

Publication Report

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Research Publications (in peer-reviewed Scientific Journals):

- 1) **S. Ghosh**, et al., “Process optimization for biosynthesis of mono and bimetallic alloy nanoparticle catalysts for degradation of dyes in individual and ternary mixture”, *Scientific Reports*, 2020, 10, 277. (Impact Factor: 4.6). <https://doi.org/10.1038/s41598-019-57097-0>
- 2) **S. Ghosh**, et al., “Ecological safety with multifunctional applications of biogenic mono and bimetallic (Au-Ag) alloy nanoparticles”, *Chemosphere*, 2022, 288 (2), 132585. (Impact Factor: 8.9). <https://doi.org/10.1016/j.chemosphere.2021.132585>
- 3) S. Jafarzadeh, M. Nooshkam, M. Zargar, F. Garavand, **S. Ghosh**, M. Hadidi, M. Forough, “Green Synthesis of Nanomaterials for Smart Biopolymer Packaging: Challenges and Outlooks”, *Journal of Nanostructure in Chemistry*, 2024, 113-136. (IF: 10.1). <https://doi.org/10.1007/s40097-023-00527-3>
- 4) N. Iqbal, S. Thirunavukkarasu, R. Krishna, D.K. Hazra, C. Jawale, S. Yadav, S. Alam, **S. Ghosh**, et al., “Environmentally Benign Design of Renewable Oleoresin-Bioenergized Imidacloprid Nanohydrocolloids for Improved Activity, Lower Toxicity, and Agroecological Sustainability” *ACS Sustainable Chem. Eng.* 2023, 11, 42, 15480–15491. (Impact Factor: 8.4). <https://doi.org/10.1021/acssuschemeng.3c05105>
- 5) R. K. Mandal, **S. Ghosh**, T. P. Majumder, “Comparative study between degradation of dyes (MB, MO) in monotonous and binary solution employing synthesized bimetallic (Fe-CdO) NPs having antioxidant property”, *Results in Chemistry*, 2023, 5, 100788. (Impact Factor: 2.3). <https://doi.org/10.1016/j.rechem.2023.100788>
- 6) R. K. Mandal, A. S. Mondal, **S. Ghosh**, A. Halder, T. P. Majumder, “Synthesis, characterisation and optical studies of CdO-NiO NCs for comparative dye degradation study between two hazardous dyes Congo red and Rose Bengal”, *Results in Chemistry*, 2023, 5, 100810. (Impact Factor: 2.3). <https://doi.org/10.1016/j.rechem.2023.100810>
- 7) **S. Ghosh**, et al., “Plant-mediated synthesis of mono and bimetallic (Au-Ag) nanoparticles: future prospects for food quality and safety”, *Journal of Nanomaterials*, 2023, 2781667. (Impact Factor: 3.791). <https://doi.org/10.1155/2023/2781667>
- 8) A. Mukherjee, R. Mondal, S. Biswas, S. Saha, **S. Ghosh**, R. K. Kole, “Dissipation behaviour and risk assessment of fipronil and its metabolites in paddy ecosystem using GC-ECD and confirmation by GC-MS/MS”, *Heliyon*, 2021, 7, e06889. (Impact Factor: 4.0). <https://doi.org/10.1016/j.heliyon.2021.e06889>
- 9) Carolina, A., **S. Ghosh**, et al., “Agro-industrial waste in the development of sustainable food packaging based on the system of a circular bioeconomy: A review” (Submitted in Chemosphere).

Book:

- 1) EDITORIAL BOARD MEMBERS, Title of the Book: Futuristic Trends in Chemical Material Sciences & Nano Technology Edition: Volume 3, Book 14, 2024, IIP Series (E-ISBN: 978-93-5747-750-5). <https://www.iipseries.org/view-publication.php?bookid=178&bookname=futuristic-trends-in-chemical-material-sciences-amp-nano-technology-volume-3-book-14>

Book Chapters:

- 1) **S. Ghosh, et al.**, Advanced Biophysical Techniques for Polysaccharides Characterization, Application of types of polysaccharides for the food industry, Chapter 14, [ELSEVIER, ISBN: 9780443140426] <https://doi.org/10.1016/B978-0-443-14042-6.00014-2>.
- 2) A. Carolina, **S. Ghosh**, et al., “Valorization of Agro-waste Derived Materials for Food Packaging Application”, Book Title: Sustainable Materials for Food Packaging and Preservation, Chapter 9, [ELSEVIER, ISBN: 9780443135675] (Review completed and will be published 20th Sep, 2024). <https://shop.elsevier.com/books/sustainable-materials-for-food-packaging-and-preservation/ghosh/978-0-443-13567-5>
- 3) **S. Ghosh** et al., “Nanotechnology: A Potential Hope for Food Packaging”, Book Title: Frontiers in Biotechnology: Emerging Approaches and Strategies, Chapter 7, [ISBN: 9789359802459].
- 4) **S. Ghosh, et al.**, “Edible film and coating”, Chapter 12: Nanotechnology in edible films and coatings, (Will be published in ELSEVIER).
- 5) S. K. Bose, **S. Ghosh***, A short review of microbiota and their ecological significances in the stress of fly ash contaminated soil. (Submitted).
- 6) K. Mondal, **S. Ghosh***, Green synthesized Silver Nano: A potential hope for environmental remediation. (Submitted).
- 7) A. Chakraborty, **S. Ghosh***, Algae-bacteria consortium: A current approach for aquatic clean up. (Submitted).
- 8) D. Das, **S. Ghosh***, A review on bioinspired ZnO nanoparticles for environmental remediation. (Submitted).
- 9) A. Chaudhuri, **S. Ghosh***, Dengue Vaccines and Its New Dimensions: A Short Review. (Submitted).

Conference Articles:

- 1) S. K. Bose, **S. Ghosh***, A review on phytoremediation capability of *Tagetes erecta* Linn. against heavy metals, Journal of Advanced Zoology, 44 (S6), 2023, 2333-2338. <https://jazindia.com/index.php/jaz/article/view/3723>
- 2) A. Nabi, **S. Ghosh***, EFFECT OF NITRATE CONTAMINATION IN GROUNDWATER - A WORLDWIDE CONCERN, Journal of Survey in Fisheries Sciences, 10(1S), 2023, 6493 – 6497. <https://sifisherliessciences.com/journal/index.php/journal/article/view/2170>
- 3) D. Banerjee, **S. Ghosh***, A Review on Phyto-Mediated Gold Nanoparticles for Efficient Dye Degradation, Journal of Survey in Fisheries Sciences, 10(1S), 2023, 6359 – 6363. <https://sifisherliessciences.com/journal/index.php/journal/article/view/2148>
- 4) A. Chakraborty, **S. Ghosh***, Potential Approach Of Mushrooms In Bioremediation –A Short Review, Journal of Advanced Zoology, 44 (S5), 2498-2501. <https://jazindia.com/index.php/jaz/article/view/3214>
- 5) D. Das, **S. Ghosh***, Aquatic Plants in phytoremediation of contaminated water: Recent knowledge and future prospects, Journal of Advanced Zoology, 44 (S6), 2023, 2322-2326. <https://jazindia.com/index.php/jaz/article/view/3721>
- 6) G. Mistri, **S. Ghosh**, A. Laha, Importance of PGPR (Plant Growth Promoting Rhizobacteria) For Sustainable Agricultural Production, Journal of Advanced Zoology, 44 (S6), 2023, 2373-2378. <https://jazindia.com/index.php/jaz/article/view/3714>
- 7) K. Ghosh, **S. Ghosh**, A. Laha, The Significance of Nanomaterials In Enhancing Soil Microbial Community Short Review, Journal of Advanced Zoology, 44 (S5), 2023, 2700-2705. <https://jazindia.com/index.php/jaz/article/view/3481>
- 8) K. Mondal, **S. Ghosh***, Ornamental Plant in phytoremediation of contaminated soils: Recent progress and future directions, Journal of Advanced Zoology, 44 (S6), 2023, 2339-2344. <https://jazindia.com/index.php/jaz/article/view/3724>
- 9) K. Bera, **S. Ghosh***, Antimicrobial activity of Plant Extract: A review of recent literature, Journal of Advanced Zoology, 44 (S6), 2023, 2352-2356. <https://jazindia.com/index.php/jaz/article/view/3728>

- 10) S. Roy, **S. Ghosh***, A review on organic nanoparticles for treatment of bacterial biofilms, Journal of Advanced Zoology, 44 (S6), 2023, 2345-2351.
<https://jazindia.com/index.php/jaz/article/view/3725>
- 11) S. Roy, **S. Ghosh***, A Review on Bioinspired and Green Synthesis of Silver Nanoparticles with Their Antimicrobial Activity, Journal of Survey in Fisheries Sciences, 10(1S), 2023, 6353 – 6358.
<https://sifisherliessciences.com/journal/index.php/journal/article/view/2147>
- 12) S. Mandal, **S. Ghosh**, A. Laha, Role of Algae-Bacterial Consortium In Heavy Metal Contaminated Water Treatment, Journal of Survey in Fisheries Sciences, 10(1S), 2023, 2252 – 2257. <https://jazindia.com/index.php/jaz/article/view/3710>
- 13) S. Mukherjee, **S. Ghosh***, Nanotechnology in edible films and its future directions: A short review, Journal of Survey in Fisheries Sciences, 10(1S), 2023, 2252 – 2257.
<https://jazindia.com/index.php/jaz/article/view/2327-2332>
- 14) M. Das ,..... **S. Ghosh***, ZnO Nano for remediation of Methylene Blue Dye: A short Review, Journal of Research in Chemistry 2024; 5(1): 45-47.
<https://www.chemistryjournal.net/archives/2024.v5.i1.A.118>
- 15) A. Majhi, **S. Ghosh***, A review on antimicrobial activity of some plant, Journal of Medicinal Plants Studies 2024; 12(1): 221-224.
<https://www.plantsjournal.com/archives/?year=2024&vol=12&issue=1&part=C&ArticleId=1644>
- 16) S. Banerjee, **S. Ghosh***, Nanoparticles in packaging films: Processing technologies and future trends, International Journal of Materials Science 2024; 5(1): 22-24.
<https://www.mechanicaljournals.com/materials-science/archives/2024.v5.i1.A.40>
- 17) R. D. Banik, **S. Ghosh***, “Phytotoxicity Study of Biogenic Mono-metallic and Bi-metallic (Au-Ag) Alloy NPs”, Journal of Mines, Metals and Fuels, 2023, 71(11), 2084-2088. <https://doi.org/10.18311/jmmf/2023/36097>

NCBI GenBank accession number

- 1) I have a provisional GenBank accession number(s) for nucleotide sequence(s):
SUB14594013 Bacillus PP998418.