

Weihua He

List of Publications by Year in descending order

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79
papers

4,220
citations

101543

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79
all docs

79
docs citations

79
times ranked

3180
citing authors

#	ARTICLE	IF	CITATIONS
1	Economic affordable carbonized phenolic foam anode with controlled structure for microbial fuel cells. <i>Science of the Total Environment</i> , 2022, 810, 151314.	8.0	12
2	Enhanced Microbial Electrochemical Systems Performance by Optimizing the "Anode-Collector" Collection Mode: From Enhancement Mechanism to Construction Strategy. <i>ACS ES&T Engineering</i> , 2022, 2, 263-270.	7.6	9
3	Microbial separator allied biocathode supports simultaneous nitrification and denitrification for nitrogen removal in microbial electrochemical system. <i>Bioresource Technology</i> , 2022, 345, 126537.	9.6	24
4	Heterogeneous Structure Regulated by Selection Pressure on Bacterial Adhesion Optimized the Viability Stratification Structure of Electroactive Biofilms. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 2754-2767.	8.0	13
5	Improved membrane permeability with cetyltrimethylammonium bromide (CTAB) addition for enhanced bidirectional transport of substrate and electron shuttles. <i>Science of the Total Environment</i> , 2022, 822, 153443.	8.0	7
6	Spatial-type skeleton induced <i>Geobacter</i> enrichment and tailored bio-capacitance of electroactive bioanode for efficient electron transfer in microbial fuel cells. <i>Science of the Total Environment</i> , 2022, 821, 153123.	8.0	21
7	Effects of ammonia on electrochemical active biofilm in microbial electrolysis cells for synthetic swine wastewater treatment. <i>Water Research</i> , 2022, 219, 118570.	11.3	20
8	Fungus-sourced filament-array anode facilitates <i>Geobacter</i> enrichment and promotes anodic bio-capacitance improvement for efficient power generation in microbial fuel cells. <i>Science of the Total Environment</i> , 2022, 838, 155926.	8.0	5
9	Remediation of nitrate contamination by membrane hydrogenotrophic denitrifying biofilm integrated in microbial electrolysis cell. <i>Water Research</i> , 2021, 188, 116498.	11.3	82
10	The anaerobic and starving treatment eliminates filamentous bulking and recovers biocathode biocatalytic activity with residual organic loading in microbial electrochemical system. <i>Chemical Engineering Journal</i> , 2021, 404, 127072.	12.7	24
11	Effects of high ammonia loading and in-situ short-cut nitrification in low carbon-nitrogen ratio wastewater treatment by biocathode microbial electrochemical system. <i>Science of the Total Environment</i> , 2021, 755, 142641.	8.0	19
12	Enhanced oxygen reduction activity and high-quality effluent of membrane filtration electrodes with Prussian blue in microbial fuel cells. <i>Science of the Total Environment</i> , 2021, 753, 142021.	8.0	6
13	Enhanced electrocatalytic activity and antifouling performance by iron phthalocyanine doped filtration membrane cathode. <i>Chemical Engineering Journal</i> , 2021, 413, 127536.	12.7	11
14	Graphene family for hydrogen peroxide production in electrochemical system. <i>Science of the Total Environment</i> , 2021, 769, 144491.	8.0	14
15	Discerning realizable advantages of microbial electrochemical system towards raw municipal wastewater treatment: From the analyses of mass and energy flow. <i>Journal of Power Sources</i> , 2021, 495, 229706.	7.8	6
16	The operation characters of biocathode microbial electrochemical system with microbial separator for domestic wastewater treatment: Power generation, long-term stability, and organic removal. <i>Journal of Power Sources</i> , 2021, 495, 229785.	7.8	9
17	Electron flow assisted COD removal in wastewater under continuous flow conditions using microbial electrochemical system. <i>Science of the Total Environment</i> , 2021, 776, 145978.	8.0	9
18	High performance cathode membrane by using zinc phthalocyanine for improved oxygen reduction reaction activity and reduced membrane fouling. <i>Journal of Power Sources</i> , 2021, 509, 230365.	7.8	2

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19	Tailoring spatial structure of electroactive biofilm for enhanced activity and direct electron transfer on iron phthalocyanine modified anode in microbial fuel cells. <i>Biosensors and Bioelectronics</i> , 2021, 191, 113410.	10.1	26
20	Response of exoelectrogens centered consortium to nitrate on collaborative metabolism, microbial community, and spatial structure. <i>Chemical Engineering Journal</i> , 2021, 426, 130975.	12.7	29
21	Tailoring Surface Properties of Electrodes for Synchronous Enhanced Extracellular Electron Transfer and Enriched Exoelectrogens in Microbial Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58508-58521.	8.0	25
22	Enhanced electricity generation and extracellular electron transfer by polydopamine- β -reduced graphene oxide (PDA- β -rGO) modification for high-performance anode in microbial fuel cell. <i>Chemical Engineering Journal</i> , 2020, 387, 123408.	12.7	97
23	Energetically self-sustaining treatment of swine wastewater in a microbial electrochemical technology-centered hybrid system. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 747-756.	2.4	4
24	Surface modification by β -cyclodextrin/polyquaternium-11 composite for enhanced biofilm formation in microbial fuel cells. <i>Journal of Power Sources</i> , 2020, 480, 228789.	7.8	11
25	Synergistic effect between poly(diallyldimethylammonium chloride) and reduced graphene oxide for high electrochemically active biofilm in microbial fuel cell. <i>Electrochimica Acta</i> , 2020, 359, 136949.	5.2	29
26	Power density of microbial electrochemical system responds to mass transfer characters of non- β -cyclodextrin selective microbial separator. <i>Bioresource Technology</i> , 2020, 311, 123478.	9.6	17
27	Efficient hydrogen recovery with CoP-NF as cathode in microbial electrolysis cells. <i>Applied Energy</i> , 2020, 264, 114700.	10.1	40
28	Electrochemical regulation on the metabolism of anode biofilms under persistent exogenous bacteria interference. <i>Electrochimica Acta</i> , 2020, 340, 135922.	5.2	20
29	In-situ enrichment and removal of Cu(II) and Cd(II) from low-strength wastewater by a novel microbial metals enrichment and recovery cell (MMERC). <i>Journal of Power Sources</i> , 2020, 451, 227627.	7.8	13
30	A novel single chamber vertical baffle flow biocathode microbial electrochemical system with microbial separator. <i>Bioresource Technology</i> , 2019, 294, 122236.	9.6	12
31	Operation strategy of cubic-meter scale microbial electrochemistry system in a municipal wastewater treatment plant. <i>Journal of Power Sources</i> , 2019, 441, 227124.	7.8	25
32	Enhanced electron transfer and methane production from low-strength wastewater using a new granular activated carbon modified with nano-Fe ₃ O ₄ . <i>Chemical Engineering Journal</i> , 2019, 374, 1344-1352.	12.7	94
33	Bidirectional electron transfer biofilm assisted complete bioelectrochemical denitrification process. <i>Chemical Engineering Journal</i> , 2019, 375, 121960.	12.7	71
34	Field tests of cubic-meter scale microbial electrochemical system in a municipal wastewater treatment plant. <i>Water Research</i> , 2019, 155, 372-380.	11.3	83
35	Carbon-Based Materials in Microbial Fuel Cells. , 2019, , 49-74.		8
36	Effective phosphate removal for advanced water treatment using low energy, migration electric-field assisted electrocoagulation. <i>Water Research</i> , 2018, 138, 129-136.	11.3	53

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37	Performance of integrated bioelectrochemical membrane reactor: Energy recovery, pollutant removal and membrane fouling alleviation. <i>Journal of Power Sources</i> , 2018, 384, 178-186.	7.8	18
38	Bread-derived 3D macroporous carbon foams as high performance free-standing anode in microbial fuel cells. <i>Biosensors and Bioelectronics</i> , 2018, 122, 217-223.	10.1	91
39	Nanomaterials for facilitating microbial extracellular electron transfer: Recent progress and challenges. <i>Bioelectrochemistry</i> , 2018, 123, 190-200.	4.6	83
40	Enhanced antifouling performance for modified carbon nanotubes filtration cathode by the electric field. <i>Journal of Power Sources</i> , 2018, 400, 493-501.	7.8	13
41	Enhanced electricity generation and effective water filtration using graphene-based membrane air-cathodes in microbial fuel cells. <i>Journal of Power Sources</i> , 2018, 395, 221-227.	7.8	36
42	Combined carbon mesh and small graphite fiber brush anodes to enhance and stabilize power generation in microbial fuel cells treating domestic wastewater. <i>Journal of Power Sources</i> , 2017, 356, 348-355.	7.8	77
43	Pilot-scale benthic microbial electrochemical system (BMES) for the bioremediation of polluted river sediment. <i>Journal of Power Sources</i> , 2017, 356, 430-437.	7.8	50
44	Addition of conductive particles to improve the performance of activated carbon air-cathodes in microbial fuel cells. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 806-810.	2.4	21
45	Improved Electrocoagulation Reactor for Rapid Removal of Phosphate from Wastewater. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 67-71.	6.7	46
46	Energy-positive nitrogen removal from reject water using a tide-type biocathode microbial electrochemical system. <i>Bioresource Technology</i> , 2016, 222, 317-325.	9.6	13
47	Pressurized air cathodes for enhanced stability and power generation by microbial fuel cells. <i>Journal of Power Sources</i> , 2016, 332, 447-453.	7.8	22
48	High-Performance Carbon Aerogel Air Cathodes for Microbial Fuel Cells. <i>ChemSusChem</i> , 2016, 9, 2788-2795.	6.8	41
49	The effect of flow modes and electrode combinations on the performance of a multiple module microbial fuel cell installed at wastewater treatment plant. <i>Water Research</i> , 2016, 105, 351-360.	11.3	86
50	Cascade degradation of organic matters in brewery wastewater using a continuous stirred microbial electrochemical reactor and analysis of microbial communities. <i>Scientific Reports</i> , 2016, 6, 27023.	3.3	29
51	Enhanced Power Generation of Oxygen-Reducing Biocathode with an Alternating Hydrophobic and Hydrophilic Surface. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31995-32003.	8.0	15
52	Diffusion layer characteristics for increasing the performance of activated carbon air cathodes in microbial fuel cells. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 266-273.	2.4	38
53	Energy efficient electrocoagulation using an air-breathing cathode to remove nutrients from wastewater. <i>Chemical Engineering Journal</i> , 2016, 292, 308-314.	12.7	55
54	Microbial fuel cells with an integrated spacer and separate anode and cathode modules. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 186-195.	2.4	49

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55	A 90-liter stackable baffled microbial fuel cell for brewery wastewater treatment based on energy self-sufficient mode. <i>Bioresource Technology</i> , 2015, 195, 66-72.	9.6	264
56	Influence of solution concentration and salt types on the performance of reverse electrodialysis cells. <i>Journal of Membrane Science</i> , 2015, 494, 154-160.	8.2	78
57	Assessment of Microbial Fuel Cell Configurations and Power Densities. <i>Environmental Science and Technology Letters</i> , 2015, 2, 206-214.	8.7	423
58	Reducing pumping energy by using different flow rates of high and low concentration solutions in reverse electrodialysis cells. <i>Journal of Membrane Science</i> , 2015, 486, 215-221.	8.2	75
59	Simultaneous current generation and ammonia recovery from real urine using nitrogen-purged bioelectrochemical systems. <i>RSC Advances</i> , 2015, 5, 70371-70378.	3.6	16
60	COD removal characteristics in air-cathode microbial fuel cells. <i>Bioresource Technology</i> , 2015, 176, 23-31.	9.6	209
61	High current densities enable exoelectrogens to outcompete aerobic heterotrophs for substrate. <i>Biotechnology and Bioengineering</i> , 2014, 111, 2163-2169.	3.3	36
62	A novel boost circuit design and in situ electricity application for elemental sulfur recovery. <i>Journal of Power Sources</i> , 2014, 248, 317-322.	7.8	18
63	Enhanced electricity generation for microbial fuel cell by using electrochemical oxidation to modify carbon cloth anode. <i>Journal of Power Sources</i> , 2014, 265, 391-396.	7.8	87
64	A horizontal plug flow and stackable pilot microbial fuel cell for municipal wastewater treatment. <i>Bioresource Technology</i> , 2014, 156, 132-138.	9.6	237
65	Intermittent contact of fluidized anode particles containing exoelectrogenic biofilms for continuous power generation in microbial fuel cells. <i>Journal of Power Sources</i> , 2014, 261, 278-284.	7.8	62
66	Long-Term Performance of Chemically and Physically Modified Activated Carbons in Air Cathodes of Microbial Fuel Cells. <i>ChemElectroChem</i> , 2014, 1, 1859-1866.	3.4	143
67	Using ammonium bicarbonate as pore former in activated carbon catalyst layer to enhance performance of air cathode microbial fuel cell. <i>Journal of Power Sources</i> , 2014, 272, 909-914.	7.8	60
68	Effects of azide on electron transport of exoelectrogens in air-cathode microbial fuel cells. <i>Bioresource Technology</i> , 2014, 169, 265-270.	9.6	15
69	Poly(vinylidene fluoride-co-hexafluoropropylene) phase inversion coating as a diffusion layer to enhance the cathode performance in microbial fuel cells. <i>Journal of Power Sources</i> , 2014, 269, 379-384.	7.8	29
70	Single-Step Fabrication Using a Phase Inversion Method of Poly(vinylidene fluoride) (PVDF) Activated Carbon Air Cathodes for Microbial Fuel Cells. <i>Environmental Science and Technology Letters</i> , 2014, 1, 416-420.	8.7	145
71	A microbial fluidized electrode electrolysis cell (MFEEC) for enhanced hydrogen production. <i>Journal of Power Sources</i> , 2014, 271, 530-533.	7.8	42
72	The electrochemical behavior of three air cathodes for microbial electrochemical system (MES) under meter scale water pressure. <i>Journal of Power Sources</i> , 2014, 267, 219-226.	7.8	39

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73	Salt removal using multiple microbial desalination cells under continuous flow conditions. <i>Desalination</i> , 2013, 317, 17-22.	8.2	67
74	Simultaneous water desalination and electricity generation in a microbial desalination cell with electrolyte recirculation for pH control. <i>Bioresource Technology</i> , 2012, 106, 89-94.	9.6	159
75	Application of nitrogen-doped carbon powders as low-cost and durable cathodic catalyst to air-cathode microbial fuel cells. <i>Bioresource Technology</i> , 2012, 108, 89-93.	9.6	81
76	Effects of sulfide on microbial fuel cells with platinum and nitrogen-doped carbon powder cathodes. <i>Biosensors and Bioelectronics</i> , 2012, 35, 413-415.	10.1	45
77	Selection of fungus with high ability of cellulase activity production using UV mutagenesis. , 2011, , .		0
78	Degradation of raw corn stover powder (RCSP) by an enriched microbial consortium and its community structure. <i>Bioresource Technology</i> , 2011, 102, 742-747.	9.6	59
79	Continuous electricity generation by a graphite granule baffled air-cathode microbial fuel cell. <i>Bioresource Technology</i> , 2010, 101, 632-638.	9.6	98