

# Hong Liu

## List of Publications by Year in descending order

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86  
papers

15,212  
citations

44069  
48  
h-index

58581  
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. <i>Bioresource Technology</i> , 2022, 345, 126433.	9.6	80
2	Hydrogen production from lignocellulosic hydrolysate in an up-scaled microbial electrolysis cell with stacked bio-electrodes. <i>Bioresource Technology</i> , 2021, 320, 124314.	9.6	28
3	Enhancement of microbiome management by machine learning for biological wastewater treatment. <i>Microbial Biotechnology</i> , 2021, 14, 59-62.	4.2	12
4	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
5	Performance prediction of ZVI-based anaerobic digestion reactor using machine learning algorithms. <i>Waste Management</i> , 2021, 121, 59-66.	7.4	56
6	Different mechanisms for riboflavin to improve the outward and inward extracellular electron transfer of <i>Shewanella loihica</i> . <i>Electrochemistry Communications</i> , 2021, 124, 106966.	4.7	22
7	Predicting the performance of anaerobic digestion using machine learning algorithms and genomic data. <i>Water Research</i> , 2021, 199, 117182.	11.3	73
8	Scaling-up up-flow microbial electrolysis cells with a compact electrode configuration for continuous hydrogen production. <i>Bioresource Technology</i> , 2021, 331, 125030.	9.6	17
9	Hydrophilic porous materials provide efficient gas-liquid separation to advance hydrogen production in microbial electrolysis cells. <i>Bioresource Technology</i> , 2021, 337, 125352.	9.6	14
10	Microbial Community Predicts Functional Stability of Microbial Fuel Cells. <i>Environmental Science &amp; Technology</i> , 2020, 54, 427-436.	10.0	37
11	Functional photothermal sponges for efficient solar steam generation and accelerated cleaning of viscous crude-oil spill. <i>Solar Energy Materials and Solar Cells</i> , 2020, 204, 110203.	6.2	58
12	Prediction of anaerobic digestion performance and identification of critical operational parameters using machine learning algorithms. <i>Bioresource Technology</i> , 2020, 298, 122495.	9.6	119
13	Accelerated tests for evaluating the air-cathode aging in microbial fuel cells. <i>Bioresource Technology</i> , 2020, 297, 122479.	9.6	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). <i>Science of the Total Environment</i> , 2020, 748, 141379.	8.0	24
15	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
16	Breaking the loop: Tackling homoacetogenesis by chloroform to halt hydrogen production-consumption loop in single chamber microbial electrolysis cells. <i>Chemical Engineering Journal</i> , 2020, 389, 124436.	12.7	30
17	Novel trickling microbial fuel cells for electricity generation from wastewater. <i>Chemosphere</i> , 2020, 248, 126058.	8.2	17
18	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. <i>ACS Catalysis</i> , 2019, 9, 8712-8718.	11.2	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. <i>Science of the Total Environment</i> , 2019, 678, 533-542.	8.0	22
20	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
21	A facile dopamine-assisted method for the preparation of antibacterial surfaces based on Ag/TiO <sub>2</sub> nanoparticles. <i>Applied Surface Science</i> , 2019, 481, 1270-1276.	6.1	19
22	Incorporating microbial community data with machine learning techniques to predict feed substrates in microbial fuel cells. <i>Biosensors and Bioelectronics</i> , 2019, 133, 64-71.	10.1	60
23	Linking internal resistance with design and operation decisions in microbial electrolysis cells. <i>Environment International</i> , 2019, 126, 611-618.	10.0	59
24	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
25	Selective inhibition of methanogenesis by acetylene in single chamber microbial electrolysis cells. <i>Bioresource Technology</i> , 2019, 274, 557-560.	9.6	35
26	A clean technology to convert sucrose and lignocellulose in microbial electrochemical cells into electricity and hydrogen. <i>Bioresource Technology Reports</i> , 2019, 5, 331-334.	2.7	26
27	The influence of incorporating microbial fuel cells on greenhouse gas emissions from constructed wetlands. <i>Science of the Total Environment</i> , 2019, 656, 270-279.	8.0	55
28	Investigation of a two-dimensional model on microbial fuel cell with different biofilm porosities and external resistances. <i>Chemical Engineering Journal</i> , 2018, 333, 572-582.	12.7	52
29	Conductive properties of methanogenic biofilms. <i>Bioelectrochemistry</i> , 2018, 119, 220-226.	4.6	12
30	Development of novel polyethylene air-cathode material for microbial fuel cells. <i>Energy</i> , 2018, 155, 763-771.	8.8	13
31	Enhanced redox conductivity and enriched Geobacteraceae of exoelectrogenic biofilms in response to static magnetic field. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 7611-7621.	3.6	15
32	Revealing the impact of hydrogen production-consumption loop against efficient hydrogen recovery in single chamber microbial electrolysis cells (MECs). <i>International Journal of Hydrogen Energy</i> , 2018, 43, 13064-13071.	7.1	26
33	Influence of enhanced carbon crystallinity of nanoporous graphite on the cathode performance of microbial fuel cells. <i>Carbon</i> , 2017, 115, 271-278.	10.3	50
34	Stay connected: Electrical conductivity of microbial aggregates. <i>Biotechnology Advances</i> , 2017, 35, 669-680.	11.7	33
35	Urea removal coupled with enhanced electricity generation in single-chambered microbial fuel cells. <i>Environmental Science and Pollution Research</i> , 2017, 24, 20401-20408.	5.3	24
36	Predicting Microbial Fuel Cell Biofilm Communities and Bioreactor Performance using Artificial Neural Networks. <i>Environmental Science &amp; Technology</i> , 2017, 51, 10881-10892.	10.0	64

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37	Redox Conductivity of Current-Producing Mixed Species Biofilms. PLoS ONE, 2016, 11, e0155247.	2.5	19
38	Wastewater treatment by Microbial Fuel Cell (MFC) prior irrigation water reuse. Journal of Cleaner Production, 2016, 137, 144-149.	9.3	80
39	Millimeter scale electron conduction through exoelectrogenic mixed species biofilms. FEMS Microbiology Letters, 2016, 363, fnw153.	1.8	13
40	High Performance Activated Carbon/Carbon Cloth Cathodes for Microbial Fuel Cells. Fuel Cells, 2015, 15, 855-861.	2.4	26
41	Performance and stability of different cathode base materials for use in microbial fuel cells. Journal of Power Sources, 2015, 280, 159-165.	7.8	48
42	Can bicarbonate replace phosphate to improve the sustainability of bioelectrochemical systems for $H_2$ production?. RSC Advances, 2015, 5, 27082-27086.	3.6	8
43	Suppression of methanogenesis for hydrogen production in single-chamber microbial electrolysis cells using various antibiotics. Bioresource Technology, 2015, 187, 77-83.	9.6	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.	11.3	206
46	Establishing a core microbiome in acetate-fed microbial fuel cells. Applied Microbiology and Biotechnology, 2014, 98, 4187-4196.	3.6	65
47	Olive mill wastewater treatment in single-chamber air-cathode microbial fuel cells. World Journal of Microbiology and Biotechnology, 2014, 30, 1177-1185.	3.6	38
48	Impact of tobramycin on the performance of microbial fuel cell. Microbial Cell Factories, 2014, 13, 91.	4.0	41
49	Design of microbial fuel cells for practical application: a review and analysis of scale-up studies. Biofuels, 2014, 5, 79-92.	2.4	173
50	Enhanced power generation and energy conversion of sewage sludge by CEA microbioal fuel cells. Bioresource Technology, 2014, 166, 229-234.	9.6	17
51	Microbial Conversion of Waste Glycerol from Biodiesel Production into Value-Added Products. Energies, 2013, 6, 4739-4768.	3.1	75
52	Improved performance of CEA microbial fuel cells with increased reactor size. Energy and Environmental Science, 2012, 5, 8273.	30.8	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.	3.6	62

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55	Continuous flowing membraneless microbial fuel cells with separated electrode chambers. Bioresource Technology, 2011, 102, 8914-8920.	9.6	54
56	Utilization of mixed monosaccharides for power generation in microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2011, 86, 570-574.	3.2	11
57	Nanoparticle decorated anodes for enhanced current generation in microbial electrochemical cells. Biosensors and Bioelectronics, 2011, 26, 1908-1912.	10.1	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.	7.1	49
61	Microbial electrolysis: novel technology for hydrogen production from biomass. Biofuels, 2010, 1, 129-142.	2.4	138
62	Removal of selenite from wastewater using microbial fuel cells. Biotechnology Letters, 2009, 31, 1211-1216.	2.2	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.	7.1	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.	9.6	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.	7.8	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.	3.5	16
68	Electricity production from twelve monosaccharides using microbial fuel cells. Journal of Power Sources, 2008, 175, 196-200.	7.8	226
69	Effects of furan derivatives and phenolic compounds on electricity generation in microbial fuel cells. Journal of Power Sources, 2008, 180, 162-166.	7.8	57
70	Electricity generation using a baffled microbial fuel cell convenient for stacking. Bioresource Technology, 2008, 99, 1650-1655.	9.6	108
71	Electricity generation from polyalcohols in single-chamber microbial fuel cells. Biosensors and Bioelectronics, 2008, 24, 849-854.	10.1	97
72	Hydrogen production using single-chamber membrane-free microbial electrolysis cells. Water Research, 2008, 42, 4172-4178.	11.3	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.	11.3	85
74	Quantification of the Internal Resistance Distribution of Microbial Fuel Cells. Environmental Science & Technology, 2008, 42, 8101-8107.	10.0	536
75	Sustainable Power Generation in Microbial Fuel Cells Using Bicarbonate Buffer and Proton Transfer Mechanisms. Environmental Science & Technology, 2007, 41, 8154-8158.	10.0	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.	7.8	521
77	Power Densities Using Different Cathode Catalysts (Pt and CoTMPP) and Polymer Binders (Nafion and) Tj ETQq1 1 0.784314 rgBT /Over 364-369.	10.0	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.	10.0	646
79	Increased performance of single-chamber microbial fuel cells using an improved cathode structure. Electrochemistry Communications, 2006, 8, 489-494.	4.7	978
80	Electrochemically Assisted Microbial Production of Hydrogen from Acetate. Environmental Science & Technology, 2005, 39, 4317-4320.	10.0	913
81	Production of Electricity from Acetate or Butyrate Using a Single-Chamber Microbial Fuel Cell. Environmental Science & Technology, 2005, 39, 658-662.	10.0	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.	10.0	830
83	Production of Electricity during Wastewater Treatment Using a Single Chamber Microbial Fuel Cell. Environmental Science & Technology, 2004, 38, 2281-2285.	10.0	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.	10.0	1,708
85	Characterization of a hydrogen-producing granular sludge. Biotechnology and Bioengineering, 2002, 78, 44-52.	3.3	270
86	Effect of pH on hydrogen production from glucose by a mixed culture. Bioresource Technology, 2002, 82, 87-93.	9.6	884