

Lu Lu

List of Publications by Year in descending order

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55
papers

4,511
citations

101543

36
h-index

155660

55
g-index

55
all docs

55
docs citations

55
times ranked

4138
citing authors

#	ARTICLE	IF	CITATIONS
1	Pyrosequencing reveals highly diverse microbial communities in microbial electrolysis cells involved in enhanced H ₂ production from waste activated sludge. <i>Water Research</i> , 2012, 46, 2425-2434.	11.3	317
2	Wastewater treatment for carbon capture and utilization. <i>Nature Sustainability</i> , 2018, 1, 750-758.	23.7	299
3	Microbial electrolysis cells for waste biorefinery: A state of the art review. <i>Bioresource Technology</i> , 2016, 215, 254-264.	9.6	273
4	Microbial Metabolism and Community Structure in Response to Bioelectrochemically Enhanced Remediation of Petroleum Hydrocarbon-Contaminated Soil. <i>Environmental Science & Technology</i> , 2014, 48, 4021-4029.	10.0	254
5	Microbial community structure accompanied with electricity production in a constructed wetland plant microbial fuel cell. <i>Bioresource Technology</i> , 2015, 195, 115-121.	9.6	228
6	Hydrogen production with effluent from an ethanol- ¹³ C ₂ H ₂ -coproducing fermentation reactor using a single-chamber microbial electrolysis cell. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3055-3060.	10.1	197
7	Carbon dioxide and organic waste valorization by microbial electrosynthesis and electro-fermentation. <i>Water Research</i> , 2019, 149, 42-55.	11.3	191
8	Enhanced hydrogen production from waste activated sludge by cascade utilization of organic matter in microbial electrolysis cells. <i>Water Research</i> , 2012, 46, 1015-1026.	11.3	166
9	Hydrogen production, methanogen inhibition and microbial community structures in psychrophilic single-chamber microbial electrolysis cells. <i>Energy and Environmental Science</i> , 2011, 4, 1329.	30.8	163
10	Individual and competitive removal of heavy metals using capacitive deionization. <i>Journal of Hazardous Materials</i> , 2016, 302, 323-331.	12.4	162
11	Enhanced bioremediation of hydrocarbon-contaminated soil using pilot-scale bioelectrochemical systems. <i>Journal of Hazardous Materials</i> , 2014, 274, 8-15.	12.4	154
12	Syntrophic interactions drive the hydrogen production from glucose at low temperature in microbial electrolysis cells. <i>Bioresource Technology</i> , 2012, 124, 68-76.	9.6	149
13	Autotrophic Vanadium(V) Bioreduction in Groundwater by Elemental Sulfur and Zerovalent Iron. <i>Environmental Science & Technology</i> , 2018, 52, 7434-7442.	10.0	125
14	Hydrogen production from proteins via electrohydrogenesis in microbial electrolysis cells. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2690-2695.	10.1	108
15	Nickel based catalysts for highly efficient H ₂ evolution from wastewater in microbial electrolysis cells. <i>Electrochimica Acta</i> , 2016, 206, 381-387.	5.2	102
16	Concurrent Nitrogen and Phosphorus Recovery Using Flow-Electrode Capacitive Deionization. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7844-7850.	6.7	84
17	Microbial electrochemical nutrient recovery in anaerobic osmotic membrane bioreactors. <i>Water Research</i> , 2017, 114, 181-188.	11.3	81
18	Microbial fuel cells and osmotic membrane bioreactors have mutual benefits for wastewater treatment and energy production. <i>Water Research</i> , 2016, 98, 183-189.	11.3	78

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19	Microbial Electrolytic Carbon Capture for Carbon Negative and Energy Positive Wastewater Treatment. <i>Environmental Science & Technology</i> , 2015, 49, 8193-8201.	10.0	76
20	Iron-rich nanoparticle encapsulated, nitrogen doped porous carbon materials as efficient cathode electrocatalyst for microbial fuel cells. <i>Journal of Power Sources</i> , 2016, 315, 302-307.	7.8	76
21	Active H ₂ Harvesting Prevents Methanogenesis in Microbial Electrolysis Cells. <i>Environmental Science and Technology Letters</i> , 2016, 3, 286-290.	8.7	70
22	Ferric iron enhances electricity generation by <i>Shewanella oneidensis</i> MR-1 in MFCs. <i>Bioresource Technology</i> , 2013, 135, 630-634.	9.6	66
23	Bioreactor Performance and Quantitative Analysis of Methanogenic and Bacterial Community Dynamics in Microbial Electrolysis Cells during Large Temperature Fluctuations. <i>Environmental Science & Technology</i> , 2012, 46, 6874-6881.	10.0	64
24	Geochemical and microbial characterizations of flowback and produced water in three shale oil and gas plays in the central and western United States. <i>Water Research</i> , 2019, 164, 114942.	11.3	64
25	Resin-enhanced rolling activated carbon electrode for efficient capacitive deionization. <i>Desalination</i> , 2017, 419, 20-28.	8.2	56
26	The effects of metal ions and L-cysteine on <i>hydA</i> gene expression and hydrogen production by <i>Clostridium beijerinckii</i> RZF-1108. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 13711-13717.	7.1	54
27	Electrochemical Control of Redox Potential Arrests Methanogenesis and Regulates Products in Mixed Culture Electro-Fermentation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8650-8658.	6.7	54
28	Alternating Current Influences Anaerobic Electroactive Biofilm Activity. <i>Environmental Science & Technology</i> , 2016, 50, 9169-9176.	10.0	52
29	Combined effects of enrichment procedure and non-fermentable or fermentable co-substrate on performance and bacterial community for pentachlorophenol degradation in microbial fuel cells. <i>Bioresource Technology</i> , 2012, 120, 120-126.	9.6	50
30	The Microbial Electrochemical Current Accelerates Urea Hydrolysis for Recovery of Nutrients from Source-Separated Urine. <i>Environmental Science and Technology Letters</i> , 2017, 4, 305-310.	8.7	50
31	Photocatalytic pretreatment of oily wastewater from the restaurant by a vacuum ultraviolet/TiO ₂ system. <i>Journal of Hazardous Materials</i> , 2011, 186, 849-854.	12.4	48
32	Degradation of algal organic matter using microbial fuel cells and its association with trihalomethane precursor removal. <i>Bioresource Technology</i> , 2012, 116, 80-85.	9.6	48
33	Unbiased solar H ₂ production with current density up to 23 mA cm ⁻² by Swiss-cheese black Si coupled with wastewater bioanode. <i>Energy and Environmental Science</i> , 2019, 12, 1088-1099.	30.8	48
34	Electrochemical hythane production for renewable energy storage and biogas upgrading. <i>Applied Energy</i> , 2017, 187, 595-600.	10.1	47
35	Geophysical Monitoring of Hydrocarbon-Contaminated Soils Remediated with a Bioelectrochemical System. <i>Environmental Science & Technology</i> , 2016, 50, 8205-8213.	10.0	46
36	Dominance of electroactive microbiomes in bioelectrochemical remediation of hydrocarbon-contaminated soils with different textures. <i>Chemosphere</i> , 2019, 235, 776-784.	8.2	42

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37	Microbial Photoelectrosynthesis for Self-Sustaining Hydrogen Generation. <i>Environmental Science & Technology</i> , 2017, 51, 13494-13501.	10.0	34
38	Active harvesting enhances energy recovery and function of electroactive microbiomes in microbial fuel cells. <i>Applied Energy</i> , 2019, 247, 492-502.	10.1	33
39	Microbial electrochemical treatment of biorefinery black liquor and resource recovery. <i>Green Chemistry</i> , 2019, 21, 1258-1266.	9.0	28
40	Spontaneous Solar Syngas Production from CO ₂ Driven by Energetically Favorable Wastewater Microbial Anodes. <i>Joule</i> , 2020, 4, 2149-2161.	24.0	27
41	Urine-powered synergy of nutrient recovery and urine purification in a microbial electrochemical system. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1427-1438.	2.4	25
42	Simultaneous bioelectrochemical degradation of algae sludge and energy recovery in microbial fuel cells. <i>RSC Advances</i> , 2012, 2, 7228.	3.6	23
43	Characteristic changes in algal organic matter derived from <i>Microcystis aeruginosa</i> in microbial fuel cells. <i>Bioresource Technology</i> , 2015, 195, 25-30.	9.6	23
44	Graphene oxide and H ₂ production from bioelectrochemical graphite oxidation. <i>Scientific Reports</i> , 2015, 5, 16242.	3.3	22
45	Electrical decoupling of microbial electrochemical reactions enables spontaneous H ₂ evolution. <i>Energy and Environmental Science</i> , 2020, 13, 495-502.	30.8	20
46	Electrochemical biofilm control by reconstructing microbial community in agricultural water distribution systems. <i>Journal of Hazardous Materials</i> , 2021, 403, 123616.	12.4	20
47	Molecular Transformation of Crude Oil Contaminated Soil after Bioelectrochemical Degradation Revealed by FT-ICR Mass Spectrometry. <i>Environmental Science & Technology</i> , 2020, 54, 2500-2509.	10.0	19
48	Self-sustaining carbon capture and mineralization via electrolytic carbonation of coal fly ash. <i>Chemical Engineering Journal</i> , 2016, 306, 330-335.	12.7	17
49	Ambient CO ₂ capture and storage in bioelectrochemically mediated wastewater treatment. <i>Bioresource Technology</i> , 2016, 215, 380-385.	9.6	17
50	Moisture retention extended enhanced bioelectrochemical remediation of unsaturated soil. <i>Science of the Total Environment</i> , 2020, 724, 138169.	8.0	16
51	Long-term metal pollution shifts microbial functional profiles of nitrification and denitrification in agricultural soils. <i>Science of the Total Environment</i> , 2022, 830, 154732.	8.0	15
52	Wearable Microbial Fuel Cells for Sustainable Self-Powered Electronic Skins. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8664-8668.	8.0	11
53	Sensitivity and Bifurcation Analysis of a Differential-Algebraic Equation Model for a Microbial Electrolysis Cell. <i>SIAM Journal on Applied Dynamical Systems</i> , 2019, 18, 709-728.	1.6	8
54	Comment on "Unbiased solar H ₂ production with current density up to 23 mA cm ⁻² by Swiss-cheese black Si coupled with wastewater bioanode" by L. Lu, W. Vakki, J. A. Aguiar, C. Xiao, K. Hurst, M. Fairchild, X. Chen, F. Yang, J. Gu and Z. J. Ren, <i>Energy Environ. Sci.</i> , 2019, 12, 3412-3414.	30.8	6

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55	Wastewater treatment meets artificial photosynthesis: Solar to green fuel production, water remediation and carbon emission reduction. <i>Frontiers of Environmental Science and Engineering</i> , 2022, 16, 1.	6.0	5