

DC MEMBER

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List of Publications (Recent):

1. Role of interfacial charge transfer process in the graphene-ZnO-MoO₃ core-shell nano assemblies for efficient disinfection of industrial effluents, Journal of processing and application of Ceramics, 2020.
2. Insights into Apatite Mineralization Potential of Thermally Processed Nanocrystalline Ca_{10-x}Fe_x(PO₄)₆(OH)₂, New Journal of Chemistry, 43(2019), pp. 1358-1371.
3. Fabrication of Bismuth ferrite Nanostructures and Their Visible Light Photocatalytic Degradation and Water Splitting Properties, AIP Conference Proceedings, 2115 (2019), pp. 030167.
4. Enhancing the Electrochemical Properties of Zinc Antimonate Nanorods by Anchoring Silver Nanoparticles as Hybrid Electrode Material for Supercapacitors, AIP Conference Proceedings, 2115(2019), pp. 030538.
5. On the Investigation of Structural and Biological Properties of 45S5 Bioglass and β -Tricalcium Phosphate Nanostructured Materials, AIP Conference Proceedings, 2115 (2019), pp. 030242.
6. Conductometric Sensing Characteristics of Nanoplatelet Bi₂WO₆ as Nanosensor for Hydrogen Detection, AIP Conference Proceedings, 2115 (2019), pp. 030317.
7. Fe₀/rGO Nanocomposites for Cadmium Remediation from Drinking Water and EMI Shielding Applications, AIP Conference Proceedings, 2115 (2019), pp. 030176.
8. Nanostructuring of Silver Nanoparticles Anchored 1D Zinc Antimonate Electrode Material by Ultrasonication Assisted Chemical Reduction Approach for Supercapacitors, Materials Chemistry and Physics, 224 (2019), pp.334-348.
9. Role of Sintering Temperature Dependent Crystallization of Bioactive Glasses on Erythrocyte/Cytocompatibility, Processing and Application of Ceramics, 13 (2019), pp. 12-23.
10. Effect of microwave and probe sonication processes on sol-gel-derived bioactive glass and its structural and biocompatible investigations, Journal of Biomedical Materials Research Part B: Applied Biomaterials, 108 (2019), pp.143-155.
11. Ultrasonication-assisted Fabrication of Hierarchical Architectures of Copper Oxide/Zinc Antimonate Nanocomposites Based Supercapacitor Electrode Materials, Ultrasonics Sonochemistry, 56 (2019), pp. 337-349.

12. Sonochemistry-assisted Fabrication of 1D ZnSb₂O₆@2D-MoS₂ Nanostructures: a Synergistic Energy Storage Material for Supercapacitors, *Ultrasonics Sonochemistry*, 58 (2019), pp.104589.
13. Zinc Antimonate Nanorods Integrated Porous Graphitic Carbon Nitride Nanosheets as Hybrid Electrode Materials for Supercapacitors, *Diamond and Related Materials*, 97 (2019), pp.107460.
14. Rapid Dilapidation of Alcohol Using Magnesium Oxide and Magnesium Aspartate based Nanostructures: A Raman Spectroscopic and Molecular Simulation Approach, *Journal of Inorganic and Organometallic Polymers and Materials*, 29 (2019), pp.1390-1399.
15. Modulation in the Band Dispersion of Bi₂WO₆ Nanocrystals Using the Electronegativity of Transition Elements for Enhanced Visible Light Photocatalysis, *Crystal Growth & Design*, 19 (2019), pp. 6224-6238.
16. Electrochemical Performance of Nitrogen-Doped TiO₂ Nanotubes as Electrode Material for Supercapacitor and Li-Ion Battery, *Molecules*, 24 (2019), pp. 2952.
17. A Review on Multifunctional Attributes of Zinc Antimonate Nanostructures towards Energy and Environmental Applications, *Chemical Papers*, (2019), pp. 1-12.
18. Evolution of Phase Pure Magnetic Cobalt Ferrite Nanoparticles by Varying the Synthesis Conditions of Polyol Method, *Materials Science and Engineering B*, 252 (2019), pp. 114451.
19. Evaluation of Whitlockite through Conventional Hydrothermal method and its In-vitro Erythrocyte Compatibility and Antibacterial activity, *AIP Conference Proceedings*, 2019.
20. Exploration of Thermal Treatment dependent In-Vitro Mineralization on 45S5 Bioactive Nanostructured Materials, *AIP Conference Proceedings*, 2019.
21. In vitro Bioactivity and Wound Healing Efficiency of 45S5 nanoBioactive Glass-Al₂O₃ Composites, *AIP Conference Proceedings*, 2019.
22. Fabrication of Nickel Oxide Nanostructures and Evaluation of Morphology-dependent Photocatalytic and Supercapacitor Performance, *AIP Conference Proceedings*, 2019.
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25. Graphitic Carbon Nitride: an Active and Economical Visible Light Photocatalyst towards Diversified Organic Pollutants, *AIP Conference Proceedings*, 2019.
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28. Impact of copper on in-vitro biomineralization, drug release efficacy and antimicrobial properties of bioactive glasses, *Materials Science and Engineering: C*, 2019, pp.110598.
29. Dual Oxidation State Induced Oxygen Vacancies in Pr Substituted BiFeO₃ Compounds: An Effective Material Activation Strategy to Enhance the Magnetic and

- Visible Light-Driven Photocatalytic Properties, *Materials Research Bulletin*, 101 (2018), pp. 107-115.
30. Understanding the lattice composition directed in situ structural disorder for enhanced visible light photocatalytic activity in Bismuth iron niobate pyrochlore, *Applied Catalysis B: Environmental*, 225 (2018), pp. 386-396.
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 40. Enhanced Shielding Effectiveness in Nanohybrids of Graphene Derivatives with Fe₃O₄ and ϵ -Fe₃N in the X-Band Microwave Region, *Nanoscale*, 10 (2018), pp. 12018-12034.
 41. Beyond Chemical Bonding Interaction: An Insight into the Growth Process of 1D ZnO on Few Layer Graphene for Excellent Photocatalytic and Room Temperature Gas Sensing Applications, *ChemistrySelect*, 3 (2018), pp. 7302-7309.
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