

DEPARTMENT OF BIOTECHNOLOGY ENGINEERING
Research Paper Publications for AY August 01st 2024 – July 31st 2025

Sl No	Month	Paper	Details
1	August	Selvaraj R, Iyer RV, Murugesan G, Goveas LC , Varadavenkatesan T, Samanth A, Vinayagam R. Modeling 2, 4-dichlorophenoxyacetic acid adsorption on candle bush pod-derived activated carbon: Insights from advanced statistical physics models. Journal of Water Process Engineering. 2024, 106027. https://doi.org/10.1016/j.jwpe.2024.106027	Journal: Journal of Water Process Engineering, Q1, Scopus and Web of Science, H Index:89, Online ISSN: 2214-7144 CiteScore: 10.7 SNIP: , SJR: 1.28 , Impact Factor: 6.3 Journal Link: https://www.sciencedirect.com/journal/journal-of-water-process-engineering
2	September	Shamanna V, Srinivas S, Couto N, Nagaraj G, Sajankila SP , Krishnappa HG, Kumar KA, Aanensen DM, Lingegowda RK, NIHR Global Health Research Unit on genomic surveillance-India consortium. Geographical distribution, disease association and diversity of Klebsiella pneumoniae K/L and O antigens in India: roadmap for vaccine development. Microbial Genomics. 2024, 10(7):001271. https://doi.org/10.1099/mgen.0.001271	Journal: Microbial Genomics, Q1, Scopus and Web of Science, H Index:52, ISSN:20575858 Impact Factor: 4.0 Journal Link: https://www.microbiologyresearch.org/content/journal/mgen
3	September	Nagendran V, Goveas LC , Vinayagam R, Varadavenkatesan T, Selvaraj R. Nanozymes in environmental remediation: A bibliometric and comprehensive review of their oxidoreductase-mimicking capabilities. Microchemical Journal. 2024 Sep 21:111748. https://doi.org/10.1016/j.microc.2024.111748	Journal: Microchemical Journal, Q1, Scopus and Web of Science, H Index:107, Online ISSN: 1095-9149, Linking ISSN: 0026-265X CiteScore: 8.7 SNIP: , SJR: 0.74 , Impact Factor:4.9 Journal Link: https://www.sciencedirect.com/journal/microchemical-journal

4	October	Nayak, S., Hegde, R.B., Rao, A.S. <i>et al.</i> Revitalizing agriculture with the potential of cashew nutshell liquid: a comprehensive exploration and synergy with AI. <i>Discov Appl Sci</i> 6 , 557 (2024). https://doi.org/10.1007/s42452-024-06258-6	Journal: Discover Applied Sciences, Q1, Scopus, Impact Factor: NIL, H Index: 74, Cite Score: 7.0, SJR: NA, ISSN: 3004-9261 Journal Link: https://link.springer.com/journal/42452
5	November	Nayak S, Goveas LC, Sajankila SP. Exploring the efficacy of Pongamia pinnata-induced silver nanoflowers for efficient adsorptive degradation of malachite green dye. <i>Biotechnology for Sustainable Materials</i> . 2024 Nov 19;1(1):17.	ISSN: 2948-2348, Journal Link: https://biotechsustainablematerials.biomedcentral.com/
6.	November	Menezes A, Goveas LC, Vinayagam R, Selvaraj R, Harnessing carbon-based adsorbents for poly- and perfluorinated substance removal: A comprehensive review, <i>Journal of Water Process Engineering</i> , 69, 2024, 106621, https://doi.org/10.1016/j.jwpe.2024.106621 .	Journal: Journal of Water Process Engineering, Q1, Scopus and Web of Science, H Index:89, Online ISSN: 2214-7144 CiteScore: 10.7 SNIP: , SJR: 1.28 , Impact Factor: 6.3 Journal Link: https://www.sciencedirect.com/journal/journal-of-water-process-engineering
7.	November	Goveas, L.C., Darshini, S.M., Kausthubha, P. Padyana, S. Anvitha, Suvarna, A.R. Lewis S. P, Vidya S. M Probiotic <i>Lactobacillus plantarum</i> SVP2 fermented bioactive EPS-rich milk whey functional beverage. <i>J Food Sci Technol</i> (2024). https://doi.org/10.1007/s13197-024-06126-6	Journal: Journal of Food Science and Technology, Q1, Scopus H Index:105, Electronic ISSN 0975-8402, Print ISSN ,0022-1155, CiteScore: 7.7 SJR: 0.66 , Impact Factor: 2.6 https://link.springer.com/journal/13197

8.	November	Rao U K, Goveas LC , Arun A, Gokhale A. Biosorption of Pb (II) by extracellular polymeric substance of Lysinibacillus sp. SS1: optimization, kinetics, and isotherms. Bioremediation Journal. 2024 Nov 20:1-3.	Journal: Bioremediation Journal, Q2, Scopus H Index:41, CiteScore: 5.3 SJR: 0.47 , Impact Factor: 1.9 https://www.tandfonline.com/journals/bbrm20
9.	December	Nagendran V, Goveas LC , Vinayagam R, Varadavenkatesan T, Selvaraj R. Challenges and advances in nanocellulose-based adsorbents for dye removal: mechanisms and future directions. Discover Applied Sciences. 2024 Dec 18;7(1):14. https://doi.org/10.1007/s42452-024-06413-z	Journal: Discover Applied Sciences, Q1, Scopus, Impact Factor: NIL, H Index: 74, Cite Score: 7.0, SJR: NA, ISSN: 3004-9261 Journal Link: https://link.springer.com/journal/42452
10.	January	Rai,V, Granada DL, Skariyachan S, P Ujwal ;. K Sandesh In vitro and In silico investigation deciphering novel antifungal activity of endophyte <i>Bacillus velezensis</i> CBMB205 against Fusarium oxysporum. Scientific Reports. 2025 Jan 3;15(1):684.	Journal: Scientific Reports, Q1, Scopus, Impact Factor: 3.8, H Index: 315, Journal Link: https://www.nature.com/srep/
11.	January	Darshini Shivamogga Mohan, Murali Badanthadka, Anushri Umesh, Bharath Basavapattana Rudresh, Manjunatha Bukkambudhi Krishnaswamy, Rashmi Kanugodu Vasappa, Sahayog Narayan Jamdar, Vidya Shimoga Muddappa , Guar galactomannan ameliorates radiation-induced intestinal injury in mice. Bioactive Carbohydrates and Dietary Fibre, 33 (2025) 100466 https://doi.org/10.1016/j.bcdf.2024.100466	Journal: Bioactive Carbohydrates and Dietary Fibres, Q1, Scopus, Impact Factor: NIL, H Index: 40, Cite Score: 6.0, Journal Link: https://www.sciencedirect.com/journal/bioactive-carbohydrates-and-dietary-fibre

12	January	Vinayagam R, Batra S, Murugesan G, Goveas LC , Varadavenkatesan T, Menezes A, Selvaraj R. Emerging Contaminant Removal Using Eco-Friendly Zinc Ferrite Nanoparticles: Sunlight-Driven Degradation of Tetracycline. Emerging Contaminants. 2025, Volume 2, Issue 1:100469. https://doi.org/10.1016/j.emcon.2025.100469	Journal: Emerging Contaminants, Q1, Scopus, Impact Factor: 5.3, H Index: 36, Cite Score: 10.0, ISSN 24056642, 24056650 Journal Link: https://www.sciencedirect.com/journal/emerging-contaminants
13	November	Joshi, K., Navalgund, L., & Shet, V. B. (2024). Studies on Bio-denitrification of Wastewater Using Immobilized GAC in Draft Tube Spouted Bed Reactor. Journal of Environmental Health and Sustainable Development, 9(4), 2470-2479. https://doi.org/10.18502/jehsd.v9i4.17394	Quartile:03 H-Index:10 ISSN: 24766267, 24767433 https://jehsd.ssu.ac.ir/
14.	February	Varadavenkatesan T, Nagendran V, Vinayagam R, Goveas LC , Selvaraj R. Green synthesis of silver nanoparticles using Lagerstroemia speciosa fruit extract: catalytic efficiency in dye degradation. Materials Technology. 2025 Dec 31;40(1):2463955. https://doi.org/10.1080/10667857.2025.2463955	Journal: Materials Technology, Q1, Scopus, Impact Factor: 2.9, H Index: 45, Cite Score: 10.0, 0.614 (2023) SNIP, 0.554 (2023) SJR, ISSN: 10667857, 1753555 Journal Link: https://www.tandfonline.com/journals/ymte20

15.	February	Sheikh T, Nagendran V, Vasant S K, Mallya U, Mutalik S, Khan F, Nayak S , Sarvajith MS, Acacia auriculiformis mediated synthesis of silver nanoparticles for the sensitive and rapid electrochemical sensing of nitrite in water sample, Microchemical Journal, Volume 211, 2025, 113162, https://doi.org/10.1016/j.microc.2025.113162 .	Journal: Microchemical Journal, Q1, Scopus and Web of Science, H Index:107, Online ISSN: 1095-9149, Linking ISSN: 0026-265X CiteScore: 8.7 SNIP: , SJR: 0.74 , Impact Factor:4.9 Journal Link: https://www.sciencedirect.com/journal/microchemical-journal
16	February	B. K. Manjunatha · V. K. Vamshee · N. G. Poojitha · R. J. Kiran · S. T. Mythili · R. Divakara · R. A. Sreenivasa · S. M. Vidya , Bioremediation of polycyclic aromatic hydrocarbons (acenaphthene, anthracene, fluoranthene, fluorene) by Aspergillus niger HQ170509.1 fungus, International Journal of Environmental Science and Technology https://doi.org/10.1007/s13762-025-06370-z	Journal: International Journal of Environmental Science and Technology, Q1, Scopus and Web of Science, H Index:101, Electronic ISSN 1735-2630 Print ISSN 1735-1472 CiteScore: 5.6 Impact Factor:2.80 Journal Link: https://www.sciencedirect.com/journal/microchemical-journal
17	February	Pradeepa, Vasappa RK, Mohan DS, Krishnaswamy MB, Anil Kumar HS, Venkatesh KH,, Gamana G, Vidya SM . Ascorbic acid-Sodium Borohydride coupled supersensitive gold nanoparticles for water quality assurance. Nanotechnology for Environmental Engineering. 2025;10(1):12., https://doi.org/10.1007/s41204-025-00406-y	Journal: Nanotechnology for Environmental Engineering, Q2, Scopus and Web of Science, H Index:, Electronic ISSN 2365-6387, Print ISSN: 2365-6379 , CiteScore: 6.5 Impact Factor:2.80 Journal Link: https://link.springer.com/journal/41204
18	February	Vinayagam R, Jogi S, Murugesan G, Goveas LC , Varadavenkatesan T, Samanth A, Selvaraj R, Mesoporous carbon from <i>Vateria indica</i> fruit for efficient 2,4-D herbicide removal: Mechanistic insights from double-layer statistical physics modelling and	Journal: Diamond and Related Materials Q1, Scopus, Impact

		regeneration studies, Diamond and Related Materials, Vol 154, 2025, 112149, https://doi.org/10.1016/j.diamond.2025.112149	Factor: 4.3, H Index: 126, Cite Score: 6.0, Journal Link: https://www.sciencedirect.com/journal/diamond-and-related-materials
19	April	Jathanna HM, Poojari M, Ravi KS, Venkatesh BN, Hanumanthappa H, Goriparti NS, Shanmugam BK. Augmented lipid biosynthesis in native fungus through dual-stage optimization of lignocellulosic biomass residue pretreatment and fermentation conditions. Biomass Conversion and Biorefinery. 2025 Apr 25:1-4.	Journal: Biomass Conversion and Refinery Q2, Scopus, Impact Factor: 3.5, H Index: 56, Journal Link: https://link.springer.com/journal/13399
20	April	Nayak S, Goveas LC. Adsorption of residual methyl green by extracellular polymeric substance of Lysinibacillus sp. SS1: A sustainable approach to wastewater treatment. Biodegradation. 2025 Jun;36(3):1-1.	Journal: Biodegradation Q2, Scopus, Impact Factor: 3.1, H Index: 95, Journal Link: https://link.springer.com/journal/10532
21	May	Nayak, S., Hegde, R.B., Rao, A.S. Poojary R Unlocking the potential of essential oils in aromatic plants: a guide to recovery, modern innovations, regulation and AI integration. <i>Planta</i> 262, 6 (2025). https://doi.org/10.1007/s00425-025-04724-y	Journal: <i>Planta</i> , Q1, Scopus H Index: 194, ISSN 00320935, 14322048 CiteScore: 6.9 Impact Factor: 3.6 https://scijournals.onlinelibrary.wiley.com/journal/10974660
22	May	Girish T., Prasad S.V., Patil, N. I., Shetty, D., Nayak, S. , Advances in food azo dye detection through nanoparticle modified electrochemical sensors with a	Journal: <i>Journal of Chemical Technology and Biotechnology</i> ,

		focus on sustainable nano-materials <i>Journal of Chemical Technology and Biotechnology</i> (2025). https://doi.org/10.1002/jctb.7887	Q1, Scopus H Index: 142, ISSN 10974660, CiteScore: 7.0 Impact Factor: 3.174 https://scijournals.onlinelibrary.wiley.com/journal/10974660
23	May	Goveas, L.C. , Khanapur, P., Chetan, D.M. Nannuri, K., Shishir R.K. , Murugesan, G., Rao, R.N. , Selvaraj, R., Vinayagam, R., Vidya, S.M. , Anti-biofilm and anti-cancer effects of biosurfactant from <i>Lactobacillus plantarum</i> SVP2 in fermented milk whey beverage. <i>J Food Sci Technol</i> (2025). https://doi.org/10.1007/s13197-025-06306-y	Journal: Journal of Food Science and Technology, Q1, Scopus H Index:105, Electronic ISSN, 0975-8402, Print ISSN,0022-1155, CiteScore: 7.7 SJR: 0.66, Impact Factor: 2.6 https://link.springer.com/journal/13197
24	May	Goveas, L.C. Artificial Sweeteners and the One Health crisis: Toxicity effects and Ecological consequences. <i>Discov Appl Sci</i> 7, 535 (2025). https://doi.org/10.1007/s42452-025-07107-w	Journal: Discover Applied Sciences, Q1, Scopus, Impact Factor: NIL, H Index: 74, Cite Score: 7.0, SJR: NA, ISSN: 3004-9261 Journal Link: https://link.springer.com/journal/42452
25	May	Rao AS , Shenoy R, Keshav LB, Malhotra K, Nayak S , Poojary R. Identification of prognostic factors contributing towards mortality in leptospirosis patients: a statistical and score-based model approach. <i>Discover Applied Sciences</i> . 2025 Jun;7(6):1-29. https://doi.org/10.1007/s42452-025-07167-y	Journal: Discover Applied Sciences, Q1, Scopus, Impact Factor: NIL, H Index: 74, Cite Score: 7.0, SJR: NA, ISSN: 3004-9261 Journal Link: https://link.springer.com/journal/42452

26	June	Shet, V. B., Kantakere, S., Eshwarachar, V. C., Rao, S. P., Mogaveera, P. S., Manjunatha, P., ... Mubarak, N. M. (2025). <i>Theobroma cacao</i> pod shells extract mediated production of FeO nanoparticles to explore nanoadsorbent, nanofertilizer and enzyme activator applications. <i>Nanotechnology for Environmental Engineering</i> , 10(3). https://doi.org/10.1007/s41204-025-00457-1	Journal: Nanotechnology for Environmental Engineering, H Index: 37 Scopus Quartile : Q1 Print ISSN: 2365-6379 Journal link: https://link.springer.com/journal/4120
27	July	Hegde RB, Kudva V, Nayak S , Sampathila N, Thalengala A. Advanced techniques for seed quality assessment and germination monitoring. <i>Discover Applied Sciences</i> . 2025 Jul 1;7(7):690. https://doi.org/10.1007/s42452-025-07284-8	Journal: Discover Applied Sciences, Q1, Scopus, Impact Factor: NIL, H Index: 74, Cite Score: 7.0, SJR: NA, ISSN: 3004-9261 Journal Link: https://link.springer.com/journal/42452
28	July	Goveas, L.C. Interactions between polyaromatic hydrocarbons and microplastics: Environmental mechanisms and ecotoxicological impacts. <i>Environ Geochem Health</i> 47, 320 (2025). https://doi.org/10.1007/s10653-025-02636-0	Journal: Environmental Geochemistry and Health , Q1, Scopus, Impact Factor: 3.4, H Index: 99, Cite Score: 6.9, SJR: 0.871, Print ISSN: 0269-4042 Journal Link: https://link.springer.com/journal/10653
29	July	Joshi, K., Navalgund, L., Mubarak, N. M., & Shet, V. B. (2025). Insight mechanism of ANN model for denitrification in spouted bed bioreactor. <i>Nature</i> . https://doi.org/10.1038/s41598-025-11109-4	Scopus Quartile : Q1 E ISSN: 2045-2322 Journal link: https://www.nature.com/srep/

Book/Book Chapters/Conference Proceedings for AY August 01st 2024 – July 31st 2025

SI No	Name	Book/Book Chapter Details	ISSN/ISBN Number
1	Louella Concepta Goveas, SM Vidya, Ramesh Vinayagam, Raja Selvaraj	Circular Bioeconomy Approaches for Valorizing Waste Streams into Bio-jet Fuel. In: Baskar, G., Ashokkumar, V., Rokhum, S.L., Moholkar, V.S. (eds) Circular Bioeconomy Perspectives in Sustainable Bioenergy Production. Energy, Environment, and Sustainability. Springer, Singapore. https://doi.org/10.1007/978-981-97-2523-6_15	• Print ISBN • 978-981-97-2522-9 • Online ISBN • 978-981-97-2523-6
2	Vinayaka B Shet	Title: Nanotechnology: Principles and applications Publisher: REST	ISBN: 978-81-978468-1-6
3	Nabisab Mujawar Mubarak, Saran Kumar & Vinayaka B Shet	Thematic Issue in Biomass Conversion and Refinery Journal Titled Novel and Innovative Technological Trends in Biomass Volarisation. Mubarak, N., Kumar, S. & Shet, V.B. Novel and innovative technological trends in biomass volarisation. <i>Biomass Conv. Bioref.</i> 15, 8135 (2025). https://doi.org/10.1007/s13399-025-06769-1	
4	Sneha Nayak	Kapilan N, Premnath K, Varshitha D, Nayak S , Sunil S. Laboratory Simulation Studies on Evaporative Fuel Loss from Storage Tanks. In BIO Web of Conferences 2025 (Vol. 172, p. 01004). EDP Sciences. https://doi.org/10.1051/bioconf/202517201004	Volume 172 (2025)
5	Harshitha M Jathanna	Jathanna HM, Prabhu P, Rai S, HK SP. Synthesis of Nanocellulose from Indigenous Sources and Application in Dye Removal. In BIO Web of	Volume 172 (2025)

		Conferences 2025 (Vol. 172, p. 03004). EDP Sciences. https://doi.org/10.1051/bioconf/202517203004	
6	Sneha Nayak	Rao AS, BH KP, Poojary R, Shenoy R, Nayak S. Comprehensive Exploration of Acute Febrile Illnesses with Low Platelet Count Syndrome: From Epidemiology to AI-Driven Solutions. In 2025 International Conference on Artificial Intelligence and Data Engineering (AIDE) 2025 Feb 6 (pp. 26-33). IEEE.	2025 International Conference on Artificial Intelligence and Data Engineering (AIDE) 202
7	Louella Concepta Goveas	Goveas LC, Selvaraj R, Vinayagam R. Overview on Occurrence of Arsenic on Human Health and Its Removal Through Microorganisms. In Arsenic Removal Technologies: From Challenges to Innovative Solutions 2025 Jul 23 (pp. 1-11). Cham: Springer Nature Switzerland. //doi.org/10.1007/978-3-031-91171-2_1	• Print ISBN • 978-3-031-91170-5 • Online ISBN • 978-3-031-91171-2