Fang Zhang

List of Publications by Year
in descending order

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111 papers	5,113 citations	76326 40 h-index	95266 68 g-index
113 all docs	113 docs citations	113 times ranked	4896 citing authors

#	Article	IF	Citations
1	Power generation using an activated carbon and metal mesh cathode in a microbial fuel cell. Electrochemistry Communications, 2009, 11, 2177-2179.	4.7	358
2	Long-term performance of activated carbon air cathodes with different diffusion layer porosities in microbial fuel cells. Biosensors and Bioelectronics, 2011, 30, 49-55.	10.1	255
3	Emerging electrochemical and membrane-based systems to convert low-grade heat to electricity. Energy and Environmental Science, 2018, 11, 276-285.	30.8	172
4	A thermally regenerative ammonia-based battery for efficient harvesting of low-grade thermal energy as electrical power. Energy and Environmental Science, 2015, 8, 343-349.	30.8	165
5	Microbial Fuel Cell Cathodes With Poly(dimethylsiloxane) Diffusion Layers Constructed around Stainless Steel Mesh Current Collectors. Environmental Science & Technology, 2010, 44, 1490-1495.	10.0	155
6	Single-Step Fabrication Using a Phase Inversion Method of Poly(vinylidene fluoride) (PVDF) Activated Carbon Air Cathodes for Microbial Fuel Cells. Environmental Science and Technology Letters, 2014, 1, 416-420.	8.7	145
7	Longâ€Term Performance of Chemically and Physically Modified Activated Carbons in Air Cathodes of Microbial Fuel Cells. ChemElectroChem, 2014, 1, 1859-1866.	3.4	143
8	One-Pot Hydrothermal Synthesis of Carbon Dots with Efficient Up- and Down-Converted Photoluminescence for the Sensitive Detection of Morin in a Dual-Readout Assay. Langmuir, 2017, 33, 1043-1050.	3.5	140
9	Carbon Black Oxidized by Air Calcination for Enhanced H₂O₂ Generation and Effective Organics Degradation. ACS Applied Materials & Interfaces, 2019, 11, 27846-27853.	8.0	106
10	Roles of bacterial community in the transformation of dissolved organic matter for the stability and safety of material during sludge composting. Bioresource Technology, 2018, 267, 378-385.	9.6	104
11	Oxygen-Reducing Biocathodes Operating with Passive Oxygen Transfer in Microbial Fuel Cells. Environmental Science & Technology, 2013, 47, 2085-2091.	10.0	99
12	Oneâ€Step Exfoliation and Hydroxylation of Boron Nitride Nanosheets with Enhanced Optical Limiting Performance. Advanced Optical Materials, 2016, 4, 141-146.	7.3	99
13	Performance of two different types of anodes in membrane electrode assembly microbial fuel cells for power generation from domestic wastewater. Journal of Power Sources, 2011, 196, 8293-8300.	7.8	97
14	A complete route for biodegradation of potentially carcinogenic cyanotoxin microcystin-LR in a novel indigenous bacterium. Water Research, 2020, 174, 115638.	11.3	97
15	Use of Pyrolyzed Iron Ethylenediaminetetraacetic Acid Modified Activated Carbon as Airâ€“Cathode Catalyst in Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2013, 5, 7862-7866.	8.0	93
16	Measurement and Modeling of Delays in Wide-Area Closed-Loop Control Systems. IEEE Transactions on Power Systems, 2015, 30, 2426-2433.	6.5	91
17	Mesh optimization for microbial fuel cell cathodes constructed around stainless steel mesh current collectors. Journal of Power Sources, 2011, 196, 1097-1102.	7.8	89
18	Enhancing Lowâ€Grade Thermal Energy Recovery in a Thermally Regenerative Ammonia Battery Using Elevated Temperatures. ChemSusChem, 2015, 8, 1043-1048.	6.8	84

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19	Methane Production in Microbial Reverse-Electrodialysis Methanogenesis Cells (MRMCs) Using Thermolytic Solutions. Environmental Science & Technology, 2014, 48, 8911-8918.	10.0	76
20	Different electrode configurations to optimize performance of multi-electrode microbial fuel cells for generating power or treating domestic wastewater. Journal of Power Sources, 2014, 249, 440-445.	7.8	74
21	Impact of Ohmic Resistance on Measured Electrode Potentials and Maximum Power Production in Microbial Fuel Cells. Environmental Science & Technology, 2018, 52, 8977-8985.	10.0	73
22	Novel anti-flooding poly(dimethylsiloxane) (PDMS) catalyst binder for microbial fuel cell cathodes. Journal of Power Sources, 2012, 218, 100-105.	7.8	70
23	Climate finance policy in practice: a review of the evidence. Climate Policy, 2021, 21, 529-545.	5.1	70
24	Enhanced degradation of ibuprofen by heterogeneous electro-Fenton at circumneutral pH. Chemosphere, 2018, 209, 998-1006.	8.2	68
25	Removal of copper from water using a thermally regenerative electrodeposition battery. Journal of Hazardous Materials, 2017, 322, 551-556.	12.4	67
26	Evaluation and Exploration of Favorable QTL Alleles for Salt Stress Related Traits in Cotton Cultivars (G. hirsutum L.). PLoS ONE, 2016, 11, e0151076.	2.5	67
27	Intermittent contact of fluidized anode particles containing exoelectrogenic biofilms for continuous power generation in microbial fuel cells. Journal of Power Sources, 2014, 261, 278-284.	7.8	62
28	Reference and counter electrode positions affect electrochemical characterization of bioanodes in different bioelectrochemical systems. Biotechnology and Bioengineering, 2014, 111, 1931-1939.	3.3	61
29	Improving startup performance with carbon mesh anodes in separator electrode assembly microbial fuel cells. Bioresource Technology, 2013, 133, 74-81.	9.6	58
30	Treating refinery wastewaters in microbial fuel cells using separator electrode assembly or spaced electrode configurations. Bioresource Technology, 2014, 152, 46-52.	9.6	58
31	Patterned ion exchange membranes for improved power production in microbial reverse-electrodialysis cells. Journal of Power Sources, 2014, 271, 437-443.	7.8	58
32	Application of a Real-Time Data Compression and Adapted Protocol Technique for WAMS. IEEE Transactions on Power Systems, 2015, 30, 653-662.	6.5	56
33	A bimetallic thermally regenerative ammonia-based battery for high power density and efficiently harvesting low-grade thermal energy. Journal of Materials Chemistry A, 2019, 7, 5991-6000.	10.3	56
34	Facile Preparation of Lignin-Based Underwater Adhesives with Improved Performances. ACS Sustainable Chemistry and Engineering, 2019, 7, 4508-4514.	6.7	51
35	Optimization of membrane stack configuration for efficient hydrogen production in microbial reverse-electrodialysis electrolysis cells coupled with thermolytic solutions. Bioresource Technology, 2013, 140, 399-405.	9.6	50
36	A three chamber bioelectrochemical system appropriate for in-situ remediation of nitrate-contaminated groundwater and its reaction mechanisms. Water Research, 2019, 158, 401-410.	11.3	48

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37	China's soil and groundwater management challenges: Lessons from the UK's experience and opportunities for China. Environment International, 2016, 91, 196-200.	10.0	47
38	Energy-Efficient Oxidation and Removal of Arsenite from Groundwater Using Air-Cathode Iron Electrocoagulation. Environmental Science and Technology Letters, 2017, 4, 71-75.	8.7	46
39	Janus Electrode of Asymmetric Wettability for H₂O₂ Production with Highly Efficient O₂ Utilization. ACS Applied Energy Materials, 2020, 3, 705-714.	5.1	44
40	A microbial fluidized electrode electrolysis cell (MFEEC) for enhanced hydrogen production. Journal of Power Sources, 2014, 271, 530-533.	7.8	42
41	A â€œTrojan Horseâ€•Camouflage Strategy for Highâ€Performance Cellulose Paper and Separators. Advanced Functional Materials, 2020, 30, 2002169.	14.9	42
42	Air humidity and water pressure effects on the performance of air-cathode microbial fuel cell cathodes. Journal of Power Sources, 2014, 247, 655-659.	7.8	41
43	Current density reversibly alters metabolic spatial structure of exoelectrogenic anode biofilms. Journal of Power Sources, 2017, 356, 566-571.	7.8	40
44	High specific surface area porous graphene grids carbon as anode materials for sodium ion batteries. Journal of Energy Chemistry, 2019, 31, 159-166.	12.9	40
45	Electrochemical analysis of separators used in single-chamber, air-cathode microbial fuel cells. Electrochimica Acta, 2013, 89, 45-51.	5.2	39
46	Soil organic carbon stability under natural and anthropogenic-induced perturbations. Earth-Science Reviews, 2020, 205, 103199.	9.1	39
47	Highly selective fluorescent visual detection of perfluorooctane sulfonate via blue fluorescent carbon dots and berberine chloride hydrate. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 207, 262-269.	3.9	37
48	Electrochemical study of multi-electrode microbial fuel cells under fed-batch and continuous flow conditions. Journal of Power Sources, 2014, 257, 454-460.	7.8	36
49	Energy Internet: Concept and practice exploration. , 2017, , .		36
50	A Cu Ni bimetallic cathode with nanostructured copper array for enhanced hydrodechlorination of trichloroethylene (TCE). Science of the Total Environment, 2018, 635, 1417-1425.	8.0	36
51	Power generation using carbon mesh cathodes with different diffusion layers in microbial fuel cells. Journal of Power Sources, 2011, 196, 9317-9321.	7.8	35
52	Controllable Design and Preparation of Hollow Carbon-Based Nanotubes for Asymmetric Supercapacitors and Capacitive Deionization. ACS Applied Materials & Interfaces, 2021, 13, 21217-21230.	8.0	35
53	Minimal RED Cell Pairs Markedly Improve Electrode Kinetics and Power Production in Microbial Reverse Electrodialysis Cells. Environmental Science & Technology, 2013, 47, 14518-14524.	10.0	33
54	A Three-electrode Electro-Fenton System Supplied by Self-generated Oxygen with Automatic pH-regulation for Groundwater Remediation. Electrochimica Acta, 2017, 250, 42-48.	5.2	33

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55	Microbial functional gene patterns related to soil greenhouse gas emissions in oil contaminated areas. Science of the Total Environment, 2018, 628-629, 94-102.	8.0	33
56	Scaling up floating air cathodes for energy-efficient H2O2 generation and electrochemical advanced oxidation processes. Electrochimica Acta, 2019, 299, 273-280.	5.2	33
57	Preparation and characterization of colorful graphene oxide papers and flexible Nâ€doping graphene papers for supercapacitor and capacitive deionization. , 2020, 2, 656-674.		32
58	Different response of bacterial community to the changes of nutrients and pollutants in sediments from an urban river network. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	6.0	32
59	Poly(vinyl alcohol) separators improve the coulombic efficiency of activated carbon cathodes in microbial fuel cells. Electrochemistry Communications, 2013, 34, 150-152.	4.7	31
60	An Feâ€“Mn binary oxide (FMBO) modified electrode for effective electrochemical advanced oxidation at neutral pH. Electrochimica Acta, 2016, 194, 104-109.	5.2	31
61	Poly(vinylidene fluoride-co-hexafluoropropylene) phase inversion coating as a diffusion layer to enhance the cathode performance in microbial fuel cells. Journal of Power Sources, 2014, 269, 379-384.	7.8	29
62	Removal of refractory organics and heavy metals in landfill leachate concentrate by peroxi-coagulation process. Journal of Environmental Sciences, 2022, 116, 43-51.	6.1	27
63	Highly sensitive and selective detection of perfluorooctane sulfonate based on the Janus Green B resonance light scattering method. Analytical Methods, 2016, 8, 8042-8048.	2.7	26
64	Importin-7 mediates memory consolidation through regulation of nuclear translocation of training-activated MAPK in Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3072-3077.	7.1	24
65	Quercetin Protects Ethanol-Induced Hepatocyte Pyroptosis via Scavenging Mitochondrial ROS and Promoting PGC-1Î±-Regulated Mitochondrial Homeostasis in L02 Cells. Oxidative Medicine and Cellular Longevity, 2022, 2022, 1-15.	4.0	23
66	A cellular automata model for simulating the evolution of positiveâ€“negative terrains in a small loess watershed. International Journal of Geographical Information Science, 2013, 27, 1349-1363.	4.8	22
67	Tradeoff between groundwater arsenite removal efficiency and current production in the self-powered air cathode electrocoagulation with different oxygen reduction pathways. Journal of Hazardous Materials, 2018, 357, 138-145.	12.4	21
68	A Three-dimensional Floating Air Cathode with Dual Oxygen Supplies for Energy-efficient Production of Hydrogen Peroxide. Scientific Reports, 2019, 9, 1817.	3.3	21
69	Preparation of magnetic molecularly imprinted polymers for the rapid and selective separation and enrichment of perfluorooctane sulfonate. Journal of Separation Science, 2017, 40, 2819-2826.	2.5	20
70	Occurrence and spatial distribution of perfluorinated compounds in groundwater receiving reclaimed water through river bank infiltration. Chemosphere, 2018, 211, 1203-1211.	8.2	19
71	A mobile, modular and rapidly-acting treatment system for optimizing and improving the removal of non-aqueous phase liquids (NAPLs) in groundwater. Journal of Hazardous Materials, 2018, 360, 639-650.	12.4	19
72	How do fungal communities and their interaction with bacterial communities influence dissolved organic matter on the stability and safety of sludge compost?. Environmental Science and Pollution Research, 2019, 26, 4141-4146.	5.3	19

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73	Enhancing DNAPL removal from low permeability zone using electrical resistance heating with pulsed direct current. Journal of Hazardous Materials, 2021, 413, 125455.	12.4	19
74	The use of cloth fabric diffusion layers for scalable microbial fuel cells. Biochemical Engineering Journal, 2013, 73, 49-52.	3.6	18
75	From fossil to low carbon: The evolution of global public energy innovation. Wiley Interdisciplinary Reviews: Climate Change, 2021, 12, e734.	8.1	18
76	China released the Action Plan on Prevention and Control of Soil Pollution. Frontiers of Environmental Science and Engineering, 2016, 10, 1.	6.0	17
77	A simple and highly sensitive assay of perfluorooctanoic acid based on resonance light scattering technique. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 159, 7-12.	3.9	16
78	Onsite quantifying electron donating capacity of dissolved organic matter. Science of the Total Environment, 2019, 662, 57-64.	8.0	16
79	The transcription factor AtGLK1 acts upstream of MYBL2 to genetically regulate sucrose-induced anthocyanin biosynthesis in Arabidopsis. BMC Plant Biology, 2021, 21, 242.	3.6	16
80	A Robust Salty Water Adhesive by Counterion Exchange Induced Coacervate. Macromolecular Rapid Communications, 2019, 40, e1800758.	3.9	14
81	Indirect effect of nutrient accumulation intensified toxicity risk of metals in sediments from urban river network. Environmental Science and Pollution Research, 2020, 27, 6193-6204.	5.3	14
82	Increased soil methane emissions and methanogenesis in oil contaminated areas. Land Degradation and Development, 2018, 29, 563-571.	3.9	13
83	Disturbance, carbon physicochemical structure, and soil microenvironment codetermine soil organic carbon stability in oilfields. Environment International, 2020, 135, 105390.	10.0	13
84	Low permeability zone remediation of trichloroethene via coupling electrokinetic migration with in situ electrochemical hydrodechlorination. Chemosphere, 2020, 250, 126209.	8.2	13
85	One-pot hydrothermal synthesis of Si-doped carbon quantum dots with up-conversion fluorescence as fluorescent probes for dual-readout detection of berberine hydrochloride. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 275, 121139.	3.9	13
86	Genotypic variation for potassium efficiency in wild and domesticated watermelons under ample and limited potassium supply. Journal of Plant Nutrition and Soil Science, 2013, 176, 466-473.	1.9	12
87	Prediction Based Hierarchical Compensation for Delays in Wide-Area Control Systems. IEEE Transactions on Smart Grid, 2018, 9, 3897-3899.	9.0	11
88	Fabrication of a 1D Mn₃O₄ nano-rod electrode for aqueous asymmetric supercapacitors and capacitive deionization. Inorganic Chemistry Frontiers, 2019, 6, 355-365.	6.0	11
89	Varieties of publicâ€“private co-governance on cybersecurity within the digital trade: implications from Huaweiâ€™s 5G. Journal of Chinese Governance, 2022, 7, 81-110.	1.7	11
90	Response and contribution of bacterial and archaeal communities to eutrophication in urban river sediments. Environmental Pollution, 2022, 306, 119397.	7.5	11

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91	Preparation and properties of antioxidative BaOâ€“B2O3â€“SiO2 glass-coated Cu powder for copper conductive film on LTCC substrate. Journal of Materials Science: Materials in Electronics, 2018, 29, 130-137.	2.2	8
92	Wavelet-based data compression for wide-area measurement data of oscillations. Journal of Modern Power Systems and Clean Energy, 2018, 6, 1128-1140.	5.4	8
93	The policy coordinator role of national development banks in scaling climate finance: Evidence from the renewable energy sector. Climate Policy, 2022, 22, 754-769.	5.1	8
94	Complete Goss Secondary Recrystallization by Control of the Grain Size and Texture of Primary Recrystallization in Grain-Oriented Silicon Steel. Materials, 2021, 14, 5383.	2.9	7
95	Optical Limiting of Carboxylâ€“Graphene Oxide. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 200-205.	2.9	6
96	Role of Humic Acid Chemical Structure Derived from Different Biomass Feedstocks on Fe(III) Bioreduction Activity: Implication for Sustainable Use of Bioresources. Catalysts, 2019, 9, 450.	3.5	6
97	Effect of current density on groundwater arsenite removal performance using air cathode electrocoagulation. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	6.0	6
98	Rapid Secondary Recrystallization of the Goss Texture in Fe81Ga19 Sheets Using Nanosized NbC Particles. Materials, 2021, 14, 3818.	2.9	6
99	Occurrence of PFASs and its effect on soil bacteria at a fire-training area using PFOS-restricted aqueous film-forming foams. IScience, 2022, 25, 104084.	4.1	5
100	Internet information applied in the energy internet planning: A review and outlook. , 2017, , .		4
101	Estimation and measurement of closed-loop delays in the actual WACS of Guizhou Power Grid. , 2016, , .		3
102	A highly sensitive dual-readout assay for perfluorinated compounds based CdTe quantum dots. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 269, 120753.	3.9	3
103	Construction of a Self-Powered System for Simultaneous In Situ Remediation of Nitrate and Cr(VI) Contaminated Synthetic Groundwater and River Sediment. Sustainability, 2018, 10, 2806.	3.2	2
104	Tardigrade inspired polyelectrolyte complexation and functional materials. Journal of Materials Chemistry A, 2019, 7, 27450-27457.	10.3	2
105	Concept and analysis of discrete energy internet. , 2017, , .		1
106	Modeling and analysis of secondary controlled virtual synchronous generator with dynamic droop for microgrid. , 2017, , .		1
107	Image Features of Face Recognition and Matching Techniques Research Based on Machine Learning. , 2018, , .		1
108	Classification and Recognition Model of Water Saturation Level of Rock Based on Near-Infrared Spectroscopy. Geotechnical Testing Journal, 2021, 44, 564-583.	1.0	1

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109	Characterization and Calculation of the Dynamic Recrystallization Texture in Fe-3.0 Wt.% Si Alloy. Materials, 2022, 15, 517.	2.9	1
110	Controllable synthesis of Na, K-based titanium oxide nanoribbons as functional electrodes for supercapacitors and separation of aqueous ions. New Journal of Chemistry, 2022, 46, 5100-5110.	2.8	0
111	Texture Evolution by Strain-Induced Boundary Migration during Hot Deformation of Fe-3.0 wt.% Si Alloy: Experiment and Modeling. Metals, 2022, 12, 360.	2.3	0