

## Selected peer-reviewed publications (In chronological order)

Title of the paper, with Journal's name, Year of publication, Vol. No., Page Nos., etc.	Impact Factor, if any	Authors
1. Exploring eco-friendly approaches for mitigating pharmaceutical and personal care products in aquatic ecosystems: A sustainability assessment Chemosphere, 2023, 316, 137715	7.086	Miraji Hossein, Ripanda Asha, Ramadhani Bakari, <b>N.F. Islam</b> , Guangming Jiang, <b>Hemen Sarma</b>
2. Soil treatment using a biosurfactant-producing bacterial consortium in ricefields contaminated with oily sludge—a sustainable approach Environmental Research, 2023, 220, 115092	8.4	Kaustuvmani Patowary , Tamanna Bhuyan , Rupshikha Patowary , Yugal Kishore Mohanta ,Kaustuvmani Patowary , Tamanna Bhuyan, Rupshikha Patowary, Yugal Kishore Mohanta ,Bibhu Prasad Panda , Suresh Deka , <b>N.F. Islam</b> , Sanket J. Joshi , <b>Hemen Sarma</b>
3. Proximate analysis and ecological modelling of macrofungi in ecologically significant North-East India. Journal of Applied Sciences, 2022, 22:127-138.		<b>Bhattacharyya P.N.</b> , Sarma, B.
4. Fungi-derived agriculturally important nanoparticles and their application in crop stress management – Prospects and environmental risks Environmental Research, 2022, 212, 113543	8.4	Hiralal Sonawane, Deepak Shelke, Mahadev Chambhare, Nishi Dixit, Siddharam Math, Suparna Sen, Siddhartha Narayan Borah, <b>N. F. Islam</b> , Sanket J. Joshi, Balal Yousaf, Jörg Rinklebe, <b>Hemen Sarma</b>
5. Bioremediation of cytostatic pharmaceutical and personal care products and emerging technologies. Emerging Contaminants in the Environment, 2022, 579-601. <a href="https://doi.org/10.1016/B978-0-323-85160-2.00019-6">https://doi.org/10.1016/B978-0-323-85160-2.00019-6</a> .	5.17	<b>Bhattacharyya P.N.</b> , Sonowal, S., Bhattacharyya, L.H., Prasad, R., <b>Sarma, H.</b>
6. Biosurfactant-assisted phytoremediation of potentially toxic elements in soil: Green technology for meeting the United Nations Sustainable Development Goals, Pedosphere, 2022, 32(1), 198-210	5.5	Songita Sonowal, Amy R. Nava, Sanket J. Joshi, Siddhartha Narayan Borah, <b>N. F. Islam</b> , Soumya Pandit, Ram Prasad, <b>Hemen Sarma</b>
7. Enhancing phytoremediation of hazardous metal (loid) s using genome engineering CRISPR–Cas9 technology, Journal of Hazardous Materials, 2021, 414, 125493	12.5	<b>Hemen Sarma</b> , <b>N.F.Islam</b> , Ram Prasad, M.N.V.Prasad, Lena Q. Ma, Jörg Rinklebe
8. Environmental antibiotics and resistance genes as emerging contaminants: Methods of detection and bioremediation, Current Research in Microbial Sciences, 2021, 2, 100027		N. Koch, <b>N.F. Islam</b> , S. Sonowal, R Prasad, <b>H Sarma</b>
9. Selenite bioreduction and biosynthesis of selenium nanoparticles by Bacillus paramycoides SP3 isolated from coal mine overburden leachate Environmental Pollution, 2021, 285, 117519	8.07	SN Borah, L Goswami, S Sen, D Sachan, <b>H Sarma</b> , M Montes, ...
10. Genetic Polymorphisms and Pesticide-Induced DNA Damage: A Review The Open Biotechnology Journal, 2021, 15	2.17	MB Usman, K Priya, S Pandit, PK Gupta, S Agrawal, <b>H Sarma</b> , R Prasad

11. Integrated remediation approaches for selected pharmaceutical and personal care products in urban soils for a sustainable future 3.83 S Ghahari, S Ghahari, S Ghahari, G Nematzadeh, **H Sarma**  
Energy, Ecology and Environment, 2021, 1-14
12. Fungal-mediated electrochemical system: Prospects, applications and challenges. **Hemen Sarma, PN Bhattacharyya**, Dipak A Jadhav, Prajakta Pawar, Mayur Thakare, Soumya Pandit, Abhilasha Singh Mathuriya, Ram Prasad  
Current Research in Microbial Sciences, 2021, 2:100041.doi: 10.1016/j.crmicr.2021.100041.
13. Integrating Recommendations to Improve Treatment Outcomes in the Clinical Management of Allergic Conjunctivitis 1.58 A Bharali, B Deka, **H Sarma**, S Sarma, A Ahmed, B Bhattacharjee, G Das, ...  
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14. Ethnic preparation of *Chubitchi*, an alcoholic beverage of the Garo tribe of Meghalaya: a sociocultural analysis 2.73 SR Marak, D Sharma, **H Sarma**  
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15. Environmental Biotechnology: Toward a Sustainable Future S Ghahari, S Ghahari, S Ghahari, GA Nematzadeh, **H Sarma**  
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16. Fermented fish products in South and Southeast Asian cuisine: indigenous technology processes, nutrient composition, and cultural significance 2.73 Y Narzary, S Das, AK Goyal, SS Lam, **H Sarma**, D Sharma  
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17. Bacterial biodegradation of bisphenol A (BPA) S Ingale, K Patel, **H Sarma**, SJ Joshi  
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18. Utilization of distillers dried grains with solubles as a cheaper substrate for sophorolipid production by *Rhodotorula babjevae* YS3 7.96 S Sen, SN Borah, **H Sarma**, A Bora, S Deka  
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19. Microbial biocides-Prominent alternatives of chemicals in tea disease management. 0.93 Sarmah SR, **Bhattacharyya PN**, Barooah AK.  
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20. Nonchemical based integrated management package for live-wood eating termites in tea plantations of north-east India. 0.7 Roy S, Prasad, AK, Neave S, **Bhattacharyya PN**, Borah K, Rahman A, Sarmah M, Sarmah SR, et al. (2020)  
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21. Mechanistic understanding and future prospect of microbe-enhanced phytoremediation of polycyclic aromatic hydrocarbons in soil 7.75 **H Sarma**, AR Nava, MNV Prasad  
Environmental Technology & Innovation, 2019, 13, 318-330
22. Metabolic Engineering of Rhizobacteria Associated With Plants for Remediation of Toxic Metals and Metalloids **H Sarma**, MNV Prasad  
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23. Plant-microbiome assisted and biochar-amended remediation of heavy metals and polyaromatic compounds— a microcosmic study 7.12 **H Sarma**, S Sonowal, MNV Prasad  
Ecotoxicology and Environmental Safety, 2019, 176, 288-299

24. Biodegradation of bisphenol A by bacterial consortia isolated directly from river sediments  
Environmental Technology & Innovation, 2019, 14, 100314 7.75 **H Sarma**, AR Nava, AME Manriquez, DC Dominguez, WY Lee
25. C3 and C4 plants as potential phytoremediation and bioenergy crops for stabilization of crude oil and heavy metal co-contaminated soils-response of antioxidative enzymes  
Trop. Plant Res, 2018, 5 (3), 306-314 S Sonowal, MNV Prasad, **H Sarma**
26. Bacteria enhanced lignocellulosic activated carbon for biofiltration of bisphenols in water  
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27. Bioprospecting fungal diversity from crude oil infiltrate soil of Assam, India's Northeast,  
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28. Plant-microbial association in petroleum and gas exploration sites in the state of Assam, north-east India-significance for bioremediation,  
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32. Localization of polycyclic aromatic hydrocarbons and heavy metals in surface soil of Asia's oldest oil and gas drilling site in Assam, northeast India: Implications for the Bio-economy,  
Emerging Contaminants, 2016, 2, (3) 119-127 3.92 **H Sarma**, **NF Islam**, P Borgohain, A Sarma, MNV Prasad
33. Effect of different growth stages on rice crop on soil microbial and enzyme activities,  
Tropical Plant Research, 2016, 3 (1), 40-47 **NF Islam**, SK Borthakur
34. Impact of training on knowledge level of integrated rice-fish farming practices  
Indian Research Journal of Extension Education, 2016, 13 (1), 35-38 **H Sarma**, RK Talukdar, P Mishra
35. Plant-microbe association-assisted removal of heavy metals and degradation of polycyclic aromatic hydrocarbons  
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36. Notes on herbal treatment practiced by the people of fringe villages of Manas National Park, India  
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41. Optimization of environmental factors for improved production of rhamnolipid biosurfactant by *Pseudomonas aeruginosa* RS29 on glycerol 2.28  
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43. Study of fungi associated with the decomposition of rice stubble and their role in the degradation of lignin and holocellulose, 16.5  
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45. Accumulation of heavy metals in selected medicinal plants  
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47. Vermicomposting potentiality of *Perionyx excavatus* for recycling of waste biomass of java citronella-An aromatic oil yielding plant 11.88  
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### Book Chapter/Book

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| 1.      | Microbes are the natural ecological engineers in the forest ecosystem, enhancing the interaction between plants and herbivores; Sarma (Ed)- Biotechnology of Emerging Microbes; Elsevier, (2023)  | Bhoirob Gogoi, <b>N.F. Islam</b> , and Hemen Sarma   |
| 2.      | Assisted and amended technology for the sustainable remediation of emerging contaminants, Editor(s): Hemen Sarma, Delfina C. Dominguez, Wen-Yee Lee, Emerging Contaminants in the Environment, Challenges and Sustainable Practices; Elsevier,(2022), pp.547-577                      | Sajjad Ghahari, Somayeh Ghahari, Saeid Ghahari, Ghorban Ali Nematzadeh, Rashmi Rekha Saikia, <b>N. F. Islam, Hemen Sarma</b> |
| 3.      | Forest resources. In: An illustrated geography of Assam. Eds. A. K. Bora and M. Nath. EBH Publishers (India) Guwahati-1,2022, pp. 166-184.ISBN: 978-93-92038-43-3   | Baruah, P. P., <b>Dihingia, J.</b> , Dutta, J., Adhikari, A., Borah, S.  |
| 4.      | Biosurfactant-assisted phytoremediation for a sustainable future, Editor(s): Vimal Pandey, Assisted Phytoremediation, Elsevier, (2022), pp.399-414  | <b>N.F. Islam</b> , Rupshikha Patowary, <b>Hemen Sarma</b>   |
| 5.      | Biological Remediation of Selenium in Soil and Water Handbook of Assisted and Amendment: Enhanced Sustainable Remediation Technology, John Wiley & Sons, Ltd, 2021, pp 403-421.   | SN Borah, S Sen, <b>H Sarma</b> , K Pakshirajan  |
| 6.      | Emerging Contaminants in the Environment : Challenges and Sustainable Practices 978-0-323-85160-2, Elsevier, 2021   | <b>H Sarma</b> , DC Dominguez, WY Lee  |
| 7.      | Metagenomics Approach for Selection of Biosurfactant Producing Bacteria from Oil Contaminated Soil. In: H. Sarma, MNV Prasad (Eds.), Biosurfactants for a Sustainable Future: Production and Applications in the Environment and Biomedicine, Wiley online library, (2021), pp. 43-58 | <b>N. F. Islam, Hemen Sarma</b>  |
| 8.      | Biosurfactants from Bacteria and Fungi: Perspectives on Advanced Biomedical Applications Biosurfactants for a Sustainable Future: Production and Applications in the Environment and Biomedicine, John Wiley & Sons, Ltd, 2021, pp 293-315  | Rashmi Rekha Saikia, Suresh Deka, <b>Hemen Sarma</b>   |
| 9.      | Biobased Nanotechnology for Green Applications 10.1007/978-3-030-61985-5, Springer International Publishing, 2021   | <b>H Sarma</b> , JJ Sanket, R Prasad, J Jampilek   |
| 10.     | Biosurfactants for a sustainable future: production and applications in the environment and biomedicine John Wiley & Sons, 2021   | <b>Hemen Sarma</b> , Majeti Narasimha Vara Prasad  |

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