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Area of specialization: Environmental Biotechnology, wastewater treatment, Environmental Nanotechnology, Microbial Fuel Cell.

List of publications for the last five years

1. SN Mohamed, N Thomas, J Tamilmani, T Boobalan, **M Matheswaran**, Bioelectricity generation using iron (II) molybdate nanocatalyst coated anode during treatment of sugar wastewater in microbial fuel cell, Fuel 277, 118119, 2020.
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4. Pramila Murugesan, Sheeba Narayanan, **M. Matheswaran**, "Photocatalytic performance and antibacterial activity of visible light driven silver iodide anchored on Graphitic-C3N4 binary composite", Environmental Nanotechnology, Monitoring & Management, 10, 253-263, 2018.
5. N Samsudeen, J Spurgeon, **M Matheswaran**, J Satyavolu, Simultaneous biohydrogen production with distillery wastewater treatment using modified microbial electrolysis cell, International Journal of Hydrogen Energy 45 (36), 18266-18274, 2020.
6. H Muthukumar, S Malla, **M Matheswaran**, SN Gummadi, Immobilization of xylose reductase enzyme on cysteine-functionalized Murraya koenigii mediated magnetite nanoparticles, Materials Letters 261, 127125, 2020.
7. M Harshiny, S AiswaryaDevi, **M Matheswaran**, Spiny amaranth leaf extract mediated iron oxide nanoparticles: biocidal photocatalytic propensity, stability, dissolubility and reusability, Biocatalysis and Agricultural Biotechnology 21, 101296, 2019.
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11. C. NivedhiniIswarya, M. Harshiny, S. Aiswarya Devi, Arivalagan Pugazhendhi, **M. Matheswaran**, “High-performance asymmetric supercapacitor from nanostructured tin nickel sulfide (SnNi₂S₄) synthesized via microwave-assisted technique”, *Journal of Molecular Liquids*, 266, 649-657, 2018.
12. M. Harshiny, N. Samsudeen, C. NivedhiniIswarya, S. Aiswarya Devi, Arivalagan Pugazhendhi, **M. Matheswaran**, “Effect of iron doped Zinc oxide nanoparticles coating in the anode on current generation in microbial electrochemical cells”, *International Journal of Hydrogen Energy*, (accept)
13. Pramila Murugesan, Sheeba Narayanan, **M. Matheswaran**, M. Praveen Kumar, S. Ravichandran, “A direct Z-Scheme plasmonic AgCl@g-C₃N₄ heterojunction photocatalyst with superior visible light CO₂ reduction in aqueous medium”, *Applied Surface Science*, 450, 516-526, 2018.
14. S. Aiswarya Devi, M. Harshiny, C. Nivedhini Iswarya, **M. Matheswaran**, “Photocatalytic degradation of naphthalene using calcined FeZnO/ PVA nanofibers”, *Chemosphere*, 205,610-617, 2018.
15. N. Samsudeen, T. K. Radhakrishnan, **M. Matheswaran**, “Enhancement of bioelectricity generation from treatment of distillery wastewater using microbial fuel cell”, *Environmental Progress & Sustainable Energy* 37, 663 - 668, 2018
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