

Table of Contents

Effect of Zirconia Nano Filler for Enhancing Energy Capacity in Polyethylene Oxide Based Polymer Electrolyte C.P. Sugumaran and D.E. Selvaraj	1
Residual Charges during Electrospinning Assist in Formation of Piezoelectricity in Poly(Vinylidene Fluoride-co-Trifluoroethylene) Nanofibers A.Y. Choi, H.J. Sim, M.K. Shin, S.J. Kim and Y.T. Kim	13
A Facile Method for Synthesis of CdS/P(St-co-MMA) Nanorods Composite and Characterization of its Optical Properties A. Jila and K. Golshad	20
Characterization and Volumetric Studies of Magnetite (Fe₃O₄) Nanofluids at Different Temperatures M. Asghar Jamal, A. Bin Yousaf, M.K. Khosa, M. Usman and M. Khan	28
Conductive Microwires of Silver Nanoparticles Prepared by Microcontact Printing S.L. Liu, Z.Q. Xin, X. Li, B.Q. Huang, P.J. Deng and L.H. Li	36
Manufacturing of Smart Nanomaterials for Structural Health Monitoring (SHM) in Aerospace Application Using CNT and CNF M.S. Nisha and D. Singh	42
Control of Structure and Properties of Nanostructured Multilayer Composite Coatings Applied to Cutting Tools as a Way to Improve Efficiency of Technological Cutting Operations A.S. Vereschaka, A.A. Vereschaka, D.V. Sladkov, A.Y. Aksenenko and N.N. Sitnikov	51
X-Ray Diffraction and FESEM Analysis for Mixture of Hybrid Nanoparticles in Heat Transfer Applications S. Nallusamy and A. Manoj Babu	58
Synthesis and Optical Characterization of CuO Nanoparticles on Solar Borosilicate Glass R.V. Ramani, B.M. Ramani, A.D. Saparia, D. Dhruv and J. Markna	68
Photocatalytic Activity of One-Pot Synthesized Reduced Graphene Oxide – Zinc Oxide Nanocomposites K. Mohammadi, S. Safa, S. Safalou Moghaddam, M. Rabbani and R. Azimirad	74
Electrochemistry Behavior of Ag/TiO₂ Nanobelts and its Potential Applications on Mercapto Proteins Detection Y.M. Wang, X.H. Hao and H. Liu	85
Effect of Annealing Atmosphere on the Structural and Optical Properties of ZnO Thin Films on Si (100) Substrates Grown by Atomic Layer Deposition J.L. Tian, G.G. Wang and H.Y. Zhang	92
The Effects of Liquid Environment on Ablation Efficiency and Morphology of Gold Nanoparticles Prepared by Laser Ablation Technique M.A. Al-Azawi, N. Bidin, M. Bououdina, A. Alshanableh and E.Y. Salih	99
Properties of Silver and Copper Nanoparticle Containing Aqueous Suspensions and Evaluation of their <i>In Vitro</i> Activity against <i>Candida albicans</i> and <i>Staphylococcus aureus</i> Biofilms M. Montes, C.G. Pierce, J.L. Lopez-Ribot, A.S. Bhalla and R.Y. Guo	109
A New Method for Synthesis of FeMnO₃ Ceramics and its Phase Transformation Z.J. Li, S.F. Wang, B. Li and X. Xiang	122