck, Freiberg, GDR): Beitrag zur Kinetik von Festkörperreaktionen unter nicht-isothermen Bedingungen. *Thermochim. Acta* 20 (1977) 195
- BOYLE, F. P., TAYLOR, P. L., HOPFINGER, A. J. (Case Western Reserve Univ., Dept. Phys., Cleveland, Ohio, 44106 USA): Theory of melting in simple polymers. I. *J. Chem. Phys.* 67 (1977) 353
- BRADLEY, G. F., EVANS, W. B. L., STEVENS, I. D. R. (c/o I. D. R. Stevens, Univ. Southampton, Dept. Chem., Southampton, SO9 5N4, Hampshire, England): Thermal and photochemical decompositi-
- tion of cycloalkanespirodiazirines. *J. Chem. Soc. Perkin Trans. II* (1977) 1214
- BRASLAWSKY, S., HEICKLEN, J. (c/o J. Heicklen, Penn State Univ., Dept. Chem., University Pk., Pa., 16802 USA): The gas-phase thermal and photochemical decomposition of heterocyclic compounds containing nitrogen, oxygen or sulfur. *Chem. Rev.* 77 (1977) 473
- BRENER, R., EHRENFREUND, E., SHECHTER, H., MAKOVSKY, J. (Technion Israel Inst. Technol., Dept. Phys., Haifa, Israel): Thermal and magnetic studies of the nearly one-dimensional antiferromagnetic system $CsNiBr_3$. *J. Phys. Chem. Solids* 38 (1977) 1023
- BRETTEAU, T., MARHIC, C., SPENDEL, M., CASTAING, J. (CNRS, Phys. Mat. Lab., F-92190 Bellevue, France): Fluage à haute température de monocristaux d'oxyde cuivreux. *Phil. Mag.* 35 (1977) 1473
- BROWN, D., HURGEN, C., FUGER, J. (A.E.R.E., Div. Chem., Harwell Didcot, Berkshire, England): Preparation and some properties of actinide(III) and lanthanide(III) oxide halides, and the enthalpies of formation of $PuBr_3(s)$ and $PuI_3(s)$. *Rev. Chim. Miner.* 14 (1977) 189
- BRUBAKER, G. R., BEAK, P. (Univ. Illinois, Roger-Adams Lab., Urbana, Ill., 61801 USA): The enthalpies of protonation of propenyllithiums, phenyllithium, and ethyllithium. *J. Organometal. Chem.* 136 (1977) 147
- BRUN, P., CASANOVA, J., HATEM, J., WAESELL, B. (Univ. Droit, Econ. et Sci., Fac. Sci. et Tech. St. Jerome, CNRS, Stereochem. Lab., F-13307 Marseille, 4, France): Réarrangement thermique de dihalogénio-9,9 et de bromo-9, méthyl-1 bicyclo-[6.1.0] nonanes. *Bull. Soc. Chim. Fr. II* (1977) 521
- BRUSZEWSKI, Z., KOLIŃSKI, R. A. (Polish Acad. Sci., Inst. Organ. Chem., PL-00961 Warszawa, Poland): Pyrolysis of bromochlorodifluoromethane. *Roczn. Chem.* 51 (1977) 1259
- BRYAN, A. M., LAU, K., OLAFSSON, P. G. (State Univ. Albany, Dept. Chem., Albany, N. Y., 12222 USA): A differential scanning calorimetry — thin-layer chromatography study of ribonucleosides. *Thermochim. Acta* 20 (1977) 363

- BURGESS, S., SHEPHERD, I. W. (Univ. Manchester, Dept. Phys., Manchester M13 9PL, Lancashire, England): Localised acoustic phonons in glasses and their effects on low temperature thermal conductivity and Raman spectra. *Chem. Phys. Lett.* 50 (1977) 112
- BURY, R., JORDAN, J. (c/o J. Jordan, Penn. State Univ., Dept. Chem., Davey Lab. 152, University Pk., Pa., 16802 USA): Redox thermodynamics and electron transfer reactivity of heme by enthalpimetry and voltammetry. *Anal. Chem.* 49 (1977) 1573
- BURYAN, P., MACÁK, J. (Inst. Chem. Technol., Dept. Coke and Gas Technol., CS-16628 Prague, Czechoslovakia): Phenols in the products of the pyrolysis of coal. II. *Chem. Listy* 71 (1977) 829 (In Czech)
- CABRERA, G. G. (Univ. Estadual Campinas, Inst. Fis. Gleb Wataghin, 13100 Campinas, Brasil): Low-temperature resistivity of ferromagnetic metals with domain structure. *J. Phys. F* 7 (1977) 827
- CASTIGLIONI, M., VOLPE, P. (Univ. Torino, Ist. Chim., I-10126 Torino, Italy): Effect of electron doublet on thermal reactivity of trimethylamine. *Chim. Ind.* 59 (1977) 522 (In Italian)
- ČERNEC, F., OSREDKAR, U., MOŽE, A., VIZOVIŠEK, I., LAPANJE, S. (Boris Kidrič Inst. Chem., Ljubljana, Yugoslavia): Study of the isothermal bulk polymerization of diallyl fumarate and related compounds by differential scanning calorimetry. *Makromol. Chem.* 178 (1977) 2197
- CERUTTI, P. J., HEPLER, L. G. (Univ. Lethbridge, Dept. Chem., Lethbridge, T1K 3M4, Alberta, Canada): The enthalpy of solution of ferrous chloride in water at 298K. *Thermochim. Acta* 20 (1977) 309
- CHAKRABORTY, K. B., SCOTT, G. (Univ. Aston, Dept. Chem., Birmingham, B4 7ET, Warwickshire, England): The effects of thermal processing on the thermal oxidative and photo-oxidative stability of low density polyethylene. *Eur. Polym. J.* 13 (1977) 731
- CHALLIS, L. J., DE GOËR, A. M., HASELER, S. C. (Univ. Nottingham, Dept. Phys., Nottingham, NG7 2RD, England): Thermal conductivity of p-Ge down to 50 mK. *Phys. Rev. Lett.* 39 (1977) 558
- CHAND, A., FENBY, D. V. (c/o D. V. Fenby, Univ. Otago, Dept. Chem., Dunedin, New Zealand): Thermodynamic properties of alcohol-amine mixtures: excess enthalpies of methanol-triethylamine and ethanol-triethylamine. *J. Chem. Eng. Data* 22 (1977) 289
- CHANG, E. P., KIRSTEN, R., SLAGOWSKI, E. L. (Hooker Chem. and Plast. Corp., Hooker Res. Ctr., Niagara Falls, N. Y., 14302 USA): Dynamic mechanical and thermal properties of fire-retardant high-impact polystyrene. *J. Appl. Polym. Sci.* 21 (1977) 2167
- CHEN, T. P., GASPARINI, F. M. (State Univ. Buffalo, Dept. Phys. and Astron., Amherst, N. Y., 14260 USA): Specific heat of unsaturated ^4He films near T_λ . *Phys. Lett. A* 62 (1977) 231
- CHERTOV, V. M., OKOPMAYA, N. T. (Acad. Sci. UkrSSR, Inst. Phys. Chem., Kiev, UkrSSR): Investigation of the hydrothermal modification of zirconium dioxide. *Colloid J. USSR* transl. *Kolloidn. Zh.* 38 (1976) 1082
- CHIVERS, T., RAM, R. (Univ. Calgary, Dept. Chem., Calgary, T2N 1N4, Alberta, Canada): The synthesis and thermal decomposition of bis(phenylthio)methyl derivatives of mercury. *Can. J. Chem.* 55 (1977) 2554
- CHOI, Y. S., CRISS, C. M. (c/o C. M. Criss, Univ. Miami, Dept. Chem., Coral Gables, Fla., 33124 USA): Enthalpies of solution of selected electrolytes in sulfolane and in acetonitrile. *J. Chem. Eng. Data* 22 (1977) 297
- CHOY, C. L., YOUNG, K. (Chinese Univ. Hong Kong, Dept. Phys., Shatin, Hong Kong): Thermal conductivity of semicrystalline polymers. A model. *Polymer* 18 (1977) 769
- CHU, J. Y. C., LEWICKI, J. W. (Xerox Corp., Webster Res. Ctr., Rochester, N.Y., 14644 USA): Thermal decomposition of bis(diphenylmethyl) diselenide. *J. Org. Chem.* 42 (1977) 2491
- CLAUDY, P., BONNETOT, B., MATHURIN, D., TURCK, G., (CNRS, Phys. Chim. Minerale Assoc. Lab., F-69621 Villeurbanne, France): Études calorimétriques en milieu solvant organique. I. Enthalpie de dissolu-

- tion du bromure de lithium dans le tétra-hydrofuranne. *Thermochim. Acta* 20 (1977) 315
- COUGHLAN, B., NARAYANAN, S., McCANN, W. A., CAROLL, W. M. (Natl. Univ. Ireland, Univ. Coll. Galway, Phys. Chem. Labs., Galway, Ireland): Ruthenium zeolite catalysts. A characterization by gas adsorption, thermogravimetry and catalytic activity for the hydrogenation of benzene. *J. Catal.* 49 (1977) 97
- COX, D. L., CRONENBERG, A. W. (Univ. New Mexico, Dept. Chem. Nucl. Engr., Albuquerque, N. M., 87131 USA): Theoretical prediction of thermal conductivity of uranium carbide vapor. *J. Nucl. Mater.* 67 (1977) 326
- CULLIS, C. F., FOSTER, C. D. (City Univ. London, Dept. Chem., London, EC1V 4PB, England): Application of thermal ignition theory to determination of spontaneous ignition temperature limits of hydrocarbon-oxygen mixtures. *Proc. Royal Soc. London A* 355 (1977) 153
- CYGAŃSKI, A. (Polytech. Univ. Łódź, Inst. Gen. Chem., 90924 Łódź, Poland): Studies on thermal decomposition of thiocyanato-bismuthates(III). II. Bismuth- and bismuthyl thiocyanate. *Roczn. Chem.* 51 (1977) 869
- DADGAR, A., TAHERIAN, M. R. (Arya Mehr Univ. Technol., Dept. Chem., Teheran, Iran): Enthalpies of solution in water and (methanol + water) at 298.15K and enthalpies of transfer. *J. Chem. Thermodyn.* 9 (1977) 711
- DEIASI, R., ADLER, P. N. (Grumman Aerosp. Corp., Dept. Res., Solid State Phys. Branch, Mat. Lab., Bethpage, N. Y., 11714 USA): Calorimetric studies of 7000 series aluminium alloys. 1. Matrix precipitate characterization of 7075. *Metal Trans. A* 8 (1977) 1177
- DEOPURA, B. L., KUMAR, V., SINHA, T. B. (Indian Inst. Technol., Fibre Sci. Lab., New Delhi, 110029 India): Melting behaviour and crystalline, intermediate and amorphous phase in poly(ethylene terephthalate) fibres. *Polymer* 18 (1977) 856
- DE VISSER, C., PERRON, G., DESNOYERS, J. E. (c/o J. E. Desnoyers, Univ. Sherbrooke, Dept. Chem., Sherbrooke, J1K 2R1 Quebec, Canada): Volumes and heat capacities of ternary aqueous systems at 25°C. Mixtures of urea, tert-butyl alcohol, dimethylformamide, and water. *J. Amer. Chem. Soc.* 99 (1977) 5894
- DE VYNCK, I. A. (State Univ. Ghent, Inorgan. Tech. Chem. Electrochem. and Electrothermie Lab., B-9710 Zwijnaarde, Belgium): Chemical applications of arc plasma techniques. The thermal decomposition of molybdenite. *Bull. Soc. Chim. Belges* 86 (1977) 509
- DICKENS, P. G., NEILD, D. J. (Inorg. Chem. Lab., Oxford, OX1 3QR, England): The thermochemistry of some oxide bronzes of molybdenum. *J. Less-Common Metals* 54 (1977) 273
- DIETZ, A. G., BLAHA, C., LI, N. C. (Duquesne Univ., Dept. Chem., Pittsburgh, Pa., 15219 USA): Enthalpies of hydrogen bonding of quinoline with o-phenylphenol and of hydrogen-bonding reactions involving the acid and base components of a coal-derived asphaltene. *J. Chem. Thermodyn.* 9 (1977) 783
- DOLIVO, G., GÄUMANN, T. (Ecole Polytech. Fed. Lausanne, Inst. Chim. Phys., CH-1007 Lausanne, Switzerland): La thermoluminescence (TL), la conductivité stimulée thermiquement (TSC) et l'absorption optique (AO) du méthylcyclohexane irradié à 77K. *Radiat. Phys. Chem.* 10 (1977) 207
- DRAPKIN, B. M.: Temperature dependence and limiting values of elastic moduli of metals. *Russ. Metall. transl. Izv. Akad. Nauk SSSR Met.* (1976) 95
- DUBEY, K. S. (Univ. Basrah, Coll. Sci., Dept. Phys., Basrah, Iraq): Role of point-defect-scattering in the lattice thermal conductivity of an insulator at low temperatures. *Phys. Status Solidi B* 82 (1977) K63
- DUBEY, K. S. (Univ. Basrah, Coll. Sci., Dept. Phys., Basrah, Iraq): Contribution to the lattice thermal conductivity due to the correction term in the Callaway integral. *Phys. Status Solidi B* 81 (1977) K83
- DUBLER, E., LINOWSKY, L., MATTHIEU, J. P., OSWALD, H. R. (Univ. Zürich, Inst. Inorgan. Chem., CH-8001 Zürich, Switzerland): Synthese, Kristallstruktur und thermische Entwässerung von $\text{CsMnF}_4 \cdot 2\text{H}_2\text{O}$. *Helv. Chim. Acta* 60 (1977) 1589
- DUDKINA, G. A., AZIEV, R. G., VOL'KOVICH,

- S. I. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Analysis of phosphate mixtures obtained during the high temperature processing of phosphates. *J. Anal. Chem. USSR transl. Zh. Anal. Khim.* 31 (1976) 1765
- DWORKIN, A., FUCHS, A. H. (Univ. Paris 11, CNRS, Phys. Chim. Rayonnements Lab., F-91405 Orsay, France): Heat capacity of benzil near its phase transition. *J. Chem. Phys.* 67 (1977) 1789
- ECSEDY, D. J., KLEMENS, P. G. (Univ. Connecticut, Dept. Phys., Storrs, Conn., 06268 USA): Thermal resistivity of dielectric crystals due to four-phonon processes and optical modes. *Phys. Rev. B* 15 (1977) 5957
- ELLINGHORST, G., HUMMEL, D. O. (Univ. Köln, Inst. Phys. Chem., D-5000 Köln, GFR): Das thermische Verhalten von strahlenchemisch hergestelltem PVC. I. Präparation und Charakterisierung der PVC-Proben. *Angew. Makromol. Chem.* 63 (1977) 157
- ELLINGHORST, G., HUMMEL, D. O. (Univ. Köln, Inst. Phys. Chem., D-5000 Köln, GFR): Das thermische Verhalten von strahlenchemisch hergestelltem PVC. II. Auswertung der DTA- und TG-Kurven. *Angew. Makromol. Chem.* 63 (1977) 167
- ELLINGHORST, G., HUMMEL, D. O. (Univ. Köln, Inst. Phys. Chem., D-5000 Köln, GFR): Das thermische Verhalten von strahlenchemisch hergestelltem PVC. III. Zur Kinetik der Dehydrochlorierungsreaktion. *Angew. Makromol. Chem.* 63 (1977) 183
- ENEA, O., SINGH, P. P., WOOLLEY, E. M., McCURDY, K. G., HEPLER, L. G. (Univ. Poitiers, Thermodynam. Chim. et Electrochim., F-86022 Poitiers, France): Heat capacities of aqueous nitric acid, sodium nitrate, and potassium nitrate at 298.15K: ΔC_p of ionization of water. *J. Chem. Thermodyn.* 9 (1977) 731
- ENNAN, A. A., NIKITIN, V. I., KONUNOVA, T. B. (I. I. Mechnikov State Univ., Odessa, UkrSSR): Heats of formation of silicon tetrafluoride adducts with aniline and its derivative. *Zh. Neorg. Khim.* 22 (1977) 1807 (In Russian)
- ERMAKOV, G. V., ISMAGILOV, R. G. (Acad. Sci. USSR, Ural Sci. Ctr., Dept. Physico-
tech. Energy Problems, Moscow, V-71 USSR): Speed of ultrasound, adiabatic compressibility, and heat capacity of superheated liquid n-hexane. *High Temp. transl. Teplofiz. Vys. Temp.* 14 (1976) 975
- ESIN, Y. O., VALISHEV, M. G., GELD, P. V., TUSHKOVA, L. M.: Partial and integral enthalpies of formation of liquid Y-Si alloys. *Russ. Metall. transl. Izv. Akad. Nauk SSSR Met.* (1976) 19
- FEIGELSON, R. S., N'DIAYE, A., YIN, S. Y., BUBE, R. H. (Stanford Univ., Dept. Mat. Sci. and Engn., Stanford, Calif., 94305 USA): II-VI solid-solution films by spray pyrolysis. *J. Appl. Phys.* 48 (1977) 3162
- FERLONI, P., ZANGEN, M., FRANZOSINI, P. (CNR, Ctr. Studio Termodinamica ed Elettrochim., Pavia, Italy): On the thermal behaviour of long-chain rubidium n-alkanoates. *Z. Naturforsch. A* 32 (1977) 793
- FERRATON, J. P., ROBIN, J. (Univ. Montpellier, CNRS, Spectroscopie Lab. 2, Equipe Rech., F-34060 Montpellier, France): Résistivité de couches minces d'alliages Ag-Pd entre 273 et 700 K. *Thin Solid Films* 44 (1977) 109
- FILIPPI, J., LASJAUNIAS, J. C., RAVEX, A., TCHÉOU, F., ROSSAT-MIGNOD, J. (CNRS, Magnetism. Lab., F-38042 Grenoble, France): Specific heat of dysprosium gallium garnet between 37 mK and 2 K. *Solid State Commun.* 23 (1977) 613
- FILIPPOV, E. A., IAKSHIN, V. V., BOLEV, V. A., ARKHPOVA, G. G., LASKORIN, B. N.: Thermoselectivity of trialkylphosphates in the reactions of uranium and transuranic element extraction from nitric-acid solutions. *Dokl. Akad. Nauk SSSR* 235 (1977) 831 (In Russian)
- FISCHER, D. F., LEIBOWITZ, L. (Argonne Natl. Lab., Div. Chem. Engr., Argonne, Ill., 60439 USA): Enthalpy of uranium-plutonium carbide from 298K to the melting point. *J. Nucl. Mater.* 67 (1977) 244
- FRANKVOORT, E. (Univ. Amsterdam, Chem. Technol. Lab., Amsterdam, 1004 Netherlands): Non-adiabatic treatment of diathermic-chemical-reaction data by the integrational minimization method. *Thermochim. Acta* 20 (1977) 279
- FROSINI, V., BUTTA, A. M. (Univ. Pisa, Fac. Ingn., Inst. Chim. Ind. and Appl.,

- I-56100 Pisa, Italy): Thermal effects associated to glass transition in some polyvinylbenzoates. *Chim. Ind.* 59 (1977) 415
- GAJEWSKI, J. J., CHOU, S. K. (Indiana Univ. Dept. Chem., Bloomington, Ind., 47401 USA): Thermal bridgehead double inversion of the 6-methylene and 7-ethylene-2-methylbicyclo [3.1.0.] hexanes and related materials. Rotational kinetic deuterium isotope effects and the mechanism of the thermal interconversion of cis and trans 2,3 dimethylmethylenecyclopropanes via orthogonal and planar trimethylenemethane singlet biradicals. *J. Amer. Chem. Soc.* 99 (1977) 5696
- GARLAND, C. W., BALOGA, J. D. (MIT, Dept. Chem., Cambridge, Mass., 02139 USA): Heat capacity of NH_4Cl and ND_4Cl single crystals at high pressure. *Phys. Rev. B* 16 (1977) 331
- GAVRILOV, M. Z., ERMOLENKO, I. N., TITOVA, L. V. (Acad. Sci. BeSSR, Gen. and Inorgan. Chem. Inst., Minsk, BeSSR): Investigation of the deformation of hydrate cellulose films during pyrolysis. *Dokl. Akad. Nauk BeSSR* 21 (1977) 535 (In Russian)
- GERASIMOV, J. I., GLAZOV, V. M., LAZAREV, V. B., ZHAROV, V. V., PASHINKIN, A. S. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Enthalpies of phase transitions of simple substances at melting point. *Dokl. Akad. Nauk SSSR* 235 (1977) 846 (In Russian)
- GERASIMOV, Y. J., LEONIDOV, V. Y.: 7th All Union Conference on Calorimetry. *Zh. Fiz. Khim.* 51 (1977) 1861 (In Russian)
- GLACET, C., HASIAK, B., DUMAS, C. (Univ. Sci. et Tech. Lille, Chim. Organ. Lab., F-59650 Villeneuve, d'Ascq, France): Étude de la décomposition thermique de quelques hydroxydes de N,N-diméthylpyrrolidiniums α -substitués. *Compt. Rend. Ser. C* 285 (1977) 93
- GLAZOV, V. M., LAZAREV, V. B., ZHAROV, V. V. (Moscow Electr. Engn. Inst., Moscow, USSR): On the correlation between condensed phase enthalpy in triple point and heats of fusion, evaporation and sublimation of simple bodies. *Dokl. Akad. Nauk SSSR* 234 (1977) 1368 (In Russian)
- GOL'DBERG, V. M., ESENIN, V. N., KRASOTINA, I. A. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Role of hydroperoxides in thermal oxidation of a polystyrene melt. *Vysokomol. Soedin.* 19 (1977) 1720 (In Russian)
- GÓRSKI, A., MILCZAREK, M. (Polytech. Univ., Inst. Gen. Chem. and Inorgan. Technol. PL-00664 Warszawa, Poland): Studies on transformations of oxygen iodine species in solid phase. III. Influence of counter-ions on thermal decomposition of periodates. *Roczn. Chem.* 51 (1977) 881
- GOUEDARD, C. (Univ. Paris 11, Phys. Plasma Lab., F-91405 Orsay, France): Thermal conductivity in a partially degenerate electron plasma. *J. Phys. A* 10 (1977) L143
- GREENHOW, E. J. (Univ. London, Chelsea Coll. Sci. und Technol., Dept. Chem., London, SW3 6LX England): Acetylation as a means of end-point indication in the catalytic thermometric titration of bases. *Analyst* 102 (1977) 584
- GRODZICKI, A. (M. Copernicus Univ., Inst. Chem., PL-87100 Toruń, Poland): Kinetic studies of thermal dehydration of Co(II) coordination salts with hexamethylenetetramine (HMTA). *Roczn. Chem.* 51 (1977) 863
- GROLIER, J. P. E., KIYOHARA, O., BENSON, G. C. (c/o G. C. Benson, Natl. Res. Council Canada, Div. Chem., Ottawa K1A OR6, Ontario, Canada): Thermodynamic properties of binary mixtures containing ketones. II. Excess enthalpies of some aromatic ketones + n-hexane, + benzene, and + tetrachloromethane. *J. Chem. Thermodynam.* 9 (1977) 697
- GRØNVOLD, F., HIGHE, A. J. WESTRUM, E. F. (Univ. Oslo, Dept. Chem., Oslo, Norway): Heat capacity and thermodynamic properties of FeSb_2 from 5 to 1021. 2 K. Enthalpy of decompositon. *J. Chem. Thermodyn.* 9 (1977) 773
- GÜNTER, J. R., OSWALD, H. R. (Univ. Zürich, Inst. Anorgan. Chem., CH-8001 Zürich, Switzerland): Crystal structure of $\text{Mg}_2(\text{OH})_2\text{CO}_3$, deduced from the topotactic thermal decomposition of artinite. *J. Solid State Chem.* 21 (1977) 211
- HANDA, Y. P., JONES, D. E. (c/o D. E. Jones, Environm. Ontario, Bracebridge POB 1CO, Ontario, Canada): Molar excess

- enthalpies of acetonitrile + chloroform and of acetonitrile + chloroform-d, 208K. *Can J. Chem.* 55 (1977) 2977
- HANLEY, H. J. M., HAYNES, W. M., McCARTY, R. D. (Natl. Bur. Stand. Inst. Bas. Stand., Div. Cryogen., Boulder, Colo., 80302, USA): The viscosity and thermal conductivity coefficients for dense gaseous and liquid methane. *J. Phys. Chem. Ref. Data* 6 (1977) 597
- HARRISON, J. P., MCCOLL, D. B. (Univ. Manchester, Dept. Phys., Schuster Lab., Manchester, M13 9PL, Lancashire, England): Thermal boundary resistance at very low temperatures. A size effect. *J. Phys. C* 10 (1977) L297
- HASEGAWA, H., SAITO, H., TSUCHITANI, K. (Waseda Univ., Sch. Sci. and Engn., Dept. Appl. Chem., Shinjuku-ku, Tokyo, 160 Japan): The thermal reaction of vinyloxirane. *Chem. Lett.* (1977) 797
- HATTA, I., REHWALD, W. (Nagoya Univ., Dept. Appl. Phys., Chikusa-ku, Nagoya, 464 Japan): Specific heat of $\text{Sn}_x\text{Ge}_{1-x}\text{Te}$ crystals at the structural phase transition. *J. Phys. C* 10 (1977) 2075
- HELVIG, J., PETERSSON, J., SCHNEIDER E. (Univ. Saarland, Fachrichtung Experimentalphys., D-6600, Saarbrücken, GFR): Specific heat of the ferroelectric $\text{AgNa}(\text{NO}_2)_2$. *Z. Naturforsch. A* 32 (1977) 787
- HEMINGWAY, B. S., ROBIE, R. A. (US. Geol. Survey, Reston, Va., 22092 USA): Enthalpies of formation of low albite ($\text{NaAlSi}_3\text{O}_8$), gibbsite (Al(OH)_3) and NaAlO_2 . Revised values for $\delta H_f^\circ,_{298}$ and $\delta G_f^\circ,_{298}$ of some aluminosilicate minerals. *J. Res. U.S. Geol. Survey*, 5 (1977) 413
- HENSEL, F. (Univ. Marburg, Inst. Phys. Chem., D-3550 Marburg, GFR): Density-, temperature-, and concentration-induced metal - nonmetal transitions in fluids. *Can. J. Chem.* 55 (1977) 2225
- HIBMA, T., GELLER, S. (Brown Boveri Res. Ctr., CH-5401 Baden, Switzerland): Low-temperature phase transitions in $(\text{C}_6\text{H}_5\text{NH})\text{Ag}_5\text{I}_6$. *J. Solid State Chem.* 21 (1977) 225
- HOFFMANN, H., SPANGENBERG, H. J. (c/o H. J. Spangenberg, Akad. Wissensch. DDR, Zent. Inst. Phys. Chem., DDR-1199 Berlin, GDR): Zur Bestimmung von Enthalpieprofilen eines reaktiven Plasstrahls mittels Kapillarsonden. *Z. Phys. Chem. Leipzig* 258 (1977) 577
- HORIUCHI, H., FUKUDA, A. (Osaka Municipal Tech. Res. Inst., Kita-ku, Osaka, 530 Japan): Effect of molecular structure of novolac on thermal stability of cured two-stage phenolics. *Jap. Polym. Sci. Technol.* 34 (1977) 551 (In Japanese)
- HORTLING, B. (Univ. Helsinki, Fac. Med., Dept. Gen. Chem., SF-00170 Helsinki, 17 Finland): Thermal resistance of cross-linked and substituted poly(phenylene sulfide)s. *Makromol. Chem.* 178 (1977) 2185
- HOVIS, G. L., WALDBAUM, D. R. (Lafayette Coll., Dept. Geol., Easton, Pa., 18042 USA): A solution calorimetric investigation of K-Na mixing in a sanidine-analbite ion-exchange series. *Amer. Mineral.* 62 (1977) 680
- HUBIN, R., GABÉLICA, Z. (Univ. Liège, Inst. Chim., Dept. Chim. Gen. et Chim. Phys. B-4000, Liège, Belgium): Etude par RPE des radicaux formés lors de la décomposition thermique sous vide de sulfites et de thiosulfates. III. Composés de magnésium et de potassium. *Thermochim. Acta* 20 (1977) 395
- HURDUC, N., SCHNEIDER, I. A. (Polytech. Inst. Jassi, Dept. Phys. Chem., Jassy, Romania): Der thermische Abbau von Poly(methylmethacrylat) unter nicht isothermen Bedingungen. *Rev. Roum. Chim.* 22 (1977) 945
- IGRANOVA, E. G., OSTROVSKII, V. E., TEMKIN, M. I. (L. Y. Karpov Physicochem. Sci. Res. Inst., Moscow, USSR): Calorimetric investigation of the products of incomplete hydrogenation of nitrogen, the products being adsorbed on an iron catalyst in connection with the mechanism of ammonia synthesis. *Kinet. Catal. transl. Kinet. Katal.* 17 (1976) 1083
- IKEBE, M., NAKAGAWA, S., HIRAGA, K., MUTO, Y. (Tohoku Univ., Iron Steel and Other Met. Res. Inst., Sendai, Miyagi, 980 Japan): Anomalous phonon thermal resistivity in superconducting $\text{Ti}_{55}\text{Nb}_{45}$ alloys. *Solid State Commun.* 23 (1977) 189
- IRVING, R. J., ABRAHAM, M. H., SALMON, J. E., MARTON, A., INCZÉDY J. (Univ. Surrey, Dept. Chem., Guildford, GU2 5XH Surrey, England): Thermochemical

- aspects of anion exchange reactions. 1. Exchange reactions involving Cl^- , OH^- and H_2PO_4^- ion. *J. Inorg. Nucl. Chem.* 39 (1977) 1433
- IVANOVA, T. N., KOSTIKOV, Y. P., MARTYNOVA, N. S., SUSAREV, M. P. (A. A. Zhdanov State Univ., Leningrad, USSR): Thermal and X-ray phase analysis of the system KCl - BaCl_2 . *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 50 (1977) 168
- JAIN, P. C., PANDYA, T. P. (Natl. Phys. Lab., New Delhi, 110012 India): Thermal conductivity of binary mixtures of rare gases in the temperature range 400-2500K. *Jap. J. Appl. Phys.* 16 (1977) 1323
- JERNEJČIČ, J., VENE, N., ZAJC, A. (Boris Kidrič Inst. Chem., YU-61000 Ljubljana, Yugoslavia): Thermal decomposition of α -dicalcium silicate hydrate. *Thermochim. Acta* 20 (1977) 237
- JESENÁK, V., TOMKOVÁ, V. (Slovak Tech. Coll., Dept. Silicate Chem. and Technol., Bratislava, Czechoslovakia): Apparatur zur thermischen Dekryptonationsanalyse (DkTA). I. *Radiochem. Radioanal. Lett.* 30 (1977) 89
- KAMETANI, T., KIGASAWA, K., HURAGI, M., IWATA, T., OHKUBO, K. (Tohoku Univ., Inst. Pharmaceut., Sendai, Miyagi, 980 Japan); Thermolysis of normal-substituted benzazocine hydrochlorides. *Heterocycles* 6 (1977) 1183
- KAMIGAKI, Y., ITOH, Y. (Hitachi Ltd., Cent. Res. Lab., Kokubunji, Tokyo, 185 Japan): Thermal oxidation of silicon in various oxygen partial pressures diluted by nitrogen. *J. Appl. Phys.* 48 (1977) 2891
- KAMIŃSKI, A. M., SOBKOWSKI, J. (Univ. Warsaw, Radiochem. and Radiat. Chem. Lab., Warszawa, PL-20289 Poland): The influence of ethane on thermal decomposition of methane studied by the radio-chromatographic pulse technique. *Roczn. Chem.* 51 (1977) 1183
- KÄMPF, G., BUCKEL, W. (Univ. Karlsruhe, Inst. Phys., D-7500 Karlsruhe, GFR): Specific heat of amorphous and polycrystalline lead-bismuth films. *Z. Phys. B* 27 (1977) 315
- KARL, V. H., ASMUSSEN, F., UEBERREITER, K. (Max-Planck-Gesell., Fritz Haber Inst., D-1000 Berlin 33): Über die Druckabhängigkeit der viskoelastischen und physikalisch-chemischen Eigenschaften von Polymeren. 2. Spezifisches Volumen und thermische Ausdehnung einiger Polymeren beim Schmelzen und Kristallisieren. *Makromol. Chem.* 178 (1977) 2037
- KARL, V. H., ASMUSSEN, F., WOLF, F. P., UEBERREITER, K. (Max-Planck-Gesell., Fritz Haber Inst., D-1000 Berlin, 33 GFR): Über die Druckabhängigkeit der viskoelastischen und physikalisch-chemischen Eigenschaften von Polymeren. V. Eine neue Methode zur Bestimmung von Temperaturleitfähigkeit, Wärmeleitfähigkeit und spezifischer Wärme von Polymerschmelzen. *Ber. Bunsen-Ges. Phys. Chem.* 81 (1977) 598
- KASAL, P. H., BISHOP, R. J. (Union Carbide Corp., Tarrytown Tech. Ctr., Tarrytown, N. Y., 10891 USA): Thermochemical decomposition of water catalysed by zeolites. *J. Phys. Chem.* 81 (1977) 1527
- KATSURA, S. (Tohoku Univ., Fac. Engn., Dept. Appl. Phys., Sendai, Miyagi, 980 Japan): Susceptibility and specific heat in the glass-like phase. Cumulant expansion to the random bond Ising model. *Progr. Theor. Phys.* 58 (1977) 434
- KAWAIIZUMI, F., NOGUCHI, T., MIYAHARA, Y. (Nagoya Univ., Fac. Engn., Dept. Chem. Engn., Chikusa-ku, Nagoya, 464 Japan): Heat capacities of aqueous solutions of glutaric and malonic acids. *Bull. Chem. Soc. Jap.* 50 (1977) 1687
- KESSELMAN, P. M., MOGILEVSKII, V. I., ONUFRIEV, I. V., VORONYUK, A. K.: Calculation of thermal properties of multicomponent gas mixtures. *Zh. Fiz. Khim.* 51 (1977) 1489 (In Russian)
- KESZTHELYI, K., TÁTRAI, F., VÁMOS, E. (Tech. Univ. Budapest, Lehrstuhl Chem. Technol., H-1521 Budapest, Hungary): Prüfung der Brenneigenschaften von leichten Heizölen. *Period. Polytech.* 21 (1977) 79
- KHOSLA, S. N., BEDI, R. K., GUPTA, C. S. (Univ. Jammu, PG Dept. Phys., Jammu, India): Chemical, thermal and X-ray analysis of some clays. *J. Chin. Chem. Soc.* 24 (1977) 33
- KICE, J. L., MARGOLIS, H. C., JOHNSON, W. S., WULFF, C. A. (Texas Tech. Univ., Dept. Chem., Lubbock, Tex., 79409 USA): Heats of hydrolysis of phenyl α -disulfone

- and phenyl benzenesulfinyl sulfone. *J. Org. Chem.* 42 (1977) 2933
- KIMBALL, M. E., FIELDING-RUSSEL, G. S. (Goodyear Tire and Rubber Co., Div. Res., Akron, Ohio, 44316 USA): Effect of cure temperature on urethane networks. *Polymer* 18 (1977) 777
- KINOSHITA, K. (Argonne Natl. Lab., Div. Chem., Engn., Argonne, Ill., 60439 USA): Differential thermal analysis of $\text{PtO}_2/\text{carbon}$. *Thermochim. Acta* 20 (1977) 297
- KISHORE, K., PAI VERNEKER, V. R., SUNITHA M. R. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., High Energy Solids Lab., Bangalore, 560012 India): Effect of manganese dioxide on the thermal decomposition of ammonium perchlorate. *J. Appl. Chem. Biotechnol.* 27 (1977) 415
- KISHORE, K., PAI VERNEKER, V. R., SUNITHA, M. R., PRASAD, G. (Indian Inst. Sci., Dept. Inorgan and Phys. Chem. High Energy Solids Lab., Bangalore, 560012 India): Contribution of the condensed-phase reactions in the combustion of solid rocket fuels. *Fuel* 56 (1977) 347
- KIYOHARA, O., BENSON, G. C. (Natl. Res. Council Canada, Div. Chem., Ottawa, K1A OR6, Ontario, Canada): Excess volumes of cyclohexane + tetrachloromethane at 298.15K. *J. Chem. Thermodyn.* 9 (1977) 807
- KNIEWALD, J., MILDNER, P. (Univ. Zagreb, Fac. Technol., Biochem. Lab., YU-41000 Zagreb, Yugoslavia): Calorimetric study of ligand binding to fumarase. *Croat. Chem. Acta* 49 (1977) 567
- KNYAZEVA, R. N., LARIONOVA, T. A., SHEVCHENKO, I. A. (A. M. Gorkii State Univ., Sverdlovsk, USSR): The preparation and thermal decomposition of lead orthotellurate. *Zh. Neorg. Khim.* 22 (1977) 2061 (In Russian)
- KOBAYASHI, T., SUSA, K., TANIGUCHI, S. (Hitachi Ltd., Cent. Res. Lab., Tokyo, 185 Japan): Pressure and temperature stability region of cubic BN in the presence of ammonium borate. *Mater. Res. Bull.* 12 (1977) 847
- KOCHERVINSKII, V. V., ROMADIN, V. F., ZELENEV, Y. V., SHEVCHENKO, V. G., PONOMARENKO, A. T., ENIKOLOPYAN, N. S. (Moscow Text. Inst., Moscow, USSR): Adhesion thermal stability of cured resins on the basis of diglycidyl ether of resorcinol. *Vysokomol. Soedin. A* 19 (1977) 1697 (In Russian)
- KOENIG, J. L., ANTOON, M. K. (Case Western Reserve Univ., Dept. Macromolec. Sci., Cleveland, Ohio, 44106 USA): Thermally induced conformational changes in poly(vinyl chloride). *J. Polym. Sci.* 15 (1977) 1379
- KOKLYUEV, G. A., OGANOV, É. P.: Perturbation solution of the heat-conduction problem for a current-carrying rod with temperature-dependent properties. *High Temp. transl. Teplofiz. Vysok. Temp.* 14 (1977) 1079
- KOO, J. Y., SCHUSTER, G. B. (c/o G. B. Schuster, Univ. Illinois, Sch. Chem. Sci., Roger Adams Lab., Urbana, Ill., 61801 USA): Dioxetane chemiluminescence. The effect of deuterium substitution on the thermal decomposition of trans-3,4-diphenyl-1,2-dioxetane. *J. Amer. Chem. Soc.* 99 (1977) 5403
- KOPINGA K. (Eindhoven Univ. Technol., Dept. Phys., Eindhoven, Netherlands): Low-temperature heat capacity of the pseudo-one-dimensional magnetic systems $\text{CsMnCl}_3 \cdot 2\text{H}_2\text{O}$, $\alpha\text{-RbMnCl}_3 \cdot 2\text{H}_2\text{O}$ and $\text{CsMnBr}_3 \cdot 2\text{H}_2\text{O}$. *Phys. Rev. B* 16 (1977) 427
- KORN, D., MÜRER, W. (Univ. Constance, Fachbereich Phys., D-7750 Constance, GFR): Thermokraft von amorphen SnCu-Legierungen. *Z. Phys. B* 27 (1977) 309
- KORNILOV, A. N., CHELOVSKAYA, N. V., ZHELANKIN, V. I., SHVEIKIN, G. P. (Moscow State Univ., Moscow, 117234 USSR): Enthalpies of formation of hafnium carbides. *J. Chem. Thermodynam.* 9 (1977) 629
- KOSMODEMYANSKAYA, G. V., SADYKOVA, M. M., SPITSYN, V. I. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Application of thermochemical method for the study of water properties in crystal hydrates of penta-substituted borotungstates of alkali metals. *Zh. Neorg. Khim.* 22 (1977) 2175 (In Russian)
- KOZIN, V. E., MAKUROV, A. V., MELENTEYEV, I. V.: Specific heat of metallised ore pellets. *Russ. Metall. transl. Izv. Akad. Nauk SSSR Met.* (1976) 29
- KRAINOV, I. F., SHPILTAIN, E. E. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): Thermal conductivity of

- liquid sodium — potassium alloys. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 14 (1976) 1181
- KRATZER, R. H., PACIOREK, K. L., KAUFMAN, J., NAKAHARA, J. H., HARTSTEIN, A. M. (Ultrasyst. Inc., Irvine, Calif., 92715 USA): Flammability and degradation characteristics of styrene — butadiene rubbers. *J. Appl. Polym. Sci.* 21 (1977) 2077
- KUKKONEN, C. A., SOHN, K. F. (Purdue Univ., Dept. Phys., W. Lafayette, Ind., 47907 USA): The low-temperature electrical resistivity of bismuth. *J. Phys. F* 7 (1977) L 193
- KUKUSHKIN, Y. N., BUCANOVA, V. F., SEDOVA, G. N. (Lensovet Technol. Inst., Leningrad, USSR): Thermal dissociation of platinum(II) complexes, containing triphenylphosphine. *Zh. Neorg. Khim.* 22 (1977) 1868 (In Russian)
- KUKUSHKIN, Y. N., KOTELNIKOV, V. P., SPEVAK, V. N. (Lensovet Technol. Inst., Leningrad, USSR): Thermal stability of platinum(II) ethylenediamine complexes. *Zh. Neorg. Khim.* 22 (1977) 2208 (In Russian)
- KUKUSHKIN, Y. N., LOBANTSOVA, V. F. (Lensovet Technol. Inst., Leningrad, USSR): Course of thermal isomerization of platinum(II)sulfoxide-ethanolamine complexes. *Zh. Neorg. Khim.* 22 (1977) 1099 (In Russian)
- KULIASHA, M. A., CRONENBERG, A. W. (Oak Ridge Natl. Lab., Oak Ridge, Tenn., 37830 USA): Theoretical prediction of thermal conductivity of uranium nitride vapor. *J. Nucl. Mater.* 67 (1977) 320
- KULIEV, A. M., DZHAFAROV, O. I., KARASHARI, K. A., KUZNETSOVA, A. G. (Acad. Sci. AzSSR, Inst. Chem. Technol., Baku, AzSSR): Heat capacity and thermodynamic functions of 1,1,5,5-tetramethyl-3,3,7,7-tetraphenylcyclotetra-siloxane. *Zh. Fiz. Khim.* 51 (1977) 1798 (In Russian)
- KUMAR, A. (Allahabad Univ., Dept. Phys., Allahabad, 211002 India): Lattice thermal conductivity of insulators in presence of dislocations. *Indian J. Pure Appl. Phys.* 15 (1977) 300
- KUMAR, A. (Allahabad Univ., Dept. Phys., Allahabad, 211002 India): Lattice thermal conductivity of anharmonic crystals with isotopic impurities. *Indian J. Pure Appl. Phys.* 15 (1977) 304
- KUPREEV, A. I., SHIMONAEV, G. S.: Enthalpy of formation of acetylenic hydrocarbons in liquid state. *Zh. Fiz. Khim.* 51 (1977) 1403 (In Russian)
- KUSHNIR, S. V. (Lvov Polytech. Inst. Lvov, UkrSSR): Heats of formation of oxosalts from oxides and other properties of those compounds. *Zh. Fiz. Khim.* 51 (1977) 1643 (In Russian)
- LAHIRI, S., DABRAL, V., BHAT, V., JEMMIS, E. D., GEORGE, M. V. (c/o M. V. George, Indian Inst. Technol., Dept. Chem., Kanpur 16, Uttar Pradesh, India): Thermal and photochemical transformations of tetraphenyl-p-dioxin and tetraphenyl-p-dithiin. *Proc. Indian Acad. Sci. A* 86 (1977) 1
- LAKHANPAL, M. L., GUPTA, S., LAL, G. MANDAL, H. G. (Panjab Univ., Dept. Chem., Chandigarh, 160014 India): Thermochemical studies of partially miscible liquid pairs of furfural with normal-hexane and normal-heptane. *Indian J. Chem. A* 15 (1977) 174
- LANDAU, M. A., MARKOVICH, M. N., RUDZIT, E. A. (Kupavna Chem. Prod. Biol. Test. Inst., Kupavna, USSR): Application of microcalorimetry method for studying thermodynamic characteristics of complex-formation of small molecules with proteins. *Zh. Fiz. Khim.* 51 (1977) 1495 (In Russian)
- LANG, M. C., NOËL, C., LEGRAND, A. P. (Ecole Super. Phys. et Chim. Ind., Physicochim. Struct. et Macromolec. Lab., F-75231 Paris, 05 France): Solid-state relaxations in poly(ethyleneoxide). I. Study using the differential scanning calorimetry methods. *J. Polym. Sci. Polym. Phys. Ed.* 15 (1977) 1319
- LÁSZLÓ-HEDVIG, Zs., IRING, M., BÁLINT, G., KELEN, T., TÜDŐS, F. (MTA Központi Kémiai Kutatóintézet, H-1525 Budapest, Hungary): Investigation of thermooxidative degradation of polyolefines. VII. Formation kinetics of oxygen-containing groups during the oxidation of polypropylene. *Magy. Kém. Foly.* 83 (1977) 257 (In Hungarian)
- LAU, P. G. W., MARTIN, J. C. (c/o J. C. Martin, Univ. Ill., Roger Adams Lab., Dept. Chem., Urbana, Ill., 61801 USA): Synthesis of a stable cyclic sulphenate by thermal decomposition of a chlorosul-

- phurane in the crystalline state. *J. Chem. Soc.* (1977) 621
- LAWLESS, W. N. (Corning Glass Works, Res. and Dev. Lab., Corning, N. Y., 14830 USA): Specific heat and electrocaloric properties of KTaO_3 at low temperatures. *Phys. Rev. B* 16 (1977) 433
- LAWLESS, W. N., MORROW, A. J. (Corning Glass Works, Res. and Dev. Lab., Corning, N. Y., 14830 USA): Specific heat and electrocaloric properties of a SrTiO_3 ceramic at low temperatures. *Ferroelectrics* 15 (1977) 159
- LAWLESS, W. N., MORROW, A. J. (Corning Glass Works, Res. and Dev. Labs., Corning, N. Y., 14830 USA): Further studies of $T^{3/2}$ specific heat term in ferroelectrics at low temperatures. *Ferroelectrics* 15 (1977) 167
- LEBLANC, J. L. (Monsanto Tech. Ctr., B-1348 Louvain-La-Neuve, Belgium): Stress-strain behaviour, hardness, and thermo-mechanical properties of butadiene-styrene block copolymers as a function of processing technique. *J. Appl. Polym. Sci.* 21 (1977) 2419
- LECHTKEN, P., REISSENWEBER, G., GRUBMÜLLER, P. (Univ. Erlangen Nürnberg, Inst. Organ. Chem., D-8520 Erlangen, GFR): Die Bedeutung von Konformation und Substitution auf die Stabilität und Anregungsausbeute bei der Thermolyse von alkylsubstituierten 1,2-Dioxetanen. *Tetrahedron Lett.* (1977) 2881
- LEONYUK, N. I., PASHKOVA, A. V., GOKHMAN, L. Z.: Volatility and thermal decomposition of potassium trimolybdate melt. *Zh. Neorg. Khim.* 22 (1977) 2171 (In Russian)
- LIELMEZS, J., ALEMAN, H. (Univ. British Columbia, Dept. Chem. Engr., Vancouver V6T, 1W5 British Columbia, Canada): Weak transverse magnetic field effect on the viscosity of $\text{Mn}(\text{NO}_3)_2 - \text{H}_2\text{O}$ solution at several temperatures. *Thermochim. Acta* 20 (1977) 219
- LIEPINS, R., SURLES, J. R., MOROSOFF, N., STANNETT, V. T. (Res. Triangle Inst., Div. Life Sci., Polymer Res. Lab., Res. Triangle Pk., N. C., 27709 USA): Localized radiation grafting of flame retardants to poly(ethylene terephthalate). I. Bromine-containing monomers. *J. Appl. Polym. Sci.* 21 (1977) 2529
- LIPTAY, G. (Techn. Univ., Inst. Inorg. Chem., H-1521 Budapest, Hungary): Some practical applications of thermoanalytical methods. *Kemia-Kemi* 4 (1977) 387 (In Finnish)
- LOCHMÜLLER, C. H., GORDON, B. M., LOWSON, A. E., MATHIEU, R. J. (Duke Univ., Paul M. Gross Chem. Lab., Durham, N. C., 27706 USA): A systematic approach to thermal conductivity detector design. I. Use of computer-aided data acquisition for the evaluation of cell contributions to peak shape. *J. Chromatogr. Sci.* 15 (1977) 285
- LOGVINENKO, V. A. (Acad. Sci. USSR, Inst. Organ. Chem., Novosibirsk, 90 USSR): Characteristics of thermal stability of coordination compounds. *Zh. Fiz. Khim.* 51 (1977) 1810 (In Russian)
- LOZINSKIY, M. G., ROMANOV, A. N., MALOV, V. V.: Structural changes in an austenitic steel during dual frequency low cycle loading and high temperature heating. *Russ. Metall. transl. Izv. Akad. Nauk SSSR Met.* (1976) 101
- LÜDERWALD, I. (Univ. Mainz, Inst. Organ. Chem., D-6500 Mainz, GFR): Über den thermischen Abbau des Poly(ϵ -caprolacton)s. *Makromol. Chem.* 178 (1977) 2603
- LUKÁČ, P., LAPČÍK, L. (Slovak Tech. Univ., Dept. Radiochem. and Radiat. Chem., CS-88037 Bratislava, Czechoslovakia): Dekryptonation thermal analysis of polyvinylchloride determination of glass transition temperature. *Radiochim. Radioanal. Lett.* 29 (1977) 227
- MAGOSHI, J., MOGOSHI, Y., NAKAMURA, S., KASAI, N., KAKUDO, M. (Sericultural Expt. Stn., Suginami-ku, Tokyo, Japan): Physical properties and structure of silk. V. Thermal behaviour of silk fibroin in the random-coil conformation. *J. Polym. Sci. Polym. Phys. Ed.* 15 (1977) 1675
- MAKITA, Y., YAMAUCHI, Y., SUZUKI, S. (Sci. Univ. Tokyo, Fac. Sci., Dept. Appl. Phys., Shinjuku-ku, Tokyo, Japan): Study of the phase transition in $\text{KH}_3(\text{SeO}_3)_2$. II. Thermal anomalies and their relation to acoustic phonon instability. *J. Phys. Soc. Jap.* 43 (1977) 181
- MAMEDOV, K. K., ALDZHANOV, M. A., KERIMOV, I. G., MEKHTIEV, M. I. (Acad. Sci. AzSSR, Inst. Phys., Baku, AzSSR):

- Specific heat of gallium sulphide. *Fiz. Tverd. Tela* 19 (1977) 1471 (In Russian)
- MAMEDOV, K. P., GADZHEV, M. F., NURIEVA, Z. D. (Acad. Sci. AzSSR, Inst. Phys., Baku, AzSSR): Phase transition in silver chalcogenides. *Fiz. Tverd. Tela* 19 (1977) 2196 (In Russian)
- MANABE, K., OGAWA, M., YONEMURA, Y., KUBO, T. (Tokyo Coll. Phot., Fac. Engn., Dept. Ind. Chem., Iiyama, Atsugi, 24302 Japan): Mechanochemical effects of grinding of both ammonium paramolybdate tetrahydrate and its thermally decomposed products. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1977) 947 (In Japanese)
- MARCU, V., SEGAL, E. (Polytech, Inst. Bucharest, Inst. Chem., Dept. Phys. Chem. and Electrochem. Technol., Bucharest, Romania): The non-linear least squares method in non-isothermal kinetics. *Thermochim. Acta* 20 (1977) 211
- MARDELLI, M., OLMSTED III, J. (American Univ. Beirut, Dept. Chem., Beirut, Lebanon): Calorimetric determination of the 9,10-diphenylanthracene fluorescence quantum yield. *J. Photochem.* 7 (1977) 277
- MARKOV, B. F., TISHURA, T. A., BUDARINA, A. N. (Acad. Sci. UkrSSR, Inst. Gen. and Inorgan. Chem., Kiev, UkrSSR): Diagrams of enthalpy composition of fusions of binary salt systems. *Ukr. Khim. Zh.* 43 (1977) 593 (In Russian)
- MARSH, K. N. (Univ. New England, Dept. Phys. and Inorgan. Chem., Armidale, 2351 New S. Wales, Australia): A general method for calculating the excess Gibbs free energy from isothermal vapour-liquid equilibria. *J. Chem. Thermodyn.* 9 (1977) 719
- MATHEWS, M. D., MOMIN, A. C., KARKHA-NAVALA, M. D. (Bhabha Atom. Res. Ctr., Div. Chem., Bombay, 400085 India): High temperature behaviour of strontium uranates. *Indian J. Chem. A* 15 (1977) 192
- MATSUMOTO, Y., TOUHARA, H., NAKANISHI, K., WATANABE, N. (Kyoto Univ., Ind. Chem., Kyoto, 606 Japan): Molar excess enthalpies for water + ethanediol, +1,2-propanediol, and +1,3-propanediol at 298.15 K. *J. Chem. Thermodyn.* 9 (1977) 801
- MAYSTRENKO, L. G., POLOVOV, V. M. (Acad. Sci. USSR, Inst. Solid State Phys., Moscow, V-71 USSR): Calorimetric studies of magnetic phase transition in chromium alloys. *Fiz. Metal. Matelloved.* 43 (1977) 991 (In Russian)
- MÁZOR, L. (Tech. Univ. Budapest, Dept. Gen. and Analyt. Chem., H-1521 Budapest, Hungary): Determination of sulfur in organic compounds by the hydro-pyrolysis method. *Acta Chim. Acad. Sci. Hung.* 92 (1977) 105
- MCELROY, D. L., HAINES, H. R., HALL, R. O. A., LEE, J. A. (Oak Ridge Natl. Lab., Oak Ridge, Tenn., 37830 USA): The specific heat of PuC_{1-x} and Pu_2C_3 from 10 to 300K. *Proc. 5th Int. Conf. on Plutonium and Other Actinides, Baden Baden, North Holland Publ. Co.* (1976) 267
- MCKAY, J. A., SCHRIEMPF, J. T. (USN, Res. Lab., Washington, D. C. 20375 USA): Thermal transient analysis of pulsed heat deposition in sheet targets and observations of plasma spreading. *Appl. Phys. Lett.* 31 (1977) 369
- MEIJER, E. L., BLOK, J. G., KROON, J., OONK, H. A. J. (c/o H. A. J. Oonk, State Univ. Utrecht, Struct. Chem. en Chem. Thermodynam. Lab., Utrecht, Netherlands): The carboxime system. IV. Heat capacities and enthalpies of melting of dl-carboxime, 1-carboxime and standard n-heptane. *Thermochim. Acta* 20 (1977) 325
- MEOT-NER, M., HUNTER, E. P., FIELD, F. H. (Rockefeller Univ., New York, N. Y., 10021 USA): Thermal and nonthermal decompositions, eliminative ionic polymerization, and negative temperature coefficients in the *i*-C₄H₁₀-benzyl acetate system. A time resolved chemical ionization mass spectrometric study. *J. Amer. Chem. Soc.* 99 (1977) 5576
- MESSIER, F., DE JONGH, D. C. (c/o D. C. De Jongh, Univ. Montreal, Dept. Chim., Montréal H3C 3V1 Quebec, Canada): La pyrolyse de poly(adipate de butylène-1,4). *Can. J. Chem.* 55 (1977) 2732
- MEYER, L. U., MEIJERE, A. D. (c/o A. D. Meijere, Univ. Göttingen, Inst. Organ. Chem., D-3400 Göttingen, FRG): Eine moderne Strömungsapparatur für kinetische Messungen an thermischen Umlagerungen in der Gasphase: Thermolysekinetik neuer Kleinringverbindungen. *Chem. Ber.* 110 (1977) 2545

- MIEDEMA, A. R. (Philips Res. Labs., Eindhoven, Netherlands): On the heat of formation of plutonium alloys. *Proc. 5th Int. Conf. on Plutonium and Other Actinides, Baden Baden, North Holland Publ. Co.* (1976) 3
- MILLER, B., MARTIN, J. R., MEISER, C. H. (Text. Res. Inst., Princeton, N. J., 08540 USA): Design, calibration and use of a convective air flow dynamic calorimeter. *Thermochim. Acta* 20 (1977) 253
- MINAKOVA, T. T., ATAVIN, A. S., MOROZOVA, L. V. (Acad. Sci. USSR, Inst. Organ. Chem., Irkutsk, USSR): Thermal stability of vinyl acetate copolymers. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 50 (1977) 144
- MOCHIZUKI, S., SAKURAI, T. (Tohoku Univ., Sci. Measurement Res. Inst., Sendai, Miyagi, 980 Japan): Electrical conduction of MgO doped with Cr at high temperatures in oxidizing atmosphere. *Phys. Status Solidi A* 41 (1977) 411
- MODAK, A. T. (Factory Mutual Res. Corp., Norwood, Mass., 02062 USA): Thermal radiation from pool fires. *Combust. Flame* 29 (1977) 177
- MOHAMED, E. J., MISHO, R. H. DUBEY, K. S. (Univ. Basrah, Coll. Sci., Dept. Phys., Basrah, Iraq): Effect of variation of Debye temperature theta on lattice thermal conductivity of Ge. *Indian J. Pure Appl. Phys.* 15 (1977) 442
- MORANCHO, R., CONSTANT, G. (Ecole Natl. Supér. Chim. Toulouse, CNRS, Chim. Minérale et Cristallochim. Lab., Equipe Rech. 263, F-31077 Toulouse, France): Préparation et étude de la décomposition thermique du composé tris (2,2'-bipyridine) titane. *Compt. Rend. Ser. C* 235 (1977) 77
- MORTON, N., JAMES, B. W., WOSTENHOLM, G. H., TAYLOR, I. A., TAYLOR, G. M. (Univ. Salford, Dept. Pure and Appl. Phys., Salford, M5 4WT, Lancashire, England): The lattice thermal conductivity of superconducting vanadium - titanium alloys. *Cryogenics* 17 (1977) 447
- MÓSCICKI, J. K., NGUYEN, X. P., URBAN, S., WRÓBEL, S., RACHWALSKA, M., JANIK, J. A. (Jagiellonian Univ. Inst. Phys., PL-30059 Cracow, Poland): Calorimetric and dielectric investigations of MBBA (N-p-methoxybenzylidene(-p-butylaniline) and HAB (4,4'-di-n-heptyloxyazoxobenzene). *Mol. Cryst. Liquid Cryst.* 40 (1977) 891
- MOSES, D., BEN-AROYA, O., LUPU, N. (Technion Israel Inst. Technol., Dept. Phys., Haifa, Israel): Simple calorimetric system for the temperature range 3-300K with on-line computer. *Rev. Sci. Instr.* 48 (1977) 1098
- MOSES, D., TALMI, A., BENGUIGUI, L. (Technion Israel Inst. Technol., Dept. Phys., Haifa, Israel): Specific heat of SrTiO₃ near the structural transition. *Phys. Rev. B* 16 (1977) 533
- MÜLLER-VONMOOS, M., KAHR, G., RUB, A. (ETH, Inst. Crystallog. and Petrog., CH-8006 Zürich, Switzerland): DTA-TG-MS in the investigation of clays. Quantitative determination of H₂O, CO, CO₂ by evolved gas analysis with a mass spectrometer. *Thermochim. Acta* 20 (1977) 387
- MUSTAFAEV, R. A. (C. Ildrym Polytechn. Inst., Azerbaijan, AzSSR): Thermal conductivity of olefin hydrocarbon vapor for a wide range of temperatures. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 14 (1976) 870
- NABAR, M. A., ATHAWALE, V. D. (Univ. Bombay, Dept. Chem., Bombay, 400098 India): Thermal decomposition of zinc and cadmium hexaoxiodates. *Curr. Sci.* 46 (1977) 558
- NAITHANI, V. C., GAIROLA, R. P., SEMVAL, B. S. (Garhwal Univ. Coll., Dept. Phys., Strinagar Garhwal, Uttar Pradesh, India): Thermal conductivity of an isotopically disordered ferroelectric crystal. *J. Phys. Soc. Jap.* 43 (1977) 204
- NAKASE, Y., KURIYAMA, I., NISHIJIMA, H., ODAJIMA, A. (Japan Atom Energy Res. Inst., Takasaki Radiat. Chem. Res. Estab., Takasaki, 370 12, Japan): Simultaneous thermogravimetric and differential scanning calorimetric measurement of poly(trioxane). *Jap. J. Appl. Phys.* 16 (1977) 1417
- NAMBIAR, P. R., WENDLANDT, W. W. (c/o W. W. Wendlandt, Univ. Houston, Dept. Chem., Houston, Tex., 77044 USA): The kinetics of oxidation of some hydroxooaquoutetramminecobalt(III) complexes in the solid state. *Thermochim. Acta* 20 (1977) 417

- NAMBIAR, P. R., WENDLANDT, W. W. (c/o W. W. Wendlandt, Univ Houston, Dept. Chem., Houston, Tex., 77044 USA): The thermal oxidation reaction of *cis*-[Co(en)₂(OH)(H₂O)JS₂O₆]. *Thermochim. Acta* 20 (1977) 422
- NAVRÁTIL, K., OHLIDAL, I., LUKEŠ, F. (Purkyne Univ., Fac. Sci., Dept. Solid State Phys., CS-61137 Brno, Czechoslovakia): A model of oxide film originating at thermal oxidation of GaAs. *Czech. J. Phys. B* 27 (1977) 672
- NEDEL'KO, V. V., KORSUNSKII, B. L., DUBOVITSKII, F. I., ANAN'INA, O. V. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Thermal decomposition of N-methyl and N-benzoyl derivatives of linear polyethyleneimine. *Vysokomol. Soedin. A* 19 (1977) 1599 (In Russian)
- NEDOSTUP, N. A., SEMENCHENKO, V. K.: Analytical presentation of results from studies of liquid-crystalline substances at various temperatures and pressures. *Zh. Fiz. Khim.* 51 (1977) 1628 (In Russian)
- NEDOSTUP, N. A., SEMENCHENKO, V. K.: Thermodynamic stability of liquid-crystalline substances at various temperatures and pressures. *Zh. Fiz. Khim.* 51 (1977) 1632 (In Russian)
- NEKRJACH, E. F., SAMCHENKO, Z. A. (Acad. Sci. UkrSSR, Inst. Colloid Chem. and Water Chem., Kiev, UkrSSR): Heats of different-change ions exchange on macroporous sulphocation exchange resin KY-23. *Ukr. Khim. Zh.* 43 (1977) 647 (In Russian)
- NEMOTO, H., SETO, H., KAMETANI, T. (Tohoku Univ., Inst. Pharmaceut., Sendai, Miyagi, 980 Japan): Thermal rearrangement of aminomethyl cyclopropyl ketones. *Heterocycles* 6 (1977) 1569
- NGAUV, S. N., SABBATH, R., LAFFITTE, M. (c/o R. Sabbah, CNRS, Ctr. Res. Microcalorimétr. et Thermochim., F-13003 Marseille, France): Thermodynamique de composés azotés. III. Etude thermochimique de la glycine et de la L- α -alanine. *Thermochim. Acta* 20 (1977) 371
- NIEBERLEIN, V. A., STEVERDING, B. (USA, Missile Res. and Dev. Command, Redstone Arsenal, Ala., 35809 USA): Thermal conductivity of epoxy-aluminium powder mixtures. *J. Mater. Sci.* 12 (1977) 1684
- NINO, S., HAYAMA, S. (Yamagata Univ., Fac. Engn., Dept. Polymer Chem., Ya-
- magata, 992 Japan): Thermal properties and solution viscosities of vinyl copolymers containing biphenyl units in the backbone. *Jap. Polym. Sci. Technol.* 34 (1977) 591 (In Japanese)
- NIKLAS, K. J., GIANNASI, D. E. (New York Bot. Garden, Harding Res. Lab., Bronx, N. Y., 10458 USA): Geochemistry and thermolysis of flavonoids. *Science* 197 (1977) 767
- NONNENMACHER, T. F., WUNDERLE, R. (Univ. Ulm, Dept. Phys., D-7900 Ulm, GFR): Size effect on the thermal conductivity of small dielectric crystals. *Phys. Status Solidi B* 82 (1977) 257
- NOVIKOV, I. I., MARDYKIN, I. P.: Thermal properties of yttrium and holmium at high temperatures. *Russ. Metall.* transl. *Izv. Akad. Nauk SSSR Metall.* (1976) 27
- NOVOTNY, V. (Xerox Res. Ctr. Canada Ltd., Mississauga L5L 1J9, Ontario, Canada): Thermal conductivity of gold wire at low temperatures. *Cryogenics* 17 (1977) 451
- NURETDINOVA, O. N., GUSEVA, F. F., ARBUZOV, B. A. (A. E. Arbuzov Organ. and Phys. Chem. Inst., Kazan, USSR): Thermal decomposition of 2-hydroxylalkylthiol esters of phosphorous acids. *Bull. Acad. Sci. USSR. Div. Chem. Sci.* transl. *Izv. Akad. Nauk SSSR Khim.* 25 (1976) 2443
- OGURA, H., MATSUDA, H., OGAWA, T., OGITA, N., UEDA, A. (Kyoto Univ., Dept. Phys., Kyoto, 606 Japan): Computer simulation for the melting curve maximum phenomenon. Two-species soft-core model. *Progr. Theor. Phys.* 58 (1977) 419
- OKOPNAYA, N. T., CHERTOV, V. M. (Acad. Sci. MoSSR, Inst. Chem., Kishinev, MoSSR): Hydrothermal modification on titanium dioxide. *Colloid J. USSR* transl. *Kolloidn. Zh.* 38 (1976) 1058
- O'MARA M. M. (B. F. Goodrich Chem. Co., Ctr. Tech., Avon Lake, Ohio, 44012 USA): Combustion of PVC. *Pure Appl. Chem.* 49 (1977) 649
- OPPERMANN, H., KUNZE, G., WOLF, E. (Akad. Wissenschaft DDR, Zent. Inst. Festkörperphys. und Werkstoffforsch., DDR-8027 Dresden, GDR): The enthalpy of formation for TeX₄. *Z. Anorg. Allg. Chem.* 432 (1977) 182

- OZWALD, H. J., TURI, E. A., HARGET, P. J., KHANNA, Y. P. (Allied Chem. Corp., Chem. Res. Ctr., Morristown, N. J., 07960 USA): Development of a middle endotherm in DSC thermograms of thermally treated drawn PET yarns and its structural and mechanistic interpretation. *J. Macromol. Sci.* 13 B (1977) 231
- OVCHINNIKOVA, O. G., POPOVICH, G. M. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Thermal stability of silver atoms, adsorbed on silica gel surface. *Zh. Fiz. Khim.* 51 (1977) 1768 (In Russian)
- OVERBERGH, N., GIROLAMO, M., KELLER, A. (Univ. Leuven, Macromolec. en Organ. Scheikunde Lab., B-3030 Heverlee, Belgium): Solution grown isotactic polystyrene crystals. I. Degree and distribution of crystallinity, thermal stability. *J. Polym. Sci. Polym. Phys. Ed.* 15 (1977) 1475
- OVERBERGH, N., SADLER, D. M., KELLER, A. (Univ. Leuven Macromolec. en Organ. Scheikunde Lab., B-3030 Heverlee, Belgium): Solution grown isotactic polystyrene crystals. II. Kinetics of thermal changes by X-ray diffraction. *J. Polym. Sci. Polym. Phys. Ed.* 15 (1977) 1485
- PANDEY, H. C., PANDEY, J. D. (Univ. Allahabad, Dept. Chem., Allahabad, 211002 India): Temperature and pressure dependence of effective Debye temperature for NaCl. *Indian J. Pure Appl. Phys.* 15 (1977) 443
- PARINET, B., MOST, J. M., JOULAIN, P., VANTELON, J. P. (Grp. Rech. Chim. Phys. Combust., CNRS, Equipe Rech. 160, F-86800 St.-Julien-L'Ars, France): Contribution à l'étude de la décomposition thermique du chlorure de polyvinyle. *J. Chim. Phys.* 74 (1977) 539
- PAUTOV, G. A. (Voronezh Polytech. Inst., Voronezh, USSR): Electronic numerical controller for preliminary thermocalibration of a heat-carrier in precision calorimetry. *Zh. Fiz. Khim.* 51 (1977) 1552 (In Russian)
- PAUTOV, G. A., LEVCHENKO, G. V. (Voronezh Polytech. Inst., Voronezh, USSR): Ampule-free method for dissolution of crystalline hydrates in precision microcalorimetry. *Zh. Fiz. Khim.* 51 (1977) 1846 (In Russian)
- PAUTOV, G. A. (Voronezh Polytech. Inst., Voronezh, USSR): Unified numerical compensator in precision microcalorimetry. *Zh. Fiz. Khim.* 51 (1977) 1853 (In Russian)
- PAVLYUCHENKO, A. V. (Acad. Sci. USSR, Inst. Solid State Phys., Chernogolovka, USSR): Low-temperature properties of V₃Ge compound. *Fiz. Tverd. Tela* 19 (1977) 1431 (In Russian)
- PELAH, I., HAUER, A. (Soreq Nucl. Res. Ctr., Yavne, Israel): Differential calorimeter for measurement of absorbed energy in laser-produced plasmas. *Rev. Sci. Instr.* 48 (1977) 1068
- PELIZZA, G., NEBULONI, M., GALLO, G. G. (Ric. Grp., Lepetit S.p.A. Lab., I-20158 Milano, Italy): Thermal properties of diftalone and compounds related to its metabolism. *Thermochim. Acta* 20 (1977) 426
- PÉRAUDEAU, G., RAVEZ, J., TRESSAUD, A., HAGENMULLER, P., AREND, H., CHANUSSET, G. (Univ. Bordeaux 1, CNRS, Chim. Solide Lab., F-33405 Talence, France): Les transitions de phase de l'oxyfluorure Rb₃MoO₃F₃. *Solid State Commun.* 23 (1977) 543
- PERKINS, R. M., NEUMAYER, J. P., WADSWORTH, J. I., KNOEPFLER, N. B. (USDA, So. Reg. Res. Ctr., New Orleans, La., 70179 USA): Thermoanalytical studies of flame-retardant polyester/cotton textile blends: a comparison of THPC-urea-PVBr and THPOH ammonia treatments. *Thermochim. Acta* 20 (1977) 263
- PERRIN, J., ROSSITER, P. L. (Monash Univ., Dept. Phys., Clayton, 3161 Victoria, Australia): The temperature dependence of the electrical resistivity of Al-6.8 at. %Zn. *Phil. Mag.* 36 (1977) 109
- PETUKHOV, B. V., ESTRIN, Y. Z. (Acad. Sci. USSR, Inst. Crystallogr., Moscow, V-71 USSR): Thermal instability of the amplitude-dependent internal friction. *Phys. Status Solidi A* 42 (1977) 391
- PICOMARIN, C., VEIGABLANCO, M. L., GUTIERREZRIOS, E. (Univ. Complutense Madrid, Fac. Ciencias Quim., Dept. Quim. Inorgan., Madrid, Spain): Thermal decomposition of hexaoxotelluric acid. *An. Quim.* 73 (1977) 816
- PINCOCK, J. A., BOYD, R. J. (Dalhousie Univ., Dept. Chem., Halifax, B3H 4J3, N.S.,

- Canada): Thermal and photochemical reactivity of cyclopropene derivatives: a semi-empirical molecular orbital study. *Can. J. Chem.* 55 (1977) 2482
- PLESHANOV, V. P., BERLYANT, S. M. (L. Y. Karpov Physicochem. Inst., Moscow, USSR): Influence hydroperoxide on the thermal oxidative stability of γ -irradiated polyethylene film. *Vysokomol. Soedin. A* 19 (1977) 1679 (In Russian)
- PLETNEVA, E. D., KHODOS, M. Y., FOTIEV, A. A., VOLKOV, V. L.: Heats of formation of oxidic sodium-vanadium bronze of beta-Na_xV205 type. *Zh. Fiz. Khim.* 51 (1977) 1507 (In Russian)
- POINT, R., PETIT, J. L., GRAVELLE, P. C. (Inst. Natl. Sci. Appl. Lyon, Dept. Informat., F-69621 Villeurbanne, France): A microcalorimetric determination of the distribution of active sites at a catalyst surface. *J. Catal.* 48 (1977) 408
- POMPE, R. (Chalmers Univ. Technol., Dept. Inorgan. Chem., S-40220 Göteborg, 5 Sweden): A study of temperature variations of some reaction enthalpies suitable as calibration standards in DTA. *Thermochim. Acta* 20 (1977) 229
- POURADIER, J. (Ctr. Rech. Kodak Pathe, F-94300 Vincennes, France): Determination of desoxyribose by calorimetry: a method allowing to differentiate between free and constituent sugar in ADN and its application to gelatine analysis. *Bull. Soc. Chim. Fr. I* (1977) 455
- PROCHASKA, K., WYPYCH, J. (Univ. Łódź, Ctr. Comp., PL-90237 Łódź, Poland): Basic principles of thermal degradation and thermal stabilization of poly(vinyl chloride). Mathematical model of the action of PVC thermal stabilizers. *J. Appl. Polym. Sci.* 21 (1977) 2113
- PROCHÁZKA, M. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem., CS-16206 Prague, 6 Czechoslovakia): Preparation and thermal decomposition of branched azo esters. *Collect.* 42 (1977) 2394
- PROKOPCHUK, N. R., KRENEV, V. V., REZLER, R. Y., BESPALEV, A. A., KORZHAVIN, L. N., BARANOV, V. G., FRENKEL', S. Y. (Acad. Sci. USSR, Inst. Macromolec. Cpd., Leningrad, USSR): Thermomechanical study of the relaxation phenomena in polymers. *Vysokomol. Soedin. A* 19 (1977) 1605 (In Russian)
- RABEK, J. F., CANBÄCK, G., RÅNBY, B. (Royal Inst. Technol., Dept. Polymer Technol., S-10044 Stockholm, 70 Sweden): Studies on the photo-oxidation mechanism of polymers. VI. The role of commercial thermostabilizers in the photostability of poly(vinyl chloride). *J. Appl. Polym. Sci.* 21 (1977) 2211
- RAGHUNANDAN, B. N., MUKUNDA, H. S. (Indian Inst. Sci., Dept. Aeronaut. Engn., Bangalore, 560012 India): Combustion of polystyrene spheres in air. *Fuel* 56 (1977) 271
- RAJESHWAR, K., SECCO, E. A. (c/o E. A. Secco, St. Francis Xavier Univ., Dept. Chem., Antigonish, B2G 1CO, N.S., Canada): Study of NH₄EuF₄ in solid state reaction Eu₂O₃—NH₄F. Thermal analyses, calorimetry, and decomposition kinetics. *Can. J. Chem.* 55 (1977) 2628
- REZNITSKII, L. A. (M. V. Lomonosov State Univ., Dept. Gen. Chem., Moscow, 117234 USSR): The preference energies of cations and heats of formation of spinels. *Vestn. Moskovsk. Univ. Khim.* 18 (1977) 66 (In Russian)
- REZNITSKII, L. A. (M. V. Lomonosov State Univ., Dept. Gen. Chem., Moscow, 117234 USSR): The heats of formation of lithium spinels. *Vestn. Moskovsk. Univ. Khim.* 18 (1977) 228 (In Russian)
- REZNITSKII, L. A. (M. V. Lomonosov State Univ., Dept. Gen. Chem., Moscow, 117234 USSR): Heat capacity, heat content, and entropy of copper chromite from 298 to 1000 °K. *High Temp.* transl. *Teplofiz. Vysok. Temp.* 14 (1976) 1185
- ROBERTS, R. B. (CSIRO, Natl. Measurement Lab., Sydney 2008, New S. Wales, Australia): The absolute scale of thermoelectricity. *Phil. Mag.* 36 (1977) 91
- ROBERTS, R. B., CRISP, R. S. (CSIRO, Natl. Measurement Lab., Sydney 2008, New S. Wales, Australia): Thermoelectric power and thermal conductivity. An integral method. Aluminium. *Phil. Mag.* 36 (1977) 81
- ROSENBLATT, G. M., LEMONS, R. S., DRAPER, C. W. (Penn. State Univ., Dept. Chem., University Pk., Pa., 16802 USA): Thermal accommodation coefficients by high speed vibration of solid samples. IV. Determination of translational and internal energy accommodation coefficients. *J. Chem. Phys.* 67 (1977) 1099

- ROUX, A. H., VIALLARD, A. (Univ. Clermont-Ferrand, UER Sci. Exactes et Nat., Thermodynam. et Cinét. Chim. Lab., F-63170 Aubière, France): Appareillage pour l'élimination «in situ» des effets thermiques d'origine réactionnelle. *Bull. Soc. Chim. Fr.* (1977) 189
- ROWE, J. J., STEINNES, E. (US Geol. Survey, Reston, Va., 22092 USA): Determination of 30 elements in coal and fly ash by thermal and epithermal neutron-activation analysis. *Talanta* 24 (1977) 433
- SABROWSKY, H., MASSONNE, H. J. (Ruhr Univ. Bochum, Lehrstuhl Anorgan. Chem. 1, Arbeitsgruppe Festkörperchem., D-4630 Bochum, GFR): Die thermische Zersetzung von TiFeO_2 zu TiFe_5O_8 und $\alpha\text{-Fe}_2\text{O}_3$. *Z. Anorg. Allg. Chem.* 432 (1977) 115
- SADYKOV, R. M., AGARKOVA, G. A.: Reduction of germanium monoxide with hydrogen under polythermal conditions. *Russ. Metall. transl. Izv. Akad. Nauk SSSR Met.* (1976) 12
- SAKAI, K., AONO, O. (Univ. Tokyo, Fac. Sci., Dept. Phys., Tokyo, 113 Japan): Effects of nuclear fusion reaction on diffusion and thermal conduction in a magnetoplasma. *J. Phys. Soc. Jap.* 43 (1977) 222
- SALAMATINA, A. M., PHILIPPOV, P. (M. V. Lomonosov State Univ., Dept. Molec. Phys., Moscow, 117234 USSR): Application of noise thermometry for measurement of heat capacity of solid metals. *Vestn. Moskovsk. Univ.* 18 (1977) 51 (In Russian)
- SALERNO, V., LANDI, E., VACATELLO, M. (c/o M. Vacatello, Univ. Naples, Ist. Chim., I-80134 Naples, Italy): Transition metal complexes with long-chain amines. Thermal behaviour and crystal structure of $(n-\text{C}_n\text{H}_{2n+1}\text{NH}_2)_2\text{ZnCl}_2$. *Thermochim. Acta* 20 (1977) 407
- SAMCHENKO, Z. A., NEKRJACK, E. T. (Acad. Sci. UkrSSR, Inst. Colloid Chem. and Water Chem., Kiev, UkrSSR): Heat of exchange of alkaline and alkali earth metals ions on macroporous sulphocation exchange resin KX-23. *Ukr. Khim. Zh.* 43 (1977) 650 (In Russian)
- SANYAL, G. S., NAG, K. (c/o K. Nag, Indian Assoc. Cultivat. Sci., Dept. Inorgan. Chem., Calcutta 700032, India): Thermal studies on the dimesoperiodates and iodates of Ca(II), Sr(II) and Ba(II). Preparation and characterization of hexavalent iodates. *J. Inorg. Nucl. Chem.* 39 (1977) 1127
- SASUGA, T., TAKEHISA, M. (Japan Atom. Energy Res. Inst., Takasaki Radiat. Chem. Res. Estab., Takasaki, Gunma, 37012 Japan): Pressure - volume - temperature behavior of several synthetic rubbers. *J. Macromol. Sci. 13 B* (1977) 215
- SAWAGUCHI, T., KUROKI, T., ISANO, T., IKEBAYASHI, N., IKEMURA, T. (Nihon Univ., Coll. Sci. and Technol., Dept. Ind. Chem., Chiyoda-ku, Tokyo, 101 Japan): Behavior of products having high molecular weight formed during thermal degradation of polystyrene. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1977) 1056 (In Japanese)
- SCHMIDBAUR, H., BLASCHKE, G., KÖHLER, F. H. (Tech. Univ. München, Inst. Anorgan. Chem., D-800 München 2, GFR): Tri(tert-butyl)methylenphosphoran: Konsequenzen sterischer Hinderung für innermolekulare Beweglichkeit und thermischen Zerfallsmechanismus. *Z. Naturforsch. B* 32 (1977) 757
- SEKIGUCHI, Y., KUROKI, T., SAWAGUCHI, T., IKEMURA, T. (Nihon Univ., Coll. Sci. and Engn., Dept. Ind. Chem., Chiyoda-ku, Tokyo, 101 Japan): Thermal degradation of polystyrene by using a flow reactor. *J. Chem. Soc. Jap. Chem. Industr. Chem.* (1977) 1220 (In Japanese)
- SHAPLYGIN, I. S., LAZAREV, V. B. (N. S. Kurnakov Gen. and Inorg. Chem. Inst., Moscow, USSR): Thermal stability of osmium mixed oxides. I. CaOsO_3 decomposition products: a new orthorhombic phase $\text{Ca}_2\text{Os}_2\text{O}_7$. *Thermochim. Acta* 20 (1977) 381
- SHARMA, R. C. (Himachal Pradesh Univ., Dept. Math., Simla 171005 India): Thermal instability in compressible fluids in the presence of rotation and magnetic field. *J. Mathematic. Anal. Appl.* 60 (1977) 227
- SHEINDLIN, A. E., GORBUNOVA, N. I., SIMONOV, V. M. (Acad. Sci. USSR, Inst. High Temp., Moscow, V-71 USSR): Experimental data on the enthalpy of diphenyl mixture. *Dokl. Akad. Nauk SSSR* 235 (1977) 89 (In Russian)

- SHELUDYAKOV, V. D., KIRILIN, A. D., MIRONOV, V. F.: Reactions occurring during thermal conversions of o-silylurethans. *Zh. Obshch. Khim.* 47 (1977) 1515 (In Russian)
- SHENDER, E. F. (Leningrad Nucl. Phys. Inst., Leningrad, USSR): Density of states and the heat capacity of dilute Heisenberg ferromagnets near the percolation threshold. *Phys. Lett. A.* 62 (1977) 161
- SHIMIZU, H., OGURI, A., YASUDA, N., FUJIMOTO, S. (Gifu Univ., Fac. Engn., Dept. Electr. Engn., Kagamihara, Gifu, Japan): Effects of hydrostatic pressure on the phase transition points of ferroelectric NH_4LiSO_4 . *J. Phys. Soc. Jap.* 43 (1977) 349
- SHIMOKAWABE, M., FURUCHI, R., ISHII, T. (Hokkaido Univ., Fac. Engn., Dept. Appl. Chem., Sapporo, Hokkaido, 060 Japan): Effect of metal oxide additives on the thermal decomposition of perchlorates, oxalates and hydroxides. *Thermochim. Acta* 20 (1977) 347
- SHOKHINA, G. N., GAVRILOV, M. S. (Acad. Sci. BeSSR, Inst. Electr., Minsk, BeSSR): Changes of the porous structure of anodic aluminium oxide on heating to 1300°. *J. Appl. Chem. USSR* transl. *Zh. Prikl. Khim.* 50 (1977) 6
- SHOUMAN, A. R., DONALDSON, A. B. (New Mexico State Univ., Las Cruces, N.M., 88001 USA): Prediction of critical conditions for thermal explosion problems by a series method. *Combust. Flame* 29 (1977) 213
- SHURYGIN, P. M., BUZOVKIN, V. P., LEONOV, V. V. (M. I. Kalinin Krasnoyarsk Inst. Nonferrous Inst. Nonferrous Met., Moscow, USSR): Investigation of thermal conductivity of oxide melts. *High Temp. transl. Teplofiz. Vys. Temp.* 14 (1976) 981
- SHYAPNIKOVA, Y. A., DUBINSKII, V. Z., ROGINSKII, V. A., MILLER, V. B. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, V-71 USSR): Kinetics of the thermal decomposition of quinolide peroxides from 2,4,6-tri-tert-butylphenol. *Bull. Acad. Sci. USSR Div. Chem. Sci.* transl. *Izv. Akad. Nauk SSSR Ser. Khim.* 26 (1977) 46
- SIEGMANN, A., NARKIS, M. (Ctr. Ind. Res. Ltd., Haifa, Israel): Thermal analysis of thermosetting phenolic compounds for injection molding. *J. Appl. Polym. Sci.* 21 (1977) 2311
- SIMBIRSKII, D. F. (Kharkov Aviat. Inst., Kharkov, UkrSSR): Solution of the inverse thermal conductivity problem with applications to optimum filtration. *High Temp. transl. Teplofiz. Vys. Temp.* 14 (1976) 925
- SIROTA, N. N., BONDAR, V. I. (Acad. Sci. BeSSR, Solid State Phys. and Semicond. Inst., Minsk, BeSSR): The Curie temperature of solid solutions of barium strontium-calcium hexaferrites. *Dokl. Akad. Nauk BeSSR* 21 (1977) 507 (In Russian)
- SUCHEVSKAYA, N. P., YABLOKOV, V. A., YABLOKOVA, N. V., ALEKSANDROV, Y. A., SHAGALOV, Y. N.: Thermal stability of organogermanium polyperoxides. *Zh. Obshch. Khim.* 47 (1977) 1544 (In Russian)
- SNIEGOSKI, P. J. (USN, Res. Lab., Washington, D.C. 20375 USA): Quantitative TLC analysis of amine antioxidants in high-temperature jet engine lubricants. *J. Chromatogr. Sci.* 15 (1977) 328
- SOLOVEV, S. N., PRIVALOVA, N. M., VOROB'EV, A. F. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Enthalpy of dissolution of potassium iodide in dimethyl sulfoxide — formamide mixture. *Zh. Fiz. Khim.* 51 (1977) 1830 (In Russian)
- SOLUNSKII, V. I., KHAVKIN, V. L., LANTSBERG, N. G. (Kharkov Grad. Tank Operat. Sch., Kharkov, UkrSSR): On nature of thermal hysteresis of conductivity of KCl single crystals. *Fiz. Tverd. Tela* 19 (1977) 1986 (In Russian)
- SRIVASTAVA, G. P. (Univ. Newcastle-upon-Tyne, Dept. Theoret. Phys., Newcastle Tyne NE1 7RU, Northumberland, England): Improvement of variational bounds on lattice thermal conductivity by scaling and Ritz procedures. *J. Phys. C* 10 (1977) 1843
- SRIVASTAVA, S. P., SINGH, I. D., GUPTA, P. L. (Indian Inst. Petr., Anal. Phys. Lab., Dehra Dun, 248005 India): Thermal expansion coefficient and Grüneisen parameter of bicyclo[2.2.2] octane. *J. Phys. Soc. Jap.* 43 (1977) 355
- STEPANOVA, M. A., TVERDOKHLEBOV, V. P., STEPANOV, R. S., TSELINSKII, J. V., GIDASPOV, B. V. (Lensovet Technol. Inst., Leningrad USSR): Thermal decomposition of ferrocenylmethyl-N-nitroamines. *Zh. Org. Khim.* 13 (1977) 1364 (In Russian)

- STEVENS, B., SMALL, R. D. (Univ. S. Florida, Dept. Chem., Tampa, Fla., 33620 USA): The photoperoxidation of unsaturated organic molecules. 17. The thermal regeneration of acceptor. *J. Phys. Chem.* 81 (1977) 1605
- STIVALA, S. S., GABBAY, S. M. (Stevens Inst. Technol., Dept. Chem. and Chem. Engr., Hoboken, N.J. 07030 USA): Kinetics of the thermal oxidation of poly(4-methyl-1-pentene) from volatile products using thermogravimetric analysis. *Polymer* 18 (1977) 807
- ŠTOKŘ, J., JAKĚŠ, J., SCHNEIDER, B. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem., CS-16206 Prague, 6 Czechoslovakia): Simple relation for the determination of free activation enthalpies of conformational transitions. *Collect.* 42 (1977) 2287
- STURTEVANT, J. M. (Yale Univ., Dept. Chem., New Haven, Conn., 06520 USA): Heat capacity and entropy changes in processes involving proteins. *Proc. Nat. Acad. Sci. USA* 74 (1977) 2236
- SUNDQVIST, B., SANDBERG, O., BÄCKSTRÖM, G. (Univ. Umeå, Dept. Phys., S-90187 Umeå, Sweden): The thermal properties of an epoxy resin at high pressure and temperature. *J. Phys. D* 10 (1977) 1397
- SVENSEN, S. R. (Univ. Oslo, Dept. Chem., Oslo 3, Norway): Decomposition pressures and thermodynamic properties of RuTe₂. *J. Chem. Thermodyn.* 9 (1977) 789
- SVOBODA, V., MAJER, V., VESELÝ, F., PICK, J. (Prague Inst. Chem. Technol., Dept. Phys. Chem., CS-16628 Prague, 6 Czechoslovakia): Heats of vaporization of alkyl bromides. *Collect. Czech. Chem. Commun.* 42 (1977) 1755
- SZEIMIES, G., MANNHARDT, K., MICKLER, W. (Univ. München, Inst. Organ. Chem., D-8000 München, 2 GFR): Synthese und thermisches Verhalten einiger 3-Aryl-3-azido-aziridin-2-carbonsäure-ethylester. *Chem. Ber.* 110 (1977) 2922
- SZKERES, G., SIKLÓS, P., NAGY, L., JELINEK, L. (Tech. Univ., Budapest, Dept. Chem. Technol., H-1521 Budapest, Hungary): Thermal dimerization of cyclopentadiene and its reaction with isoprene. *Period. Polytech.* 21 (1977) 13
- TABAYASHI, K., FUENO, T., TAKASA, K., KAJIMOTO, O., OKADA, K. (Osaka Univ., Fac. Engr. Sci., Dept. Chem., Toyonaka, Osaka, 560 Japan): Thermal decomposition of hydrogen cyanide in shock waves. *Bull. Chem. Soc. Jap.* 50 (1977) 1754
- TAGER, A. A. (A. M. Gorkii State Univ., Sverdlovsk, USSR): Thermodynamics of mixing of polymers and thermodynamic stability of polymer compositions. *Vysokomol. Soedin. A* 19 (1977) 1659 (In Russian)
- TAKATSUKA, R., UNISHI, T., HONDA, I., KAKURAI, T. (Fukui Univ., Fac. Engr., Dept. Ind. Chem., Bunkyo, Fukui, 910 Japan): Thermal properties and solubility of poly-1,4,5,8-naphthalenetetracarboxydiimides containing 1,3,5-triazine rings. *J. Polym. Sci. Polym. Chem. Ed.* 15 (1977) 1785
- TAKENO, T. (Univ. Tokyo, Inst. Space and Aeronaut. Sci., Meguro-ku, Tokyo, Japan): Ignition criterion by thermal explosion theory. *Combust. Flame* 29 (1977) 209
- TANAKA, R., BENSON, G. C. (c/o. G. C. Benson, Natl. Res. Council Canada, Div. Chem., Ottawa, K1A OR6, Ontario, Canada): Excess enthalpies and volumes for mixtures of o-dichlorobenzene with some aromatic hydrocarbons at 298.15K. *J. Chem. Eng. Data* 22 (1977) 291
- TANIGUCHI, H., ISOMURA, K., TANAKA, T. (Kyushu Univ., Fac. Engr., Dept. Appl. Chem., Fukuoka, 812 Japan): Thermal reactions of 2H-azirines. *Heterocycles* 6 (1977) 1563
- TANTTILA, W. H. (Univ. Colorado, Dept. Phys. and Astrophys., Boulder, Colo., 80309 USA): Anomalous thermal properties of glasses. *Phys. Rev. Lett.* 39 (1977) 554
- TARDY, Y., GARTNER, L. (Univ. Louis Pasteur, Inst. Geol., Strasbourg, France): Relationship among Gibbs energies of formation of sulfates, nitrates, carbonates, oxides and aqueous ions. *Contrib. Mineral. Petrol.* 63 (1977) 89
- TEREBILO, G. I., TIKHOMIROVA, L. B., TUSHINSKII, L. (Novosibirsk Electrotech. Inst., Novosibirsk, USSR): Change in the substructure of bainite during thermo-mechanical treatment. *Metal. Sci. Heat Treatments transl. Metalloved. Thermichesk. Obrabotk. Metall.* 19 (1977) 156
- THAYER, W. L., ROBBINS, J. L. (Univ. Calif.,

- Lawrence Livermore Lab., Livermore, Calif., 94550 USA): Enthalpy and heat capacity of liquid plutonium and uranium. *Proc. 5th Int. Conf. on Plutonium and Other Actinides, Baden Baden, North Holland Publ. Co.* (1976) 85
- THOMPSON, J. E., REYNARD, K. A. (Horizons Res. Inc., Cleveland, Ohio, 44122 USA): Poly(aryloxyphosphazenes) and a flame retardant foam. *J. Appl. Polym. Sci.* 21 (1977) 2575
- TIMONOVA, R. I., IVASHENTSEV, Y. I.: Thermolysis of palladium and platinum sulfides and sulfates. *Zh. Neorg. Khim.* 22 (1977) 2303 (In Russian)
- TIMROT, D. L., MAKHROV, V. V., SVERDLENKO, V. I., REUTOV, B. F. (Moscow Power Engn. Inst., Moscow, USSR): Experimental study of the thermal conductivity of cesium vapor. *High Temp. transl. Teplofiz. Vysok. Temp.* 14 (1976) 858
- TIWARI, S. C. (K. N. Govt. Postgrad. Coll., Dept. Chem., Gyanpur, India): Heat of formation of cyclazines and some other organic compounds containing heteroatoms. *Indian J. Chem.* 15 (1977) 238
- TOMKINS, R. P. T., TURNER, P. J. (Rensselaer Polytech. Inst., Dept. Chem., Troy, N.Y., 12181 USA): Enthalpies of solution of lithium perchlorate in anhydrous and aqueous aliphatic nitriles at 298.15 K. *J. Chem. Thermodyn.* 9 (1977) 707
- TOMLINSON, W. J., STAPLEY, D. (Bell Tel. Labs. Inc., Holmdel, N.J., 07733 USA): Thermal conductivity of epoxyresin-aluminum (0 to 50 percent) composites. *J. Mater. Sci.* 12 (1977) 1689
- TRAVERSO, O., CHIORBOLI, C., MAZZI, U., ZUCCHINI, G. L. (Univ. Ferrara, Ist. Chim., I-44100 Ferrara, Italy): Thermal and photochemical reactions of ferrocene-mercuric and ruthenocene-mercuric halide systems. *Gazz. Chim. Ital.* 107 (1977) 181
- TRDLICKA, V., MITERA, J., MOSTEKY, J. (Univ. Prague, Dept. Petr. Technol. and Petrochem., CS-16628 Prague, Czechoslovakia): Organische Phosphorverbindungen. III. Identifizierung der thermischen Zersetzungprodukte von 0,0'-Diäthyl-S-Butylester der Dithiophosphorsäure und von Diäthylphosphorothionyl-disulfid mit Hilfe der Massenspektrometrie. *Erdöl-Kohle-Erdgas-Petrochem.* 30 (1977) 332
- ULICKÁ, L. (Komenský Univ., Fac. Nat. Sci., Dept. Inorgan. Chem., CS-80100 Bratislava, Czechoslovakia): Thermal decomposition of ammonium cadmium decavanadate. *Chem. Zvesti* 30 (1976) 409
- ULICKÁ, L. (Komenský Univ., Fac. Nat. Sci., Dept. Inorgan. Chem., CS-80100 Bratislava, Czechoslovakia): Thermal analysis of cesium zinc vanadates. *Chem. Zvesti* 30 (1976) 416
- VAN CALSTER, A., REUSENS, P. (State Univ. Ghent, Electr. Lab., B-9000 Ghent, Belgium): The variation of resistivity with temperature for n-type degenerate indium antimonide films. *Thin Solid Films* 44 (1977) 21
- VAN DIEPEN, A. M., DEN BROEDER, F. J. A. (Philips Res. Labs., Eindhoven, Netherlands): Effect of thermal stress on the easy axis of amorphous $Fe_{40}Ni_{40}P_{14}B_6$. *J. Appl. Phys.* 48 (1977) 3165
- VAN TIL, A. E., JOHNSON, D. C. (Universal Oil Prod. Inc., Corp. Res., Des Plaines, Ill., 60016 USA): A high sensitivity DC thermometric circuit using operational amplifiers and a hybrid combination of NTC and PTC thermistors. *Thermochim. Acta* 20 (1977) 115
- VAN TIL, A. E., JOHNSON, D. C. (Universal Oil Prod. Inc., Corp. Res., Des Plaines, Ill., 60016 USA): A compact differential isoperibol calorimeter with variable heat shields. *Thermochim. Acta* 20 (1977) 141
- VAN TIL, A. E., JOHNSON, D. C. (Universal Oil Prod. Inc., Corp. Res., Des Plaines, Ill., 60016 USA): A new calorimetric standard: 4-aminopyridine. *Thermochim. Acta* 20 (1977) 177
- VASILEVA, I. A., GERASIMOV, J. I., KUSHMIR, E. I. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Thermodynamic functions of higher titanium oxides Ti_nO_{2n-1} ($4 \leq n \leq 10$) at high temperatures. *Dokl. Akad. Nauk SSSR* 234 (1977) 1362 (In Russian)
- VASSOS, B. H., BONILLA, A. (Univ. Puerto Rico, Dept. Chem., Rio Piedras, P.R., 00923 USA): High sensitivity differential thermometer. *Chem. Instrum.* 8 (1977) 31
- VERNEKER, V. R. P., KISHORE, K., KANNAN, M. P. (Indian Inst. Sci., Dept. Inorgan. and Phys. Chem., High Energy Solids

- Lab., Bangalore, 560012 India): Sublimation and thermal decomposition of ammonium perchlorate. *Chem. Eng. Sci.* 32 (1977) 1114
- VOLODKO, L. V., KSENOPOFTOV, M. A., OSTROVSKAYA, L. E. (V. I. Lenin State Univ. Appl. Phys. Problems Res. Inst., Minsk, BeSSR): Influence of thermal transformation of the condensation products of diatomic phenols with formaldehyde on their optical and electrophysical properties. *Vysokomol. Soedin.* 19 (1977) 1702 (In Russian)
- VON WERNER, K. (Hoechst A.G., D-6230 Frankfurt/Main, 80 GFR): The reactivity of a thermally unstable perfluoroalkylsulfanyl azide. *J. Fluorine Chem.* 10 (1977) 163
- VOROB'EV, A. F., PRIVALOVA, N. M., REKHARSKII, M. V. (M. V. Lomonosov State Univ., Moscow, 117234 USSR): Hermetic calorimeter with automated adiabatic shell for measurements of heat capacity of liquids. *Zh. Fiz. Khim.* 51 (1977) 1843 (In Russian)
- WEEDY, B. M., RIGBY, S. J. (Univ. Southampton, Dept. Elect. Engn., Southampton, SO9 5NH, Hampshire, England): Thermal and electrical assessment of flexible cryoresistive cables. *Cryogenics* 17 (1977) 453
- WEISS, R. A., LENZ, R. W., MACKNIGHT, W. J. (Exxon Res. and Engn. Co., Corp. Res. Labs., Linden, N.J. 07036 USA): Properties of polyethylene modified with phosphonate side groups. I. Thermal and mechanical properties. *J. Polym. Sci. Polym. Phys. Ed.* 15 (1977) 1409
- WELLS, P. R. A. (Univ. Oxford, Dept. Geol. and Mineral., Oxford, OX1 3PR, England): Pyroxene thermometry in simple and complex systems. *Contrib. Mineral. Petro.* 62 (1977) 129
- WENGER, L. E., KEESOM, P. H. (Wayne State Univ., Dept. Phys., Detroit, Mich., 48202 USA): Specific heat of NbO_2 at low temperatures. *Phys. Rev. B* 15 (1977) 5953
- WIRTH, H. O., ANDREAS, H. (Ciba-Geigy GmbH, Marienberg, GFR): The stabilization of PVC against heat and light. *Pure Appl. Chem.* 49 (1977) 627
- WURFLINGER, A., LANDAU, R. (Ruhr Univ. Bochum, Inst. Phys. Chem., D-4630 Bochum, GFR): Differential thermal analysis at high pressures. VII. Phase behaviour of solid methanol up to 3 kbar. *J. Phys. Chem. Solids* 38 (1977) 811
- YAMASHITA, Y., MUKAI, T., TEZUKA, T. (c/o T. Mukai, Tohoku Univ., Fac. Sci., Dept. Chem., Sendai, Miyagi, 980 Japan): Thermal reactions of cage ketones possessing an oxygen-containing bridge or a hydroxy-substituent. *J. Chem. Soc.* (1977) 532
- YAROSHENKO, O. A., TYCHINA, I. I., KOLUPAEV, B. S., DEMYANYUK, B. P. (Rovno Teachers Inst., Rovno, UkrSSR): Study of thermophysical properties of glass-like systems of $\text{A}^{\text{V}}\text{B}^{\text{VI}}\text{C}^{\text{VI}}$ type. *Fiz. Tverd. Tela* 19 (1977) 1518 (In Russian)
- YAROUNTSEV, V. K., MEDVEDEV, V. S. (Eidgenoss. T. H. Zürich, Festkörperphys. Lab., CH-8049 Zürich, Switzerland): Measurement of isobaric specific heat of He_4 and $\text{He}-\text{H}_2$ mixtures. *Cryogenics* 17 (1977) 509
- YASUMOTO, Y., ITO, Y. (Nat'l. Chem. Lab. Ind., Shibuya-ku, Tokyo, 151 Japan): Thermal decompositions of sodium imidobis(sulfate) and potassium imidobis(sulfate). *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1977) 969 (In Japanese)
- YOSHINO, K., OHKATSU, Y., TSURUTA, T. (Univ. Tokyo, Fac. Engn., Dept. Synthet. Chem., Bunkyo ku, Tokyo, 113 Japan): Study on the modes of thermal decomposition of several azo-type initiators. *Polym. J.* 9 (1977) 275
- ZABEL, F. (Univ. Göttingen, Inst. Phys. Chem., D-3400 Göttingen, GFR): Thermal gas-phase decomposition of chloroethylenes. 2. Vinyl chloride. *Int. J. Chem. Kinet.* 9 (1977) 651
- ZAKHARKINA, L. I., KOROTCHENKO, N. A., FROLOV, V. I., BOGDANOV, G. A. (Moscow, Text. Inst., Moscow, USSR): Application of differential thermal analysis method for the studies of thermal decomposition of magnesium peroxotungstates. *Zh. Neorg. Khim.* 22 (1977) 2299 (In Russian)
- ZEMTSOVA, Z. N., PRODAN, E. A., PAVLYUCHENKO, M. M. (Acad. Sci. BeSSR, Inst. Gen. and Inorg. Chem., Minsk, BeSSR):

- Thermal decomposition kinetics of (Sr, Ca)CO₃ solid solutions. *Zh. Fiz. Khim.* 51 (1977) 1406 (In Russian)
- ZIELIŃSKI, M., KRYSZEWSKI, M. (Polish Acad. Sci., Ctr. Molec. and Macromolec. Studies, PL-90362 Łódź, 40 Poland): Thermal sampling technique for the thermally stimulated discharge in polymers. Model calculations. *Phys. Status Solidi A* 42 (1977) 305