

Table of Contents

Radio Frequency Magnetron Sputtering Growth of Titanium Dioxide Thin Films: Effects of Substrate Temperature on Microstructural and Optical Properties H.E. Doghmane, F. Challali, T. Touam, A. Chelouche and D. Djouadi	1
Corrosion Resistance and Adhesion Properties of Electrophoretic Deposited Nano TiN Powder S.S. Golchin and H. Aghajani	15
Growth Optimization and Study on Structural, Morphological, Optical and Electrical Properties of As-Deposited Zinc Sulfide Thin Films Fabricated by Radio-Frequency Magnetron Sputtering Technique at Room Temperature M.S. Bashar, R. Matin, M. Sultana, A. Siddika, M.A. Gafur and A. Farid	27
Nitrogen Dioxide Gas Sensor of In₂O₃- ZnO Polyhedron Nanostructures Prepared by Spray Pyrolysis J.M. Marei, A.A. Khalefa, Q.A. Abduljabbar and J.M. Rzaiz	41
Synergistic Effect of Tea-Phytochemicals, Noble Metals and Zno Nano-Photo-Composites for Combating Resistance of Bacterial Growth P. Basnet, P.K. Jha, A. Gupta and S. Chatterjee	53
Synthesis of Highly Stabilized AuNPs Using 3,5-Dinitrobenzoic Acid and Sodium Acetate as Capping Agents in an Aqueous Solution and their Bioactivity W. Abdussalam-Mohammed, M.Y. Najem, A.O. Errayes, S.S. Shamsi, M.O. Darwish and A.B. Mezoughi	67
Parametric Study of Nanoparticles Effects on Convective Heat Transfer of Nanofluids in a Heated Horizontal Annulus M. Benkhada, F. Bensouici and T. Boufendi	81
Fabrication of Platinum/ Polypyrol-Carbon Nanofiber Nanocomposite Electrocatalyst for Direct Methanol Fuel Cells M. Yaldagard, M. Nazoktabar and M. Jahanshahi	101
Strain Engineering of Graphene Nanoribbon Transistors Made Using Analytical Quasi-Ballistic Transport Model G. Kliros	119
Secondary Metabolites in Functionalized Titanium Dioxide (TiO₂) Nanoparticles: A Novel and Safe Virucide against SARS-CoV-2 G. León-Gutiérrez, C. Cabello-Gutiérrez, M.H. Martínez-Gómez, P. Azuara, B. Madden, J. Shalkow and A. Mejía	137