Yifeng Zhang

List of Publications by Year
in descending order

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		71061	82499
121	5,943	41	72
papers	citations	h-index	g-index

121	121	121	4743
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microbial electrolysis cells turning to be versatile technology: Recent advances and future challenges. Water Research, 2014, 56, 11-25.	5.3	334
2	Cathodic reduction of hexavalent chromium [Cr(VI)] coupled with electricity generation in microbial fuel cells. Biotechnology Letters, 2008, 30, 1959-1966.	1.1	248
3	An Overview of Electron Acceptors in Microbial Fuel Cells. Frontiers in Microbiology, 2017, 8, 643.	1.5	224
4	Generation of Electricity and Analysis of Microbial Communities in Wheat Straw Biomass-Powered Microbial Fuel Cells. Applied and Environmental Microbiology, 2009, 75, 3389-3395.	1.4	174
5	Mechanism and performance of singlet oxygen dominated peroxymonosulfate activation on CoOOH nanoparticles for 2,4-dichlorophenol degradation in water. Journal of Hazardous Materials, 2020, 384, 121350.	6.5	167
6	Electricity generation and microbial community response to substrate changes in microbial fuel cell. Bioresource Technology, 2011, 102, 1166-1173.	4.8	159
7	Novel bio-electro-Fenton technology for azo dye wastewater treatment using microbial reverse-electrodialysis electrolysis cell. Bioresource Technology, 2017, 228, 322-329.	4.8	151
8	A new method for in situ nitrate removal from groundwater using submerged microbial desalinationâ€“denitrification cell (SMDDC). Water Research, 2013, 47, 1827-1836.	5.3	135
9	Simultaneous organic carbon, nutrients removal and energy production in a photomicrobial fuel cell (PFC). Energy and Environmental Science, 2011, 4, 4340.	15.6	134
10	Bio-electro-Fenton processes for wastewater treatment: Advances and prospects. Chemical Engineering Journal, 2018, 354, 492-506.	6.6	133
11	Nanomodification of the electrodes in microbial fuel cell: Impact of nanoparticle density on electricity production and microbial community. Applied Energy, 2014, 116, 216-222.	5.1	120
12	Microbial community evolution and fate of antibiotic resistance genes along six different full-scale municipal wastewater treatment processes. Bioresource Technology, 2019, 272, 489-500.	4.8	117
13	In situ Biogas Upgrading by CO2-to-CH4 Bioconversion. Trends in Biotechnology, 2021, 39, 336-347.	4.9	116
14	Submersible microbial fuel cell sensor for monitoring microbial activity and BOD in groundwater: Focusing on impact of anodic biofilm on sensor applicability. Biotechnology and Bioengineering, 2011, 108, 2339-2347.	1.7	106
15	Bioenergy recovery from wastewater accelerated by solar power: Intermittent electro-driving regulation and capacitive storage in biomass. Water Research, 2020, 175, 115696.	5.3	104
16	Biological caproate production by Clostridium kluyveri from ethanol and acetate as carbon sources. Bioresource Technology, 2017, 241, 638-644.	4.8	100
17	Submersible microbial desalination cell for simultaneous ammonia recovery and electricity production from anaerobic reactors containing high levels of ammonia. Bioresource Technology, 2015, 177, 233-239.	4.8	96
18	Bio-electro-Fenton process for the degradation of Non-Steroidal Anti-Inflammatory Drugs in wastewater. Chemical Engineering Journal, 2018, 338, 401-410.	6.6	96

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19	Efficient treatment of aniline containing wastewater in bipolar membrane microbial electrolysis cell-Fenton system. Water Research, 2017, 119, 67-72.	5.3	94
20	Ammonia inhibition on hydrogen enriched anaerobic digestion of manure under mesophilic and thermophilic conditions. Water Research, 2016, 105, 314-319.	5.3	92
21	Recovery of ammonia and sulfate from waste streams and bioenergy production via bipolar bioelectrodialysis. Water Research, 2015, 85, 177-184.	5.3	90
22	A simple and rapid method for monitoring dissolved oxygen in water with a submersible microbial fuel cell (SBMFC). Biosensors and Bioelectronics, 2012, 38, 189-194.	5.3	89
23	Alternate switching between microbial fuel cell and microbial electrolysis cell operation as a new method to control H2O2 level in Bioelectro-Fenton system. Journal of Power Sources, 2015, 291, 108-116.	4.0	85
24	Bio-electrolytic sensor for rapid monitoring of volatile fatty acids in anaerobic digestion process. Water Research, 2017, 111, 74-80.	5.3	85
25	Microbial Electrochemical Monitoring of Volatile Fatty Acids during Anaerobic Digestion. Environmental Science & Technology, 2016, 50, 4422-4429.	4.6	80
26	Counteracting ammonia inhibition during anaerobic digestion by recovery using submersible microbial desalination cell. Biotechnology and Bioengineering, 2015, 112, 1478-1482.	1.7	79
27	Effect of organic loading rate on anaerobic digestion of pig manure: Methane production, mass flow, reactor scale and heating scenarios. Journal of Environmental Management, 2019, 231, 646-652.	3.8	71
28	Bioelectrode-based approach for enhancing nitrate and nitrite removal and electricity generation from eutrophic lakes. Water Research, 2012, 46, 6445-6453.	5.3	68
29	Electricity generation and microbial communities in microbial fuel cell powered by macroalgal biomass. Bioelectrochemistry, 2018, 123, 145-149.	2.4	65
30	Urban biowaste valorization by coupling anaerobic digestion and single cell protein production. Bioresource Technology, 2019, 290, 121743.	4.8	65
31	Bioelectrochemical recovery of waste-derived volatile fatty acids and production of hydrogen and alkali. Water Research, 2015, 81, 188-195.	5.3	64
32	Self-stacked submersible microbial fuel cell (SSMFC) for improved remote power generation from lake sediments. Biosensors and Bioelectronics, 2012, 35, 265-270.	5.3	63
33	Simultaneous biogas upgrading and biochemicals production using anaerobic bacterial mixed cultures. Water Research, 2018, 142, 86-95.	5.3	58
34	Intermittent electro field regulated mutualistic interspecies electron transfer away from the electrodes for bioenergy recovery from wastewater. Water Research, 2020, 185, 116238.	5.3	52
35	Microbial Electrochemical Systems and Technologies: It Is Time To Report the Capital Costs. Environmental Science & Technology, 2016, 50, 5432-5433.	4.6	51
36	Degradation of pharmaceuticals from wastewater in a 20-L continuous flow bio-electro-Fenton (BEF) system. Science of the Total Environment, 2020, 727, 138684.	3.9	49

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37	Improved methane production and energy recovery of post-hydrothermal liquefaction waste water via integration of zeolite adsorption and anaerobic digestion. Science of the Total Environment, 2019, 651, 61-69.	3.9	47
38	Biogas upgrading and energy storage via electromethanogenesis using intact anaerobic granular sludge as biocathode. Applied Energy, 2020, 269, 115101.	5.1	45
39	Microbial community evolution and fate of antibiotic resistance genes during sludge treatment in two full-scale anaerobic digestion plants with thermal hydrolysis pretreatment. Bioresource Technology, 2019, 288, 121575.	4.8	44
40	Photochemical Behavior of Microbial Extracellular Polymeric Substances in the Aquatic Environment. Environmental Science & Technology, 2021, 55, 15090-15099.	4.6	44
41	Electrochemical and microbiological response of exoelectrogenic biofilm to polyethylene microplastics in water. Water Research, 2022, 211, 118046.	5.3	44
42	Microbial electrochemical separation of CO2 for biogas upgrading. Bioresource Technology, 2018, 247, 380-386.	4.8	43
43	Enhanced bio-decolorization of azo dyes by co-immobilized quinone-reducing consortium and anthraquinone. Bioresource Technology, 2009, 100, 2982-2987.	4.8	42
44	Feasibility and applicability of the scaling-up of bio-electro-Fenton system for textile wastewater treatment. Environment International, 2020, 134, 105352.	4.8	42
45	Two-electron oxygen reduction on fullerene C60-carbon nanotubes covalent hybrid as a metal-free electrocatalyst. Scientific Reports, 2019, 9, 13780.	1.6	41
46	Innovative operation of microbial fuel cell-based biosensor for selective monitoring of acetate during anaerobic digestion. Science of the Total Environment, 2019, 655, 1439-1447.	3.9	41
47	Salinity-gradient energy driven microbial electrosynthesis of hydrogen peroxide. Journal of Power Sources, 2017, 341, 357-365.	4.0	40
48	Salinity-gradient energy driven microbial electrosynthesis of value-added chemicals from CO2 reduction. Water Research, 2018, 142, 396-404.	5.3	40
49	Exoelectrogenic Anaerobic Granular Sludge for Simultaneous Electricity Generation and Wastewater Treatment. Environmental Science & Technology, 2019, 53, 12130-12140.	4.6	40
50	Innovative self-powered submersible microbial electrolysis cell (SMEC) for biohydrogen production from anaerobic reactors. Water Research, 2012, 46, 2727-2736.	5.3	38
51	Biogas upgrading and biochemical production from gas fermentation: Impact of microbial community and gas composition. Bioresource Technology, 2019, 286, 121413.	4.8	38
52	Microbial Electrolytic Capture, Separation and Regeneration of CO₂ for Biogas Upgrading. Environmental Science & Technology, 2017, 51, 9371-9378.	4.6	37
53	Electricity generation and microbial community in response to short-term changes in stack connection of self-stacked submersible microbial fuel cell powered by glycerol. Water Research, 2017, 109, 367-374.	5.3	35
54	Surface area expansion of electrodes with grass-like nanostructures and gold nanoparticles to enhance electricity generation in microbial fuel cells. Bioresource Technology, 2012, 123, 177-183.	4.8	34

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55	Submersible microbial fuel cell for electricity production from sewage sludge. Water Science and Technology, 2011, 64, 50-55.	1.2	33
56	Microbial electrolytic disinfection process for highly efficient Escherichia coli inactivation. Chemical Engineering Journal, 2018, 342, 220-227.	6.6	33
57	The impact of anode acclimation strategy on microbial electrolysis cell treating hydrogen fermentation effluent. Bioresource Technology, 2017, 236, 37-43.	4.8	32
58	Microbial fuel cell-based biosensor for toxic carbon monoxide monitoring. Talanta, 2018, 186, 368-371.	2.9	32
59	Coordinated response of Au-NPs/rGO modified electroactive biofilms under phenolic compounds shock: Comprehensive analysis from architecture, composition, and activity. Water Research, 2021, 189, 116589.	5.3	31
60	Activation of persulfate for highly efficient degradation of metronidazole using Fe(II)-rich potassium doped magnetic biochar. Science of the Total Environment, 2022, 819, 152089.	3.9	31
61	Sulfide restrains the growth of Methylocapsa acidiphila converting renewable biogas to single cell protein. Water Research, 2020, 184, 116138.	5.3	30
62	Microbial protein production from CO2, H2, and recycled nitrogen: Focusing on ammonia toxicity and nitrogen sources. Journal of Cleaner Production, 2021, 291, 125921.	4.6	30
63	Regeneration of Fe(II) from Fenton-derived ferric sludge using a novel biocathode. Bioresource Technology, 2020, 318, 124195.	4.8	29
64	An innovative microbial electrochemical ultraviolet photolysis cell (MEUC) for efficient degradation of carbamazepine. Water Research, 2020, 187, 116451.	5.3	29
65	Microbial electrolysis enhanced bioconversion of coal to methane compared with anaerobic digestion: Insights into differences in metabolic pathways. Energy Conversion and Management, 2022, 259, 115553.	4.4	29
66	Microbial community response to ammonia levels in hydrogen assisted biogas production and upgrading process. Bioresource Technology, 2020, 296, 122276.	4.8	28
67	Valorization of food waste for cost-effective reducing sugar recovery in a two-stage enzymatic hydrolysis platform. Energy, 2020, 208, 118379.	4.5	28
68	Simple modulation of Fe-based single atoms/clusters catalyst with acidic microenvironment for ultrafast Fenton-like reaction. Applied Catalysis B: Environmental, 2022, 304, 121009.	10.8	28
69	Integrated electrochemical-biological process as an alternative mean for ammonia monitoring during anaerobic digestion of organic wastes. Chemosphere, 2018, 195, 735-741.	4.2	25
70	Degradation of metoprolol from wastewater in a bio-electro-Fenton system. Science of the Total Environment, 2021, 771, 145385.	3.9	25
71	Biogas Upgrading: Current and Emerging Technologies. , 2019, , 817-843.		24
72	The Potential of Bioelectrochemical Sensor for Monitoring of Acetate During Anaerobic Digestion: Focusing on Novel Reactor Design. Frontiers in Microbiology, 2018, 9, 3357.	1.5	24

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73	Optimization of a newly developed electromethanogenesis for the highest record of methane production. Journal of Hazardous Materials, 2021, 407, 124363.	6.5	24
74	Scaling-up of microbial electrosynthesis with multiple electrodes for in situ production of hydrogen peroxide. IScience, 2021, 24, 102094.	1.9	24
75	From renewable energy to sustainable protein sources: Advancement, challenges, and future roadmaps. Renewable and Sustainable Energy Reviews, 2022, 157, 112041.	8.2	24
76	An overview of nanomaterial-based novel disinfection technologies for harmful microorganisms: Mechanism, synthesis, devices and application. Science of the Total Environment, 2022, 837, 155720.	3.9	24
77	Insights into the impact of polyethylene microplastics on methane recovery from wastewater via bioelectrochemical anaerobic digestion. Water Research, 2022, 221, 118844.	5.3	23
78	The ins and outs of pharmaceutical wastewater treatment by microbial electrochemical technologies. , 2022, 1, 100003.		22
79	Pyrogenic carbon facilitated microbial extracellular electron transfer in electrogenic granular sludge via geobattery mechanism. Water Research, 2022, 220, 118618.	5.3	22
80	Immobilization of Clostridium kluyveri on wheat straw to alleviate ammonia inhibition during chain elongation for n-caproate production. Environment International, 2019, 127, 134-141.	4.8	21
81	Coupling electrochemical ammonia extraction and cultivation of methane oxidizing bacteria for production of microbial protein. Journal of Environmental Management, 2020, 265, 110560.	3.8	21
82	Bioelectrochemically assisted sustainable conversion of industrial organic wastewater and clean production of microalgal protein. Resources, Conservation and Recycling, 2021, 168, 105441.	5.3	19
83	Natural solar intermittent-powered electromethanogenesis towards green carbon reduction. Chemical Engineering Journal, 2022, 432, 134369.	6.6	19
84	Novel fabricated low-cost hybrid polyacrylonitrile/polyvinylpyrrolidone coated polyurethane foam (PAN/PVP@PUF) membrane for the decolorization of cationic and anionic dyes. Journal of Environmental Management, 2022, 315, 115128.	3.8	19
85	Simultaneous heavy metal immobilization and antibiotics removal during synergetic treatment of sewage sludge and pig manure. Environmental Science and Pollution Research, 2020, 27, 30323-30332.	2.7	18
86	Electrochemical capacitive performance of intact anaerobic granular sludge-based 3D bioanode. Journal of Power Sources, 2020, 470, 228399.	4.0	18
87	Microbial electrochemical approaches of carbon dioxide utilization for biogas upgrading. Chemosphere, 2022, 291, 132843.	4.2	18
88	The ins and outs of photo-assisted microbial electrochemical systems for synchronous wastewater treatment and bioenergy recovery. Resources, Conservation and Recycling, 2022, 181, 106230.	5.3	18
89	High efficient ethanol and VFA production from gas fermentation: Effect of acetate, gas and inoculum microbial composition. Biomass and Bioenergy, 2017, 105, 32-40.	2.9	17
90	Optimization of the Cell Immobilization-Based Chain-Elongation Process for Efficient n-Caproate Production. ACS Sustainable Chemistry and Engineering, 2021, 9, 4014-4023.	3.2	17

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91	Green electricity-driven simultaneous ammonia recovery and in-situ upcycling for microbial protein production. Chemical Engineering Journal, 2022, 430, 132890.	6.6	16
92	Enhanced Cr(VI) reduction in biocathode microbial electrolysis cell using Fenton-derived ferric sludge. Water Research, 2022, 212, 118144.	5.3	16
93	Catalytic activity of LaCu0.5Mn0.5O3 perovskite at circumneutral/basic pH conditions in electro-Fenton processes. Catalysis Today, 2021, 361, 159-164.	2.2	15
94	Deeper investigation on methane generation from synthetic wastewater containing oxytetracycline in a scale up acidic anaerobic baffled reactor. Bioresource Technology, 2021, 333, 125156.	4.8	15
95	Novel method to immobilize phosphate in lakes using sediment microbial fuel cells. Water Research, 2021, 198, 117108.	5.3	14
96	Bio-electrochemically extracted nitrogen from residual resources for microbial protein production. Bioresource Technology, 2021, 337, 125353.	4.8	14
97	The interactions between microalgae and wastewater indigenous bacteria for treatment and valorization of brewery wastewater. Resources, Conservation and Recycling, 2022, 182, 106341.	5.3	14
98	Current as an indicator of ammonia concentration during wastewater treatment in an integrated microbial electrolysis cell - Nitrification system. Electrochimica Acta, 2018, 281, 266-273.	2.6	13
99	Triclosan Removal in Microbial Fuel Cell: The Contribution of Adsorption and Bioelectricity Generation. Energies, 2020, 13, 761.	1.6	13
100	Effects of nanoplastics on microalgae and their trophic transfer along the food chain: recent advances and perspectives. Environmental Sciences: Processes and Impacts, 2021, 23, 1873-1883.	1.7	13
101	Magnetic Cathode Stimulates Extracellular Electron Transfer in Bioelectrochemical Systems. ACS Sustainable Chemistry and Engineering, 2019, 7, 15012-15018.	3.2	12
102	Innovative air-cathode bioelectrochemical sensor for monitoring of total volatile fatty acids during anaerobic digestion. Chemosphere, 2021, 273, 129660.	4.2	12
103	Technological progress and readiness level of microbial electrosynthesis and electrofermentation for carbon dioxide and organic wastes valorization. Current Opinion in Green and Sustainable Chemistry, 2022, 35, 100605.	3.2	12
104	Self-sustained ammonium recovery from wastewater and upcycling for hydrogen-oxidizing bacteria-based power-to-protein conversion. Bioresource Technology, 2022, 344, 126271.	4.8	11
105	Beyond the farm: Making edible protein from CO2 via hybrid bioinorganic electrosynthesis. One Earth, 2021, 4, 868-878.	3.6	10
106	Biogas upgrading and valorization to single-cell protein in a bioinorganic electrosynthesis system. Chemical Engineering Journal, 2021, 426, 131837.	6.6	10
107	Cost-efficient microbial electrosynthesis of hydrogen peroxide on a facile-prepared floating electrode by entrapping oxygen. Bioresource Technology, 2021, 342, 125995.	4.8	9
108	When microbial electrochemistry meets UV: The applicability to high-strength real pharmaceutical industry wastewater. Journal of Hazardous Materials, 2022, 423, 127151.	6.5	9

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109	Nitrogen and phosphorous recycling from human urine by household electrochemical fixed bed in sparsely populated regions. Water Research, 2022, 218, 118467.	5.3	9
110	Efficient recovery of dissolved Fe(II) from near neutral pH Fenton via microbial electrolysis. Journal of Hazardous Materials, 2022, 436, 129196.	6.5	9
111	A novel persulfate-photo-bioelectrochemical hybrid system promoting the degradation of refractory micropollutants at neutral pH. Journal of Hazardous Materials, 2021, 416, 125905.	6.5	8
112	Activated sludge diffusion for efficient simultaneous treatment of municipal wastewater and odor in a membrane bioreactor. Chemical Engineering Journal, 2021, 415, 128765.	6.6	7
113	Microbial conversion of syngas to single cell protein: The role of carbon monoxide. Chemical Engineering Journal, 2022, 450, 138041.	6.6	7
114	Energy-harvesting bio-electro-dehalogenation for sustainable wastewater treatment. Electrochimica Acta, 2018, 290, 38-45.	2.6	6
115	Elimination of recalcitrant micropollutants by medium pressure UV-catalyzed bioelectrochemical advanced oxidation process: Influencing factors, transformation pathway and toxicity assessment. Science of the Total Environment, 2022, 828, 154543.	3.9	6
116	Electroactive biofilm-based sensor for volatile fatty acids monitoring: A review. Chemical Engineering Journal, 2022, 449, 137833.	6.6	6
117	BioEnergy and BioChemicals Production from Biomass and Residual Resources. Energies, 2018, 11, 2125.	1.6	5
118	Synergistic effect for efficient oxidization of refractory organics with high chroma by an innovative persulfate assisted microbial electrolysis ultraviolet cell. Chemical Engineering Journal, 2021, 419, 129477.	6.6	5
119	Extracellular electron transfer in electroactive anaerobic granular sludge mediated by the phenothiazine derivative. Journal of Power Sources, 2022, 527, 231212.	4.0	5
120	Electrifying anaerobic granular sludge for enhanced waste anaerobic digestion and biogas production. Separation and Purification Technology, 2022, 295, 121300.	3.9	4
121	Electricity generation in microbial fuel cells: Using humic acids as a mediator. Journal of Biotechnology, 2008, 136, S474-S475.	1.9	0