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Last five years publication list

2020 Year Publications

1. Issues and Challenges of Rechargeable Lithium Batteries, O Padmaraj, N Satyanarayana, SA Suthanthiraraj, C Venkateswaran, Rechargeable Lithium-Ion Batteries: Trends and Progress in Electric Vehicles, 38
2. Non-adiabatic small polaron hopping transport above metal-like to insulator transition in the vacant 3d-orbital $\text{Tb}_2\text{Ti}_2\text{O}_7$ pyrochlore oxide, BS Kumar, YN Kumar, V Kamalarasan, C Venkateswaran, Journal of Materials Science: Materials in Electronics, 1-11
3. Optical property and thermal stability studies on $\text{Cs}_3\text{Bi}_2\text{I}_9$ perovskite quantum dots for photovoltaic application, V Kamalarasan, BS Kumar, T Mukilraj, C Venkateswaran, AIP Conference Proceedings 2265 (1), 030168
4. One-dimensional photonic hypercrystal for effective transmission of electromagnetic waves, RR Dorthy, C Venkateswaran, N Yogesh, AIP Conference Proceedings 2265 (1), 030389
5. Optical and electrical behavior of pristine and Mn doped $0.935(\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3)$ - 0.065BaTiO_3 lead free piezoelectric ceramics, APB Selvadurai, R Suriakarthick, K Aravinth, R Murugaraj, C Venkateswaran, AIP Conference Proceedings 2265 (1), 030458
6. A study of hybrid bifunctional $\text{CuCo}_2\text{O}_4/\text{rGO}$ electrocatalytic oxygen reduction and evolution reactions for rechargeable metal-air batteries, O Padmaraj, C Venkateswaran, AIP Conference Proceedings 2265 (1), 030677
7. Study of 100 MeV O^{7+} ion beam irradiation effects on spray deposited 5 wt% 'Li' doped MoO_3 thin film, R Rathika, SJ Jeyakumar, M Kovendhan, DP Joseph, C Venkateswaran, K Asokan, AIP Conference Proceedings 2265 (1), 030250
8. First Observed Metallic-to-Insulator Transition in the Vacant 3d Orbital Quantum-Spin Liquid $\text{Tb}_2\text{Ti}_2\text{O}_7$ B Santhosh Kumar, C Venkateswaran, The Journal of Physical Chemistry

9. Spin-glass behavior in nanocrystalline ZnFe_2O_4 spinel ferrite, S Thilagavathi, NP Shanker, C Venkateswaran, AIP Conference Proceedings 2270 (1), 080003
10. Concurrence of ferroelectric, dielectric and magnetic behaviour in $\text{Tb}_2\text{Ti}_2\text{O}_7$ pyrochlore, B Santhosh Kumar, R Narayana Perumal, C Venkateswaran, arXiv e-prints, arXiv: 2010.05032
11. Crossover to Negative Dielectric Constant in Perovskite PrMnO_3 , SK Balu, NP Shanker, M Manikandan, N Aparnadevi, T Mukilraj, Periyaswamy Manimuthu, Chakravarthy Venkateswaran, *physica status solidi (a)* 217 (17), 2000230
12. Fabry–Pérot modes associated with hyperbolic-like dispersion in dielectric photonic crystals and demonstration of a bending angle sensor at microwave frequencies, RR Darchy, C Venkateswaran, V Subramanian, Z Ouyang, N Yogesh, *Scientific Reports* 10 (1), 1-10
13. Tailoring the properties of spray deposited V_2O_5 thin films using swift heavy ion beam irradiation, R Rathika, M Kovendhan, DP Joseph, R Pachaiappan, AS Kumar, K Vijayarangamuthu, C Venkateswaran, K Asokan, S Johnson Jeyakumar, *Nuclear Engineering and Technology*
14. Anisotropic asymmetric transmission of circularly polarized terahertz waves in a three-dimensional spline assembly, CK Amaljith, C Venkateswaran, V Subramanian, Z Ouyang, N Yogesh, *Optics Letters* 45 (8), 2315-2318
15. Structural properties, optical, electrical and magnetic behavior of bismuth doped $\text{Gd}_3\text{Fe}_5\text{O}_{12}$ prototype garnet, N Aparnadevi, KS Kumar, M Manikandan, BS Kumar, JS Punitha, C Venkateswaran, *Journal of Materials Science: Materials in Electronics* 31 (3), 2081-2088

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16. 200 MeV Ag^{15+} swift heavy ion beam induced property modifications in Nb_2O_5 thin films by fluence variation, R Rathika, M Kovendhan, DP Joseph, K Vijayarangamuthu, AS Kumar, C Venkateswaran, K Asokan, S Johnson Jeyakumar, *Journal of Physics and Chemistry of Solids* 135, 109089
17. 200 MeV Ag^{15+} ion beam irradiation induced modifications in spray deposited MoO_3 thin films by fluence variation, R Rathika, M Kovendhan, DP Joseph, K Vijayarangamuthu, AS Kumar, C Venkateswaran, K Asokan, S Johnson Jeyakumar. *Nuclear Engineering and Technology* 51 (8), 1983-1990

18. Investigation of structural and electrical properties of pristine and 200 MeV Ag^{15+} ion irradiated 3 wt% 'Li' doped WO_3 thin films, R Rathika, M Kovendhan, DP Joseph, C Venkateswaran, K Asokan, S Johnson Jeyakumar, Indian Journal of Physics 93 (12), 1559-1565
19. Metamagnetism emergence and spectroscopic elucidation of SmFeO_3 nanoceramics, APB Selvadurai, R Thiagarajan, V Pazhanivelu, R Suriakarthick, W Yang, R Murugaraj, C Venkateswaran, Journal of Physics D: Applied Physics 52 (43), 435002
20. Realization of Moirè Pattern Photonic Crystal for Electromagnetic Wave Propagation Applications, RR Dorthy, C Venkateswaran, N Yogesh, 2019 PhotonIcs & Electromagnetics Research Symposium-Spring (PIERS-Spring ...
21. First Observed Metal to Insulator Transition in the vacant 3d orbital Quantum Spin Liquid TbTiO_3 , BS Kumar, C Venkateswaran, arXiv preprint arXiv:1904.12478
22. Metal Insulator Transition in vacant 3d orbital Quantum Spin Liquid: $\text{Tb}_2\text{Ti}_2\text{O}_7$, B Santhosh Kumar, P Manimuthu, N Praveen Shanker, T Mukilraj, C Venkateswaran, arXiv, arXiv: 1904.12478
23. Pentagonal shaped ZnTiO_3 ceramics for microwave dielectric applications, BS Kumar, M Manikandan, T Mukilraj, NP Shankar, C Venkateswaran, Journal of Materials Science: Materials in Electronics 30 (1), 525-528
24. Effect of 200 MeV Ag^{15+} ion beam irradiation at different fluences on WO_3 thin films, R Rathika, M Kovendhan, DP Joseph, AS Kumar, K Vijayarangamuthu, C Venkateswaran, K Asokan, S Johnson Jeyakumar, Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms

2018 Year Publications

25. Electrical property of Half Metallic Ferromagnet $\text{Pr}_{0.95}\text{Mn}_{0.939}\text{O}_3$, B Shanker, C Venkateswaran, marXiv preprint arXiv:1809.10350
26. Exploration of photoanode characteristics of a mixed ferroelectric ZnSnO_3 and semiconducting Zn_2SnO_4 phase for photovoltaic applications, M Manikandan, T Mukilraj, C Venkateswaran, SM Babu, Journal of Materials Science: Materials in Electronics 29 (17), 15106-15111
27. Gas-Sensing Characteristics of $\text{SrFeO}_{3-\delta}$ Thin Film Probed by a Homemade Apparatus, M Manikandan, BS Kumar, TM Raj, SM Babu, C Venkateswaran, Journal of Electronic Materials 47 (8), 4678-4682

28. Structural, vibrational, and enhanced magneto-electric coupling in Ho-substituted BiFeO₃, M Muneeswaran, SH Lee, DH Kim, BS Jung, SH Chang, JW Jang, B C Choi, J H Jeong, NV Giridharan, C Venkateswaran *Journal of Alloys and Compounds* 750, 276-285
29. Fabrication of eco-friendly *PNP* transistor using RF magnetron sputtering, BS Kumar, N Harinee, K Purvaja, NP Shanker, M Manikandan, N Aparnadevi, T Mukilraj, C Venkateswaran, *AIP Conference Proceedings* 1953 (1), 050061
30. Effect of stress, strain and optical properties in vacuum and normal annealed ZnO thin films using RF magnetron sputtering, BS Kumar, K Purvaja, N Harinee, C Venkateswaran *AIP Conference Proceedings* 1953 (1), 100056
31. Effect of spin interactions on the Landé splitting factor in NiFe₂O₄ inverse spinel, T Kavipriya, BS Kumar, C Venkateswaran, *AIP Conference Proceedings* 1942 (1), 130027

2017 Year Publications

32. Bi augmented magnetization in gadolinium iron garnet N Aparnadevi, BS Kumar, C Venkateswaran, *AIP Conference Proceedings* 1832 (1), 140032
33. Magnetodielectric coupling in multiferroic holmium iron garnets, MM Selvi, D Chakraborty, C Venkateswaran, *Journal of Magnetism and Magnetic Materials* 423, 39-45

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34. Room temperature dual ferroic behaviour of ball mill synthesized NdFeO₃ orthoferrite, N Aparnadevi, K Saravana Kumar, M Manikandan, D Paul Joseph, C Venkateswaran, *Journal of Applied Physics* 120 (3), 034101
35. 200 MeV Ag¹⁵⁺ ion beam irradiation effects on spray deposited 5 wt% 'Li' doped V₂O₅ thin film, M Kovendhan, DP Joseph, P Manimuthu, A Sendilkumar, K Asokan, C Venkateswaran, R Mohan, *AIP Conference Proceedings* 1731 (1), 080068
36. Half metallic ferromagnet Pr_{0.95}Mn_{0.939}O₃ for spin based devices, B Santhosh Kumar, N Praveer Shankar, C Venkateswaran, P Manimuthu, *Proceedings of the seventh international symposium for research scholars on metallurgy, materials science and engineering* 2020