

Makarand Ghangrekar

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2726155/publications.pdf>

Version: 2024-02-01

216
papers

8,983
citations

31949

53
h-index

58549

82
g-index

218
all docs

218
docs citations

218
times ranked

4886
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of microbial fuel cell subjected to variation in pH, temperature, external load and substrate concentration. <i>Bioresource Technology</i> , 2009, 100, 717-723.	4.8	477
2	Performance of membrane-less microbial fuel cell treating wastewater and effect of electrode distance and area on electricity production. <i>Bioresource Technology</i> , 2007, 98, 2879-2885.	4.8	293
3	Rice mill wastewater treatment in microbial fuel cells fabricated using proton exchange membrane and earthen pot at different pH. <i>Bioelectrochemistry</i> , 2010, 79, 228-233.	2.4	249
4	Characteristics of sludge developed under different loading conditions during UASB reactor start-up and granulation. <i>Water Research</i> , 2005, 39, 1123-1133.	5.3	238
5	Performance evaluation of low cost microbial fuel cell fabricated using earthen pot with biotic and abiotic cathode. <i>Bioresource Technology</i> , 2010, 101, 1183-1189.	4.8	228
6	Performance of microbial fuel cell in response to change in sludge loading rate at different anodic feed pH. <i>Bioresource Technology</i> , 2009, 100, 5114-5121.	4.8	162
7	Development of low cost ceramic separator using mineral cation exchanger to enhance performance of microbial fuel cells. <i>Electrochimica Acta</i> , 2015, 166, 320-328.	2.6	137
8	Third generation in bio-electrochemical system research – A systematic review on mechanisms for recovery of valuable by-products from wastewater. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 76, 1022-1031.	8.2	137
9	Graphene supported Ir-MnO_2 nanotubes as a cathode catalyst for improved power generation and wastewater treatment in single-chambered microbial fuel cells. <i>RSC Advances</i> , 2013, 3, 7902.	1.7	135
10	Enhancing performance of microbial fuel cell by using graphene supported V_2O_5 -nanorod catalytic cathode. <i>Electrochimica Acta</i> , 2017, 228, 513-521.	2.6	133
11	Advanced oxidation processes: Performance, advantages, and scale-up of emerging technologies. <i>Journal of Environmental Management</i> , 2022, 316, 115295.	3.8	131
12	Application of electro-active biofilms. <i>Biofouling</i> , 2010, 26, 57-71.	0.8	127
13	Novel low cost proton exchange membrane made from sulphonated biochar for application in microbial fuel cells. <i>Materials Chemistry and Physics</i> , 2020, 239, 122025.	2.0	127
14	Coronavirus disease 2019 (COVID-19) outbreak: some serious consequences with urban and rural water cycle. <i>Npj Clean Water</i> , 2020, 3, .	3.1	118
15	Graphene Oxide-Impregnated PVA-STA Composite Polymer Electrolyte Membrane Separator for Power Generation in a Single-Chambered Microbial Fuel Cell. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 11597-11606.	1.8	107
16	Waste-derived biochar: Applications and future perspective in microbial fuel cells. <i>Bioresource Technology</i> , 2020, 312, 123587.	4.8	107
17	Bismuth doped TiO_2 as an excellent photocathode catalyst to enhance the performance of microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7501-7510.	3.8	96
18	Performance of an anion exchange membrane in association with cathodic parameters in a dual chamber microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 9383-9392.	3.8	95

#	ARTICLE	IF	CITATIONS
19	Nitric acid activation of graphite granules to increase the performance of the non-catalyzed oxygen reduction reaction (ORR) for MFC applications. <i>Electrochemistry Communications</i> , 2009, 11, 1547-1549.	2.3	91
20	V ₂ O ₅ microflower decorated cathode for enhancing power generation in air-cathode microbial fuel cell treating fish market wastewater. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 3638-3645.	3.8	91
21	Modification of carbon felt anode with graphene oxide-zeolite composite for enhancing the performance of microbial fuel cell. <i>Sustainable Energy Technologies and Assessments</i> , 2018, 26, 77-82.	1.7	89
22	Comparison of oxygen and hypochlorite as cathodic electron acceptor in microbial fuel cells. <i>Bioresource Technology</i> , 2014, 154, 330-335.	4.8	88
23	Performance comparison of up-flow microbial fuel cells fabricated using proton exchange membrane and earthen cylinder. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 5681-5686.	3.8	85
24	A novel low cost polyvinyl alcohol-Nafion-borosilicate membrane separator for microbial fuel cell. <i>Materials Chemistry and Physics</i> , 2016, 182, 86-93.	2.0	85
25	Moving towards practical applications of microbial fuel cells for sanitation and resource recovery. <i>Journal of Water Process Engineering</i> , 2020, 38, 101566.	2.6	85
26	Improving performance of microbial fuel cell with ultrasonication pre-treatment of mixed anaerobic inoculum sludge. <i>Bioresource Technology</i> , 2010, 101, 562-567.	4.8	84
27	Improving performance of microbial fuel cell while controlling methanogenesis by <i>Chaetoceros</i> pretreatment of anodic inoculum. <i>Bioresource Technology</i> , 2015, 180, 66-71.	4.8	83
28	Quorum-sensing mediated signals: A promising multi-functional modulators for separately enhancing algal yield and power generation in microbial fuel cell. <i>Bioresource Technology</i> , 2019, 294, 122138.	4.8	81
29	Performance of low cost scalable air-cathode microbial fuel cell made from clayware separator using multiple electrodes. <i>Bioresource Technology</i> , 2015, 182, 373-377.	4.8	80
30	Required minimum granule size in UASB reactor and characteristics variation with size. <i>Bioresource Technology</i> , 2007, 98, 994-999.	4.8	79
31	A novel proton exchange membrane developed from clay and activated carbon derived from coconut shell for application in microbial fuel cell. <i>Biochemical Engineering Journal</i> , 2019, 148, 170-177.	1.8	79
32	Goethite supplemented natural clay ceramic as an alternative proton exchange membrane and its application in microbial fuel cell. <i>Ionics</i> , 2020, 26, 3061-3072.	1.2	78
33	Biofouling effects on the performance of microbial fuel cells and recent advances in biotechnological and chemical strategies for mitigation. <i>Biotechnology Advances</i> , 2019, 37, 107420.	6.0	71
34	A review on environmental occurrence, toxicity and microbial degradation of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs). <i>Journal of Environmental Management</i> , 2021, 300, 113694.	3.8	69
35	Analysis, evaluation, and optimization of kinetic parameters for performance appraisal and design of UASB reactors. <i>Bioresource Technology</i> , 2008, 99, 2132-2140.	4.8	65
36	Biofouling inhibition and enhancing performance of microbial fuel cell using silver nano-particles as fungicide and cathode catalyst. <i>Bioresource Technology</i> , 2016, 220, 183-189.	4.8	65

#	ARTICLE	IF	CITATIONS
37	Application of bimetallic low-cost CuZn as oxygen reduction cathode catalyst in lab-scale and field-scale microbial fuel cell. <i>Chemical Physics Letters</i> , 2020, 751, 137536.	1.2	65
38	Effect of operating parameters on the performance of sediment microbial fuel cell treating aquaculture water. <i>Aquacultural Engineering</i> , 2014, 61, 17-26.	1.4	63
39	Simultaneous organic matter removal and disinfection of wastewater with enhanced power generation in microbial fuel cell. <i>Bioresource Technology</i> , 2014, 163, 328-334.	4.8	63
40	Enhancement of bioelectricity generation and algal productivity in microbial carbon-capture cell using low cost coconut shell as membrane separator. <i>Biochemical Engineering Journal</i> , 2018, 133, 205-213.	1.8	63
41	Synthesis and Application of Zirconium Metal-Organic Framework in Microbial Fuel Cells as a Cost-Effective Oxygen Reduction Catalyst with Competitive Performance. <i>ACS Applied Energy Materials</i> , 2020, 3, 3512-3520.	2.5	63
42	ANAMMOX-denitrification biomass in microbial fuel cell to enhance the electricity generation and nitrogen removal efficiency. <i>Biodegradation</i> , 2020, 31, 249-264.	1.5	62
43	Effect of operating temperature on performance of microbial fuel cell. <i>Water Science and Technology</i> , 2011, 64, 917-922.	1.2	59
44	On-Site Sanitary Wastewater Treatment System Using 720-L Stacked Microbial Fuel Cell: Case Study. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2020, 24, .	1.2	59
45	Novel multi walled carbon nanotube based nitrogen impregnated Co and Fe cathode catalysts for improved microbial fuel cell performance. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 23027-23035.	3.8	58
46	Improved performance of microbial fuel cell by using conductive ink printed cathode containing Co ₃ O ₄ or Fe ₃ O ₄ . <i>Electrochimica Acta</i> , 2019, 310, 173-183.	2.6	58
47	A live bio-cathode to enhance power output steered by bacteria-microalgae synergistic metabolism in microbial fuel cell. <i>Journal of Power Sources</i> , 2020, 449, 227560.	4.0	58
48	Architectural adaptations of microbial fuel cells. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 9419-9432.	1.7	57
49	Review- Microbial Electrosynthesis: A Way Towards The Production of Electro-Commodities Through Carbon Sequestration with Microbes as Biocatalysts. <i>Journal of the Electrochemical Society</i> , 2020, 167, 155510.	1.3	57
50	Application of sediment microbial fuel cell for in situ reclamation of aquaculture pond water quality. <i>Aquacultural Engineering</i> , 2013, 57, 101-107.	1.4	56
51	Wastewater treatment in pilot-scale microbial fuel cell using multielectrode assembly with ceramic separator suitable for field applications. <i>Environmental Progress and Sustainable Energy</i> , 2016, 35, 1809-1817.	1.3	56
52	Carbon supported nickel-phthalocyanine/MnOx as novel cathode catalyst for microbial fuel cell application. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 23085-23094.	3.8	56
53	Enhancing waste activated sludge digestion and power production using hypochlorite as catholyte in clayware microbial fuel cell. <i>Bioresource Technology</i> , 2015, 182, 225-231.	4.8	55
54	Enhancing organic matter removal, biopolymer recovery and electricity generation from distillery wastewater by combining fungal fermentation and microbial fuel cell. <i>Bioresource Technology</i> , 2015, 176, 8-14.	4.8	55

#	ARTICLE	IF	CITATIONS
55	Start-Up of Anammox SBR from Non-Specific Inoculum and Process Acceleration Methods by Hydrazine. <i>Water (Switzerland)</i> , 2021, 13, 350.	1.2	55
56	Enhancing Electrogenesis by Pretreatment of Mixed Anaerobic Sludge To Be Used as Inoculum in Microbial Fuel Cells. <i>Energy & Fuels</i> , 2015, 29, 3518-3524.	2.5	54
57	Simultaneous Wastewater Treatment, Algal Biomass Production and Electricity Generation in Clayware Microbial Carbon Capture Cells. <i>Applied Biochemistry and Biotechnology</i> , 2017, 183, 1076-1092.	1.4	54
58	Synthesis of bimetallic iron ferrite $\text{Co}_0.5\text{Zn}_0.5\text{Fe}_2\text{O}_4$ as a superior catalyst for oxygen reduction reaction to replace noble metal catalysts in microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 19196-19205.	3.8	54
59	Bioelectrochemically powered remediation of xenobiotic compounds and heavy metal toxicity using microbial fuel cell and microbial electrolysis cell. <i>Materials Science for Energy Technologies</i> , 2020, 3, 104-115.	1.0	54
60	Ameliorating effect of nitrate on nitrite inhibition for denitrifying P-accumulating organisms. <i>Science of the Total Environment</i> , 2021, 797, 149133.	3.9	54
61	Novel Sulfonated Co-poly(ether imide)s Containing Trifluoromethyl, Fluorenyl and Hydroxyl Groups for Enhanced Proton Exchange Membrane Properties: Application in Microbial Fuel Cell. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 14803-14817.	4.0	53
62	Enhancing the performance of microbial fuel cell using Ag Pt bimetallic alloy as cathode catalyst and anti-biofouling agent. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 19650-19660.	3.8	52
63	Enhancing the power generation in microbial fuel cells with effective utilization of goethite recovered from mining mud as anodic catalyst. <i>Bioresource Technology</i> , 2015, 191, 110-116.	4.8	51
64	Application of bioelectrochemical systems for carbon dioxide sequestration and concomitant valuable recovery: A review. <i>Materials Science for Energy Technologies</i> , 2019, 2, 687-696.	1.0	51
65	Ameliorated performance of a microbial fuel cell operated with an alkali pre-treated clayware ceramic membrane. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 16787-16798.	3.8	50
66	Enhancing the performance of single-chambered microbial fuel cell using manganese/palladium and zirconium/palladium composite cathode catalysts. <i>Bioresource Technology</i> , 2017, 238, 568-574.	4.8	48
67	Electricity generation through a photo sediment microbial fuel cell using algae at the cathode. <i>Water Science and Technology</i> , 2017, 76, 3269-3277.	1.2	47
68	Influence of ceramic separator's characteristics on microbial fuel cell performance. <i>Journal of Electrochemical Science and Engineering</i> , 2014, 4, .	1.6	45
69	Carbon Supported Cu-Sn Bimetallic Alloy as an Excellent Low-Cost Cathode Catalyst for Enhancing Oxygen Reduction Reaction in Microbial Fuel Cell. <i>Journal of the Electrochemical Society</i> , 2018, 165, F621-F628.	1.3	45
70	Production of Hydrogen Peroxide Using Various Metal-Based Catalysts in Electrochemical and Bioelectrochemical Systems: Mini Review. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2020, 24, .	1.2	45
71	Using rhodium as a cathode catalyst for enhancing performance of microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 22218-22222.	3.8	44
72	Microbial fuel cell coupled Fenton oxidation for the cathodic degradation of emerging contaminants from wastewater: Applications and challenges. <i>Environmental Research</i> , 2022, 204, 112135.	3.7	44

#	ARTICLE	IF	CITATIONS
73	Simultaneous sewage treatment and electricity generation in membrane-less microbial fuel cell. <i>Water Science and Technology</i> , 2008, 58, 37-43.	1.2	43
74	Increasing methane content in biogas and simultaneous value added product recovery using microbial electrosynthesis. <i>Water Science and Technology</i> , 2018, 77, 1293-1302.	1.2	43
75	Improving Performance of MFC by Design Alteration and Adding Cathodic Electrolytes. <i>Applied Biochemistry and Biotechnology</i> , 2008, 151, 319-332.	1.4	42
76	Cow's urine as a yellow gold for bioelectricity generation in low cost clayware microbial fuel cell. <i>Energy</i> , 2016, 113, 76-84.	4.5	42
77	Effective ammonium removal by anaerobic oxidation in microbial fuel cells. <i>Environmental Technology (United Kingdom)</i> , 2015, 36, 767-775.	1.2	41
78	A green and sustainable approach on statistical optimization of laccase mediated delignification of sugarcane tops for enhanced saccharification. <i>Journal of Environmental Management</i> , 2018, 217, 700-709.	3.8	41
79	<i>Azadirachta indica</i> leaf-extract-assisted synthesis of Co-Ni mixed metal oxide for application in a microbial fuel cell as a cathode catalyst. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3430-3440.	2.5	41
80	Performance Evaluation of Microbial Fuel Cell Operated with Pd or MnO ₂ as Cathode Catalyst and <i>Chaetoceros</i> Pretreated Anodic Inoculum. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2020, 24, .	1.2	41
81	Palladium-Supported Zirconia-Based Catalytic Degradation of Rhodamine-B Dye from Wastewater. <i>Water (Switzerland)</i> , 2021, 13, 1522.	1.2	41
82	Controlling methanogenesis and improving power production of microbial fuel cell by lauric acid dosing. <i>Water Science and Technology</i> , 2014, 70, 1363-1369.	1.2	40
83	Multi-walled carbon nanotube and carbide-derived carbon supported metal phthalocyanines as cathode catalysts for microbial fuel cell applications. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3525-3537.	2.5	40
84	Application of TiO ₂ and Rh as cathode catalyst to boost the microbial electrosynthesis of organic compounds through CO ₂ sequestration. <i>Process Biochemistry</i> , 2021, 101, 237-246.	1.8	37
85	A novel bio-electro-Fenton process for eliminating sodium dodecyl sulphate from wastewater using dual chamber microbial fuel cell. <i>Bioresource Technology</i> , 2021, 341, 125850.	4.8	37
86	Removal of caffeine from wastewater using electrochemical advanced oxidation process: A mini review. <i>Case Studies in Chemical and Environmental Engineering</i> , 2021, 4, 100129.	2.9	35
87	Synthesis of Tungstate Oxide/Bismuth Tungstate Composite and Application in Microbial Fuel Cell as Superior Low-Cost Cathode Catalyst than Platinum. <i>Journal of the Electrochemical Society</i> , 2018, 165, G146-G153.	1.3	34
88	SiOC-based polymer derived-ceramic porous anodes for microbial fuel cells. <i>Biochemical Engineering Journal</i> , 2019, 148, 29-36.	1.8	33
89	Design of Clayware Separator-Electrode Assembly for Treatment of Wastewater in Microbial Fuel Cells. <i>Applied Biochemistry and Biotechnology</i> , 2014, 173, 378-390.	1.4	32
90	Reduction of start-up time through bioaugmentation process in microbial fuel cells using an isolate from dark fermentative spent media fed anode. <i>Water Science and Technology</i> , 2015, 72, 106-115.	1.2	32

#	ARTICLE	IF	CITATIONS
91	Improved Wastewater Treatment by Combined System of Microbial Fuel Cell with Activated Carbon/TiO ₂ Cathode Catalyst and Membrane Bioreactor. <i>Journal of the Institution of Engineers (India): Series A</i> , 2019, 100, 675-682.	0.6	32
92	Role of applied potential on microbial electrosynthesis of organic compounds through carbon dioxide sequestration. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104028.	3.3	32
93	Preparation of Activated Carbon from the Wood of <i>Paulownia tomentosa</i> as an Efficient Adsorbent for the Removal of Acid Red 4 and Methylene Blue Present in Wastewater. <i>Water (Switzerland)</i> , 2021, 13, 1453.	1.2	32
94	Technical, hygiene, economic, and life cycle assessment of full-scale moving bed biofilm reactors for wastewater treatment in India. <i>Environmental Science and Pollution Research</i> , 2018, 25, 2552-2569.	2.7	31
95	Comprehensive review on treatment of high-strength distillery wastewater in advanced physico-chemical and biological degradation pathways. <i>International Journal of Environmental Science and Technology</i> , 2019, 16, 527-546.	1.8	31
96	Novel low-cost activated algal biochar as a cathode catalyst for improving performance of microbial fuel cell. <i>Sustainable Energy Technologies and Assessments</i> , 2020, 42, 100808.	1.7	31
97	Optimising the proportion of pure and mixed culture in inoculum to enhance the performance of microbial fuel cells. <i>International Journal of Environmental Technology and Management</i> , 2020, 23, 50.	0.1	31
98	Optimal cathodic imposed potential and appropriate catalyst for the synthesis of hydrogen peroxide in microbial electrolysis cell. <i>Chemical Physics Letters</i> , 2020, 754, 137690.	1.2	31
99	Pre-treatment of anodic inoculum with nitroethane to improve performance of a microbial fuel cell. <i>Water Science and Technology</i> , 2018, 77, 2491-2496.	1.2	30
100	Tungsten oxide as electrocatalyst for improved power generation and wastewater treatment in microbial fuel cell. <i>Environmental Technology (United Kingdom)</i> , 2020, 41, 2546-2553.	1.2	30
101	Removal of sodium dodecyl sulphate from wastewater and its effect on anodic biofilm and performance of microbial fuel cell. <i>International Biodeterioration and Biodegradation</i> , 2021, 156, 105108.	1.9	30
102	Novel application of peptaibiotics derived from <i>Trichoderma</i> sp. for methanogenic suppression and enhanced power generation in microbial fuel cells. <i>RSC Advances</i> , 2017, 7, 10707-10717.	1.7	29
103	In Situ Bioremediation Using Sediment Microbial Fuel Cell. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2017, 21, .	1.2	29
104	Improving Performance of Microbial Fuel Cell by Using Polyaniline-Coated Carbon Felt Anode. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2020, 24, .	1.2	29
105	Role of bioelectrochemical systems for the remediation of emerging contaminants from wastewater: A review. <i>Journal of Basic Microbiology</i> , 2022, 62, 201-222.	1.8	29
106	Application of Low-Cost Cu-Sn Bimetal Alloy as Oxygen Reduction Reaction Catalyst for Improving Performance of the Microbial Fuel Cell. <i>MRS Advances</i> , 2018, 3, 663-668.	0.5	28
107	Preparation of a fouling-resistant sustainable cathode for a single-chambered microbial fuel cell. <i>Water Science and Technology</i> , 2014, 69, 634-639.	1.2	27
108	Microbial fuel cell performance of graphitic carbon functionalized porous polysiloxane based ceramic membranes. <i>Bioelectrochemistry</i> , 2019, 129, 259-269.	2.4	27

#	ARTICLE	IF	CITATIONS
109	Chemically Stable Sulfonated Polytriazoles Containing Trifluoromethyl and Phosphine Oxide Moieties for Proton Exchange Membranes. <i>ACS Applied Polymer Materials</i> , 2020, 2, 2967-2979.	2.0	27
110	Utilisation of waste medicine wrappers as an efficient low-cost electrode material for microbial fuel cell. <i>Environmental Technology (United Kingdom)</i> , 2020, 41, 1209-1218.	1.2	26
111	Application of synthesized porous graphitic carbon nitride and its composite as excellent electrocatalysts in microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 31056-31069.	3.8	26
112	Bacterial signalling mechanism: An innovative microbial intervention with multifaceted applications in microbial electrochemical technologies: A review. <i>Bioresource Technology</i> , 2022, 344, 126218.	4.8	26
113	Nitrogen and Sulfur Codoped Graphene Macroassemblies as High-Performance Electrocatalysts for the Oxygen Reduction Reaction in Microbial Fuel Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16591-16599.	3.2	25
114	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.	1.3	25
115	Efficacious bioremediation of heavy metals and radionuclides from wastewater employing aquatic macroalgae and microphytes. <i>Journal of Basic Microbiology</i> , 2022, 62, 260-278.	1.8	25
116	Effect of pH and distance between electrodes on the performance of a sediment microbial fuel cell. <i>Water Science and Technology</i> , 2013, 68, 537-543.	1.2	24
117	Improving performance of microbial fuel cell by enhanced bacterial-anode interaction using sludge immobilized beads with activated carbon. <i>Chemical Engineering Research and Design</i> , 2020, 143, 285-292.	2.7	24
118	Live diatoms as potential biocatalyst in a microbial fuel cell for harvesting continuous diafuel, carotenoids and bioelectricity. <i>Chemosphere</i> , 2022, 291, 132841.	4.2	24
119	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.	3.3	24
120	Optimising the proportion of pure and mixed culture in inoculum to enhance the performance of microbial fuel cells. <i>International Journal of Environmental Technology and Management</i> , 2020, 23, 50.	0.1	23
121	Preparation of Pd-Ni Nanoparticles Supported on Activated Carbon for Efficient Removal of Basic Blue 3 from Water. <i>Water (Switzerland)</i> , 2021, 13, 1211.	1.2	22
122	Performance improvement of sediment microbial fuel cell by enriching the sediment with cellulose: Kinetics of cellulose degradation. <i>Environmental Technology and Innovation</i> , 2019, 13, 189-196.	3.0	21
123	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.	1.8	21
124	TiO ₂ /Activated carbon photo cathode catalyst exposed to ultraviolet radiation to enhance the efficacy of integrated microbial fuel cell-membrane bioreactor. <i>Bioresource Technology Reports</i> , 2019, 7, 100303.	1.5	20
125	Optimization of saccharification of enzymatically pretreated sugarcane tops by response surface methodology for ethanol production. <i>Biofuels</i> , 2019, 10, 73-80.	1.4	20
126	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.	2.7	20

#	ARTICLE	IF	CITATIONS
127	Optimizing performance of a microbial carbon-capture cell using Box-Behnken design. <i>Process Biochemistry</i> , 2020, 95, 99-107.	1.8	20
128	Two-phase anaerobic digestion of food waste: Effect of semi-continuous feeding on acidogenesis and methane production. <i>Bioresource Technology</i> , 2022, 346, 126396.	4.8	20
129	Biotic conversion of sulphate to sulphide and abiotic conversion of sulphide to sulphur in a microbial fuel cell using cobalt oxide octahedrons as cathode catalyst. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 759-768.	1.7	19
130	A Systematic Review on Bioelectrochemical Systems Research. <i>Current Pollution Reports</i> , 2017, 3, 281-288.	3.1	19
131	Plant secondary metabolites induced electron flux in microbial fuel cell: investigation from laboratory-to-field scale. <i>Scientific Reports</i> , 2020, 10, 17185.	1.6	19
132	Surfactant removal from wastewater using photo-cathode microbial fuel cell and laterite-based hybrid treatment system. <i>Bioprocess and Biosystems Engineering</i> , 2020, 43, 2075-2084.	1.7	19
133	Methanogenesis inhibitors used in bio-electrochemical systems: A review revealing reality to decide future direction and applications. <i>Bioresource Technology</i> , 2021, 319, 124141.	4.8	19
134	Multi-chamber microbial desalination cell for improved organic matter and dissolved solids removal from wastewater. <i>Water Science and Technology</i> , 2014, 70, 1948-1954.	1.2	18
135	New crosslinked sulfonated polytriazoles: Proton exchange properties and microbial fuel cell performance. <i>European Polymer Journal</i> , 2018, 103, 322-334.	2.6	18
136	Tailoring hydrophilic and porous nature of polysiloxane derived ceramer and ceramic membranes for enhanced bioelectricity generation in microbial fuel cell. <i>Ionics</i> , 2019, 25, 5907-5918.	1.2	18
137	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.	1.3	18
138	Seasonal characterization of municipal solid waste for selecting feasible waste treatment technology for Guwahati city, India. <i>Journal of the Air and Waste Management Association</i> , 2022, 72, 147-160.	0.9	18
139	Graphene Oxide/Polytetrafluoroethylene Composite Anode and Chaetoceros pre-Treated Anodic Inoculum Enhancing Performance of Microbial Fuel Cell. <i>Journal of Clean Energy Technologies</i> , 2018, 6, 236-241.	0.1	18
140	Optimization of Operating Conditions for Maximizing Power Generation and Organic Matter Removal in Microbial Fuel Cell. <i>Journal of Environmental Engineering, ASCE</i> , 2017, 143, .	0.7	17
141	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.	1.2	17
142	Effect of Using a Ceramic Separator on the Performance of Hydroponic Constructed Wetland-Microbial Fuel Cell. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2020, 24, .	1.2	17
143	High throughput techniques for the rapid identification of electroactive microorganisms. <i>Chemosphere</i> , 2021, 285, 131489.	4.2	17
144	Electricity Production during Distillery Wastewater Treatment in a Microbial Fuel Cell Equipped with Low Cost PVA-Nafion-Borosilicate Membrane. <i>Journal of Clean Energy Technologies</i> , 2018, 6, 155-158.	0.1	17

#	ARTICLE	IF	CITATIONS
145	Simultaneous Removal of Phenol and Dissolved Solids from Wastewater Using Multichambered Microbial Desalination Cell. <i>Applied Biochemistry and Biotechnology</i> , 2015, 177, 1638-1653.	1.4	16
146	Application of silver-tin dioxide composite cathode catalyst for enhancing performance of microbial desalination cell. <i>Materials Science for Energy Technologies</i> , 2018, 1, 188-195.	1.0	16
147	Testing of Chemically Activated Cellulose Fibers as Adsorbents for Treatment of Arsenic Contaminated Water. <i>Materials</i> , 2021, 14, 3731.	1.3	16
148	Organic matter and nitrogen removal in a hybrid upflow anaerobic sludge blanketâ€”Moving bed biofilm and rope bed biofilm reactor. <i>Journal of Environmental Chemical Engineering</i> , 2016, 4, 3240-3245.	3.3	15
149	Low efficiency of sewage treatment plants due to unskilled operations in India. <i>Environmental Chemistry Letters</i> , 2016, 14, 407-416.	8.3	15
150	Investigating the efficacy of CeO ₂ multi-layered triangular nanosheets for augmenting cathodic hydrogen peroxide production in microbial fuel cell. <i>Electrochimica Acta</i> , 2021, 398, 139341.	2.6	15
151	Maximum anode chamber volume and minimum anode area for supporting electrogenesis in microbial fuel cells treating wastewater. <i>Journal of Renewable and Sustainable Energy</i> , 2016, 8, .	0.8	14
152	Enhanced Power Generation in Microbial Fuel Cell Using MnO ₂ -Catalyzed Cathode Treating Fish Market Wastewater. <i>Springer Proceedings in Energy</i> , 2016, , 285-294.	0.2	14
153	Application of Low-Cost Transition Metal Based Co _{0.5} Zn _{0.5} Fe ₂ O ₄ as Oxygen Reduction Reaction Catalyst for Improving Performance of Microbial Fuel Cell. <i>MRS Advances</i> , 2018, 3, 3171-3179.	0.5	14
154	The COVID-19 pandemic: biological evolution, treatment options and consequences. <i>Innovative Infrastructure Solutions</i> , 2020, 5, 1.	1.1	14
155	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.	2.0	14
156	Biodegradation kinetics of thin-stillage treatment by <i>Aspergillus awamori</i> and characterization of recovered chitosan. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 1955-1965.	1.7	13
157	Improved Performance of Microbial Fuel Cell by In Situ Methanogenesis Suppression While Treating Fish Market Wastewater. <i>Applied Biochemistry and Biotechnology</i> , 2020, 192, 1060-1075.	1.4	13
158	EFFECT OF SULFATE CONCENTRATION IN THE WASTEWATER ON MICROBIAL FUEL CELL PERFORMANCE. <i>Environmental Engineering and Management Journal</i> , 2010, 9, 1227-1234.	0.2	13
159	Waste-derived iron catalyzed bio-electro-Fenton process for the cathodic degradation of surfactants. <i>Environmental Research</i> , 2022, 212, 113141.	3.7	13
160	Trifluoromethyl and benzyl ether side groups containing novel sulfonated co-poly(ether imide)s: Application in microbial fuel cell. <i>European Polymer Journal</i> , 2019, 118, 451-464.	2.6	12
161	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, .	1.2	12
162	Bioelectrogenesis Detection of Inoculums Using Electrochromic Tungsten Oxide and Performance Evaluation in Microbial Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016, 163, F183-F189.	1.3	11

#	ARTICLE	IF	CITATIONS
163	Screening anodic inoculums for microbial fuel cells by quantifying bioelectrogenic activity using tungsten trioxide quantum rods. <i>Bioresource Technology</i> , 2018, 252, 66-71.	4.8	11
164	A BRIEF REVIEW ON RECENT ADVANCES IN AIR-CATHODE MICROBIAL FUEL CELLS. <i>Environmental Engineering and Management Journal</i> , 2018, 17, 1531-1544.	0.2	11
165	TiO ₂ -Si- or SrTiO ₃ -Si-impregnated PVA-based low-cost proton exchange membranes for application in microbial fuel cell. <i>Ionics</i> , 2020, 26, 6195-6205.	1.2	10
166	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.	1.1	10
167	Application of ion exchange membranes in enhancing algal production alongside desalination of saline water in microbial fuel cell. <i>MRS Advances</i> , 2019, 4, 1077-1085.	0.5	9
168	Microbial Carbon Capture Cell: Advanced Bio-electrochemical System for Wastewater Treatment, Electricity Generation and Algal Biomass Production. , 2019, , 317-338.		9
169	Effectiveness of constructed wetland integrated with microbial fuel cell for domestic wastewater treatment and to facilitate power generation. <i>Environmental Science and Pollution Research</i> , 2022, 29, 51117-51129.	2.7	9
170	Anodic inoculum pre-treatment by extracts of <i>Azadirachta indica</i> leaves and <i>Allium sativum</i> peels for improved bioelectricity recovery from microbial fuel cell. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 23391-23400.	3.8	8
171	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, .	1.3	8
172	Enhancing performance of microbial fuel cell treating distillery wastewater using carbon supported Nickel-phthalocyanine/MnOx as novel cathode catalyst. <i>MRS Advances</i> , 2018, 3, 657-662.	0.5	7
173	Evaluating the suitability of tungsten, titanium and stainless steel wires as current collectors in microbial fuel cells. <i>Water Science and Technology</i> , 2018, 77, 999-1006.	1.2	7
174	A novel tin-chloride-zirconium oxide-kaolin composite coated carbon felt anode for electro-oxidation of surfactant from municipal wastewater. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104489.	3.3	7
175	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.	1.7	7
176	Performance comparison between batch and continuous mode of operation of microbial electrosynthesis for the production of organic chemicals. <i>Journal of Applied Electrochemistry</i> , 2021, 51, 715-725.	1.5	7
177	Integration of bioelectrochemical systems with other existing wastewater treatment processes. , 2020, , 229-248.		7
178	Appraising efficacy of existing and advanced technologies for the remediation of beta-blockers from wastewater: A review. <i>Environmental Science and Pollution Research</i> , 2023, 30, 25427-25451.	2.7	7
179	Organic matter and dissolved salts removal in a microbial desalination cell with different orientation of ion exchange membranes. <i>Desalination and Water Treatment</i> , 0, , 1-9.	1.0	6
180	Integrating microbial electrochemical technologies for methane-to-bioelectricity and water-splitting to impart self-sustainability to wastewater treatment plants. <i>Bioresource Technology Reports</i> , 2021, 13, 100644.	1.5	6

#	ARTICLE	IF	CITATIONS
181	An integrated biorefinery approach for bioethanol production from sugarcane tops. <i>Journal of Cleaner Production</i> , 2022, 352, 131451.	4.6	6
182	Ultrafiltration membrane bio-fuel cell as an energy-efficient advanced wastewater treatment system. <i>International Journal of Energy Research</i> , 2022, 46, 20216-20227.	2.2	6
183	Sewage reuse for aquaculture after treatment in oxidation and duckweed pond. <i>Water Science and Technology</i> , 2007, 55, 173-181.	1.2	5
184	Comparative pretreatment method for efficient enzymatic hydrolysis of <i>Salvinia cucullata</i> and sewage treatment in ponds containing this biomass. <i>Clean Technologies and Environmental Policy</i> , 2014, 16, 1787-1794.	2.1	5
185	Biogas Production from Partially Digested Septic Tank Sludge and its Kinetics. <i>Waste and Biomass Valorization</i> , 2019, 10, 387.	1.8	5
186	Wastewater Treatment and Concomitant Bioelectricity Production Using Microbial Fuel Cell: Present Aspects, Up-Scaling and Future Inventiveness. , 2021, 6, 633-651.		5
187	Contaminant Removal and Energy Recovery in Microbial Fuel Cells. , 2019, , 76-94.		5
188	Biomass granulation in an upflow anaerobic sludge blanket reactor treating 500 m ³ /day low-strength sewage and post treatment in high-rate algal pond. <i>Water Science and Technology</i> , 2017, 76, 1234-1242.	1.2	4
189	Fouling resistant nitrogen doped carbon powder with amino-tri-methylene-phosphate cathode for microbial fuel cell. <i>Materials for Renewable and Sustainable Energy</i> , 2017, 6, 1.	1.5	4
190	Sludge granulation in an UASB-moving bed biofilm hybrid reactor for efficient organic matter removal and nitrogen removal in biofilm reactor. <i>Environmental Technology (United Kingdom)</i> , 2018, 39, 298-307.	1.2	4
191	Low-Cost Solutions for Fabrication of Microbial Fuel Cells: Ceramic Separator and Electrode Modifications. , 2018, , 95-124.		4
192	In situ bioremediation techniques for the removal of emerging contaminants and heavy metals using hybrid microbial electrochemical technologies. , 2020, , 233-255.		4
193	Enhancing the Performance of Microbial Fuel Cell by Using Chloroform Pre-treated Mixed Anaerobic Sludge to Control Methanogenesis in Anodic Chamber. <i>Applied Biochemistry and Biotechnology</i> , 2021, 193, 846-855.	1.4	4
194	Bismuth-Impregnated Ruthenium with Activated Carbon as Photocathode Catalyst to Proliferate the Efficacy of a Microbial Fuel Cell. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2021, 25, .	1.2	4
195	New Trends in Monitoring and Removing the Pollutants from Water. <i>Journal of Chemistry</i> , 2018, 2018, 1-2.	0.9	3
196	Concomitant bioenergy production and wastewater treatment employing microbial electrochemical technologies. , 2022, , 359-385.		3
197	Evaluating application of photosynthetic microbial fuel cell to exhibit efficient carbon sequestration with concomitant value-added product recovery from wastewater: A review. <i>Environmental Science and Pollution Research</i> , 2023, 30, 98995-99012.	2.7	3
198	Sediment Microbial Fuel Cell and Constructed Wetland Assisted with It: Challenges and Future Prospects. , 2018, , 335-352.		2

#	ARTICLE	IF	CITATIONS
199	Sulfonated co-poly(ether imide)s with alkyne groups: Fabrication of crosslinked membranes and studies on PEM properties including MFC performance. Polymer Engineering and Science, 2020, 60, 2097-2110.	1.5	2
200	Performance and Economics of Low Cost Clay Cylinder Microbial Fuel Cell for Wastewater Treatment. , 2011, , .		2
201	Yeast and Algae as Biocatalysts in Microbial Fuel Cell. , 2019, , 141-168.		2
202	Microbial fuel cells—Challenges for commercialization and how they can be addressed. , 2022, , 393-418.		2
203	Effect of Cathodic Electron Acceptors on the Performance of Microbial Desalination Cell. , 2019, , 305-315.		1
204	Microbial Electrochemical Technologies for CO2 Sequestration. , 2021, , 413-443.		1
205	Biological and Microbial Fuel Cells. , 2021, , .		1
206	Biofuel cell: existing formats, production level, constraints, and potential uses. , 2022, , 531-550.		1
207	An overview of membrane bioreactor coupled bioelectrochemical systems. , 2020, , 249-272.		1
208	Improved Wastewater Treatment by Using Integrated Microbial Fuel Cell-Membrane Bioreactor System Along with Ruthenium/activated Carbon Cathode Catalyst to Enhance Bio-energy Recovery. Water Science and Technology Library, 2021, , 183-192.	0.2	1
209	Optimum dose of Chaetoceros for controlling methanogenesis to improve power production of microbial fuel cell. Water Science and Technology, 2022, 85, 257-264.	1.2	1
210	Performance evaluation of microbial fuel cell using novel anode architecture and with low cost components. Journal of Environmental Engineering and Science, 0, , 1-8.	0.3	1
211	Bioelectrochemical Systems for Fuel Production: A Techno-Economic Analysis. , 2021, , 379-412.		0
212	Bioenergy and Valuables Recovery During Wastewater Treatment Using Bio-Electrochemical Systems. , 2021, , 259-259.		0
213	Integration of wastewater treatment with algal cultivation for the production of biofuel and bioenergy. , 2022, , 289-312.		0
214	Bioelectrochemical System for Bioremediation and Energy Generation. , 2020, , 365-391.		0
215	Microbial electrochemical technologies for wastewater treatment: insight into theory and reality. , 2022, , 179-200.		0
216	Development of Low-Cost Microbial Fuel Cell for Converting Waste to Electricity and Abating Pollution. , 2022, , 167-198.		0