

Bibliography Section

- ACCARY, A., INFARNET, Y., HUET, J. (Univ. Claude Bernard, Dépt. Chim., Org. Escil, 69621 Villeurbanne, France): Pyrolyse sur alumine de dihydro-2,3 furannes. *Compt. Rend. Ser. C* 275 (1972) 53
- ACKERMANN, R. J., RAUH, E. G. (Argonne Natl. Lab., Chem. Div., Argonne, Ill., 60439 USA): The thermodynamics and vaporization of thorium, hafnium and zirconium. *J. Chem. Thermodyn.* 4 (1972) 521
- ADACHI, K., SUGA, H., SEKI, S. (Osaka Univ., Fac. Sci., Dept. Chem., Toyonaka, Osaka, Japan): Calorimetric study of the glassy state. VII. Phase changes between the crystalline phases of cycloheptanol with various degrees of stability. *Bull. Chem. Soc. Jap.* 45 (1972) 1960
- ADY, E., HENCSEI, P., GÁBOR, T., BECKER-PÁLOSSY, K. (Techn. Univ. Budapest, Dept. Inorg. Chem., 1111 Budapest, Hungary): Increase in water repellency and thermal stability of ceramic insulating materials. *Per. Polytech. Chem. Eng.* 16 (1972) 121
- ALBERS, C. (Humboldt Univ., Sect. Phys., Bereich Kristallogr., Berlin): Zur Deutung der Temperaturabhängigkeit der elektrischen Leitfähigkeit von Tellerschichten auf Glas. *Phys. Status Solidi A-Appl. Res.* 12 (1972) K 99
- ALEXEYEV, A. M. (State Inst. Nitrogen Fert., Ministry Chem. Ind., USSR): Development of new catalysts for the fixation of nitrogen in the USSR. *Chem. Age India* 22 (1971) 997
- ALTUNIN, V. V., RASSKAZOV, D. S., KUZNETSOV, D. O., KRYUKOV, L. A.: Non-standard flow meter for circulating calorimetric schemes. *Ind. Lab. Engl. Transl.* 38 (1972) 139
- AMAMOU, A., BACH, P., GAUTIER, F., ROBERT, C., CASTAING, J. (CNRS, Equipe Rech. Struct. Electr. Solides, Strasbourg 67, France): Mesures de chaleur spécifique de susceptibilité et de RMN sur CoSi autour de la stœchiométrie. *J. Phys. Chem. Solids* 33 (1972) 1697
- ANDA, K., NISHIWAKI, T., IWAI, S. (Metropolitan Ind. Res. Inst., (3-13-10 Nishigaoka, Kita-ku, Tokyo, Japan): The thermal degradation of poly (p-vinylphenyl-dimethylcarbinol). *Polym. Chem.* 29 (1972) 118 (In Japanese)
- ANKER, D., FAVRE-BONVIN, J. (Museum Natl. Hist. Nat., Lab. Chim., Paris 5, France): Nouveaux composés en série coumarinique. Comportement thermique et influence de catalyseurs basiques. *Bull. Soc. Chim. Fr. A* (1972) 3259
- ANKERS, W. B., BROWN, C., HUDSON, R. F., LAWSON, A. J. (c/o Hudson, R. F., Univ. Kent at Canterbury, Chem. Lab., Kent, England): Thermal rearrangement of 0-thiocarbamoylated hydroxamic acids: a 1,3 radical shift. *J. Chem. Soc. Chem. Commun.* (1972) 935
- ARAVINDAKSHAN, C., MISRA, M., BANERJEE, B. K. (Fert. Corp. India Ltd., Sindri, Bihar, India): X-ray studies on wideel oxide hydrates. 1. Hydrates products. *Techn.* 8 (1971) 127
- ARAVINDAKSHAN, C., MISRA, M., BANERJEE, B. K. (Fert. Corp. India Ltd., Sindri, Bihar, India): X-ray studies on nickel oxide hydrates. 2. Dehydrated products. *Techn.* 8 (1971) 132
- AREND, H., REMOISENET, M., STAEHLIN, W. (Inst. Technol., Lab. Solid State Phys., Zürich, Switzerland): Thermoanalytical study of the polymorphism in LiIO₃. *Mater. Res. Bull.* 7 (1972) 869

- ARENTESEN, J. G., VAN MILTENBURG, J. C. (Rijks Univ. Utrecht, Lab. Algemene Chem., Utrecht, Netherlands): Carbon tetrachlorid. Determination of the enthalpy of transition from metastable face-centered cubic carbon tetrachloride to the stable rhombohedral modification. *J. Chem. Thermodyn.* 4 (1972) 789
- ARVIDSSON, K., WESTRUM, E. F. (Univ. Lund, Chem. Ctr., Thermochem. Lab., S-220 07, Lund, Sweden): Tris (hydroxymethyl) aminomethane. Heat capacities and thermodynamic properties from 5 to 350 K. *J. Chem. Thermodyn.* 4 (1972) 449
- ASEEVA, R. M., ZELENETSKAYA, T. V., BERLIN, A. A. (Acad. Sci. USSR, Inst. Chem. Phys., Moscow, USSR): On oxidative thermal destruction of three-dimensional polyester methacrylate. *Chem. Zvesti* 26 (1972) 258
- ASEEVA, R. M., ZELENITSKAYA, T. V., SEL'SKAYA, O. G., BERLIN, A. A. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Thermal degradation of poly (ester methacrylate) with a three-dimensional network structure. *Vysokomol. Soedin. A* 14 (1972) 1573 (In Russian)
- ASHCROFT, S. J., SCHWARZMANN, E. (Univ. Exeter, Dept. Chem. Engn., Exeter EX4 4QF England): Standard enthalpy of formation of crystalline gold (III) oxide. *J. Chem. Soc. Faraday Trans. I* 68 (1972) 1360
- AUFFREDIC, J. P., CAREL, C., WEIGEL, D. (UER, SPM, Rennes 35000, France): Étude thermodynamique de la déshydratation de l'hexahydrate de nitrate de nickel. *Compt. Rend. Ser. C* 275 (1972) 5
- AUFFREDIC, J. P., CAREL, C., WEIGEL, D. (UER, SPM, Rennes 35000, France): Étude thermodynamique de la déshydratation du tétrahydrate de nitrate de nickel. Enthalpie de formation d'hydrates de nitrate de nickel. *Compt. Rend. Ser. C* 275 (1972) 303
- BAE, J. H. (Culf Res. and Dev. Co., Pittsburgh, Pa., 15230 USA): A simple thermogravimetric apparatus for pressures up to 70 atmospheres. *Rev. Sci. Instr.* 43 (1972) 983
- BAGLEY, B. G., DISALVO, F. J., WASZCZAK, J. V. (Bell Tel. Labs. Inc., Murray Hill, N. J., 07974 USA): The low temperature magnetic susceptibilities of crystalline and selenium. *Solid State Commun.* 11 (1972) 89
- BAIGUBEKOVA, T. A., KISELEV, A. V., NIKITIN, YU. S. (M. V. Lomonosov State Univ., Chem. Fac., Moscow, USSR): Effect of thermal and hot-vapour treatment on the adsorption properties and the catalytic activity of a lumosilicagels. *Kinet. Katal.* 13 (1972) 755 (In Russian)
- BAIN, D. C. (Macaulay Inst. Soil Res., Aberdeen AB9, 2QJ, Scotland): Oxidation of chlorites in soil clays and effect on DTA curves. *Nature Phys. Sci.* 238 (1972) 142
- BAKER, F. B., FITZGIBBON, G. C., PAVONE, D., HOLLEY, C. E., HANSEN, L. D., LEWIS, E. A. (Univ. California, Los Alamos Sci. Lab., Los Alamos, N. M., 87544 USA): Enthalpies of formation of Sm_2O_3 (monoclinic) and Sm_2O_3 (cubic). *J. Chem. Thermodyn.* 4 (1972) 621
- BALASUNDARAM, L. J., SINHA, A. N. (Nat. Met. Lab., Phys. Met. Div., Jamshedpur, 7, India): Thermal expansion of bismuth-tin and bismuth-lead alloys. *Curr. Sci.* 41 (1972) 211
- BALDWIN, J. E., OLLERENSHAW, J. (Univ. Oregon, Dept. Chem., Eugene, Oregon, 97403 USA): Kinetics of the thermal isomerization of *cis*, *anti*, *cis*-tricyclo [3.1.0.0^{2,4}] hexane. *Tetrahedron Lett.* (1972) 3757
- BARROETA, N., MIRALLES, A. (Inst. Venezolano Invest. Cient., Phys. Org. Dept., Caracas, Venezuela): Thermal reactions of alkyl isocyanates. I. *J. Org. Chem.* 37 (1972) 2255
- BARTENEV, G. M., TSYGANOV, A. D., ABROSIMOVA, G. D. (V. I. Lenin State Teachers Inst., Moscow, USSR): The effect of heat treatment on the electronic structure of glass-like system B_2O_3 . *Dokl. Akad. Nauk SSSR* 205 (1972) 375 (In Russian)
- BARTON, T. J., WITIAK, J. L., MCINTOSH, C. L. (Iowa State Univ., Dept. Chem., Ames, Iowa, 50010 USA): Thermal decomposition of 1,4-diphenyl-2,3-bis (trifluoromethyl)-7-dimethylsilabicyclo [2.2.1] heptadiene. *J. Amer. Chem. Soc.* 94 (1972) 6229
- BARTOS, J. (Ctr. Rech. Roussel-Uclaf, 93-Romainville, France): Analyse thermique

- différentielle. Applications organiques et pharmaceutiques. *Analysis 1* (1972) 70
- BAYBARZ, R. D., ADAIR, H. L. (Oak Ridge Natl. Lab., Oak Ridge, Tennessee, 37830 USA): Preparation of the high temperature form of curium metal. *J. Inorg. Nucl. Chem.* 34 (1972) 3127
- BAYLISS, P., WARNE, S. ST. J. (Univ. Calgary, Dept. Geol., Calgary, Alb., Canada): Differential thermal analysis of siderite-kaolinite mixtures. *Amer. Mineral.* 57 (1972) 960
- BECERRA, C. C., SANO, W., MARQUES, A., FROSSATTI, G., FILHO, A. P., DE OLIVEIRA, N. F., QUADROS, C. J. A. (Univ. Sao Paulo, Inst. Fis., Sao Paulo, 20516 Brazil): Low temperature specific heat and magnetic susceptibility of $Ni(NO_3)_2 \cdot 6NH_3$. *Phys. Lett.* 40A (1972) 203
- BECKER, H. G. O., BÖTTCHER, H. (T. H. Chem. Carl Schorlemmer, Sekt. Verfahrenchem., Merseburg 42, GFR): Untersuchung der Photolyse und Thermolyse von o-Chinondiaziden des s-Triazolol[4,3-b]pyradazins. *J. Prakt. Chem.* 314 (1972) 55
- BEECH, D. R., BOOTH, C., DODGSON, D. V., HILLIER, I. H. (Univ. Manchester, Turner Dent. Sch., Mat. Sci. Unit., Manchester, Lancs., England): Crystallization of poly (ethylene oxide) fractions: crystallization isotherms. *J. Polym. Sci. A-2*, 10 (1972) 1555
- BELOV, K. P., ELYUTIN, O. P., KATAEV, G. I., NIKITIN, S. A., PSHECHENKOVA, G. V., TARATYNOV, V. P., SHULTE, L. A. (M. V. Lomonosov State Univ., Moscow, USSR): Magnetic properties of dysprosium-holmium-erbium rare earth alloys at 4.2°K. *Izv. Akad. Nauk SSSR, Ser. Fiz.* 36 (1972) 1247 (In Russian)
- BEREZINA, M. I., PECHKOVSKII, V. V., PINAEV, G. F. (S. M. Kirov Technol. Inst. Minsk, BeSSR): Thermal dissociation of beryllium selenite. *Zh. Neorg. Khim.* 17 (1972) 1795 (In Russian)
- BERNARD, M. A., BUSNOT, F. (Univ. Caen, UER Sci., Lab. Chim. Minérale B, Caen, France): Composés de solvation de l'acétate de zinc par quelques amines. II. Enthalpies standards de formation. *Bull. Soc. Chim. Fr. A* (1972) 3045
- BERTHON, G., ENEA, O., BOKRA, Y. (Lab. Thermodyn. Chim. Electrochim. Univ., 40, Avenue du Recteur Pineau, 86-Poitiers, France): Étude calorimétrique des complexes de l'orthophénanthroline et de ses dérivés avec certains métaux. I. Complexes de l'orthophénanthroline, de la 5-méthyl-orthophénanthroline et de la 5-phénylorthophénanthroline; influence de la nature des groupements substituants. *Thermochim. Acta* 4 (1972) 441
- BESSONOV, A. F. (Sevastopol Instrumentation Inst., Sevastopol, UkSSR): The study of some phase transformations in heating up the mixture of oxides $MgO-Fe_2O_3-CaO-Al_2O_3-SiO_2$. *Izv. Akad. Nauk SSSR, Neorg. Mat.* 8 (1972) 1455 (In Russian)
- BESSONOV, A. F., SLOBODYANYUK, A. A., TRETYAKOV, YU. D. (Sevastopol Instrumentation Inst., Sevastopol, UkSSR): A high-temperature investigation of the $CuO-Al_2O_3$ and $Cu_2O-Al_2O_3$ systems. *Izv. Akad. Nauk SSSR, Neorg. Mat.* 8 (1972) 1270 (In Russian)
- BEYER, W., STUKE, J. (Univ. Marburg, Phys. Inst., Marburg, GFR): Thermoelectric power of amorphous semiconductors. *J. Non-Cryst. Solids* 8-10 (1972) 321
- BIHARI-VARGA, M. (Simmelweis Univ. Med., IIrd. Dept. Med., Budapest 8, Hungary): Application of derivatography protein research. *Hung. Sci. Inst.* 23 (1972) 23
- BLANTER, M. E., SEREBRENNIKOVA, B. C. (All Union Machinery, Correspond. Inst., Moscow, USSR): Thermal stabilization of austenite. *Metalloved. Term. Obrab. Metal.* (1972) 5 (In Russian)
- BOHME, R. D., WESSLING, R. A. (Daubert Chem. Co., Chicago, Ill., USA): The thermal decomposition of poly (vinylidene chloride) in the solid state. *J. Appl. Polym. Sci.* 16 (1972) 1761
- BOHON, R. L., CONWAY, W. T. (Cent. Res. Lab., 3 M Co., St Paul, Minnesota, 55101 USA): DTA studies on the glycerol-water system. *Thermochim. Acta* 4 (1972) 321
- BOOS, H. J., HAUSCHILD, K. R. (Siemens A. G., Zent. Forsch. and Entwicklung, Erlangen, GFR): Melting enthalpy of benzil and 4-nitrophenol. *Fresenius Z. Anal. Chem.* 261 (1972) 32 (In German)
- BONET, C., SIBIEUDE, F., FOEX, M. (CNRS, Lab. Ultra Réfractaires, Odello 66, France): Four à arc pour analyse thermique de matériaux ultra-réfractaires. *J. Phys. E-Sci. Inst.* 5 (1972) 749

- BOUCHER, E. A., LANGDON, D. J., MANNING, R. J. (Univ. Sussex, Sch. Molec. Sci., Brighton, Sussex, England): Effect of heat treatment on the morphology and structure of crystals, powders, and fibers of polyacrylonitrile and Saran. *J. Polym. Sci. A-2*, 10 (1972) 1285
- BRANDŠTEJN, J., SAPÁKOVÁ, P., HULEJA, J. (Techn. Hochsch. Brno, Inst. Chem., Brno, Czechoslovakia): Thermometrische (enthalpiometrische) Manganbestimmung. *Collect. Czech. Chem. Commun.* 37 (1972) 2149
- BREISACHER, R., TAKIMOTO, H. H., DENAULT, G. C., HICKS, W. A. (Aerosp. Corp., Aerodynam. and Prop. Res. Lab., El Segundo, California, 90245 USA): Vacuum thermal decomposition of the nitrate salts of hydrazine. *Combust. Flame* 19 (1972) 144
- BUKAČ, Z., ŠEBENDA, J. (Czechoslovak Acad. Sci., Inst. Macromolec. Chem., Prague 6, Czechoslovakia): Alkaline polymerization of 6-caprolactam. XLI. Anionic thermolysis of N-2,2-substituted 3-oxoamides. *Collect. Czech. Chem. Commun.* 37 (1972) 2714
- BURENKOV, YU. A., VALIEV, A. A., NIKANOROV, S. P., STEPANOV, A. V.: Temperature dependences of the elastic constants of bismuth. *Sov. Phys.-Solid State Engl. Transl.* 14 (1972) 215
- BUZIN, I. M., IVANOV, I. V., RUKIN, E. I., CHUPRAKOV, V. F. (M. V. Lomonosov Univ., Moscow, USSR): Anomalous behaviour of dielectric nonlinearity coefficients in SrTiO_3 near phase transition at 110°K. *Fiz. Tverd. Tela* 14 (1972) 2053 (In Russian)
- CAMERON, G. G., DAVIE, F. (Univ. Aberdeen, Dept. Chem. Aberdeen, AB9 2UE, Scotland): The oxidative thermal degradation of poly (methyl acrylate). *Chem. Zvesti* 26 (1972) 200
- CARSON, A. S., LAYE, P. G., SPENCER, J. A., STEELE, W. V. (Univ. Leeds, Dept. Phys. Chem., Leeds LS2 9JT, England): The enthalpy of combustion of organometallic compounds measured with a vacuum-jacketed rotating aneoid calorimeter. The enthalpy of formation of lead tetraphenyl. *J. Chem. Thermodyn.* 4 (1972) 783
- CHANG, C. H., BAUTISTA, R. G., MARGRAVE, J. L. (c/o Margrave, J. L., Rice Univ., Dept. Chem., Houston, Texas, 77001 USA): Untersuchungen bei hohen Temperaturen und hohen Drücken. 4. Thermische Zersetzung von KClO_3 , HgO und HgS bei hohen Temperaturen und hohen Drücken. *Monatsh. Chem.* 103 (1972) 1021
- CHEKHOVSKI, V. YA., STAVROSKII, G. I., IVANOV, A. B.: High-temperature thermal conductivity of cerium dioxide. *High Temp. USSR, Engl. Transl.* 9 (1971) 1090
- CHERNYAK, B. I., TROYAN, A. A., FURSA, G. S. (Acad. Sci. UkSSR, Phys. and Org. Chem. Inst., Donetsk, UkSSR): Kinetics of the thermal decay of 1-nonene-3-hydroperoxide. *Zh. Org. Khim.* 8 (1972) 1352 (In Russian)
- CHEVRIER, J. C., MOREAUX, F., BECK, G. (CNRS, Super Met. and Ind. Min., Lab. Met., Nancy 54, France): L'effusivité et la résistance thermique des zones superficielles du solide déterminant le processus de vaporisation du liquide en régime de trempé. *Int. J. Heat Mass. Transfer* 15 (1972) 1631
- CHIZHIKOV, D. M., TSVETKOV, Y. V., KAZENAS, E. K. (A. A. Baikov Met. Inst., Moscow, USSR): Thermodynamics of garnierite-mineral at high temperatures. *Zh. Fiz. Khim.* 46 (1972) 1577 (In Russian)
- CHOU, C. J., OLSON, F. A. (Kennecott Copper Corp., Res. Ctr., Salt Lake City, Utah, USA): Isothermal decomposition of isothiocyantopentammine cobalt (III) perchlorate. Particle size effect. *Anal. Chem.* 44 (1972) 1841
- COBBLE, J. W., STEPHENS, H. P., MCKINNON, I. R., WESTRUM, E. F. (Purdue Univ., Lafayette, Indiana, 47907 USA): Thermodynamic properties of oxygenated sulfur complexions. Heat capacity from 5 to 300°K for $\text{K}_2\text{S}_4\text{O}_6(\text{c})$ and from 273 to 373°K for $\text{S}_4\text{O}_6^{2-}(\text{aq})$. Revised thermodynamic functions for $\text{HSO}_3^-(\text{aq.})$, $\text{SO}_3^{2-}(\text{aq.})$, $\text{S}_2\text{O}_3^{2-}(\text{aq.})$, and $\text{S}_4\text{O}_6^{2-}(\text{aq.})$ at 298°K. Revised potential of the thiosulfate-tetrathionate electrode. *Inorg. Chem.* 11 (1972) 1669
- COLOMNA, M., LAYNEZ, J. L., PEREZ-OSSORIO, R., TURRION, C. (CSIC, Inst., Phys. Chem. Rocasolano, Madrid 6, Spain): Enthalpies of combustion and formation of six methyl esters of benzene

- carboxylic acids. *J. Chem. Thermodyn.* 4 (1972) 499
- COMMICHAU, A. (Mobil Oil AG, Wedel 2, GFR): Contribution to the determination of the ageing stability of lubricants by DTA. *Erdöl Kohle Erdgas-Petr. Br. Ch.* 25 (1972) 322 (In German)
- CONCILIO, C. B., JAHNKE, B. J. (Baroid Div., N. L. Ind., P. O. Box 1675, Houston, Texas, 77001 USA): The characterization by differential thermal analysis of organic polyelectrolytes and flocculating agents. *Thermochim. Acta* 4 (1972) 249
- COOK, J. G., VAN DERMEER, M. P., LAUBITZ, M. J. (Natl. Res. Council Canada, Div. Phys., Ottawa, Ont., Canada): Thermal and electrical conductivities of sodium from 40 to 360 K. *Can. J. Phys.* 50 (1972) 1386
- CRAWFORD, W. A., HOERSCH, A. L. (Bryn Mawr Coll., Dept. Geol., Bryn Mawr, Pa. 19010 USA): Calcite-aragonite equilibrium from 50°C to 150°C. *Amer. Mineral.* 57, (1972) 995
- CREYF, H. S., VAN POUCKE, L. C. (Univ. Ghent, Dept. Gen. Inorg. Chem., Ghent, Belgium): The free energy, enthalpy and entropy changes of the dissociation of diprotonated diamines. *Thermochim. Acta* 4 (1972) 485
- DALY, N. J., ZIOLKOWSKI, F. (Australian Natl. Univ., Dept. Chem., Canberra 2600, Australia): The thermal decomposition of carbamates. II. Methyl N-methylcarbamate. *Aust. J. Chem.* 25 (1972) 1453
- DALY, N. J., ZIOLKOWSKI, F. (Australian Natl. Univ. Dept. Chem., Canberra 2600, Australia): Thermolyses of N,N-dimethylcarbamates and the implications for thermal β -elimination reaction mechanism. *J. Chem. Soc. Chem. Commun.* (1972) 911
- DASARATHY, C. (British Steel Corp., Res. Ctr., Port Talbot, Glam., Wales): A transition point at 170°K. *Nature Phys. Sci.* 238 (1972) 141
- DARGEL, L., KUBEL, W., OLKIEWICZ, K. (Acad. Min. and Met., Inst. Met., Cracow, Poland): Influence of thermal treatment on the crystallographic structure of a series of $\text{Li}_2\text{O}(5-2t)\text{Fe}_2\text{O}_3t\text{Cr}_2\text{O}_3$ ferrites. *Acta Phys. Pol. A* 41 (1972) 689
- DAVE, N. G., MASOOD, I. (Cent. Bldg. Res. Inst., Roorkee, India): Thermogravimetric method of determining unhydrated magnesium oxide contents of hydrated dolomitic limes. *Indian Ceram.* 15 (1971) 197
- DAVE, N. G., MASOOD, I., SINGH, J. (Cent. Bldg. Res. Inst., Roorkee, India): Utilization of magnesian limestones for making magnesian limes. *I. S. I. Bull.* 24 (1972) 154
- DAVIES, M. B., LETHBRIDGE, J. W. (Stockport Coll. Technol., Sci. Dept., Stockport SK1 3UQ, England): Thermal decomposition of some simple nitro complexes of cobalt(III), nickel(II) and mercury(II). *J. Inorg. Nucl. Chem.* 34 (1972) 2171
- DAWBER, J. G., GUEST, L. B., LAMBOURNE, R. (N. Staffordshire Polytechn., Dept. Chem., Stoke-on-Trent, England): Heats of immersion of titanium dioxide pigments in aqueous solution. *Thermochim. Acta* 4 (1972) 471
- DEGANELLO, S. (Univ. Chicago, Dept. Geophys. Sci., Chicago, Ill. 60637 USA): γ - Na_2BeF_4 , its crystal structure at 25° and 74°C and its anisotropic thermal expansion. *Z. Kristallogr.* 135 (1972) 18
- DE JONGH, D. C., EVENSON, G. N. (Wayne State Univ., Dept. Chem. Detroit, Mich., 48202 USA): The pyrolysis of 2H-naphth [1,8-cd] isothiazole 1,1-dioxide and its 2-phenyl analog. *J. Org. Chem.* 37 (1972) 2152
- DE JONGH, D. C., VAN FOSSEN, R. Y. (Univ. Montreal, Dept. Chem., Montreal, Que., Canada): Pyrolysis of aromatic cyclic diazoketones. *Tetrahedron* 28 (1972) 3603
- DELINGER, W. G., SAVAGE, W. R., SCHWEITZER, J. W. (Univ. Iowa, Dept. Phys. and Astron., Iowa City, Iowa, 52240 USA): Low-temperature specific heat of γ -phase Cu-Au alloys. *Phys. Rev. B-Solid State* 6 (1972) 338
- DELHAES, P., BLONDET-GONTE, G. (CNRS, Domaine Univ., Ctr. Rech., Paul Pascal Talence 33, France): Relationship between the linear term of the specific and a Curie law magnetic susceptibility in noncrystalline carbons. *Phys. Lett.* 40A (1972) 242
- DE MARÉ, G. R., HUYBRECHTS, G., TOT, M. (c/o Huybrechts, G., Univ. Libre Brussels, Serv. Chim. Phys. 1, Brussels 1050, Belgium): Kinetics and mechanism of the pyrolysis of cyclohexa 1,3-diene. *J. Chem. Soc. Perkin Trans. II* (1972) 1256

- DIKANT, J. (Slovak Acad. Sci., Inst. Phys., Bratislava, Czechoslovakia): Specific heat, thermal diffusivity and thermal conductivity of Ca doped NaNO_3 crystals near the transition point. *Czech. J. Phys. B*, 22 (1972) 697
- DOROFFEV, Y. G., SKORIKOV, E. A., SEMIN, E. G., SHATOV, Y. S., LAMKOV, K. K. (Novocherkassk Polytech. Inst., Novocherkassk, USSR): Oxidation protection of metal-ceramic magnets during thermal treatment. *Metalloved. Term. Obrab. Metal.* (1972) 73 (In Russian)
- DUBOIS, J. E., HERZOG, H. (CNRS, Univ. Paris, Lab. Chim. Org. Phys., Paris 5, France): Heats of formation of aliphatic ketones: structure correlation based on environment treatment. *J. Chem. Soc. Chem. Commun.* (1972) 932
- DUTT, P. K., KAVA, R. M., MEHTA, D. J. (Cent. Salt and Marine Chem. Res. Inst., Bhavnagar, India): Thermal decomposition of magnesium chloride hexahydrate. *Indian J. Techn.* 10 (1972) 41
- DUVAUT, G., LIONS, J. L. (Univ. Paris, Dept. Math., Paris, France): Inéquations en thermoplasticité et magnétohydrodynamique. *Arch. Ration. Mech. Anal.* 46 (1972) 241
- DWORKIN, A. S. (Oak Ridge Natl. Lab., Chem. Div., Oak Ridge, Tennessee, 37830 USA): Enthalpy of lithium fluoroborate from 298–700 K. Enthalpy and entropy of fusion. *J. Chem. Engn. Data* 17 (1972) 284
- DYUZHEVA, T. I., KABALKINA, S. S., VERESHAGIN, L. F. (Acad. Sci. USSR, High Pressure, Phys. Inst., Moscow, USSR): Polymorphism of Mg_2Sn at high temperatures and pressures. *Kristallografiya* 17 (1972) 804 (In Russian)
- EFIMOV, A. I., BARVINOK, G. M.: The enthalpies of formation of some chlorocomplexes of cadmium. *Vestn. Leningrad Univ. Fiz. Khim.* (1972) 140 (In Russian)
- EFIMOVA, S. G., VOLOKHINA, A. V., KORETSKAYA, A. I., IOVLEVA, M. M., SOKOLOVA, T. S., PAKOV, S. P. (All Union Synth. Fiber Inst., Moscow, USSR): On the investigation of the formation of fibers from heat-resistant polymers. *Vysokomol. Soedin. Ser. A* 14 (1972) 1523 (In Russian)
- EGYED, J., WINKLER, P., GÁL, S. (Hungarian Acad. Sci., Cent. Res., Inst. Chem., Budapest 2, Hungary): Thermolytic disproportionation of cyanoacetate salts. *Acta Chim. Acad. Sci. Hung.* 72 (1972) 451
- EHARA, K. (Tokyo Inst. Technol., Fac. Engn., Meguro-ku, Tokyo, Japan): New device for the thermal analysis systems and applications to high polymers. *Polym. Chem.* 29 (1972) 419 (In Japanese)
- ENEA, O., BERTHON, G., BOKRA, Y. (Lab. Thermodyn. Chim. Electrochim. Univ., 40 Avenue du Recteur Pineau, 86-Poitiers, France): Étude calorimétrique des complexes de l'orthophénantroline et de ses dérivés avec certains métaux. II. Complexes de la 2,9-diméthylorthophénantroline de la 4,7-diméthylorthophénantroline et de la 5,6-diméthylorthophénantroline; influence de la position des groupement substituants. *Thermochim. Acta* 4 (1972) 449
- ERMOLAEV, M. I., BATISHCHEV, V. V., GORYACHEV, K. V. (Voronezh Technol. Inst., Voronezh, USSR): Derivatographic method for a thermal analysis of lubricants. *Khim. Tekhnol. Topl. Masel.* (1972) 46 (In Russian)
- ETTWIG, H. H., PEPPERHOFF, W. (Mannesmann AG, Forsch. Inst., Duisburg, GFR): Ordnungsumwandlungen in krz. Eisen-Silizium-Legierungen. III. Spezifische Wärme. *Z. Metallk.* 63 (1972) 453
- ÉTOURNEAU, J., MERCURIO, J. P., NASLAIN, R. (CNRS Univ. Bordeaux, Serv. Chim., Minérale Struct., Talence 33, France): Étude comparative de la stabilité thermique des hexaborures de terres rares. *Compt. Rend. Ser. C* 275 (1972) 273
- FABBRIZZI, L., BARBUCCI, R., PAOLETTI, P. (c/o Paoletti, P., Univ. Florence, Ist. Chim. Gen., Florence, Italy): Thermodynamics of complex formation with linear aliphatic tetramines. II. Heats and entropies of the reactions of 3,7-diazononane-1,9-diamine with hydrogen ions and some bivalent transition-metal ions. *J. Chem. Soc. Dalton Trans.* (1972) 1529
- FARGHALY, A. S. (Ain Shams Univ., Fac. Engn., Cairo, United Arab Republic): Lower phase transition temperature of solid hydrogen sulphide. *Czech. J. Phys. B* 22 (1972) 617

- FARMER, R. W. (Air Force Mat. Lab., Wright-Patterson AFB, Ohio, 45433 USA): Thermogravimetry of thermally stable aromatic and heterocyclic polymers. *Thermochim. Acta* 4 (1972) 203
- FARMER, R. W. (Air Force Mat. Lab., Wright-Patterson AFB, Ohio, 45433 USA): Phenolic resin char-formation during hyperthermal ablation. *Thermochim. Acta* 4 (1972) 223
- FARRAN, R., HOUSE, J. E. (c/o House, J. E., Illinois State Univ., Dept. Chem., Normal, Ill., 61761 USA): Thermal decomposition of complexes of palladium(II) chloride with substituted pyridines. *J. Inorg. Nucl. Chem.* 34 (1972) 2219
- FEDOSOV, A. I. (Minsk Heating Equipment Plant, Minsk, BeSSR): Thermal endurance and structural changes of wrought iron during thermocycling. *Metalloved. Term. Obrab. Metal.* (1972) 39 (In Russian)
- FEDOTOVA, O. YA., GOROKHOV, V. I., PARESISHVILI, O. I., KARETNIKOV, G. S., KOLESNIKOV, G. S. (D. I. Mendeleev Chem. Technol. Inst., Moscow, USSR): Investigation of thermal degradation and thermal oxidation of phosphorus-containing polyimides. *Vysokomol. Soedin. A* 14 (1972) 1256 (In Russian)
- FEDYUKIN, V. K. (Leningrad Polytech. Inst., Leningrad, USSR): New methods for thermal treatment of high-durable cast iron. *Metalloved. Term. Obrab. Metal.* (1972) 37 (In Russian)
- FEENBERG, I. Y., VAISBURG, S. E. (State Nickel Ind. Inst., Leningrad, USSR): Thermodynamics of melts of the Co-Se system. *Zh. Fiz. Khim.* 46 (1972) 1575 (In Russian)
- FELSCHÉ, J., KALDIS, E. (ETH, Inst. Kristallographie, Zürich, Switzerland): Thermal oxidation of Eu_2SiO_3 —a topotactic solid state reaction. *J. Solid State Chem.* 5 (1972) 49
- FELTHAM, P., SINCLAIR, R. (Brunel Univ., Uxbridge London, England): High-temperature creep of copper. *Acta Met.* 20 (1972) 1095
- FERRILLO, R. G., WILSON, A. (Amer. Cyanamid Co., Bound Brook, N. J., 08805 USA): Differential scanning calorimetry of hazardous materials: 4-nitro-*m*-cresol and *p*-nitrophenol. *Thermochim. Acta* 4 (1972) 273
- FILIMONOV, A. I., KLIMOVA, Z. A., BRILKINA, T. G. (N. I. Lobachevskii State Univ., Gorki, USSR): Thermal decomposition of di-*O*-betatert-butylperoxyethylmethylphosphonate. *Zh. Obshch. Khim.* 42 (1972) 1254 (In Russian)
- FINCH, A., GARDNER, P. J., WEBB, A. F. (Roy Holloway Coll., Dept. Chem., Englefield Green, Surrey, England): The standard enthalpy of formation of tetramethoxydiboron. *J. Chem. Thermodyn.* 4 (1972) 495
- FINKE, H. L., MCCULLOUGH, J. P., MESSERLY, J. F., OSBORN, A., DOUSLIN, D. J. (U. S. Dept. Interior, Bur. Min., Energy Res. Ctr., Bartlesville, Oklahoma, 74003 USA): Cis- and trans-hexahydroindan. Chemical thermodynamic properties and isomerization equilibrium. *J. Chem. Thermodyn.* 4 (1972) 477
- FITZGIBBON, G. C., HUBER, E. J., HOLLEY, C. E. (Univ. California, Los Alamos Sci. Lab., Los Alamos, N. M., 87544 USA): Enthalpy of formation of europium sesquioxide. *J. Chem. Thermodyn.* 4 (1972) 349
- FLANAGAN, R. D., RIJKE, A. M. (Univ. Witwatersrand, Dept. Chem., Johannesburg, South Africa): Polymorphism in polymers. I. The equilibrium melting temperature of two crystalline modifications of trans-1,4-polyisoprene. *J. Polym. Sci. A-2*, 10 (1972) 1207
- FLÜKIGER, R., ROGGEN, R., PAOLI, A., YVON, K. (Univ. Geneva, Inst. Phys. Mat. Condensee, Geneva, Switzerland): Propriétés électroniques à basse température et structure cristalline dans le système Mo—Pt. *Helv. Phys. Acta* 45 (1972) 31
- FOMINYKH, I. P., SOROKIN, P. I., BLINOV, G. F. (Tula Polytech. Inst., Tula, USSR): Thermal expansion of copper-Kovar-copper band. *Metalloved. Term. Obrab. Metal.* (1972) 64 (In Russian)
- FOO, E. H., LUPIS, C. H. P., BYERLEY, J. J., REMPEL, G. L., TAKEBE, N. (Florida State Univ., Tallahassee, Florida, 32302 USA): Activity of carbon in liquid iron alloys at 1550°C. *Met Trans.* 3 (1972) 2125
- FOSTER, A. M., AGOSTA, W. C. (c/o Agosta, W. C., Rockefeller Univ. Labs., New York, N. Y., 10021 USA): Pyrolysis of lactone tosylhydrazones sodium salts. *J. Amer. Chem. Soc.* 94 (1972) 5777
- FOURME, R., RENAUD, M., ANDRÉ, D. (Univ.

- Paris, Lab. Chim. Phys., Orsay 91, France): Transition ordre-désordre d'orientation dans le 1,2,3-trichloro-4,5,6-triméthylbenzène. I. Structure cristalline à 298 K. *Molec. Cryst. Liquid Cryst.* 17 (1972) 209
- FOURME, R., RENAUD, M. (Univ. Paris, Lab. Chim. Phys., Orsay 91, France): Transition ordre-désordre d'orientation dans le 1,2,3-trichloro-4,5,6-triméthylbenzène. II. Structure cristalline à 173 K. *Molec. Cryst. Liquid Cryst.* 17 (1972) 223
- FRANCO, J. I., KLEYKAMP, H. (c/o Kleykamp, H., Postfach 3640, Karlsruhe 75, GFR): Freie Bildungsenthalpie von Osmium-dioxid. *Ber. Bunsen Ges. Phys. Chem.* 76 (1972) 691
- FREDRICKSON, D. R., CHASANOV, M. G. (Argonne Natl. Lab., Chem. Engr. Div., Argonne, Ill., 60439 USA): Thermodynamic investigation of trisodium uranium (V) oxide (Na_3UO_4). III. Enthalpy to 1200 K by drop calorimetry. *J. Chem. Thermodyn.* 4 (1972) 419
- FRITZ, L. P., FRASCI, A., BRAGATO, G. (Chattillon, Ctr. Ricerche, 13100 Vercelli, Italy): Differential calorimetric analysis of poly(ethyleneterephthalate), polycaprolactam and polypropylene. *Angew. Makromol. Chem.* 24 (1972) 155
- GALLAGHER, P. K., JOHNSON, D. W. (Bell Tel. Lab., Murray Hill, N. J., 07974 USA): Kinetics of the formation of BaSnO_3 from barium carbonate and tin(IV) oxide or oxalate precursors. *Thermochim. Acta* 4 (1972) 283
- GANNON, D. J., PARSONAGE, N. G. (Mamster Univ., Inst. Mat. Res., Hamilton, Ont., Canada): Thermodynamic properties of urea + hydrocarbon adducts from 12 to 300 K. The heat capacities and entropies of the adducts of the 1-alkenes $\text{C}_{12}\text{H}_{24}$, $\text{C}_{14}\text{H}_{28}$, and $\text{C}_{18}\text{H}_{36}$. *J. Chem. Thermodyn.* 4 (1972) 745
- GATILOV, YU. F., KOVYZINA, V. P., KRALICHKINA, M. G. (Kazan Teachers Inst. Kazan, USSR): Thermal behaviour of quasarsonium salts. *Zh. Obshch. Khim.* 42 (1972) 1303 (In Russian)
- GEGUZIN, J. E., VOROBIEVA, I. V. (Harkov State Univ., Harkov, UkSSR): Thermal stability of tracts made by fissioning nuclei fragments on the surface of non-metallic crystals. *Dokl. Akad. Nauk SSSR* 205 (1972) 325 (In Russian)
- GEISELER, G., RAUH, H. J. (Karl Marx Univ., Bereich Phys. Chem., Leipzig, GDR): Bildungsenthalpien und Mesomerieenergien von π -Bindungssystemen. 3. Bildungsenthalpie und Verdrillung der S-S-Bindung in Trithionen. *Z. Phys. Chem. Leipzig* 249 (1972) 376
- GEISELER, G., SAWISTOWSKY, J. (Karl Marx Univ., Sekt. Chem., Bereich Phys. Chem., Leipzig, GDR): Bildungsenthalpien und Mesomerieenergien von π -Bindungssystemen. 4. Bildungsenthalpien einiger Thiacyclanone. *Z. Phys. Chem. Leipzig* 250 (1972) 43
- GESHKO, E. I., MIKHALCHENKO, V. P., SHARLAI, B. M. (Chernovtsy State Univ., Chernovtsy, UkSSR): On temperature dependence of components of thermal expansion tensor for Ga. *Fiz. Tverd. Tela* 14 (1972) 1803 (In Russian)
- GIL'BURD, M. M., MOIN, F. B.: Mass-spectrometric study of the kinetics of fast high-temperature reactions. III. Thermal decomposition of methylacetate. *Kinet. Katal.* 13 (1972) 836 (In Russian)
- GILLHAM, J. K., GLAZIER, K. C. (Princeton Univ., Dept. Chem. Engr., Princeton, N. J., 08540 USA): Thermomechanical behaviour of "BBB" polymer. *J. Appl. Polym. Sci.* 16 (1972) 2153
- GIOVANNINI, B., HEDGCOCK, F. T. (Univ. Genève, Dept. Phys. Mat. Condensee, Genève, Switzerland): Influence of temperature on the two band model for negative magnetoresistance in heavily doped semiconductors. *Solid State Commun.* 11 (1972) 367
- GLAZER, A. A., POTAPOV, A. P., TAGIROV, R. I. (Acad. Sci. USSR, Si. Ctr., Met. Phys. Inst., Sverdlovsk, USSR): Thermographic recording on a manganese-permalloy film with exchange anisotropy. *JETP Lett.* 15 (1972) 259
- GOGOLEWSKI, S., TURSKA, E. (Tech. Univ., Inst. Artificial Fibers, Łódź 40, Poland): Isothermal crystallization of copolyamides. I. Kinetics of crystallization of nylon 6-piperazine adipate and nylon 6-piperazine terephthalate random copolyamides. *J. Appl. Polym. Sci.* 16 (1972) 1959
- GORBUNOV, V. E., PALKIN, V. A. (N. S. Kurnakov Gen. and Inorg. Chem. Inst.,

- Moscow, USSR): Low-temperature microcalorimeter. *Zh. Fiz. Khim.* 46 (1972) 1625 (In Russian)
- GORZYNSKI, C. S., MCCARTY, M., MAYCOCK, J. N. (Res. Inst. Adv. Stud., Martin Marietta Corp. Res. Dev. Lab., 1450 South Rolling Road, Baltimore, Maryland, 21227 USA): Application of thermal analysis methods to the study of unstable and metastable materials. *Thermochim. Acta* 4 (1972) 309
- GRASSIE, N., SCOTNEY, A., JENKINS, R., DAVIS, T. I. (Univ. Glasgow, Dept. Chem., Glasgow, W2, Scotland): Relationships between thermal, photothermal and photolytic degradation processes in methacrylate/acrylate copolymers. *Chem. Zvesti* 26 (1972) 208
- GREENE, R. L., LITTLE, W. A. (IBM Corp., Res. Lab., San Jose, Calif., 95114 USA): Low-temperature specific heat of one-dimensional $K_2Pt(CN)_4Cl_{0.3} \cdot n(H_2O)$. *Phys. Rev. Lett.* 29 (1972) 718
- GRENTHE, I., OTS, H. (Univ. Lund, Chem. Ctr., Div. Phys. Chem., 220 07 Lund, Sweden): Thermodynamic properties of rare earth complexes. XI. Stability constants and free energy changes for the formation of rare earth diglycolate complexes at 5, 20, 35, and 50°C. *Acta Chem. Scand.* 26 (1972) 1217
- GRENTHE, I., OTS, H. (Univ. Lund, Chem. Ctr., Div. Phys. Chem., 220 07 Lund, Sweden): Thermodynamic properties of rare earth complexes. XII. Enthalpy and heat capacity changes for the formation of rare earth diglycolate complexes at 5, 20, 35, and 50°C. *Acta Chem. Scand.* 26 (1972) 1229
- GRIGORIEV, V. M., GUNDARINA, Z. I., KOPEIKIN, V. A., KUZ'MINSKAYA, L. N., RASHKOVAN, I. L. (V. A. Kucherenko Cent. Bldg. Construction Inst., Moscow, USSR): Thermal transformations of chromophosphate binder. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1340 (In Russian)
- GRIGORIEV, V. M., GUNDARINA, Z. I., KOPEIKIN, V. A., KUZ'MINSKAYA, L. N., RASHKOVAN, I. L. (V. A. Kucherenko Cent. Bldg. Construction Inst., Moscow, USSR): Thermal transformations of alumochromophosphate binder. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1343 (In Russian)
- GRIZIK, A. A., ABDULLINA, N., ANISIMOVA, V. N., KUTSEV, V. S. (Moscow State Rare Met. Ind. Inst., Moscow, USSR): Thermal decomposition of rare earth thiosulfates. *Zh. Neorg. Khim.* 17 (1972) 1812 (In Russian)
- GRØNVOLD, F., KVESETH, N. J., SVEEN, A. (Univ. Oslo, Kjem Inst., Oslo 3, Norway): The $Ni_{3\pm x}Te_2$ phases. Heat capacities in the range 298 to 900 K and transition behaviour. *J. Chem. Thermodyn.* 4 (1972) 337
- GUPTA, T. K. (Westinghouse Res. Labs., Ceramics and glasses, Pittsburgh, Pa., 15235 USA): Strength behaviour of thermally shocked ZnO. *J. Amer. Ceram. Soc.* 55 (1972) 429
- GUPTA, V. S., CHAKRABORTY, A. K., GHOSH, P. K., DUTTA, B. K. (Fert. Corp. India, Sindri, India): Epoxy resins, their infrared spectrophotometric and thermogravimetric studies. *Techn.* 8 (1971) 60
- GUPTA, G. D., JERE, G. V. (Indian Inst. Techn., Dept. Chem., New Delhi-29, India): Preparation and structure determination of peroxo-oxalato zirconium (IV) complex. *Indian J. Chem.* 10 (1972) 102
- GUREVICH, V. M., SOKOLOV, V. A. (N. S. Kurnakov Gen. and Inorg. Chem. Inst., Moscow, USSR): Vacuum calorimeter for determining heats of reaction. Heat of solution for potassium chloride at 25 and 50 degrees C. *Zh. Fiz. Khim.* 46 (1972) 1868 (In Russian)
- GUSAKOVSKAYA, I. G. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Use of the Calvet microcalorimeter for determination of the regions of defreezing of molecular mobility. *Vysokomol. Soedin. A* 14 (1972) 1649 (In Russian)
- HABERSBERGER, K., BALEK, V. (Czech. Acad. Sci., Inst. Phys. Chem., Prague, Czechoslovakia): Investigation of the thermal decomposition of calcium carbonate by simultaneous emanation thermal analysis, differential thermal analysis and evolved gas detection. *Thermochim. Acta* 4 (1972) 457
- HAGER, N. E. (Armstrong Cork Co., Res. and Dev. Ctr., Lancaster, Pa., 17604 USA): High speed thermal analysis with thin-foil calorimeter. *Rev. Sci. Instr.* 43 (1972) 1116

- HALEEM, M. A. (Univ. Baghdad, Coll. Sci., Baghdad, Irak): Thermal decarboxylation of benzoic acid in catechol. *UAR J. Chem.* 13 (1970) 505
- HAUSSÜHL, S., LECKEBUSCH, R., RECKER, K. (Univ. Bonn, Mineral Petrog. Inst., Bonn, GFR): Elastische und thermoelastische Konstanten des LiBaF_3 . *Z. Naturforsch.* 27a (1972) 1022
- HEANEY, H., LEY, S. V., PRICE, A. P., SHARMA, R. P. (Univ. Technol. Loughborough, Dept. Chem., Loughborough, LE11 3TU, England): Thermal reactions of 1,4-bridged-1,2,3,4-tetrahydronaphthalene derivatives. *Tetrahedron Lett.* (1972) 3067
- HEGEDÜS, A. J., BEREND, G. (Tungsram Res. Inst., Mat. Technol. Lab., Budapest 4, Hungary): Ein tückischer Fremdstoffeffekt bei der Thermoanalyse bzw. Thermolyse von Mangan(II)-carbonaten. *Microchim. Acta* (1972) 512
- HEIMGARTNER, H., HANSEN, H. J., SCHMID, H. (Univ. Zürich, Org. Chem. Inst., Zürich, Switzerland): Thermisches Verhalten von 1,2-diphenylbenzolen. *Helv. Chim. Acta* 55 (1972) 1385
- HERBELL, T. P. (Nat. Aeronaut. and Space Adm., Lewis Res. Center, Cleveland, Ohio, 44135 USA): Thermogravimetry system designed for use in dispersion strengthening studies. *Thermochim. Acta* 4 (1972) 295
- HIRAO, M. (Shinsku Univ., Fac. Engn., Dept. Ind. Chem., Wakasato, Nagano, Japan): Studies on the thermal expansion and the solid solubility in fluor-phlogopite and tetrasilicic mica sintering system. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1972) 1381 (In Japanese)
- HIRAKAWA, K., HAYASHI, H., MIKE, H. (Kyushu Univ., Dept. Commun. Engn., Fukuoka, Japan): Thermal conduction in a two-dimensional antiferromagnet $\text{Cu}(\text{HCOO})_2 \cdot 4\text{H}_2\text{O}$. *J. Phys. Soc. Jap.* 32 (1972) 1667
- HIYAMA, T., TAGUCHI, H., FUJITA, S., NOZAKI, H. (Kyoto Univ., Dept. Ind. Chem., Yosida, Kyoto, Japan): The photolysis and thermolysis of ethyl azidoformate in the presence of ketones. *Bull. Chem. Soc. Jap.* 45 (1972) 1863
- HÖJFORS, R. J. V., FLODIN, P. G. M. (Perstorp. AB, Res. Dept. Perstorp, Sweden): A recording differential dilatometer for the investigation of polymer crystallization rates and melting temperatures. *J. Appl. Polym. Sci.* 16 (1972) 1859
- HOLM, J. L., GRØNVOLD, F. (Tech. Univ. Norway, Inst. Inorg. Chem., N-7034 Trondheim, Norway): The enthalpy of fusion of samarium trifluoride. *Acta Chem. Scand.* 26 (1972) 1733
- HOLM, J. L., HOLM, B. J., RØTNES, M. (Tech. Univ. Norway, Inst. Inorg. Chem., N-7034 Trondheim, Norway): Thermodynamic and structural properties of solid and molten sodium magnesium fluoride. *Acta Chem. Scand.* 26 (1972) 1687
- HOPF, H. (Univ. Karlsruhe, Inst. Org. Chem., Karlsruhe, GFR): Thermische Isomerisierungen. IV. Die Propargyl-Cope-Umlagerung von 4-Methylhexadien-(1,2)-in-(5). *Tetrahedron Lett.* (1972) 3571
- HUBBELL, W. C., BROTZEN, F. R. (Rice Univ., Houston, Texas, 77001 USA): Elastic constants of niobium-molybdenum alloys in the temperature range -190 to $+100^\circ\text{C}$. *J. Appl. Phys.* 43 (1972) 3306
- HUG, R., HANSEN, H. J., SCHMID, H. (Univ. Zürich, Org. Chem. Inst., Zürich, Switzerland): Thermische Cyclodehydratisierung von Salicylalkoholen; eine einfache Synthese von 4-substituierten 2H-Chromenen. *Helv. Chim. Acta* 55 (1972) 1675
- HUNT, G. L., RITCHIE, I. M. (Univ. Melbourne, Sch. Chem., Parkville, Victoria 3052, Australia): Effect of pressure changes on the oxidation rate of aluminium in the temperature range 323–673 K. *J. Chem. Soc. Faraday Trans. I.* 68 (1972) 1413
- HUNT, G. L., RITCHIE, I. M. (Univ. Melbourne, Sch. Chem., Parkville, Victoria 3052, Australia): Oxidation of aluminium by nitrous oxide in the temperature range 323–683 K. *J. Chem. Soc. Faraday Trans. I.* 68 (1972) 1423
- IKEDA, K., NAKAMICHI, T., YAMAMOTO, M. (Tohoku Univ., Res. Inst. Iron Steel and other Met., Sendai, Japan): Thermohysteresis phenomenon of the electrical resistivity in Fe_2Ti suggesting its martensitic transformation. *Phys. Status Solidi A-Appl. Res.* 12 (1972) 595
- INAGAKI, N., KOBASHI, M., KATSUURA, K. (Shizuoka Univ., Fac. Engn., Johoku, Hamamatsu, Shizuoka, Japan): Kinetic analysis of the thermal degradation poly-

- styrene by thermal volatilization analysis. *Polym. Chem.* 29 (1972) 326 (In Japanese)
- INOZEMTSEV, P. P., LIKUMOVICS, A. G., GRACHEVA, Z. D. (Sterlitamak Isoprene Rub. Ind., Sterlitamak, USSR): Melting points of spatial hindered phenols according to data of differential thermal analysis. *Zh. Fiz. Khim.* 46 (1972) 1594 (In Russian)
- IONOVA, E. A., ANTONOV, A. N., LAPINA, N. A., KHARITONOV, YU. YA.: Study of thermal decomposition of polyoxypropylene-carboranediol resin. *Vysokomol. Soedin. Ser. A* 14 (1972) 1672 (In Russian)
- IRVING, R. J. (Univ. Surrey, Chem. Dept., Guilford, Surrey, England): The standard enthalpy of sublimation of naphthalene. *J. Chem. Thermodyn.* 4 (1972) 793
- IVLEV, V. I., MAL'TSEVA, G. K.: Dilatometer using photoelectric recording of elongation (exchange of experience). *Ind. Lab. Eng. Trans.* 37 (1971) 1956
- JADHAO, V. G., SINGRU, R. M., RAO, C. N. R. (Indian Inst. Technol. Kanpur, India): Mössbauer studies of the thermal effects on β -FeOOH, $(Cr_{0.8})(OH)_3$, and corresponding oxides. *Phys. Status Solidi A-Appl. Res.* 12 (1972) 605
- JANIN, C., BERT, M., GUYOT, A. (CNRS, Inst. Rech. Catalyse, 69-Villeurbanne, France): Stabilité thermique du polyphénylsiloxane. *J. Chim. Phys. Phys.-Chim. Biol.* 69 (1972) 810
- JELLINEK, H. H. G., FUJIWARA, H. (Clarkson Coll. Technol., Dept. Chem., Potsdam, N. Y., 13676 USA): Degradation of poly-p-oxybenzoate under vacuum. *J. Polym. Sci. A-1*, 10 (1972) 1719
- JENSEN, R. E., SWENSON, R. P. (Gustavus Adolphus Coll., St. Peter, Minnesota, 56082 USA): Construction of a thermogravimetric balance based on the Hall-effect. *J. Chem. Educ.* 49 (1972) 648
- JERNIGAN, D. L., MCATEE, J. L. (Baylor Univ., Waco, Texas, 76703 USA): The study of carbon-coated grids at elevated temperatures by electron microscopy. *Thermochim. Acta* 4 (1972) 393
- JUDD, M. D., POPE, M. I., WINTRELL, C. G. (Portsmouth Polytech., Dept. Chem., Portsmouth 1, Hauts., England): Formation and surface properties of electron-emissive coatings. IX. Thermal decomposition of the alkaline-earth formates. *J. Appl. Chem. Biotechnol.* 22 (1972) 679
- KAGEMOTO, A., BABA, Y. (Osaka Inst. Techn., Dept. Gen. Educ., Omiya-cho, Asaki-ku, Osaka): On the study of liquid-liquid phase equilibrium by differential thermal analysis method. *Polym. Chem.* 28 (1971) 784 (In Japanese)
- KAGEMOTO, A., BABA, Y., FUJITA, Y. (Osaka Inst. Techn., Dept. Gen. Educ., Omiya-cho, Ashai-Ku, Osaka): Study on the phase equilibrium of aqueous oligo(ethylene oxide) solutions by differential thermal analysis. *Rep. Progress Polym. Phys. Japan* 15 (1972) 33
- KAGEMOTO, A., BABA, Y., FUJITA, Y. (Osaka Inst. Techn., Dept. Gen. Educ., Omiya-cho, Asahi-ku, Osaka): Thermal properties of atactic polystyrene-methyl ethyl ketone systems determined by a modified differential thermal analysis. *Rep. Progress Polym. Phys. Japan* 15 (1972) 269
- KALASHNIK, A. T., EREMOV, V. YA., MIKHAILOV, N. V., KUDRYAVTSEV, N. V., SHCHETININ, A. M., PANIKAROVA, N. P., DUBROVINA, M. A., PANKRATOV, YU. P. (All Union Synth. Fiber Res. Inst., Mytishchi, USSR): Study of the kinetics and mechanism of thermal-oxidative stability of aromatic polyamides. *Vysokomol. Soedin. Ser. A* 14 (1972) 1396 (In Russian)
- KALOFOROV, N. YA. (Burgas Advanced Chem. Technol. Inst., Burgas, Bulgaria): Some peculiarities of the chemical interactions of poly(vinyl acetate) and polypropylene under the conditions of thermal degradation. *Vysokomol. Soedin. Ser. A* 14 (1972) 1752 (In Russian)
- KAPTEIN, R., BROKKEN-ZIJP, J., DEKANTER, F. J. J. (Shell Res. Labs., Amsterdam, Netherlands): Chemically induced dynamic nuclear polarization. XI. Thermal decomposition of acetyl peroxide. *J. Amer. Chem. Soc.* 94 (1972) 6280
- KARAKOZOVA, E. I., RATNER, D. M., PAUSHKIN, J. M., STUKAN, R. A., KARMILOVA, L. V., VISHNIAKOVA, T. P., ENIKOLOPIAN, N. S. (I. M. Gubkin Petrochem. and Gas. Ind. Inst., Moscow, USSR): The action of ferrocene derivatives on thermal destruction of polyethylene. *Dokl.*

- Akad. Nauk SSSR 205* (1972) 97 (In Russian)
- KARASHIMA, S., IKUBO, T., OIKAWA, H. (Tohoku Univ., Fac. Engn., Dept. Mat. Sci., Sendai, Japan): On the high-temperature creep behaviour and substructures in alpha-iron single crystals. *Trans. Jap. Inst. Met.* 13 (1972) 176
- KATILA, T. E., PHILLIPS, N. E., VEURO, M. C., TRIPPLET, B. B. (Tech. Univ. Helsinki, Dept. Tech. Phys., Helsinki, Finland): Heat capacity of $Tm_2(SO_4)_3 \cdot 8H_2O$ between 0.08 and 20 K. *Phys. Rev. B-Solid State* 6 (1972) 1827
- KAWASE, K., HAYAKAWA, K. (Govt. Ind. Res. Inst., Kita, Nagoya, Japan): Thermal properties of methyl methacrylate-grafted polypropylene fibers. *J. Chem. Soc. Jap. Chem. Ind. Chem.* (1972) 1432 (In Japanese)
- KELLY, B. T. (British Nucl. Fuels Ltd., UKAEA, Reactor Fuel, Salwick, Lancs., England): The thermal expansion coefficient of graphite parallel to the basal planes. *Carbon* 10 (1972) 429
- KELLY, B. T. (British Nucl. Fuels Ltd., UKAEA, Reactor Fuel, Salwick, Lancs., England): The high temperature thermal expansion of graphite parallel to the hexagonal axis. *Carbon* 10 (1972) 435
- KELLY, B. T. (British Nucl. Fuels Ltd., UKAEA, Reactor Fuel, Salwick, Lancs., England): The electronic contribution to the thermal expansion coefficients of graphite crystals. *Carbon* 10 (1972) 439
- KENNEDY, G. C., HIGGINS, G. H. (Univ. California, Inst. Geophys. and Planetary Phys., Los Angeles, Calif., 90024 USA): Melting temperatures in the earth's mantle. *Tectonophysics* 13 (1972) 221
- KHALAFALLA, S. E., HAAS, L. A. (US Dept. Interior, Bur. Min., Met. Res. Ctr., Twin Cities, Minnesota, 55111 USA): Kinetics of carbothermal reduction of quartz under vacuum. *J. Amer. Ceram. Soc.* 55 (1972) 414
- KHANDROS, V. O., BOGOLYUBOV, N. A. (Acad. Sci. USSR, Inorg. Chem. Inst., Novosibirsk, USSR): Co sublimation in temperature range including the Curie point (1320 - 1410°K). *Fiz. Tverd. Tela* 14 (1972) 1837 (In Russian)
- KHIMCHENKO, YU. I., RADKEVICS, L. S., VASILENKO, V. P., NATANSON, E. M. (Acad. Sci. UkSSR, Colloidial and Water Chem. Inst., Kiev, UkSSR): Investigation of the influence of highly-dispersed Fe, Co, Ni, Pd and Cu on the supermolecular structure of polycapromamide during preparation of the corresponding metallopolymers by the thermal method. *Kolloid Zh.* 34 (1972) 585 (In Russian)
- KHLYNTSOV, V. G., BORUKHOVICH, A. S., PERELYAEV, V. A.: On heat of semiconductor-metal phase transition in V_2O_3 . *Fiz. Tverd. Tela* 14 (1972) 2142 (In Russian)
- KHLYUSTOV, V. G., FLEROV, I. N., SILIN, A. T., SAL'NIKOV, A. N.: Specific heat of $KMnF_3$. *Sov. Phys.-Solid State Engl. Transl.* 14 (1972) 139
- KINSER, D. L., WILSON, L. K., SANDERS, H. R., HILL, D. J. (Vanderbilt Univ., Nashville, Tennessee, 37203 USA): Electrical, thermal and structural properties of $As_2Te_3-As_2Se_3$ glasses. *J. Non. Cryst. Solids* 8-10 (1972) 823
- KIRICHOK, P. P., PODVALNYKH, G. S., KOBRYA, N. V., BOROVSKAYA, O. R., LETYUK, L. M. (Ivano Frankovsk Teachers Inst., Ivano Frankov, UkSSR): X-ray spectral and Moessbauer studies of ferrites subjected to thermomagnetic treatment. *Zh. Fiz. Khim.* 46 (1972) 1550 (In Russian)
- KIRSHENBAUM, A. D., BEARDELL, A. J. (Pyrotech. Div., Feltman Res. Lab., Picatinny Arsenal, Dower, N. J., USA): Thermal analysis of the reaction of molybdenum trioxide with various metals. *Thermochim. Acta* 4 (1972) 239
- KISS, A., GADÓ, P., HEGEDŰS, A. J. (Tungstam Res. Inst., Váci út 77, Budapest 4, Hungary): Investigations on the thermocondensation of ammonium paratungstate pentahydrate by a combined thermoanalytical and IR spectrophotometric method, and additional methods. *Acta Chim. Acad. Sci. Hung.* 72 (1972) 371
- KOLESNIKOV, V. N., KORNIENKO, V. P., DAVYDOV, V. D., BAUMER, V. N. (A. M. Gorki State Univ., Harkov, UkSSR): On the thermolysis of silver and copper oxalates and the formation of highly-disperse metal powders. *Kinet. Katal.* 13 (1972) 665 (In Russian)
- KONOROVA, L. F. (A. F. Ioffe Engn. Phys. Inst., Leningrad, USSR): Thermal defects

- in silicon. *Fiz. Tverd. Tela* 14 (1972) 1852 (In Russian)
- KONYUKHOVA, N. E., KALINICHENKO, I. I., PURTOV, A. I. (S. M. Kirov Polytech. Inst., Gen. Chem. Dept., Sverdlovsk, USSR): Thermal decomposition of copper bichromate and its reduction product. *Zh. Neorg. Khim.* 17 (1972) 1803 (In Russian)
- KORSHAK, V. V., GRIBKOVA, P. N., BALKOVA, T. N., KOMAROVA, L. G., BEKASOVA, N. J. (Acad. Sci. USSR, Organoelemental Cpds. Inst., Moscow, USSR): Thermal degradation of aromatic polyamides containing carborane rings. *Vysokomol. Soedin Ser. A* 14 (1972) 1557 (In Russian)
- KORSHAK, V. V., VINOGRADOVA, S. V., PAPAFA, G. SH., TSISKARISHVILI, R. P., TSISKARISHVILI, P. D. (Acad. Sci. USSR, Organoelemental Cpds. Inst., Moscow, USSR): On some peculiarities information of poly(amide-arylates) based on polycyclic bis-phenols in the course of low-temperature polycondensation. *Vysokomol. Soedin Ser. A* 14 (1972) 1699 (In Russian)
- KOSTYANOVSKY, R. G., KADORKINA, G. K. (Acad. Sci. USSR, Chem. Phys. Met., Moscow, USSR): Stable nitrogen pyramid at 200°C. *Izv. Akad. Nauk. SSSR, Ser. Khim.* (1972) 1676 (In Russian)
- KNUDSON, M. I., MCATEE, J. L. (Baylor Univ., Chem. Dept., Waco, Texas, 76703 USA): A study of thermal decomposition of tris (ethylendiamine)cobalt(III) chloride: Dilution effects. *Thermochim. Acta* 4 (1972) 411
- KRAPF, G., LUTZ, J. L., MELNICK, L. M., BANDI, W. R. (U. S. Steel Corp., Appl. Res. Lab., Monroeville, Pa., 15146 USA): A DTA-EGA study of the chemical isolation of Fe₃C, amorphous carbon, and graphite from steel and cast iron. *Thermochim. Acta* 4 (1972) 257
- KÜHN, H., HORSCH, W. (Karl Marx Univ., Sekt. Biowissenschaft., Leipzig 701, GDR): Stabilität synthetischer Lipide gegen thermische und oxydative Belastung im Vergleich zu Erdnußöl. *Pharm.* 27 (1972) 343
- KULIKOV, I. S. (A. A. Baikov Met. Inst., Moscow, USSR): Utilization of thermodynamic data on dissociation of oxides. *Zh. Fiz. Khim.* 46 (1972) 1552 (In Russian)
- KUSE, D. ZELLER, H. R. (Brown Boveri Res. Ctr., Baden 5401, Switzerland): Anisotropic thermopower in the quasi-one-dimensional conductor K₂Pt(CN)₄Br_{0.3} · 3H₂O. *Solid State Commun.* 11 (1972) 355
- KURASH, V. V., GOL'DANSKY, V. I., MALYSHEVA, T. V., URUSOV, V. S. (V. I. Vernadskii Geochem. and Anal. Chem. Inst., Moscow, USSR): A study of the Mössbauer spectrum of wüstite at low temperatures. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1336 (In Russian)
- KUTSCHER, J., SCHNEIDER, A. (Tech. Univ. Clausthal, Anorg. Chem. Inst., 3392 Clausthal GFR): Chemie der seltenen Erden in geschmolzenen Alkalihalogeniden XI. Spezifische elektrische Leitfähigkeiten und Aktivierungsenergien von Lanthaniden (III)-jodid-Alkalijodid-Schmelzen. *Z. Anorg. Allg. Chem.* 389 (1972) 157
- KUZNETSOV, V. A., GOLUBEVA, N. D., SEMENENKO, K. N. (Acad. Sci. USSR, New Chem. Prob. Inst., Chernogolovka, USSR): Thermal decomposition of NaAlH₄. *Dokl. Akad. Nauk SSSR* 205 (1972) 589 (In Russian)
- KYOTAN, M., MITSUHASHI, S. (Res. Inst. Polymers and Text., Kanagawa, Yokohama 221, Japan): Studies in crystalline forms of nylon 6. II. Crystallization from the melt. *J. Polym. Sci. A-3*, 10 (1972) 1497
- LAGARRIGUE, M. (Univ. Paris Sud., CNRS, Lab. Physiochim., Paris, France): Étude de la chaleur spécifique des dérivés chlorés de l'hexaméthylbenzène entre 30 et 300 K. I: 1,2,3-trichloro-4,5,6-triméthylbenzène. *Molec. Cryst. Liquid Cryst.* 17 (1972) 237
- LANG, I. G., PAVLOV, S. T., TAMARIN, P. V.: Theory of galvanomagnetic and thermomagnetic effects in nondegenerate semiconductors with two kinds of current carrier. *Sov. Phys. Solid. State, Engl. Transl.* 13 (1972) 3083
- LANUSSE, M. C., CARRARA, P., FERT, A. R., MISCHLER, G., REDOULÉS, J. P. (Inst. Natl. Sci. Appl., CNRS, Lab., Phys. Solides, Toulouse 4, France): A study of the specific heat of ferrous chloride and ferrous bromide. *J. Phys.* 33 (1972) 429 (In French)
- LE BORGNE, WEIGEL, D. (Fac. Sci. Rennes, Lab. Chim. Gén. B, Rennes, France): Étude thermogravimétrique et structurale

- des perchlorates de nickel. *Bull. Soc. Chim. Fr. A* (1972) 3081
- LEE, S. H., WULFF, C. A. (Univ. Vermont, Dept. Chem., Burlington, Vermont, 05401 USA): Thermal anomalies in stressed teflon. *Thermochim. Acta* 4 (1972) 513
- LEE, S. L., CAMERON, A. M., WARKENTIN, J. (McMaster Univ., Dept. Chem., Hamilton, Ont., Canada): Thermolysis of Δ^3 -1,3,4-oxadiazolin-2-ones. *Can. J. Chem.* 50 (1972) 2326
- LEGRAND, J. C., MALEISSYE, J. T. (Lab. Chim. Gén. 11 Quai St. Bernard, Paris-75005, France): Décomposition thermique du propyne entre 700 et 1000°C. *Compt. Rend. Ser. C* 274 (1972) 2042
- LEONARD, W. F., LIN, S. F. (Southern Methodist Univ., Electr. Sci. Ctr., Dallas, Texas, 75222 USA): The thermoelectric power due to surface scattering in thin gold films. *Thin Solid Films* 11 (1972) 273
- LEONIDOV, V. J., PERVOV, V. S., KLIUEV, L. I., GAISINSKAIA, O. M., MEDVEDEV, V. A., NIKOLAEV, N. S. (Acad. Sci. USSR, High Temp., Inst., Moscow, USSR): Fluor calorimetry. Enthalpy of tungsten hexafluoride formation. *Dokl. Akad. Nauk SSSR* 205 (1972) 349 (In Russian)
- LEONTIEVA, I. A., SHEVCHENKO, I. A., KISIL', YU. K., RYABIN, V. A. (Ural Basic Chem. Inst., Sverdlovsk, USSR): Thermodynamic and kinetic characteristics of $MgCrO_4 \cdot nH_2O$ dehydration. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1322 (In Russian)
- LE TKHY, C. T., FILATOV, S. K.: High-temperature diffractometry and thermography of sodium sulfate, bromate and sulfate-bromate. *Zh. Neorg. Khim.* 17 (1972) 1551 (In Russian)
- LEVINE, H. S. (Sandia Labs., Albuquerque, N. M., 87115 USA): Formation of vapour nuclei in high temperature melts. *J. Phys. Chem.* 76 (1972) 2609
- LEVITSKII, E. A., GAGARINA, V. A. (Acad. Sci. USSR, Catalysis Inst., Novosibirsk, USSR): On the reproducibility of the disperse structure of aluminium oxide at high temperatures. *Kinet. Katal.* 13 (1972) 779 (In Russian)
- ŁODZIŃSKA, A., GRODZICKI, A., GRODZICKA, T. (N. Copernicus Univ., Inst. Chem., Toruń, Poland): Thermal stability of hexa and tetra-coordinated salts of Co(II) with hexamethylenetetramine. *Rocz. Chem.* 46 (1972) 1017 (In Polish)
- LOKTEV, S. M., MAKARENKOVA, L. I., SLIVINSKII, E. V., ENTIN, S. D. (A. V. Topchiev Petrochem. Synth. Inst., Moscow, USSR): Thermomagnetic analysis of fused iron catalysts for synthesis of higher alcohols from carbon monoxide and hydrogen. *Kinet. Katal.* 13 (1972) 1042 (In Russian)
- LOUNASMAA, O. V., VEURO, M. C. (Helsinki Univ. Technol., Dept. Techn. Phys., Otaniemi, Finland): The specific heat of ^{152}Sm metal between 0.45 and 6 K. *Phys. Lett. A* 40 (1972) 371
- LUI, H., WARKENTIN, J. (McMaster Univ., Dept. Chem., Hamilton, Ont., Canada): Thermolysis of γ -phenylazo- γ -valerolactone. *Can. J. Chem.* 50 (1972) 1767
- LUQUET, H., GUASTAVINO, F., BOUGNOT, J., VASSIÈRE, J. C. (Univ. Sci. and Techniques Languedoc, CNRS, Montpellier, France): Etude du système Cu-S dans le domaine $\text{Cu}_{1.78}\text{S}-\text{Cu}_2\text{S}$ par analyse thermique différentielle. *Mater. Res. Bull.* 7 (1972) 955
- LUTKOV, A. I., VOLGA, V. I., DYMOV, B. K., LUKINA, E. YU., TAMARIN, P. V.: Thermal and electric properties of pyrolytic graphite. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1409 (In Russian)
- LYNCH, R. W., MOROSIN, B. (Sandia Labs., Albuquerque, N. M., 87115 USA): Thermal expansion, compressibility, and polymorphism in hafnium and zirconium titanates. *J. Amer. Ceram. Soc.* 55 (1972) 409
- LYNCH, T. R., MACLACHLAN, F. N. (Univ. Toronto, Chem. Dept., West Hall, Ont., Canada): The thermal decomposition of N-benzoyl-N'-1-cyanocyclohexyl-diimide. *Can. J. Chem.* 50 (1972) 2143
- MACHADO, J. M., MCDERMOTT, J. M., HILL, R. W. (Univ. Oporto, Fac. Ciências, Lab. Fis., Oporto, Portugal): The low temperature specific heats of some Laves phases containing neodymium. *J. Phys. C-Solid State Phys.* 5 (1972) 1573
- MACLEOD, A. C. (Univ. Strathclyde, Dept. Met., Glasgow, G1 1XM, Scotland): Enthalpy and derived thermodynamic functions of platinum and a platinum rhodium alloy from 400 to 1700 K. *J. Chem. Thermodyn.* 4 (1972) 391

- MACLEOD, W. D. (Univ. Strathclyde, Dept. Met., Glasgow G1 1XM, Scotland): Enthalpy of $\text{UO}_{2.25}$ to 1600 K by drop calorimetry. *J. Chem. Thermodyn.* 4 (1972) 699
- MANISSE, N., POMMELET, J. C., CHUCHE, J. (Fac. Sci. Reims, Lab. Chim. Org. Phys., Reims 51, France): Réarrangement thermique d'ényne-1.5 ols-3. Étude du mécanisme de l'isomérisation des énols γ -alléliques intermédiaires. *Bull. Soc. Chim. Fr. B* (1972) 2422
- MANNING, W. R., HUNTER, O., CALDERWOOD, F. W., STACY, D. W. (Champion Spark Plug. Co., Ceramic Div., Detroit, Mich., 48234 USA): Thermal expansion of Nb_2O_5 . *J. Amer. Ceram. Soc.* 55 (1972) 342
- MARANO, R. T., MCATEE, J. L. (Baylor Univ., Waco, Texas, 76703 USA): Differential thermal analysis of ammonium tetrafluoroborate and hexamminonickel- and tetramminozinc-tetrafluoroborate. *Thermochim. Acta* 4 (1972) 421
- MARIA, P. C., ELEGANT, L., AZZARO, M., REVEL, M., NAVECH, J. (Univ. Nice, Lab. Chim. Phys. Org., UER Domaine Méditerranéen, Parc Valrose, 06 Nice, France): Hétérocycles contenant du phosphore. XV. Comportement d'une série d'oxo-2 dioxaphospholanes-1,3,2 vis-à-vis du trifluorure de bore mesures des enthalpies d'addition. *Thermochim. Acta* 4 (1972) 505
- MAR, R. W. (Mat. Div. 8314, Sandia Lab., Livermore, Calif., 94550 USA): High-temperature thermal analysis of high boron alloys using automatic optical pyrometry. *Thermochim. Acta* 4 (1972) 367
- MARTIN, D. L. (Natl. Res. Council Canada, Div. Phys., Ottawa, Ont., Canada): Effect of heat treatment on the specific heat of Cu-40 at. % Ni below 3°K. *Phys. Rev. B. Solid State* 6 (1972) 1169
- MARTIN, J. J. P., MARTIN-LEFÈVRE, C., DESPANGE, B. (Univ. Paris, Lab. Rech. Chim. Syst., Paris⁵, France): Étude des oxynitrates de plomb. Analyses thermiques du pentoxynitrate de plomb hydraté. *Bull. Soc. Chim. Fr. A* (1972) 2573.
- MARTIN, R. H., MARCHANT, M. J. (Univ. Libre Brussels, Fac. Sci., Serv. Chim. Org., Brussels 1050, Belgium): Thermal racemisation of [6], [7], [8] and [9] helicene. *Tetrahedron Lett.* (1972) 3707
- MASUMURA, R. A., VOLD, C. L., GLICKSAM, M. E. (Naval Res. Lab., Transformations and Kinetics, Washington, D. C., 20390 USA): Comments on "High Temperature Elastic Constants and the Phase Stability of Siliconiron". *Scr. Met.* 6 (1972) 607,
- MATHIEU, H. J., RICKERT, H. (Univ. California, Berkeley, Calif., 94720 USA): Elektrochemisch-thermodynamische Untersuchungen am System Kupfer-Schwefel bei Temperaturen $T = 15$ bis 90°C . *Z. Phys. Chem.* 79 (1972) 315
- MATIAŠOVSKÝ, K., PAUČIROVÁ, M., MALINOVSKÝ, M. (Slovakian Acad. Sci., Inst., Inorg. Chem., Bratislava, Czechoslovakia): Contribution to the study of the structure and the thermodynamic properties of molten compounds of the type M_3AlF_6 . I. Structure. *Rev. Roum. Chim.* 17 (1972) 801
- MATSUO, T., OGUNI, M., SUGA, H., SEKI, S. (Osaka Univ., Dept. Chem., Fac. Sci., Toyonaka, Osaka, Japan): Glassy crystalline state in the two-dimensional hydrogen-bonded network in stannous chloride dihydrate and dideuterate crystals. *Proc. Jap. Acad.* 48 (1972) 237
- MATSUSHIGE, K., HIRAKAWA, S., TAKEMURA, T. (Kyushu Univ., Dept. Appl. Sci., Fac. Eng., Fukuoka, Japan): The transition and crystal transformation of poly[3,3-bis] (chloro-methyl) oxacyclobutane under high pressure. *Polymer J.* 3 (1972) 166
- MAURAS, H. (Univ. Paul Sabatier, Lab. Chim. Phys., Toulouse, 31, France): L'analyse thermogradientimétrique. *Analisis I* (1972) 152
- MCALLISTER, P. V., CUTLER, I. B. (Univ. Utah, Div. Mat. Sci. and Engn., Salt Lake City, Utah, 84112 USA): Thermal grooving of MgO and Al_2O_3 . *J. Amer. Ceram. Soc.* 55 (1972) 351
- MCKENZIE, J. W., WU, C., BUBE, R. H. (Stanford Univ., Dept. Mat. Sci., Stanford, Calif., 94305 USA): Thermoelectric analysis of transport in linear transition-metal organometallic compounds. *Appl. Phys. Lett.* 21 (1972) 187
- MCNEIL, I. C., MOHAMED, M. A. J. (Univ. Glasgow, Chem. Dept., Glasgow G12 8QQ, Scotland): Thermal degradation of polystyrene and other polymers in the form of ultra-thin films. *Eur. Polym. J.* 8 (1972) 975
- MEINWALD, J., KAPECKI, J. A. (Cornell

- Univ., Dept. Chem., Ithaca, N. Y., 14850 USA): Intramolecular thermal cyclo-additions of 1,8-divinylnaphthalene and 1,8-distyrylnaphthalene. *J. Amer. Chem. Soc.* 94 (1972) 6235
- MEZHNIKOVSKY, S. M., MATNISHYAN, A. A., LIOGONKY, B. I., BERLIN, A. A. (Acad. Sci. USSR, Inst., Chem. Phys., Moscow, USSR): The investigation of thermostability of poly(sulfophenylene quinones). *Chem. zvesti* 26 (1972) 217
- MILLER, G. W., FITZSIMMONS, R. V. (Owens-Illinois, 1700 N. Westwood, Toledo, Ohio, 43651, USA): Thermal analyses of polymers. XI. Correlation among several modes of thermal analysis for the transitional behaviour of block copolymers. *Thermochim. Acta* 4 (1972) 425
- MILLION, B. (Czechoslovak Acad. Sci., Inst. Phys. Met. Res., Brno, Czechoslovakia): Diffusion von Kobalt in Ni-Co-Legierungen bei Temperaturen bis 1000°C. *Z. Metallk.* 63 (1972) 484
- MILLION, B., CIHA, K., KREJČI, J., STRÁNSKÝ, K. (Czechoslovak Acad. Sci., Inst. Phys. Met., Brno, Czechoslovakia): Self-diffusion of cobalt in coarse grained polycrystalline Ni-Co alloys at low temperature. *Czech. J. Phys. B* 22 (1972) 534
- MINCIONE, E., IOCCO, D. (Univ. Rome, CNR, Ctr. Studio Chim., Sostanze Org. Rome, Italy): Thermal isomerizations of steroid boranes. III. Endocyclis isomerizations on the ring D. *Ann. Chim.* 62 (1972) 285 (In Italian)
- MIRONOV, V. A., AKHREM, A. A. (N. D. Zelinskii Org. Chem. Inst., Moscow, USSR): Kinetics of thermal isomerizations of 2-methylcycloheptadiene-1,3. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1972) 1871 (In Russian)
- MIRONOV, V. A., IVANOV, A. P., AKHREM, A. A. (N. D. Zelinskii Org. Chem. Inst., Moscow, USSR): Thermal isomerization of 1,4,5,5-tetramethylcyclopentadiene. *Izv. Akad. Nauk. SSSR, Ser. Khim.* (1972) 1849 (In Russian)
- MISUK, A., MULAK, J., CZOPNIK, A. (Polish Acad. Sci., Inst. Low Temp. and Struct. Res., Wrocław, Poland): Low temperature magnetic properties of some uranium compounds of AuCu₃-type structure. *Bull. Acad. Pol. Sci. Chim.* 20 (1972) 459
- MITA, I., KAMBE, H. (Inst. Space Aero. Sci., 6-1, Komaba-4, Meguroku, Tokyo, Japan): Heat shielding properties of water-containing plastics. *Intern. J. Polym. Mater.* 1 (1972) 175.
- MITRA, G. B., CHAUDHURI, A. K. (Indian Inst. Techn., Dept. Phys., Kharagpur, India): Debye characteristic temperatures of thin films of copper and silver. *Indian J. Pure Appl. Phys.* 10 (1972) 119
- MIYAGI, A., WUNDERLICH, B. (Bridgestone Tire Co., Tokyo, Res. Inst., Tokyo, Japan): Superheating and reorganization on melting of poly(ethylene terephthalate). *J. Polym. Sci. A-2*, 10 (1972) 1401
- MIYAMOTO, Y., NAKAFUKU, C., TAKEMURA, T. (Fukuoka Univ., Dept. Appl. Phys., Fac. Sci., Fukuoka, Japan): Crystallization of poly(chlorotrifluoroethylene). *Soc. Polym. Sci. Japan* 3 (1972) 122
- MORAWETZ, E. (Univ. Lund, Chem. Ctr., Thermochem. Lab., Lund 220 07, Sweden): Enthalpies of vaporization for a number of aromatic compounds. *J. Chem. Thermodyn.* 4 (1972) 455
- MORAWETZ, E. (Univ. Lund, Chem. Ctr., Thermochem. Lab., Lund 220 07, Sweden): Correlation of sublimation enthalpies at 298.15 K with molecular structure for planar aromatic hydrocarbons. *J. Chem. Thermodyn.* 4 (1972) 461
- MORTIMER, C. T., McNAUGHTON, J. L., PUDDEPHATT, R. J. (Univ. Keele, Dept. Chem., Keele Staffs., ST5 5BG, England): Thermal decomposition of some platinum complexes containing tetrafluoroethylene and hexafluorobut-2-yne. *J. Chem. Soc. Dalton Trans.* (1972) 1265
- MOSIN, A. M., SHAULOV, Y. K. (Moscow Electr. Machinery Inst., Moscow, USSR): Thermodynamics of the thermal decay of siloxane polymers. 1. Removal of lateral radicals. *Zh. Fiz. Khim.* 46 (1972) 1832 (In Russian)
- MOSIN, A. M., SHAULOV, Y. K. (Moscow Electr. Machinery Inst., Moscow, USSR): Thermodynamics of the thermal decay of hexachlorodisilane. *Zh. Fiz. Khim.* 46 (1972) 1834 (In Russian)
- MOSIN, A. M., SHAULOV, Y. K. (Moscow Electr. Machinery Inst., Moscow, USSR): Heats of formation for methyl chlorosilane and ethyl chlorosilane. *Zh. Fiz. Khim.* 46 (1972) 1838 (In Russian)
- MOSIN, A. M., SHAULOV, Y. K. (Moscow

- Electr. Machinery Inst., Moscow, USSR): Thermodynamic functions of tetraphenyl silane and triphenyl chlorosilane. *Zh. Fiz. Khim.* 46 (1972) 1840 (In Russian)
- MOSS, S. C., DENEUFVILLE, J. P. (Energy Conversion Devices Inc., Troy, Mich., 48084 USA): Thermal crystallization of selected Te-based sputtered thin films. *J. Non-Cryst. Solids* 8-10 (1972) 45
- MÜLLER-HARTMANN, E., ZITTARTZ, J. (KFA Jülich, Inst. Festkörper Forsch., Jülich 517, GFR): Specific heat of superconductors with magnetic impurities. *Solid State Commun.* 11 (1972) 401
- MÜLLER, A., PRASAD, T. P., MENGE, R. (Univ. Dortmund, Inst. Anorg. Chem., Dortmund 46, GFR): Thermal decomposition of $(\text{NH}_4)_2\text{MoS}_4$ and $(\text{NH}_4)_2\text{WS}_4$. Heat of formation of $(\text{NH}_4)_2\text{MoS}_4$. *Z. Anorg. Allg. Chem.* 391 (1972) 107
- NADZHAFOV, Y. B., LOSEV, V. B., SHAULOV, Y. K. (Moscow Electr. Machinery Inst., Moscow, USSR): Enthalpy of formation for dimethyl gamma aminopropylethoxy silane, vinyl triethoxy ethoxy silane, and methyl beta cyanoethyl diethoxy silane. *Zh. Fiz. Khim.* 46 (1972) 1835 (In Russian)
- NAGANUMA, S., SAKURAI, T., TAKAHASHI, Y., TAKAHASHI, S. (Lab. Hokkai Can Co., 3-1-1 Ironai, Otaru, Hokkaido, Japan): Dynamic spring analysis (DSA). *Polym. Chem.* 29 (1972) 105 (In Japanese)
- NAGASE, K. (Tohoku Univ., Dept. Chem., Kawauchi, Sendai, Japan): Thermal decomposition reactions of metal oxalato complexes in the solid state. I. Thermographic studies of metal oxalato complexes. *Bull. Chem. Soc. Jap.* 45 (1972) 2166
- NAKAGAWA, H., EHARA, K. (Tokyo Inst. Technol., Fac. Engn. Meguro-ku, Tokyo, Japan): Thermal mechanical analysis of polyethylene. *Polym. Chem.* 29 (1972) 326 (In Japanese)
- NAKAMURA, S., OTAKE, T., MATSUZAKI, K. (Univ. Tokyo, Fac. Engn. Dept. Ind. Chem. Bunkyo-ku, Tokyo, Japan): Thermal behaviour of polymethacrylonitrile. *J. Appl. Polym. Sci.* 16 (1972) 1817
- NECHITALLO, N. A., SANIN, P. I. (A. V. Topchiev Petrochem. Synth. Inst., Moscow, USSR): Thermographic assessment of the compatibility of components in the systems polymer - low-molecular compound. *Vysokomol. Soedin. A-14* (1972) 1491 (In Russian)
- NEFF, V. D., CHANG, M. K. H., FISHEL, D. L. (Kent State Univ., Liquid Crystal Inst., Kent, Ohio, 44242 USA): Thermotropic liquid crystals IV. Anomalous melting behaviour of nematogenic azobenzene derivatives. *Molec. Cryst. Liquid Cryst.* 17 (1972) 369
- NELSEN, S. F., GILLESPIE, J. P. (Univ. Wisconsin, Dept. Chem., Madison, Wisconsin, 53706 USA): Thermal rearrangement of 1,6-(1',8'-naphthalene)1,5-hexadienes. *J. Amer. Chem. Soc.* 94 (1972) 6237
- NELSEN, S. F., GILLESPIE, J. P. (Univ. Wisconsin, Dept. Chem., Madison, Wisconsin, 53706 USA): Thermal rearrangement of 1,8-divinylnaphthalene. *J. Amer. Chem. Soc.* 94 (1972) 6238
- NICHOLLS, J., CARMICHAEL, I. S. E. (Univ. Calgary, Dept. Geol., Calgary, Alb., Canada): The equilibration temperature and pressure of various lava types with spinel- and garnet-peridotite. *Amer. Mineral.* 57 (1972) 941
- NIGAM, A. N., GARG, V. S. (Harcourt Butler Technol. Inst., Phys. Dept., Kanpur, India): Thermo-electric behaviour of hydrogenated nickel. *Phys. Status Solidi A-Appl. Res.* 12 (1972) 589
- NIKAM, P. S. (M. S. G. Coll., Malegaon, Dist. Nasik, India): Dissociation of cupric selenide to new crystallographic phases of cuprous selenide in vacuo. *Curr. Sci.* 41 (1972) 138
- NIKIFOROV, G. A., PLEKHANOVA, L. G., ERSHOV, V. V. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): Thermal decomposition of 2,6-di-tert. butyl-p-benzoquinone-diazide in cyclic esters. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1972) 1819 (In Russian)
- NISHIJO, J., IMANISHI, I., NASHIZUME, G. (Kobe Womens Coll. Pharm., Higashinada, Kobe, Japan): The solid complex of aminomalonic acid with β -alanine and its thermal decomposition. *Bull. Chem. Soc. Jap.* 45 (1972) 2070
- NOEL, F. Imp. Oil Enterprises, (Res. Dept., Ltd., P. O. Box 3022, Sarnia, Ont., Canada): Thermal analysis of lubricating oils. *Thermochim. Acta* 4 (1972) 377
- NOÉ, M., PETERSON, J. R. (c/o Peterson, J. R., Univ. Tennessee, Dept. Chem.,

- Knoxville, Tennessee, 37916 USA): Thermal expansion coefficient of curium-248 dioxide, 248CmO_2 . *Inorg. Nucl. Chem. Lett.* 8 (1972) 897
- NOVIK, V. K., ROITBERG, M. B., GAURILOVA, N. D. (All. Union Chem. Reagents and Very Pure Chem., Moscow, USSR): Pyroelectric thermometers in systems for measuring and regulating temperature. *Zavod. Lab.* 38 (1972) 701 (In Russian)
- NOVITSKIL, L. A., ÉRGARDT, N. N.: New instruments for thermophysical investigations. *High Temp. USSR, Engl. Transl.* 9 (1971) 1236
- OELE, P. C., LOUW, R. (c/o Louw, R., Univ. Leiden, Gorlaeus Labs., Leiden, Netherlands): Thermolysis of S-methoxymethyl thioacetates and derivatives; A novel β -elimination reaction in the vapour phase. *J. Chem. Soc. Chem. Commun.* (1972) 848
- OGILVIE, K. K., WESTHORE, J. B., TAYLOR, G., LIN, D., IWACHA, D., WAYBORN, H., DUNN, G. E. (Univ. Manitoba, Dept. Chem., Winnipeg, Man., Canada): Thermal rearrangement of acyl groups in anhydronucleosides. A convenient synthesis of 5'-O-acetylanhydrouridine. *Can. J. Chem.* 50 (1972) 2365
- O'HARE, P. A. G., SHINN, W. A., MRAZEK, F. C., MARTIN, A. E. (Argonne Natl. Lab., Chem. Engn. Div., Argonne, Ill., 60439 USA): Thermodynamic investigation of trisodium uranium (V) oxide (Na_3UO_4). I. Preparation and enthalpy of formation. *J. Chem. Thermodyn.* 4 (1972) 401
- OKAZAKI, K., CONRAD, H. (Kyushu Inst. Technol., Dept. Met., Kitakyushu, Japan): Thermal and athermal components of the flow stress in zone-refined titanium. *Trans. Jap. Inst. Met.* 13 (1972) 205
- OKUMOTO, T., TAKEUCHI, T., NAKAJIMA, E. (Nagoya Rubber Co., Ltd., Haruhi-mura, Nishikasugai-gun, Aichi-ken, Japan): Determination of carbon black in vulcanized rubber by pyrolysis technique. *Jap. Anal.* 21 (1972) 989 (In Japanese)
- OMINI, M. (Fiat Res. Labs., Turin, Italy): Melting point and structure factor of liquid metals. *Phil. Mag.* 26 (1972) 287
- ORBECK, T.: Discussion on "Theory of life testing and use of thermogravimetric analysis to predict the thermal life of wire enamels" and "The use of thermogravimetric analysis as a rapid screening test for large numbers of experimental insulations." *IEEE Trans. Elect. Insul. EI-7* (1972) 157
- OSAWA, Z., SORIMACHI, M., TSUCHIYA, M., OGIWARA, Y. (Gunma Univ., Dept. Polym. Chem., Fac. Eng., Kiryu, Gunma, Japan): Thermal oxidative degradation of ethylene-vinyl acetate copolymers. *Polym. Chem.* 29 (1972) 10
- OSBORNE, D. W., FLOTOW, H. E. (Argonne Natl. Lab., Chem. Div., Argonne, Ill., 60439 USA): Thermodynamic investigation of trisodium uranium (V) oxide (Na_3UO_4). II. Heat capacity, entropy, and enthalpy increment from 5 to 350 K. Gibbs energy of formation at 298.15 K. *J. Chem. Thermodyn.* 4 (1972) 411
- OVCHINNIKOV, K. V., LOGAI, S. E., KOLBIN, N. I. (Leningrad State Univ., Leningrad, USSR): Production of and research into sublimation of rhenium pentabromide. *Zh. Obshch. Khim.* 42 (1972) 1183 (In Russian)
- PADWA, A., GEHRLEIN, L. (State Univ. New York, Dept. Chem., Buffalo, N. Y., 14214 USA): Thermal and photochemical reactions in the 1,5-diazabicyclo [5.1.0] octa-3,5-diene system. *J. Amer. Chem. Soc.* 94 (1972) 4933
- PAILLET, A., BARBERI, P., HARTMANSHENN, O. (CEN, Div. Chim., Serv. Etud. Séparation, Gif/Yvette 91, France): Étude calorimétrique et gravimétrique d'adsorption de fluor par la fluorine à basse température. *Bull. Soc. Chim. Fr. A* (1972) 3092
- PALADE, D. M., POPOV, Y. L. (Donetsk Polytech. Inst. Donetsk, UkSSR): Thermogravimetry of dihalodiphenanthro-line cobalt (III) salts. *Zh. Neorg. Khim.* 17 (1972) 1667 (In Russian)
- PALONIEMI, P. (Oy. Strömberg Ab, Helsinki, Finland): Isothermal differential calorimetry as a means to measure insulation aging rate down to the operating temperatures. *IEEE Trans. Elect. Insul. EI-7* (1972) 126
- PANI, C. G., SASTRY, R. K. S., MURTY, C. R. K., PREMASWARUP, D. (Andhra Univ., Post-grad. Cent., Guntur 5, India): Crystal structure studies by NQR and temperature variation of NQR frequencies

- in 4,4'-dibromo-diphenyl ether. *Indian J. Pure Appl. Phys.* 10 (1972) 96
- PAN, K., HSIN, S. C., HUANG, T. S. (Natl. Taiwan Univ., Chem. Res. Ctr., Taipei, Taiwan): A thermochemical study on the formation of oxalato-titanium (III) complexes. *J. Chin. Chem. Soc.* 19 (1972) 1
- PANT, A. N., SONI, R. N., GUPTA, S. L. (Birla Inst., Technol. and Sci., Dept. Chem., Pilani, Rajasthan, India): Thermodynamics of the formation of iron (III) and uranium (VI) chelates with 2-hydroxy-1-naphtoic acid. *J. Inorg. Nucl. Chem.* 34 (1972) 2951
- PAOLI, A., FLÜKIGER, R. (Univ. Geneva, Inst. Phys. Mat. Condensee, Geneva, Switzerland): Chaleur spécifique, supraconductivité et ordre cristallin d'alliages de structure A 15 à base de molybdène. *Helv. Phys. Acta* 45 (1972) 31
- PAPIR, Y. S., KAPUR, S., ROGERS, C. E., BAER, E. (City Univ. New York, Richmond Coll., Staten Island, N. Y., 10301 USA): Effect of orientation, anisotropy, and water on the relaxation behavior of Nylon 6 from 4.2 to 300°K. *J. Polym. Sci. A-2*, 10 (1972) 1305
- PAPOULAR, M. (CRTBT, Grenoble 38, France): On thermal expansion of glasses at low temperature. *J. Phys. C-Solid State Phys.* 5 (1972) 1943
- PATIL, K. C., SECCO, E. A. (St. Francis Xavier Univ., Chem. Dept., Antigonish, N. S., Canada): Complex fluorides with perovskite structure: thermal analyses, calorimetry, and infrared spectra. *Can. J. Chem.* 50 (1972) 1529
- PAUČIROVÁ, M., MALINOVSKÝ, M., MATIAŠOVSKÝ, K. (Slovakian Acad. Sci., Inst. Inorg. Chem., Bratislava, Czechoslovakia): Contribution to the study of the structure and the thermodynamic properties of molten compounds of the type M_3AlF_6 . II. Thermodynamic properties. *Rev. Roum. Chim.* 17 (1972) 809
- PAULIK, F., PAULIK, J. (Tech. Univ., Inst. Gen. and Anal. Chem., Budapest 1111, Hungary): Kinetic studies of thermal decomposition reactions under quasi-isothermal and quasi-isobaric conditions by means of the derivatograph. *Thermochim. Acta* 4 (1972) 189
- PAZ-ANRADE, M. I., HERNANDEZ, C., NUNEZ, L., JIMENEZ, E. (Univ. Santiago, Fac. Cienc., Dept. Fis. Fundamental, Compostela, Spain): Étude microcalorimétrique des chaleurs de mélange: systèmes benzène-xylène (ortho, méta et para) à 50°C. *J. Chim. Phys. Phys.-Chim. Biol.* 69 (1972) 1132
- PEGORARO, M., PENATI, A., GIANOTTI, G., CAPIZZI, A. (Politec. Milan, Ist. Chim. Ind., Milan, Italy): Thermal analysis of polypropylene grafted with polyacrylic acid. *Chem. Zvesti* 26 (1972) 224
- PELEVIN, O. V., GIMELFARB, F. A., MILVIDSKY, M. G., ZHERDEV, B. P. (Moscow Rare Met. Inst., Moscow, USSR): The polythermal section of GaAs-Zn. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1049 (In Russian)
- PELLEGRINI, G. (Comm. European Commun., Joint Nucl. Res. Ctr., Hague, Netherlands): Dependence of the lattice thermal expansion perpendicular to the layer planes of pyrocarbons on their structural properties. *Carbon* 10 (1972) 487
- PETRIE, S. E. B. (Eastman Kodak Co., Res. Labs., Rochester, N. Y., 14650 USA): Thermal behaviour of annealed organic glasses. *J. Polym. Sci. A-2*, 10 (1972) 1255
- PILOT, A., VACCARONE, R., RIZZUTO, C. (CNR, Ist., Sci. Fis., Genoa, Italy): Resistivity of Zn Cr and Zn Mn to below 0.1°K. *Phys. Lett. A* 40 (1972) 405
- PINEL, J., LEBEAU, C. (Inst. Natl. Sci. Appl., Rennes, France): An apparatus for the measurement of heat capacity at low temperatures. *J. Phys. E-Sci. Instrum.* 5 (1972) 688
- PISTORIUS, C. W. F. T., RICHTER, P. W. (S. African Council Sci. and Ind. Res., Natl. Phys., Pretoria, South Africa): Crystallographic data for KNO_2 III at 35°C and KNO_2 VII at 100°C. *Z. Anorg. Allg. Chem.* 389 (1972) 315
- POJOUR, A. F., YATES, B., KELLY, B. T. (Hawker Siddeley Dynam. Ltd., Hatfield, Herts., England): Thermal expansion at elevated temperatures: III. A hemispherical laminar composite of pyrolytic graphite, silicon carbide and its constituents between 300 and 800°K. *J. Phys. D-Appl. Phys.* 5 (1972) 1321
- POKROVSKY, A. N. (Moscow State Univ., Inorg. Chem. Dept., Moscow, USSR): An investigation of isothermic sections of the system $ThO_2-Y_2O_3-WO_3$. *Vestn.*

- Mosk. Univ. Khim.* (1972) 302 (In Russian)
- PRASAD, S., RAO, B. A. (Indian Inst. Techn., Phys. Dept., New Delhi-29, India): Performance of PbTe and Bi₂Te₃ solar thermoelectric generator materials. *Indian J. Pure Appl. Phys.* 10 (1972) 36
- PRICE, G. H. (Australian Atom Energy Comm., Res. Estab., Lucas Heights, NSW, Australia): A simplified derivative thermograph. *J. Phys. E-Sci. Inst.* 5 (1972) 747
- PRIVALKO, V. P. (Acad. Sci. UkSSR, Inst. Chem., Macromol. Cpd., Kiev, UkSSR): Thermodynamic analysis of polymorphic transformation and glass-transition of poly(ethylene glycol adipate). *Vysokomol. Soedin. A* 14 (1972) 1235
- PRIVALKO, V. P., LIPATOV, YU. S. (Acad. Sci. UkSSR, Inst. Chem., Macromol. Cpd., Kiev, UkSSR): Method for estimation of the heat capacity of linear polymers in amorphous state. *Vysokomol. Soedin. A* 14 (1972) 1420 (In Russian)
- PRODAN, E. A., PAVLYUCHENKO, M. M., ZONOV, YU. G. (Acad. Sci. BeSSR, Gen. and Inorg. Chem. Inst., Minsk, BeSSR): A study of thermal transformation of MnNa₃P₃O₁₀ · 12H₂O. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1090 (In Russian)
- PRODAN, E. A., PAVLYUCHENKO, M. M., PRODAN, L. I., SOTNIKOVA-YUZHNIK, V. A., SOTNIK-YUZHNIK, YU. M., PESLYAK, G. V. (Acad. Sci. BeSSR, Gen. and Inorg. Chem. Inst., Minsk, BeSSR): Thermal transformations of thallium tripolyphosphate hydrate. *Izv. Akad. Nauk CCCP, Neorg. Mater.* 8 (1972) 1507 (In Russian)
- QUINSON, J. F., ESCOUBES, M., CHAUCHARD, J., CHABERT, B., SOULIER, J. P. (Univ. Claude Bernard, Lab. Chim. Appl. and Génie, 69-Villeurbanne, France): Étude microcalorimétrique de la sorption d'eau sur des fibres et des grains de polytéraphthalate d'éthylène-glycol. *J. Chim. Phys. Phys.-Chim. Biol.* 69 (1972) 1143
- RAJPUT, B. K., KARKHANAVALA, M. D. (Bhabha Atom. Res. Cent., Chem. Div., Trombay, Bombay-85, India): Room temperature reactions of freshly formed strontia with moisture and CO₂. *J. Indian Chem. Soc.* 49 (1972) 433
- RALLO, F., RODANTE, F. (Fac. Ingn. Rome, Ist. Chim., Rome, Italy): Calorimetric study of water-dimethyl-sulfoxide adducts in dioxane solution. *Annal. Chim.* 62 (1972) 221
- RAMACHANDRAN, V. S. (Nat. Res. Council of Canada, Div. Bldg. Res., Ottawa, Canada): Elucidation of the role of chemical admixtures in hydrating cements by DTA technique. *Thermochim. Acta* 4 (1972) 343
- RAD, R. A. V., TABE, V. B. (Banaras Hindu Univ., Inst. Techn., Varanasi, India): Determination of some thermodynamic properties of Fe₂O₃ by an e.m.f. method. *Curr. Sci.* 41 (1972) 125
- REDMOND, A. D., YATES, B. (Ormskirk Secondary Modern Sch., Ormskirk, Lancs., England): The low temperature thermal expansion of thalious chloride and thalious bromide. *J. Phys. C-Solid State Phys.* 5 (1972) 1589
- REED, T. B., FAHEY, R. E., STRAUSS, A. J. (MIT, Lincoln Lab., Lexington, Mass., 02173 USA): Scaled crucible technique for thermal analysis of volatile compounds up to 2500°C: melting points of EuO, EuS, EuSe and EuTe. *J. Cryst. Growth* 15 (1972) 174
- REICH, L., GREFORY, W., STIVALA, S. S. (Polym. Res. Branch., Picatinny Arsenal, Dover, N. J., 07801 USA): Estimation of diffusion parameters for polymer films by TG. *Thermochim. Acta* 4 (1972) 493
- REZUKHINA, T. N. (M. V. Lomonosov State Univ., Moscow, USSR): Defects in crystal-line lattices of recently formed high-melting phases and related errors in experimentally obtained thermodynamic properties. *Zh. Fiz. Khim.* 46 (1972) 1564 (In Russian)
- RIPAN, R., PUȘCAȘIU, M., STĂNESCU, D., BOIAN, P. (Minist. Educ., Inst. Chem., Cluj, Roumania): Thermal behaviour of the potassium 11-tungstosnickel-silicate. *Z. Anorg. Allg. Chem.* 391 (1972) 183
- RIPAN, R., STĂNESCU, D., PUȘCAȘIU, M. (Minist. Educ., Inst. Chem., Cluj, Roumania): The thermal decomposition of some heteropolytungstates with transition metal-ions. *Z. Anorg. Allg. Chem.* 391 (1972) 187
- ROMEO, G., SMELTZER, W. W. (Gen. Electr., Res. and Dev. Ctr., Schenectady, N. Y., 12301 USA): The high temperature sul-

- fidation properties of nickel-chromium alloys. *J. Electrochem. Soc.* 119 (1972) 1267
- ROTHENBERGER, O. S., MOORE, J. A. (c/o Moore, J. A., Univ. Delaware, Dept. Chem., Newark, Delaware, 19711 USA): Heterocyclic studies. 36. Acyldiazepinium intermediates in thermal reactions of diazabicyclo [3.2.0] heptenones. *J. Org. Chem.* 37 (1972) 2796
- ROTBORT, J. L. (Argonne Natl. Lab., Mat. Sci. Div., Argonne, Ill., 60439 USA): High-temperature deformation of polycrystalline uranium carbide. *J. Nucl. Mater.* 44 (1972) 24
- ROY, H., SAMANTA, P. K., DAS, S. (Fert. Corp. India Ltd., Planning Devel. Div., Sindri, Bihar, India): A modified high temperature dilatometer for studying the expansion characteristics of refractory linings and thermal insulating materials. *Techn.* 8 (1971) 178
- RUSTAMOV, P. G., ALIDZHANOV, M. A., ABILOV, C. I. (Acad. Sci. AzSSR, Inorg. and Phys. Chem. Inst., Baku-73, AzSSR): Effect of partial substitution of lead by gallium, indium and thallium on thermoelectric properties of PbTe. *Phys. Status Solidi A-Apl. Res.* 12 (1972) K 103
- RYABOV, E. N., VASILKOVA, I. V., STARIKOVA, L. P., SANDLER, R. A., GODUN, I. V. (Leningrad Min. Inst., Leningrad, USSR): Thermography of the $AlCl_3 - TiCl_3 - NaCl$ system. *Zh. Neorg. Khim.* 17 (1972) 1759 (In Russian)
- SALAMA, K., BROTZEN, F. R., DONOHO, P. L. (Rice Univ., Houston, Texas, 77001 USA): Elastic constants of terbium between 78 and 300 K. *J. Appl. Phys.* 43 (1972) 3254
- SAMSONOW, G. W., NESCHPOR, W. S., MALACHOW, J. S., KLIMENKO, W. A., KISELJOWA, A. F. (Acad. Sci. UkSSR, Inst. Prob. Raw. Mat. Sci., Kiev, UkSSR): Die Wärmeleitfähigkeit der Übergangsmetalle. *Z. Metallk.* 63 (1972) 490
- SANDAKOV, V. M., ESIN, Y. O., GELD, P. V. (S. M. Kirov Polytechn. Inst., Sverdlovsk, USSR): Heats of formation and thermodynamics of nickel and cobalt monoaluminides. *Zh. Fiz. Khim.* 46 (1972) 1567 (In Russian)
- SARMA, V. V. S., MURTY, C. R. K. (Andhra Univ., Post-grad Cent., Guntur 5, India): Temperature variation of NQR frequencies in *p*-iodoaniline and *o*-iodophenol. *Indian J. Pure Appl. Phys.* 10 (1972) 100
- SATO, T. (Shizuoka Univ., Fac. Engn., Dept. Appl. Chem., Hamamatsu, Japan): The thermal transformation of gelatinous aluminium hydroxide. *Z. Anorg. Allg. Chem.* 391 (1972) 167
- SCHMUTZLER, R. W., HENSEL, F. (Univ. Karlsruhe, Inst. Phys. Chem. and Electrochem., Karlsruhe, GFR): The thermoelectric power of fluid mercury in the density range of the metal-nonmetal transition. *Ber. Bunsen Ges. Phys. Chem.* 76 (1972) 531
- SCHROFF, A. V. (M. S. Univ. Baroda, Fac. Techn. Engn., Baroda, India): Heat propagation in the lattice structures of minerals. *J. Techn. Eng.* 6 (1971) 7
- SCHULTZE-RHONHOF, E., WINKHAUS, G. (Vereinigte Aluminium Werke A.G., 53-Bonn, 1, GFR): Beiträge zur Chemie des Bauxitaufschlusses. I. Untersuchungen im System $Na_2O - CaO - Al_2O_3 - TiO_2 - H_2O$ bei 100°C unter Normaldruck. *Z. Anorg. Allg. Chem.* 390 (1972) 97
- SCHULZ, H., TSCHERRY, V. (Eidgenoss T. H., Inst. Kristallogr. and Petrogr., Zürich 8006, Switzerland): Structural relations between the low- and high-temperature forms of β -eucryptite ($LiAlSiO_4$) and low and high quartz. I. Low temperature form of β -eucryptite and low quartz. *Acta Cryst.* B28 (1972) 2168
- SCHULZ, H., TSCHERRY, V. (Eidgenoss T. H., Inst. Kristallogr. and Petrogr., Zürich 8006, Switzerland): Structural relation between the low- and high-temperature forms of β -eucryptite ($LiAlSiO_4$) and low and high quartz. II. High-temperature form of β -eucryptite and high quartz. *Acta Cryst.* B28 (1972) 2174
- SCHWARTZ, J., CANNON, J. B. (Princeton Univ., Dept. Chem., Princeton, N. J., 08540 USA): Tris(triphenylphosphine) methyliridium(I). Synthesis, characterization, and thermal decomposition. *J. Amer. Chem. Soc.* 94 (1972) 6226
- SELIVANOVA, N. M., PRYMOVA, L. A., KRAVCHENKO, L. K., ORLOVA, V. T.: Thermal resistance of double magnesium-ammonium selenate. *Zh. Neorg. Khim.* 17 (1972) 1551 (In Russian)
- SENGUPTA, S. K., VARMA, S. (Fert. Corp.

- India Ltd., Sindri, Bihar, India): A study on the urea-monocalcium phosphate adduct formation. *Techn. 8* (1971) 161
- SEVERSON, R. F., SCHULLER, W. H. (USN, Stores Lab., Olustee, Florida, 32072 USA): The thermal behaviour of some resin acids at 400–500°C. *Can. J. Chem. 50* (1972) 2224
- SEVOSTYANOV, V. P., DVORNIKOVA, L. M. (N. G. Chernyshevskii State Univ., Saratov, USSR): Thermal decomposition of dysprosium and holmium dicarboxylates. *Zh. Neorg. Khim. 17* (1972) 1499 (In Russian)
- SHEINKER, M. E., ZAGRYAZHSKII, V. L., KALISHEVICS, G. I., GELD, P. V. (S. M. Kirov Polytech. Inst., Sverdlovsk, USSR): Determination of heat capacity jump and curie temperature of alloys of the $Mn_2(Si_xGe_{1-x})_2$ system. *Zh. Fiz. Khim. 46* (1972) 1578 (In Russian)
- SHIMADA, J., KABUKI, K., ANDO, M. (Nippon Teleg. and Tel. Publ. Corp., Ibaracki, Japan): Thermal oxidative degradation of ABS resin and its stabilization. *Rev. Elect. Commun. Lab. Tokyo, 20* (1972) 564
- SHURYGIN, P. M., MARBAKH, A. L., DENISON, V. M., IVANOV, V. V. (M. I. Kalinin Non-ferrous Met. Inst., Krasnoyarsk, USSR): Kinetics of thermal decomposition of GaP and GaAs under a layer flux. *Dokl. Akad. Nauk SSSR 204* (1972) 1419 (In Russian)
- SHUMSKII, V. F., ZUBKO, S. A., LITSOV, N. I., KHAILENKO, L. V., LIPATOV, YU. S. (Acad. Sci. UkSSR, Inst. Chem. Macromol. Cpd., Kiev, UkSSR): High-temperature transition in oligourethanes. *Vysokomol. Soedin. Ser. A 14* (1972) 1409 (In Russian)
- SHUSHAKOV, I. G., ZLOBIN, P. D., PUSTOVALOV, G. D. (Izhevsk Met. Plant, Izhevsk, USSR): Decarbonization decrease during heat treatment of wire. *Metallurg.* (1972) 29 (In Russian)
- SIMMONS, E. L., WENDLANDT, W. W. (Univ. Houston, Thermochem. Lab., Dept. Chem., Houston, Texas, 77004 USA): Deaquation kinetics at the boiling point of water: $BaCl_2 \cdot 2H_2O$ and $BaBr_2 \cdot 2H_2O$. *Thermochem. Acta 4* (1972) 291
- SINGH, H. P., RAO, M. H., MISRA, S. (Banaras Hindu Univ., Inst. Technol., Dept. Met., Varanasi, India): Thermodynamic properties of the phase In_3Bi_3 . *Ser. Met. 6* (1972) 621
- SINHA, O. P., SIVARAMAN, S. (Univ. Sagar, Dept. Phys., Sagar, India): Decay and thermoluminescence studies of SrS phosphors activated by Zr, Sn, Pb and Th. *Indian J. Pure Appl. Phys. 10* (1972) 134
- SIRDESHMUKH, D. B., DESHPANDE, V. T. (Osmania Univ., Phys. Dept., Hyderabad-7, India): Lattice thermal expansion of lead iodide. *Curr. Sci. 41* (1972) 210
- SLOBODYANYUK, A. A., TRETYAKOV, Y. D., BESONOV, A. F. (M. V. Lomonosov State Univ., Moscow, USSR): Thermodynamic stability of copper titanate and gallates. *Zh. Neorg. Khim. 17* (1972) 1776 (In Russian)
- SMIRNOVA, G. M., ZHITKOVA, T. N., SUSHKOVA, S. G., KALITINA, L. N., ZHMYRKO, L. A., SHISHKINA, Z. I. (Ural Chem. Res. Inst., Sverdlovsk, USSR): Study of lead borates and their heat treatment products. *Zh. Neorg. Khim. 17* (1972) 1903 (In Russian)
- SMIRNOV, YU. N., TIMOSHENKO, V. M.: Magnetic contribution to thermal expansion of palladium. *JETP Lett. 15* (1972) 334
- SOCHAVA, I. V., TSERETELI, G. I., SMIRNOVA, O. I.: Calorimetric study of the recrystallization and reorganization processes of crystallites of a polymer. *Sov. Phys.-Solid State, Engl. Transl. 14* (1972) 460
- SORAI, M., SEKI, S. (Osaka Univ., Dept. Chem. Fac. Sci., Toyonaka, Osaka 560, Japan): Magnetic heat capacity due to cooperative low-spin $^1A_1 \rightleftharpoons$ high-spin 5T_2 transition in $Fe(phen)_2(NCS)_2$ crystal. *J. Phys. Soc. Jap. 33* (1972) 575
- SPACU, P., CISMARU, G. D. (Univ. Bucharest, Fac. Chem., Bucharest, Roumania): Behaviour of uranium compounds on heating. Thermal decomposition of ammonium uranates. *Rev. Roum. Chim. 17* (1972) 947
- SPENCER, T. A., ARIEL, R. A., ROUSE, D. S., DUNLAP, W. P. (Dartmouth Coll., Dept. Chem., Hannover, New Hampshire, 03755 USA): Pyrolysis of 2-acetoxy-2-methoxycyclopentane-1,3-dione and 3-acetoxy-3-methylpentane-2,4-dione. *J. Org. Chem. 37* (1972) 2349
- STAHL, E. (Univ. Saarland, Inst. Pharmakognosie und Anal. Phytochem., 66 Saarbrücken 15, GFR): Thermofraktographie. *Fresenius Z. Anal. Chem. 261* (1972) 11
- STARCKOVA, N. K., STARKOV, L. N., SRYVA-

- LIN, I. T. (Perm Polytech. Inst., Perm, USSR): Heats of mixing, density and electric conductivity of melts in the $\text{CaSiO}_3\text{-CaF}_2$ and CaO-CaF_2 systems. *Zh. Fiz. Khim.* 46 (1972) 1574 (In Russian)
- STATTON, W. O. (Univ. Utah, Div. Mat. Sci. and Engn., Salt Lake City, Utah, 84112 USA): High-temperature annealing of drawn nylon 66 fibers. *J. Polym. Sci. A-2*, 10 (1972) 1587
- STEFFEN, K. D. (Dynamit Nobel AG., Troisdorf, GFR): Poly-dioxyarylen (dioxy-cycloalkylen)-diphenylsilane II. Molekulargewichte, Erweichungstemperature, Thermostabilitäten und hydrolytische Beständigkeiten dieser Polymeren. *Angew. Makromol. Chem.* 24 (1972) 21
- STORONKIN, A. V., VASILKOVA, I. V., PYATUNIN, M. D. (A. A. Zhdanov State Univ., Leningrad, USSR): Thermography of the LiCl-FeCl_3 system. *Zh. Fiz. Khim.* 46 (1972) 1604 (In Russian)
- STORONKIN, A. V., VASILKOVA, I. V., FEDOROV, Y. A. (A. A. Zhdanov State Univ., Leningrad, USSR): Thermodynamic study of the ternary system $\text{VCl}_3\text{-CrCl}_3\text{-KCl}$. 3. Configuration of solid phase-melt nodes. *Zh. Fiz. Khim.* 46 (1972) 1722 (In Russian)
- STRAUMANIS, M. E., SHAH, J. S. (Univ. Missouri, Rolla, Miss., 65401 USA): Low temperature lattice parameters and expansion coefficients of Al_2Au and LiF . Grüneisen constants of LiF . *Z. Anorg. Allg. Chem.* 391 (1972) 79
- STRIZHKOV, B. V., MARTYENKO, A. P., GALKIN, B. D., ROZYNOV, B. V.: Thermal decomposition of chromium bisarene compounds in vacuum. *Zh. Neorg. Khim.* 17 (1972) 1645 (In Russian)
- STURM, E. (Brooklyn Coll. City Univ. New York, Dept. Geol., Brooklyn, New York, 11210 USA): A systematic error in quantitative differential thermal analysis. *Thermochim. Acta* 4 (1972) 461
- SUKHAREVA, L. A., VORONKOV, L. A., ZUBOV, P. I.: Effect of structural transformations during formation of epoxy coatings on the thermophysical characteristics. *Vysokomol. Soedin. Ser. B* 14 (1972) 518 (In Russian)
- SULLIVAN, C. L., PRUSACZYK, J. E., CARLSON, K. D. (Case Western Reserve Univ., Dept. Chem., Cleveland, Ohio, 44106 USA): Heats of reaction for the $\text{Sb}_4 = 2\text{Sb}_2$ equilibrium and sublimation of Sb_3 and Bi_3 in the vaporization of antimony and bismuth. *High Temp. Sci.* 4 (1972) 212
- SYOYOMA, S., OSAKI, K. (Kyoto Univ., Fac. Pharm. Sci., Sakyo, Kyoto, Japan): An X-ray study of the low temperature form of $\text{MgSiF}_6 \cdot 6\text{H}_2\text{O}$ and the relation between the crystal lattices of low- and high-temperature forms. *Acta Crystallogr.* 28B (1972) 2626
- SWEET, G. E., BELL, J. P. (Univ. Connecticut, Storrs, Connecticut, 06268 USA): Multiple endotherm melting behaviour in relation to polymer morphology. *J. Polym. Sci. A-2*, 10 (1972) 1273
- TAKANO, Y., SHICHIMI, T., YAMAMOTO, R., YAMAMOTO, N., YAMASHITA, I. (Ouchishinko Chem. Ind. Co. Ltd. 72 Umegaecho Kitaku Osaka 530, Japan): Sulfur containing aldehyde oligomers as thermal stabilizer. II. *J. Soc. Rubber Ind. Japan* 45 (1972) 588 (In Japanese)
- TAMARIN, P. V., SHALYT, S. S., LANG, I. G., PAVLOV, S. T.: Galvanomagnetic and thermomagnetic effects in p-type InSb . *Sov. Phys.-Solid State, Engl. Transl.* 14 (1972) 47
- TANAKA, R., MURAKAMI, S., FUJISHIRO, R. (Osaka City Univ., Fac. Sci. Dept. Chem., Sumiyoshi, Osaka, Japan): An isothermal displacement calorimeter for measuring enthalpies of mixing. *Bull. Chem. Soc. Jap.* 45 (1972) 2107
- TANAKA, S., NAKAJIMA, A. (Univ. Tokyo, Inst. Nucl. Study, Tokyo, Japan): On the melting of desoxyribonucleic acid as heterogeneous chain. *Macromol.* 5 (1972) 482
- TANNY, S. R., GROSSMAN, J., FOWLER, F. W. (c/o Fowler, F. W., State Univ. New York, Dept. Chem., Stony Brook, N. Y., 11790 USA): Synthesis and thermal rearrangement of the 2-azabicyclo [3.1.0] hex-3-ene ring system. *J. Amer. Chem. Soc.* 94 (1972) 6495
- TARDY, M., BREGEAULT, J. M. (Univ. Paris, Lab. Cinétique Chim., Paris, France): Montage d'analyse thermique différentielle sous pression de vapeur d'eau contrôlée: application à la décomposition de sulfates doubles hexahydratés. *Analisis* 1 (1972) 127

- TARDY, M., BRÉGEAULT, J. M., PANNETIER, G. (CNRS, Univ. Paris, Lab. Cinétique Chim., Paris 5, France): Étude des processus de dégradation thermique des sels doubles hydratés. V. Quelques aspects de la déshydratation du sulfate $\text{Cs}_2\text{Cu}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$. *Bull. Soc. Chim. Fr. A* (1972) 2658
- TEGMAN, R. (Univ. Umeå, Dept. Inorganic Chem., Umeå 90187, Sweden): Thermodynamic studies of high temperature equilibria. VI. Equilibria between species in a sodium polysulfide melt and sulfur gas at the temperatures 500°C and 600°C. *Chem. Scr.* 2 (1972) 63
- THEETEN, J. B., PARADAN, H., ESCARIEUX, M., DOMANGE, J. L., BONNEROT, J. (Lab. Electr. and Phys. Appl., 3 Ave. Descartes, Limeil 94, France): Appareillage pour étude par diffraction d'électrons lents à température variable dans la gamme 20°K—150°K. *Rev. Phys. Appl.* 7 (1972) 73
- THOMA, R. E. (Oak Ridge Natl. Lab., Reactor Chem. Div., Oak Ridge, Tennessee, 37830 USA): High-temperature phase equilibria in lithium-, sodium and thorium-fluoride mixtures. *J. Inorg. Nucl. Chem.* 34 (1972) 2747
- THOMAS, C. B., CAREW-JONES, R., BOSNELL, J. (Royal Radar Estab., Great Malvern, Worcs., WR14 3PS, England): Thermal analysis of preswitching characteristics of a thin-film amorphous-chalcogenide switch. *Electron. Lett.* 8 (1972) 447
- THOMAS, D. L., MALE, J. C. (Cent. Electr. Res. Labs., Leatherhead, Surrey, England): Thermal breakdown in chalcogenide glasses. *J. Non-Cryst. Solids* 8—10 (1972) 522
- THOMPSON, J. B., WILSON, G. W. (Newcastle Polytech., Dept. Phys. and Phys. Electr., Newcastle, Nothum., England): Thermoelectric measurements on thin copper films. *Thin Solid Films* 11 (1972) 445
- TIMOFEEVA, L. K., SHAPOSHNIKOV, A. P., MYSENKOVA, I. P. (Moscow Glass Ind. Inst., Moscow, USSR): The use of rapid differential thermal analysis for controlling the properties of silicate melts. *Steklo Keram.* (1972) 13 (In Russian)
- TIMOFEEVA, I. L., SHVEDOVA, L. K. (Acad. Sci. UkSSR, Mat. Technol. Inst., Kiev, UkSSR): Microhardness and thermal expansion of transition metal nitrides within the 80—300°K temperature range. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1169 (In Russian)
- TRAKHTENBERG, B. F., KOTEL'NIKOV, G. A., KOLESNIKOV, M. S.: Method for the investigation of thermomechanical fatigue of materials in contact with melts. *Ind. Lab. Engl. Transl.* 37 (1971) 1921
- TSENTSIPER, A. B., DOBROLYUBOVA, M. S. (N. S. Kurnakov Gen. and Inorg. Chem. Inst., Leningrad, USSR): Thermal decomposition of kalium, rubidium and cesium ozonides. *Izv. Akad. Nauk SSSR, Ser. Khim.* (1972) 1471 (In Russian)
- TSERELNIKOV, V. N., GONCHAROV, A. I. (M. V. Lomonossov State Univ., Chem. Fac., Moscow, USSR): Process of thermal disproportionation for hafnium tribromide. *Zh. Fiz. Khim.* 46 (1972) 1877 (In Russian)
- TUFARIELLO, J. J., BAYER, A. B. (State Univ. New York, Dept. Chem., Buffalo, N. Y., 14214 USA): Thermal behaviour of exo-5-substituted bicyclo [2.1.0] pentanes. *Tetrahedron Lett.* (1972) 3551
- TURNER, D. J. (Cent. Electr. Res. Labs., Chem. Div. Leatherhead, Surrey, England): Chelate formation in high temperature steam. *J. Appl. Chem. Biotechnol.* 22 (1972) 689
- URUSHIZAKI, M., IKEGAMI, A., MIYASHITA, T., AIDA, H. (Fukui Univ., Dept. Ind. Chem., Fac. Eng., Bunkyo 3—9—1, Fukui, Japan): Thermal stability of poly-(N-p-substituted phenyl maleimides). *Polymer Chem.* 29 (1972) 40 (In Japanese)
- UY, O. M., SRIVASTAVA, R. D., FARBER, M. (Space Sci. Inc., Monrovia, Calif., 91016 USA): Mass spectrometric determination of the heats of formation of the gaseous molecules AlOF_2 and AlF_2 . *High Temp. Sci.* 4 (1972) 227
- VAISBURD, S. E., BURYLEV, B. P., ZEDINA, I. N., REMEN, T. F. (Leningrad Nickel Ind. Inst., Leningrad, USSR): Thermodynamic of sulfide melts and their quantitative description. *Zh. Fiz. Khim.* 46 (1972) 1528 (In Russian)
- VAN DER MEULEN, W., DERUYTTERE, A. (Katholieke Univ., Dept. Met., Leuven, Belgium): On the decomposition of the Cu—Sn γ -phase at lower temperatures. *Ser. Met.* 6 (1972) 579

- VAN DER WEEN, J., DE JEU, W. H., GROBBEN, A. H., BOVEN, J. (N. V. Philips Gloeilampenfabrieken, Phil. Res., Eindhoven, Netherlands): Low melting liquid crystalline p,p'-di-n-alkylazoxy-and azobenzenes. *Molec. Cryst. Liquid Cryst.* 17 (1972) 291
- VAN MILTENBURG, J. C. (Rijks Univ. Utrecht, Lab. Algemene Chem., Utrecht, Netherlands): Construction of an adiabatic calorimeter. Thermodynamic properties of standard n-heptane from 155 to 270°K and of 2,2-dichloropropane from 135 to 270°K. *J. Chem. Thermodyn.* 4 (1972) 773
- VANYUKOV, A. V., BYSTROV, V. P., BABASHEV, I. S. (Moscow Steel and Alloy Inst., Moscow, USSR): Structural diagram and thermodynamics of iron-sulfur system. *Zh. Fiz. Khim.* 46 (1972) 1538 (In Russian)
- VÁRHEGYI, G., SZÉKELY, T. (Hungarian Acad. Sci., Res. Grp. Inorg. Chem., Budapest 8, Hungary): Some new data on the kinetics and mechanism of the thermal degradation of teflon. *Acta Chim. Acad. Sci. Hung.* 73 (1972) 179
- VELU, E., RENARD, J. P., DUPAS, C. (CNRS, Univ. Paris, Inst. Electr. Fondamentale, Orsay 91, France): Aimantation à basse température de deux sels ferromagnétiques uniaxes $\text{Cu}(\text{NH}_4)_2\text{Br}_4 \cdot 2\text{H}_2\text{O}$ et $\text{CuRb}_4 \cdot 2\text{H}_2\text{O}$. *Solid State Commun.* 11 (1972) 1
- VERMA, B. S. (Nat. Phys. Lab., New Delhi-12, India): Calculation and verification of temperature coefficient of resistance of thin epitaxial films of silver. *Indian J. Pure Appl. Phys.* 10 (1972) 134
- VILK, YU. N., ORDANYAN, S. S., AVGUSTINNIK, A. I. (Lensovet Technol. Inst., Leningrad, USSR): On the possible structure of isothermal sections of the Zr—W—C system at 2200 and 2600°C. *Izv. Akad. Nauk SSSR, Neorg. Mat.* 8 (1972) 1245 (In Russian)
- VINOGRADOVA, S. V., VASNEV, V. A., PERFILOV, YU. I., KORSHAK, V. V. (Acad. Sci. USSR, Inst. Organoelement Cpds., Moscow, USSR): On the relative reactivity of some types of dihydroxy compounds during low-temperature polycondensation. *Vysokomol. Soedin. B* 14 (1972) 457 (In Russian)
- VISWANATHAN, R., LAWSON, A. C. (Univ. California, San Diego, Dept. Appl. Phys., La Jolla, Calif., 92037 USA): Heat capacity of superconducting ternary molybdenum sulfides. *Sci.* 177 (1972) 267
- VISWANATH, D. S., MATHUR, B. C. (Indian Inst. Sci., Bangalore, India): Thermal conductivity of liquid metals and alloys. *Met. Trans.* 3 (1972) 1769
- VOLCKOVA, E. A., SMOLYANINOVA, D. D., GENCHEL, V. G., LOPATKINA, I. L., SHAULOV, Y. K. (Moscow Electr. Machinery Inst., Moscow, USSR): Heat of combustion, enthalpy of formation and heat of vaporization of octamethyl germaxane. *Zh. Fiz. Khim.* 46 (1972) 1837 (In Russian)
- VORONKOVA, V. V., BASKAKOV, Y. A., CHEKAREVA, T. G., SVIRSKAYA, P. I., NEGREBETSKII, V. V.: Thermal decomposition of N-methyl carbomoyl-N-phenyl hydroyl amine. *Zh. Org. Khim.* 8 (1972) 1479 (In Russian)
- WACHTEL, E., MAIER, J. (Max Planck Inst. Met. Forsch., Inst. Met. Kunde, Stuttgart, GFR): Constitution and magnetic properties of B—B-metal and Fe—B-metal alloys, III. Magnetic behaviour of Fe—B-metals melts. *Z. Metallk.* 63 (1972) 461
- WAWZONEKI, S., PLAISANCE, T. H., BOAZ, D. P. (Univ. Iowa, Dept. Chem., Iowa City, Iowa, 52240 USA): Pyrolysis of 1,1,1-trimethylamine-2-arylcarbomoylimides. *Tetrahedron* 28 (1972) 3669
- WEEN, S. (Ever Ready Thermometer Co. Inc., New York, N. Y., USA): The Beckmann Differential Thermometer: Its principles of construction and application. *Mater. Res. Stand.* 12 (1972) 31
- WEIR, R. D. (Roy. Milit. Coll. Canada, Dept. Chem. and Chem. Engr. Kingston, Ont., Canada): Analysis of low-temperature heat capacity data. *Amer. J. Phys.* 40 (1972) 1085
- WENTRUP, C. (Univ. Lausanne, Inst. Org. Chem., Lausanne 1005, Switzerland): The relationship between $\text{C}_6\text{H}_5\text{N}$ isomers. Pyrolysis of isatins. *Helv. Chim. Acta* 55 (1972) 1613
- WESTLAKE, D. G., OCKERS, S. T., MUELLER, M. H., ANDERSON, K. D. (Argonne Natl. Lab., Argonne, Ill., 60439 USA): Low temperature phase transition in V_4H_3 . *Met. Trans.* 3 (1972) 1709
- WHITESIDES, G. M., GAASCH, J. F., STEDRONSKY, E. R. (MIT, Dept. Chem., Cam-

- bridge, Mass., 02139 USA): Mechanism of thermal decomposition of di-*n*-butylbis(triphenylphosphine) platinum(II). *J. Amer. Chem. Soc.* **94** (1972) 5258
- WIBERG, N., PRACHT, H. J. (Univ. München, Inst. Anorg. Chem., München, GFR): Zur Thermolyse von Silyltriazenen. *J. Organometal. Chem.* **40** (1972) 289
- WIESE, G., HALLSTEIN, H. (Freie Univ. Berlin, Inst., Anorg. Chem., Berlin 1000): Über die dilatometrisch indizierten Titraktionen. IV. Redox-titraktionen. *Fresenius Z. Anal. Chem.* **260** (1972) 111
- WILLIAMS, J. G., DELATYCKI, O. (Def. Stand. Labs., Ascot Vale, Victoria 3032, Australia): Glass transition temperature for epoxy-diamine networks. *J. Polym. Sci. A-2*, **10** (1972) 1297
- WONG, J. (Gen. Electr. Corp. Res. and Dev., Schenectady, N. Y., 12301 USA): Thermal stresses in CVD films: The case of binary arsenosilicate glasses. *J. Electrochem. Soc.* **119** (1972) 1080
- WOOD, D. S. (Physic. Int. Co., San Leandro, Calif., 94577 USA): A depth dose calorimeter for high intensity, low voltage flash X-ray machines. *Rev. Sci. Instr.* **43** (1972) 1094
- WUNDERLICH, B. (Rensselaer Polytech. Inst., Dept. Chem., Troy, N. Y., 12181 USA): Melting point variations in linear high polymers. *Thermochim. Acta* **4** (1972) 175
- YAMAMOTO, N., YAMASHITA, I., YAMAMOTO, R. (Govt. Ind. Res. Inst. Osaka, Midorigaoka 1, Ikeda, Osaka 563, Japan): Sulfur-containing aldehyde oligomers as thermal stabilizer (III). *J. Soc. Rubber Ind. Japan* **45** (1972) 595 (In Japanese)
- YAMASHITA, I., YAMAMOTO, N., YAMAMOTO, R. (Govt. Ind. Res. Inst. Osaka Midorigaoka 1, Ikeda, Osaka 563, Japan): Sulfur-containing aldehyde oligomers as thermal stabilizer (I). *J. Soc. Rubber Ind. Japan* **45** (1972) 582 (In Japanese)
- YANAI, H. S., FREUND, W. J., CARTER, O. L. (Rohm and Haas Co., Res. Lab., Bristol, Pa., 19007 USA): Determination of the deflection temperature under load, Vicat softening temperature, and Clash-Berg T_F of plastics by a new method. *Thermochim. Acta* **4** (1972) 199
- YOON, H. I., HULTGREN, R. (Lawrence Radiat. Lab., Inorg. Mat., Res. Div., Berkeley, Calif., 94720 USA): The effect of ordering on lattice heat capacities of ordered and disordered $AuCu_3$. *J. Chem. Thermodyn.* **4** (1972) 375
- YOSHIDA, T., KAMAKURA, S. (Kyushu Univ., Fac. Sci., Dept. Phys., Fukuoka, Japan): Theory of melting at high pressures. II. Pair potentials and melting curves. *Progr. Theor. Phys. Kyoto* **47** (1972) 1801
- YOSHIDA, S., SUGA, H., SEKI, S. (Ashigara Res. Lab., Fuji Photo Film, Co., Ltd., Minamishigara, Kanagawa, Japan): Heat capacity of solid polytetrahydrofuran. *Rep. Progress Polym. Phys. Jap.* **XV** (1972) 247
- YUKI, Y., KAKURAI, T., NOGUCHI, T. (Nagoya Inst. Technol., Dept. Fiber and Polym., Gokiso, Showa-ku, Nagoya, Japan): Synthesis of aromatic polyguanimes by interfacial polycondensation method. *Polym. Chem.* **29** (1972) 127 (In Japanese)
- ZABEL, D. E., TRAHANOVSKY, W. S. (c/o Trahanovsky, W. S., Iowa. State Univ. and Technol., Dept. Chem., Ames, Iowa, 50010 USA): Thermal decomposition of methyl and phenyl triphenylmethylazocarboxylates. *J. Org. Chem.* **37** (1972) 2413
- ZAKHAROV, A. I., PEREPKINA, A. M., SHIRYAEVA, A. N. (Moscow Cent. Ferrous Met. Res. Inst., Moscow, USSR): The effect of alloying on thermal expansion of the super-Invar alloy. *Metalloved. Term. Obrab. Metal.* (1972) 62 (In Russian)
- ZAPOL'SKY, A. K., SAZHIN, V. S., FEDORTENKO, I. I., KOSTENKO, A. S. (Acad. Sci. UkSSR, Gen. and Inorg. Chem. Inst., Kiev, UkSSR): Differential thermal analysis of basic aluminium sulphates. *Ukr. Khim. Zh.* **38** (1972) 563 (In Russian)
- ZAREMBOVSKAYA, T. A., VARIKASH, V. M., PUPKEVICS, P. A. (Minsk Radio Engr. Inst., Alma Ata, KaSSR): Thermal expansion of triglycine fluorineberyllate crystals in the range of segnetoelectric transformation. *Izv. Vyssh. Ucheb. Zaved. Fiz.* (1972) 153 (In Russian)
- ZASLONKO, I. S., KOGARKO, S. M., MOZZHUKHIN, E. V. (Acad. Sci. USSR, Chem. Phys. Inst., Moscow, USSR): On the mechanism of thermal azoimidic acid decomposition. *Kinet. Katal.* **13** (1972) 829 (In Russian)

- ZHDANOVA, V. V., SERGEEVA, V. P. (A. I. Ioffe Phys. Tech. Inst., Leningrad, USSR): Thermal expansion of ZnSe in 100–600°K temperature range. *Fiz. Tverd. Tela* 14 (1972) 2153 (In Russian)
- ZONOV, YU. G., PRODAN, E. A., PAVLYU-CHENKO, M. M., MEL'NIKOVA, R. YA. (Acad. Sci. USSR, Gen. and Inorg. Chem. Inst., Minsk, BeSSR): High-temperature dehydration of $\text{NiNa}_3\text{P}_3\text{O}_{10} \cdot 12\text{H}_2\text{O}$. *Izv. Akad. Nauk SSSR, Neorg. Mater.* 8 (1972) 1083 (In Russian)