

Table of Contents

Impedance Analysis and Modulus Spectroscopy of Fe (III) Containing Strontium Stannate Nanoparticles A. Kumar, A.A. Kumar and J.K. Quamara	3
The Effect of Preparation Temperature of Electrolytes on Undoped and Ag-Doped TiO₂ Nanotube Structures S. Phocharin, B. Samran, R. Vongwathaporn, N. Kodtharin, R. Chaiyarat and U. Tipparach	7
Nanofiber Polyaniline and Polyaniline-Clay Nanocomposite Prepared via Sonochemical and Sol-Gel Techniques A. Abdelraheem, A.H. El-Shazly and M.F. El-Kady	12
The Effect of Ultrasonic Treatment on the Morphology and Microstructure of TiO₂ Nanotubes Prepared by DC Anodization B. Samran, E.N. Timah and U. Tipparach	17
Synthesis and Characterization of Nanomagnetic Graphene via Co-Precipitation Technique with Aid of Ultrasound E.M. Abo-Zahhad, A.H. El-Shazly and M.F. El-Kady	21
Silver Doped Nano-Sized Bioglass Ceramics: Synthesis, Characterization and Biocompatibility Studies C.R. Mariappan and N. Ranga	25
Tunable Properties of Three-Dimensional Graphene-Loaded Plasmonic Absorber Using Plasmonic Nanoparticles J.Y. Li, J.F. Zhu and Q.H. Liu	29
Plasmon-Enhanced Performance of an Array of Core-Shell Silver Nanoparticles Photodeposited onto a Titanium Dioxide Layer C.C. Yuan-Fong	35
Fabrication of TiO₂ Nanoparticles on Large-Area Graphene Oxide Sheets as Promising Photocatalytic Material T.L. Tan, S.B. Abd Hamid, K.M. Lee and C.W. Lai	39
The Role of Nanoporous Biochars Functional Groups for Immobilization of Heavy Metals in Aqueous Solution A.K. Darban, H. Arabyarmohammadi, M. Abdollahy and B. Ayati	43
Relation between Friction Stir Spot Welding Parameters and Mechanical Properties of High Density Polyethylene/Glass Spheres Polymer Composites M. Tasdemir, M.K. Bilici and M. Kurt	49
Research of Detecting Methods of Welding Cracks in CFRP-Steel Structures Based on Eddy Current Pulsed Thermography Z.P. Liu, X. Li, M.C. Li, X.L. Liu and L. Ke	53
Study of Box Girder Steel Structure Locally Reinforced by CFRP Z.P. Liu, Z.C. Li, M.C. Li, K. Chen and C.C. He	57
Optimization of Machining Parameters in Electro Discharge Machining of Al6061-Cu-SiC-Graphite Metal Matrix Composite D.K. Kasdekar, V. Parashar and P. Soni	61
A New Unit Cell Concerned Realistic Geometry Structure of 3D Four Directional Braided Composite H.J. Zhang and C.W. Zhou	65
Effect of Weathering on the Mechanical Properties of HDPE/Rice Straw Composite Y.M.S. El Shazly, M.H. El Nemr, A.A. Mubarak and M.H. Zaki	69
Shungite Nanopowder as a Modifier of Mechanical Properties and Water Absorption for Three-Ply Particle Board S.B. Vasilyev, G.N. Kolesnikov, A.V. Pitukhin, N.G. Panov and V. Kostyukevich	73
Effect of Cellulose Coating on Properties of Cotton Fabric B.M. Kale, J. Wiener, J. Militky and H.S. Maqsood	81
Optimization of Tin Magneto Electrodeposition under Additive Electrolyte Influence Using Taguchi Method Application Sudibyoy, F. Nurjaman and N. Aziz	85

Anatase Type Titanium Dioxide Prepared by Oxidation of Titanium Carbide J. Matsushita, T. Tsuchiyama, K. Hamaguchi, N. Iwamoto, X.L. Wang, J.F. Yang, T. Sekino, X.Y. Wu, S. Yin and T. Sato	92
Comparison between Tungsten and Bronze Powder as a Backing Material of Ultrasonic Probe for Residual Stress Measurement M. Noipitak, B. Khwansri and S. Charunetratsamee	97
High-Temperature Sulfidation of SUS316L, TiN, and CrN Thin Films in (N₂/3.1%H₂O/2.42%H₂S)-Mixed Gas M.J. Kim, S.W. Chung and D.B. Lee	101
Activated Carbon as Heterogeneous Catalyst of Catalytic Ozonation Activity for Improvement RB 49 Dye Degradation S. Sangjan, M. Sratongin, A. Kawpakpor, P. Amphap, L. Jamtanom and K. Kaewbang	105
Assessment of Titanium Carbide Chlorination by Statistical Design E. Ahmadi, E.M. Sereiratana, S.A. Rezan, F.Y. Yeoh, M.N. Ahmad Fauzi and G. Zhang	111
Investigation of Aramid Fibers Compared with Steel Fiber on Bending Behavior of Hybrid RC Beams L. Chan, G. Tanapornraweekeit and S. Tangtermsirikul	117
An Experimental Behaviour of Cellular Lightweight Concrete-Filled Steel Square Tube Columns under Axial Compression J. Thumrongvut, S. Seangatith, T. Siriparinyanan and S. Wangrakklang	121
A Review on the Use of Engineered Cementitious Composite in Bridges A. Krouma and Z.I. Syed	125
Models for Predicting Free Water and Specific Heat of Pastes Containing Ground Granulated Blast Furnace Slag A. Dabarera, W. Saengsoy, K. Mori and S. Tangtermsirikul	135
Behavior of Rectangular Concrete Column Confined with Sisal Fiber Reinforced Polymers (Sisal FRP) A. Suwattanakorn, Q. Hussain, W. Rattanapitikon and A. Pimanmas	140
Flexural Strengthening of RC Beams with Sisal Fiber Composites and Sisal Fiber Rods A. Qayyum Khan, Q. Hussain, W. Rattanapitikon and A. Pimanmas	144
Compressive Behavior of Concrete Confined by Hemp Fiber Composite Jackets A. Sangthongtong, Q. Hussain and A. Pimanmas	148
Shear Strengthening of Reinforced Concrete Beams with HFRP Composite S. Siriluk, Q. Hussain, W. Rattanapitikon and A. Pimanmas	152
Flexural Behavior of Reinforced-Concrete (RC) Beams Strengthened with Hemp Fiber-Reinforced Polymer (FRP) Composites S. Vinh, Q. Hussain, W. Rattanapitikon and A. Pimanmas	156
The Analysis of the Mechanics Performance about GFRP Tube Confined Concrete Short Column under the Axial Compression Z.G. Song and C. Fan	160
The Effect of Mixing Ratios on Pore Properties of Fe Foam Fabricated Using Slurry Coating Process J.Y. Yun, D.H. Park and J.P. Wang	166