

Weiwei Cai

List of Publications by Year in descending order

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Version: 2024-02-01

45
papers

2,178
citations

218677

26
h-index

233421

45
g-index

45
all docs

45
docs citations

45
times ranked

2111
citing authors

#	ARTICLE	IF	CITATIONS
1	Biodiversity and species competition regulate the resilience of microbial biofilm community. <i>Molecular Ecology</i> , 2017, 26, 6170-6182.	3.9	299
2	Microbial electrolysis contribution to anaerobic digestion of waste activated sludge, leading to accelerated methane production. <i>Renewable Energy</i> , 2016, 91, 334-339.	8.9	140
3	Soil bacterial quantification approaches coupling with relative abundances reflecting the changes of taxa. <i>Scientific Reports</i> , 2017, 7, 4837.	3.3	131
4	Deterministic Assembly and Diversity Gradient Altered the Biofilm Community Performances of Bioreactors. <i>Environmental Science & Technology</i> , 2019, 53, 1315-1324.	10.0	109
5	Biocathodic Methanogenic Community in an Integrated Anaerobic Digestion and Microbial Electrolysis System for Enhancement of Methane Production from Waste Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4913-4921.	6.7	106
6	Response of chloramphenicol-reducing biocathode resistome to continuous electrical stimulation. <i>Water Research</i> , 2019, 148, 398-406.	11.3	90
7	Enhanced hydrogen production in microbial electrolysis cell with 3D self-assembly nickel foam-graphene cathode. <i>Biosensors and Bioelectronics</i> , 2016, 80, 118-122.	10.1	87
8	Enhanced membrane biofouling potential by on-line chemical cleaning in membrane bioreactor. <i>Journal of Membrane Science</i> , 2016, 511, 84-91.	8.2	77
9	mcrA sequencing reveals the role of basophilic methanogens in a cathodic methanogenic community. <i>Water Research</i> , 2018, 136, 192-199.	11.3	77
10	Quorum sensing alters the microbial community of electrode-respiring bacteria and hydrogen scavengers toward improving hydrogen yield in microbial electrolysis cells. <i>Applied Energy</i> , 2016, 183, 1133-1141.	10.1	76
11	An integrated engineering system for maximizing bioenergy production from food waste. <i>Applied Energy</i> , 2017, 206, 83-89.	10.1	74
12	Methane production enhancement by an independent cathode in integrated anaerobic reactor with microbial electrolysis. <i>Bioresource Technology</i> , 2016, 208, 13-18.	9.6	73
13	Generation of dissolved organic matter and byproducts from activated sludge during contact with sodium hypochlorite and its implications to on-line chemical cleaning in MBR. <i>Water Research</i> , 2016, 104, 44-52.	11.3	72
14	Computational and experimental analysis of organic degradation positively regulated by bioelectrochemistry in an anaerobic bioreactor system. <i>Water Research</i> , 2017, 125, 170-179.	11.3	64
15	Effect of magnesium ion on polysaccharide fouling. <i>Chemical Engineering Journal</i> , 2020, 379, 122351.	12.7	60
16	Efficient Methane Production from Beer Wastewater in a Membraneless Microbial Electrolysis Cell with a Stacked Cathode: The Effect of the Cathode/Anode Ratio on Bioenergy Recovery. <i>Energy & Fuels</i> , 2017, 31, 615-620.	5.1	52
17	Enhanced short chain fatty acids production from waste activated sludge conditioning with typical agricultural residues: carbon source composition regulates community functions. <i>Biotechnology for Biofuels</i> , 2015, 8, 192.	6.2	51
18	Fate of dissolved organic matter and byproducts generated from on-line chemical cleaning with sodium hypochlorite in MBR. <i>Chemical Engineering Journal</i> , 2017, 323, 233-242.	12.7	50

#	ARTICLE	IF	CITATIONS
19	New insights into membrane fouling formation during ultrafiltration of organic wastewater with high salinity. <i>Journal of Membrane Science</i> , 2021, 635, 119446.	8.2	43
20	Ni5P4-NiP2 nanosheet matrix enhances electron-transfer kinetics for hydrogen recovery in microbial electrolysis cells. <i>Applied Energy</i> , 2018, 209, 56-64.	10.1	39
21	Development of rapid CO2 utilizing microbial ecosystem onto the novel & porous FPUF@nZVI@TAC@ASP hybrid for green coal desulphurization. <i>Chemical Engineering Journal</i> , 2022, 433, 134361.	12.7	32
22	Formation mechanisms of emerging organic contaminants during on-line membrane cleaning with NaOCl in MBR. <i>Journal of Hazardous Materials</i> , 2020, 386, 121966.	12.4	29
23	Combination of ultrasound and Fenton treatment for improving the hydrolysis and acidification of waste activated sludge. <i>RSC Advances</i> , 2015, 5, 48468-48473.	3.6	27
24	Improvement of bioelectrochemical property and energy recovery by acylhomoserine lactones (AHLs) in microbial electrolysis cells (MECs). <i>Journal of Power Sources</i> , 2015, 284, 56-59.	7.8	26
25	Comparison of chemosynthetic and biological surfactants on accelerating hydrogen production from waste activated sludge in a short-cut fermentation-bioelectrochemical system. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 9044-9050.	7.1	26
26	Comparative study of dissolved organic matter generated from activated sludge during exposure to hypochlorite, hydrogen peroxide, acid and alkaline: Implications for on-line chemical cleaning of MBR. <i>Chemosphere</i> , 2018, 193, 295-303.	8.2	26
27	Electro-driven methanogenic microbial community diversity and variability in the electron abundant niche. <i>Science of the Total Environment</i> , 2019, 661, 178-186.	8.0	26
28	Semiquantitative Detection of Hydrogen-Associated or Hydrogen-Free Electron Transfer within Methanogenic Biofilm of Microbial Electrosynthesis. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	3.1	24
29	Oxidative stress induced membrane biofouling and its implications to on-line chemical cleaning in MBR. <i>Chemical Engineering Journal</i> , 2018, 334, 1917-1926.	12.7	21
30	Electron Fluxes in Biocathode Bioelectrochemical Systems Performing Dechlorination of Chlorinated Aliphatic Hydrocarbons. <i>Frontiers in Microbiology</i> , 2018, 9, 2306.	3.5	18
31	Reinjection oilfield wastewater treatment using bioelectrochemical system and consequent corrosive community evolution on pipe material. <i>Journal of Bioscience and Bioengineering</i> , 2020, 129, 199-205.	2.2	16
32	Characterizing membrane fouling formation during ultrafiltration of high-salinity organic wastewater. <i>Chemosphere</i> , 2022, 287, 132057.	8.2	15
33	Hydrogen production from buffer-free anaerobic fermentation liquid of waste activated sludge using microbial electrolysis system. <i>RSC Advances</i> , 2016, 6, 38769-38773.	3.6	14
34	Applying rhamnolipid to enhance hydrolysis and acidogenesis of waste activated sludge: retarded methanogenic community evolution and methane production. <i>RSC Advances</i> , 2019, 9, 2034-2041.	3.6	14
35	Florfenicol restructured the microbial interaction network for wastewater treatment by microbial electrolysis cells. <i>Environmental Research</i> , 2020, 183, 109145.	7.5	14
36	Enhanced organic matter and nutrient release from waste activated sludge using ultrasound and surfactant synergetic pre-treatment. <i>Bioresource Technology Reports</i> , 2019, 6, 32-38.	2.7	13

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37	Mitigation of antibiotic resistance in a pilot-scale system treating wastewater from high-speed railway trains. <i>Chemosphere</i> , 2020, 245, 125484.	8.2	13
38	Enhanced nitrate removal in an Fe ⁰ -driven autotrophic denitrification system using hydrogen-rich water. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1380-1388.	2.4	11
39	Simultaneous coupling of fluidized granular activated carbon (GAC) and powdered activated carbon (PAC) with ultrafiltration process: A promising synergistic alternative for water treatment. <i>Separation and Purification Technology</i> , 2022, 282, 120085.	7.9	10
40	Using cold-adapted river-bottom sediment as seed sludge for sulfur-based autotrophic denitrification operated at mesophilic and psychrophilic temperatures. <i>Science of the Total Environment</i> , 2020, 735, 139345.	8.0	8
41	Discarded antibiotic mycelial residues derived nitrogen-doped porous carbon for electrochemical energy storage and simultaneous reduction of antibiotic resistance genes(ARCs). <i>Environmental Research</i> , 2021, 192, 110261.	7.5	8
42	Minimizing extracellular DNA improves the precision of microbial community dynamic analysis in response to thermal hydrolysis. <i>Bioresource Technology</i> , 2020, 304, 122938.	9.6	7
43	Chemically induced alteration in PAC characteristics and its influences on PAC/UF water treatment: Implications for on-line membrane cleaning with NaClO. <i>Separation and Purification Technology</i> , 2022, 294, 121130.	7.9	7
44	A wireless charger powered the extracellular electron transfer for hydrogen recovery from organics. <i>Environmental Research</i> , 2020, 186, 109524.	7.5	2
45	Effects of High Salinity on Alginate Fouling during Ultrafiltration of High-Salinity Organic Synthetic Wastewater. <i>Membranes</i> , 2021, 11, 590.	3.0	1