

Bibliography Section

- ABDULLAEV, A. A., ANGELOVA, L. A., KUZNETSOV, V. K., ORMONT, A. B., PASHINTSEV, YU. I. (Radioengn. and Electr. Inst., Moscow, USSR): Galvanoo- and thermomagnetic properties of platinum antimonide. *Phys. Status Solidi A-Appl. Res.* 18 (1973) 459
- ABRAMOVA, L. I., FEDOROV, G. V., VOLKENSHTEYN, N. V. (Acad. Sci. USSR, Phys. Met. Inst., Sverdlovsk, USSR): Kinetic and magnetic properties of palladium-iron alloys. II. Temperature dependence of magnetization and thermoelectric power. *Fiz. Metal. Metalloved.* 36 (1973) 501 (In Russian)
- ABRAMOVITCH, R. A., INBASEKARAN, M., KATO, S. (Univ. Alabama, Dept. Chem. Ala., 35486 USA): Thermolysis of aryloxypyridinium salts. Possible generation of aryloxenium ions. *J. Amer. Chem. Soc.* 95 (1973) 5428
- ACCARY, A., INFARNET, Y., HUET, J. (Univ. Claude Bernard, ESCIL, Dept. Chim. Org., Lab. Chim. Org. IV, 43 Blvd. 11 Novembre 1918, 69621 Villeurbanne, France): Pyrolyse sur alumines de phényl-4 dihydro-2,3 furanes. *Bull. Soc. Chim. Fr. Pt. II.* (1973) 2424
- ÁCS, G., TÓTH, G., HUHN, P. (József Attila Tudományegyetem Szervetlen és Anal. Kém. Tsz., Szeged, Hungary): The thermal decomposition of propionaldehyde. *Magy. Kém. Foly.* 79 (1973) 385
- ADER, M., HUBBARD, W. N. (Argonne Natl. Lab., Chem. Engn. Div., Argonne, Ill., 60439 USA): Enthalpy of formation of monocoesium acetylide. *J. Chem. Thermo- dyn.* 5 (1973) 607
- AIDA, H., IKOH, K., WATANABE, A., SUZUKI, S., TOMOKANE, A. (Fukui Univ., Dept. Engn., Bunkyo 3-9-1, Fukui, Japan): The glass transition temperatures of copolymers of N-p-substituted phenyl maleimides with methyl acrylate. *Polymer Chemistry* 29 (1972) 643 (In Japanese)
- AKHMEDOV, N. R., ALIEV, G. M., ABDINOV, D. SH. (Acad. Sci. AzSSR, Phys. Inst., Baku, AzSSR): Thermal conductivity of iron selenides. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 9 (1973) 1330 (In Russian)
- ALEMAN, H., LIELMEZS, J. (Chem. Engn. Dept., Univ. Brit. Columbia, Vancouver 8, Canada): Thermodynamic functions for biphenyl and the 4,4'-dihalogenobiphenyls. *Thermochim. Acta* 7 (1973) 69
- ALIEV, S. A. (Acad. Sci. AzSSR, Phys. Inst., Baku, AzSSR): Thermal conductivity and thermoelectric power of $Hg_{1-x}Cd_xTe$ solid solutions at low temperatures. *Sov. Phys.-Semicond. Engl. Transl.* 7 (1973) 115
- ALI-ZADE, Z. I., BEYLIN, V. M., ZEYNALOV, T. I., ROGEL'BERG, I. L. (Non Ferrous Met. Proc. Inst., Moscow, USSR): Thermal E.M.F. in alloys of nickel with hafnium, tungsten, and rhenium in range 77 — 1300°K. *Fiz. Metal. Metalloved.* 36 (1973) 192 (In Russian)
- AMDUR, S., MARINSKY, J. A. (State. Univ. New York, Dept. Chem., Buffalo, N. Y., 14214 USA): An improved adiabatic titration calorimeter. *Rev. Sci. Instr.* 44 (1973) 1234
- AMIRKHANOV, KH. I., GADZHIEV, G. G., ISMAILOV, SH. M., MAGOMEDOV, YA. B. (Acad. Sci. USSR, Phys. Inst., Makhachkala, USSR): Thermoconductivity of $TlAsS_2$ and $TlAsTe_2$ in solid and liquid states. *Fiz. Tverd. Tela* 15 (1973) 2497 (In Russian)
- ANDRIANOV, K. A., PASHINTSEVA, G. I.,

- NANUSH'YAN, S. R., SEVERNYYI, V. V. (V. I. Lenin Elect. Engn. Inst., Leningrad, USSR): Study of the thermal and thermal-oxidative stability of polyorganocarbosiloxanes of the network structure. *Vysokomol. Soedin. Ser. 15* (1973) 1809 (In Russian)
- ARAJIS, S., STELMACH, A. A., MARTIN, M. C. (Clarkson Coll. Technol., Dept. Phys., Potsdam, N. Y., 13676 USA): Magnetic susceptibility and electrical resistivity of TiCO at elevated temperatures. *J. Less-Common Metals* 32 (1973) 178
- ARCORIA, A., FISICHELLA, S., SCARLATA, G., TORRE, M. (Univ. Catania, Ist. Chim. Ind., Catania, Italy): Affinities of standard heats and standard entropies of dyeing of azo-dyes from trans-4'-aminostilbene and trans-2(4'-aminostyryl)thiophene. *Ann. Chim. Rome* 62 (1972) 723 (In Italian)
- ARORA, B. R., BANERJEE, R. K., PRASAD RAO, T. S. R., MANDAL, N. K., GANGULI, N. C., SEN, S. P. (Fertilizer Corp. India Lmd., Planning and Dev. Div., Sindri, Bihar, India): Mechanism and kinetics of thermal decomposition of precipitates of the zinc oxide-aluminium oxide system from non-isothermal TG curves. *Thermochim. Acta* 7 (1973) 25
- AUERBACH, H., FLYNN, D., GOETSCH, S., LEE, C. C., SCHROEDER, P. A. (Michigan State Univ., Phys. Dept., E. Lansing, Mich., 48823 USA): The thermopower of α -phase silver-cadmium alloys from 4.2 to 300°K. *Phil. Mag.* 28 (1973) 49
- AUROUX, A., BOUSQUET, J., JOLY, R. D., LETOFFE, J. M. (CNRS, Inst. Natl. Sci. Appl., Lab. Phys. Chim. Min., 20 Ave. Albert Einstein, 69621 Villeurbanne, France): Nouveaux modes d'obtention de MnS γ . Détermination de l'enthalpie de la réaction de transformation de MnS γ en MnS α par calorimétrie de réaction. *Chim. Phys. Phys.-Chim. Biol.* 70 (1973) 1133
- AVERBACK, R. S., STEPHAN, C. H., BASS, J. (Cornell Univ., Dept. Mat. Sci., Ithaca, N. Y., 14850 USA): Magnetic field dependence of the thermopower of dilute aluminum alloys. *J. Low Temp. Phys.* 12 (1973) 319
- AWASTHI, S. K., CHAWLA, K. L., CHACKRA-BURTY, D. M. (Bhabha Atom. Res. Ctr., Radiochem. Div., Bombay 85, India): Structural and thermal investigations on some tetra oxalato complexes of uranium (IV). *J. Inorg. Nucl. Chem.* 35 (1973) 3805
- BABAYAN, S. A., KOSTANIAN, K. A., GEODAKIAN, J. A.: Dilatometric research of solid solutions on the basis of the aluminium titanate. *Arm. Khim. Zh.* 26 (1973) 549 (In Russian)
- BADALOVA, R. I., MITROFANOVA, N. D., MARTYNENKO, L. I., KRAMARENKO, F. G., LARCHENKO, V. E. (M. V. Lomonosov State Univ., Inorg. Chem. Dept., Moscow, USSR): Thermogravimetric analysis of rare earth triiminodiacetates. *Zh. Neorg. Khim.* 18 (1973) 1780 (In Russian)
- BARAN, B. A., BELEN'KAYA, I. M., DUBININ, M. M. (Acad. Sci. USSR, Phys. Chem. Inst., Moscow, USSR): Formation and properties of the hydrogen form of mordenite. 8. Effect of preliminary thermal treatment on the properties of natural mordenite. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1973) 1702 (In Russian)
- BARAN, B. A., BELEN'KAYA, I. M., DUBININ, M. M. (Acad. Sci. USSR, Phys. Chem. Inst., Moscow, USSR): Formation and properties of the hydrogen form of mordenite. 9. Thermal stability of certain cationic forms of synthetic mordenite. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1973) 1707 (In Russian)
- BARDYSHEV, I. I., BUINOVA, E. F., UDAROV, B. G. (Acad. Sci. BeSSR, Phys. Org. Chem. Inst., Minsk, BeSSR): Thermal isomerization of (-)-cis-carane and (+)-trans-carane. *Zh. Org. Khim.* 9 (1973) 1670 (In Russian)
- BARES, V., WUNDERLICH, B. (Rensselaer Polytech. Inst., Dept. Chem., Troy, N. Y., 12181 USA): Interpretation of the heat capacity of polymer melts. *J. Polym. Sci. Polym. Phys. Ed.* 11 (1973) 1301
- BARTON, J. M. (Roy. Aircraft Estab., Mat. Dept., Farnborough, Hampshire, England): Monitoring the curing reaction of an aromatic amine epoxide resin system by differential scanning calorimetry (DSC): determination and significance of the activation energy. *Makromol. Chem.* 171 (1973) 247
- BASZYNSKI, J. (Polish Acad. Sci. Inst. Phys., Ferromagnetics Lab., 61704 Poznan, Po-

- land): Electric conductivity and thermoelectric power of ferrimagnetics with magnetoplumbite structure. *Acta Phys. Pol.-A.* 43 (1973) 499
- BATALIN, G. I., STUKALO, V. A., BELOBORODOVA, E. A., NIKOFOROVA, A. I. (T. G. Shevchenko State Univ., Kiev, UkrSSR): Thermodynamic properties of double liquid solutions of a Ge-Pb system. *Zh. Fiz. Khim.* 47 (1973) 1609 (In Russian)
- BATHA, H. D., WHITNEY, E. D. (Carborundum Co., Res. and Dev. Div., Niagara Falls, N. Y., 14302, USA): Kinetics and mechanism of the thermal decomposition of Si_3N_4 . *J. Amer. Ceram. Soc.* 56 (1973) 365
- BAUM, G. A. (Inst. Paper Chem., Appleton, Wis., 54911 USA): Thermal depolarization currents of regenerated cellulose films. *J. Appl. Polym. Sci.* 17 (1973) 2855
- BELOVSOVA, E. M., SEIFULLINA, I. I., YANKELEVICH, R. G., PURICH, A. N. (I. I. Mechnikov State Univ., Odessa, UkrSSR): Infrared spectroscopy and thermography of germanium tetrachloride complexes with nicotinic and isonicotinic acids. *Zh. Obshch. Khim.* 43 (1973) 1746 (In Russian)
- BELYAKOV, V. K., KOSOBUTSKAYA, A. A., BELYAKOVA, I. V., KOZLOVA, M. V., SOKOLOV, L. B. (All Union Synth. Resin Inst., Moscow, USSR): Thermal-oxidative degradation of aromatic polyamides and polyimides. *Vysokomol. Soedin. Ser. A* 15 (1973) 1483 (In Russian)
- BERLIN, A. A., GHERASSIMOV, B. G., IVANOV, A. A. (Inst. Fine Chem. Technol., Moscow, USSR): Thermooxidative stability of copolymers having polyconjugated fragments in the main chain of macromolecules. *J. Polym. Sci. C* (1973) 183
- BERLIN, A. A., IVANOV, A. A., MIROTVORTEV, I. I. (Inst. Fine Chem. Technol., Moscow, USSR): Inhibiting activity and thermooxidative stability of the oxidative dehydropolycondensation products of diphenylamide. *J. Polym. Sci. C* (1973) 175
- BERNARD, M. A., BOREL, M. M., LEDESERT, M. A. (UER Sci., Lab. Chim. Mineral. B, 14032 Caen, France): Étude des thioacétates métalliques. I. Préparation et stabilité thermique du thioacétate de barium trihydraté et de deux nouveaux composés: les acétates thioacétates de calcium et de strontium hydratés. *Bull. Soc. Chim. Fr.* (1973) 2194
- BERNSHTEYN, M. L., LYUTTSAU, V. G., PLATOVA, S. N., LYUTTSAU, A. V., RUDNITSKIY, YE. N. (Moscow Steel and Alloy Inst., Moscow, USSR): On strengthening mechanism of steel by high-temperature thermomechanical treatment. *Fiz. Metal. Metalloved.* 36 (1973) 394 (In Russian)
- BERTIN, Y., PARISOT, J., FOUCET, J. (CNRS, Ecole Natl. Super. Mécanique and Aerotech., Lab. Mécanique and Phys. Mat., 86034 Poitiers, France): Frottement intérieur et vieillissement isotherme des aciers trempe martensitiques entre -50 et 25°C. *Scr. Met.* 7 (1973) 769
- BERTRAND, G. L., OYLER, D. E., EICHLBAUM, U. G., HEPLER, L. G. (Dept. Chem., Univ. Missouri-Rolla, Rolla, Mo., 65401 USA): Calorimetric investigations of association equilibria: the pyridine-iodine complex in cyclohexane and in carbon tetrachloride. *Thermochim. Acta* 7 (1973) 87
- BHATNAGAR, I. K., CHAKRABARTY, D. K., BISWAS, A. B. (Chem. Dept., Indian Institute of Technology, Bombay-400 076, India): Thermal decomposition of ammonium vanadate, ammonium molybdate and ammonium tungstate. *Indian J. Chem.* 10 (1972) 1025
- BIDA, G., CURCI, R., EDWARDS, J. O. (Brown Univ., Metcalf Chem. Labs., Providence, R. I., 02912 USA): A comparison of the thermal and photochemical oxidation of 2-propanol by two peroxyanions. *Int. J. Chem. Kinet.* 5 (1973) 859
- BIRKE, P., KEMPE, G. (Sektion Verfahrenschemie der T. H. für Chemie "Carl Schorlemmer" Leuna-Merseburg): Zum thermischen Verhalten der Phosphate einiger seltener Erdmetalle; Praseodymtrimetaphosphat-hydrat $\text{Pr}[\text{P}_3\text{O}_9] \cdot 4 \text{H}_2\text{O}$. *Z. Chem.* 13 (1973) 110
- BIRYUKOVA, G. P., SHABLYGIN, M. V., MIKHAILOV, N. V., ANDRIANOV, K. A. (All Union Synth. Fiber Inst., Moscow, USSR): Structural-chemical transformations of cellulose hydrate as affected by the pyrolysis conditions. *Vysokomol. Soedin. Ser. A* 15 (1973) 1573 (In Russian)
- BISELX, CH., SCHÄFER, J.-J., JANJIC, D. (Univ. Genève, Dept. Phys. Chem., 22 Blvd. Philosophes, Genève, Switzerland): Etude calorimétrique de complexes à transfert

- de charge-interhalogène quinoléine en solution. *Helv. Chim. Acta* 56 (1973) 2098
- BLAIR, A., IHLE, H. (Kernforschungsanlage Jülich GmbH, Inst. Phys. Chem., Jülich, GFR): The thermal decomposition and thermodynamic properties of uranium pentabromide. *J. Inorg. Nucl. Chem.* 35 (1973) 3795
- BLAIR, D. G., MATHESON, C. C., SAUNDERS, B. J. (Louisiana State Univ., Baton Rouge, La., 70803 USA): A ferrite magnetic permeability thermometer. *Cryogenics* 13 (1973) 561
- BLAKE, A. E., CHARLESBY, A., RANDLE, K. J. (Phys. Dept. Royal Military College of Science Shrivenham, Swindon, Wilts, England): High temperature thermoluminescence in polyethylene. *Polymer Letters Edition* 11 (1973) 165
- BOGDANOV, N. I., VARGANOV, B. Y., KHOLOMONOVA, N. D.: High-temperature alloy corrosion in sodium chloride melt. *Zh. Prikl. Khim.* 46 (1973) 1698 (In Russian)
- BOLDYREV, V. V. (Acad. Sci. USSR, Chem. Kinetics and Combustion Inst., Novosibirsk, USSR): Topochemistry of the thermal decomposition of solid substances. *Usp. Khim.* 42 (1973) 1161 (In Russian)
- BONNEKESSEL, J., RÜCHARDT, C. (Univ. Münster, Org. Chem. Inst., Orléans-Ring 23, D-4400 Münster, GFR): Aliphatische Azoverbindungen, III; Organische Peroxide, XVIII: Darstellung und Thermoalyse von 1,1'-Diphenylazocycloalkanen und 1-Phenyl-1-cycloalkanperoxykarbonsäure-tert-butylestern. *Chem. Ber.* 106 (1973) 2890
- BORUKHOVICH, A. S., BAZUEV, G. V., SHVEIKIN, G. P. (Acad. Sci. USSR, Sci. Ctr., Chem. Inst., Sverdlovsk, USSR): Heat capacity and magnetic phase transition in LaVO_3 . *Fiz. Tverd. Tela* 15 (1973) 2203 (In Russian)
- BOURDARIAT, J., ISNARD, R., ODIN, J.: Heat capacity of amorphous polyhexene-1 between 20 and 300°K: intramolecular vibrational contribution to Cr below the glass transition. *J. Polym. Sci. Polym. Phys. Ed.* 11 (1973) 1817
- BRANDŠTETR, J., SAPÁKOVÁ, P. (T. H. Brno, Inst. Chem., 600 00 Brno, Czechoslovakia): Thermometrische (enthalpiometrische) Wasserstoffperoxidbestimmung. *Collect. Czech. Chem. Commun.* 38 (1973) 2249
- BRIE, C., PETIT, J. L., GRAVELLE, P. C. (Inst. Natl. Sci. Appl., Dept. Phys., Rennes, France): Application à l'adsorption et à la catalyse hétérogène d'une méthode de recherche de la thermocinétique exacte, I. Méthode de déconvolution des thermogrammes et appareillage expérimental. *J. Chim. Phys. Phys.-Chim. Biol.* 70 (1973) 1107
- BROWN, G. E., PREWITT, C. T. (Stanford Univ., Dept. Geol., Stanford, Calif., 94305 USA): High-temperature crystal chemistry of hortonolite. *Amer. Mineral.* 58 (1973) 577
- BRÜNTRUP, G., CHRISTL, M. (Univ. Munich, Inst. Org. Chem., Karl Str. 23, 8 Munich 2, GFR): Darstellung und Thermolyse der Hexamethyldewarbenzol-Cycloaddukte aromatischer Nitriloxide und des Diphenyl-nitrilimins. *Tetrahedron Lett.* (1973) 3369
- BUSCHOW, K. H. J., MIEDEMA, A. R. (Philips Res. Labs., Eindhoven, Netherlands): Thermal expansion of ZrFe_2 and some rare-earth iron compounds. *Solid State Commun.* 13 (1973) 367
- BUZÁGH-GERÉ, É., GÁL, S., SIMON, J. (Tech. Univ. Budapest, Inst. Allgemeine und Anal. Chem., P. O. B. 91. 1502 Budapest, Hungary): Untersuchung von Dehydrationsvorgängen. I. Die Dehydratisierung von Erdalkalihalogenid-Hydraten in ihren eigenen Gasatmosphäre. *Z. Anorg. Allg. Chem.* 400 (1973) 37
- CAMERON, M., SUENO, S., PREWITT, C. T., PAPIKE, J. J. (State Univ. New York, Dept. Earth and Space Sci., Stony Brook, N. Y., 11790 USA): High-temperature crystal chemistry of acmite, diopside, hedenbergite, jadeite, spodumene, and ureyite. *Amer. Mineral.* 58 (1973) 594
- CARENZA, M., MOISEEV, Y. N., PALMA, G. (CNR. Ctr. Studio Fis. Macromolec., Bologna, Italy): Degradation of poly(vinyl chloride). III. Kinetics of thermal dehydrochlorination catalyzed by slow-diffusing HCl. *J. Appl. Polym. Sci.* 17 (1973) 2685
- CAȘCAVAL, C. N., OLEINEK, H., ZUGRĂVESCU, I., SCHNEIDER, I. A. (P. Poni, Inst. Makromolek. Chem., Jassy, Roumania): Polychalcone. IV. Gaschromatographische-pyrolytische Untersuchungen wärmebeständiger Polychalkone. *Makromol. Chem.* 169 (1973) 129

- CATHCART, J. V., LIU, C. T. (Oak Ridge Natl. Lab., Met. and Ceramics Div., Oak Ridge, Tenn., 37830 USA): The mechanical properties of two uranium alloys and their role in the oxidation of the alloys. *Oxidat. Metal.* 6 (1973) 123
- CHAIKIN, P. M., KWAK, J. F., JONES, T. E., GARITO, A. F., HEEGER, A. J. (Univ. Calif., Dept. Phys., Los Angeles, Calif., 90024 USA): Thermoelectric power of tetrathiofulvalinium tetracyanoquinodimethane. *Phys. Rev. Lett.* 31 (1973) 601
- CHAMPA, R. A., FISHEL, D. L. (c/o FISHEL, D. L., Kent State Univ., Dept. Chem., Kent, Oh., 44242 USA): Evidence for reactive intermediates formed during pyrolyses of α -betaines: a mass spectrometric investigation. *Can. J. Chem.* 51 (1973) 2750
- CHANG, F. C., WENDLANDT, W. W. (Dept. Chem., Univ. Houston, Houston, Texas 77004 USA): Thermal decomposition of some dihalotetramminecobalt (III) nitrates. *Thermochim. Acta* 7 (1973) 103
- CHANG, S. S., BESTUL, A. B. (NBS, Inst. Mat. Res., Washington, D. C., 20234 USA): Heat capacities of polyethylene from 2 to 360°K. I. Standard samples of linear and branched polyethylene whole polymer. *J. Res. Nat. Bur. Stand.-A. Phys. Chem.* 77A (1973) 395
- CHARLU, T. V., KLEPPA, O. J. (Univ. Chicago, Dept. Chem., Chicago, Ill., 60637 USA): High temperature combustion calorimetry. II. Enthalpies of formation of vanadium oxides. *High Temp. Sci.* 5 (1973) 260
- CHATAIN, D., GAUTIER, P., LACABANNE, C. (CNRS, Lab. Phys. Solides, 31077 Toulouse, France): Ionic thermal current study of the α 'process in poly(hexamethylene adipamide). *J. Polym. Sci. Polym. Phys. Ed.* 11 (1973) 1631
- CHEN, R., WESTCOTT-LEWIS, M. F. (Tel Aviv Univ., Dept. Phys. and Astron., Ramat Aviv, Israel): Application of thermoluminescence theory to the investigation of thermoremanent magnetization curves. *Aust. J. Phys.* 26 (1973) 249
- CHRISTOU, A., DAY, H. (USN, Res. Lab., Washington, D. C., 20375 USA): Structure and thermal stability of sputtered Au-Ta films. *J. Appl. Phys.* 44 (1973) 3386
- CLARK, R. P. (Organization 1913, Sand. Labs., Albuquerque, N. M., 87115 USA): The thermal decomposition of poly-4,4'-oxydiphenylene pyromellitimide. *Thermochim. Acta* 6 (1973) 473
- COLE, R. F. J., COXON, J. M., HARTSHORN, M. P. (Univ. Canterbury, Dept. Chem., Christchurch, New Zealand): The pyrolysis of cyclic sulphites from 2,3-endo and 2,3-exobornanediols. *Aust. J. Chem.* 26 (1973) 1595
- COMES, R., LAMBERT, M., ZELLER, H. R. (Univ. Paris, Ctr. Orsay, Lab. Phys. Solides, Orsay, France): A low-temperature phase transition in the one-dimensional conductor $K_2Pt(CN)_4Br_{0.30} \cdot H_2O$. *Phys. Status Solidi B-Basic Re.* 58 (1973) 587
- COOPER, D. R., SUTTON, G. J., TIGHE, B. J. (Univ. Aston, Dept. Chem. Gosta Green, Birmingham B4 7ET, England): Poly- α -ester degradation studies. V. Thermal degradation of polyglycollide. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 2045
- DEIBIG, H., PLACHKY, M., SANDER, M. (Battelle Inst. e. V., 6000 Frankfurt, GFR): Thermostabile Polymere. IV. Aromatische-o-Cyanopolyamide. *Angew. Makromol. Chem.* 32 (1973) 131
- DEREŃ, J., MANIA, R. (Sch. Min. and Met. Cracow, Inst. Mat. Engn., 30-059 Cracow, Poland): Influence of electric field on the thermal decomposition of silver oxalate. *Bull. Acad. Pol. Sci. Chim.* 21 (1973) 387
- DHERBOMEZ, N., DELMAIRE, J.-P., BRUSQ, H. (Fac. Sci., Lab. Chim. Gen., 33 Rue St. Leu., 80039 Amiens-Cedex, France): Sur le diagramme Ta-S à haute température et l'étude des propriétés électriques des sulfures de tantale. *Compt. Rend. Ser. C* 277 (1973) 311
- DÍAZ PEÑA, M., MENDUIÑA, C. (Univ. Complutense, Fac. Ciencias, Dept. Quim. Fis., Madrid, Spain): Calorímetro semicontinuo para la medida de calores de mezcla. *An. Quim.* 69 (1973) 857
- DICKSON, R. S., MICHEL, L. J. (Monash Univ., Dept. Chem., Clayton 3168, Victoria, Australia): The thermal degradation of μ -diphenylacetylene-bis(tricarbonylcobalt). *Aust. J. Chem.* 26 (1973) 1791
- DOLLMORE, D., HOLT, B. (Univ. Salford, Dept. Chem. and Appl. Chem., Salford M5 4WT, Lancashire, England): Thermal

- degradation of cellulose in nitrogen. *J. Polym. Sci. Polym. Phys. Ed.* 11 (1973) 1703
- DOMBROVSKY, N. M., GORNOSTAL', V. V. (Chernovtsy State Univ., Chernovtsy, UkrSSR): A study of the thermodynamic stability of trisodiumphosphate. *Izv. Akad. Nauk SSSR, Neorg. Mat.* 9 (1973) 1604 (In Russian)
- DOVGOPOL, S. P., RADOVSKII, I. Z., GELD, P. V. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): The effect of melting on magnetic characteristics of iron, cobalt and nickel. *Dokl. Akad. Nauk SSSR* 212 (1973) 83 (In Russian)
- DWIVEDI, G. L., SUBBARAO, E. C. (Indian Inst. Technol., Kanpur, India): Thermal expansion of monoclinic(alpha) Nb_2O_5 . *J. Amer. Ceram. Soc.* 56 (1973) 443
- ECKERT, L. J., BRADT, R. C. (Ctr. Engn., 307 Benner Pike State Coll., Pa., 16801, USA): Thermal expansion of corundum structure Ti_2O_3 and V_2O_3 . *J. Appl. Phys.* 44 (1973) 3470
- EGASHIRA, K., YOSHII, S. (Nippon Telegraph and Tel. Publ. Corp., Ibaraki Elect. Commun. Lab., Tokai, Ibaraki, Japan): Thermal hysteresis of magnetization curve in MnBi films below room temperature. *J. Appl. Phys.* 44 (1973) 3742
- ELLIOT, L. E., ESTACIO, P., RING, M. A. (c/o Ring, M. A. Calif. State Univ., Dept. Chem., San Diego, Calif., 92115 USA): Pyrolysis of silylphosphine and germylsilane and the formation of phosphylene (PH). *Inorg. Chem.* 12 (1973) 2193
- ENBERBY, J. E.: Thermoelectricity in metals and alloys. *Nature* 244 (1973) 527
- FABBRI, G., BARALDI, P. (Univ. Modena, Ist. Chim. Fis., Lab. Chim. Fis. Appl., Modena, Italy): Study of the thermal decomposition of copper sulphate by infrared emission spectroscopy. *Ann. Chim. Rome* 62 (1972) 740
- FACTOR, A. (G. E. Res. and Dev. Ctr., Schenectady, N. Y., 12301 USA): Thermal decomposition of 4,4'-isopropylidene bis-2,6-dibromophenol (tetrabromobisphenol-A). *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1691
- FEDOTOVA, O. YA., GOROKHOV, V. I., KARETNIKOV, G. S., KORSHAK, V. V. (D. I. Mendeleev Chem. Tecnol. Inst., Moscow, USSR): Investigation of the thermal degradation of polycarbamides. *Vysokomol. Soedin. Ser. A* 15 (1973) 2036 (In Russian)
- FELDMANN, W. (AdW, Zent. Inst., Anorg. Chem., Rudower Chaussee 5., 1199 Berlin, GDR): On the thermal behaviour of alkali calcium trimetaphosphate hydrates $\text{M}^1\text{CaP}_3\text{O}_9 \cdot \text{aq}$ ($\text{M}^1 = \text{Na, K, NH}_4$). *Z. Anorg. Allg. Chem.* 400 (1973) 97
- FILIPPOW, L. P. (Moskauer Universität, UdSSR): Untersuchung der termischen Eigenschaften im Stoff an der Moskauer Universität. *Int. J. Heat Mass. Transfer* 16 (1973) 865
- FLASCK, R., ROCKSTAD, H. K. (Energy Conversion Devices Inc., 1675 W Maple Rd., Troy, Mich., 48084 USA): The thermal conductivity of some chalcogenide glasses. *J. Non-Cryst. Solids* 12 (1973) 353
- FLEWITT, P. E. J., PALMER, D. E. B. (Cent. Elect. Generating Board, Met. Div. S Eastern Reg., Barnet, England): Temperature dependence of deformation for β phase niobium 16–40% zirconium alloys. *J. Less-Common Metals* 32 (1973) 57
- FLÓRA, T. (NEVIKI 8201, Veszprém POB. 39, Hungary): Kinetic calculations from derivatographic curves on examples of various types thermal reactions. *Magy. Kém. Lapja* 28 (1973) 278
- FOIT, Jr. F. F., PEACOR, D. R. (Washington State Univ., Dept. Geol., Pullman, Wash., 99163 USA): The anorthite crystal structure at 410 and 830°C. *Amer. Mineral.* 58 (1973) 665
- FREIMUTH, U. (Tech. Univ. Dresden, Sekt. Chem., 8027 Dresden, GDR): Veränderungen von Proteinen durch thermische Einwirkungen und Maillard-Reaktion. *Period. Polytech. Chem. Eng.* 17 (1973) 19
- GALCHENKO, G. L., BRYKINA, E. P., CHIRKOVA, L. I., VASILEV, L. S., MIKHAILOV, B. M. (M. V. Lomonosov State Univ., Moscow, USSR): Determination of the heat of combustion of tris-(diethylamino)-borane. *Zh. Fiz. Khim.* 47 (1973) 1606 (In Russian)
- GARDNER, R. A., SWISS, W. R. (IBM Corp., Syst. Prod. Div., E. Fishkill Fac., Hopewell Junction, N. Y., 12533 USA): High-

- temperature thermal gravimetric apparatus. *Rev. Sci. Instr.* 44 (1973) 1428
- GENIN, YA. V., Gerasimov, V. I., Tsvankin, D. Ya. (Acad. Sci. USSR, Inst. Organo-element. Cpd., Moscow, USSR): Thermal shrinkage of polyethylene with plane orientation of crystallites. *Vysokomol. Soedin. Ser. 15* (1973) 1798 (In Russian)
- GERASCHENKO, Z. V., VYGODSKII, YA. S., SLONIMSKII, G. L., ASKADSKII, A. A., PAPKOV, V. S., VINOGRADOVA, S. V., DASHEVSKII, V. G., KLIMOVA, V. A., SHERMAN, F. B., KORSHAK, V. V. (Acad. Sci. USSR, Inst. Organoelemental Cpd., Moscow, USSR): On the kinetics of formation of polyimides by high-temperature polycyclization. *Vysokomol. Soedin. Ser. 15* (1973) 1718 (In Russian)
- GERASIMOV, J. I., VASILIEVA, I. A., BALABAeva, R. F. (M. V. Lomonosov State Univ., Moscow, USSR): Defective structure and thermodynamic properties of vanadium non-stoichiometric sesquioxide at high temperatures. *Dokl. Akad. Nauk SSSR* 211 (1973) 98 (In Russian)
- GERBER, A. H. (Horizons Incorp., Beachwood, Ohio, 44122 USA): Thermally stable polymers derived from 2,3,5,6-tetraaminopyridine. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1703
- GIOVANOLI, R., STADELMANN, W. (Univ. Bern, Inst. Anorg., Anal. Phys. Chem., Freiestrasse 3, Psf. 140/P. O. B. 140, CH-3000 Bern 9, Schweiz): Über kristallines Chrom(III) Hydrosid. II. Thermische Zersetzung. *Thermochim. Acta* 7 (1973) 41
- GOLDOVSKII, E. A., KOROTKIKH, L. A., KUZ'MINSKII, A. S., YUZHELEVSKII, YU. A., KURLOVA, T. V., KAGAN, E. G. (All Union Rub. Ind. Inst., Moscow, USSR): On the thermal-oxidative stability of some aryl-containing siloxane elastomers. *Vysokomol. Soedin. Ser. B Krat. 15* (1973) 571 (In Russian)
- GOLDSHTEIN, M. I., ELOKHINA, G. N., KOLOSOVA, E. L. (Ural Ferrous Met. Res. Inst., Sverdlovsk, USSR): Fine structure of excessive ferrite during isothermal decomposition of austenite. *Metalloved. Term. Obrab. Metal.* (1973) 14 (In Russian)
- GOOD, W. D. (Dept. Interior, Bur. Mines, Bartlesville Energy Res. Ctr., Bartlesville, Okla., 74003 USA): The enthalpies of combustion and formation of 1,8-di-methylnaphthalene, 2,3-dimethylnaphthalene, 2,6-dimethylnaphthalene, and 2,7-dimethylnaphthalene. *J. Chem. Thermodyn.* 5 (1973) 715
- GORBACHEV, L. A. (Ust Kamenogorsk, Highway Construction Inst., Vst Kamenogorsk, USSR): Application of a thermoelectric method for graphing true stress diagrams. *Zavod. Lab.* (1973) 858 (In Russian)
- GÓRECKI, T., SUJAK, B. (Higher Engn. Coll., Dept. Phys., Ozimska 75, 45-370 Opole, Poland): On a possibility of predicting changes of thermodynamical properties of metal during polymorphic transitions $A_1 \rightarrow A_2$ and $A_3 \rightarrow A_2$. *Acta Phys. Pol.* A44 (1973) 11
- GORGORAKI, E. I., EFIMOV, E. A., ERUSALIMCHIK, I. G.: Pyrolysis of bisethylbenzenechromium (O). *J. Appl. Chem.* 46 (1973) 1541 (In Russian)
- GOTO, T., NAGANO, M., OWAKI, M. (Dept. of Fiber and Polymer Technology, Nagoya Inst. of Technol., Gokiso, Showaku, Nagoya, Japan): Thermal behavior of polyvinyl alcohol derivatives with 2-methoxy-4-amino-6-chloro-s-triazine. *Polymer Chem.* 29 (1972) 946 (In Japanese)
- GRAEBER, E. J., BAUGHMAN, R. J., MOROSIN, B. (Sandia Labs., Albuquerque, N. M., 87115 USA): Crystal structure and linear thermal expansivities of platinum silicide and platinum germanide. *Acta Crystallogr. Sect. C* 29B (1973) 1991
- GRASSIE, N., FORTUNE, J. D. (Univ. Glasgow, Dept. Chem., Glasgow G12 8QQ, Scotland): Thermal degradation of copolymers of methyl methacrylate and butyl acrylate, 4. The reaction mechanism. *Makromol. Chem.* 169 (1973) 117
- GRASSIE, N., GILKS, J. (Univ. Glasgow, Chem. Dept., Glasgow G12 8QQ, Scotland): Thermal analysis of polystyrenes cross-linked by p-di(chloromethyl)benzene. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1985
- GREGORY, A. R. (Roswell Pk. Mem. Inst., Biostatistics, Buffalo, N. Y., 14203 USA): The toxicity of thermolysis products of space-craft elastomers. *J. Appl. Polym. Sci.* 17 (1973) 2909
- GRIBKOVA, P. N., BALYKOVA, T. N., GLIVKA, L. A., VALETSKII, P. M., VINOGRADOVA, S. V., KORSHAK, V. V. (Acad. Sci. USSR,

- Inst. Organoelement Cpds., Moscow, USSR): Thermal degradation of poly-1,3,4-oxadiazoles containing carborane rings in the main chain. *Vysokomol. Soedin. Ser. A* 15 (1973) 1506 (In Russian)
- GRUBER, P., MÜLLER, L., STEGLICH, W. (Tech. Univ. Munich, Org. Chem. Inst., Munich, GFR): Thermolyse von Oxazolin-5-onen. III: Unterschiedliches Thermolyseverhalten von 2- und 4-Arylthio-2-(trifluormethyl)oxazolin-5-onen: Cycloeliminierung von CO₂ zu 2H-1,3-Benzothiazinen und CO-Abspaltung zu Alken-Derivaten. *Chem. Ber.* 106 (1973) 2863
- GUPTA, T. K. (Westinghouse Elect. Corp., Res. Labs., Pittsburgh, Pa., 15235 USA): Resistance to crack propagation in ceramics subjected to thermal shock. *J. Mater. Sci.* 8 (1973) 1283
- GUPTA, V. P., PIERRE, L. E. Sr. (Mc Gill Univ., Dept. Chem., Montreal, Quebec, Canada): Thermal degradation of poly(vinylchloride). II. Degradation mechanism based on decomposition energetics. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1841
- HALMOS, Z., WENDLANDT, W. W. (Univ. Houston, Dept. Chem., Houston, Texas, 77004 USA): A simultaneous electrical conductivity-differential thermal analysis apparatus. *Thermochim. Acta* 7 (1973) 95
- HALMOS, Z., WENDLANDT, W. W. (Univ. Houston, Dept. Chem., Houston, Texas, 77004 USA): Electrical conductivity-differential thermal analysis measurements on some M_nHgI₄ complexes. *Thermochim. Acta* 7 (1973) 113
- HARBUS, F., STANLEY, H. E. (MIT, Phys. Dept., Cambridge, Mass., 02139 USA): High-temperature-series study of models displaying tricritical behavior. I. Ferromagnetic planes coupled antiferromagnetically. *Phys. Rev. B-Solid State* 8 (1973) 1141
- HARBUS, F., STANLEY, H. E. (MIT, Phys. Dept., Cambridge, Mass., 02139 USA): High-temperature-series study of models displaying tricritical behavior. II. A Nearest-Neighbor Ising antiferromagnet with Next-Nearest-Neighbor ferromagnetic interactions. *Phys. Rev. B-Solid State* 8 (1973) 1156
- HAUSSÜHL, S. (Univ. Cologne, Inst. Kristallog., Cologne, GFR): Elastische und thermoelastische Konstanten von Calciumfluorid und Ammoniumjodid. *Z. Kristallogr.* 138 (1973) 177
- HEGEDÜS, A. J., BAKCSY, G., CHUDIK-MAJOR, L. (TUNGSRAM Res. Inst., 1340 Budapest, Hungary): Thermo- und röntgenanalytische Untersuchung des Sb—O Systems im Bereich SbO_{1.5-2}. *Acta Chim. Acad. Sci. Hung.* 77 (1973) 227
- HENDRICKSON, J. B., BERGERON, R. (Brandeis Univ., Edison Labs., Waltham, Ma., 02154 USA): A new thermal pericyclic carbon transfer capable of creating quaternary sites. *Tetrahedron Lett.* (1973) 3609
- HERBSTSTEIN, F. H., WEISSMAN, A. (Technion Israel Inst. Technol., Dept. Chem., Haifa, Israel): Thermal decomposition of potassium permanganate and related substances. Part III. Direct evidence that K₂(MnO₄)₂ is not an intermediate phase in the thermal decomposition of potassium permanganate in air at ca. 200°C. *J. Chem. Soc. Dalton Trans.* (1973) 1701
- HEYES, G., HOLT, G. (c/o HOLT, G., Univ Manchester, Inst. Sci. and Technol., Dept. Chem., P. O. Box No. 88, Manchester M60 1QD, England): Thermal rearrangement of α -diazo- β -diketones. *J. Chem. Soc. Perkin Trans. I* (1973) 1206
- HOLBA, P., ŠESTÁK, I. (Inst. of Solid State Phys., Czech Acad. Sci., Prague, Czechoslovakia): Kinetics with regard to the equilibrium of processes studied by non-isothermal techniques. *Z. Physik. Chem. Neue Folge* 80 (1972) 1
- HORSÁK, I., SLÁMA, I. (Czechoslovak Acad. Sci., Inst. Anorg. Chem., 160 00 Prague 6, Czechoslovakia): Reaktionen in geschmolzenen Salzen III. Thermische Zersetzung von in geschmolzenen Alkalinitraten gelösten Perchloraten. *Collect. Czech. Chem. Commun.* 38 (1973) 2366
- ICHIDA, T. (Kyoto Univ., Inst. Chem. Res. Uji, Kyoto-fu Japan): Mössbauer study of the thermal decomposition products of BaFeO₃. *J. Solid State Chem.* 7 (1973) 308
- IMAI, Y., URAYAMA, K. (Yamagata University, Dept. of Polym. Chem., Fac. of Engn., 4-3-16 Johnan, Yonezawa, Yamagata, Japan): Preparation and properties

- of poly-2,6-piperazinediones. *Polymer Chem.* 29 (1972) 610 (In Japanese)
- IRISOVA, K. N., ELBERT, E. I., SMIRNOV, V. K.: Application of thermography for studying carbon deposits on hydrocracking oxide catalysts. *Zh. Fiz. Khim.* 47 (1973) 1461 (In Russian)
- Ito, K. (Govt. Ind. Res. Inst., Nagoya Kita-Ku, Nagoya, Japan): Competition between thermal decomposition and hydrolysis of 2,2'-azobis(2-amidinopropane) in aqueous solution. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1673
- IVANOV, A. B., DONTSOV, A. A., KAMENSKII, A. N., KORNEV, A. E., EVSTRATOV, V. F. (M. V. Lomonosov Fine Chem. Technol. Inst., Moscow, USSR): Structural transformations of fluorine rubbers during the cure and the heating-up in thermostat. *Dokl. Akad. Nauk SSSR* 211 (1973) 1108 (In Russian)
- IYENGAR, L., RAMPRASAD, B., QUADRI, B. (Osmania Univ., Phys. Dept., Hyderabad 500007, India): Thermal expansion of cobalt ferrite and cobalt-zinc ferrite. *Curr. Sci.* 42 (1973) 534
- IZYUMOV, YU. A., SYROMYATNIKOV, V. N. (Acad. Sci. USSR, Sci. Ctr., Met. Phys. Inst., Sverdlovsk, USSR): Influence of impurities on temperature of superconducting transition in W₃Si-type compounds. *Fiz. Metal. Metalloved.* 35 (1973) 899 (In Russian)
- JASIM, F. (Univ. Baghdad, Dept. Chem., Coll. Sci., Baghdad, Iraq): Thermal, X-ray, and neutron-activation investigations of compounds of niobium and tantalum. *Thermochim. Acta* 6 (1973) 439
- JEFFERS, P., DASCH, C., BAUER, S. H. (State Univ. New York, Dept. Chem., Cortland-N. Y., 13045 USA): The pyrolysis of trimethylene sulfide. A unimolecular decomposition. *Int. J. Chem. Kinet.* 5 (1973) 545
- JENKINS, R. G., NANDI, S. P., WALKER, Jr. P. L. (Pennsylvania State Univ., Dept. Mat. Sci., University Park, Pa., 16802 USA): Reactivity of heat-treated coals in air at 500°C. *Fuel* 52 (1973) 288
- JESPERSEN, N. D. (Univ. Texas, Dept. Chem., Austin, Tex., 78712 USA): Thermometric titration studies of isopolymolybdates. *J. Inorg. Nucl. Chem.* 35 (1973) 3873
- JOHANSSON, N. G. (Roy. Inst. Technol., Dept. Org. Chem., S-100 44 Stockholm 70, Sweden): The synthesis of [dihalo(N,N-pentamethylenecarbamoyl)-methyl]phenyl mercury compounds and their thermal decomposition to halo-β-lactams. *Acta Chem. Scand.* 27 (1973) 1417
- JOHNSON, D. R., ROBB, W. A. (Dept. Interior, Bur. Mines, Laramie Energy Res. Ctr., Laramie, Wyo., 82070 USA): Gay-lussite: Thermal properties by simultaneous thermal analysis. *Amer. Mineral* 58 (1973) 778
- JOHNSON, P. Y., KOZA, E., KOHRMAN, R. E. (Johns Hopkins Univ., Dept. Chem., Baltimore, Md., 21218 USA): The pyrolysis of alkyl sulfide tosylhydrazone salts. A search for R₂S-4 participation in carbene reactions. The pyrolysis of sodium toluene-sulfinate. *J. Org. Chem.* 38 (1973) 2967
- JOHNSON, H. P., MERRILL, R. T. (Univ. Washington, Geophys. Program, Seattle, Wa., 98195 USA): Low-temperature oxidation of a titanomagnetite and the implications for paleomagnetism. *J. Geophys. Res.* 78 (1973) 4938
- JORDAN, JR. E. F., RISER, G. R., ARTYMYSHYN, B., SMITH, Jr. S., WRIGLEY, A. N. (USDA, ARS, Eastern Reg. Res. Lab., Philadelphia, Pa., 19118 USA): Allyl stearate copolymers and terpolymers: thermal, mechanical, and solution properties of polymers incorporating vinyl chloride. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1475
- KAGEMOTO, A., BABA, Y., FUJISHIRO, R. (Osaka Inst. of Technol., Omiyakitanicho, Asahi-ku, Osaka, Japan): Phase equilibrium of the cellulose derivatives determined by differential thermal analysis 1. Methylcellulose/water. *Die Makromol. Chem. Verlag Basel* 154 (1972) 105
- KAIDYMOV, B. I., DRAGANOVA, D. P., IVANOVA, M. G. (K. Okhridskii Univ., Chem. Fac., Sofia, Bulgaria): Effect of magnesium, calcium, strontium, and barium admixture ions on the rate of thermal ammonium perchlorate decomposition. *Kinet. Katal.* 14 (1973) 906 (In Russian)
- KAINO, T. (The Musashino Electrical Commun. Lab., Nippon Telegraph and Telephone Public Corp., 9-11, 3-Chome,

- Midoricho, Musashino-shi, Tokyo, Japan): Flame retardation of polyethylene and its mechanism. *Polym. Chem.* 29 (1972) 733 (In Japanese)
- KALININA, T. A., KLEINMAN, I. A., RABINOVICH, A. Z., ROITBERG, M. B. (All Union Chem. Reagent Inst., Moscow, USSR): Pyroelectric thermograph for indication of phase transitions in liquid crystals. *Prib. Techn. Eksp.* (1973) 235 (In Russian)
- KAMETANI, T., TAKAHASHI, T., OGASAWARA, K. (Tohoku Univ., Pharm. Inst., Aobayama, Sendai, Japan): A novel synthesis of an ochotensine-type isoquinoline by thermolysis. *J. Chem. Soc. Perkin Trans. I.* (1973) 1464
- KAMIYA, K., INAGAKI, M. (Mie Univ., Fac. Engn., Kamihama, Tsu, Japan): Thermal expansion of natural graphite imbedded in glassy carbon. *Carbon* 11 (1973) 429
- KÄMMERER, H., NIEMANN, W. (Univ. Mainz, Org. Chem. Inst., Sonderforschungsbereich. 41, 6500 Mainz, GFR): Der Aufbau einiger homologer Reihen von Hydroxyphenylen-methylen-Verbindungen und ihr Schmelzverhalten. *Makromol. Chem.* 169 (1973) 1
- KAZANSKII, V. M. (Kiev Engn. Construction Inst., Kiev, UkrSSR): Thermodynamic analysis of thermographic methods of study. *Zh. Fiz. Khim.* 47 (1973) 1437 (In Russian)
- KHAIRETDINOV, E. F., MEERSON, E. E., BOLDYREV, V. V. (Acad. Sci. USSR, Chem. Kinet. and Combust. Inst., Novosibirsk, USSR): Effect of thermal decomposition on electric conductivity of ammonium sulphate. *Zh. Fiz. Khim.* 47 (1973) 1763 (In Russian)
- KHAMSKII, E. V., TSIKAeva, D. V.: Polythermal crystallization. *Zh. Prikl. Khim.* 46 (1973) 1668 (In Russian)
- KHOKHLACHEV, P. P. (Acad. Sci. USSR, Phys. Inst., Makhachkala, USSR): Galvanomagnetic and thermomagnetic effects in $(\text{Cd Sn As}_{2/1-x}/2\text{CdSe})_x$. *Sov. Phys.-Semicond. Engl. Transl.* 7 (1973) 180
- KIBA, N., TAKEUCHI, T. (Nagoya Univ., Fac. Engn., Dept. Synth. Chem., Chikusa-ku, Nagoya, Japan): Thermometric titration of some molybdates, molybdic acid and molybdenum trioxide. *Anal. Chim. Acta* 66 (1973) 75
- KIBA, N., TAKEUCHI, T. (Nagoya Univ., Fac. Engn., Dept. Synth. Chem., Chikusa-ku, Nagoya, Japan): Thermometric titration in investigation of the formation of polyanions of molybdenum(VI), tungsten(VI), vanadium(V), and chromium(VI)-I. Comparison of thermometric and potentiometric titration curves. *Talanta* 20 (1973) 875
- KIM, A. M., DINDOIN, V. I., ZARZHETSKAYA, L. K., TATEVOSIAN, E. L., YUDKIN, B. I. (Plastpolymer Sci. Ind. Assoc., Novosibirsk, USSR): Thermal-oxidative degradation of poly-(2,6-dimethylphenylene oxide). *Vysokomol. Soedin. Ser. B-Kratk.* 15 (1973) 631 (In Russian)
- KISS, T. F. A. (Univ. Novi Sad, Chem. Inst., Novi Sad, Yugoslavia): Oxydationen organischer Substanzen Wasserstoffperoxid zur katalytisch-thermometrischen Endpunktanzeige chelatometrischer Titrationen. *Mikrochim. Acta* (1973) 847
- KLEINMAN, I. A., LYUBIMOVA, T. A., RABINOVICH, A. Z., ROITBERG, M. B. (All Union Res. Inst. Chem. Reagents and Special Pure Chem. Substances, Moscow, USSR): On thermal effects in lithium metaniobate. *Kristallografiya* 18 (1973) 863 (In Russian)
- KLUGER, R. (Univ. Chicago, Dept. Chem., Searle Chem. Lab., Chicago, Ill., 60637 USA): Thermal decomposition of a β -ketophosphonic acid. *J. Org. Chem.* 38 (1973) 2721
- KODESS, B. N. (Kirov Urals Polytech. Inst., Res. Dept., Sverdlovsk, USSR): Susceptibilité paramagnétique et transition à la basse température. I. Influence de la seconde composante intransitive dans les composés de la base de vanadium. *Solid State Commun.* 13 (1973) 523
- KODESS, B. N. (Kirov Urals Polytech. Inst., Res. Dept., Sverdlovsk, USSR): Susceptibilité paramagnétique et transition à la basse température. II. Supraconductivité des composés A-15 et leur propriétés magnétiques. *Solid State Commun.* 13 (1973) 527
- KOENIG, T. (Univ. Oregon, Dept. Chem., Eugene, Or., 97403 USA): Thermal decomposition of N-nitrosohydroxylamines. VI. Substituent effects on *t*-butyl perbenzoate formation. *Tetrahedron Lett.* (1973) 3487
- KOLOUCH, M. (Montanist. Hsch., Inst. Met. und Werkstoffprüfung, Leoben, Austria):

- Untersuchung mit der Tieftemperatur-Differentialthermoanalyse. *Metallk.* 64 (1973) 546
- KONISHI, Y., SAIJO, H. (Tokushima Univ., Fac. Engn., Dept. Chem. Engn., Minami-Josanjima, Tokushima 770, Japan): Thermal polymerizations of metal maleates in solid state. *Chem. Lett.* (1973) 829
- KORAT, M., GINSBURG, D. (Israel Inst., Technol., Dept. Chem., Haifa, Israel): Propellanes. XXI. Preparation and decomposition of azopropellanes. Thermal and photolitic decompr. *Tetrahedron* 29 (1973) 2373
- KOTON, M. M., SAZANOV, YU. N. (Acad. Sci. USSR, Macromolec. Cpd. Inst., Moscow, USSR): Thermal degradation of polyypyromellitimides. *Vysokomol. Soedin. Ser. A* 15 (1973) 1654 (In Russian)
- KOUMELIS, C. N. (Univ. Athens, Phys. Dept., Athens, Greece): The thermal expansion coefficient of chromium in the temperature region of 3 to 80°C. *Phys. Status Solidi A* 19 (1973) K65
- KOVALENKO, L. I., POLYAKOV, Y. I., PUGACH, B. Y., ROZEN, A. A. (Kharkov Engn. Phys. Inst., Kharkov, UkrSSR): Thermal decomposition kinetics of niobium pentachloride. *Zh. Fiz. Khim.* 47 (1973) 1606 (In Russian)
- KRASNOV, E. P., AKSENOVA, V. P., KHAR'KOV, S. N. (All Union Synth. Fiber Res. Inst., Mytischchi, USSR): Dependence of thermal stability on the chemical composition and structure of polyheteroarylenes. *Vysokomol. Soedin. Ser. A* 15 (1973) 2093 (In Russian)
- KRASNOV, E. P., AKSENOVA, V. P., BELYAEV, A. A., VOLOKHINA, A. V., KUDRYAVTSEV, G. I., SAVINOVA, V. M., TERENIN, V. I. (All Union Synth. Fiber Inst., Moscow, USSR): Thermal degradation of polybenzimidazopyrrolones and polybenzimidazophenanthrolines. *Vysokomol. Soedin. Ser. A* 15 (1973) 1606 (In Russian)
- KRIEN, G., LICHT, H. H., ZIERATH, J. (Inst. Chem. Techn. Untersuch., Swisttal-Heimerzheim, BRD): Thermochemical Untersuchungen an Nitraminen. *Thermochim. Acta* 6 (1973) 465
- KUBRAK, Y. P., YARYM-AGAEV, N. L. (Donetsk Polytech. Inst., Donetsk, UkrSSR): Thermodynamic properties of fused salts. 15. Saturated vapor pressure in a KBr-NaBr system. *Zh. Fiz. Khim.* 47 (1973) 1603 (In Russian)
- KUENTZLER, R. (Univ. Louis Pasteur, Inst. Phys., Lab. Pierre Weiss, Strasbourg, France): Low temperature specific heat of ordered and disordered FeCo. *Phys. Status Solidi B-Basic Re.* 58 (1973) 519
- KUMAR, P., GUPTA, S. N. (Univ. Roorkee Dept. Phys. Roorkee, India): Thermomagnetic effects in dirty transition-metal superconductors near the upper critical field. *Phys. Rev. B-Solid State* 8 (1973) 168
- KUSHNIR, S. V. (Lvov Polytech. Inst., Lvov, UkrSSR): Thermodynamics and the mechanism of thermal decomposition of tricalciumphosphate. *Dokl. Akad. Nauk SSSR*, 211 (1973) 652 (In Russian)
- KUTTY, T. R. N. (Indian Inst. Sci., Dept. Inorg. and Phys. Chem., Bangalore 12, India): Thermal decomposition of hydroxylapatite. *Indian J. Chem.* 11 (1973) 695
- KUVANDIKOV, O. K., CHEREMUSHKINA, A. V., VASILJEVA, R. P. (Moscow State Univ., Magnetism. Dept., Moscow, USSR): Galvanomagnetic and thermomagnetic properties of single crystal of tungsten. *Vestn. Mosk. Univ. Fiz. Astron.* 14 (1973) 382 (In Russian)
- KUZ'MENKO, P. P., KAL'NAYA, G. I., SUPRUNENKO, P. A., GALINA, G. A. (T. G. Shevchenko State Univ., Kiev, USSR): Effect of melting on magnetic properties of Mg-Cd alloys. *Izv. Vyssh. Ucheb. Zaved. Fiz.* (1973) 90 (In Russian)
- LANGE, B. A., HAENDLER, H. M. (Univ. New Hampshire, Dept. Chem., Durham, N. H., 03824 USA): The thermal decomposition of nickel and zinc fluoride tetrahydrates. *J. Inorg. Nucl. Chem.* 35 (1973) 3129
- LAUKHIN, V. N., RABINKIN, A. G., ESTRIN, E. I. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Phase transformation in KCl induced by pressure at low temperatures. *Zh. Eksp. Teor. Fiz.* 6L (1973) 2273 (In Russian)
- LAZÁR, M., AMBROVIČ, P., MIKOVIČ, J., BORSIG, E. (Polym. Inst., Slovak Acad. Sci., Bratislava, Czechoslovakia): Thermal decomposition of p-methyl-p'-nitrobenzoyl and bis-p-nitrobenzoyl peroxides. *Thermochim. Acta* 6 (1973) 481
- LEADBETTER, A. J., WATERFIELD, C. G., WYCHERLEY, K. E. (Univ. Bristol, Sch.

- Chem., Bristol B58 1TS, England): The heat capacities of a soda silica and a soda germania glass between 1.5 and 25K. *Solid State Commun.* 13 (1973) 701
- LECHTKEN, P., HÖHNE, G. (Univ. Erlangen, Inst. Org. Chem., Henke Str. 42., 852 Erlangen, GFR): Thermolysis of tetramethyl-1,2-dioxetane. *Angew. Chem. Int. Ed.* 12 (1973) 772
- LEONIDOV, V. I., PERVOV, V. S., GAISINSKAIA, O. M., KLIUEV, L. I. (Moscow High Temp. Inst., Moscow, USSR): Fluorine calorimetry. The enthalpy of sulphur hexafluoride formation. *Dokl. Akad. Nauk SSSR* 211 (1973) 901 (In Russian)
- LEUNG, L. K., EVANS, B. J., MORRISH, A. H. (Univ. Manitoba, Dept. Phys., Winnipeg 19, Manitoba, Canada): Low-temperature Mössbauer study of a nickel-zinc ferrite: $Zn_xNi_{1-x}Fe_2O_4$. *Phys. Rev. B-Solid State* 8 (1973) 29
- LIPATOV, YU. S., PRIVAIKO, V. p., SHUMSKII, V. F. (Acad. Sci. UkrSSR; Inst. Chem. Macromolec. Cpd., Kiev, UkrSSR): Investigation of the viscosity of the melts of filled oligoesters. *Vysokomol. Soedin. Ser. A* 15 (1973) 2106 (In Russian)
- LITVINOV, I. A., KARGIN, V. A. (A. V. Topchiev Petrochem. Synth. Inst., Moscow, USSR): Study of the effect of heat treatment on the supermolecular structure of polyacrylonitrile. *Vysokomol. Soedin. Ser. A* 15 (1973) 1615 (In Russian)
- LIVSHITS, B. G., SAMARIN, B. A., SHUBAKOV, V. S. (Moscow Steel and Alloy Inst., Moscow, USSR): Thermal treatment of Yu NDK35T5-type alloys. *Metalloved. Term. Obrab. Metal.* (1973) 30 (In Russian)
- LÓRÁNT, B. (Hauptstädlt. Inst. Lebensmittelkontroll und Chem., Budapest V., Hungary): Analytical use of ternary molybdo-phosphate complexes. Investigations of the thermal properties by means of the derivatograph. *Fresenius Z. Anal. Chem.* 266 (1973) 31 (In German)
- LUTHER, H., BAUMGARTEN, E., UL-ISLAM, K. (Tech. Univ. Clausthal, Inst. Chem. Technol. and Brennstoff Tech., Clausthal, GFR): Gaschromatographic studies on the thermal decomposition of zinc-di-butyl-dithiophosphates. *Erdöl Kohle Erdgas-Petr. Br. Ch.* 26 (1973) 509 (In German)
- LYSAK, L. I., DRACHINSKAYA, A. G., STOR-CHAK, N. A., USTINOV, A. I. (Acad. Sci. UkrSSR, Metallophys. Inst., Kiev, UkrSSR): On nature of martensite crystal structure change at low temperatures in iron aluminium-carbon alloy. *Fiz. Metal. Metalloved.* 36 (1973) 442 (In Russian)
- LYUTAYA, M. D., BARTNITSKAYA, T. S. (Acad. Sci. UkrSSR, Mat. Technol. Inst., Kiev, UkrSSR): Thermal stability of complex nitrides of the elements of the III-B subgroup. *Izv. Akad. Nauk SSSR Neorg. Mater.* 9 (1973) 1186
- MAGOMEDOV, A. A., OMAROV, A. M. (V. I. Lenin State Univ., Makhachkala, USSR): Thermal analysis of alloys of a bismuth-indium system. *Zh. Fiz. Khim.* 47 (1973) 1556 (In Russian)
- MAHAJAN, S. N., DAUNT, J. G., BOUGHTON, R. I., YAQUB, M. (Stevens Inst. Technol., Cryogenics Ctr., Hoboken, N. J., 07L30 USA): Thermoelectric power of pure gallium. I. Temperature dependence. *J. Low Temp. Phys.* 12 (1973) 347
- MALASPINA, L., GIGLI, R., BARDI, G. (Univ. Rome, Ist. Chim., Lab. Chim. Fis. ed Elettrochim., Rome, Italy): Microcalorimetric determination of the enthalpy of sublimation of benzoic acid and anthracene. *J. Chem. Phys.* 59 (1973) 387
- MALASPINA, L., GIGLI, R., BARDI, G., MARIA, G. (Univ. Rome, Ist. Chim., Lab. Chim. Fis. ed Elettrochim., Rome, Italy): Simultaneous determination by Knudsen effusion microcalorimetry of the vapour pressure and the enthalpy of sublimation of p- and m-nitroaniline. *J. Chem. Thermodyn.* 5 (1973) 699
- MALINGEROVÁ, N., MALINGER, M. (Univ. of Agricult., Dept. of Chem., Brno, Czechoslovakia): Thermometric determination of urea and its derivatives by means of oxidation with sodium hypobromite. *Acta Universitatis Agricult.* 307 (1972) 356 (In Czech)
- MALINGEROVÁ, N. (Univ. of Agricult., Dept. of Chem., Brno, Czechoslovakia): Thermometric determination of ammonium salts by means of oxidation with sodium hypobromite. *Acta Universitatis Agricult.* 306 (1972) 343 (In Czech)
- MALINOVSKY, V. V., ZINCHENKO, V. F., VELIKANOV, A. A., SEVCHUK, P. P. (Kiev State Univ., Kiev, UkrSSR): The absolute

- thermo-e.m.f. of melts of the systems Ge—Se and Ge—Te. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 9 (1973) 1342 (In Russian)
- MALINSKY, I., CLAISSE, F. (Univ. Laval, Ctr. Rech. Minerales, Quebec City, Quebec, Canada): A high-temperature calorimeter. *J. Chem. Thermodyn.* 5 (1973) 615
- MÅNSSON, M. (Univ. Lund, Chem. Ctr., Thermochem. Lab., S-220 07, Lund, Sweden): A 4.5 cm³ bomb combustion calorimeter and an ampoule technique for 5 to 10 mg samples with vapour pressures below approximately 3 kPa (20 Torr). *J. Chem. Thermodyn.* 5 (1973) 721
- MANZINI, G., CRESCENZI, V., CIANA, A., CICERI, L., DELLA FORTUNA, G., ZOTTERI, L. (Univ. Trieste, Inst. Chim., Trieste, Italy): Thermodynamic characterization of the melting of a series of polyester-amides. *Eur. Polym. J.* 9 (1973) 941
- MARCHIDIAN, D. I., VASU, L. (Ctr. Phys. Chem., Str. Galăți 31, Bucharest, Roumania): Heat of melting for eutectics formed in binary systems of AgNO₃ with KNO₃, RbNO₃, CsNO₃, AgCl and AgBr. *Rev. Roum. Chim.* 18 (1973) 1295
- MARTIN, H. D., HEKMAN, M. (Univ. Freiburg, Chem. Lab., 78 Freiburg, GFR): Thermolyse des Tetracyclo [4.4.0^{2,5} · · O^{7,10}]deca-3,8-dien-System. π -Homokonjugation oder σ -Hyperkonjugation? *Angew. Chem. Int. Ed.* 85 (1973) 615
- MARTIN, M. M., HAMMER, F. T., ZADOR, E. (Univ. Michigan, Dept. Chem., Ann Arbor, Mich., 48104 USA): Vapor-phase thermolysis of cyclic malonyl peroxides. *J. Org. Chem.* 38 (1973) 3422
- MARTSENKO, K. N., ASTAFEV, A. A., BUROVA, N. I. (Moscow Cent. Machinery Inst., Moscow, USSR): Effect of austenitization temperature on properties of the Kh5Ni2M3TYu steel. *Metalloved. Term. Obrab. Metal.* (1973) 27 (In Russian)
- MARTYNENKO, L. I., SPITSYN, V. I., EFREMOVA, L. B. (M. V. Lomonosov State Univ. Moscow, USSR): Thermogravimetric analysis of the hydrates of rare earths mono- and dicitrates. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1973) 1206 (In Russian)
- MATSUURA, M., TAKEDA, K., SATOH, T., SAWADA, Y., MACHADO DA SILVA, J. M. (Osaka Univ., Fac. Engn. Sci., Toyonaka, Osaka 560, Japan): Heat capacity and magnetic interaction in copper formate dihydrate. *Solid State Commun.* 13 (1973) 467
- MEKHRIUSHEV, Y. Y., POLUEKTOV, V. A.: Kinetics of thermal isomerization of trichloroethylene epoxide. *Zh. Fiz. Khim.* 47 (1973) 1695 (In Russian)
- MERRITT, R. R., HYDE, B. G., BURSILL, L. A., PHILP, D. K. (CSIRO, Div. Mineral Chem., P.O. Box 124, Port Melbourne, 3207 Victoria, Australia): An isothermal gravimetric study of the composition range Ti₃O₅ to TiO₂ at 1304°K. *Phil. Trans. Roy. Soc. London A274* (1973) 627
- METALLIDIS, A., THEODOROPoulos, D. (Univ. Patras, Lab. Org. Chem., Patras, Greece): Zur Thermolyse von Methantricarbon bzw. tetracarbonsäure-(N- α -naphthyl-amiden). *J. Heterocycl. Chem.* 10 (1973) 583
- MIKHAIL, R. SH., DOLLIMORE, D., KAMEL, A. M., EL-NAZER, N. R. (AIN Shams Univ., Fac. Sci., Dept. Chem., Cairo, United Arab Rep.): The thermal decomposition of pure and doped cadmium carbonate. I. Kinetics. *J. Appl. Chem. Biotechnol.* 23 (1973) 419
- MIKHAIL, R. SH., DOLLIMORE, D., KAMEL, A. M., EL-NAZER, N. R. (AIN Shams Univ., Fac. Sci. Dept. Chem., Cairo, United Arab Rep.): The thermal decomposition of pure and doped cadmium carbonate. II. Surface and pore structure studies. *J. Appl. Chem. Biotechnol.* 23 (1973) 431
- MIKHAILOVSKIY, V. G., SOKOLOVSKII, V. D., BORESKOV, G. K. (Acad. Sci. USSR, Catalysis Inst., Novosibirsk, USSR): Chemisorption of propylene on copper oxide, studied by the thermal desorption technique. *Kinet. Katal.* 14 (1973) 698 (In Russian)
- MILIČKA, K., ČADEK, J., RYŠ, P. (Czechoslovak Acad. Sci., Inst. Phys. Met., Brno, Czechoslovakia): High temperature creep in magnesium strengthened by magnesia particles. *Z. Metallk.* 64 (1973) 581
- MILLS, K. C., RICHARDSON, M. J. (Nat. Phys. Lab., Teddington, Middlesex TW11 OLW, England): The heat capacity of Cu₂Te(c), CuTe(c), Ag₂Te(c) and Ag_{1.64}Te(c). *Thermochim. Acta* 6 (1973) 427
- MISHIN, I. V., KLYACHKO-GURVICH, A. L.,

- SHIKUNOV, B. I., ASHAVSKAYA G. A., KAPUSTIN, G. I., RUBINSTEIN, A. M. (N. D. Zelinskii Org. Chem. Inst., Moscow, USSR): Investigations of thermostability of certain decationated and dealuminated mordenites. *Izv. Akad. Nauk SSSR, Ser. Khim.* 6 (1973) 1346 (In Russian)
- MISHIN, I. V., PILOYAN, G. A., KLYACHKO-GURVICH, A. L., RUBINSTEIN, A. M. (N. D. Zelinskii Org. Chem. Inst., Moscow, USSR): Water vapour adsorption and thermographic investigation of certain decationated and aluminated mordenites. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1973) 1343 (In Russian)
- MOHADGER, Y., ROLLER, M. B., GILLHAM, J. K. (Princeton Univ., Dept. Chem. Engr., Mat. Program, Princeton, N. J., 08540 USA): High-temperature elastomers: a systematic series of linear poly-(carborane siloxane)s containing icosahedral(-CB₁₀H₁₀C-)cages. III. Spectroscopic identification. *J. Appl. Polym. Sci.* 17 (1973) 2635
- MUKHERJEE, J. L., RAY, S., MEHTA, M. L. (Bhabha Atom. Res. Ctr., Met. Div., Bombay, India): The effect of heat treatment on the tensile strength and hardness of a quenched ternary zirconium-base alloy (Zr-0.5 wt. % Nb-1 wt. % Cr). *J. Less-Common Metals* 32 (1973) 189
- MURAT, M. (Univ. C. Bernard, Lyon I, Lab. de Chim. Appl. et de Génie Chimique, 69-Villeurbanne, France): Application des méthodes d'analyse thermique à l'identification des minéraux. Comparaison de quelques résultats obtenus par A.T.D. et par dilatométrie. *Rev. Générale Thermique* 136 (1973) 331
- NACHBAUR, E., BAUMGARTNER, E. (Univ. Graz, Inst. für Anorg. und Anal. Chem., Österreich): Über die Darstellung von Trilithium-trisulfimid (Trilithium-1,3,5,2,4,6-trithiazin-1,1,3,3,5,5-hexaoxid) und die thermische Zersetzung einiger Salze des Trisulfimids. *Monatshefte für Chemie* 104. (1973) 1131
- NAGASE, K., TANAKA, N. (Tohoku Univ., Coll. Gen. Educ., Kawauchi Sendai, 980, Japan): Kinetic studies of thermal decomposition reactions of amminechro-
- mium(III) complexes in solid state. *Bull. Chem. Soc. Jap.* 46 (1973) 2435
- NAITO, K., KAMEGASHIRA, N., YAMADA, N., KITAGAWA, J. (Nagoya Univ., Fac. Engr., Dept. Nucl. Engr., Nagoya, Japan): Studies on a dynamic adiabatic calorimeter I: Heat leakage at high temperatures. *J. Phys. E Sci. Instrum.* 6 (1973) 836
- NAMETKIN, N. S., GUSELNIKOV, L. E., ORLOV, V. I., USHAKOVA, R. L., KUZMIN, O. V., VDOVIN, V. M. (A. V. Topchiev Petrochem. Synth. Inst., Moscow, USSR): Thermal decomposition of 4-sila-(3,3)-spiroheptane. *Dokl. Akad. Nauk SSSR* 211 (1973) 106 (In Russian)
- NARITA, T., NISHIDA, K. (Hokkaido Univ., Fac. Engr., Met. Res. Inst., Sapporo, Japan): High-temperature corrosion of low Cr—Fe alloys in sulphur vapor. *Oxidat. Metal.* 6 (1973) 181
- NARITA, T., NISHIDA, K. (Hokkaido Univ., Fac. Engr., Met. Res. Inst., Sapporo, Japan): On the high-temperature corrosion of Fe—Cr alloys in sulphur vapor. *Oxidat. Metal.* 6 (1973) 157
- NAVRASTIL, J. D., OETTING, F. L. (Dow. Chem. Co., Rocky Flats Div., POB. 888 Golden, Colo., 80401 USA): Enthalpy of formation of beryllium sulphate and its hydrates. *J. Inorg. Nucl. Chem.* 35 (1973) 3943
- NEWMAN, M. S., STALICK, W. M. (Ohio State Univ., Evans Chem. Lab., Columbus, Ohio, 43210 USA): A novel synthesis of disubstituted maleic anhydrides by the pyrolysis of 1-ethoxy-1-alkenyl esters of α -keto acids. *J. Org. Chem.* 38 (1973) 3386
- NOVOKHATSKI, I. A., LADIANOV, V. L., ARKHAROV, V. I., VELIUKHANOV, V. P. (Acad. Sci. UkrSSR, Engn. Phys. Inst., Donetsk, UkrSSR): The two-isotherm method in the diffractography of melts. *Dokl. Akad. Nauk SSSR* 211 (1973) 814 (In Russian)
- OHARA, M., IWATA, M., SAKO, T., SAKURAMOTO, Y., YAMAMOTO, R. (Ouchishinko Chemical Industrial Co., Ltd., 3-7, Kobuna-cho, I-Chome, Nihonbashi, Chuo-ku, Tokyo 103, Japan): Sulfur-containing aldehyde oligomers as thermal stabilizer (IV). Addition effect of sulfur-containing aldehyde oligomers to plastics. *J. Soc.*

- Rubber Ind. Japan* 46 (1973) 51 (In Japanese)
- OHARA, M., SHICHIMI, T., SAKURAMOTO, Y., YAMAMOTO, R. (Ouchishinko Chemical Industrial Co. 3-7, I-Chome, Kobunacho, Nihonbashi, Chuo-ku, Tokyo 103, Japan): Sulfur-containing aldehyde oligomers as thermal stabilizer (V). Addition effect of sulfur-containing aldehyde oligomers to vulcanized rubber. *J. Soc. Rubber Ind. Japan* 46 (1973) 57 (In Japanese)
- OPPERMANN, H., STÖVER, G. (Dresden, Zentralinstitut für Festkörperphysik und Werkstoffforschung—Institutsteil für Metallphysik und Reinstmetalle der DAW zu Berlin): Beiträge zur Chemie der Oxihalogenide von Molybdän und Wolfram. VI. Termische Zersetzung von MoCl_3 - und MoOCl_2 . *Z. Anorg. Allgemeine Chem.* 387 (1972) 217
- OREHOTSKY, J., SCHRÖDER, K. (Wilkes Coll., Wilkes Barries, Pa., 18703 USA): Specific heat of iron-rich iron-chromium, iron-aluminium and iron-vanadium alloys between 600 and 1200°K. *Phys. Status Solidi A-Appl. Res.* 19 (1973) 93
- ORLOV, Y. F., PANFILOVA, L. A., STANSKAYA, T. B., SAKSEEV, D. A., FOMINA, V. I.: Evaporation of antimony sulfide-selenides. 2. Communication. *J. Appl. Chem.* 46 (1973) 1587 (In Russian)
- OSAWA, Z., ISHIZUKA, T. (Gunma Univ., Fac. Engn., Dept. Polymer. Chem., Kiryu, Gunma, Japan): Catalytic action of metal salts in autoxidation and polymerization. X. The effect of various metal stearates on the thermal oxidation of 2,6,10,14-tetramethyl-pentadecane. *J. Appl. Polym. Sci.* 17 (1973) 2897
- PACÁK, P., SLÁMA, I. (Czechoslovak Acad. Sci., Inst. Anorg. Chem., 160 00 Prague 6, Czechoslovakia): Reaktionen in geschmolzenen Salzen II. Oxydation von Jodidionen mit Hilfe von Molekularsauerstoff und Reaktion von Lithiumhexoxoperjodat mit Jodidionen und mit Kohlendioxid im eutektischen Gemisch von Lithium- und Kaliumchlorid. *Collect. Czech. Chem. Commun.* 38 (1973) 2355
- PACÁK, P., SLÁMA, I., HORSÁK, I. (Czechoslovak Acad. Sci., Inst. Anorg. Chem., 160 00 Prague 6, Czechoslovakia): Reaktionen in geschmolzenen Salzen I. Reaktion von Jodationen mit Jodidionen im eutektischen Gemisch von LiCl-KCl. *Collect. Czech. Chem. Commun.* 38 (1973) 2347
- PACIOREK, K. L., KRATZER, R. H., KAUFMAN, J. (Ultrasyst., Inc., Irvine, Calif., 92664 USA): Oxidative thermal degradation of polytetrafluoroethylene. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 1465
- PAK, V., KRASNOV, V. A., KRINSKII, Y. P.: Diagram of differential-thermal analysis on the principle of heater and thermo-receptor combination. *Zh. Fiz. Khim.* 47 (1973) 1586 (In Russian)
- PALENZONA, A., CIRAFICI, S. (Univ. Genoa, Ist. Chim. Fis., Italy): Dynamic differential calorimetry of intermetallic compounds. II. Heats of formation, heats and entropies of fusion of rare earths-lead (REPb_3) compounds. *Thermochim. Acta* 6 (1973) 455
- PAPP, S., KOVÁCS, S., LISZI, I. (Inst. für Allg. und Anorg. Chem. der Univ. für Chemisch. Indust., Veszprém, Ungarn): Phosphororganische Derivate von Übergangsmetall-Cyanokomplexen. I. Phosphonium- und Phosphonium-Wasserstoff-Cyanoferrate. *J. Inorg. Nucl. Chem.* 34 (1972) 3111
- PATHAK, P. D., TRIVEDI, J. M., VASAVADA, N. G. (Univ. Ahmedabad, Sch. Sci. Phys. Dept., Ahmedabad, 9 India): Thermal expansion of NaF, KBr and RbBr and temperature variation of the frequency spectrum of NaF. *Acta Crystallogr. Sect. A29* (1973) 477
- PECHKOVSKII, V. V., MAKATUN, V. N., MELNIKOVA, R. Y. (S. M. Kirov Technol. Inst., Minsk, BeSSR): Thermal dehydation and dissociation of cobalt selenite dihydrate. *Zh. Neorg. Khim.* 18 (1973) 2023 (In Russian)
- PEKSHEVA, N. P., VORONTSOV, E. S. (Voronezh Polytech. Inst., Voronezh, USSR): Thermal and anodal oxidation of titanium and chemical stability of interferentially colored films on it. *Zh. Prikl. Khim.* 46 (1973) 1689 (In Russian)
- PETINAUX, M., AUNE, J. P. (Univ. Provence, Inst. Pétrochim., Ctr. St. Jérôme, 13-Marseille, France): Synthèse économique de l'indole. II. Sur le mécanisme du craquage thermique du borate de N-(β -

- hydroxyéthyl) aniline. *Bull. Soc. Chim. Fr. Pt. II.* (1973) 2490
- PETINAUX, M., AUNE, J. P. (Univ. Provance, Inst. Pétroléochim., Ctr. St. Jérôme, 13-Marseille, France): Synthèse économique de l'indole. I. Sur le craquage thermique d'esters de la N-(β -hydroxyéthyl)aniline. *Bull. Soc. Chim. Fr. Pt. II.* (1973) 2485
- PETRENKO, N. S., KRAVCHENKO, S. F. (Harkov State Univ., Harkov, UkrSSR): Dilatometer for measuring dilation of construction materials at temperature interval of 2–77°K. *Prib. Tekhn. Eksp.* (1973) 248 (In Russian)
- PETRENKO, N. S., POPOV, V. P. (A. M. Gorkii State Univ., Kharkov, UkrSSR): Thermal expansion of thulium in the 2–300°K temperature range. *Zh. Eksp. Teor. Fiz.* 65 (1973) 249 (In Russian)
- PEUZIN, J. C., LISSALDE, F. C. (C. N. R. S., Grenoble, France): Comment on "transient thermal analysis and experiments of pyroelectric detectors". *Jap. J. Appl. Phys.* 12 (1973) 1295
- PEZZATI, E., SCHIRALDI, A., MAGISTRIS, A. (Univ. Pavia, Ist. Chim. Fis., I-27100 Pavia, Italy): Thermoelectric power of the molten systems (Ag + Me)I and (Cu + Me)I (Me = Na, K, Rb, Cs). *Z. Naturforsch. Sect. A* 28a (1973) 1334
- PIETRASZKO, A., ŁUKASZEWCZ, K. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., Wrocław, Poland): Thermal expansion and phase transitions of Cd₃As₂ and Zn₃As₂. *Phys. Status Solidi A Appl. Res.* 18 (1973) 723
- PIKUS, G. YA., TETERYA, V. P. (T. G. Shevchenko State Univ., Kiev, UkrSSR): Effect of illumination on kinetics of thermal decomposition and composition of CdS crystals in vacuum. *Fiz. Tverd. Tela.* 15 (1973) 2098 (In Russian)
- PILLARS, W. W., PEACOR, D. R. (Univ. Michigan, Dept. Geol. and Mineral., Ann Arbor, Mich., 48104 USA): The crystal structure of beta eucryptite as a function of temperature. *Amer. Mineral.* 58 (1973) 681
- PIMENOV, V. M. (Moscow Cent. Machinery Inst., Moscow, USSR): High-temperature thermomechanical treatment of 9Kh steel. *Metalloved. Term. Obrab. Metal.* (1973) 24 (In Russian)
- POGORELKOV, V. Z., KARETNKOVA, N. A., RYABOV, A. V. (N. I. Lobachevskii State Univ., Chem. Inst., Gorki, USSR): Comparative study of the pyrolysis of polyacrylic and poly(methacrylic acid). *Vysokomol. Soedin. Ser. B Kratk.* 15 (1973) 625 (In Russian)
- POPOV, V. N., GLUSHKOV, V. P. (All Union Luminophore and Spec. Pure Subst. Inst., Moscow, USSR): Effect of thermal dehydration conditions of CaHPO₄ · 2 H₂O on the habit of CaHPO₄ crystals. *J. Appl. Chem.* 46 (1973) 1590
- POULIS, J. A., MASSEN, C. H., SCHUBART, B., JANKE, F. K. (Technol. Univ., Eindhoven, Netherlands): Molecular diameter data from thermomolecular flow experiments. *Thermochim. Acta* 6 (1973) 461
- PREDEL, B., EMAM, A. (Inst. Metall. Univ., Münster, Westfalen, BRD): Beitrag zur Kenntnis der Überschußvolumina flüssiger Legierungen der Systeme Indium-Wismut, Indium-Blei, Indium-Zink, und Blei-Zinn. *Thermochim. Acta* 7 (1973) 1
- PRICE, C., EVANS, K. A., CANDIA, F. (Univ. Manchester, Dept. Chem., Manchester M13 9PL, England): Thermoelastic and thermomechanical studies on natural rubber vulcanized in the swollen state. *Polymer* 14 (1973) 338
- PROUT, E., G., LIDDIARD, V. C. (Univ. Cape Town, Dept. Chem., Rondebosch, South Africa): The thermal decomposition of preirradiated (γ -rays) lithium azide. *J. Inorg. Nucl. Chem.* 35 (1973) 3419
- RADO, R., CHODÁK, I. (Slovak Acad. Sci., Inst. Polymers, 809 34 Bratislava, Czechoslovakia): A contribution to the study of thermal decomposition of cumene hydroperoxide. *Collect. Czech. Chem. Commun.* 38 (1973) 2614
- RAJARAM, P., VISWANATHAN, B., ARAVAMUDAN, G., SRINIVASAN, V., SASTRI, M. V. C. (Dept. Chem., Ind. Inst. Technol., Madras, 600036 India): Studies on the formation of manganese molybdate. *Thermochim. Acta* 7 (1973) 123
- RAMACHANDRAN, V. S. (Div. of Build. Res., Nat. Res. Council of Canada, Ottawa K1A OR6, Ontario, Canada): Action of triethanolamine on the hydration of tricalcium aluminate. *Cement Concrete Res.* 3 (1973) 41

- RAMACHANDRAN, V. S. (Nat. Res. Council of Canada, Div. of Buil. Res., Ottawa K1A OR6, Ontario, Canada): Influence of triethanolamine on the hydration characteristics of tricalcium silicate. *J. Appl. Chem. Biotechnol.* 22 (1972) 1125
- RAPP, J. E., MERCHANT, H. D. (Owens Illinois Tech. Ctr., Toledo, Ohio, 43606 USA): Thermal expansion of alkali halides from 70 to 570°K. *J. Appl. Phys.* 44 (1973) 3919
- RAUH, H.-J., GEISELER, G. (Karl Marx Univ., Bereich Phys. Chem., Sekt. Chem., 701 Leipzig, GDR): Bildungsenthalpien und Mesomerieenergien von π -Bindungssystemen. 6. Mitt.: Zur Stabilität der Isothione und Isodithione. *Z. Phys. Chem. Leipzig* 252 (1973) 395
- RAY, N. H. (ICI Ltd., Corp. Lab., Runcorn, Cheshire, England): Inorganic glasses as cross-linked polymers: the relationship between cross-link density and transformation temperature in phosphate glasses. *J. Polym. Sci. Polym. Chem. Ed.* 11 (1973) 2169
- RAZUVAEV, G. A., TROITSKII, B. B., CHOCHLOVA, L. V., DUBOVA, Z. B. (Acad. Sci. USSR, Chem. Inst., Gorkii, USSR): Thermal degradation of ethylene-vinyl acetate copolymer. *J. Polym. Sci. Polym. Lett. Ed.* 11 (1973) 521
- REICH, L. (Polym. Res. Branch, Picatinny Arsenal, Dover, N. J., 07801 USA): Melting and decomposition of RDX-HMX mixtures by DTA. *Thermochim. Acta* 7 (1973) 57
- RODGERS, D. L., WESTRUM, Jr. E. F., ANDREWS, J. T. S. (Univ. Michigan, Dept. Chem., Ann Arbor, Mich., 48104 USA): The enthalpies of combustion and formation of [2,2]-paracyclophane and triptycene. *J. Chem. Thermodyn.* 5 (1973) 733
- ROLLER, M. B., GILLHAM, J. K. (Bell Labs., Whipppany, N. J., 07981 USA): High-temperature elastomers: a systematic series of linear poly(carborane-siloxane)s containing icosahedral (-CB₁₀H₁₀C-) cages. I. Thermomechanical behavior in nitrogen. *J. Appl. Polym. Sci.* 17 (1973) 2141
- ROUX, F. X., AUDEBERT, R., QUIVORON, C. (Univ. Paris VI, Ecole Supér. Phys. et de Chim., Lab. Physico-Chim. Macromoléc., 10 rue Vauquelin, 75005 Paris, France): Etude de la pyrolyse à température modérée des acides polyacrylique et polyméthacrylique. *Eur. Polym. J.* 9 (1973) 815
- RUPP, G. (A. G. Siemens Res. Labs., Erlangen, GFR): The low temperature specific heat capacity of CeRu₂ containing gadolinium, terbium or yttrium. *J. Phys. F: Metal. Phys.* 3 (1973) 1403
- RYBACHUK, V. P., KADURINA, T. I., OMEL'CHENKO, S. I. (Acad. Sci. UkrSSR, Macro-molec. Cpd. Chem. Inst., Kiev, UkrSSR): On the possibility of calculation of the kinetic polycondensation parameters from the results of a dynamic thermochemical analysis. *Vysokomol. Soedin. Ser. A* 15 (1973) 1678 (In Russian)
- SANDENAW, T. A., HARBUR, D. R. (Univ. California, Los Alamos Sci. Lab., Los Alamos, N. M., 87544 USA): Heat capacity behaviour of Pu-Fe eutectic alloy (10a/o Fe) between 15 and 373°K. Evidence for order-disorder and an anti-phase structure below room temperature. *J. Phys. Chem. Solids* 34 (1973) 1487
- ŠARČEVIĆ, N., ZSINDELÝ, J., SCHMID, H. (Univ. Zürich, Org. Chem. Inst., CH-8001 Zürich, Switzerland): Thermische Umlagerungen von halogensubstituierten Arylpropargyläthern. *Helv. Chim. Acta* 56 (1973) 1457
- SATO, M., MATSUKI, K., SUGAWARA, M., ENDO, T. (Yamagata Univ., Fac. Engn., Dept. Appl. Chem., Yonezawa 992, Japan): Pyrolysis of γ -manganese hydroide oxide. *J. Soc. Chem. Ind. Chem.* (1973) 1655 (In Japanese)
- SCHOENFELDER, C. W., SWISHER, J. H. (Sandia Labs., Met. Div. II 8313, Livermore, Calif., 94550 USA): Kinetics of thermal decomposition of TiH₂. *J. Vac. Sci. Technol.* 10 (1973) 862
- SCHÜRMANN, E., WURM, P. (Tech. Univ.

- Clausthal, Inst. Gießereikunde, Clausthal, GFR): Zustandsschaubilder und Reduktionsgleichgewichte des Dreistoffsystems Fe— Fe_2O_3 —CaO zwischen 550 und 1070°C. *Arch. Eisenhüttenw.* 44 (1973) 637
- SEKHON, B. S., CHOPRA, S. L. (Punjab Agricult. Univ., Dept. Chem. Bicchem., Ludhiana, India): A thermodynamic study of the complexation reaction for some amino acids with cerium(III) and yttrium(III). *Thermochim. Acta* 7 (1973) 151
- SEKIDO, E., TANAKA, J., MASUDA, Y. (Kobe Univ., Fac. Sci., Dept. Chem., Kobe 657, Japan): Thermal and spectrophotometric studies of 8-mercaptoquinoline-5-sulfonic acid and its sodium salt. *Bull. Chem. Soc. Jap.* 46 (1973) 2112
- SEMENKO, K. N., SAVCHENKOVA, A. P. (M. V. Lomonosov State Univ., Moscow, USSR): Standard enthalpy of formation of crystalline ammonium fluoroberyllate. *Zh. Neorg. Khim.* 18 (1973) 2285 (In Russian)
- SHAH, K. G., MANKAD, B. N. (Sardar Patel Univ., Dept. Chem., Vallabh. Vidyanaoar, Gujarat, India): Synthesis of high temperature resistant anisolic resins. *Angew. Makromol. Chem.* 32 (1973) 1
- SHIBATA, K., WATANABE, H., YAMAUCHI, H., SHINOHARA, T. (Tohoku Univ., Res. Inst. Iron, Steel and Other Met., Sendai, Japan): Temperature dependence of magnetic anisotropy in MnAlGe. *J. Phys. Soc. Jap.* 35 (1973) 448
- SHTERNBERG, M. M., SMIRNOV, M. A., KAREVA, N. T., ANANIN, S. N., GOLDBUKHT, G. E., TOLSTOV, A. M. (Chelyabinsk Polytech. Inst., Chelyabinsk, USSR): Low-temperature mechanical-thermal treatment of alloy of the Al—Mg—Si system. *Metalloved. Term. Obrab. Metal.* (1973) 26 (In Russian)
- SIMON, J., DEBRECZENY, E., BUZÁGH-GERE, É. (Tech. Univ. Budapest, Dept. Gen. and Anal. Chem., 1111 Budapest, Hungary): A computer program for Zsakó's integral method for thermal reaction kinetics. *Period. Polytech. Chem. Eng.* 17 (1973) 203
- SIMOV, D., FAKIROV, S., MIKHAILOV, N., PETRENKO, P. (K. Ohridskii Univ., Sofia, Bulgaria): Effect of heat-treatment on the thermomechanical properties of poly(ethylene terephthalate) fibers. *Vysokomol. Soedin. Ser. 15* (1973) 1775 (In Russian)
- SMITH, E. B., CARR, P. W. (c/o Carr, P. W., Univ. Georgia, Dept. Chem., Athens, Ga., 30602 USA): Rapid and precise determination of total serum protein by thermochemical analysis. *Anal. Chem.* 45 (1973) 1688
- SMITH, R. F., CRAIG, T. A. (State Univ. New York, Coll. Arts and Sci., Dept. Chem., Geneseo, N. Y., 14454 USA): Amidrazones-III. The synthesis and properties of 1,1,1-trimethyl-2-(N-phenylbenzimidoyl) hydrazinium hydroxide inner salt — a novel ylid. *Tetrahedron Lett.* (1973) 3941
- SMITH, T. (N. Amer. Rockwell Sci. Ctr., Thousand Oaks, Calif., 91360 USA): Oxidation of titanium between 25°C and 400°C. *Surface Sci.* 38 (1973) 292
- SMYTH, J. R. (Lunar Sci. Inst., 3303 NASA. Rd. 1., Houston, Texas, 77058 USA): An orthopyroxene structure up to 850°C. *Amer. Mineral.* 58 (1973) 636
- SMYTH, J. R., HAZEN, R. M. (Lunar Sci. Inst., 3303 NASA. Rd. 1., Houston, Texas, 77058 USA): The crystal structures of forsterite and hortonolite at several temperatures up to 900°C. *Amer. Mineral.* 58 (1973) 588
- SOBOLEVSKII, M. V., SKOROKHODOV, I. I., DITSENT, V. E., SOBOLEVSKAYA, L. V.: Study of the thermal degradation of α, ω -hexamethyldimethylsiloxanes of different molecular weight. *Vysokomol. Soedin. Ser. B-Kratk.* 15 (1973) 507 (In Russian)
- SRINIVASAN, R. (IBM Corp., Thomas J. Watson Res. Ctr., Yorktown Heights, N. Y., 10598 USA): Thermal decomposition of tetracyclo [5.5.0.0^{2,10} · 0^{3,6}]deca-4,8-diene. An unusual disproportionation reaction. *Tetrahedron Lett.* (1973) 4029
- SRIRAMULU, V. (Dept. Mech. Engn., Ind. Inst. Technol., Madras, India): An optical study of flame blow-off from a three-dimensional bluff-body. *Thermochim. Acta* 7 (1973) 74
- SRIVASTAVA, A. K., KRISHNA, B. (Univ. Allahabad, Dept. Chem., Allahabad 2, India): Heats of formation of some nitrogen-containing hetero molecules and non-alternant hydrocarbons. *Indian J. Pure Appl. Phys.* 11 (1973) 246
- STAPLEY, A. J., BEEVERS, C. J. (Def. Stand. Labs., Melbourne, Victoria, Australia): The stability of sapphire whiskers in nickel at elevated temperatures. 2. The

- kinetics of morphological changes over the temperature range 1100 to 1400°C. *J. Mater. Sci.* 8 (1973) 1296
- STEFFEN, H., WOLLENBERGER, H. (KFA Jülich, Van de Graaff Lab., Aachen, GFR): An adiabatic twin calorimeter using electron beam heating. *Rev. Sci. Inst.* 44 (1973) 937
- STEGLICH, W., KÜBEL, B., GRUBER, P. (Tech. Univ. Berlin, Org. Chem. Inst., D-1000 Berlin, GFR): Thermolyse von Oxazolin-5-onen, IV: Überführung O-nitrophenyl-substituierter 3-Oxazolin-5-one in 1-Acyl-oxyindazole und (O-Nitrophenyl)ketone. *Chem. Ber.* 106 (1973) 2870
- STEVENSON, J. N., PETERSON, J. R. (Univ. Tennessee, Chem. Dept., Knoxville, Tenn., 37916 USA): The trigonal and orthorhombic crystal structures of CfF_3 and their temperature relationship. *J. Inorg. Nucl. Chem.* 35 (1973) 3481
- STEWART, A. M., DUNLOP, J. B., ANDREONE, D., COSTA, G. (Univ. Miami, Ctr. Theoret. Studies, POB., 9055 Coral Gables, Fla., 33124 USA): Low temperature properties of the metallic antiferromagnet ErZn_{12} . *J. Phys. Chem. Solids* 34 (1973) 1939
- STINCHCOMBE, R. B. (Univ. Oxford, Dept. Theoret. Phys., Oxford OX1 3PQ, England): Thermal and magnetic properties of the transverse Ising model. *J. Phys. C Solid State Phys.* 6 (1973) 2507
- STOUT, N. D., MAR, R. W., BOO, W. O. J. (Lawrence Livermore Lab., Livermore, Calif., 84550 USA): The high-temperature enthalpy and the enthalpy of fusion of boron by drop calorimetry. *High Temp. Sci.* 5 (1973) 241
- STRIGUNOV, F. I., ALEKSEEV, V. I.: Thermodynamics of pyrosilicate reactions in a $\text{BaSO}_4-\text{SiO}_2-\text{C}$ system. *J. Appl. Chem.* 46 (1973) 1600
- SUENO, S., CAMERON, M., PAPIKE, J. J., PREWITT, C. T. (State Univ. New York, Dept. Earth and Space Sci., Stony Brook, N. Y., 11790 USA): The high temperature crystal chemistry of tremolite. *Amer. Mineral.* 58 (1973) 649
- SZEIMIES, G., HARNISCH, J. (Univ. Munich, Inst. Org. Chem., Karl Str. 23, 8 Munich 2, GFR): Thermolysis of cyclopropyl azides: Stereochemistry of the olefin forming process. *J. Chem. Soc. Chem. Commun.* (1973) 739
- TADA, M., TAKAHASHI, T. (Univ. Tokyo, Fac. Sci., Dept. Chem., Bunyo, Tokyo, Japan): Thermal isomerization of 3-acylfuran to its isomeric 3-acylfuran thermal interconversion between ligularone and iso-ligularone. *Tetrahedron Lett.* (1973) 3999
- TAKANO, K., SATO, T. (Tokyo Metropolitan Univ., Dept. Phys., Fukazawa Setagaya, Tokyo, Japan): Thermal expansion of InBi . *Phys. Lett. A*, A44 (1973) 309
- TAMAGAKI, S., SAKAKI, K., OAE, S. (Osaka City Univ., Fac. Engr., Dept. Appl. Chem., Sumiyoshi 558, Osaka, Japan): Derivatives of 1,2-dithiole-3-thione. II. Thermal rearrangement of iminothiocarbonyl compounds. *Bull. Chem. Soc. Jap.* 46 (1973) 2608
- TARNEY, J., NICOL, A. W., MARRINER, G. F. (Univ. Birmingham, Dept. Geol., Birmingham, England): The thermal transformation of datolite, $\text{CaBSiO}_4(\text{OH})$, to boron-melilite. *Miner. Mag.* 39 (1973) 158
- THIÉBAUD, C., CHANUSSET, G. (Fac. Sci. Dijon, Lab. Diélectr., Blvd. Gabriel, 21000 Dijon, France): Comportement pyroélectrique des titanates de baryum dopés au fer au voisinage du point de Curie. *Compt. Rend. Ser. B* 277 (1973) 95
- TIKAVYI, V. F., BRATENNKOVA, A. N., CHIVENKOV, A. N., LAPKO, K. N. (V. I. Lenin State Univ., Minsk, BeSSR): A study of thermal transformations of chromophosphate binding. *Izv. Akad. Nauk SSSR, Neorg. Mat.* 9 (1973) 1611 (In Russian)
- TIKAVYI, V. F., KORPUS, V. A., CHIVENKOV, A. N., LAPKO, K. N. (V. I. Lenin State Univ., Minsk, BeSSR): Effect of B_2O_3 on thermal transformations of alumophosphate binder. *Izv. Akad. Nauk SSSR, Neorg. Mat.* 9 (1973) 1608 (In Russian)
- TIWARI, M. D., AGRAWAL, B. K. (Univ. Allahabad, Dept. Phys., Allahabad 211002, India): Analysis of the lattice specific heat of Mo: Re alloy. *Phys. Rev. B Solid State* 8 (1973) 1397
- TÖRMÄLÄ, P., SAVOLAINEN, A. (Univ. Helsinki, Dept. Wood and Polymer Chem., Helsinki, Finland): Studies on the melting process of polyethylene glycol. *Acta Chem. Scand.* 27 (1973) 1430
- TSIRELNICKOV, V. I., KHODEEV, Y. S., TROYANOV, S. I. (Moscow State Univ., Moscow, USSR): Study of thermal disproportionation-

- tion of zirconium monochloride. *Zh. Fiz. Khim.* 47 (1973) 1567 (In Russian)
- TULUPOV, P. E., KARPOV, O. N.: Kinetics of thermal decomposition of sulfocationites from styrene and divinylbenzene according to thermogravimetric analysis data. *Zh. Fiz. Khim.* 47 (1973) 1420 (In Russian)
- UGAI, Y. A., SOKOLOV, L. I., GONCHAROV, E. G., AFINOGENOV, Yu. P. (Voronezh State Univ., Voronezh, USSR): A thermographic study of the cross-section of the system Ge—P—Pb. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 9 (1973) 1445 (In Russian)
- ÚŘEDNÍČEK, M., KIRKALDY, J. S. (McMaster Univ., Dept. Met. and Mat. Sci., Hamilton, Ontario, Canada): An investigation of the phase constitution of iron—zinc—aluminium at 450°C. *Z. Metallk.* 64 (1973) 419
- UVAROVA, I. V., PANICHKINA, V. V., KONCHAKOVSKAYA, L. D.: Low-temperature reduction of molybdenum and tungsten trioxides. *Russ. Met. Eng. Tr.* (1972) 54
- UTSUGI, H., NISHIMURA, S. (Tohoku Univ., Dept. Appl. Sci., Fac. of Engrn., Aramaki, Sendai-sihs Miyagi, Japan): Studies on the surface groups of the silica gels treated with the various kinds of alcohols and by means of infrared spectroscopy, differential, thermoanalysis and thermogravimetry. *J. Japan Soc. Col. Mat.* 46 (1973) 73
- VALASHIKAINA, E. P., KEPENZHINSKANS, K. B. (Acad. Sci. USSR, Geol. Inst. Ore Dep., Petrog., Mineral and Geochem., Moscow, USSR): New data on the thermal analysis of ferrous chlorites. *Dokl. Akad. Nauk SSSR* 210 (1973) 1419 (In Russian)
- VAN ZANDT, L. L. (Purdue Univ. Phys. Dept., West Lafayette, In., 47907 USA): Specific-heat anomalies in the systems (Ti, V)₂O₃. *Phys. Rev. Lett.* 31 (1973) 598
- VARMA, D. S., NARASIMHAN, V. (Indian Inst. of Technol., Delhi, New Delhi-29, India): Thermal behaviour of graft copolymers of cotton cellulose and acrylate monomers. *J. Appl. Polym. Sci.* 16 (1972) 3325
- VARMA, I. K., SAMBANDAM, R. M., VARMA, D. S. (Indian Inst. Technol., Delhi, New Delhi-29, India): Thermal analysis of poly(1,3,4-oxadiazole-2,5-diyl-1,4-phenylene) and poly(1,3-phenylene-1,3,4-oxadi-azole-2,5-diyl-1,4-phenylene). *Makromol. Chem.* 170 (1973) 117
- VASIL'eva, R. P., CHERYOMUSHKINA, A. V., IVANOVA, N. N., OLEFIRENKO, P. P. (M. V. Lomonosov State Univ., Moscow, USSR): Temperature dependence of galvanic and thermomagnetic properties of palladium. *Izv. Vyssh. Ucheb. Zaved. Fiz.* (1973) 95 (In Russian)
- VASILKOVA, I. V., KOZHINA, I. I., MENDELEVA, S. V., STORONKIN, A. V. (A. A. Zhdanov State Univ., Leningrad, USSR): Thermographic and X-ray diffraction study of NaCl—CdCl₂—SrCl₂ ternary system. *Zh. Fiz. Khim.* 47 (1973) 1684 (In Russian)
- VEDEJS, E., WU, E. S. C. (Univ. Wisconsin, Dept. Chem., Madison, Wi., 53706 USA): Pyrolysis of syn-7,8-benzotricyclo[4.2.2.-0^{2,5}]deca-3,7,9-triene. *Tetrahedron Lett.* (1973) 3793
- VÎLCANU, R., BADER, B. D., RĂDULESCU, M., MARINESCU, M. (Ctr. Chem. Res., B. Dul. Mihai Viteazul 24, Timișoara, Roumania): Neue organische Pigmente-Isatin-derivate. IV. Thermisches Verhalten. *Rev. Roum. Chim.* 18 (1973) 1225
- VÎLCU, R., COMAN, B. (Univ. Bucharest, Chair Chem. Thermodynam. and Electro-chem., B. D. Republicii 13, Bucharest, Roumania): Caloric capacities of vapours of organic liquids. I. A flow calorimeter. *Rev. Roum. Chim.* 18 (1973) 1301
- VOROSHILOV, V. P., ZAKHAROV, A. I., KALININ, V. M., URALOV, A. S. (I. P. Bardin Cent. Ferrous Met. Inst., Precision Alloy Div., Moscow, USSR): Influence of plas-tical deformation and heat treatment on temperature linear expansion coefficient and magnetic properties of invar alloys. *Fiz. Metal. Metalloved.* 35 (1973) 953 (In Russian)
- VUČELIĆ, V., VUČELIĆ, D., KARAULIĆ, D., ŠUŠIĆ, M. (Dept. Phys. Chem., Fac. Sci. and Inst. Chem., Technol. and Met., Belgrade, Yugoslavia): Thermal quality analysis of water on synthetic zeolite type A. *Thermochim. Acta* 7 (1973) 77
- WANG, P.-S., ODELL, G. V. (Oklahoma State Univ., Dept. Biochem., Stillwater, Ok., 74074 USA): Formation of pyrazines from thermal treatment of some amino-

- hydroxy compounds. *J. Agr. Food Chem.* 21 (1973) 868
- WIEDEMANN, H. G. (Mettler Instrumente AG, 8606 Greifensee, Switzerland): Thermal analysis and synthesis of pentazinc hexahydroxide dicarbonate. Investigations by thermogravimetry, thermomolecular beam analysis and X-ray measurements. *Thermochim. Acta* 7 (1973) 131
- WIESE, G., LANG, H. (Freie Univ. Berlin, Inst. Anorg. Chem., Berlin): Die scheinbare molare Dilatation bei Fällungsreaktionen am Beispiel der Silberchloridfällung. *Z. Phys. Chem. Frankfurt* 85 (1973) 24
- WILLMANN, G. (Techn. Univ. Berlin, Inst. Nichtmet. Werkstoffe, Engl. Strasse 20, D-1000 Berlin 12): Bestimmung einer Phasenumwandlungstemperatur mit der Differentialthermoanalyse. *Fresenius Z. Anal. Chem.* 266 (1973) 21
- WITTENBERG, L. J. (Mound Lab., Monsanto Res. Corp., Miamisburg, Ohio, 45342 USA): Thermal diffusivities of lanthanum, cerium and plutonium at high temperatures. *Thermochim. Acta* 7 (1973) 13
- WYNNE, A. M., ROBERTS, J. E. (Univ. Massachusetts, Dept. Chem., Amherst, Mass., 01002 USA): A thermogravimetric study of the adipates and sebacates of praseodymium and neodymium. *Thermochim. Acta* 7 (1973) 159
- YAGISAWA, K. (Natl. Res. Inst. Metals, Tokyo, Japan): The Mössbauer studies of the decomposition and ordering in Fe-23 at % Be alloys aged at 300°C. *Phys. Status Solidi A Appl. Res.* 18 (1973) 589
- YAMAGUCHI, T., KIMURA, A. (Tohoku Univ., Dept. of Appl. Chem., Fac. Engn., Sendai, Miyagi, Japan): Synthesis of poly-diphenyl-p-phenylenesilane. *Polym. Chem.* 29 (1972) 665 (In Japanese)
- YASEVICHYUTE, YA. (Acad. Sci. LiSSR, Semi-cond. Phys. Inst., Vilnius, LiSSR): Theory of thermogalvanomagnetic effects in semi-conductors at low temperatures. *Sov. Phys.-Semi-cond. Engl. Transl.* 7 (1973) 369
- YASUNIWA, M., NAKAFUKU, C., TAKEMURA, T. (Kurume Techn. Coll., Kurume, Fukuoka, Japan): Melting and crystallization process of polyethylene under high pressure. *Soc. of Polym. Sci. Jap.* 4 (1973) 526
- YOKOTA, K., KATAYAMA, S. (Kansai Univ., Fac. Engn., Dept. Electr. Engn., 3 Yamate, Suita Osaka, Japan): Thermal conductivities of $(Bi_{1-x}Sb_x)_2Te_3$ and $Bi_2(Te_{1-y}Se_y)_3$ compounds. *Jap. J. Appl. Phys.* 12 (1973) 1205
- YOSHIDA, T., WAKAE, M. (Osaka Prefectural Ind. Res. Inst., Nishi 550, Osaka, Japan): On thermal behaviour of arylarsenic acids. *J. Chem. Soc. Chem. Ind. Chem.* (1973) 1800 (In Japanese)
- YUNUSOVA, N. V., OSACHEV, V. P., SHEINKMAN, A. I., KLESHCHEV, G. V.: Thermal decomposition of oxalates. *Zh. Neorg. Khim.* 18 (1973) 2096 (In Russian)
- ZAIKIN, I. D., VAN-CHIN-SYAN, Y. Y., CHUCHMAREV, S. K., ELAGIN, G. I. (Lvov Polytech. Inst., Lvov, UkrSSR): Standard heats of formation of tert.-alkylglycidic esters. *Zh. Fiz. Khim.* 47 (1973) 1625 (In Russian)
- ZAVIALOV, S. I., ZHELEZNAYA, L. L. (N. D. Zelinskii Org. Chem. Inst., Moscow, USSR): On the thermal decomposition of N-nitrosodesthiobiotin. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1973) 1905 (In Russian)
- ZEVIN, L. S., BOGDANOVA, G. S., ORLOV, E. M., BESSMERTNAYA, Z. G. (Moscow State Glass Technol. Inst., Moscow, USSR): Effect of the initial glass composition and heat treatment on the composition of β -spodumene solid solutions in sials in the system $SiO_2 - Al_2O_3 - Li_2O$. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 9 (1973) 1404 (In Russian)
- ZHARINOVA, T. A., ULRBERG, Z. R., DEINEGA, YU. F., SOBOLEV, V. I., SAVKIN, A. G. (Acad. Sci. UkrSSR, Colloid Chem. Inst., Kiev, UkrSSR): Effect of lead colloid particles on thermal properties of isotactic polypropylene. *Ukr. Khim. Zh.* 39 (1973) 892 (In Russian)
- ZHIGACH, A. F., ZAKHAROV, V. V., MANELIS, G. B., NECHIPORENKO, G. N., NIKITIN, V. S., ESELSON, B. M.: Kinetics of thermal decomposition of hydrazine-borane. *Zh. Neorg. Khim.* 18 (1973) 1762 (In Russian)
- ZHURAVLYOV, L. G., POVOLOTSKIY, V. D., SHTEYNBERG, M. M. (Chelyabinsk Polytech. Inst., Chelyabinsk, USSR): Influence of phase cold hardening on isothermal and athermal martensitic transformations. *Fiz.*

- Metal. Metalloved. 36 (1973) 109 (In Russian)
- ZISLINA, S. S., SENINA, N. A., TERMAN, L. M., SEMCHIKOV, YU. D. (N. I. Lobachevskii State Univ., Chem. Inst., Gorki, USSR): Thermal degradation of α -methyl-styrene-butyl acrylate copolymer. Vysokomol. Soedin. Ser. B Kratk. 15 (1973) 459 (In Russian)
- ZOBEL, D. (Betriebssektion der Kammer der Technik, Düngemittelkombinat VEB Stickstoffwerk Piesteritz, DDR): Theorie und Praxis der Phosphitypyrolyse. Chemisch-Technische Umschau 4 (1972) 1-182
- ZOLLER, P., FEHL, D. L., DILLINGER, J. R. (Neues Technikum Buchs, CH-9470 Buchs, Switzerland): Low-temperature specific heat of polystyrene and related polymers (1.6° to 4°K). J. Polym. Sci. Polym. Phys. Ed. 11 (1973) 1441