

Table of Contents

Preface

Inverse Melting of Metastable Solid Solutions

R. Bormann, C. Michaelsen, W. Sinkler and T. Pfullmann 5

Surface Energy Enhanced Crystallization of Amorphous $\text{Ni}_{69}\text{Cr}_{14}\text{P}_{17}$ Alloy

G. Schumacher, N. Wanderka and R.P. Wahi 15

Singularity of Some Low Temperature Physical Properties of $\text{Fe}_{100-x}\text{B}_x$ Metallic Glasses of the Eutectic Composition

V.Z. Bengus, P. Duhaj, E.D. Tabachnikova, V.P. Popov, T.A. Lobkovskaya, A.V. Golik and S.I. Tarapov 21

Metastable Phase Formation in Undercooled Stainless Steel Alloys

W. Löser and T. Volkmann 27

Fundamental Aspects of Bulk Metallic Glass Formation in Multicomponent Alloys

W.L. Johnson 35

Thermodynamic Properties and Crystallization Kinetics of Highly Undercooled Liquid Zr-Ti-Ni-Cu-Be Alloys

S.G. Klose, M.P. Macht and H.J. Fecht 51

Phase Separation and Crystallization in the Bulk Amorphous $\text{Zr}_{41.2}\text{Ti}_{13.8}\text{Cu}_{12.5}\text{Ni}_{10}\text{Be}_{22.5}$ Alloy

S. Schneider, U. Geyer, P. Thiagarajan, R. Busch, R. Schulz, K. Samwer and W.L. Johnson 59

Decomposition of the Supercooled Liquid of the Bulk Amorphous Alloy

$\text{Zr}_{41}\text{Ti}_{14}\text{Cu}_{12.5}\text{Ni}_{10}\text{Be}_{22.5}$
M.P. Macht, N. Wanderka, A. Wiedenmann, H. Wollenberger, Q. Wei, H.J. Fecht and S.G. Klose 65

Decomposition and Crystallization of Bulk Amorphous $\text{Zr}_{41}\text{Ti}_{14}\text{Cu}_{12.5}\text{Ni}_{10}\text{Be}_{22.5}$ Alloys Studied by Small Angle Neutron Scattering

A. Wiedenmann, U. Keiderling, M.P. Macht and H. Wollenberger 71

Atom Probe Field Ion Microscope and Levitation Studies of the Decomposition and Crystallization of Undercooled Zr-Ti-Cu-Ni-Be Melts

R. Busch, Y.J. Kim, S. Schneider and W.L. Johnson 77

Structural Relaxation and Viscous Flow in Amorphous ZrAlCu Above and Below the Glass Transition Temperature

R. Rambousky, M. Weiss, H. Mysz, M. Moske and K. Samwer 83

Beryllium Diffusion in the Supercooled Liquid and Glassy State of the $\text{Zr}_{41.2}\text{Ti}_{13.8}\text{Cu}_{12.5}\text{Ni}_{10}\text{Be}_{22.5}$ Alloy

U. Geyer, S. Schneider, Y. Qiu, M.P. Macht, T.A. Tombrello and W.L. Johnson 89

Viscosity Measurements of the $\text{Zr}_{46.75}\text{Ti}_{8.25}\text{Cu}_{7.5}\text{Ni}_{10}\text{Be}_{27.5}$ Bulk Metallic Glass Forming Alloy Using Parallel Plate Rheometry and Beam-Bending

E. Bakke, R. Busch and W.L. Johnson 95

Thermophysical Properties of Structurally Relaxed $\text{Pd}_{40}\text{Ni}_{40}\text{P}_{20}$ Samples

G. Wilde, G.P. Görlner, R. Willnecker, S. Klose and H.J. Fecht 101

Low Temperature Plasticity and Failure of a Bulk $\text{Cu}_{50}\text{Zr}_{35}\text{Ti}_8\text{Hf}_5\text{Ni}_2$ Metallic Glass

E.D. Tabachnikova, V.Z. Bengus and V.V. Molokanov 107

Bulk Metallic Glasses with Significant Supercooled Liquid Region Prepared by Mechanical Alloying

J. Eckert, M. Seidel and L. Schultz 113

Mechanical Alloyed Zr-Based Metallic Glasses with Significant Supercooled Liquid Region

M. Seidel, J. Eckert, H.D. Bauer and L. Schultz 119

Crystal-to-Glass Transition in Interface Controlled Materials

U. Herr, H. Geisler and K. Samwer 127

Phase Selection and Sequence of Phase Formation in Al/Ni Multilayers

M.H.d. Silva Bassani, J.H. Perepezko, A.S. Edelstein and R.K. Everett 135

Solid State Amorphization and Metastable Supercooled Melting in the Zr-Al-Cu-Ni Bulk Metallic Glass Forming Alloy System

R. Busch, E. Bakke and W.L. Johnson 141

Magnetoresistance and Structural State of Cu-Co, Cu-Fe Compounds Obtained by Mechanical Alloying	
A.Y. Yermakov, M.A. Uimin, A.V. Shangurov, A.V. Zarubin, Y.V. Chechetkin, A.K. Shtolz, V.V. Kondratyev, G.N. Konygin, Y.P. Yelsukov, S. Enzo, P.P. Macri, R. Frattini and N. Cowlam	147
GMR in a Cu₉₀Co₁₀ Alloy Produced by Mechanical Alloying	
S.W. Mahon, X.Y. Song, M.A. Howson, B.J. Hickey and R.F. Cochrane	157
Microstructural Evolution and its Relationship to GMR in Melt-Spun Cu₇₀Co₃₀	
X.Y. Song, S.W. Mahon, B.J. Hickey, M.A. Howson and R.F. Cochrane	163
Spray Deposition of CdTe Thin Films Using Nanoparticle Precursors	
D.L. Schulz, M. Pehnt, C.J. Curtis and D.S. Ginley	169
Manufacture and Characterization of Nanocomposite Thin Films of Si-SiO₂ and Ag-Si	
I.T.H. Chang, F. Niu, D. Slimovici, C. Wildig, P.A. Leigh, P.J. Dobson and B. Cantor	175
Formation of Abnormally Thick Amorphous Layer in Austenitic Stainless Steel by Nitrogen Ion Implantation	
X. Li, M. Samandi and D.P. Dunne	179
Microstructural Evolution in High Temperature Nitrogen Implanted Stainless Steel	
X. Li, M. Samandi, D.P. Dunne, D. Wexler and G. Collins	185
Structure Analysis of Nanocrystalline FeAl 8 Alloy	
M. Schneider, W. Zeiger, H. Worch, J. Schumann, P. Biscourp and G. Lanza	191
The Behavior of Nanometer-Sized Ga as Observed by PAC	
S. Lauer, H. Ehrhardt, H.G. Zimmer, H. Wolf and T. Wichert	197
Phase Transformations under Ball Milling: Theory versus Experiment	
P. Pochet, P. Bellon, L. Chaffron and G. Martin	207
Amorphization of NiZr₂ under Ball-Milling: Validation of the Milling Intensity	
L. Chaffron and S. Poissonnet	217
Microstructural Evolution in Ball-Milled Iron Powder	
D.M. Goodrich and M. Atzmon	223
Experimental Supports to the Energy Transfer Collision Model in the Mechanical Alloying Process	
M. Magini and A. Iasonna	229
Impact Frequency and Energy Transfer in Milling Processes: An Experimental Approach	
G. Mulas, L. Schiffini and G. Cocco	237
Detecting Chaotic Attractors in a Ball Milling Process	
M. Rustici, G. Mulas and G. Cocco	243
Shock Transfer in Ball-Milling: Nanocomposite Mechanical Approach	
R. Rahouadj and E. Gaffet	249
Optimisation of the Mechanical Shock Transfer in a Modified Horizontal Rod Mill	
M. Abdellaoui, R. Rahouadj and E. Gaffet	255
Investigations of Grain-Boundary Structure and Stability in Nanocrystalline Pd	
C.E. Krill III and R. Birringer	263
Atomic Defects and Disorder in Mechanically-Milled Intermetallic Compounds	
G.S. Collins and P. Sinha	275
Triple Line Defects in Nanostructured Materials	
G. Palumbo, K.T. Aust and U. Erb	281
Anelasticity and Structural Transformations of Nanostructured Fe-Al by Mechanical Alloying	
E. Bonetti and G. Scipione	287
Mechanisms of Nanocrystallization of Fe- and Al-Based Amorphous Precursors	
A.R. Yavari and O. Drbohlav	295
Al-Based Nanostructures Obtained from Amorphous Precursors	
J.H. Paik, W.J. Botta Filho and A.R. Yavari	305
Influence of Oxygen Contents on Nanocrystallization of Co₃₃Zr₆₇ and Zr₆₅Cu_{17.5}Ni₁₀Al_{7.5} Alloys	
U. Köster, J. Meinhardt, S. Roos and A. Rüdiger	311
Compositional and Constitutional Infuence on the Mechanism of Ultrafine Grained Structure Formation from Amorphous Precursors in the Al-TM-RE System	
N. Petrescu, M. Calin and M. Petrescu	317

Formation of Nanocrystalline Aluminum in Al-Y-Fe Amorphous Alloys J.C. Foley and J.H. Perepezko	323
Crystallization of Amorphous $\text{Al}_{90-x}\text{Y}_{10}\text{Ni}_x$ Alloys J. Latuch, H. Matyja and V.I. Fadeeva	329
Rapidly Solidified $\text{Al}_{85}\text{Ni}_{15-x}\text{Y}_x$ ($x=5,8,10$) Alloys I.T.H. Chang, P. Svec, M. Gogebakan and B. Cantor	335
High-Temperature X-Ray Investigations of the Crystallization of Amorphous Fe-Based Alloys N. Mattern, A. Danzig, M. Müller, U. Kühn and S. Doyle	341
Amorphous to Nanocrystalline Transformation in $\text{Fe}_{77.5}\text{Cu}_1\text{Nb}_3\text{Si}_{9.5}\text{B}_9$ Alloy S. Suriñach, M. Enrech, A. Khalladi, J.S. Muñoz Domínguez and M.D. Baró	347
The Crystallization Kinetics of 'Finemet' Type Amorphous Alloy before and after Milling T.Y. Mochalova, S.D. Kaloshkin, I.A. Tomilin, E.V. Obruchevea and B.V. Jalnin	353
Nanostructure of Melt-Spun $\text{Cu}_{80}\text{Fe}_{20}$ O. Drbohlav, W.J. Botta Filho and A.R. Yavari	359
Effect of Stoichiometry on the Ordering Mechanism in a Partially Disordered $\text{Ni}_3\text{-Al}$ Type Intermetallic W.J. Botta Filho and A.R. Yavari	367
Structural Properties and Compositional Dependence of Grain Size in Heavily Mechanically Deformed Nanophase NiAl I. Börner and J. Eckert	377
Mechanical Grinding $\beta\text{-FeSi}_2$ M.B. Fernández Van Raap, F.H. Sánchez and L. Mendoza-Zélis	383
Mechanical Milling Induced Amorphization in Fe_2Sc and Fe_2Y Laves Phases S.K. Xia, C. Larica, V.A. Rodriguez, F.C. Rizzo Assunção and E. Baggio-Saitovitch	389
Thermoanalytical Characterization of a Nanograined Fe-40Al Alloy S. Suriñach, S. Gialanella, X. Amils, L. Lutterotti and M.D. Baró	395
Mechanically Induced Transformations in the Spinel CdIn_2O_4 L. Mendoza-Zélis, A.F. Pasquevich, F.H. Sánchez and A. de Virgilis	401
Mechanical Alloying of Interstitial Solid Solutions and Compounds J. Foct, R.S. de Figueiredo, O. Richard and J.P. Morniroli	409
The Solubility Limit and Mechanical Alloying Process in Ni-X, Cu-X ($X=\text{Ge, Ga, Al, In, Sn}$) Systems T.F. Grigorieva, A.P. Barinova, V.V. Boldyrev and E.Y. Ivanov	417
Nonequilibrium Phases Formation by Mechanical Alloying of A_3B Powders and Relation between Mechanical Properties and Ordering Energies of Ni_3Al X.M. Wang, K. Aoki and T. Masumoto	423
Nanocrystalline and Amorphous Mechanically Alloyed Ni - Al - M ($M=\text{Fe, Zr}$) Phases E. Gaffet	429
Co-Ti Intermetallics Made by Mechanical Alloying R. Martínez-Sánchez, J.G. Cabañas-Moreno, H.A. Calderón and M. Umemoto	435
Phase Evolution during the Mechanical Alloying of AlFe Powder Mixtures M. Meyer, L. Mendoza-Zélis and F.H. Sánchez	441
Mechanical Alloying of $\text{Fe}_{50}\text{B}_{50}$ C.E. Rodríguez Torres, M.B. Fernández Van Raap, F.H. Sánchez and L. Mendoza-Zélis	447
Phase Segregation in Mechanically Alloyed Invar Fe-Ni Alloys S.K. Xia, R.B. Scorzelli, I. Souza Azevedo, E. Baggio-Saitovitch and A.Y. Takeuchi	453
Mechanical Alloying Induced Amorphization in Cr-Fe System S.K. Xia, F.C. Rizzo Assunção and E. Baggio-Saitovitch	459
Phase Transitions in Cu-Sb Systems Induced by Ball Milling M. Kis-Varga and D.L. Beke	465
Phase Formation during Ball Milling of Ti-Al-B Powders K. Brand, C. Suryanarayana, B. Kieback and F.H. Froes	471
Ball Milling Induced Amorphization of Graphite and High Solubility in Ag-Gd Solid Solution J. Tang	477
Minimization of Nitride Formation during Mechanical Alloying of Ti-Al-Nb F.S. Biancaniello, F.W. Gayle, C. Suryanarayana and F.H. Froes	483

Formation of 25 Mol % $\text{Fe}_2\text{O}_3\text{-Al}_2\text{O}_3$ Solid Solution by High-Energy Ball Milling J.Z. Jiang, S. Mørup and S. Linderöth	489
Zirconia Solid Solutions $\text{ZrO}_2\text{-Y}_2\text{O}_3$ (CoO or Fe_2O_3) Obtained by Mechanical Alloying A. Tonejc	497
Mechanosynthesis of Tricalcium Aluminum Hydrate by Mixed Grinding J.M. Filio, R.V. Perucho, F. Saito, M. Hanada and Y. Ito	503
Mechanochemistry and Mechanical Activation V.V. Boldyrev	511
Direct Verification of Incipient Mechanochemical Interaction between Two Metallic Species Mediated by OH Groups M. Senna, T. Watanabe and T. Isobe	521
Formation, Structure and Stability of Iron Nitrides Made by Reactive Ball Milling A. Calka, J.I. Nikolov and J.S. Williams	527
Microstructural Development of Iron Powder during Attritor Ball-Milling in Nitrogen D.C. Cook, T.H. Kim and J. Rawers	533
Mechanochemical Reactions in Gas (H_2, Co)/Solid (Zr, $\alpha\text{-NiZr}$) Systems A.N. Streletskii, O.S. Morozova, I.V. Beresteskaia, A.B. Borunova and P.J. Butyagin	539
Investigation of Gas-Solid Reactions Realised by Ball Milling Y. Chen and J.S. Williams	545
Combustive Mechanochemical Reactions with Titanium, Zirconium and Hafnium L. Takacs	553
Combustive Mechanochemical Reactions in Off-Stoichiometric Powder Mixtures L. Takacs and M.A. Susol	559
Mechanochemically Assisted Preparation of BaTiO_3 Powder B.N. Romanyuk and Y. Suzuki	563
A Redox Reaction between Fine Particulate Al and $\text{TiO}_2\cdot n\text{H}_2\text{O}$ during Milling Y. Kojima, T. Isobe, M. Senna, T. Shinohara, S. Ono, K. Sumiyama and K. Suzuki	569
Reaction of Nanocrystalline Cu-Sn Alloy with Ga-In-Sn Eutectic E. Ivanov, V. Patton and T.F. Grigorieva	575
Metastable States during Reaction Milling of hcp Transition Metals with Hydrocarbon M. Nagumo, T. Suzuki and K. Tsuchida	581
A New Inorganic Bonding Agent from Mechanically Activated Kaolin T. Nakano, M. Kamitani and M. Senna	587
Thermal Stability of Nanocrystalline Materials T.R. Malow and C.C. Koch	595
Fully Dense Nanocrystalline Nickel by Severe Plastic Deformation Consolidation R.S. Mishra, R. Valiev and A.K. Mukherjee	605
Flow Behavior of Partially Dense Nanocrystalline Alumina R.S. Mishra, D.A. West and A.K. Mukherjee	611
Nanocrystalline Alumina by High Pressure Sintering R.S. Mishra, C.E. Leshner and A.K. Mukherjee	617
Dynamic Compaction of Nanosized Ceramic Oxide Powders V.E. Banin, R. Boehme, G. Schumacher and A. Vikhrev	623
Sintering Behavior and Mechanical Properties of Nanocrystalline WC/Co R. Porat, S. Berger and A. Rosen	629
Ups and Downs of Magnetic Properties of Intermetallic Compounds during Mechanical Milling G.F. Zhou, H. Yang and H. Bakker	649
Spinglass Formation by Milling as a Consequence of Chemical Disordering G.F. Zhou and H. Bakker	655
The Role of the M Element in Nanocrystalline Fe-M-B (M=Zr, Hf and Nb) Soft Magnetic Alloys K. Suzuki, V. Sahajwalla, J.M. Cadogan, A. Inoue and T. Masumoto	665
Magnetic Properties and Microstructure of Nanocrystalline $\text{Fe}_{79}\text{Si}_{10}\text{B}_{10}\text{Cu}_1$ D. Wexler, C. Harland, B. Tate, N.V. Brown and G.W. Delamore	671
Magnetic Nanostructure of $\text{Fe}_{73.5}\text{Si}_{15.5}\text{B}_{7.5}\text{Nb}_3\text{Cu}_1$ at Elevated Temperatures Studied by SANS J. Kohlbrecher, A. Wiedenmann and H. Wollenberger	677

Transmission Electron Microscopy Investigations of the Microstructure of FeSiB-(Cu, Nb) - Alloys	
U. Klement, N. Mattern, M. Müller and L. Schultz	683
Rapid Thermal Annealing of Fe-Based Amorphous Ribbons	
M.L. Trudeau, S. Boily and R. Schulz	689
The Influence of Alloy Composition and Thermal Treatment on Structural and Magnetic Properties of Mechanically Alloyed Fe-Transition Metal-Based Alloys	
C. Stiller, J. Eckert, S. Roth, R. Schäfer, U. Klement and L. Schultz	695
Magnetic Properties of Nanocrystalline Fe, Ni(Fe) and Fe(Si) Alloys	
D.L. Beke	701
Mössbauer Study of Amorphous and Nanocrystalline Fe-Nb-B Alloys	
K. Suzuki, J.M. Cadogan, V. Sahajwalla, A. Inoue and T. Masumoto	707
Magnetic Relaxations in Mechanically Ground FeSn₂	
F.H. Sánchez, L.M. Socolovsky, A.F. Cabrera and L. Mendoza-Zélis	713
Enhanced Magnetic Moment of the Iron in a Metastable Iron-Mercury Alloy	
M.S. Pedersen, S. Mørup, S. Linderöth and M. Hanson	719
Optical Absorption Tail and Superparamagnetism of γ-Fe₂O₃	
J.K. Vassiliou, V. Mehrotra, J.W. Otto and N.R. Dollahon	725
Nanocrystalline Structures Obtained by Continuous Heavy Plastic Deformation	
E. Meyer and C. Biselli	733
Deformation Behaviour of Ultrafine-Grained Materials	
V.Y. Gertsman, R. Valiev, N.A. Akhmedeev and O.V. Mishin	739
Nanostructured Intermetallics: Structure and Mechanical Properties	
H. Van Swygenhoven, W. Wagner and J.F. Löffler	745
Nanocrystalline Structures and Related Properties Obtained by Mechanical Milling Ti-Al Powders	
M.A. Morris and M. Leboeuf	751
Mechanical Properties of Nanocrystalline Silicide Dispersion Strengthened (SDS) Intermetallic TiAl Alloy	
T. Pfullmann, M. Oehring, R. Bohn and R. Bormann	757
Study of an Al Composite Reinforced with Nanometric SiC Particles, Produced by Mechanical Alloying	
A. Malchere, M. Grosbras, J.L. Demenet, L. Bresson and E. Gaffet	763
Mechanical Properties of (Fe,Co)₃₃Zr₆₇ Alloys	
H. Alves, M. Ferreira, U. Köster and B. Müller	769
The Hot Indentation Test as a Characterization Technique of Superplasticity in Yttria Stabilized Tetragonal Zirconia	
G.B. Prabhu and D.L. Bourell	775
Structure and Mechanical Properties of Liquid-Quenched Nanocrystals	
A.M. Glezer, V.A. Pozdnyakov, V.I. Kirienko and O.M. Zhigalina	781
Damping Properties of 18-10 Type Stainless Steel with Submicrocrystalline Structure	
R.R. Mulyukov, S. Mikhailov, R. Zaripova and D. Salimonenko	787
Low Overpotential Nanocrystalline Ti-Fe-Ru-O Cathodes for the Production of Sodium Chlorate	
A. Van Neste, S.-. Yip, S.W. Jin, S. Boily, E. Ghali, D. Guay and R. Schulz	795
Electrocatalytic Properties of Nanocrystalline Alloys: Effect of the Oxygen Concentration in Ti₂RuFeO_x Alloy on the Structural and Electrochemical Properties	
M. Blouin, D. Guay, S. Boily, A. Van Neste and R. Schulz	801
Electrochemical Characterization of Co-Cu Mechanical Alloys	
E.M. Arce Estrada, S. Díaz de la Torre, V.M. López-Hirata and J.G. Cabañas-Moreno	807
Study of the Structure and Electrochemical Properties of Mechanically Alloyed Ti-TiO Mixtures	
É. Tremblay, O. Savadogo, S. Boily, A. Van Neste and R. Schulz	813
Electrochemical Behavior of Nanocrystalline FeAl₈ and FeCr₁₀ Alloys	
M. Schneider, W. Zeiger, D. Scharnweber and H. Worch	819
Corrosion Behaviour of Nickel Coating Obtained by Ball Milling	
O. El Kedim, M. Tachikart and E. Gaffet	825

Electrodeposited Nanostructured Nickel for In-Situ Nuclear Steam Generator Repair F. Gonzalez, A.M. Brennenstuhl, G. Palumbo, U. Erb and P.C. Lichtenberger	831
Electronic Transport Properties of Amorphous FeSc₃ Produced by Mechanical Milling V.A. Peña Rodríguez, E.C. Passamani, E. Baggio-Saitovitch, S.L. Bud'ko, M. El Massalami, M. Gafhari and M.A. Continentino	837
Improvement in Thermoelectric Properties of FeSi₂ Prepared from Mechanically Alloyed Powder M. Umemoto, S. Shiga and K. Raviprasad	841
Nanocrystalline Hydrogen Absorbing Alloys L. Zaluski, A. Zaluska, P. Tessier, J.O. Ström-Olsen and R. Schulz	853
Structure and Properties of Metal Hydrides Prepared by Mechanical Alloying M.L. Wasz and R.B. Schwarz	859
Effect of Compositional Variations on Hydrogen Storage in Ball-Milled Fe-Ti P. Tessier, L. Zaluski, A. Zaluska, J.O. Ström-Olsen and R. Schulz	869
Investigation of Structural Relaxation by Hydrogen Absorption in Ball-Milled Alloys L. Zaluski, A. Zaluska, P. Tessier, J.O. Ström-Olsen and R. Schulz	875
Hydriding Reactions Induced by Ball Milling Y. Chen and J.R. Williams	881
Preparation of Nanocrystalline TiAl Powder by Ball Milling in a Hydrogen Atmosphere and Dehydrogenation Y. Itoh, K. Aoki and T. Masumoto	889
Synthesis and Structural Characteristics of Mechanically Alloyed Nanostructured Palladium-Yttrium K.J. Bryden and J.Y. Ying	895
Sonochemical Synthesis of Nanophase Metals, Alloys and Carbides K.S. Suslick, T. Hyeon, M. Fang, J.T. Ries and A.A. Čichowlas	903
Synthesis of Al₂O₃, TiO₂ and ZrO₂ Nanopowders by Electrical Explosion of Wires Y.A. Kotov, I.V. Beketov, A.M. Murzakaev, O.M. Samatov, R. Boehme and G. Schumacher	913
Abnormal Grain Growth in Sintered YBa₂Cu₃O_{7-δ} Nanocrystalline Powders Produced by High Energy Ball Milling M. Simoneau, G. L'Espérance and R. Schulz	917
Melt Grown YBa₂Cu₃O_{7-x} Superconductor Prepared from Highly Ball-Milled Powders J.H. Ahn and K.H. Ha	923
Mechanochemical Effects on Synthesis and Sintering of Multi-Component Ceramics M. Awano and Y. Kuwahara	929
Microporous Carbon G. Pchelarov, N. Koprinarov and M. Konstantinova	935
Sol-Gel Processing of Inorganic Cyanogels M. Heibel and A.B. Bocarsly	941