

Table of Contents

Preface

Recent Progress in the Understanding of Si-Nanostructures Formation in a-SiN_x:H Thin Film for Si-Based Optoelectronic Devices S.P. Singh and P. Srivastava	1
Room Temperature Ferromagnetism and its "Switch" Behaviour in some Dilute Magnetic Oxides: an Electronic Structure and Magnetization Study R.K. Singhal	19
Organic Light Emitting Diodes: Effect of Annealing the Hole Injection Layer on the Electrical and Optical Properties P. Predeep, T.A. Shahul Hameed, J. Aneesh and M.R. Baiju	39
Corrosion and Oxidation Behavior of Ti-Based Amorphous and Nanocrystalline Alloys S.K. Sharma	51
First-Principles Study of Structural, Electronic, Elastic, Phonon, and Thermodynamical Properties of the Niobium Carbide N. Rathod, S. Gupta, S.K. Gupta and P.K. Jha	67
Role of Particle Size on Structural and Magnetic Behavior of Nanocrystalline Cu-Ni Ferrite S.N. Dolia	79
Influence of Co Doping on Structural and Magnetic Properties of Fe₂P S. Kumar, A. Krishnamurthy and B.K. Srivastava	93
Iso-Conversional and Isokinetic Methods of Analysis of Non-Isothermal Crystallization in Ti₅₀Cu₂₀Ni₃₀ Metallic Glass H. Dhurandhar, T.L. Shanker Rao, K.N. Lad and A. Pratap	107
Glass Forming Ability of Ca-Based Bulk Metallic Glasses A.T. Patel, K.N. Lad and A. Pratap	121