

Table of Contents

Challenges of the Amorphous State	1
T.R. Anantharaman	
Theory of Amorphous Semiconductors	11
D. Adler	
Density of Metallic Glasses	19
G. Konczos, L. Małkiński and B. Sas	
Preparation and Magnetic Properties of Compositionally Modulated NiP/NiCoP Amorphous Films	27
J. Dubowik, R. Gontarz and Kowalewska	
Method of Formation of Shapes in Metallic Glasses	31
E.G. Baburaj, G.E. Prasad and S. Banerjee	
Growth of Large Crystals from Amorphous Phase	35
E.G. Baburaj, G.K. Dey and G.E. Prasad	
Experimental Arrangement for Obtaining Uniform Amorphous Ni-P Alloys by Electrodeposition	39
E. Toth-kadar, I. Bakonyi, A. Sólyom, J. Hering and G. Konczos	
Preparation and Characterization of Amorphous Lead-Selenium Alloy Ribbons	43
I.S. Athwal, J.P. Singh and R.K. Bedi	
Structural Characterization of Glassy SnTe Thin Films	47
B.K. Samantaray, S. Santhanam and A.K. Chaudhuri	
Synthesis and Characterisation of Semiconducting Carbon-Sulphur Solid Complexes	51
B.K. Mathur, P. Pramanik and D. Mukherjee	
Abstract: Novel Methods/Techniques for Metallic Glass Formation	55
W.L. Johnson	
Abstract: Fabrication and Solidification Processing of a Perfect Spherical Ball of an Amorphous Ni₇₅Si₈B₁₇ Alloy	56
H. Kimura	
Abstract: An Innovative Method for Preparing Anisotropic InSb-NiSb Ribbon	57
H.Y. Chang, C.I. Chiang, P.C. Yao, S.J. Yang and S.H. Hsu	
Abstract: Preparation and Micro-Hardness Studies on some V-VI-VII Glassy Compounds	58
D. Arivuoli, F.D. Gnanam and P. Ramasamy	
Synchrotron Radiation as a Tool for the Determination of Atomic Arrangements in Amorphous Materials	59
A. Bienenstock, S. Brennan, A. Fischer-Colbrie, P.H. Fuoss, K.F. Ludwig, R.D. Lorentz, W.K. Warburton and L. Wilson	
The Local and Medium Range Structure of Metallic Glasses	71
P.H. Gaskell	
Radial Distribution Function (RDF) Analysis of Metglas 2605 SC (Fe₈₁B_{13.5}Si_{3.5}C₂)	85
D. Manna and N.K. Misra	
Nanodemixion and the Influence of Metalloids on Topological Order in Iron-Base Glasses	89
J.M. Dubois, G. Le Caer and S.J. Guedes De Lima	
Determination of RMS Displacements of Atoms of Structurally Disordered Materials	95
T.B. Ghosh	
Application of Xanes to the Study of Binary Amorphous Alloys	99
K.S. Jerath and K.B. Garg	
X-Ray Anomalous Diffraction and Magnetic Studies in Amorphous Fe-Zr Foils	103
M. Laridjani, R. Krishnan and P. Rougier	
Modeling the Structure of Amorphous Si by Simulated Annealing	109
F. Wooten and D. Weaire	
Si-Te Glasses: Relation between Structure and the Physical Properties	119
S. Asokan, E.S.R. Gopal and G. Parthasarathy	
Structure Consequences of Rigidity Percolation in Network Glasses	131
P. Boolchand	

Abstract: The Structure of Metallic Glass	143
G.M. Qui	
Structural Study of Metallic Glass Fe₄₀Ni₄₀B₂₀	144
S. Kumar and S. Natarajan	
Abstract: A Model for Doping of Chalcogenide Glasses by Bismuth	145
S.R. Elliott	
Abstract: Structural Modelling of Chalcogenide Glasses	146
S.R. Elliott, L.F. Gladden and T.G. Fowler	
Abstract: XANES and EXAFS Study of Semiconductor Glasses	147
K.B. Garg	
XANES Study of Se-Te Glasses	148
D.C. Jain, K.S. Jerath, H.S. Chauhan, K.B. Garg, U. Chandra, R.K. Singhal, K.V.R. Rao, G. Parthasarathy and E.S.R. Gopal	
Abstract: The Short-Range Ordered Structure in Amorphous Selenium Films by X-Ray Radial Distribution Function Analysis	149
J. Nag and S.P.S. Gupta	
Abstract: Nanocrystalline Materials	150
H. Gleiter	
Analysis of Relaxation Kinetics in Metallic Glasses	151
J.A. Leake	
Magnetic After-Effects and Structural Relaxation in Metallic Glasses	153
N. Moser and H. Kronmüller	
Structural Relaxation Studies in Metglas 2605S-2 through Mossbauer Effect	177
T. Nagarajan, V. Sridharan, S. Srinivasan, U.C. Asari and A. Narayanasamy	
Abstract: Study of Structural Relaxation in Amorphous Fe₈₀B₂₀ through Changes in Electrical Resistivity	181
V. Seetaramiah, V. Siruguri and S.N. Kaul	
Abstract: Thermodynamic Functions of Cu-Zr and Cu-Ti Metallic Glass Electrode Systems	182
M.S. Kumar and S. Nageswar	
Low-Energy Excitations in Amorphous Sputtered Zr_{100-x}Cu_x Alloys - Effect of Structural Relaxation	183
J.C. Lasjaunias, F. Zougmore and O. Béthoux	
Modelling Structural Relaxation	187
G. Hygate and M.R.J. Gibbs	
DSC Studies of Structural Relaxation in Te-Ge-Pb Chalcogenide Glasses	191
L. Zaluski	
Thermodynamics of Glass Formation	195
P.R. Rao	
Low-Temperature Thermodynamic Properties of Amorphous Sputtered Zr_{100-x}Cu_x Alloys: Comparison to Melt-Spun Alloys	203
F. Zougmore, J.C. Lasjaunias, O. Laborde and O. Béthoux	
Evaluation of the Ideal Glass Transition Temperature and other Thermodynamic Properties of Glass Forming Liquids	207
S.P. Pandey, K.S. Dubey and P. Ramachandrarao	
Some Aspects of Atomic Diffusion in Metallic Glasses	211
D. Akhtar and R.D.K. Misra	
Au Diffusion in Metallic Glasses Fe₈₂B₁₈ and Zr₆₁Ni₃₉	215
S.K. Sharma, K. Jain and A.K. Jain	
Quasicrystals, a Physical Metallurgical Point of View	219
K.H. Kuo	
Decagonal Quasicrystals	229
S. Ranganathan and K. Chattopadhyay	
Direct Observation of Fracture Process in Quasicrystalline Alloy	237
K. Suzuki, M. Ichihara, K. Kimura, S. Takeuchi and H. Ino	
Structural Investigations of some Rapidly Solidified Potential Quasi Crystal Forming Alloys	241
G.K. Dey, R.T. Savalia and S. Banerjee	
On the Morphology of Icosahedral Quasicrystals in Al-Mn Alloys	245
N. Thangaraj, K. Chattopadhyay, E.S.R. Gopal and S. Ranganathan	

Do Quasi-Crystals Exist?	249
T. Rajasekharan, R. Gopalan and D. Akhtar	
Formation and Thermal Stability of Quasicrystals in Al-Mn Alloys	257
B. Schuhmacher and U. Köster	
Ageing of Quasicrystalline Phase in Al-Mn-Fe Alloys	263
V.S. Raghunathan, G.A. Dixit and P. Kuppusami	
Studies of Aluminium-Manganese Quasi-Crystals by Scanning Transmission Electron Microscopy	267
D. Bahadur, P.H. Gaskell and D. Imeson	
Neutron Diffractometry with Al-Transition Metal Quasi-Crystal	271
J.M. Dubois, C. Janot, J. Pannetier and R. Fruchart	
Synthesis of Metastable Crystalline, Quasi Crystalline and Amorphous AlMn 11% Thin Films by Vapour Deposition	275
A. Verma and K.L. Chopra	
Abstract: EPR Study of Quasi-Crystalline Al₈₆Mn₁₄ Alloy	279
V.S. Bai	
Abstract: Electronic Structure of Al-Mn Metallic Glasses: A Soft X-Ray Appearance Potential Study	280
A.R. Chourasia, D.R. Chopra and S. Deshpande	
Crystallization Kinetics in Metallic Glasses	281
U. Köster	
Crystal Nucleation in Glass-Forming Alloys	293
A.L. Greer	
The Effect of Cr and Si Coating on the Stability and Kinetics of Crystallization of Pd₇₇Si₂₃ Amorphous Ribbons	303
A. Calka and A.P. Radlinski	
Formation and Crystallization Behaviour of NiCrNb Metallic Glasses	307
D. Akhtar, R.P. Mathur and V. Chandrasekaran	
Influence of Molybdenum and Silicon on the Crystallization of Fe-Ni-B Metallic Glasses	311
V.S. Raja	
Crystallization Process of Zr-Fe Amorphous Ribbons	315
A. Calka and A.M. Stewart	
Time-Resolved Neutron Thermodiffractometry with (Fe,Mn)₈₀P₂₀ Amorphous Alloys	319
C. Janot, J. Pannetier, B. George and D. Boumazouza	
Interlamellar Spacing Variation in Metglas 2826	325
R.W. Tiwari, M.V. Heimendahl and S. Ranganathan	
Glass Forming Abilities and Crystallization in Zirconium Base Metallic Glasses	329
G.K. Dey, E.G. Baburaj, S. Banerjee and P. Ramachandrarao	
Crystallization of Amorphous Fe₄₀Ni₄₀B₂₀ and Fe₃₉Ni₃₉Mo₄Si₆B₁₂ Alloys	333
B.B. Prasad and A.K. Bhatnagar	
Crystallization Kinetics of the Metglas 2605 SC Determined by Differential Scanning Calorimetry	339
D. Akhtar	
Crystallization Studies on (Fe_{1-x}Co_x)₇₅Si₁₅B₁₀ Metallic Glasses by Electrical Resistivity	343
N.R.M. Rathnam and A.K. Bhatnagar	
Amorphous to Crystalline Transformation of Fe₈₂B₁₂Si₆ and Fe₇₈B₁₃Si₉	347
G.S. Rao and S.B. Raju	
Structural Transformation in N-Type Bi Doped Semiconducting Glasses Ge₂₀S_{80-x}Bi_x	351
D.P. Gosain, K.L. Bhatia, G. Parthasarathy and E.S.R. Gopal	
Mossbauer Studies of Metallic Glasses Annealing Hydrogen and Vacuum	355
A. Verma, L.M. Malhotra, K.S. Jerath, Y.K. Vijay and I.P. Jain	
Crystallization Studies on as-Sb-Se Glasses	359
S. Mahadevan, A. Giridhar and A.K. Singh	
Study of Amorphous to Crystalline Transformation in a-Fe₇₈B₁₁Si₉C₂	363
A. Gupta, J. Raj, S. Lal and R.P. Verma	
Abstract: Current Pulse Annealing of Metallic Glasses	364
A. Zaluska and H. Matyja	

Experimental Studies of Electron Transport Properties in Non-Magnetic Metallic Glasses	365
U. Mizutani	
The Theory of Electric Transport in Amorphous Metals	377
G.J. Morgan, M.A. Howson and A. Paja	
The Hall Coefficient and Thermoelectric Power of Non-Magnetic Metallic Glasses	389
D. Greig	
Low-Energy Excitations and their Origin in Amorphous Metals	401
D.M. Herlach and H.W. Gronert	
Multilayered Amorphous Semiconductors: Periodic and Quasiperiodic Superlattices	417
C. Janot	
Electronic Transport in Amorphous Chalcogenide Semiconductors	443
E.A. Owen	
Effect of Pressure on Electrical Resistance of Transition Metal Based Amorphous Alloy Example of Fe₄₀Ni₄₀P₁₄B₆	467
M. Yousuf and K.G. Rajan	
Study of Transport Properties of AuFe Spin Glasses near the Percolation Limit	471
G. Chandra and A.K. Nigam	
Magnetic Contribution to the Electrical Resistivity in Amorphous Fe_xNi_{80-x}B₂₀ Alloys	475
S.N. Kaul and M. Rosenberg	
Electrical Transport Studies in Amorphous Fe_{80-x}Cr_xB₁₂Si₈ Alloys	481
V. Srinivas, G. Rajaram, S. Prasad, G. Chandra, S.N. Shringi and R. Krishnan	
Influence of Cr-Content on Electrical Resistivity and Thermoelectric Power of Metal-Metal and Metal-Metalloid Glasses	485
P.V. Reddy and D. Akhtar	
Thermoelectric and Calorimetric Studies on (Fe_{1-x}Co_x)₇₅Si₁₅B₁₀ Metallic Glasses	489
N.R.M. Rathnam, A.K. Bhatnagar and O.V. Nielsen	
Influence of Transition Metal Additives on the Transport Properties of Amorphous Fe₈₀T₃B₁₇ and Ni₇₇T₃B₂₀	493
B. Sas, J. Toth, A. Lovas and G. Konczos	
The Origin of a Band Gap in Amorphous Si	497
G.J. Morgan, B.J. Hickey, D. Mayou and A. Pasturel	
Exponential Band Tails as a Consequence of the Glass Transition	501
J.C. Dyre	
DC Electrical Conduction in TeO₂-V₂O₃ Glasses	505
R. Singh and K. Sethupati	
Electrical Transport Properties of Amorphous Semiconducting Sb-Se-Te System	509
B.D. Muragi and J.K. Zope	
Conductivity Minimum of the V₂O₅-P₂O₅ Glasses Containing Bi₂O₃ or Sb₂O₃	515
A. Ghosh and B.K. Chaudhuri	
Amorphous CuInSe₂ Films	519
S. Venkataraman and A.K. Bhatnagar	
Conduction Mechanism in Bulk Amorphous Ge_xSb₁₀Se_{90-x} System	523
P. Sikka	
Electronic Structure of (001) Face Centered Cubic Quasi-Periodic Superlattice	527
V. Kumar and G. Ananthakrishna	
Coalescence of Atomic Clusters and its Effect on Localization Properties	533
V. Srivastava	
Localisation Effect in Thermopower and Resistivity of Quasi ID Semiconducting Compound [(Nb_{1-x}Ta_x)Se₄]₃I	537
C. Bansal, K. Surendranath and V. Srivastava	
Abstract: Electrical Resistivity of Amorphous Ru_xFe_{80-x}B₂₀ Alloys	543
P.L. Paulose, V. Nagarajan and R. Vijayaraghavan	
Abstract: D.C. Conductivity and Thermoelectric Power Studies in Bulk Amorphous Ge_xSe_{1-x} Alloys	544
R.M. Mehra, M. Arora and P.C. Mathur	
Abstract: Electrical Conductivity in Zinc-Borate Glasses Containing Transition Metal Oxides	545
R.V. Anavekar, N. Devaraj and J. Ramakrishna	

Abstract: Low-Temperature Resistivity and TEP of Fe_{80-x}Cr_x(PC)₂₀	547
S.N. Bhatia, K.V.S. Mahesh and M.N. Ghatika	
Abstract: The Study of Electronic Transport in Amorphous Fe Ni Cr Mo Si B	549
S.N. Bhatia, R. Walia and P.B. Joshi	
Abstract: The Addition Effect of Ti on the Electrical and Thermal Transport of a-As₂Se₃	551
M.F. Kotkata, M.H. El-Fouly, S.A. Fayek and S.A. El-Hakim	
Abstract: IR Spectroscopic and D.C. Resistivity Studies of Barium-Vanadate Glasses	553
T.K. Bansal, S. Bansal and R.G. Mendiratta	
Abstract: Temperature Dependence on DC and AC Conductivity in Amorphous Ge-Sb-Se Films	554
R.M. Mehra, R. Kumar and P.C. Mathur	
Metallic Glass Structure by ⁵⁷Fe Mossbauer Spectroscopy	555
G. Le Caer and J.M. Dubois	
Temperature Dependence of Reduced Hyperfine Fields in Amorphous Fe₇₂Ni_{10-x}Mo_xB₁₆Si₂	557
T.G. Narendrababu, R. Jagannathan, A.K. Bhatnagar and V.R.V. Ramanan	
Structure of (Fe_{1-x}M_x)-(B_{1-y}Si_y) Metallic Glasses [M/Ni, Co: x=0 or 20; y=0 or 10] Using Mossbauer Hyperfine Parameter Correlation	571
P. Raj, A. Sathyamoorthy and I.K. Rao	
Magnetic Properties and Crystallization Studies of Amorphous Fe₇₄Co₅Cr₅B₁₆ Alloy	575
T.G. Narendrababu, R. Jagannathan, V.N. Murthy, D. Akhtar and P. Subrahmaniam	
Comparison of Magnetic Hyperfine Field Distributions in Amorphous Fe₄₀Ni₄₀B₂₀ and Fe₃₉Ni₃₉Mo₄Si₆B₁₂ Alloys	579
B.B. Prasad and A.K. Bhatnagar	
Room Temperature Mossbauer Study of Amorphous Fe-V-B-Si Alloys	585
R.V. Vadnere, V. Srinivas, S. Prasad, S.N. Shringi, G. Rajaram, A.K. Nigam, G. Chandra and R. Krishnan	
Mossbauer and Magnetic Study of Metglas (Co_{0.93}Fe_{0.07})_{75-x}Cr_xSi₁₅B₁₀	589
K. Ganeshan, A. Narayanasamy and T. Nagarajan	
Effect of Sn-Implantation in Amorphous Fe₄₀Ni₄₀B₂₀	593
K.G. Prasad, M.B. Kurup and R.P. Sharma	
Development of Software for Mossbauer Spectroscopic Analysis Using Microcomputers of Amorphous Phases as Well as Crystalline Phases	597
M.S. Saini and R. Kamal	
Mossbauer Studies on Amorphous Fe-Ni-B-Si	601
I.K. Rao and H.V. Varma	
Ferromagnetic Resonance in Amorphous Fe₈₂B_{18-y}Ge_y Alloys: Effect of Isothermal Annealing	605
V.S. Kasyapa, S.N. Kaul and C. Bansal	
FMR in as Prepared and Annealed Fe₇₄Cr₆B₁₂Si₈ Metallic Glass	609
R. Bilas, D. Bahadur, P. Chand and R.A. Dunlap	
FMR Studies on Fe_{80-x}Ni_xB₂₀ Amorphous Alloys	615
G.V. Rao, C.S. Sunandana and A.K. Bhatnagar	
An Electron Spin Resonance Study of some Insulating Europium Chalcogenide Spin Glasses	619
N.P. Raju and G. Rangarajan	
Electron Spin Resonance of Mn²⁺ in Bi Doped N-Type Amorphous Germanium Chalcogenide Semiconductors	623
K.L. Bhatia, V.K. Bhatnagar and D.P. Gosain	
EPR of Tellurium-Vanadate Glasses Partially Substituted by Iron-Group Ions	627
C.S. Sunandana	
Positronium Pick-Off Life Times in V₂O₅-TeO₂-CuO Semiconducting Glasses	633
K. Veena, C.S. Sunandana and C. Bansal	
Positron Annihilation for Investigation of Chemical Bonding in the Structures of As-Se, As-Te and Ge-Se	637
I.B. Kevdina, B.V. Kobrin, V.S. Minaev and V.P. Shantorovich	
Effect of Copper and Lead on the Properties of As-Ge-X(X/X, Se,Te) Glasses - Positron Annihilation Studies	638
B.V. Kobrin, V.P. Shantorovich, T.I. Kim, M.D. Mikhailov, Z.U. Borisova and B.I. Zaslavskii	

Positron Annihilation Study of Defects and Microheterogeneity of Chalcogenide Glassy Semiconductors	
V.P. Shantarovich and B.V. Kobrin	639
Spin Dynamics in Randomized Spin Systems	
S.M. Bhagat, M.A. Manheimer and K. Moorjani	641
Spin Glass and Re-Entrant Behaviour in Metallic Glasses	
G. Chandra	651
Magnetic Phases in Metallic Glasses: Static Phenomena near Critical Concentration	
P. Mazumdar and S.M. Bhagat	661
Reentrant Transition in Disordered Magnets	
R. Ranganathan	665
Effect of Annealing on the Temperature Dependence of the Effective Susceptibility Exponent of an Amorphous Ferromagnet	
S.N. Kaul, W.U. Kellner and H. Kronmüller	669
Magnetization Study of Metglass Fe(80)B(8.74)Si(11.26)	
M. Mathur and H.V. Varma	675
FMR Study of an Amorphous Weak Itinerant Ferromagnet	
V. Siruguri and S.N. Kaul	679
Origin of Spin-Glass Transition in $Mn_{1-x}Zn_xO(x=0.001)^+$	
C.E. Deshpande, S.K. Date and J.J. Hauser	685
Stress Dependence of Magnetic Properties of A-Fe₈₁B_{13.5}Si_{3.5}C₂	
A. Mitra and S.K. Ghatak	689
Magnetic Susceptibility of Amorphous Semiconductors	
T. Sahu, N. Panigrahi and P.K. Misra	693
Atomic Scale Structure of Hydrogenated Amorphous Alloys by Pulsed Neutron Scattering	
K. Suzuki	697
Helium Implantation Damage in Metallic Glasses	
A.K. Tyagi	715
Hydrogen Embrittlement Susceptibility of Ni₆₀Nb₄₀ and Ni₅₅Cr₅Nb₄₀ Metallic Glasses	
R.D.K. Misra and D. Akhtar	727
Abstract: Hydrogen in CuTi Amorphous Alloys	
B. Rodmacq, L. Billet and A. Chamberod	731
Abstract: Mossbauer Studies of Hydrogenated Amorphous Fe₇₃Ti₂₇ Alloys	
A.K. Bhatnagar, B. Rodmacq and A. Chamberod	732
Metallic Glasses as Magnetomechanical Materials	
L.A. Davis and V.R.V. Ramanan	733
Microscopic Mechanism of Plastic Deformation in Metallic Glasses	
S. Takeuchi and K. Maeda	749
Mechanical Properties of Rapidly Quenched Iron-Based Alloys	
B.L. Mordike, H.D. Burchards and K.U. Kainer	761
Effect of Cr Addition on the Thermal and Mechanical Stability of Ni₆₀Nb₄₀ Glass	
D. Akhtar, R.D.K. Misra and S.B. Bhaduri	773
Investigations of near Surface and Bulk Properties of Metallic Glass Samples Following Heavy and Light Ion Bombardment with Special Reference to RBS Technique	
R.P. Sharma	777
A Novel Experimental Technique to Study Interface Structures and Properties	
A. Roy	787
Characterisation of Surface Oxide Layers on the Metallic Glass Fe₆₇Co₁₈B₁₄Si₁ by AES and XPS	
S.K. Sharma, P.K. Chauhan and P. Mukhopadhyay	793
Electron Spectroscopic Studies of Interaction of CO with the Surfaces of Metallic Glasses	
K. Prabhakaran and C.N.R. Rao	797
Corrosion of Metallic Glasses at Ambient	
C. Bansal	801
Abstract: Scanning Tunneling Microscopy of Metallic Glasses	
P.H. Grütter, R. Wiesendanger and H.J. Güntherodt	806
Abstract: Corrosion in Metallic Glasses	
T.K.G. Namboodhiri	807

Abstract: Effect of some Anions on the Corrosion Characteristics of Fe₄₀Ni₄₀B₂₀ Metallic Glass	809
I.B. Singh, T.K.G. Namboodhiri and R.S. Chaudhary	
Abstract: Study of Secondary Electron Emission Characteristics in Bismuth Containing Semiconducting Glasses	810
N.R. Rajopadhye, S.V. Bhoraskar and D. Chakravorty	
Abstract: Surface Studies on Metallic Glasses	811
A.S. Nigavekar	
Photoacoustic Studies on Selenium-Based Semiconducting Glasses	813
K.V. Reddy and A.K. Bhatnagar	
Photoacoustic Studies of Lead-Vanadate Glasses	817
U.N. Virataswaroop and A.K. Bhatnagar	
Optical and Electrical Properties of Amorphous TeO₂ Films	821
S. Kumar and A. Mansingh	
Dark Recovery of Fatigued PL Centers during Fatiguing in Amorphous Ge-Se System	825
M. Koós, I. Pocsik and I.K. Somogyi	
Some Studies on Wo₃ Thin Films	829
R.P. Singh, S.L. Agrawal and Y.D. Singh	
Abstract: Photo-Induced Changes in Chalcogenide Glasses	833
S.R. Elliott	
Theoretical Studies of Optical Absorption in Amorphous Semiconductors	835
U. Dersch, M. Grunewald and P. Thomas	
Correlations among the Technological Parameters and the Soft Magnetic Parameters of Metallic Glasses	837
I. Nagy, C. Hargital and C. Kopasz	
Metallic Glasses in Magnetic Applications	849
V.R.V. Ramanan, C.H. Smith and G.E. Fish	
Amorphous Materials in Information Storage	863
R. Krishnan	
Compatibility of Varnished Metallic Glass Laminations with Transformer Oil	875
G. Swaminathan, T.S.R. Moorthy, L.R. Venkateswaran and K.M. Kamath	
AC Transducer System for Determination of Small Displacement	879
A. Mitra and S.K. Ghatak	
Application of Metallic Glasses to Power Transformers: Technical Considerations	883
G. Swaminathan, S. Srinivasan and S. Ameerjan	
Charge Storage Capacity of RF Sputtered Amorphous Barium Titanate Films	887
C.V.R.V. Kumar and A. Mansingh	
Formation of Glassy Films by N₂⁺ Ion Implantation into Fe and Ni	893
P. Chatterjee, A.K. Batabyal and A.K. Barua	
Doping of Amorphous Semiconductors	894
M. Stutzmann	
Abstract: Dielectric Properties of Semiconducting Glasses	895
A. Mansingh	
Dielectric Behaviour of Sodium Niobate Silicate Glasses	897
S. Singh and A. Mansingh	
Ultrasonic Velocity and Attenuation in Sodium Niobate Silicate Glasses	901
A. Pasricha, N. Chopra, A. Mansingh and S. Singh	
Ultrasonic Detection of Cumulative Damage in Hybrid Glass Fibre/zirconia/epoxy Composite	905
V.K. Srivastava and R. Prakash	