

**Government Victoria College Palakkad**  
**Department of Physics**  
**Publications**

**2024**

Rajita Ramanarayanan, Sindhu Swaminathan, Bhabina N M, “Fast and facile pH tailored green synthesized ZnO photocatalyst by biogenic reduction using water extract of Averrhoa bilimbi (L) fruit International”, Journal of Materials Research, vol. 115, no. 1, (2024), pp. 21-27 (2023), doi: 10.1515/ijmr-2022-0433

**2023**

Rajita Ramanarayanan, Bhavana E.M, Akhila K, “Synthesis and Characterization of one Dimensional Bismuth Oxide Microstructures for Energy Harvesting Applications”, Journal of Advanced Materials and Interfaces, Kannur University, Volume 1, Issue 1 (2023)

K. Nayana and A. P. Sunitha, “Analysis of Electrocatalytic Performance of Nanostructured MoS<sub>2</sub> in Hydrogen Evolution Reaction”, Current Nanoscience Volume 19, Issue 4, 575 – 588 (2023) doi:10.2174/1573413718666220825163052

Nimisha O K, Pal Shubhadeep, Divya D, Al-Omari Imadin, Pradeesh Kannan and Reena Mary A P, “Rosensweig instability study of iron oxide nanofluid under uniform magnetic field”, Journal of Nanofluids (2023), doi:10.1166/jon.2023.1944.

Smiya John, Melda Francis V Geetha, “Influence of annealing on the properties of chemically prepared SnS thin films”, Chalcogenide Letters, 20(5), pp.315-323. (2023)

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S.B. Rakesh Chandran, C.L. Veenas, L.R. Asitha, B. Parvathy, K.R. Rakhimol, A. Abraham, S.R. Rajesh, A.P. Sunitha, G. Renuka, Potential – Current characteristics of lunar surface at average solar wind conditions Advances in Space Research

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<https://doi.org/10.1016/j.snb.2021.129678> (Impact Factor 7.460)

2. Nayana K. Sunitha A. P., Probing the Nanostructure MoS<sub>2</sub> as Catalyst in Light Activated and Electro Activated Hydrogen Evolution Reaction, Article number. MATPR-D-20-11687R1, Materials Today: Proc., 2021 https://doi.org/10.1016/j.matpr.2021.01.115
3. A.P. Sunitha, O. K. Devika, K. Nayana, K. J. Saji and T. N. Narayanan, Hydrothermally grown MoS<sub>2</sub> quantum dots for electrocatalytic applications, AIP, Jan 2021, DOI: 10.1063/5.0058400, AIP Conference Proceedings 2379, 030003 (2021); https://doi.org/10.1063/5.0058400
4. A. P. Sunitha, K. Sandeep, Josny Rose, P. Hajara, K. J. Saji, Carbon dots synthesized from Plecanthus Amboinicus: An eco friendly material with excellent non linear optical properties, Materials Today: Proceedings 47 (2021) 1601–1604. https://doi.org/10.1016/j.matpr.2021.04.288
5. Rajita Ramanarayanan, Sindhu Swaminathan “The green synthesis of iron oxide micro/nano structures for photocatalytic applications” IOP Conf. Series: Materials Science and Engineering 1166 (2021) 012041 doi:10.1088/1757-899X/1166/1/012041.
6. K Anlin Lazar, V J Cicily Rigi, D Divya, and K J Saji “Effect of annealing on structural and optical properties of SnS<sub>2</sub> thin films grown by thermal evaporation and post sulphur annealing technique” IOP Conf. Ser.: Mater. Sci. Eng. 1166 012004, doi:10.1088/1757-899X/1166/1/012004
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8. AP Reena Mary et al, *Effect of Surfactant Mediated Inter-Particle Interactions on the Magnetic Properties of Manganese Zinc Ferrite Ferrofluid*, IOP Conf. Series: Materials Science and Engineering 1166 (2021), 012027, doi:10.1088/1757-899X/1166/1/012027
9. Appusamy, S., Krishnan, S., Gopikrishna, M. et al. Bio-based Materials for Microwave Devices: A Review. Journal of Elec Mater 50, 1893{1921 (2021). <https://doi.org/10.1007/s11664-020-08672-z>, Impact Factor - 1.938
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5. Ambily Krishnan, Dharsana Vidyadharan, Sindhu Swaminathan, Pradeesh Kannan, "Co-electrodeposited Cu<sub>2</sub>ZnSnS<sub>4</sub> thin films for PN junction photovoltaics and dye sensitized solar cells", Materials Today: Proceedings 25 (2020): 122-128. (Impact factor 0.97) **DOI:10.1002/er.4754**
6. Shaheera M., K. G. Girija, Manmeet Kaur, V. Geetha, A. K. Debnath, R. K. Vatsa, K. P. Muthe, and S. C.Gadkari, "*Creation of multiple defect states in RF sputtered li doped ZnO nanocrystalline thin films*", Chemical Physics Letters 758 (2020) 137951, <https://doi.org/10.1016/j.cplett.2020.137951> Impact Factor - 2.029
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12. Sathishkannan P, Sowfia M, Sujith Raman, Gopikrishna M, "A Novel CR/LH Transmission Line based Bandpass Filter for sub 6 GHz 5G", International Symposium on Antennas and Propagation (APSYM 2020)
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