Dr. K. Vishista

Associate Professor, Department of Physics

Anna University

Publications

1. V Shanmugavalli, K Vishista, An Investigation on the Supercapacitive Performance of CuCo2O4/Polyaniline, a Nanocomposite of Spinel Structured Transition Binary Metal Oxide and Conducting Polymer, with a Special Focus on Bonding and Electron Density Distribution Through MEM, Journal of Inorganic and Organometallic Polymers and Materials, Volume: 30, Pages:1448-1462, 2020
2. V Shanmugavalli, K Vishista, Investigation of structural electron density distribution and enhanced electrochemical properties of spinel structured MnCo2O4/polyaniline nanocomposite prepared by facile and economical method, SN Applied Sciences, Vol. 2, Pages: 1-17, 2020
3. A Arulmozhi, K Vishista, G Subalakshmi, Synthesis, structural, tunable-luminescence spectra and quenching behaviour of Sm3+ ions activated Ba1-xBixTiO3 phosphors for LED applications, Journal Optik, Volume:205, Pages: 164252, 2020
4. V Shanmugavalli, K Vishista, Low-cost synthesis of cubic spinel structured highly efficient NiCo2O4/polyaniline nanocomposite for supercapacitor application, Materials Research Express, Volume: 6, Pages: 045021,2019
5. Raji RameshKumar, Tholkappiyan Ramachandran, Karthikeyan Natarajan, Munisamy Muralidharan, Fathalla Hamed, Vishista Kurapati, Fraction of Rare-Earth (Sm/Nd)-Lanthanum Ferrite-Based Perovskite Ferroelectric and Magnetic Nanopowders, Journal of Electronic Materials, Volume: 48, Pages:1694-1703,2019
6. V Shanmugavalli, OV Saravanan, K Vishista, R Saravanan, A study of charge density distribution and enhanced electrochemical properties of zinc cobaltite/polyaniline nanocomposite for supercapacitor application, Ionics, Volume: 25, Pages: 4393-4408,2019
7. A Nirmalesh Naveen, K Vishista, Fathalla Hamed,Investigation on the electrochemical performance of hausmannite Mn3O4 nanoparticles by ultrasonic irradiation assisted co-precipitation method for supercapacitor electrodes, R Tholkappiyan, Journal of Taibah University for Science, Volume:12, Pages:669-677,2018

8. S Venkatesh, K Vishista, Identification of the best chemical equivalent ratio to produce emeraldine salt exhibiting better pseudo capacitance, Journal Electrochimica Acta, Volume :263, Pages 76-84, 2018
9. M Kamalanathan, H Shamima, R Gopalakrishnan, K Vishista, Influence of solvents on solvothermal synthesis of Cu2SnS3 nanoparticles with enhanced optical, photoconductive and electrical properties, Materials technology Volume: 33 (2), Pages:72-78, 2018
10. KR Arivukkarasu, S Venkatesh, N Karthikeyan, K Vishista, Preparation and characterisation of pure and neodymium doped samarium strontium cobaltites, Materials Research Innovations, 2018
11. P Chandrasekar, K Vishista, Photocatalytic Activity of High Energy Ball Mill Derived (ZnO)1−x(C)x Nanocomposite, Transactions of the Indian Institute of Metals, Volume:71, Pages: 2051-2055, 2018
12. P Chandrasekar, SN Begum, K Vishista, Influence of Grain and Grain Boundary Interfaces on Dielectric Relaxation of Ceria Nanocrystals Using Modulus Formalism Under Biased and Equilibrium Conditions, Nanoscience and Nanotechnology Letters, Volume: 10, Pages: 389-395, 2018
13. P Buvana, K Vishista, Devaraj Shanmukaraj, Ramaswamy Murugan,Lithium garnet oxide dispersed polymer composite membrane for rechargeable lithium batteries, Ionics, Volume: 23, Pages: 541-548, 2017
14. R Tholkappiyan, K Vishista, Factors controlling phase formation of novel Sr-based Y-type hexagonal ferrite nanoparticles, F Hamed, Pramana, Volume: 88, Pages: 27, 2017
15. Kamalanathan M,Hussain Shamima, Vishista K, Gopalakrishnan R, Influence of solvents on solvothermal synthesis of Cu2SnS3 nanoparticles with enhanced optical, photoconductive and electrical properties, Materials Technology,2017
16. J Bennet, R Tholkappiyan, K Vishista, N Victor Jaya, Fathalla Hamed, Attestation in self-propagating combustion approach of spinel AFe2O4 (A= Co, Mg and Mn) complexes bearing mixed oxidation states: Magnetostructural properties, Applied Surface Science, Volume:383, Pages:113-125, 2016
17. G Rekha, R Tholkappiyan, K Vishista, Fathalla Hamed, Systematic study on surface and magnetostructural changes in Mn-substituted dysprosium ferrite by hydrothermal method, Applied Surface Science, Volume:385,2016

18. K Vishista R Tholkappiyan, Fathalla Hamed, Effect of annealing conditions on the struct-optical properties of ZnFe1.96La0.04O4 nanoparticles, Advanced Materials Letters, 2016
19. F Hamed, T Ramachandran, V Kurapati, The effect of induced strains on the optical band gaps in lanthanum-doped zinc ferrite nanocrystalline powders, Modern Physics Letters B 30 (18), 1650230, 2016
20. R Tholkappiyan, L Mohamed Azarudeen, G Anand Kumar, K Vishista, Characterization of Sm Doped CaO Phosphor Prepared by Co Precipitation Method, Advanced Science, Engineering and Medicine, Volume:8, Pages: 57-61, 2016
21. Fathalla Hamed R.Tholkappiyan, K.Vishista, Factors Controlling Pure-Phase Formation of Novel Sr-Based Y-Type Hexagonal Ferrites Nanoparticles, Pramana -- Journal of Physics, 2016
22. K Vishista R Tholkappiyan, R Satheesh Kumar, L Mohamed Azarudeen, G Anand Kumar, K Vishista, Fathalla Hamed, Facile Synthesis of Cr–doped SrS Phosphor: An Investigations on Structural, Vibrational, Morphological and Photoluminescence Properties, Materials Focus, 2016
23. R Tholkappiyan, K Vishista, Tuning the composition and magnetostructure of dysprosium iron garnets by Co-substitution: An XRD, FT-IR, XPS and VSM study, Applied Surface Science, Volume:351, Pages 1016-1024, 2015
24. R Tholkappiyan, K Vishista, Combustion synthesis of Mg–Er ferrite nanoparticles: Cation distribution and structural, optical, and magnetic properties, Materials Science in Semiconductor Processing, Volume:40, Pages 631-642, 2015
25. R Tholkappiyan, A Nirmalesh Naveen, S Sumithra, K Vishista, Investigation on spinel MnCo2O4 electrode material prepared via controlled and uncontrolled synthesis route for supercapacitor application, Journal of Materials Science, Volume:50, Pages:5833-5843, 2015
26. Divinah Manoharan, Aswaghosh Loganathan, Vishista Kurapati, Victor Jaya Nesamony, Unique sharp photoluminescence of size-controlled sonochemically synthesized zirconia nanoparticles, Ultrasonics sonochemistry, Volume:23, Pages:174-184,2015
27. E Kirubha, K Vishista, PK Palanisamy, Gripe water-mediated green synthesis of silver nanoparticles and their applications in nonlinear optics and surface-enhanced Raman spectroscopy, Applied Nanoscience, Volume: 5, Pages:777-786, 2015

28. R Tholkappiyan, K Vishista, Structural, optical and magnetic properties of nanocrystalline zinc ferrite particles from glycine assisted combustion: Effect of Sr2+ dopant, International Journal of Materials Research, Volume: 106, Pages: 127-136,2015
29. R Tholkappiyan, K Vishista, Synthesis, Structural, Magnetic and XPS Studies of Garnet Type-Dysprosium Iron Oxides by Glycine-Assisted Combustion Method, Journal: Nanoscience and Nanotechnology, Volume:7 (6), Pages: 469-475,2015
30. R Tholkappiyan, AN Naveen, K Vishista, Novel: Eggshell membrane template assisted synthesis of Mn2O3 electrode material for supercapacitor applications, AIP Conference Proceedings, vol.1665 (1), pages 140011,2015