

Table of Contents

Challenges of the Amorphous State T.R. Anantharaman	1
Theory of Amorphous Semiconductors D. Adler	11
Density of Metallic Glasses G. Konczos, L. Makiński and B. Sas	19
Preparation and Magnetic Properties of Compositionally Modulated NiP/NiCoP Amorphous Films J. Dubowik, R. Gontarz and Kowalewska	27
Method of Formation of Shapes in Metallic Glasses E.G. Baburaj, G.E. Prasad and S. Banerjee	31
Growth of Large Crystals from Amorphous Phase E.G. Baburaj, G.K. Dey and G.E. Prasad	35
Experimental Arrangement for Obtaining Uniform Amorphous Ni-P Alloys by Electrodeposition E. Toth-kadar, I. Bakonyi, A. Sólyom, J. Hering and G. Konczos	39
Preparation and Characterization of Amorphous Lead-Selenium Alloy Ribbons I.S. Athwal, J.P. Singh and R.K. Bedi	43
Structural Characterization of Glassy SnTe Thin Films B.K. Samantaray, S. Santhanam and A.K. Chaudhuri	47
Synthesis and Characterisation of Semiconducting Carbon-Sulphur Solid Complexes B.K. Mathur, P. Pramanik and D. Mukherjee	51
Abstract: Novel Methods/Techniques for Metallic Glass Formation W.L. Johnson	55
Abstract: Fabrication and Solidification Processing of a Perfect Spherical Ball of an Amorphous $\text{Ni}_{75}\text{Si}_8\text{B}_{17}$ Alloy H. Kimura	56
Abstract: An Innovative Method for Preparing Anisotropic InSb-NiSb Ribbon H.Y. Chang, C.I. Chiang, P.C. Yao, S.J. Yang and S.H. Hsu	57
Abstract: Preparation and Micro-Hardness Studies on some V-VI-VII Glassy Compounds D. Arivuoli, F.D. Gnanam and P. Ramasamy	58
Synchrotron Radiation as a Tool for the Determination of Atomic Arrangements in Amorphous Materials A. Bienenstock, S. Brennan, A. Fischer-Colbrie, P.H. Fuoss, K.F. Ludwig, R.D. Lorentz, W.K. Warburton and L. Wilson	59
The Local and Medium Range Structure of Metallic Glasses P.H. Gaskell	71
Radial Distribution Function (RDF) Analysis of Metglas 2605 SC ($\text{Fe}_{81}\text{B}_{13.5}\text{Si}_{3.5}\text{C}_2$) D. Manna and N.K. Misra	85
Nanodemixion and the Influence of Metalloids on Topological Order in Iron-Base Glasses J.M. Dubois, G. Le Caer and S.J. Guedes De Lima	89
Determination of RMS Displacements of Atoms of Structurally Disordered Materials T.B. Ghosh	95
Application of Xanes to the Study of Binary Amorphous Alloys K.S. Jerath and K.B. Garg	99
X-Ray Anomalous Diffraction and Magnetic Studies in Amorphous Fe-Zr Foils M. Laridjani, R. Krishnan and P. Rougier	103
Modeling the Structure of Amorphous Si by Simulated Annealing F. Wooten and D. Weaire	109
Si-Te Glasses: Relation between Structure and the Physical Properties S. Asokan, E.S.R. Gopal and G. Parthasarathy	119
Structure Consequences of Rigidity Percolation in Network Glasses P. Boolchand	131

Abstract: The Structure of Metallic Glass G.M. Qui	143
Structural Study of Metallic Glass Fe₄₀Ni₄₀B₂₀ S. Kumar and S. Natarajan	144
Abstract: A Model for Doping of Chalcogenide Glasses by Bismuth S.R. Elliott	145
Abstract: Structural Modelling of Chalcogenide Glasses S.R. Elliott, L.F. Gladden and T.G. Fowler	146
Abstract: XANES and EXAFS Study of Semiconductor Glasses K.B. Garg	147
XANES Study of Se-Te Glasses 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	148
Abstract: The Short-Range Ordered Structure in Amorphous Selenium Films by X-Ray Radial Distribution Function Analysis J. Nag and S.P.S. Gupta	149
Abstract: Nanocrystalline Materials H. Gleiter	150
Analysis of Relaxation Kinetics in Metallic Glasses J.A. Leake	151
Magnetic After-Effects and Structural Relaxation in Metallic Glasses N. Moser and H. Kronmüller	163
Structural Relaxation Studies in Metglas 2605S-2 through Mossbauer Effect T. Nagarajan, V. Sridharan, S. Srinivasan, U.C. Asari and A. Narayanasamy	177
Abstract: Study of Structural Relaxation in Amorphous Fe₈₀B₂₀ through Changes in Electrical Resistivity V. Seetaramiah, V. Siruguri and S.N. Kaul	181
Abstract: Thermodynamic Functions of Cu-Zr and Cu-Ti Metallic Glass Electrode Systems M.S. Kumar and S. Nageswar	182
Low-Energy Excitations in Amorphous Sputtered Zr_{100-x} Cu_x Alloys - Effect of Structural Relaxation J.C. Lasjaunias, F. Zougmore and O. Béthoux	183
Modelling Structural Relaxation G. Hygate and M.R.J. Gibbs	187
DSC Studies of Structural Relaxation in Te-Ge-Pb Chalcogenide Glasses L. Zaluski	191
Thermodynamics of Glass Formation P.R. Rao	195
Low-Temperature Thermodynamic Properties of Amorphous Sputtered Zr_{100-x}Cu_x Alloys: Comparison to Melt-Spun Alloys F. Zougmore, J.C. Lasjaunias, O. Laborde and O. Béthoux	203
Evaluation of the Ideal Glass Transition Temperature and other Thermodynamic Properties of Glass Forming Liquids S.P. Pandey, K.S. Dubey and P. Ramachandrarao	207
Some Aspects of Atomic Diffusion in Metallic Glasses D. Akhtar and R.D.K. Misra	211
Au Diffusion in Metallic Glasses Fe₈₂B₁₈ and Zr₆₁Ni₃₉ S.K. Sharma, K. Jain and A.K. Jain	215
Quasicrystals, a Physical Metallurgical Point of View K.H. Kuo	219
Decagonal Quasicrystals S. Ranganathan and K. Chattopadhyay	229
Direct Observation of Fracture Process in Quasicrystalline Alloy K. Suzuki, M. Ichihara, K. Kimura, S. Takeuchi and H. Ino	237
Structural Investigations of some Rapidly Solidified Potential Quasi Crystal Forming Alloys G.K. Dey, R.T. Savalia and S. Banerjee	241
On the Morphology of Icosahedral Quasicrystals in Al-Mn Alloys N. Thangaraj, K. Chattopadhyay, E.S.R. Gopal and S. Ranganathan	245

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. Kuppasami	
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 U. Mizutani	365
The Theory of Electric Transport in Amorphous Metals G.J. Morgan, M.A. Howson and A. Paja	377
The Hall Coefficient and Thermoelectric Power of Non-Magnetic Metallic Glasses D. Greig	389
Low-Energy Excitations and their Origin in Amorphous Metals D.M. Herlach and H.W. Gronert	401
Multilayered Amorphous Semiconductors: Periodic and Quasiperiodic Superlattices C. Janot	417
Electronic Transport in Amorphous Chalcogenide Semiconductors E.A. Owen	443
Effect of Pressure on Electrical Resistance of Transition Metal Based Amorphous Alloy Example of $\text{Fe}_{40}\text{Ni}_{40}\text{P}_{14}\text{B}_6$ M. Yousuf and K.G. Rajan	467
Study of Transport Properties of AuFe Spin Glasses near the Percolation Limit G. Chandra and A.K. Nigam	471
Magnetic Contribution to the Electrical Resistivity in Amorphous $\text{Fe}_x\text{Ni}_{80-x}\text{B}_{20}$ Alloys S.N. Kaul and M. Rosenberg	475
Electrical Transport Studies in Amorphous $\text{Fe}_{80-x}\text{Cr}_x\text{B}_{12}\text{Si}_8$ Alloys V. Srinivas, G. Rajaram, S. Prasad, G. Chandra, S.N. Shringi and R. Krishnan	481
Influence of Cr-Content on Electrical Resistivity and Thermoelectric Power of Metal-Metal and Metal-Metalloid Glasses P.V. Reddy and D. Akhtar	485
Thermoelectric and Calorimetric Studies on $(\text{Fe}_{1-x}\text{Co}_x)_{75}\text{Si}_{15}\text{B}_{10}$ Metallic Glasses N.R.M. Rathnam, A.K. Bhatnagar and O.V. Nielsen	489
Influence of Transition Metal Additives on the Transport Properties of Amorphous $\text{Fe}_{80}\text{T}_3\text{B}_{17}$ and $\text{Ni}_{77}\text{T}_3\text{B}_{20}$ B. Sas, J. Toth, A. Lovas and G. Konczos	493
The Origin of a Band Gap in Amorphous Si G.J. Morgan, B.J. Hickey, D. Mayou and A. Pasturel	497
Exponential Band Tails as a Consequence of the Glass Transition J.C. Dyre	501
DC Electrical Conduction in $\text{TeO}_2\text{-V}_2\text{O}_3$ Glasses R. Singh and K. Sethupati	505
Electrical Transport Properties of Amorphous Semiconducting Sb-Se-Te System B.D. Muragi and J.K. Zope	509
Conductivity Minimum of the $\text{V}_2\text{O}_5\text{-P}_2\text{O}_5$ Glasses Containing Bi_2O_3 or Sb_2O_3 A. Ghosh and B.K. Chaudhuri	515
Amorphous CuInSe_2 Films S. Venkataraman and A.K. Bhatnagar	519
Conduction Mechanism in Bulk Amorphous $\text{Ge}_x\text{Sb}_{10}\text{Se}_{90-x}$ System P. Sikka	523
Electronic Structure of (001) Face Centered Cubic Quasi-Periodic Superlattice V. Kumar and G. Ananthakrishna	527
Coalescence of Atomic Clusters and its Effect on Localization Properties V. Srivastava	533
Localisation Effect in Thermopower and Resistivity of Quasi 1D Semiconducting Compound $[(\text{Nb}_{1-x}\text{Ta}_x)\text{Se}_4]_3\text{I}$ C. Bansal, K. Surendranath and V. Srivastava	537
Abstract: Electrical Resistivity of Amorphous $\text{Ru}_x\text{Fe}_{80-x}\text{B}_{20}$ Alloys P.L. Paulose, V. Nagarajan and R. Vijayaraghavan	543
Abstract: D.C. Conductivity and Thermoelectric Power Studies in Bulk Amorphous $\text{Ge}_x\text{Se}_{1-x}$ Alloys R.M. Mehra, M. Arora and P.C. Mathur	544
Abstract: Electrical Conductivity in Zinc-Borate Glasses Containing Transition Metal Oxides R.V. Anavekar, N. Devaraj and J. Ramakrishna	545

Abstract: Low-Temperature Resistivity and TEP of $\text{Fe}_{80-x}\text{Cr}_x(\text{PC})_{20}$ S.N. Bhatia, K.V.S. Mahesh and M.N. Ghatika	547
Abstract: The Study of Electronic Transport in Amorphous Fe Ni Cr Mo Si B S.N. Bhatia, R. Walia and P.B. Joshi	549
Abstract: The Addition Effect of Ti on the Electrical and Thermal Transport of a-As_2Se_3 M.F. Kotkata, M.H. El-Fouly, S.A. Fayek and S.A. El-Hakim	551
Abstract: IR Spectroscopic and D.C. Resistivity Studies of Barium-Vanadate Glasses T.K. Bansal, S. Bansal and R.G. Mendiratta	553
Abstract: Temperature Dependence on DC and AC Conductivity in Amorphous Ge-Sb-Se Films R.M. Mehra, R. Kumar and P.C. Mathur	554
Metallic Glass Structure by ^{57}Fe Mossbauer Spectroscopy G. Le Caer and J.M. Dubois	555
Temperature Dependence of Reduced Hyperfine Fields in Amorphous $\text{Fe}_{72}\text{Ni}_{10-x}\text{Mo}_x\text{B}_{16}\text{Si}_2$ T.G. Narendrababu, R. Jagannathan, A.K. Bhatnagar and V.R.V. Ramanan	567
Structure of $(\text{Fe}_{1-x}\text{M}_x)-(\text{B}_{1-y}\text{Si}_y)$ Metallic Glasses [M/Ni, Co: $x=0$ or 20; $y=0$ or 10] Using Mossbauer Hyperfine Parameter Correlation P. Raj, A. Sathyamoorthy and I.K. Rao	571
Magnetic Properties and Crystallization Studies of Amorphous $\text{Fe}_{74}\text{Co}_5\text{Cr}_5\text{B}_{16}$ Alloy T.G. Narendrababu, R. Jagannathan, V.N. Murthy, D. Akhtar and P. Subrahmaniam	575
Comparison of Magnetic Hyperfine Field Distributions in Amorphous $\text{Fe}_{40}\text{Ni}_{40}\text{B}_{20}$ and $\text{Fe}_{39}\text{Ni}_{39}\text{Mo}_4\text{Si}_6\text{B}_{12}$ Alloys B.B. Prasad and A.K. Bhatnagar	579
Room Temperature Mossbauer Study of Amorphous Fe-V-B-Si Alloys R.V. Vadnere, V. Srinivas, S. Prasad, S.N. Shringi, G. Rajaram, A.K. Nigam, G. Chandra and R. Krishnan	585
Mossbauer and Magnetic Study of Metglas $(\text{Co}_{0.93}\text{Fe}_{0.07})_{75-x}\text{Cr}_x\text{Si}_{15}\text{B}_{10}$ K. Ganesan, A. Narayanasamy and T. Nagarajan	589
Effect of Sn-Implantation in Amorphous $\text{Fe}_{40}\text{Ni}_{40}\text{B}_{20}$ K.G. Prasad, M.B. Kurup and R.P. Sharma	593
Development of Software for Mossbauer Spectroscopic Analysis Using Microcomputers of Amorphous Phases as Well as Crystalline Phases M.S. Saini and R. Kamal	597
Mossbauer Studies on Amorphous Fe-Ni-B-Si I.K. Rao and H.V. Varma	601
Ferromagnetic Resonance in Amorphous $\text{Fe}_{82}\text{B}_{18-y}\text{Ge}_y$ Alloys: Effect of Isothermal Annealing V.S. Kasyapa, S.N. Kaul and C. Bansal	605
FMR in as Prepared and Annealed $\text{Fe}_{74}\text{Cr}_6\text{B}_{12}\text{Si}_8$ Metallic Glass R. Bilas, D. Bahadur, P. Chand and R.A. Dunlap	609
FMR Studies on $\text{Fe}_{80-x}\text{Ni}_x\text{B}_{20}$ Amorphous Alloys G.V. Rao, C.S. Sunandana and A.K. Bhatnagar	615
An Electron Spin Resonance Study of some Insulating Europium Chalcogenide Spin Glasses N.P. Raju and G. Rangarajan	619
Electron Spin Resonance of Mn^{2+} in Bi Doped N-Type Amorphous Germanium Chalcogenide Semiconductors K.L. Bhatia, V.K. Bhatnagar and D.P. Gosain	623
EPR of Tellurium-Vanadate Glasses Partially Substituted by Iron-Group Ions C.S. Sunandana	627
Positronium Pick-Off Life Times in $\text{V}_2\text{O}_5\text{-TeO}_2\text{-CuO}$ Semiconducting Glasses K. Veena, C.S. Sunandana and C. Bansal	633
Positron Annihilation for Investigation of Chemical Bonding in the Structures of As-Se, As-Te and Ge-Se I.B. Kevdina, B.V. Kobrin, V.S. Minaev and V.P. Shantorovich	637
Effect of Copper and Lead on the Properties of As-Ge-X(X/X, Se,Te) Glasses - Positron Annihilation Studies B.V. Kobrin, V.P. Shantorovich, T.I. Kim, M.D. Mikhailov, Z.U. Borisova and B.I. Zaslavskii	638

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 $A-Fe_{81}B_{13.5}Si_{3.5}C_2$	
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 $Ni_{60}Nb_{40}$ and $Ni_{55}Cr_5Nb_{40}$ 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 $Fe_{73}Ti_{27}$ 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 $Ni_{60}Nb_{40}$ 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 $Fe_{67}Co_{18}B_{14}Si_1$ 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	
I.B. Singh, T.K.G. Namboodhiri and R.S. Chaudhary	809
Abstract: Study of Secondary Electron Emission Charactersitics in Bismuth Containing Semiconducting Glasses	
N.R. Rajopadhye, S.V. Bhoraskar and D. Chakravorty	810
Abstract: Surface Studies on Metallic Glasses	
A.S. Nigavekar	811
Photoacoustic Studies on Selenium-Based Semiconducting Glasses	
K.V. Reddy and A.K. Bhatnagar	813
Photoacoustic Studies of Lead-Vanadate Glasses	
U.N. Virataswaroop and A.K. Bhatnagar	817
Optical and Electrical Properties of Amorphous TeO₂ Films	
S. Kumar and A. Mansingh	821
Dark Recovery of Fatigued PL Centers during Fatiguing in Amorphous Ge-Se System	
M. Koós, I. Pocsik and I.K. Somogyi	825
Some Studies on Wo₃ Thin Films	
R.P. Singh, S.L. Agrawal and Y.D. Singh	829
Abstract: Photo-Induced Changes in Chalcogenide Glasses	
S.R. Elliott	833
Theoretical Studies of Optical Absorption in Amorphous Semiconductors	
U. Dersch, M. Grunewald and P. Thomas	835
Correlations among the Technological Paramteters and the Soft Magnetic Parameters of Metallic Glasses	
I. Nagy, C. Hargital and C. Kopasz	837
Metallic Glasses in Magnetic Applications	
V.R.V. Ramanan, C.H. Smith and G.E. Fish	849
Amorpohous Materials in Information Storage	
R. Krishnan	863
Compatibility of Varnished Metallic Glass Laminations with Transformer Oil	
G. Swaminathan, T.S.R. Moorthy, L.R. Venkateswaran and K.M. Kamath	875
AC Transducer System for Determination of Small Displacement	
A. Mitra and S.K. Ghatak	879
Application of Metallic Glasses to Power Transformers: Technical Considerations	
G. Swaminathan, S. Srinivasan and S. Ameerjan	883
Charge Storage Capacity of RF Sputtered Amorphous Barium Titanate Films	
C.V.R.V. Kumar and A. Mansingh	887
Formation of Glassy Films by N₂⁺ Ion Implantation into Fe and Ni	
P. Chatterjee, A.K. Batabyal and A.K. Barua	893
Doping of Amorphous Semiconductors	
M. Stutzmann	894
Abstract: Dielectric Properties of Semiconducting Glasses	
A. Mansingh	895
Dielectric Behaviour of Sodium Niobate Silicate Glasses	
S. Singh and A. Mansingh	897
Ultrasonic Velocity and Attenuation in Sodium Niobate Silicate Glasses	
A. Pasricha, N. Chopra, A. Mansingh and S. Singh	901
Ultrasonic Detection of Cumulative Damage in Hybrid Glass Firbre/zirconia/epoxy Composite	
V.K. Srivastava and R. Prakash	905