

Table of Contents

Thermal Behavior of Nickel Hydroxide Nanopowders J.M. Boyer, B. Répetti, R. Garrigos, M. Meyer and A. Bée	1
Formation, Nanostructure and Mechanical Properties of Cu-Based Nanocrystal-Dispersed Glassy Matrix Alloys A. Inoue, W. Zhang and J. Saida	11
Nanocrystallization Induced by Severe Plastic Deformation of Amorphous Alloys R. Valiev, D. Gunderov, A.P. Zhilyaev, A.G. Popov and V.G. Pushin	21
High-Strength Aluminium-Based Alloys J.B. Fogagnolo, C.A.D. Rodrigues, C. Bolfarini, C.S. Kiminami and W.J. Botta Filho	27
Magnetic Dynamics of Iron-Oxide Nanoparticles in Frozen Ferrofluids and Ferronematics G.F. Goya, S.L. Gómez and S.M. Shibli	33
Study of Magnetic Materials by Mössbauer Thermal Scans. Application to Nanocrystalline Systems F.H. Sánchez, G.A. Pasquevich, P. Mendoza Zélis, A.F. Cabrera, L. Ying-feng and M. Vázquez	39
Ionic Conducting Glasses of the Ag-Ge-Se System B. Arcondo, M.A. Ureña, A. Piarristeguy and M. Fontana	45
Transport Properties and Solvent Induced-Crystallization in PET and PET-Clay Nanocomposite Films M.L.Q. Andrade, S. Manrich and L.A. Pessan	51
Poly(Ethylene Terephthalate)-Organoclay Nanocomposites: Morphological, Thermal and Barrier Properties S.E. Vidotti, A.C. Chinellato, L.F. Boesel and L.A. Pessan	57
Short-Range Order in $\text{Pd}_{42.5}\text{Cu}_{30}\text{Ni}_{7.5}\text{P}_{20}$ Bulk and Ribbon Metallic Glasses E.V. Levchenko, N. Lupu, A. Le Moulec, E. Matsubara, G. Vaughan, A. Kvik, A. Inoue and A.R. Yavari	65
Carbon-13 Solid State NMR Study of Polypropylene/Clay Nanocomposite R.F. Nogueira, M.I.B. Tavares and R.A.S. San Gil	71
Chemical Route Processing and Structural Characterization of $\text{Cu-Al}_2\text{O}_3$ and $\text{Ni-Al}_2\text{O}_3$ Nano-Composites E.A. Brocchi, M.S. Motta, I.G. Solórzano, P.K. Jena and F.J. Moura	77
Core Shell Silica-Silicon Hybrid Nanoparticles: Synthesis and Characterization M. Lopes Dias, M.A.S. Pedroso, C.C.G. Mothé and C. Azuma	83
Mircowave-Assisted Combustion Synthesis of LaCrO_3 Nanopowders R.H.G.A. Kiminami and M.R. Morelli	91
Concentration Dependence of Hyperfine Parameters of Fe-Cu Alloys L.M. Socolovsky and F.H. Sánchez	97
Microstructural Characterization of As-Quenched and Heat Treated Al-Si-Mg Melt-Spun Ribbons C. Triveño Rios, S.F. Santos, W.J. Botta Filho, C. Bolfarini and C.S. Kiminami	103
Crystallization of $\text{Fe}_{63}\text{Nb}_{10}\text{Al}_4\text{Si}_3\text{B}_{20}$ Amorphous Alloy C.R.M. Afonso, C. Bolfarini, W.J. Botta Filho and C.S. Kiminami	109
Microstructural Characterization of Gas Atomized Al-10%Si-4%Fe Alloy Powder L.A. Bereta, C.S. Kiminami, W.J. Botta Filho and C. Bolfarini	115
Strengthening of Nanostructured Aluminium-Copper Thin Films M. Draissia and M.Y. Debili	121