Hong Liu

List of Publications by Year
in descending order

86 papers	15,212 citations	43973 48 h-index	58464 82 g-index
87 all docs	87 docs citations	87 times ranked	7283 citing authors

#	Article	IF	Citations
1	Application of machine learning in anaerobic digestion: Perspectives and challenges. Bioresource Technology, 2022, 345, 126433.	4.8	80
2	Hydrogen production from lignocellulosic hydrolysate in an up-scaled microbial electrolysis cell with stacked bio-electrodes. Bioresource Technology, 2021, 320, 124314.	4.8	28
3	Enhancement of microbiome management by machine learning for biological wastewater treatment. Microbial Biotechnology, 2021, 14, 59-62.	2.0	12
4	Overview of recent developments of resource recovery from wastewater via electrochemistry-based technologies. Science of the Total Environment, 2021, 757, 143901.	3.9	55
5	Performance prediction of ZVI-based anaerobic digestion reactor using machine learning algorithms. Waste Management, 2021, 121, 59-66.	3.7	56
6	Different mechanisms for riboflavin to improve the outward and inward extracellular electron transfer of Shewanella loihica. Electrochemistry Communications, 2021, 124, 106966.	2.3	22
7	Predicting the performance of anaerobic digestion using machine learning algorithms and genomic data. Water Research, 2021, 199, 117182.	5.3	73
8	Scaling-up up-flow microbial electrolysis cells with a compact electrode configuration for continuous hydrogen production. Bioresource Technology, 2021, 331, 125030.	4.8	17
9	Hydrophilic porous materials provide efficient gas-liquid separation to advance hydrogen production in microbial electrolysis cells. Bioresource Technology, 2021, 337, 125352.	4.8	14
10	Microbial Community Predicts Functional Stability of Microbial Fuel Cells. Environmental Science & Technology, 2020, 54, 427-436.	4.6	37
11	Functional photothermal sponges for efficient solar steam generation and accelerated cleaning of viscous crude-oil spill. Solar Energy Materials and Solar Cells, 2020, 204, 110203.	3.0	58
12	Prediction of anaerobic digestion performance and identification of critical operational parameters using machine learning algorithms. Bioresource Technology, 2020, 298, 122495.	4.8	119
13	Accelerated tests for evaluating the air-cathode aging in microbial fuel cells. Bioresource Technology, 2020, 297, 122479.	4.8	4
14	One-pot degradation of urine wastewater by combining simultaneous halophilic nitrification and aerobic denitrification in air-exposed biocathode microbial fuel cells (AEB-MFCs). Science of the Total Environment, 2020, 748, 141379.	3.9	24
15	Impact of heterotrophic denitrification on BOD detection of the nitrate-containing wastewater using microbial fuel cell-based biosensors. Chemical Engineering Journal, 2020, 394, 125042.	6.6	47
16	Breaking the loop: Tackling homoacetogenesis by chloroform to halt hydrogen production-consumption loop in single chamber microbial electrolysis cells. Chemical Engineering Journal, 2020, 389, 124436.	6.6	30
17	Novel trickling microbial fuel cells for electricity generation from wastewater. Chemosphere, 2020, 248, 126058.	4.2	17
18	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. ACS Catalysis, 2019, 9, 8712-8718.	5.5	103

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19	Enhancing the power performance of sediment microbial fuel cells by novel strategies: Overlying water flow and hydraulic-driven cathode rotating. Science of the Total Environment, 2019, 678, 533-542.	3.9	22
20	Heterotrophic anodic denitrification improves carbon removal and electricity recovery efficiency in microbial fuel cells. Chemical Engineering Journal, 2019, 370, 527-535.	6.6	56
21	A facile dopamine-assisted method for the preparation of antibacterial surfaces based on Ag/TiO2 nanoparticles. Applied Surface Science, 2019, 481, 1270-1276.	3.1	19
22	Incorporating microbial community data with machine learning techniques to predict feed substrates in microbial fuel cells. Biosensors and Bioelectronics, 2019, 133, 64-71.	5.3	60
23	Linking internal resistance with design and operation decisions in microbial electrolysis cells. Environment International, 2019, 126, 611-618.	4.8	59
24	Optimizing the performance of organics and nutrient removal in constructed wetlandâ€“microbial fuel cell systems. Science of the Total Environment, 2019, 653, 860-871.	3.9	59
25	Selective inhibition of methanogenesis by acetylene in single chamber microbial electrolysis cells. Bioresource Technology, 2019, 274, 557-560.	4.8	35
26	A clean technology to convert sucrose and lignocellulose in microbial electrochemical cells into electricity and hydrogen. Bioresource Technology Reports, 2019, 5, 331-334.	1.5	26
27	The influence of incorporating microbial fuel cells on greenhouse gas emissions from constructed wetlands. Science of the Total Environment, 2019, 656, 270-279.	3.9	55
28	Investigation of a two-dimensional model on microbial fuel cell with different biofilm porosities and external resistances. Chemical Engineering Journal, 2018, 333, 572-582.	6.6	52
29	Conductive properties of methanogenic biofilms. Bioelectrochemistry, 2018, 119, 220-226.	2.4	12
30	Development of novel polyethylene air-cathode material for microbial fuel cells. Energy, 2018, 155, 763-771.	4.5	13
31	Enhanced redox conductivity and enriched Geobacteraceae of exoelectrogenic biofilms in response to static magnetic field. Applied Microbiology and Biotechnology, 2018, 102, 7611-7621.	1.7	15
32	Revealing the impact of hydrogen production-consumption loop against efficient hydrogen recovery in single chamber microbial electrolysis cells (MECs). International Journal of Hydrogen Energy, 2018, 43, 13064-13071.	3.8	26
33	Influence of enhanced carbon crystallinity of nanoporous graphite on the cathode performance of microbial fuel cells. Carbon, 2017, 115, 271-278.	5.4	50
34	Stay connected: Electrical conductivity of microbial aggregates. Biotechnology Advances, 2017, 35, 669-680.	6.0	33
35	Urea removal coupled with enhanced electricity generation in single-chambered microbial fuel cells. Environmental Science and Pollution Research, 2017, 24, 20401-20408.	2.7	24
36	Predicting Microbial Fuel Cell Biofilm Communities and Bioreactor Performance using Artificial Neural Networks. Environmental Science & Technology, 2017, 51, 10881-10892.	4.6	64

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37	Redox Conductivity of Current-Producing Mixed Species Biofilms. PLoS ONE, 2016, 11, e0155247.	1.1	19
38	Wastewater treatment by Microbial Fuel Cell (MFC) prior irrigation water reuse. Journal of Cleaner Production, 2016, 137, 144-149.	4.6	80
39	Millimeter scale electron conduction through exoelectrogenic mixed species biofilms. FEMS Microbiology Letters, 2016, 363, fnw153.	0.7	13
40	High Performance Activated Carbon/Carbon Cloth Cathodes forÂMicrobial Fuel Cells. Fuel Cells, 2015, 15, 855-861.	1.5	26
41	Performance and stability of different cathode base materials for use in microbial fuel cells. Journal of Power Sources, 2015, 280, 159-165.	4.0	48
42	Can bicarbonate replace phosphate to improve the sustainability of bioelectrochemical systems for H₂production?. RSC Advances, 2015, 5, 27082-27086.	1.7	8
43	Suppression of methanogenesis for hydrogen production in single-chamber microbial electrolysis cells using various antibiotics. Bioresource Technology, 2015, 187, 77-83.	4.8	85
44	Microbial Fuel Cells: From Fundamentals to Wastewater Treatment Applications. , 2015, , 163-189.		0
45	Efficacy of single-chamber microbial fuel cells for removal of cadmium and zinc with simultaneous electricity production. Water Research, 2014, 51, 228-233.	5.3	206
46	Establishing a core microbiome in acetate-fed microbial fuel cells. Applied Microbiology and Biotechnology, 2014, 98, 4187-4196.	1.7	65
47	Olive mill wastewater treatment in single-chamber air-cathode microbial fuel cells. World Journal of Microbiology and Biotechnology, 2014, 30, 1177-1185.	1.7	38
48	Impact of tobramycin on the performance of microbial fuel cell. Microbial Cell Factories, 2014, 13, 91.	1.9	41
49	Design of microbial fuel cells for practical application: a review and analysis of scale-up studies. Biofuels, 2014, 5, 79-92.	1.4	173
50	Enhanced power generation and energy conversion of sewage sludge by CEAâ€"microbial fuel cells. Bioresource Technology, 2014, 166, 229-234.	4.8	17
51	Microbial Conversion of Waste Glycerol from Biodiesel Production into Value-Added Products. Energies, 2013, 6, 4739-4768.	1.6	75
52	Improved performance of CEA microbial fuel cells with increased reactor size. Energy and Environmental Science, 2012, 5, 8273.	15.6	195
53	Microbial Electrolysis: Novel Biotechnology for Hydrogen Production from Biomass. , 2012, , 93-105.		8
54	Enhanced performance and mechanism study of microbial electrolysis cells using Fe nanoparticle-decorated anodes. Applied Microbiology and Biotechnology, 2012, 93, 871-880.	1.7	62

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55	Continuous flowing membraneless microbial fuel cells with separated electrode chambers. Bioresource Technology, 2011, 102, 8914-8920.	4.8	54
56	Utilization of mixed monosaccharides for power generation in microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2011, 86, 570-574.	1.6	11
57	Nanoparticle decorated anodes for enhanced current generation in microbial electrochemical cells. Biosensors and Bioelectronics, 2011, 26, 1908-1912.	5.3	149
58	Biohydrogen Production From Glycerol in Microbial Electrolysis Cells and Prospects for Energy Recovery From Biodiesel Wastes. , 2011, , .		3
59	Microbial Electricity Generation from Cellulosic Biomass. , 2010, , 116-129.		1
60	Optimization of NiMo catalyst for hydrogen production in microbial electrolysis cells. International Journal of Hydrogen Energy, 2010, 35, 3227-3233.	3.8	49
61	Microbial electrolysis: novel technology for hydrogen production from biomass. Biofuels, 2010, 1, 129-142.	1.4	138
62	Removal of selenite from wastewater using microbial fuel cells. Biotechnology Letters, 2009, 31, 1211-1216.	1.1	103
63	Hydrogen production in single-chamber tubular microbial electrolysis cells using non-precious-metal catalysts. International Journal of Hydrogen Energy, 2009, 34, 8535-8542.	3.8	178
64	Effects of the Pt loading side and cathode-biofilm on the performance of a membrane-less and single-chamber microbial fuel cell. Bioresource Technology, 2009, 100, 1197-1202.	4.8	93
65	Fabrication of Nanomodified Anodes for Power Density Enhancement of Microbial Fuel Cells. Materials Research Society Symposia Proceedings, 2009, 1170, 47.	0.1	1
66	Scale-up of membrane-free single-chamber microbial fuel cells. Journal of Power Sources, 2008, 179, 274-279.	4.0	255
67	Selenium Induces Manganese-dependent Peroxidase Production by the White-Rot Fungus Bjerkandera adusta (Willdenow) P. Karsten. Biological Trace Element Research, 2008, 123, 211-217.	1.9	16
68	Electricity production from twelve monosaccharides using microbial fuel cells. Journal of Power Sources, 2008, 175, 196-200.	4.0	226
69	Effects of furan derivatives and phenolic compounds on electricity generation in microbial fuel cells. Journal of Power Sources, 2008, 180, 162-166.	4.0	57
70	Electricity generation using a baffled microbial fuel cell convenient for stacking. Bioresource Technology, 2008, 99, 1650-1655.	4.8	108
71	Electricity generation from polyalcohols in single-chamber microbial fuel cells. Biosensors and Bioelectronics, 2008, 24, 849-854.	5.3	97
72	Hydrogen production using single-chamber membrane-free microbial electrolysis cells. Water Research, 2008, 42, 4172-4178.	5.3	336

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73	Effect of nitrate on the performance of single chamber air cathode microbial fuel cells. Water Research, 2008, 42, 4743-4750.	5.3	85
74	Quantification of the Internal Resistance Distribution of Microbial Fuel Cells. Environmental Science & Technology, 2008, 42, 8101-8107.	4.6	536
75	Sustainable Power Generation in Microbial Fuel Cells Using Bicarbonate Buffer and Proton Transfer Mechanisms. Environmental Science & Technology, 2007, 41, 8154-8158.	4.6	322
76	Enhanced Coulombic efficiency and power density of air-cathode microbial fuel cells with an improved cell configuration. Journal of Power Sources, 2007, 171, 348-354.	4.0	521
77	Power Densities Using Different Cathode Catalysts (Pt and CoTMPP) and Polymer Binders (Nafion and) Tj ETQq1 1 0.784314 rgBT /Ov 364-369.	4.6	769
78	Increased Power Generation in a Continuous Flow MFC with Advective Flow through the Porous Anode and Reduced Electrode Spacing. Environmental Science & Technology, 2006, 40, 2426-2432.	4.6	646
79	Increased performance of single-chamber microbial fuel cells using an improved cathode structure. Electrochemistry Communications, 2006, 8, 489-494.	2.3	978
80	Electrochemically Assisted Microbial Production of Hydrogen from Acetate. Environmental Science & Technology, 2005, 39, 4317-4320.	4.6	913
81	Production of Electricity from Acetate or Butyrate Using a Single-Chamber Microbial Fuel Cell. Environmental Science & Technology, 2005, 39, 658-662.	4.6	892
82	Power Generation in Fed-Batch Microbial Fuel Cells as a Function of Ionic Strength, Temperature, and Reactor Configuration. Environmental Science & Technology, 2005, 39, 5488-5493.	4.6	830
83	Production of Electricity during Wastewater Treatment Using a Single Chamber Microbial Fuel Cell. Environmental Science & Technology, 2004, 38, 2281-2285.	4.6	1,347
84	Electricity Generation Using an Air-Cathode Single Chamber Microbial Fuel Cell in the Presence and Absence of a Proton Exchange Membrane. Environmental Science & Technology, 2004, 38, 4040-4046.	4.6	1,708
85	Characterization of a hydrogen-producing granular sludge. Biotechnology and Bioengineering, 2002, 78, 44-52.	1.7	270
86	Effect of pH on hydrogen production from glucose by a mixed culture. Bioresource Technology, 2002, 82, 87-93.	4.8	884