

# Sovik Das

## List of Publications by Year in descending order

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Version: 2024-02-01

44  
papers

1,308  
citations

279798  
23  
h-index

361022  
35  
g-index

45  
all docs

45  
docs citations

45  
times ranked

747  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Novel low cost proton exchange membrane made from sulphonated biochar for application in microbial fuel cells. Materials Chemistry and Physics, 2020, 239, 122025.  | 4.0 | 127       |
| 2  | Quorum-sensing mediated signals: A promising multi-functional modulators for separately enhancing algal yield and power generation in microbial fuel cell. Bioresource Technology, 2019, 294, 122138.                                   | 9.6 | 81        |
| 3  | Goethite supplemented natural clay ceramic as an alternative proton exchange membrane and its application in microbial fuel cell. Ionics, 2020, 26, 3061-3072.  | 2.4 | 78        |
| 4  | Application of bimetallic low-cost CuZn as oxygen reduction cathode catalyst in lab-scale and field-scale microbial fuel cell. Chemical Physics Letters, 2020, 751, 137536.   | 2.6 | 65        |
| 5  | Improved performance of microbial fuel cell by using conductive ink printed cathode containing Co <sub>3</sub> O <sub>4</sub> or Fe <sub>3</sub> O <sub>4</sub> . Electrochimica Acta, 2019, 310, 173-183.                              | 5.2 | 58        |
| 6  | Review“Microbial Electrosynthesis: A Way Towards The Production of Electro-Commodities Through Carbon Sequestration with Microbes as Biocatalysts. Journal of the Electrochemical Society, 2020, 167, 155510.                           | 2.9 | 57        |
| 7  | Application of bioelectrochemical systems for carbon dioxide sequestration and concomitant valuable recovery: A review. Materials Science for Energy Technologies, 2019, 2, 687-696.  | 1.8 | 51        |
| 8  | Ameliorated performance of a microbial fuel cell operated with an alkali pre-treated clayware ceramic membrane. International Journal of Hydrogen Energy, 2020, 45, 16787-16798.  | 7.1 | 50        |
| 9  | Production of Hydrogen Peroxide Using Various Metal-Based Catalysts in Electrochemical and Bioelectrochemical Systems: Mini Review. Journal of Hazardous, Toxic, and Radioactive Waste, 2020, 24, .                                     | 2.0 | 45        |
| 10 | Using rhodium as a cathode catalyst for enhancing performance of microbial fuel cell. International Journal of Hydrogen Energy, 2019, 44, 22218-22222.  | 7.1 | 44        |
| 11 | Increasing methane content in biogas and simultaneous value added product recovery using microbial electrosynthesis. Water Science and Technology, 2018, 77, 1293-1302.   | 2.5 | 43        |
| 12 | Performance Evaluation of Microbial Fuel Cell Operated with Pd or MnO <sub>2</sub> as Cathode Catalyst and <i>Chaetoceros</i> Pretreated Anodic Inoculum. Journal of Hazardous, Toxic, and Radioactive Waste, 2020, 24, .               | 2.0 | 41        |
| 13 | Application of TiO <sub>2</sub> and Rh as cathode catalyst to boost the microbial electrosynthesis of organic compounds through CO <sub>2</sub> sequestration. Process Biochemistry, 2021, 101, 237-246.                                | 3.7 | 37        |
| 14 | Removal of caffeine from wastewater using electrochemical advanced oxidation process: A mini review. Case Studies in Chemical and Environmental Engineering, 2021, 4, 100129.   | 6.1 | 35        |
| 15 | Improved Wastewater Treatment by Combined System of Microbial Fuel Cell with Activated Carbon/TiO <sub>2</sub> Cathode Catalyst and Membrane Bioreactor. Journal of the Institution of Engineers (India): Series A, 2019, 100, 675-682. | 1.2 | 32        |
| 16 | Role of applied potential on microbial electrosynthesis of organic compounds through carbon dioxide sequestration. Journal of Environmental Chemical Engineering, 2020, 8, 104028.  | 6.7 | 32        |
| 17 | Optimal cathodic imposed potential and appropriate catalyst for the synthesis of hydrogen peroxide in microbial electrolysis cell. Chemical Physics Letters, 2020, 754, 137690.   | 2.6 | 31        |
| 18 | Tungsten oxide as electrocatalyst for improved power generation and wastewater treatment in microbial fuel cell. Environmental Technology (United Kingdom), 2020, 41, 2546-2553.  | 2.2 | 30        |

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|----|---|-----|-----------|
| 19 | Role of bioelectrochemical systems for the remediation of emerging contaminants from wastewater: A review. <i>Journal of Basic Microbiology</i> , 2022, 62, 201-222.  | 3.3 | 29        |
| 20 | Chemically Stable Sulfonated Polytriazoles Containing Trifluoromethyl and Phosphine Oxide Moieties for Proton Exchange Membranes. <i>ACS Applied Polymer Materials</i> , 2020, 2, 2967-2979.  | 4.4 | 27        |
| 21 | Bacterial signalling mechanism: An innovative microbial intervention with multifaceted applications in microbial electrochemical technologies: A review. <i>Bioresource Technology</i> , 2022, 344, 126218.   | 9.6 | 26        |
| 22 | Proficient Sanitary Wastewater Treatment in Laboratory and Field-Scale Microbial Fuel Cell with Anti-Biofouling $\text{Cu}_{0.5}\text{Mn}_{0.5}\text{Fe}_2\text{O}_4$ as Cathode Catalyst. <i>Journal of the Electrochemical Society</i> , 2021, 168, 054519. | 2.9 | 25        |
| 23 | Efficacious bioremediation of heavy metals and radionuclides from wastewater employing aquatic macrophytes and microphytes. <i>Journal of Basic Microbiology</i> , 2022, 62, 260-278.   | 3.3 | 25        |
| 24 | Live diatoms as potential biocatalyst in a microbial fuel cell for harvesting continuous diafuel, carotenoids and bioelectricity. <i>Chemosphere</i> , 2022, 291, 132841.   | 8.2 | 24        |
| 25 | Application of innovative electrochemical and microbial electrochemical technologies for the efficacious removal of emerging contaminants from wastewater: A review. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108230.                 | 6.7 | 24        |
| 26 | Metal organic frameworks as emergent oxygen-reducing cathode catalysts for microbial fuel cells: a review. <i>International Journal of Environmental Science and Technology</i> , 2022, 19, 11539-11560.  | 3.5 | 21        |
| 27 | Application of microbial electrochemical technologies for the treatment of petrochemical wastewater with concomitant valuable recovery: A review. <i>Environmental Science and Pollution Research</i> , 2022, 29, 61783-61802.                                | 5.3 | 20        |
| 28 | Electrocoagulation as an efficacious technology for the treatment of wastewater containing active pharmaceutical compounds: a review. <i>Separation Science and Technology</i> , 2022, 57, 1234-1256.   | 2.5 | 18        |
| 29 | Concomitant production of bioelectricity and hydrogen peroxide leading to the holistic treatment of wastewater in microbial fuel cell. <i>Chemical Physics Letters</i> , 2020, 759, 137986.   | 2.6 | 17        |
| 30 | High throughput techniques for the rapid identification of electroactive microorganisms. <i>Chemosphere</i> , 2021, 285, 131489.  | 8.2 | 17        |
| 31 | The COVID-19 pandemic: biological evolution, treatment options and consequences. <i>Innovative Infrastructure Solutions</i> , 2020, 5, 1.   | 2.2 | 14        |
| 32 | Preparation of Sulfonated Polytriazoles with a Phosphaphenanthrene Unit via Click Polymerization: Fabrication of Membranes and Properties Thereof. <i>ACS Applied Polymer Materials</i> , 2021, 3, 4127-4138.   | 4.4 | 14        |
| 33 | Proclaiming Electrochemical Oxidation as a Potent Technology for the Treatment of Wastewater Containing Xenobiotic Compounds: A Mini Review. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2021, 25, .  | 2.0 | 12        |
| 34 | High-Density Polyethylene Waste-Derived Carbon as a Low-Cost Cathode Catalyst in Microbial Fuel Cell. <i>International Journal of Environmental Research</i> , 2021, 15, 1085-1096.   | 2.3 | 10        |
| 35 | A Sustainable Approach for the Production of Green Energy With the Holistic Treatment of Wastewater Through Microbial Electrochemical Technologies: A Review. <i>Frontiers in Sustainability</i> , 2021, 2, .   | 2.6 | 8         |
| 36 | Application of novel modular reactor for microbial electrosynthesis employing imposed potential with concomitant separation of acetic acid. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 43, 100902.  | 2.7 | 7         |

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|----|--|-----|-----------|
| 37 | Performance comparison between batch and continuous mode of operation of microbial electrosynthesis for the production of organic chemicals. Journal of Applied Electrochemistry, 2021, 51, 715-725.   | 2.9 | 7         |
| 38 | Integration of bioelectrochemical systems with other existing wastewater treatment processes. , 2020, , 229-248.   |     | 7         |
| 39 | Appraising efficacy of existing and advanced technologies for the remediation of beta-blockers from wastewater: A review. Environmental Science and Pollution Research, 2023, 30, 25427-25451.   | 5.3 | 7         |
| 40 | Bismuth-Impregnated Ruthenium with Activated Carbon as Photocathode Catalyst to Proliferate the Efficacy of a Microbial Fuel Cell. Journal of Hazardous, Toxic, and Radioactive Waste, 2021, 25, .   | 2.0 | 4         |
| 41 | Concomitant bioenergy production and wastewater treatment employing microbial electrochemical technologies. , 2022, , 359-385.   |     | 3         |
| 42 | Evaluating application of photosynthetic microbial fuel cell to exhibit efficient carbon sequestration with concomitant value-added product recovery from wastewater: A review. Environmental Science and Pollution Research, 2023, 30, 98995-99012. | 5.3 | 3         |
| 43 | Microbial Electrochemical Technologies for CO2 Sequestration. , 2021, , 413-443.   |     | 1         |
| 44 | Biofuel cell: existing formats, production level, constraints, and potential uses. , 2022, , 531-550.  |     | 1         |