

List of Important Research Articles in the last five years

1. Gayathri Karthikeyan, Sakar Mohan, P. Muthu Austeria, R. Geetha Balakrishna, Surface-Engineered 2D Bimetallic FeNi-MOFs Derived from Layered Double Hydroxides for Photocatalytic Membranes with Enhanced Dye Fixation in Wastewater Treatment, *Small*, doi.org/10.1002/sml.202409133, 29 December 2024
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3. Altaf Pasha, Shubhangi Bhardwaj, Andrew Torma, Kaveramma AB, Nagaraj S Naik, Isaac Metcalf, Mukaddar SK, Hao Zhang, Mahesh Padaki, Suman Kalyan Sahoo, Aditya D Mohite, Sushobhan Avasthi, R Geetha Balakrishna, Ionic Lockdown: Sealing Migration Channels across Device Interfaces in Mixed Halide Perovskite Solar Cells *ACS Energy Lett.* 9, 6002–6010, (2024)
4. S. Akhil, Dong-Won Kang, Hyosung Choi, R. Geetha Balakrishna, Emerging Bi-Based Multicationic Ternary Chalcogenides as Promising Photoabsorbers for Solar Cells, *Solar RRL*, , 2400662 (2024)
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8. Swathi Divakar, Harini G Sampatkumar, Satish S Naik, Shridhar Malladi, Mahesh Padaki, Siddappa A Patil, R Geetha Balakrishna, Graphitic carbon nitride enriched phytochemicals-based photo active membranes for perilous chromium (VI) ion removal, *Sep. Purif. Technol*, Volume 334, 125953, (2024)
9. Karthikeyarajan Vinothkumar, R Geetha Balakrishna*, One-pot synthesis of NH₂-MIL-101(Fe) and α – Fe₂O₃ composite as efficient heterojunction for multifunctional photocatalytic membranes: Towards zero waste generation, *Appl. Cat., B: Environ*, 340,123199, (2024)
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11. Jomy Jose Philip, Gouranga H. Debnath,* David H. Waldeck R. Geetha Balakrishna*, Halide exchange mediated cation exchange facilitates room temperature co-doping of d-and f-block elements in cesium lead halide perovskite nanoparticles, *Nanoscale*, 16, 9558, (2024)
 12. Sumanth Dongre S, Asif Iqbal, Ranjit Thapa, Pratheeksha M, Shwetharani Ramu, and **R. Geetha Balakrishna**, Synergistic Catalyst Design for Enhanced Electrochemical Hydrogen Evolution: Fe₂O₃/MoS₂/Ti₃C₂T_x MXene Ternary Composite, *ACS Appl. Eng. Mater.* 2, (2024)
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23. Sanjay and **R Geetha Balakrishna***, Phase transferred and non-coated, water soluble perovskite quantum dots for biocompatibility and sensing, *J. Mater. Chem. B*, 11, 2184-2190, (2023)
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