



Publications Summary:

Total Journal: 123, WOS-Cited: 108, Book Chapter:15. IPR :1





Journal (WOS)

1. A.S.Lal, N.S. Mishra, **P.Saravanan*** Synergistic charge transfer promoted staggered heterojunction built CuCoFe-LDH/g-C₃N₄/MoSe₂ with enriched generation of superoxide radical for solar and LED photocatalysis. *Journal of Alloys and Compounds*. 2026, 1053, 186225 (IF:6.3, Q1) <https://doi.org/10.1016/j.jallcom.2026.186225>
2. S.S. Roy, N. Bhuvanendran, **S. Pichiah**, A. Kuila, N.S. Mishra When microplastics meet emerging pollutants: Key insights on mechanistic features for environmental remediations. *Journal of Molecular Liquids*, 2026 444 129227 ((IF:5.3, Q1) <https://doi.org/10.1016/j.molliq.2025.129227>).
3. P.L. Yee, L.C. Sim, S.H. Shuit, K.H. Leong, A.A. Aziz, **P. Saravanan** Self-cleaning and antibacterial fabric functionalized with exfoliated carbon nitride for indoor and outdoor use *Cellulose* 2025, 32, 10881–10904 (IF:4.8, Q1). <https://link.springer.com/article/10.1007/s10570-025-06842-y>
4. A. Rani., A.S.Lal., **P. Saravanan*** Bismuth niobate/ gC₃N₄ heterojunction for maximised visible light photocatalytic removal of Bisphenol A *Chemosphere*. 364, 1431982024. (IF:8.1, Q1). <https://doi.org/10.1016/j.chemosphere.2024.143198>)
5. L.C. Sim , K.P. Leong., W.C. Chong , K.H. Leong , Y.H. Chin , **P. Saravanan** , A.A. Aziz, Integrated Adsorption-Photocatalytic Degradation of Chicken Processing Wastewater Using Powdered Activated Carbon-Supported Graphitic Carbon Nitride *Journal of Engineering Science and Technology* 2024, 19, 317 – 334 (IF:0.7, Q3). <https://jestec.taylors.edu.my/V19Issue1.htm>
6. U. Sharma., P.Mukherjee., S. Basu., **P. Saravanan*** Facile synthesis of ZIF-8 modified PES beads with improved sorption characteristics for elimination of congo red from aquatic stream *Reactive & Functional Polymers*,. 2023, 105765. (IF:4.5, Q1). <https://doi.org/10.1016/j.reactfunctpolym.2023.105765>
7. P. Mishra., P.Gopinath., **P. Saravanan*** Built in electric-field active 2D β-BN/ZIS coated water-fed photoelectrode for methane conversion into hydrogen gas and VAPs through non-oxidative coupling, *Chemical Engineering Journal*, 2023, 468, 143634 (IF:13.3,Q1) <https://doi.org/10.1016/j.cej.2023.143634>
8. N.S. Mishra., A. Kuila., **P. Saravanan*** D. Bahnemann., M. Jang., Simultaneous S-scheme promoted Ag@AgVO₃/g-C₃N₄/CeVO₄ heterojunction with enhanced charge separation and photo redox ability towards solar photocatalysis *Chemosphere*. 2023, 326, 138496. (IF:8.1, Q1). <https://doi.org/10.1016/j.chemosphere.2023.138496>
9. A. Rani, **P. Saravanan*** Heterojunction built sillenite/ perovskite (Bi₂₅Fe₂O₃₉ - SrTiO₃) composite of distinct light sensitive nature for an interactive solar photocatalysis performance, *Journal of Environmental Chemical Engineering* 2023, 11, 109550 (IF:7.4, Q1). <https://doi.org/10.1016/j.jece.2023.109550>
10. U. Sharma., R.Pandey., S. Basu., **P. Saravanan*** ZIF-67 blended PVDF membrane for improved Congo Red removal and antifouling properties: A correlation establishment between morphological features and ultra-filtration



- parameters *Chemosphere*. 2023, 320, 138075. (IF:8.1, Q1).
<https://doi.org/10.1016/j.chemosphere.2023.138075>
11. P. Mishra., P.Gopinath., **P. Saravanan*** Photoelectrochemical oxidation of nonoxidative methane into the value-added product over FRET-induced ZnO/Ag@Ag₄V₂O₇ Donor-Acceptor heterojunction, *International Journal of Hydrogen Energy*, 2023, 48, 586-599 (IF:8.1,Q1)
<https://doi.org/10.1016/j.ijhydene.2022.09.277>
12. N. S. Mishra, S. Chandra **P. Saravanan*** Solvent free synthesis of carbon modified hexagonal boron nitride nanorods for the adsorptive removal of aqueous phase emerging pollutants, *Journal of Molecular Liquids* 2023, 369, 120969 (IF:5.3, Q1) <https://doi.org/10.1016/j.molliq.2022.120969>
13. N.Rahman., C.E.,Choong., **S. Pichiah.**, I.W.Nah., J.G.Kim., S.E.Oh., Y.Yoong., E.H Choi., M.Jang Recent advances in the TiO₂ based photoreactors for removing contaminants of emerging concern in water *Separation and Purification Technology*, 2023, 304, 122294 (IF:8.1,Q1)
<https://doi.org/10.1016/j.seppur.2022.122294>
14. N. S. Mishra, **P. Saravanan*** Z-scheme promoted heterojunction photocatalyst (Ag@AgVO₃ /rGO/CeVO₄) with improved interfacial charge transfer for efficient removal of aqueous organics irradiated under LED light, *Chemosphere*. 2023, 310, 136896 (IF:8.1, Q1)
<https://doi.org/10.1016/j.chemosphere.2022.136896>
15. N. S. Mishra, **P. Saravanan*** LED light activated photocatalytic performance of metal-free carbon modified hexagonal boron nitride towards degradation of methylene blue and phenol, *Beilstein Journal of Nanotechnology*. 2022, 13, 1380-1392 (IF:2.6, Q2) <https://doi.org/10.3762/bjnano.13.114>
16. J.J. Ng, L.C. Sim, W.D. Oh, **P. Saravanan**, B. Tan, K.H. Leong Accelerated sunlight photocatalysis through improved electron mobility between g-C₃N₄ and BiPO₄ nanomaterial. *Environmental Science and Pollution Research*, 2022, 29,86068 - 86076 (IF:5.8, Q1). <https://doi.org/10.1007/s11356-021-16449-y>
17. P. Mukhrjee., U. Sharma., **P. Saravanan*** PEDOT modified MIL-53 (Al) as high throughput cathode catalyst for durable and economical power generation in microbial fuel cell *International Journal of Energy Research*. 2022, 46, 23326 - 23340 (IF:4.3, Q1) <https://doi.org/10.1002/er.8630>
18. P. Mukhrjee., **P. Saravanan*** Pyrolytically synthesized Cobalt based Carbon nitrogen framework as an efficient cathode catalyst in MFC application *Journal of Environmental Chemical Engineering* 2022, 10, 108940 (IF:7.4, Q1)
<https://doi.org/10.1016/j.jece.2022.108940>
19. A. Rani, **P. Saravanan*** Heterojunction formation between AgNbO₃ and Co₃O₄ for full solar light utilization with improved charge-carrier separation, *Photochemical & Photobiological Sciences*. 2022, 21, 1735–1750 (IF:2.7,Q2)
<https://doi.org/10.1007/s43630-022-00253-9>



20. U. Sharma., R.Pandey., S. Basu., **P. Saravanan*** Facile monomer interlayered MOF based thin film nanocomposite for efficient Arsenic separation *Chemosphere*. 2022, 309, 136634 (IF:8.1, Q1). <https://doi.org/10.1016/j.chemosphere.2022.136634>
21. P. Mukherjee, N.S. Mishra, **P. Saravanan*** Corrigendum to "Polydopamine modified silk fibroin 3-D anode for enhanced microbial fuel cell operation" [Sustain Energy Technol Assess 49 (2022) 101696] *Sustainable Energy Technologies and Assessments* 53, 102502. <https://doi.org/10.1016/j.seta.2022.102502>
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23. M. Narayan, R.Sadasivam, G. Packirisamy, **P. Saravanan** Electrospun polyacrylonitrile-Moringa Olifera based nanofibrous bio-sorbent for remediation of Congo red dye. *Journal of Environmental Management*. 2022, 317, 115294 (IF:8.0, Q1) <https://doi.org/10.1016/j.jenvman.2022.115294>
24. A.Nawaz, A.Rani, H. Zarrin, **P. Saravanan*** Construction of highly efficient separable p-n junction based light driven composite (NiFe₂O₄/MnWO₄) for improved solar light utilization. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 2022, 642, 128716. (IF:4.9, Q2) <https://doi.org/10.1016/j.colsurfa.2022.128716>
25. A. Kuila, S. Rout, **P. Saravanan***, C. Wang, D. Bahnemann., Thermo-photodynamic perspective of the simultaneous S-Scheme ternary heterostructure through Ag₃VO₄ shuttle for increased photo-redox ability, *Applied Materials Today*, 2022, 27, 101435 (IF:7.2, Q1), <https://doi.org/10.1016/j.apmt.2022.101435>
26. A.Nawaz, S.Goudarzi, H. Zarrin, **P. Saravanan*** S-Scheme/Type-1 heterostructure stimulated WO₃/g-C₃N₄-WS₂ ternary photocatalyst with improved charge transfer mechanism for full solar spectrum photocatalysis, *Journal of Alloys and Compounds*, 2022, 902, 163951. (IF:5.8, Q1) <https://doi.org/10.1016/j.jallcom.2022.163951>
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29. N.Ahamad, G. Shaghayegh, M. A. Asghari, **S.Pichiah***, G.S. Selopal, F. Rosei, Z.M. Wang, H. Zarrin Review of Hybrid 1D/2D Photocatalysts for Light-



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 38. A. Kuila, **P. Saravanan***, S. Routu, P. Gopinath, M. Jang, C. Wang Improved charge carrier dynamics through a type II staggered Ce MOF/mc BiVO₄ n-n heterojunction for enhanced visible light utilisation, *Applied Surface Science*, 2021, 553,149556 (IF:6.3,Q1) <https://doi.org/10.1016/j.apsusc.2021.149556>



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41. C.E.Choong, K.T. Wong, S.B. Jang, **S.Pichiah**, C. Park, S.H Kim, B.H. Jeon, J.Y.choi; Y.Yoon. Granular Mg-Fe-layered double hydroxide prepared by dual polymers: Insights into synergistic removal of As (III) and As(V). *Journal of Hazardous Materials*. 2021, 403, 123883 (IF: 12.2, Q1). <https://doi.org/10.1016/j.jhazmat.2020.123883>
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43. P. Mukherjee & **P. Saravanan*** Graphite nanopowder functionalized 3-D acrylamide polymeric anode for enhanced performance of microbial fuel cell, *International Journal of Hydrogen Energy*, 2020, 45, 23411-23421 (IF:8.1,Q1) <https://doi.org/10.1016/j.ijhydene.2020.06.110>
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