Zhen He

List of Publications by Year
in descending order

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257 papers	18,898 citations	7551 77 h-index	14702 127 g-index
260 all docs	260 docs citations	260 times ranked	13228 citing authors

#	Article	IF	Citations
1	Towards sustainable wastewater treatment by using microbial fuel cells-centered technologies. Energy and Environmental Science, 2014, 7, 911-924.	15.6	746
2	Electricity Generation from Artificial Wastewater Using an Upflow Microbial Fuel Cell. Environmental Science & Technology, 2005, 39, 5262-5267.	4.6	680
3	Exploring the use of electrochemical impedance spectroscopy (EIS) in microbial fuel cell studies. Energy and Environmental Science, 2009, 2, 215-219.	15.6	584
4	Nitrogenâ€Enriched Coreâ€Shell Structured Fe/Fe₃Câ€C Nanorods as Advanced Electrocatalysts for Oxygen Reduction Reaction. Advanced Materials, 2012, 24, 1399-1404.	11.1	517
5	Application of Bacterial Biocathodes in Microbial Fuel Cells. Electroanalysis, 2006, 18, 2009-2015.	1.5	493
6	Compression and Aggregation-Resistant Particles of Crumpled Soft Sheets. ACS Nano, 2011, 5, 8943-8949.	7.3	482
7	An Upflow Microbial Fuel Cell with an Interior Cathode:Â Assessment of the Internal Resistance by Impedance Spectroscopyâ€. Environmental Science & Technology, 2006, 40, 5212-5217.	4.6	442
8	Nutrients removal and recovery in bioelectrochemical systems: A review. Bioresource Technology, 2014, 153, 351-360.	4.8	419
9	Oxygen reduction reaction catalysts used in microbial fuel cells for energy-efficient wastewater treatment: a review. Materials Horizons, 2016, 3, 382-401.	6.4	322
10	Light energy to bioelectricity: photosynthetic microbial fuel cells. Current Opinion in Biotechnology, 2010, 21, 259-264.	3.3	314
11	Effect of electrolyte pH on the rate of the anodic and cathodic reactions in an air-cathode microbial fuel cell. Bioelectrochemistry, 2008, 74, 78-82.	2.4	308
12	Long-Term Performance of Liter-Scale Microbial Fuel Cells Treating Primary Effluent Installed in a Municipal Wastewater Treatment Facility. Environmental Science & Technology, 2013, 47, 4941-4948.	4.6	287
13	Crumpled graphene particles for microbial fuel cell electrodes. Journal of Power Sources, 2012, 208, 187-192.	4.0	274
14	Efficient salt removal in a continuously operated upflow microbial desalination cell with an air cathode. Bioresource Technology, 2011, 102, 376-380.	4.8	226
15	Real-Time Trajectory Planning for Autonomous Urban Driving: Framework, Algorithms, and Verifications. IEEE/ASME Transactions on Mechatronics, 2016, 21, 740-753.	3.7	226
16	Recovery of Electrical Energy in Microbial Fuel Cells. Environmental Science and Technology Letters, 2014, 1, 137-141.	3.9	221
17	Increased power production from a sediment microbial fuel cell with a rotating cathode. Biosensors and Bioelectronics, 2007, 22, 3252-3255.	5.3	206
18	Long-term performance of a 200 liter modularized microbial fuel cell system treating municipal wastewater: treatment, energy, and cost. Environmental Science: Water Research and Technology, 2016, 2, 274-281.	1.2	200

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19	Integrating Forward Osmosis into Microbial Fuel Cells for Wastewater Treatment, Water Extraction and Bioelectricity Generation. Environmental Science & Technology, 2011, 45, 6690-6696.	4.6	199
20	A 3D hybrid of layered MoS₂/nitrogen-doped graphene nanosheet aerogels: an effective catalyst for hydrogen evolution in microbial electrolysis cells. Journal of Materials Chemistry A, 2014, 2, 13795-13800.	5.2	198
21	Electricity Production Coupled to Ammonium in a Microbial Fuel Cell. Environmental Science & Technology, 2009, 43, 3391-3397.	4.6	190
22	Self-Sustained Phototrophic Microbial Fuel Cells Based on the Synergistic Cooperation between Photosynthetic Microorganisms and Heterotrophic Bacteria. Environmental Science & Technology, 2009, 43, 1648-1654.	4.6	176
23	Enhancing sludge methanogenesis with improved redox activity of extracellular polymeric substances by hematite in red mud. Water Research, 2018, 134, 54-62.	5.3	175
24	Use of a Liter-Scale Microbial Desalination Cell As a Platform to Study Bioelectrochemical Desalination with Salt Solution or Artificial Seawater. Environmental Science & Technology, 2011, 45, 4652-4657.	4.6	174
25	Integrated Photo-Bioelectrochemical System for Contaminants Removal and Bioenergy Production. Environmental Science & Technology, 2012, 46, 11459-11466.	4.6	173
26	Graphene-modified electrodes for enhancing the performance of microbial fuel cells. Nanoscale, 2015, 7, 7022-7029.	2.8	166
27	Nitrogen removal by granular nitritationâ€“anammox in an upflow membrane-aerated biofilm reactor. Water Research, 2016, 94, 23-31.	5.3	158
28	Synthesizing Nitrogen-Doped Activated Carbon and Probing its Active Sites for Oxygen Reduction Reaction in Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2014, 6, 7464-7470.	4.0	157
29	Powering a wireless temperature sensor using sediment microbial fuel cells with vertical arrangement of electrodes. Journal of Power Sources, 2011, 196, 9568-9573.	4.0	149
30	Water softening using microbial desalination cell technology. Desalination, 2013, 309, 32-37.	4.0	145
31	Methods for understanding microbial community structures and functions in microbial fuel cells: A review. Bioresource Technology, 2014, 171, 461-468.	4.8	145
32	TiO2 nanoparticles-decorated carbon nanotubes for significantly improved bioelectricity generation in microbial fuel cells. Journal of Power Sources, 2013, 234, 100-106.	4.0	136
33	Integrating membrane filtration into bioelectrochemical systems as next generation energy-efficient wastewater treatment technologies for water reclamation: A review. Bioresource Technology, 2015, 195, 202-209.	4.8	134
34	Nitrogen-doped graphene/CoNi alloy encased within bamboo-like carbon nanotube hybrids as cathode catalysts in microbial fuel cells. Journal of Power Sources, 2016, 307, 561-568.	4.0	128
35	Urban river pollution control in developing countries. Nature Sustainability, 2019, 2, 158-160.	11.5	128
36	Decorating anode with bamboo-like nitrogen-doped carbon nanotubes for microbial fuel cells. Electrochemistry Communications, 2012, 14, 71-74.	2.3	127

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37	Microbial desalination cells as a versatile technology: Functions, optimization and prospective. Desalination, 2015, 371, 9-17.	4.0	123
38	Effects of anolyte recirculation rates and catholytes on electricity generation in a litre-scale upflow microbial fuel cell. Energy and Environmental Science, 2010, 3, 1347.	15.6	120
39	Mainstream upflow nitritation-anammox system with hybrid anaerobic pretreatment: Long-term performance and microbial community dynamics. Water Research, 2017, 125, 298-308.	5.3	118
40	Applications and perspectives of phototrophic microorganisms for electricity generation from organic compounds in microbial fuel cells. Renewable and Sustainable Energy Reviews, 2014, 37, 550-559.	8.2	117
41	Efficiently â€œpumping outâ€•value-added resources from wastewater by bioelectrochemical systems: A review from energy perspectives. Water Research, 2018, 131, 62-73.	5.3	117
42	Resource recovery from landfill leachate using bioelectrochemical systems: Opportunities, challenges, and perspectives. Bioresource Technology, 2016, 201, 347-354.	4.8	116
43	Enhancing wastewater reuse by forward osmosis with self-diluted commercial fertilizers as draw solutes. Water Research, 2016, 99, 235-243.	5.3	115
44	Long-term investigation of microbial fuel cells treating primary sludge or digested sludge. Bioresource Technology, 2013, 136, 509-514.	4.8	113
45	Long-term investigation of fouling of cation and anion exchange membranes in microbial desalination cells. Desalination, 2013, 325, 48-55.	4.0	112
46	Energy extraction from a large-scale microbial fuel cell system treating municipal wastewater. Journal of Power Sources, 2015, 297, 260-264.	4.0	112
47	A review of landfill leachate induced ultraviolet quenching substances: Sources, characteristics, and treatment. Water Research, 2018, 145, 297-311.	5.3	111
48	Exceptional capacitive deionization rate and capacity by block copolymerâ€“based porous carbon fibers. Science Advances, 2020, 6, eaaz0906.	4.7	108
49	Facile Synthesis of MoS‹sub›2‹/sub›@CNT as an Effective Catalyst for Hydrogen Production in Microbial Electrolysis Cells. ChemElectroChem, 2014, 1, 1828-1833.	1.7	107
50	Improving water desalination by hydraulically coupling an osmotic microbial fuel cell with a microbial desalination cell. Journal of Membrane Science, 2013, 441, 18-24.	4.1	106
51	Applications of high gravity technologies for wastewater treatment: A review. Chemical Engineering Journal, 2017, 313, 912-927.	6.6	105
52	Scaling up microbial desalination cell system with a post-aerobic process for simultaneous wastewater treatment and seawater desalination. Desalination, 2015, 360, 28-34.	4.0	102
53	Recovery of nitrogen and water from landfill leachate by a microbial electrolysis cellâ€“forward osmosis system. Bioresource Technology, 2016, 200, 485-492.	4.8	102
54	Light-driven carbon dioxide reduction to methane by Methanosarcina barkeri-CdS biohybrid. Applied Catalysis B: Environmental, 2019, 257, 117916.	10.8	102

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55	Critical review of bioelectrochemical systems integrated with membrane-based technologies for desalination, energy self-sufficiency, and high-efficiency water and wastewater treatment. Desalination, 2019, 452, 40-67.	4.0	98
56	Microbial reduction of vanadium (V) in groundwater: Interactions with coexisting common electron acceptors and analysis of microbial community. Environmental Pollution, 2017, 231, 1362-1369.	3.7	96
57	A microfluidic microbial fuel cell fabricated by soft lithography. Bioresource Technology, 2011, 102, 5836-5840.	4.8	93
58	Integrated salinity reduction and water recovery in an osmotic microbial desalination cell. RSC Advances, 2012, 2, 3265.	1.7	93
59	Integrated organic and nitrogen removal with electricity generation in a tubular dual-cathode microbial fuel cell. Process Biochemistry, 2012, 47, 2146-2151.	1.8	93
60	Reducing effluent discharge and recovering bioenergy in an osmotic microbial fuel cell treating domestic wastewater. Desalination, 2013, 312, 52-59.	4.0	93
61	Electrochemical Relithiation for Direct Regeneration of LiCoO₂ Materials from Spent Lithium-Ion Battery Electrodes. ACS Sustainable Chemistry and Engineering, 2020, 8, 11596-11605.	3.2	92
62	Self-Supplied Ammonium Bicarbonate Draw Solute for Achieving Wastewater Treatment and Recovery in a Microbial Electrolysis Cell-Forward Osmosis-Coupled System. Environmental Science and Technology Letters, 2014, 1, 437-441.	3.9	90
63	A new method for nutrients removal and recovery from wastewater using a bioelectrochemical system. Bioresource Technology, 2014, 166, 630-634.	4.8	90
64	Microbial Fuel Cells: Now Let us Talk about Energy. Environmental Science & Technology, 2013, 47, 332-333.	4.6	89
65	Tackle reverse solute flux in forward osmosis towards sustainable water recovery: reduction and perspectives. Water Research, 2019, 149, 362-374.	5.3	89
66	Enhancing desalination and wastewater treatment by coupling microbial desalination cells with forward osmosis. Chemical Engineering Journal, 2015, 270, 437-443.	6.6	88
67	Highly-efficient photocatalytic disinfection of Escherichia coli under visible light using carbon supported Vanadium Tetrasulfide nanocomposites. Applied Catalysis B: Environmental, 2018, 224, 383-393.	10.8	88
68	Simultaneous nitrification and denitrification with electricity generation in dualâ€cathode microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2012, 87, 153-159.	1.6	87
69	Light-driven nitrous oxide production via autotrophic denitrification by self-photosensitized Thiobacillus denitrificans. Environment International, 2019, 127, 353-360.	4.8	87
70	Porous Carbon Nanosheets Codoped with Nitrogen and Sulfur for Oxygen Reduction Reaction in Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2015, 7, 18672-18678.	4.0	86
71	Self-Biased Solar-Microbial Device for Sustainable Hydrogen Generation. ACS Nano, 2013, 7, 8728-8735.	7.3	84
72	Rapid Photocatalytic Decolorization of Methyl Orange under Visible Light Using VS₄/Carbon Powder Nanocomposites. ACS Sustainable Chemistry and Engineering, 2017, 5, 7690-7699.	3.2	83

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73	Carbon/iron-based nanorod catalysts for hydrogen production in microbial electrolysis cells. Nano Energy, 2012, 1, 751-756.	8.2	82
74	Nutrient-energy-water recovery from synthetic sidestream centrate using a microbial electrolysis cell - forward osmosis hybrid system. Journal of Cleaner Production, 2017, 154, 16-25.	4.6	82
75	Nitrate removal from groundwater driven by electricity generation and heterotrophic denitrification in a bioelectrochemical system. Journal of Hazardous Materials, 2013, 262, 614-619.	6.5	81
76	In situ investigation of tubular microbial fuel cells deployed in an aeration tank at a municipal wastewater treatment plant. Bioresource Technology, 2013, 136, 316-321.	4.8	81
77	A fluidized bed membrane bioelectrochemical reactor for energy-efficient wastewater treatment. Bioresource Technology, 2014, 167, 310-315.	4.8	79
78	Hydrogen production in microbial electrolysis cells: Choice of catholyte. International Journal of Hydrogen Energy, 2013, 38, 9619-9624.	3.8	78
79	Mathematical Model of Dynamic Behavior of Microbial Desalination Cells for Simultaneous Wastewater Treatment and Water Desalination. Environmental Science & Technology, 2014, 48, 13010-13019.	4.6	76
80	Sustainable management of landfill leachate concentrate through recovering humic substance as liquid fertilizer by loose nanofiltration. Water Research, 2019, 157, 555-563.	5.3	75
81	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater â€“ a perspective. Environmental Science: Nano, 2020, 7, 2178-2194.	2.2	74
82	Understanding the application niche of microbial fuel cells in a cheese wastewater treatment process. Bioresource Technology, 2014, 157, 154-160.	4.8	73
83	Enhanced treatment of petroleum refinery wastewater by short-term applied voltage in single chamber microbial fuel cell. Bioresource Technology, 2018, 253, 16-21.	4.8	73
84	Status, Challenges, and Perspectives of Mainstream Nitritationâ€“Anammox for Wastewater Treatment. Water Environment Research, 2018, 90, 634-649.	1.3	72
85	Effects of draw solutions and membrane conditions on electricity generation and water flux in osmotic microbial fuel cells. Bioresource Technology, 2012, 109, 70-76.	4.8	68
86	A Review of Modeling Bioelectrochemical Systems: Engineering and Statistical Aspects. Energies, 2016, 9, 111.	1.6	66
87	Energy consumption by forward osmosis treatment of landfill leachate for water recovery. Waste Management, 2017, 63, 284-291.	3.7	66
88	Ammonium removal from synthetic wastewater promoted by current generation and water flux in an osmotic microbial fuel cell. Journal of Cleaner Production, 2017, 149, 856-862.	4.6	64
89	Biosynthesis of palladium nanoparticles usingShewanella loihicaPV-4 for excellent catalytic reduction of chromium(<scp>vi</scp>). Environmental Science: Nano, 2018, 5, 730-739.	2.2	64
90	Evaluation of normalized energy recovery (NER) in microbial fuel cells affected by reactor dimensions and substrates. Bioresource Technology, 2014, 157, 77-83.	4.8	63

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91	Simultaneous formation of nanoscale zero-valent iron and degradation of nitrobenzene in wastewater in an impinging stream-rotating packed bed reactor. Chemical Engineering Journal, 2017, 321, 564-571.	6.6	63
92	Forward osmosis promoted in-situ formation of struvite with simultaneous water recovery from digested swine wastewater. Chemical Engineering Journal, 2018, 342, 274-280.	6.6	62
93	Integrated experimental investigation andÂmathematical modeling of brackish water desalination and wastewater treatment inÂmicrobial desalination cells. Water Research, 2015, 77, 13-23.	5.3	60
94	Bioelectricity generation from treatment of petroleum refinery wastewater with simultaneous seawater desalination in microbial desalination cells. Energy Conversion and Management, 2017, 141, 101-107.	4.4	59
95	Hollowâ€fiber membrane bioelectrochemical reactor for domestic wastewater treatment. Journal of Chemical Technology and Biotechnology, 2013, 88, 1584-1590.	1.6	58
96	Nitrogen-doped activated carbon as a metal free catalyst for hydrogen production in microbial electrolysis cells. RSC Advances, 2014, 4, 49161-49164.	1.7	55
97	Evaluation of energy consumption of treating nitrate-contaminated groundwater by bioelectrochemical systems. Science of the Total Environment, 2018, 636, 881-890.	3.9	55
98	Mitigation of Salinity Buildup and Recovery of Wasted Salts in a Hybrid Osmotic Membrane Bioreactorâ€“Electrodialysis System. Environmental Science & Technology, 2015, 49, 10529-10535.	4.6	54
99	Enhancing forward osmosis water recovery from landfill leachate by desalinating brine and recovering ammonia in a microbial desalination cell. Bioresource Technology, 2018, 255, 76-82.	4.8	54
100	Enhancing recovery of magnesium as struvite from landfill leachate by pretreatment of calcium with simultaneous reduction of liquid volume via forward osmosis. Science of the Total Environment, 2018, 610-611, 137-146.	3.9	54
101	One-pot synthesis of high-performance Co/graphene electrocatalysts for glucose fuel cells free of enzymes and precious metals. Chemical Communications, 2015, 51, 9354-9357.	2.2	52
102	Reduction of reagent requirements and sludge generation in Fenton's oxidation of landfill leachate by synergistically incorporating forward osmosis and humic acid recovery. Water Research, 2019, 151, 310-317.	5.3	52
103	Energy production, use and saving in a bioelectrochemical desalination system. RSC Advances, 2012, 2, 10673.	1.7	51
104	Treatment of metallurgical industry wastewater for organic contaminant removal in China: status, challenges, and perspectives. Environmental Science: Water Research and Technology, 2017, 3, 1015-1031.	1.2	51
105	Algal-microbial community collaboration for energy recovery and nutrient remediation from wastewater in integrated photobioelectrochemical systems. Algal Research, 2017, 24, 527-539.	2.4	50
106	Effects of number of cell pairs on the performance of microbial desalination cells. Desalination, 2014, 341, 101-106.	4.0	49
107	Sediment microbial fuel cells for wastewater treatment: challenges and opportunities. Environmental Science: Water Research and Technology, 2015, 1, 279-284.	1.2	49
108	Grape pomace and its secondary waste management: Biochar production for a broad range of lead (Pb) removal from water. Environmental Research, 2020, 186, 109442.	3.7	49

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109	Understanding electricity generation in osmotic microbial fuel cells through integrated experimental investigation and mathematical modeling. Bioresource Technology, 2015, 195, 194-201.	4.8	47
110	Development of Microbial Fuel Cells Needs To Go beyond â€œPower Densityâ€• ACS Energy Letters, 2017, 2, 700-702.	8.8	47
111	Life cycle assessment of a microbial desalination cell for sustainable wastewater treatment and saline water desalination. Journal of Cleaner Production, 2018, 200, 900-910.	4.6	47
112	Integrated experimental and modeling evaluation of energy consumption for ammonia recovery in bioelectrochemical systems. Chemical Engineering Journal, 2017, 327, 924-931.	6.6	46
113	Cylindrical graphite based microbial fuel cell for the treatment of industrial wastewaters and bioenergy generation. Bioresource Technology, 2018, 247, 753-758.	4.8	46
114	When Bioelectrochemical Systems Meet Forward Osmosis: Accomplishing Wastewater Treatment and Reuse through Synergy. Water (Switzerland), 2015, 7, 38-50.	1.2	45
115	Boron removal from saline water by a microbial desalination cell integrated with donnan dialysis. Desalination, 2015, 376, 55-61.	4.0	45
116	Improving the flexibility of microbial desalination cells through spatially decoupling anode and cathode. Bioresource Technology, 2013, 144, 304-310.	4.8	44
117	Mathematical modeling assisted investigation of forward osmosis as pretreatment for microbial desalination cells to achieve continuous water desalination and wastewater treatment. Journal of Membrane Science, 2016, 502, 116-123.	4.1	44
118	Effects of electron acceptors on removal of antibiotic resistant Escherichia coli, resistance genes and class 1 integrons under anaerobic conditions. Science of the Total Environment, 2016, 569-570, 1587-1594.	3.9	43
119	Enhanced disinfection of Escherichia coli and bacteriophage MS2 in water using a copper and silver loaded titanium dioxide nanowire membrane. Frontiers of Environmental Science and Engineering, 2016, 10, 1.	3.3	43
120	Enhanced nitrogen removal by membrane-aerated nitritation-anammox in a bioelectrochemical system. Bioresource Technology, 2017, 238, 22-29.	4.8	42
121	Effective control of biohythane composition through operational strategies in an innovative microbial electrolysis cell. Applied Energy, 2017, 206, 879-886.	5.1	42
122	Selective recovery of lead and zinc through controlling cathodic potential in a bioelectrochemically-assisted electrodeposition system. Journal of Hazardous Materials, 2020, 386, 121941.	6.5	42
123	Electrochemical nitrate removal with simultaneous magnesium recovery from a mimicked RO brine assisted by in situ chloride ions. Journal of Hazardous Materials, 2020, 388, 122085.	6.5	42
124	A cooperative microbial fuel cell system for waste treatment and energy recovery. Environmental Technology (United Kingdom), 2013, 34, 1905-1913.	1.2	41
125	Bioelectrochemical deposition of palladium nanoparticles as catalysts by Shewanella oneidensis MR-1 towards enhanced hydrogen production in microbial electrolysis cells. Electrochimica Acta, 2019, 318, 794-800.	2.6	41
126	Energy Consumption by Recirculation: A Missing Parameter When Evaluating Forward Osmosis. Environmental Science & Technology, 2016, 50, 6827-6829.	4.6	40

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127	Advancing membrane bioelectrochemical reactor (<scp>MBER</scp>) with hollowâ€fiber membranes installed in the cathode compartment. Journal of Chemical Technology and Biotechnology, 2014, 89, 1330-1336.	1.6	39
128	Effects of current generation and electrolyte pH on reverse salt flux across thin film composite membrane in osmotic microbial fuel cells. Water Research, 2016, 105, 583-590.	5.3	39
129	Energy consumption of water recovery from wastewater in a submerged forward osmosis system using commercial liquid fertilizer as a draw solute. Separation and Purification Technology, 2017, 174, 432-438.	3.9	39
130	â€œNEWâ€•resource recovery from wastewater using bioelectrochemical systems: Moving forward with functions. Frontiers of Environmental Science and Engineering, 2018, 12, 1.	3.3	39
131	Molecular AND logic gate based on bacterial anaerobic respiration. Chemical Communications, 2012, 48, 10174.	2.2	36
132	Platinum Group Metalâ€“free Catalysts for Hydrogen Evolution Reaction in Microbial Electrolysis Cells. Chemical Record, 2017, 17, 641-652.	2.9	36
133	Response of enhanced sludge methanogenesis by red mud to temperature: Spectroscopic and electrochemical elucidation of endogenous redox mediators. Water Research, 2018, 143, 240-249.	5.3	36
134	A novel method to characterize bacterial communities affected by carbon source and electricity generation in microbial fuel cells using stable isotope probing and Illumina sequencing. Journal of Microbiological Methods, 2015, 108, 4-11.	0.7	35
135	Ni-Coated Carbon Fiber as an Alternative Cathode Electrode Material to Improve Cost Efficiency of Microbial Fuel Cells. Electrochimica Acta, 2016, 222, 338-346.	2.6	35
136	Passive separation of recovered ammonia from catholyte for reduced energy consumption in microbial electrolysis cells. Chemical Engineering Journal, 2018, 334, 2303-2307.	6.6	35
137	Electricity generation from a floating microbial fuel cell. Bioresource Technology, 2012, 114, 308-313.	4.8	34
138	Bioelectricity inhibits back diffusion from the anolyte into the desalinated stream in microbial desalination cells. Water Research, 2016, 88, 266-273.	5.3	34
139	Efficient Photoelectron Capture by Ni Decoration in Methanosarcina barkeri-CdS Biohybrids for Enhanced Photocatalytic CO2-to-CH4 Conversion. IScience, 2020, 23, 101287.	1.9	34
140	Wastewater treatment and microbial communities in an integrated photo-bioelectrochemical system affected by different wastewater algal inocula. Algal Research, 2015, 12, 446-454.	2.4	32
141	Electrodialysis recovery of reverse-fluxed fertilizer draw solute during forward osmosis water treatment. Chemical Engineering Journal, 2017, 330, 550-558.	6.6	32
142	Cathode-enhanced wastewater treatment in bioelectrochemical systems. Npj Clean Water, 2018, 1, .	3.1	32
143	Demystifying terms for understanding bioelectrochemical systems towards sustainable wastewater treatment. Current Opinion in Electrochemistry, 2020, 19, 14-19.	2.5	32
144	Cathodic fluidized granular activated carbon assisted-membrane bioelectrochemical reactor for wastewater treatment. Separation and Purification Technology, 2016, 169, 241-246.	3.9	31

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145	Removal of landfill leachate ultraviolet quenching substances by electricity induced humic acid precipitation and electrooxidation in a membrane electrochemical reactor. Science of the Total Environment, 2019, 689, 571-579.	3.9	31
146	Improving electricity production in tubular microbial fuel cells through optimizing the anolyte flow with spiral spacers. Bioresource Technology, 2013, 134, 251-256.	4.8	30
147	Understanding Ammonium Transport in Bioelectrochemical Systems towards its Recovery. Scientific Reports, 2016, 6, 22547.	1.6	30
148	Computational investigation of the flow field contribution to improve electricity generation in granular activated carbon-assisted microbial fuel cells. Journal of Power Sources, 2016, 333, 83-87.	4.0	30
149	Unravelling and Reconstructing the Nexus of Salinity, Electricity, and Microbial Ecology for Bioelectrochemical Desalination. Environmental Science & Technology, 2017, 51, 12672-12682.	4.6	30
150	Efficient recovery of polyelectrolyte draw solutes in forward osmosis towards sustainable water treatment. Desalination, 2017, 422, 134-141.	4.0	30
151	Experimental Study on the Combustion and Microexplosion of Freely Falling Gelled Unsymmetrical Dimethylhydrazine (UDMH) Fuel Droplets. Energies, 2012, 5, 3126-3136.	1.6	29
152	Investigation of multiphysics in tubular microbial fuel cells by coupled computational fluid dynamics with multi-order Butlerâ€“Volmer reactions. Chemical Engineering Journal, 2016, 296, 377-385.	6.6	29
153	Enhancing the performance of an osmotic microbial fuel cell through self-buffering with reverse-fluxed sodium bicarbonate. Chemical Engineering Journal, 2018, 349, 241-248.	6.6	29
154	Precise control of iron activating persulfate by current generation in an electrochemical membrane reactor. Environment International, 2019, 131, 105024.	4.8	29
155	Nitrogen removal from water of recirculating aquaculture system by a microbial fuel cell. Aquaculture, 2018, 497, 74-81.	1.7	28
156	A practical trajectory planning framework for autonomous ground vehicles driving in urban environments. , 2015, , .		27
157	13C Pathway Analysis for the Role of Formate in Electricity Generation by Shewanella Oneidensis MR-1 Using Lactate in Microbial Fuel Cells. Scientific Reports, 2016, 6, 20941.	1.6	27
158	Integrated experimental investigation and mathematical modeling of a membrane bioelectrochemical reactor with an external membrane module. Chemical Engineering Journal, 2016, 287, 321-328.	6.6	27
159	Mitigation of bidirectional solute flux in forward osmosis via membrane surface coating of zwitterion functionalized carbon nanotubes. Environment International, 2019, 131, 104970.	4.8	27
160	Formation of disinfection byproducts during Fentonâ€™s oxidation of chloride-rich landfill leachate. Journal of Hazardous Materials, 2020, 382, 121213.	6.5	27
161	Current-driven nitrate migration out of groundwater by using a bioelectrochemical system. RSC Advances, 2014, 4, 10290.	1.7	26
162	A thermal model for nanosecond pulsed laser ablation of aluminum. AIP Advances, 2017, 7, .	0.6	26

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163	Utilization of residual organics of Labaneh whey for renewable energy generation through bioelectrochemical processes: Strategies for enhanced substrate conversion and energy generation. Bioresource Technology, 2019, 286, 121409.	4.8	26
164	CNT@TiO2 nanohybrids for high-performance anode of lithium-ion batteries. Nanoscale Research Letters, 2013, 8, 499.	3.1	25
165	Enhancing hydrogen production in microbial electrolysis cells by in situ hydrogen oxidation for self-buffering pH through periodic polarity reversal. Journal of Power Sources, 2017, 347, 21-28.	4.0	25
166	Development of Bioelectrochemical Systems to Promote Sustainable Agriculture. Agriculture (Switzerland), 2015, 5, 367-388.	1.4	24
167	Enhanced Removal of Azo Dye by a Bioelectrochemical System Integrated with a Membrane Biofilm Reactor. Industrial & Engineering Chemistry Research, 2018, 57, 16433-16441.	1.8	24
168	Bioelectrochemically-assisted mitigation of salinity buildup and recovery of reverse-fluxed draw solute in an osmotic membrane bioreactor. Water Research, 2018, 141, 259-267.	5.3	24
169	Regulated expression of polysaccharide utilization and capsular biosynthesis loci in biofilm and planktonic Bacteroides thetaiotaomicron during growth in chemostats. Biotechnology and Bioengineering, 2014, 111, 165-173.	1.7	23
170	Effects of inter-membrane distance and hydraulic retention time on the desalination performance of microbial desalination cells. Desalination and Water Treatment, 2014, 52, 1324-1331.	1.0	23
171	Life Cycle Environmental Impact Comparison of Bioelectrochemical Systems for Wastewater Treatment. Procedia CIRP, 2019, 80, 382-388.	1.0	23
172	Sustainable operation of osmotic microbial fuel cells through effective reproduction of polyelectrolyte draw solutes facilitated by cathodic pH increase. Journal of Cleaner Production, 2017, 168, 1143-1149.	4.6	22
173	Mitigating nutrient accumulation with microalgal growth towards enhanced nutrient removal and biomass production in an osmotic photobioreactor. Water Research, 2020, 182, 116038.	5.3	22
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