Zhen He

List of Publications by Citations

251 papers	14,944 citations	68 h-index	113 g-index
260 ext. papers	16,911 ext. citations	9.2 avg, IF	7.39 L-index

#	Paper	IF	Citations
251	Towards sustainable wastewater treatment by using microbial fuel cells-centered technologies. *Energy and Environmental Science*, **2014**, 7, 911-924	35.4	641
250	Electricity generation from artificial wastewater using an upflow microbial fuel cell. *Environmental Science & Technology*, **2005**, 39, 5262-7	10.3	599
249	Exploring the use of electrochemical impedance spectroscopy (EIS) in microbial fuel cell studies. *Energy and Environmental Science*, **2009**, 2, 215-219	35.4	488
248	Nitrogen-enriched core-shell structured Fe/Fe(3)C-C nanorods as advanced electrocatalysts for oxygen reduction reaction. *Advanced Materials*, **2012**, 24, 1399-404	24	467
247	Application of Bacterial Biocathodes in Microbial Fuel Cells. *Electroanalysis*, **2006**, 18, 2009-2015	3	437
246	Compression and aggregation-resistant particles of crumpled soft sheets. *ACS Nano*, **2011**, 5, 8943-9	16.7	424
245	An upflow microbial fuel cell with an interior cathode: assessment of the internal resistance by impedance spectroscopy. *Environmental Science & Technology*, **2006**, 40, 5212-7	10.3	385
244	Nutrients removal and recovery in bioelectrochemical systems: a review. *Bioresource Technology*, **2014**, 153, 351-60	11	347
243	Light energy to bioelectricity: photosynthetic microbial fuel cells. *Current Opinion in Biotechnology*, **2010**, 21, 259-64	11.4	271
242	Oxygen reduction reaction catalysts used in microbial fuel cells for energy-efficient wastewater treatment: a review. *Materials Horizons*, **2016**, 3, 382-401	14.4	257
241	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	5.6	255
240	Long-term performance of liter-scale microbial fuel cells treating primary effluent installed in a municipal wastewater treatment facility. *Environmental Science & Technology*, **2013**, 47, 4941-8	10.3	246
239	Crumpled graphene particles for microbial fuel cell electrodes. *Journal of Power Sources*, **2012**, 208, 187-192	8.9	238
238	Efficient salt removal in a continuously operated upflow microbial desalination cell with an air cathode. *Bioresource Technology*, **2011**, 102, 376-80	11	195
237	Increased power production from a sediment microbial fuel cell with a rotating cathode. *Biosensors and Bioelectronics*, **2007**, 22, 3252-5	11.8	186
236	Recovery of Electrical Energy in Microbial Fuel Cells. *Environmental Science and Technology Letters*, **2014**, 1, 137-141	11	181
235	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	13	172

234	Integrating forward osmosis into microbial fuel cells for wastewater treatment, water extraction and bioelectricity generation. *Environmental Science & Technology*, **2011**, 45, 6690-6	10.3	170
233	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	4.2	158
232	Electricity production coupled to ammonium in a microbial fuel cell. *Environmental Science & Technology*, **2009**, 43, 3391-7	10.3	154
231	Self-sustained phototrophic microbial fuel cells based on the synergistic cooperation between photosynthetic microorganisms and heterotrophic bacteria. *Environmental Science & Technology*, **2009**, 43, 1648-54	10.3	154
230	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, 4652-7	10.3	150
229	Integrated photo-bioelectrochemical system for contaminants removal and bioenergy production. *Environmental Science & Technology*, **2012**, 46, 11459-66	10.3	149
228	Synthesizing nitrogen-doped activated carbon and probing its active sites for oxygen reduction reaction in microbial fuel cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 7464-70	9.5	138
227	Graphene-modified electrodes for enhancing the performance of microbial fuel cells. *Nanoscale*, **2015**, 7, 7022-9	7.7	135
226	Real-Time Trajectory Planning for Autonomous Urban Driving: Framework, Algorithms, and Verifications. *IEEE/ASME Transactions on Mechatronics*, **2016**, 21, 740-753	5.5	134
225	Powering a wireless temperature sensor using sediment microbial fuel cells with vertical arrangement of electrodes. *Journal of Power Sources*, **2011**, 196, 9568-9573	8.9	126
224	Methods for understanding microbial community structures and functions in microbial fuel cells: a review. *Bioresource Technology*, **2014**, 171, 461-8	11	123
223	Water softening using microbial desalination cell technology. *Desalination*, **2013**, 309, 32-37	10.3	121
222	Nitrogen removal by granular nitritation-anammox in an upflow membrane-aerated biofilm reactor. *Water Research*, **2016**, 94, 23-31	12.5	120
221	TiO2 nanoparticles-decorated carbon nanotubes for significantly improved bioelectricity generation in microbial fuel cells. *Journal of Power Sources*, **2013**, 234, 100-106	8.9	119
220	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	35.4	114
219	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	8.9	113
218	Integrating membrane filtration into bioelectrochemical systems as next generation energy-efficient wastewater treatment technologies for water reclamation: A review. *Bioresource Technology*, **2015**, 195, 202-9	11	107
217	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	16.2	103

216	Decorating anode with bamboo-like nitrogen-doped carbon nanotubes for microbial fuel cells. *Electrochemistry Communications*, **2012**, 14, 71-74	5.1	102
215	Microbial desalination cells as a versatile technology: Functions, optimization and prospective. *Desalination*, **2015**, 371, 9-17	10.3	97
214	Enhancing sludge methanogenesis with improved redox activity of extracellular polymeric substances by hematite in red mud. *Water Research*, **2018**, 134, 54-62	12.5	97
213	Long-term investigation of microbial fuel cells treating primary sludge or digested sludge. *Bioresource Technology*, **2013**, 136, 509-14	11	94
212	Facile Synthesis of MoS2@CNT as an Effective Catalyst for Hydrogen Production in Microbial Electrolysis Cells. *ChemElectroChem*, **2014**, 1, 1828-1833	4.3	94
211	Long-term investigation of fouling of cation and anion exchange membranes in microbial desalination cells. *Desalination*, **2013**, 325, 48-55	10.3	93
210	Enhancing wastewater reuse by forward osmosis with self-diluted commercial fertilizers as draw solutes. *Water Research*, **2016**, 99, 235-243	12.5	91
209	Efficiently "pumping out" value-added resources from wastewater by bioelectrochemical systems: A review from energy perspectives. *Water Research*, **2018**, 131, 62-73	12.5	90
208	Energy extraction from a large-scale microbial fuel cell system treating municipal wastewater. *Journal of Power Sources*, **2015**, 297, 260-264	8.9	88
207	Mainstream upflow nitritation-anammox system with hybrid anaerobic pretreatment: Long-term performance and microbial community dynamics. *Water Research*, **2017**, 125, 298-308	12.5	88
206	Improving water desalination by hydraulically coupling an osmotic microbial fuel cell with a microbial desalination cell. *Journal of Membrane Science*, **2013**, 441, 18-24	9.6	86
205	Resource recovery from landfill leachate using bioelectrochemical systems: Opportunities, challenges, and perspectives. *Bioresource Technology*, **2016**, 201, 347-54	11	84
204	A microfluidic microbial fuel cell fabricated by soft lithography. *Bioresource Technology*, **2011**, 102, 5836-40	11	80
203	Scaling up microbial desalination cell system with a post-aerobic process for simultaneous wastewater treatment and seawater desalination. *Desalination*, **2015**, 360, 28-34	10.3	79
202	Porous Carbon Nanosheets Codoped with Nitrogen and Sulfur for Oxygen Reduction Reaction in Microbial Fuel Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 18672-8	9.5	77
201	Integrated organic and nitrogen removal with electricity generation in a tubular dual-cathode microbial fuel cell. *Process Biochemistry*, **2012**, 47, 2146-2151	4.8	77
200	Recovery of nitrogen and water from landfill leachate by a microbial electrolysis cell-forward osmosis system. *Bioresource Technology*, **2016**, 200, 485-92	11	76
199	Reducing effluent discharge and recovering bioenergy in an osmotic microbial fuel cell treating domestic wastewater. *Desalination*, **2013**, 312, 52-59	10.3	75

198	Integrated salinity reduction and water recovery in an osmotic microbial desalination cell. *RSC Advances*, **2012**, 2, 3265	3.7	75
197	Self-biased solar-microbial device for sustainable hydrogen generation. *ACS Nano*, **2013**, 7, 8728-35	16.7	74
196	Applications of high gravity technologies for wastewater treatment: A review. *Chemical Engineering Journal*, **2017**, 313, 912-927	14.7	74
195	Microbial fuel cells: now let us talk about energy. *Environmental Science & Technology*, **2013**, 47, 332-3	10.3	74
194	Enhancing desalination and wastewater treatment by coupling microbial desalination cells with forward osmosis. *Chemical Engineering Journal*, **2015**, 270, 437-443	14.7	73
193	Highly-efficient photocatalytic disinfection of Escherichia coli under visible light using carbon supported Vanadium Tetrasulfide nanocomposites. *Applied Catalysis B: Environmental*, **2018**, 224, 383-393	21.8	72
192	A fluidized bed membrane bioelectrochemical reactor for energy-efficient wastewater treatment. *Bioresource Technology*, **2014**, 167, 310-5	11	72
191	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	11	72
190	A new method for nutrients removal and recovery from wastewater using a bioelectrochemical system. *Bioresource Technology*, **2014**, 166, 630-4	11	72
189	Nitrate removal from groundwater driven by electricity generation and heterotrophic denitrification in a bioelectrochemical system. *Journal of Hazardous Materials*, **2013**, 262, 614-9	12.8	71
188	Simultaneous nitrification and denitrification with electricity generation in dual-cathode microbial fuel cells. *Journal of Chemical Technology and Biotechnology*, **2012**, 87, 153-159	3.5	70
187	Hydrogen production in microbial electrolysis cells: Choice of catholyte. *International Journal of Hydrogen Energy*, **2013**, 38, 9619-9624	6.7	69
186	In situ investigation of tubular microbial fuel cells deployed in an aeration tank at a municipal wastewater treatment plant. *Bioresource Technology*, **2013**, 136, 316-21	11	69
185	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	10.3	69
184	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	10.3	68
183	Carbon/iron-based nanorod catalysts for hydrogen production in microbial electrolysis cells. *Nano Energy*, **2012**, 1, 751-756	17.1	67
182	A review of landfill leachate induced ultraviolet quenching substances: Sources, characteristics, and treatment. *Water Research*, **2018**, 145, 297-311	12.5	66
181	Rapid Photocatalytic Decolorization of Methyl Orange under Visible Light Using VS4/Carbon Powder Nanocomposites. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 7690-7699	8.3	66

180	Microbial reduction of vanadium (V) in groundwater: Interactions with coexisting common electron acceptors and analysis of microbial community. *Environmental Pollution*, **2017**, 231, 1362-1369	9.3	61
179	Mathematical model of dynamic behavior of microbial desalination cells for simultaneous wastewater treatment and water desalination. *Environmental Science & Technology*, **2014**, 48, 13010-9	10.3	60
178	Tackle reverse solute flux in forward osmosis towards sustainable water recovery: reduction and perspectives. *Water Research*, **2019**, 149, 362-374	12.5	57
177	Enhanced treatment of petroleum refinery wastewater by short-term applied voltage in single chamber microbial fuel cell. *Bioresource Technology*, **2018**, 253, 16-21	11	55
176	Hollow-fiber membrane bioelectrochemical reactor for domestic wastewater treatment. *Journal of Chemical Technology and Biotechnology*, **2013**, 88, 1584-1590	3.5	55
175	Evaluation of normalized energy recovery (NER) in microbial fuel cells affected by reactor dimensions and substrates. *Bioresource Technology*, **2014**, 157, 77-83	11	54
174	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	10.3	51
173	Energy consumption by forward osmosis treatment of landfill leachate for water recovery. *Waste Management*, **2017**, 63, 284-291	8.6	51
172	Integrated experimental investigation and mathematical modeling of brackish water desalination and wastewater treatment in microbial desalination cells. *Water Research*, **2015**, 77, 13-23	12.5	51
171	Understanding the application niche of microbial fuel cells in a cheese wastewater treatment process. *Bioresource Technology*, **2014**, 157, 154-60	11	51
170	Effects of draw solutions and membrane conditions on electricity generation and water flux in osmotic microbial fuel cells. *Bioresource Technology*, **2012**, 109, 70-6	11	51
169	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	14.7	50
168	Light-driven nitrous oxide production via autotrophic denitrification by self-photosensitized Thiobacillus denitrificans. *Environment International*, **2019**, 127, 353-360	12.9	50
167	Mitigation of Salinity Buildup and Recovery of Wasted Salts in a Hybrid Osmotic Membrane Bioreactor-Electrodialysis System. *Environmental Science & Technology*, **2015**, 49, 10529-35	10.3	49
166	A Review of Modeling Bioelectrochemical Systems: Engineering and Statistical Aspects. *Energies*, **2016**, 9, 111	3.1	49
165	Bioelectricity generation from treatment of petroleum refinery wastewater with simultaneous seawater desalination in microbial desalination cells. *Energy Conversion and Management*, **2017**, 141, 101-107	10.6	48
164	Light-driven carbon dioxide reduction to methane by Methanosarcina barkeri-CdS biohybrid. *Applied Catalysis B: Environmental*, **2019**, 257, 117916	21.8	48
163	Forward osmosis promoted in-situ formation of struvite with simultaneous water recovery from digested swine wastewater. *Chemical Engineering Journal*, **2018**, 342, 274-280	14.7	47

162	Biosynthesis of palladium nanoparticles using Shewanella loihica PV-4 for excellent catalytic reduction of chromium(VI). *Environmental Science: Nano*, **2018**, 5, 730-739	7.1	47
161	Nitrogen-doped activated carbon as a metal free catalyst for hydrogen production in microbial electrolysis cells. *RSC Advances*, **2014**, 4, 49161-49164	3.7	47
160	Exceptional capacitive deionization rate and capacity by block copolymer-based porous carbon fibers. *Science Advances*, **2020**, 6, eaaz0906	14.3	47
159	One-pot synthesis of high-performance Co/graphene electrocatalysts for glucose fuel cells free of enzymes and precious metals. *Chemical Communications*, **2015**, 51, 9354-7	5.8	46
158	Status, Challenges, and Perspectives of Mainstream Nitritation-Anammox for Wastewater Treatment. *Water Environment Research*, **2018**, 90, 634-649	2.8	46
157	Sustainable management of landfill leachate concentrate through recovering humic substance as liquid fertilizer by loose nanofiltration. *Water Research*, **2019**, 157, 555-563	12.5	42
156	Evaluation of energy consumption of treating nitrate-contaminated groundwater by bioelectrochemical systems. *Science of the Total Environment*, **2018**, 636, 881-890	10.2	42
155	Cylindrical graphite based microbial fuel cell for the treatment of industrial wastewaters and bioenergy generation. *Bioresource Technology*, **2018**, 247, 753-758	11	42
154	Sediment microbial fuel cells for wastewater treatment: challenges and opportunities. *Environmental Science: Water Research and Technology*, **2015**, 1, 279-284	4.2	41
153	Energy production, use and saving in a bioelectrochemical desalination system. *RSC Advances*, **2012**, 2, 10673	3.7	41
152	Effects of number of cell pairs on the performance of microbial desalination cells. *Desalination*, **2014**, 341, 101-106	10.3	39
151	Development of Microbial Fuel Cells Needs To Go beyond Power Density *ACS Energy Letters*, **2017**, 2, 700-702	20.1	38
150	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	11	38
149	Advancing membrane bioelectrochemical reactor (MBER) with hollow-fiber membranes installed in the cathode compartment. *Journal of Chemical Technology and Biotechnology*, **2014**, 89, 1330-1336	3.5	38
148	Improving the flexibility of microbial desalination cells through spatially decoupling anode and cathode. *Bioresource Technology*, **2013**, 144, 304-10	11	38
147	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	9.6	37
146	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	10.2	37
145	Understanding electricity generation in osmotic microbial fuel cells through integrated experimental investigation and mathematical modeling. *Bioresource Technology*, **2015**, 195, 194-201	11	36

144	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	4.2	36
143	Boron removal from saline water by a microbial desalination cell integrated with donnan dialysis. *Desalination*, **2015**, 376, 55-61	10.3	35
142	NEW resource recovery from wastewater using bioelectrochemical systems: Moving forward with functions. *Frontiers of Environmental Science and Engineering*, **2018**, 12, 1	5.8	35
141	When Bioelectrochemical Systems Meet Forward Osmosis: Accomplishing Wastewater Treatment and Reuse through Synergy. *Water (Switzerland)*, **2015**, 7, 38-50	3	35
140	Molecular AND logic gate based on bacterial anaerobic respiration. *Chemical Communications*, **2012**, 48, 10174-6	5.8	35
139	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	12.5	35
138	Integrated experimental and modeling evaluation of energy consumption for ammonia recovery in bioelectrochemical systems. *Chemical Engineering Journal*, **2017**, 327, 924-931	14.7	34
137	Algal-microbial community collaboration for energy recovery and nutrient remediation from wastewater in integrated photobioelectrochemical systems. *Algal Research*, **2017**, 24, 527-539	5	34
136	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	2.8	33
135	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	5.8	33
134	Energy Consumption by Recirculation: A Missing Parameter When Evaluating Forward Osmosis. *Environmental Science & Technology*, **2016**, 50, 6827-9	10.3	32
133	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	8.3	32
132	Enhanced nitrogen removal by membrane-aerated nitritation-anammox in a bioelectrochemical system. *Bioresource Technology*, **2017**, 238, 22-29	11	31
131	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater a perspective. *Environmental Science: Nano*, **2020**, 7, 2178-2194	7.1	31
130	A cooperative microbial fuel cell system for waste treatment and energy recovery. *Environmental Technology (United Kingdom)*, **2013**, 34, 1905-13	2.6	31
129	Effective control of biohythane composition through operational strategies in an innovative microbial electrolysis cell. *Applied Energy*, **2017**, 206, 879-886	10.7	31
128	Cathodic fluidized granular activated carbon assisted-membrane bioelectrochemical reactor for wastewater treatment. *Separation and Purification Technology*, **2016**, 169, 241-246	8.3	29
127	Improving electricity production in tubular microbial fuel cells through optimizing the anolyte flow with spiral spacers. *Bioresource Technology*, **2013**, 134, 251-6	11	29

126	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	12.5	28
125	Electrodialysis recovery of reverse-fluxed fertilizer draw solute during forward osmosis water treatment. *Chemical Engineering Journal*, **2017**, 330, 550-558	14.7	28
124	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	10.2	28
123	Ni-Coated Carbon Fiber as an Alternative Cathode Electrode Material to Improve Cost Efficiency of Microbial Fuel Cells. *Electrochimica Acta*, **2016**, 222, 338-346	6.7	27
122	Bioelectricity inhibits back diffusion from the anolyte into the desalinated stream in microbial desalination cells. *Water Research*, **2016**, 88, 266-273	12.5	27
121	Electricity generation from a floating microbial fuel cell. *Bioresource Technology*, **2012**, 114, 308-13	11	27
120	Electrochemical Relithiation for Direct Regeneration of LiCoO2 Materials from Spent Lithium-Ion Battery Electrodes. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 11596-11605	8.3	27
119	Life cycle assessment of a microbial desalination cell for sustainable wastewater treatment and saline water desalination. *Journal of Cleaner Production*, **2018**, 200, 900-910	10.3	26
118	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	8.9	26
117	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	6.7	25
116	Wastewater treatment and microbial communities in an integrated photo-bioelectrochemical system affected by different wastewater algal inocula. *Algal Research*, **2015**, 12, 446-454	5	25
115	CNT@TiO2 nanohybrids for high-performance anode of lithium-ion batteries. *Nanoscale Research Letters*, **2013**, 8, 499	5	25
114	Passive separation of recovered ammonia from catholyte for reduced energy consumption in microbial electrolysis cells. *Chemical Engineering Journal*, **2018**, 334, 2303-2307	14.7	25
113	Grape pomace and its secondary waste management: Biochar production for a broad range of lead (Pb) removal from water. *Environmental Research*, **2020**, 186, 109442	7.9	24
112	Current-driven nitrate migration out of groundwater by using a bioelectrochemical system. *RSC Advances*, **2014**, 4, 10290	3.7	24
111	Efficient recovery of polyelectrolyte draw solutes in forward osmosis towards sustainable water treatment. *Desalination*, **2017**, 422, 134-141	10.3	24
110	Platinum Group Metal-free Catalysts for Hydrogen Evolution Reaction in Microbial Electrolysis Cells. *Chemical Record*, **2017**, 17, 641-652	6.6	23
109	Integrated experimental investigation and mathematical modeling of a membrane bioelectrochemical reactor with an external membrane module. *Chemical Engineering Journal*, **2016**, 287, 321-328	14.7	23

108	Enhancing the performance of an osmotic microbial fuel cell through self-buffering with reverse-fluxed sodium bicarbonate. *Chemical Engineering Journal*, **2018**, 349, 241-248	14.7	23
107	Efficient Photoelectron Capture by Ni Decoration in Methanosarcina barkeri-CdS Biohybrids for Enhanced Photocatalytic CO-to-CH Conversion. *IScience*, **2020**, 23, 101287	6.1	21
106	Experimental Study on the Combustion and Microexplosion of Freely Falling Gelled Unsymmetrical Dimethylhydrazine (UDMH) Fuel Droplets. *Energies*, **2012**, 5, 3126-3136	3.1	21
105	Selective recovery of lead and zinc through controlling cathodic potential in a bioelectrochemically-assisted electrodeposition system. *Journal of Hazardous Materials*, **2020**, 386, 121941	12.8	20
104	Understanding Ammonium Transport in Bioelectrochemical Systems towards its Recovery. *Scientific Reports*, **2016**, 6, 22547	4.9	20
103	C 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	4.9	20
102	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	11	19
101	Investigation of multiphysics in tubular microbial fuel cells by coupled computational fluid dynamics with multi-order Butler Volmer reactions. *Chemical Engineering Journal*, **2016**, 296, 377-385	14.7	19
100	Response of enhanced sludge methanogenesis by red mud to temperature: Spectroscopic and electrochemical elucidation of endogenous redox mediators. *Water Research*, **2018**, 143, 240-249	12.5	19
99	Precise control of iron activating persulfate by current generation in an electrochemical membrane reactor. *Environment International*, **2019**, 131, 105024	12.9	19
98	LINC00473/miR-497-5p Regulates Esophageal Squamous Cell Carcinoma Progression Through Targeting PRKAA1. *Cancer Biotherapy and Radiopharmaceuticals*, **2019**, 34, 650-659	3.9	19
97	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		19
96	Bioelectrochemically-assisted mitigation of salinity buildup and recovery of reverse-fluxed draw solute in an osmotic membrane bioreactor. *Water Research*, **2018**, 141, 259-267	12.5	19
95	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	8.9	18
94	Unravelling and Reconstructing the Nexus of Salinity, Electricity, and Microbial Ecology for Bioelectrochemical Desalination. *Environmental Science & Technology*, **2017**, 51, 12672-12682	10.3	18
93	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	12.8	18
92	Development of Bioelectrochemical Systems to Promote Sustainable Agriculture. *Agriculture (Switzerland)*, **2015**, 5, 367-388	3	18
91	Enzyme catalyzed electricity-driven water softening system. *Enzyme and Microbial Technology*, **2012**, 51, 396-401	3.8	18

90	Resource recovery by osmotic bioelectrochemical systems towards sustainable wastewater treatment. *Environmental Science: Water Research and Technology*, **2017**, 3, 583-592	4.2	17
89	Mitigation of bidirectional solute flux in forward osmosis via membrane surface coating of zwitterion functionalized carbon nanotubes. *Environment International*, **2019**, 131, 104970	12.9	17
88	Regulated expression of polysaccharide utilization and capsular biosynthesis loci in biofilm and planktonic Bacteroides thetaiotaomicron during growth in chemostats. *Biotechnology and Bioengineering*, **2014**, 111, 165-73	4.9	17
87	Demystifying terms for understanding bioelectrochemical systems towards sustainable wastewater treatment. *Current Opinion in Electrochemistry*, **2020**, 19, 14-19	7.2	17
86	Enhanced Removal of Azo Dye by a Bioelectrochemical System Integrated with a Membrane Biofilm Reactor. *Industrial & Engineering Chemistry Research*, **2018**, 57, 16433-16441	3.9	17
85	A practical trajectory planning framework for autonomous ground vehicles driving in urban environments **2015**,		16
84	Nitrogen removal from water of recirculating aquaculture system by a microbial fuel cell. *Aquaculture*, **2018**, 497, 74-81	4.4	16
83	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	10.3	16
82	Cathode-enhanced wastewater treatment in bioelectrochemical systems. *Npj Clean Water*, **2018**, 1,	11.2	16
81	Mathematical modeling of the dynamic behavior of an integrated photo-bioelectrochemical system for simultaneous wastewater treatment and bioenergy recovery. *Energy*, **2017**, 124, 227-237	7.9	15
80	Life Cycle Environmental Impact Comparison of Bioelectrochemical Systems for Wastewater Treatment. *Procedia CIRP*, **2019**, 80, 382-388	1.8	15
79	Bioelectrochemical production of hydrogen in an innovative pressure-retarded osmosis/microbial electrolysis cell system: experiments and modeling. *Biotechnology for Biofuels*, **2015**, 8, 116	7.8	15
78	A thermal model for nanosecond pulsed laser ablation of aluminum. *AIP Advances*, **2017**, 7, 075010	1.5	15
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