

Zhiyong Jason Ren

List of Publications by Year in descending order

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181
papers

12,251
citations

20817

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29157

104
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183
all docs

183
docs citations

183
times ranked

9830
citing authors

#	ARTICLE	IF	CITATIONS
1	A comprehensive review of microbial electrochemical systems as a platform technology. <i>Biotechnology Advances</i> , 2013, 31, 1796-1807.	11.7	686
2	Nature-inspired salt resistant bimodal porous solar evaporator for efficient and stable water desalination. <i>Energy and Environmental Science</i> , 2019, 12, 1558-1567.	30.8	482
3	Bioelectrochemical metal recovery from wastewater: A review. <i>Water Research</i> , 2014, 66, 219-232.	11.3	371
4	Electricity Production from Cellulose in a Microbial Fuel Cell Using a Defined Binary Culture. <i>Environmental Science & Technology</i> , 2007, 41, 4781-4786.	10.0	319
5	Practical Energy Harvesting for Microbial Fuel Cells: A Review. <i>Environmental Science & Technology</i> , 2015, 49, 3267-3277.	10.0	309
6	Wastewater treatment for carbon capture and utilization. <i>Nature Sustainability</i> , 2018, 1, 750-758.	23.7	299
7	Biochar as a sustainable electrode material for electricity production in microbial fuel cells. <i>Bioresource Technology</i> , 2014, 157, 114-119.	9.6	279
8	Microbial electrolysis cells for waste biorefinery: A state of the art review. <i>Bioresource Technology</i> , 2016, 215, 254-264.	9.6	273
9	Microbial Metabolism and Community Structure in Response to Bioelectrochemically Enhanced Remediation of Petroleum Hydrocarbon-Contaminated Soil. <i>Environmental Science & Technology</i> , 2014, 48, 4021-4029.	10.0	254
10	Bioelectrochemical system platform for sustainable environmental remediation and energy generation. <i>Biotechnology Advances</i> , 2015, 33, 317-334.	11.7	253
11	High-entropy nanoparticles: Synthesis-structure-property relationships and data-driven discovery. <i>Science</i> , 2022, 376, eabn3103.	12.6	239
12	Granular biochar compared with activated carbon for wastewater treatment and resource recovery. <i>Water Research</i> , 2016, 94, 225-232.	11.3	230
13	Microbial community structure accompanied with electricity production in a constructed wetland plant microbial fuel cell. <i>Bioresource Technology</i> , 2015, 195, 115-121.	9.6	228
14	Microbial desalination cells for improved performance in wastewater treatment, electricity production, and desalination. <i>Bioresource Technology</i> , 2012, 105, 60-66.	9.6	203
15	Concurrent Desalination and Hydrogen Generation Using Microbial Electrolysis and Desalination Cells. <i>Environmental Science & Technology</i> , 2011, 45, 340-344.	10.0	201
16	Impact of initial biofilm growth on the anode impedance of microbial fuel cells. <i>Biotechnology and Bioengineering</i> , 2008, 101, 101-108.	3.3	200
17	Carbon dioxide and organic waste valorization by microbial electrosynthesis and electro-fermentation. <i>Water Research</i> , 2019, 149, 42-55.	11.3	191
18	Individual and competitive removal of heavy metals using capacitive deionization. <i>Journal of Hazardous Materials</i> , 2016, 302, 323-331.	12.4	162

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19	Enhanced bioremediation of hydrocarbon-contaminated soil using pilot-scale bioelectrochemical systems. <i>Journal of Hazardous Materials</i> , 2014, 274, 8-15.	12.4	154
20	Machine Learning: New Ideas and Tools in Environmental Science and Engineering. <i>Environmental Science & Technology</i> , 2021, 55, 12741-12754.	10.0	140
21	Sustainable off-grid desalination of hypersaline waters using Janus wood evaporators. <i>Energy and Environmental Science</i> , 2021, 14, 5347-5357.	30.8	133
22	Sustainable desalination using a microbial capacitive desalination cell. <i>Energy and Environmental Science</i> , 2012, 5, 7161.	30.8	130
23	Autotrophic Vanadium(V) Bioreduction in Groundwater by Elemental Sulfur and Zerovalent Iron. <i>Environmental Science & Technology</i> , 2018, 52, 7434-7442.	10.0	125
24	Graphitic biochar as a cathode electrocatalyst support for microbial fuel cells. <i>Bioresource Technology</i> , 2015, 195, 147-153.	9.6	124
25	Two-stage conversion of crude glycerol to energy using dark fermentation linked with microbial fuel cell or microbial electrolysis cell. <i>New Biotechnology</i> , 2014, 31, 179-184.	4.4	121
26	Characterization of Microbial Fuel Cells at Microbially and Electrochemically Meaningful Time scales. <i>Environmental Science & Technology</i> , 2011, 45, 2435-2441.	10.0	111
27	Zinc Leaching from Tire Crumb Rubber. <i>Environmental Science & Technology</i> , 2012, 46, 12856-12863.	10.0	108
28	Electricity production and microbial biofilm characterization in cellulose-fed microbial fuel cells. <i>Water Science and Technology</i> , 2008, 58, 617-622.	2.5	107
29	Long-term performance and characterization of microbial desalination cells in treating domestic wastewater. <i>Bioresource Technology</i> , 2012, 120, 187-193.	9.6	103
30	Carbon nanotube modified air-cathodes for electricity production in microbial fuel cells. <i>Journal of Power Sources</i> , 2011, 196, 7465-7469.	7.8	102
31	Nickel based catalysts for highly efficient H ₂ evolution from wastewater in microbial electrolysis cells. <i>Electrochimica Acta</i> , 2016, 206, 381-387.	5.2	102
32	Sand amendment enhances bioelectrochemical remediation of petroleum hydrocarbon contaminated soil. <i>Chemosphere</i> , 2015, 141, 62-70.	8.2	99
33	Shale gas produced water treatment using innovative microbial capacitive desalination cell. <i>Journal of Hazardous Materials</i> , 2015, 283, 847-855.	12.4	93
34	Synthesis of a conjugated porous Co(<i>II</i>) porphyrinylene-ethynylene framework through alkyne metathesis and its catalytic activity study. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4954-4959.	10.3	89
35	Ionic composition and transport mechanisms in microbial desalination cells. <i>Journal of Membrane Science</i> , 2012, 409-410, 16-23.	8.2	88
36	Multiple syntrophic interactions drive biohythane production from waste sludge in microbial electrolysis cells. <i>Biotechnology for Biofuels</i> , 2016, 9, 162.	6.2	88

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37	Microbial desalination cell with capacitive adsorption for ion migration control. <i>Bioresource Technology</i> , 2012, 120, 332-336.	9.6	86
38	Pluggable microbial fuel cell stacks for septic wastewater treatment and electricity production. <i>Bioresource Technology</i> , 2015, 180, 258-263.	9.6	86
39	Production Temperature Effects on the Structure of Hydrochar-Derived Dissolved Organic Matter and Associated Toxicity. <i>Environmental Science & Technology</i> , 2018, 52, 7486-7495.	10.0	86
40	Concurrent Nitrogen and Phosphorus Recovery Using Flow-Electrode Capacitive Deionization. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7844-7850.	6.7	84
41	Preventing masks from becoming the next plastic problem. <i>Frontiers of Environmental Science and Engineering</i> , 2021, 15, 125.	6.0	84
42	Nickel-Based Membrane Electrodes Enable High-Rate Electrochemical Ammonia Recovery. <i>Environmental Science & Technology</i> , 2018, 52, 8930-8938.	10.0	83
43	Active Energy Harvesting from Microbial Fuel Cells at the Maximum Power Point without Using Resistors. <i>Environmental Science & Technology</i> , 2012, 46, 5247-5252.	10.0	81
44	Microbial electrochemical nutrient recovery in anaerobic osmotic membrane bioreactors. <i>Water Research</i> , 2017, 114, 181-188.	11.3	81
45	Hydrophobic nanostructured wood membrane for thermally efficient distillation. <i>Science Advances</i> , 2019, 5, eaaw3203.	10.3	81
46	Recover wastewater resources locally. <i>Nature</i> , 2016, 529, 25-25.	27.8	80
47	Microbial fuel cells and osmotic membrane bioreactors have mutual benefits for wastewater treatment and energy production. <i>Water Research</i> , 2016, 98, 183-189.	11.3	78
48	Characterization of the cellulolytic and hydrogen-producing activities of six mesophilic <i>Clostridium</i> species. <i>Journal of Applied Microbiology</i> , 2007, 103, 2258-2266.	3.1	77
49	Comparison of coal rank for enhanced biogenic natural gas production. <i>International Journal of Coal Geology</i> , 2013, 115, 92-96.	5.0	76
50	Microbial Electrolytic Carbon Capture for Carbon Negative and Energy Positive Wastewater Treatment. <i>Environmental Science & Technology</i> , 2015, 49, 8193-8201.	10.0	76
51	Iron-rich nanoparticle encapsulated, nitrogen doped porous carbon materials as efficient cathode electrocatalyst for microbial fuel cells. <i>Journal of Power Sources</i> , 2016, 315, 302-307.	7.8	76
52	Production of magnetic biochar from waste-derived fungal biomass for phosphorus removal and recovery. <i>Journal of Cleaner Production</i> , 2019, 224, 100-106.	9.3	75
53	The global potential for converting renewable electricity to negative-CO ₂ -emissions hydrogen. <i>Nature Climate Change</i> , 2018, 8, 621-625.	18.8	74
54	High efficiency energy harvesting from microbial fuel cells using a synchronous boost converter. <i>Journal of Power Sources</i> , 2012, 208, 322-327.	7.8	71

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55	Microbial electrolysis treatment of post-hydrothermal liquefaction wastewater with hydrogen generation. <i>Applied Energy</i> , 2018, 212, 509-515.	10.1	71
56	Active H ₂ Harvesting Prevents Methanogenesis in Microbial Electrolysis Cells. <i>Environmental Science and Technology Letters</i> , 2016, 3, 286-290.	8.7	70
57	Hysteresis controller based maximum power point tracking energy harvesting system for microbial fuel cells. <i>Journal of Power Sources</i> , 2012, 205, 151-156.	7.8	68
58	Organic content influences sediment microbial fuel cell performance and community structure. <i>Bioresource Technology</i> , 2016, 220, 549-556.	9.6	67
59	Geochemical and microbial characterizations of flowback and produced water in three shale oil and gas plays in the central and western United States. <i>Water Research</i> , 2019, 164, 114942.	11.3	64
60	Hydrophobic Gas Transfer Membranes for Wastewater Treatment and Resource Recovery. <i>Environmental Science & Technology</i> , 2019, 53, 11618-11635.	10.0	64
61	Lightweight, conductive hollow fibers from nature as sustainable electrode materials for microbial energy harvesting. <i>Nano Energy</i> , 2014, 10, 268-276.	16.0	63
62	Microbial vanadate and nitrate reductions coupled with anaerobic methane oxidation in groundwater. <i>Journal of Hazardous Materials</i> , 2020, 382, 121228.	12.4	63
63	Time-course correlation of biofilm properties and electrochemical performance in single-chamber microbial fuel cells. <i>Bioresource Technology</i> , 2011, 102, 416-421.	9.6	61
64	Influences of Temperature and Metal on Subcritical Hydrothermal Liquefaction of Hyperaccumulator: Implications for the Recycling of Hazardous Hyperaccumulators. <i>Environmental Science & Technology</i> , 2018, 52, 2225-2234.	10.0	61
65	Advanced Nanowood Materials for the Water-Energy Nexus. <i>Advanced Materials</i> , 2021, 33, e2001240.	21.0	59
66	ES&T in the 21st Century: A Data-Driven Analysis of Research Topics, Interconnections, And Trends in the Past 20 Years. <i>Environmental Science & Technology</i> , 2021, 55, 3453-3464.	10.0	57
67	Resin-enhanced rolling activated carbon electrode for efficient capacitive deionization. <i>Desalination</i> , 2017, 419, 20-28.	8.2	56
68	Self-sustaining advanced wastewater purification and simultaneous in situ nutrient recovery in a novel bioelectrochemical system. <i>Chemical Engineering Journal</i> , 2017, 330, 692-697.	12.7	56
69	Electrochemical Control of Redox Potential Arrests Methanogenesis and Regulates Products in Mixed Culture Electro-Fermentation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8650-8658.	6.7	54
70	Heterogeneous corrosion behaviour of carbon steel in water contaminated biodiesel. <i>Corrosion Science</i> , 2011, 53, 845-849.	6.6	53
71	Metallated porphyrin based porous organic polymers as efficient electrocatalysts. <i>Nanoscale</i> , 2015, 7, 18271-18277.	5.6	52
72	Alternating Current Influences Anaerobic Electroactive Biofilm Activity. <i>Environmental Science & Technology</i> , 2016, 50, 9169-9176.	10.0	52

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73	A novel microbial fuel cell sensor with a gas diffusion biocathode sensing element for water and air quality monitoring. <i>Chemosphere</i> , 2018, 203, 21-25.	8.2	51
74	Value Proposition of Untapped Wet Wastes: Carboxylic Acid Production through Anaerobic Digestion. <i>IScience</i> , 2020, 23, 101221.	4.1	51
75	Microbial capacitive desalination for integrated organic matter and salt removal and energy production from unconventional natural gas produced water. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 47-55.	2.4	50
76	Accelerating Innovation that Enhances Resource Recovery in the Wastewater Sector: Advancing a National Testbed Network. <i>Environmental Science & Technology</i> , 2017, 51, 7749-7758.	10.0	50
77	The Microbial Electrochemical Current Accelerates Urea Hydrolysis for Recovery of Nutrients from Source-Separated Urine. <i>Environmental Science and Technology Letters</i> , 2017, 4, 305-310.	8.7	50
78	Feasibility of microbial production of new natural gas from non-gas-producing lignite. <i>International Journal of Coal Geology</i> , 2013, 115, 79-84.	5.0	49
79	CO ₂ activation promotes available carbonate and phosphorus of antibiotic mycelial fermentation residue-derived biochar support for increased lead immobilization. <i>Chemical Engineering Journal</i> , 2018, 334, 1101-1107.	12.7	49
80	Directing <i>Clostridium ljungdahlii</i> fermentation products via hydrogen to carbon monoxide ratio in syngas. <i>Biomass and Bioenergy</i> , 2019, 124, 95-101.	5.7	49
81	Microbial fuel cell energy harvesting using synchronous flyback converter. <i>Journal of Power Sources</i> , 2014, 247, 636-642.	7.8	48
82	Unbiased solar H ₂ production with current density up to 23 mA cm ⁻² by Swiss-cheese black Si coupled with wastewater bioanode. <i>Energy and Environmental Science</i> , 2019, 12, 1088-1099.	30.8	48
83	Biochar Based Microbial Fuel Cell for Enhanced Wastewater Treatment and Nutrient Recovery. <i>Sustainability</i> , 2016, 8, 169.	3.2	47
84	Electrochemical hythane production for renewable energy storage and biogas upgrading. <i>Applied Energy</i> , 2017, 187, 595-600.	10.1	47
85	Geophysical Monitoring of Hydrocarbon-Contaminated Soils Remediated with a Bioelectrochemical System. <i>Environmental Science & Technology</i> , 2016, 50, 8205-8213.	10.0	46
86	Microbial fuel cells: Running on gas. <i>Nature Energy</i> , 2017, 2, .	39.5	45
87	Comparative performances of microbial capacitive deionization cell and microbial fuel cell fed with produced water from the Bakken shale. <i>Bioelectrochemistry</i> , 2018, 121, 56-64.	4.6	45
88	Low-energy hydraulic fracturing wastewater treatment via AC powered electrocoagulation with biochar. <i>Journal of Hazardous Materials</i> , 2016, 309, 180-184.	12.4	44
89	Photochemical Behavior of Microbial Extracellular Polymeric Substances in the Aquatic Environment. <i>Environmental Science & Technology</i> , 2021, 55, 15090-15099.	10.0	44
90	Recycled tire crumb rubber anodes for sustainable power production in microbial fuel cells. <i>Journal of Power Sources</i> , 2011, 196, 5863-5866.	7.8	43

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91	Capacitive deionization for nutrient recovery from wastewater with disinfection capability. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 33-39.	2.4	43
92	pH Dependence of Phosphorus Speciation and Transport in Flow-Electrode Capacitive Deionization. <i>Environmental Science & Technology</i> , 2020, 54, 9116-9123.	10.0	43
93	Demethanation Trend of Hydrochar Induced by Organic Solvent Washing and Its Influence on Hydrochar Activation. <i>Environmental Science & Technology</i> , 2017, 51, 10756-10764.	10.0	42
94	Dominance of electroactive microbiomes in bioelectrochemical remediation of hydrocarbon-contaminated soils with different textures. <i>Chemosphere</i> , 2019, 235, 776-784.	8.2	42
95	Covalent organic framework-supported platinum nanoparticles as efficient electrocatalysts for water reduction. <i>Nanoscale</i> , 2020, 12, 2596-2602.	5.6	41
96	Hysteresis-Controller-Based Energy Harvesting Scheme for Microbial Fuel Cells With Parallel Operation Capability. <i>IEEE Transactions on Energy Conversion</i> , 2012, 27, 715-724.	5.2	39
97	Long-term performance of sediment microbial fuel cells with multiple anodes. <i>Bioresource Technology</i> , 2017, 237, 178-185.	9.6	39
98	Will Membranes Break Barriers on Volatile Fatty Acid Recovery from Anaerobic Digestion?. <i>ACS ES&T Engineering</i> , 2021, 1, 141-153.	7.6	39
99	Removal and fate of trace organic compounds in microbial fuel cells. <i>Chemosphere</i> , 2015, 125, 94-101.	8.2	38
100	Complex Formation via Hydrogen bonding between Rhodamine B and Montmorillonite in Aqueous Solution. <i>Scientific Reports</i> , 2018, 8, 229.	3.3	38
101	Carbon transmission of CO ₂ activated nano-MgO carbon composites enhances phosphate immobilization. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3705-3713.	10.3	37
102	Electrochemical corrosion of carbon steel exposed to biodiesel/simulated seawater mixture. <i>Corrosion Science</i> , 2012, 57, 215-219.	6.6	35
103	Microbial Photoelectrosynthesis for Self-Sustaining Hydrogen Generation. <i>Environmental Science & Technology</i> , 2017, 51, 13494-13501.	10.0	34
104	Swift Acid Rain Sensing by Synergistic Rhizospheric Bioelectrochemical Responses. <i>ACS Sensors</i> , 2018, 3, 1424-1430.	7.8	34
105	Synthesis, characterization and adsorption capacity of magnetic carbon composites activated by CO ₂ : implication for the catalytic mechanisms of iron salts. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18942-18951.	10.3	33
106	Active harvesting enhances energy recovery and function of electroactive microbiomes in microbial fuel cells. <i>Applied Energy</i> , 2019, 247, 492-502.	10.1	33
107	Pulse electromagnetic fields enhance extracellular electron transfer in magnetic bioelectrochemical systems. <i>Biotechnology for Biofuels</i> , 2017, 10, 238.	6.2	32
108	Oily bilge water treatment using DC/AC powered electrocoagulation. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1654-1660.	2.4	30

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109	Electricity from anaerobic methane oxidation by a single methanogenic archaeon <i>Methanosarcina barkeri</i> . <i>Chemical Engineering Journal</i> , 2021, 405, 126691.	12.7	30
110	Energy-neutral sustainable nutrient recovery incorporated with the wastewater purification process in an enlarged microbial nutrient recovery cell. <i>Journal of Power Sources</i> , 2018, 384, 160-164.	7.8	29
111	Efficient ammonia recovery from wastewater using electrically conducting gas stripping membranes. <i>Environmental Science: Nano</i> , 2020, 7, 1759-1771.	4.3	29
112	Brønsted Catalyzed Hydrolysis of Microcystin-LR by Siderite. <i>Environmental Science & Technology</i> , 2018, 52, 6426-6437.	10.0	28
113	Microbial electrochemical treatment of biorefinery black liquor and resource recovery. <i>Green Chemistry</i> , 2019, 21, 1258-1266.	9.0	28
114	Greenhouse gas emissions associated with urban water infrastructure: What we have learnt from China's practice. <i>Wiley Interdisciplinary Reviews: Water</i> , 2021, 8, e1529.	6.5	28
115	Spontaneous Solar Syngas Production from CO ₂ Driven by Energetically Favorable Wastewater Microbial Anodes. <i>Joule</i> , 2020, 4, 2149-2161.	24.0	27
116	A salt-rejecting anisotropic structure for efficient solar desalination via heat-mass flux decoupling. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12089-12096.	10.3	27
117	Thermoresponsive Polymers for Water Treatment and Collection. <i>Macromolecules</i> , 2022, 55, 1894-1909.	4.8	27
118	Long-term in situ bioelectrochemical monitoring of biohythane process: Metabolic interactions and microbial evolution. <i>Bioresource Technology</i> , 2021, 332, 125119.	9.6	26
119	Energy and Performance Comparison of Microbial Fuel Cell and Conventional Aeration Treating of Wastewater. <i>Journal of Microbial & Biochemical Technology</i> , 0, , .	0.2	26
120	Upscaling 3D Engineered Trees for Off-Grid Desalination. <i>Environmental Science & Technology</i> , 2022, 56, 1289-1299.	10.0	26
121	Power electronic converters for microbial fuel cell energy extraction: Effects of inductance, duty ratio, and switching frequency. <i>Journal of Power Sources</i> , 2012, 220, 89-94.	7.8	25
122	Urine-powered synergy of nutrient recovery and urine purification in a microbial electrochemical system. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1427-1438.	2.4	25
123	Microbial Electrosynthesis for Producing Medium Chain Fatty Acids. <i>Engineering</i> , 2022, 16, 141-153.	6.7	23
124	Graphene oxide and H ₂ production from bioelectrochemical graphite oxidation. <i>Scientific Reports</i> , 2015, 5, 16242.	3.3	22
125	Energy harvesting influences electrochemical performance of microbial fuel cells. <i>Journal of Power Sources</i> , 2017, 356, 356-364.	7.8	22
126	High performance spiral wound microbial fuel cell with hydraulic characterization. <i>Bioresource Technology</i> , 2014, 174, 287-293.	9.6	21

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127	Percarbonate as a naturally buffering catholyte for microbial fuel cells. <i>Bioresource Technology</i> , 2014, 172, 429-432.	9.6	21
128	Shipboard bilge water treatment by electrocoagulation powered by microbial fuel cells. <i>Frontiers of Environmental Science and Engineering</i> , 2019, 13, 1.	6.0	21
129	Electrical decoupling of microbial electrochemical reactions enables spontaneous H ₂ evolution. <i>Energy and Environmental Science</i> , 2020, 13, 495-502.	30.8	20
130	Electrochemical biofilm control by reconstructing microbial community in agricultural water distribution systems. <i>Journal of Hazardous Materials</i> , 2021, 403, 123616.	12.4	20
131	A conductive wood membrane anode improves effluent quality of microbial fuel cells. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 940-946.	2.4	19
132	Anaerobic membrane gas extraction facilitates thermophilic hydrogen production from <i>Clostridium thermocellum</i> . <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1771-1782.	2.4	19
133	Molecular Transformation of Crude Oil Contaminated Soil after Bioelectrochemical Degradation Revealed by FT-ICR Mass Spectrometry. <i>Environmental Science & Technology</i> , 2020, 54, 2500-2509.	10.0	19
134	Dynamic modeling of a microbial fuel cell considering anodic electron flow and electrical charge storage. <i>Applied Energy</i> , 2017, 193, 507-514.	10.1	18
135	Self-sustaining carbon capture and mineralization via electrolytic carbonation of coal fly ash. <i>Chemical Engineering Journal</i> , 2016, 306, 330-335.	12.7	17
136	Ambient CO ₂ capture and storage in bioelectrochemically mediated wastewater treatment. <i>Bioresource Technology</i> , 2016, 215, 380-385.	9.6	17
137	AC power generation from microbial fuel cells. <i>Journal of Power Sources</i> , 2015, 297, 252-259.	7.8	16
138	Moisture retention extended enhanced bioelectrochemical remediation of unsaturated soil. <i>Science of the Total Environment</i> , 2020, 724, 138169.	8.0	16
139	Anode co-valorization for scalable and sustainable electrolysis. <i>Green Chemistry</i> , 2021, 23, 7917-7936.	9.0	16
140	A liter-scale microbial capacitive deionization system for the treatment of shale gas wastewater. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 353-361.	2.4	15
141	Cathode Material Development in the Past Decade for H ₂ Production from Microbial Electrolysis Cells. <i>ACS Environmental Au</i> , 2022, 2, 20-29.	7.0	15
142	Cell-Free CO ₂ Valorization to C ₆ Pharmaceutical Precursors via a Novel Electro-Enzymatic Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 4114-4121.	6.7	15
143	Decarbonylation reaction of saturated and oxidized tar from pyrolysis of low aromaticity biomass boost reduction of hexavalent chromium. <i>Chemical Engineering Journal</i> , 2019, 360, 1042-1050.	12.7	14
144	Electro-fermentation enhances H ₂ and ethanol co-production by regulating electron transfer and substrate transmembrane transport. <i>Chemical Engineering Journal</i> , 2022, 429, 132223.	12.7	14

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145	Engineered wood for a sustainable future. <i>Matter</i> , 2022, 5, 1326-1329.	10.0	14
146	Syngas mediated microbial electrosynthesis for CO ₂ to acetate conversion using <i>Clostridium ljungdahlii</i> . <i>Resources, Conservation and Recycling</i> , 2022, 184, 106395.	10.8	14
147	Controlled Growth of Nanostructured Biotemplates with Cobalt and Nitrogen Codoping as a Binderless Lithium-Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26868-26877.	8.0	13
148	Circular utilization of food waste to biochar enhances thermophilic co-digestion performance. <i>Bioresource Technology</i> , 2021, 332, 125130.	9.6	13
149	Interplay of Anode, Cathode, and Current in Microbial Fuel Cells: Implications for Wastewater Treatment. <i>Energy Technology</i> , 2016, 4, 583-592.	3.8	12
150	Characterization of implementation limits and identification of optimization strategies for sustainable water resource recovery through life cycle impact analysis. <i>Environment International</i> , 2019, 133, 105266.	10.0	12
151	Deep Learning Optimization for Soft Sensing of Hard-to-Measure Wastewater Key Variables. <i>ACS ES&T Engineering</i> , 2022, 2, 1341-1355.	7.6	12
152	Membrane configuration influences microbial capacitive desalination performance. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 348-354.	2.4	10
153	Electricity Enhances Biological Fe(III) Reduction and Phosphorus Recovery from FeP Complex: Proof of Concept and Kinetic Analysis. <i>ACS ES&T Engineering</i> , 2021, 1, 523-532.	7.6	10
154	U.S.'s China Collaboration is Vital to Global Plans for a Healthy Environment and Sustainable Development. <i>Environmental Science & Technology</i> , 2021, 55, 9622-9626.	10.0	10
155	Efficient energy harvester for microbial fuel cells using DC/DC converters. , 2011, , .		9
156	Sensitivity and Bifurcation Analysis of a Differential-Algebraic Equation Model for a Microbial Electrolysis Cell. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019, 18, 709-728.	1.6	8
157	Effect of Biofilm Properties on the Electrochemical Performance of Microbial Fuel Cells. <i>ECS Transactions</i> , 2008, 13, 11-17.	0.5	7
158	High rate CO ₂ valorization to organics via CO mediated silica nanoparticle enhanced fermentation. <i>Applied Energy</i> , 2020, 279, 115725.	10.1	7
159	Selective ligand modification of cobalt porphyrins for carbon dioxide electrolysis: Generation of a renewable H ₂ /CO feedstock for downstream catalytic hydrogenation. <i>Inorganica Chimica Acta</i> , 2020, 507, 119594.	2.4	7
160	Adaptive soft sensing of river flow prediction for wastewater treatment operation and risk management. <i>Water Research</i> , 2022, 220, 118714.	11.3	7
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