

Hong Liu

List of Publications by Year in descending order

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85
papers

9,512
citations

76326

40
h-index

56724

83
g-index

85
all docs

85
docs citations

85
times ranked

8237
citing authors

#	ARTICLE	IF	CITATIONS
1	Electricity Generation Using an Air-Cathode Single Chamber Microbial Fuel Cell in the Presence and Absence of a Proton Exchange Membrane. <i>Environmental Science & Technology</i> , 2004, 38, 4040-4046.	10.0	1,708
2	Increased performance of single-chamber microbial fuel cells using an improved cathode structure. <i>Electrochemistry Communications</i> , 2006, 8, 489-494.	4.7	978
3	Power Generation in Fed-Batch Microbial Fuel Cells as a Function of Ionic Strength, Temperature, and Reactor Configuration. <i>Environmental Science & Technology</i> , 2005, 39, 5488-5493.	10.0	830
4	Quantification of the Internal Resistance Distribution of Microbial Fuel Cells. <i>Environmental Science & Technology</i> , 2008, 42, 8101-8107.	10.0	536
5	Ag ₂ O/TiO ₂ Nanobelts Heterostructure with Enhanced Ultraviolet and Visible Photocatalytic Activity. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 2385-2392.	8.0	489
6	Sustainable Power Generation in Microbial Fuel Cells Using Bicarbonate Buffer and Proton Transfer Mechanisms. <i>Environmental Science & Technology</i> , 2007, 41, 8154-8158.	10.0	322
7	An overview of advanced methods for the characterization of oxygen vacancies in materials. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 116, 102-108.	11.4	315
8	Novel fluorinated Bi ₂ MoO ₆ nanocrystals for efficient photocatalytic removal of water organic pollutants under different light source illumination. <i>Applied Catalysis B: Environmental</i> , 2017, 209, 1-11.	20.2	260
9	Heterojunction Architecture of N-Doped WO ₃ Nanobundles with Ce ₂ S ₃ Nanodots Hybridized on a Carbon Textile Enables a Highly Efficient Flexible Photocatalyst. <i>Advanced Functional Materials</i> , 2019, 29, 1903490.	14.9	223
10	Constructing Fe-MOF-Derived Z-Scheme Photocatalysts with Enhanced Charge Transport: Nanointerface and Carbon Sheath Synergistic Effect. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25494-25502.	8.0	217
11	Design and fabrication of microsphere photocatalysts for environmental purification and energy conversion. <i>Chemical Engineering Journal</i> , 2016, 287, 117-129.	12.7	180
12	Preparation and characterization of a novel KOH activated graphite felt cathode for the electro-Fenton process. <i>Applied Catalysis B: Environmental</i> , 2015, 165, 360-368.	20.2	170
13	Cerium-based hybrid nanorods for synergetic photo-thermocatalytic degradation of organic pollutants. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24740-24747.	10.3	164
14	Efficient Charges Separation Using Advanced BiOI-Based Hollow Spheres Decorated with Palladium and Manganese Dioxide Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 2751-2757.	6.7	157
15	A Novel Electro-Fenton Process for Water Treatment: Reaction-controlled pH Adjustment and Performance Assessment. <i>Environmental Science & Technology</i> , 2007, 41, 2937-2942.	10.0	154
16	Nano-TiO ₂ enhances the toxicity of copper in natural water to <i>Daphnia magna</i> . <i>Environmental Pollution</i> , 2011, 159, 729-734.	7.5	151
17	Bi ₃ TaO ₇ /Ti ₃ C ₂ heterojunctions for enhanced photocatalytic removal of water-borne contaminants. <i>Environmental Research</i> , 2020, 185, 109409.	7.5	151
18	Sustainable Energy Recovery in Wastewater Treatment by Microbial Fuel Cells: Stable Power Generation with Nitrogen-doped Graphene Cathode. <i>Environmental Science & Technology</i> , 2013, 47, 13889-13895.	10.0	146

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19	Preparation and characterization of metal-organic framework MIL-101(Cr)-coated solid-phase microextraction fiber. <i>Analytica Chimica Acta</i> , 2015, 853, 303-310.	5.4	142
20	Complete nitrogen removal and electricity production in Thauera-dominated air-cathode single chambered microbial fuel cell. <i>Chemical Engineering Journal</i> , 2019, 356, 506-515.	12.7	142
21	Enhancement of the visible light activity and stability of Ag ₂ CO ₃ by formation of AgI/Ag ₂ CO ₃ heterojunction. <i>Applied Surface Science</i> , 2014, 319, 312-318.	6.1	90
22	Effect of nitrate on the performance of single chamber air cathode microbial fuel cells. <i>Water Research</i> , 2008, 42, 4743-4750.	11.3	85
23	Design and fabrication of heterojunction photocatalysts for energy conversion and pollutant degradation. <i>Chinese Journal of Catalysis</i> , 2014, 35, 1609-1618.	14.0	80
24	In situ growth of IRMOF-3 combined with ionic liquids to prepare solid-phase microextraction fibers. <i>Analytica Chimica Acta</i> , 2014, 829, 22-27.	5.4	80
25	Electron efficiency of zero-valent iron for groundwater remediation and wastewater treatment. <i>Chemical Engineering Journal</i> , 2013, 215-216, 90-95.	12.7	75
26	A visible-light-driven core-shell like Ag ₂ S@Ag ₂ CO ₃ composite photocatalyst with high performance in pollutants degradation. <i>Chemosphere</i> , 2016, 157, 250-261.	8.2	73
27	Increased sustainable electricity generation in up-flow air-cathode microbial fuel cells. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1157-1160.	10.1	65
28	Effect of external resistance on the sensitivity of microbial fuel cell biosensor for detection of different types of pollutants. <i>Bioelectrochemistry</i> , 2019, 125, 71-78.	4.6	64
29	Homogeneous deposition-assisted synthesis of iron-nitrogen composites on graphene as highly efficient non-precious metal electrocatalysts for microbial fuel cell power generation. <i>Journal of Power Sources</i> , 2015, 278, 773-781.	7.8	59
30	Optimizing the performance of organics and nutrient removal in constructed wetland-microbial fuel cell systems. <i>Science of the Total Environment</i> , 2019, 653, 860-871.	8.0	59
31	Heterotrophic anodic denitrification improves carbon removal and electricity recovery efficiency in microbial fuel cells. <i>Chemical Engineering Journal</i> , 2019, 370, 527-535.	12.7	56
32	Overview of recent developments of resource recovery from wastewater via electrochemistry-based technologies. <i>Science of the Total Environment</i> , 2021, 757, 143901.	8.0	55
33	Dimethyl phthalate degradation at novel and efficient electro-Fenton cathode. <i>Applied Catalysis B: Environmental</i> , 2014, 156-157, 1-7.	20.2	47
34	Performance and microbial community of a novel non-aeration-based up-flow bioelectrochemical filter (UBEF) treating real domestic wastewater. <i>Chemical Engineering Journal</i> , 2018, 348, 271-280.	12.7	47
35	Impact of heterotrophic denitrification on BOD detection of the nitrate-containing wastewater using microbial fuel cell-based biosensors. <i>Chemical Engineering Journal</i> , 2020, 394, 125042.	12.7	47
36	An overview of bromate formation in chemical oxidation processes: Occurrence, mechanism, influencing factors, risk assessment, and control strategies. <i>Chemosphere</i> , 2019, 237, 124521.	8.2	44

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37	Titanium dioxide as photocatalyst on porous nickel: Adsorption and the photocatalytic degradation of sulfosalicylic acid. <i>Chemosphere</i> , 1999, 38, 283-292.	8.2	43
38	Binary-phase TiO ₂ modified Bi ₂ MoO ₆ crystal for effective removal of antibiotics under visible light illumination. <i>Materials Research Bulletin</i> , 2019, 112, 336-345.	5.2	43
39	One-pot synthesis of BiOCl nanosheets with dual functional carbon for ultra-highly efficient photocatalytic degradation of RhB. <i>Environmental Research</i> , 2020, 182, 109077.	7.5	43
40	Enhancement of Fenton degradation by catechol in a wide initial pH range. <i>Separation and Purification Technology</i> , 2016, 169, 202-209.	7.9	42
41	Applications of shell-isolated nanoparticles in surface-enhanced Raman spectroscopy and fluorescence. <i>TrAC - Trends in Analytical Chemistry</i> , 2015, 66, 103-117.	11.4	41
42	Evaluation of an intermittent-aeration constructed wetland for removing residual organics and nutrients from secondary effluent: Performance and microbial analysis. <i>Bioresource Technology</i> , 2021, 329, 124897.	9.6	41
43	Comparative analysis of microbial fuel cell based biosensors developed with a mixed culture and <i>Shewanella loihica</i> PV-4 and underlying biological mechanism. <i>Bioresource Technology</i> , 2018, 265, 415-421.	9.6	39
44	Fenton-like degradation of dimethyl phthalate enhanced by quinone species. <i>Journal of Hazardous Materials</i> , 2020, 382, 121007.	12.4	39
45	Enhanced nitrate reduction reaction via efficient intermediate nitrite conversion on tunable CuxNiy/NC electrocatalysts. <i>Journal of Hazardous Materials</i> , 2022, 421, 126628.	12.4	39
46	Boosting nitrate electroreduction to ammonia via in situ generated stacking faults in oxide-derived copper. <i>Chemical Engineering Journal</i> , 2022, 446, 137341.	12.7	39
47	Phosphorous removal and high-purity struvite recovery from hydrolyzed urine with spontaneous electricity production in Mg-air fuel cell. <i>Chemical Engineering Journal</i> , 2020, 391, 123517.	12.7	38
48	Substrate salinity: A critical factor regulating the performance of microbial fuel cells, a review. <i>Science of the Total Environment</i> , 2021, 763, 143021.	8.0	37
49	Electron-deficient Cu ^{II+} stabilized by interfacial Cu ^{II} -O-Al bonding for accelerating electrocatalytic nitrate conversion. <i>Chemical Engineering Journal</i> , 2022, 435, 134853.	12.7	37
50	Aqueous Cr(VI) reduction by electrodeposited zero-valent iron at neutral pH: Acceleration by organic matters. <i>Journal of Hazardous Materials</i> , 2009, 163, 370-375.	12.4	36
51	Enhancing the Electricity Generation and Nitrate Removal of Microbial Fuel Cells With a Novel Denitrifying Exoelectrogenic Strain EB-1. <i>Frontiers in Microbiology</i> , 2018, 9, 2633.	3.5	34
52	A highly-ordered porous carbon material based cathode for energy-efficient electro-Fenton process. <i>Separation and Purification Technology</i> , 2013, 106, 32-37.	7.9	32
53	Assessing the electron transfer and oxygen mass transfer of the oxygen reduction reaction using a new electrode kinetic equation. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 16159-16166.	2.8	29
54	Reaction kinetics of photocatalytic degradation of sulfosalicylic acid using TiO ₂ microspheres. <i>Journal of Hazardous Materials</i> , 2009, 163, 1101-1106.	12.4	25

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55	One-pot degradation of urine wastewater by combining simultaneous halophilic nitrification and aerobic denitrification in air-exposed biocathode microbial fuel cells (AEB-MFCs). <i>Science of the Total Environment</i> , 2020, 748, 141379.	8.0	24
56	Bifunctional cathode using a biofilm and Pt/C catalyst for simultaneous electricity generation and nitrification in microbial fuel cells. <i>Bioresource Technology</i> , 2020, 306, 123120.	9.6	24
57	Development of a trickle bed reactor of electro-Fenton process for wastewater treatment. <i>Journal of Hazardous Materials</i> , 2013, 261, 570-576.	12.4	23
58	Enhancing the power performance of sediment microbial fuel cells by novel strategies: Overlying water flow and hydraulic-driven cathode rotating. <i>Science of the Total Environment</i> , 2019, 678, 533-542.	8.0	22
59	Rapid detection of biodegradable organic matter in polluted water with microbial fuel cell sensor: Method of partial coulombic yield. <i>Bioelectrochemistry</i> , 2020, 133, 107488.	4.6	22
60	The pH diagram of interfacial reactions involving H^+ and OH^- . <i>Journal of Energy Chemistry</i> , 2020, 50, 339-343.	12.9	21
61	Quantitatively assessing the role played by carbonate radicals in bromate formation by ozonation. <i>Journal of Hazardous Materials</i> , 2019, 363, 428-438.	12.4	20
62	Unveiling organic loading shock-resistant mechanism in a pilot-scale moving bed biofilm reactor-assisted dual-anaerobic-anoxic/oxic system for effective municipal wastewater treatment. <i>Bioresource Technology</i> , 2022, 347, 126339.	9.6	20
63	Comparative activity of TiO_2 microspheres and P25 powder for organic degradation: Implicative importance of structural defects and organic adsorption. <i>Applied Surface Science</i> , 2014, 319, 2-7.	6.1	19
64	Quantifying biodegradable organic matter in polluted water on the basis of coulombic yield. <i>Talanta</i> , 2018, 176, 485-491.	5.5	19
65	A novel design for an ozone contact reactor and its performance on hydrodynamics, disinfection, bromate formation and oxidation. <i>Chemical Engineering Journal</i> , 2017, 328, 207-214.	12.7	18
66	Enhancing sensitivity of microbial fuel cell sensors for low concentration biodegradable organic matter detection: Regulation of substrate concentration, anode area and external resistance. <i>Journal of Environmental Sciences</i> , 2021, 101, 227-235.	6.1	17
67	Recent progress on the recovery of valuable resources from source-separated urine on-site using electrochemical technologies: A review. <i>Chemical Engineering Journal</i> , 2022, 442, 136200.	12.7	17
68	Hibernations of electroactive bacteria provide insights into the flexible and robust BOD detection using microbial fuel cell-based biosensors. <i>Science of the Total Environment</i> , 2021, 753, 142244.	8.0	16
69	Improved oxygen reduction reaction activity of three-dimensional porous N-doped graphene from a soft-template synthesis strategy in microbial fuel cells. <i>RSC Advances</i> , 2016, 6, 105211-105221.	3.6	15
70	Novel Porous Nitrogen Doped Graphene/Carbon Black Composites as Efficient Oxygen Reduction Reaction Electrocatalyst for Power Generation in Microbial Fuel Cell. <i>Nanomaterials</i> , 2019, 9, 836.	4.1	14
71	Validation of H_2O_2 -mediated pathway model for elucidating oxygen reduction mechanism: Experimental evidences and theoretical simulations. <i>Electrochimica Acta</i> , 2019, 313, 378-388.	5.2	13
72	Correlations between soil geochemical properties and Fe(III) reduction suggest microbial reducibility of iron in different soils from Southern China. <i>Catena</i> , 2014, 123, 176-187.	5.0	8

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73	Membrane penetration of nitrogen and its effects on nitrogen removal in dual-chambered microbial fuel cells. <i>Chemosphere</i> , 2022, 297, 134038.	8.2	8
74	The preparation and characterization of CaMg(CO ₃) ₂ @Ag ₂ CO ₃ /Ag ₂ S/NCQD nanocomposites and their photocatalytic performance in phenol degradation. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	1.9	7
75	Unveiling the role of gas permeability in air cathodes and performance enhancement by waterproof membrane fabricating method. <i>Journal of Power Sources</i> , 2020, 449, 227570.	7.8	7
76	Derivative-Extremum Analysis Principle for Irreversible Electrode Reactions: Feature Parameter Extractions from Polarization Curves. <i>Journal of Physical Chemistry C</i> , 2020, 124, 1950-1957.	3.1	5
77	Transport Behavior of Engineered Nanosized Photocatalytic Materials in Water. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-13.	2.7	4
78	A Trickle Bed Electrochemical Reactor for Generation of Hydrogen Peroxide and Degradation of an Azo Dye in Water. <i>Journal of Advanced Oxidation Technologies</i> , 2015, 18, .	0.5	4
79	Perchlorate Removal Using a Minimized Dosage of Electrodeposited Zero-Valent Iron. <i>Journal of Environmental Engineering, ASCE</i> , 2015, 141, 04014064.	1.4	2
80	Acid–base transport model depicting the dynamic $\langle \text{pH} \rangle$ response of interfacial reactions. <i>AIChE Journal</i> , 2022, 68, .	3.6	2
81	Alternative assessment of nano-TiO ₂ sedimentation under different conditions based on sedimentation efficiency at quasi-stable state. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	1.9	1
82	Bromate formation during oxidation of bromide-containing water by the CuO catalyzed peroxymonosulfate process. <i>Chinese Chemical Letters</i> , 2022, 33, 4786-4791.	9.0	1
83	Improved Electron Efficiency of Zero-Valent Iron towards Cr(VI) Reduction after Sequestering in Al ₂ O ₃ Microspheres. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 8367.	2.6	1
84	The Role of Denitrifying Bacteria Within the Bioelectrochemical System for Nitrate-Containing Wastewater Treatment. , 2020, , 257-268.		0
85	Derivative-extremum analysis of current-potential curves showing electrochemical kinetics in the full reversibility range. <i>Chinese Chemical Letters</i> , 2023, 34, 107185.	9.0	0