Shaoan Cheng

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6580941/publications.pdf

Version: 2024-02-01

88	14,489	53660 45	49773 87
papers	citations	h-index	g-index

88	88	88	6580
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A novel, rapidly preparable and easily maintainable biocathode electrochemical biosensor for the continuous and stable detection of nitrite in water. Science of the Total Environment, 2022, 806, 150945.	3.9	10
2	Modifying Ti3C2 MXene with NH4+ as an excellent anode material for improving the performance of microbial fuel cells. Chemosphere, 2022, 288, 132502.	4.2	19
3	Enhancing stability of interfacial solar evaporator in high-salinity solutions by managing salt precipitation with Janus-based directional salt transfer structure. Desalination, 2022, 524, 115470.	4.0	19
4	Enhanced Interfacial Solar Evaporation through Formation of Microâ€Meniscuses and Microdroplets to Reduce Evaporation Enthalpy. Advanced Functional Materials, 2022, 32, .	7.8	99
5	Fast and simultaneous detection of dissolved BOD and nitrite in wastewater by using bioelectrode with bidirectional extracellular electron transport. Water Research, 2022, 213, 118186.	5.3	15
6	High-flux flowing interfacial water evaporation under multiple heating sources enabled by a biohybrid hydrogel. Nano Energy, 2022, 98, 107287.	8.2	55
7	Realizing BOD detection of real wastewater by considering the bioelectrochemical degradability of organic pollutants in a bioelectrochemical system. Chemical Engineering Journal, 2022, 444, 136520.	6.6	10
8	Enhanced adsorption performance of UiO-66 via modification with functional groups and integration into hydrogels. Environmental Research, 2022, 212, 113354.	3.7	26
9	Janus 3D solar crystallizer enabling an eco-friendly zero liquid discharge of high-salinity concentrated seawater with antiscalant. Desalination, 2022, 537, 115862.	4.0	15
10	Highly selective and sensitive nitrite biocathode biosensor prepared by polarity inversion method coupled with selective removal of interfering electroactive bacteria. Biosensors and Bioelectronics, 2022, 214, 114507.	5.3	5
11	Effect of start-up process using different electrochemical methods on the performance of CO2-reducing methanogenic biocathodes. International Journal of Hydrogen Energy, 2021, 46, 3045-3055.	3.8	14
12	A novel electrochemical oxidation-methanogenesis system for simultaneously degrading antibiotics and reducing CO2 to CH4 with low energy costs. Science of the Total Environment, 2021, 750, 141732.	3.9	9
13	In Situ Thermal and Electricity Utilization of Photovoltaic Devices by Membrane Distillation and Electrochemical Advanced Oxidation for Desalination and Degradation of Wastewater. Advanced Sustainable Systems, 2021, 5, 2000278.	2.7	9
14	Enhancing bio-cathodic nitrate removal through anode-cathode polarity inversion together with regulating the anode electroactivity. Science of the Total Environment, 2021, 764, 142809.	3.9	12
15	Deciphering Single-Bacterium Adhesion Behavior Modulated by Extracellular Electron Transfer. Nano Letters, 2021, 21, 5105-5115.	4.5	5
16	Efficient degradation of polyacrylamide using a 3-dimensional ultra-thin SnO2-Sb coated electrode. Journal of Hazardous Materials, 2021, 416, 125907.	6.5	20
17	Interfacial solar evaporator for clean water production and beyond: From design to application. Applied Energy, 2021, 299, 117317.	5.1	33
18	Enhancing stability and resilience of electromethanogenesis system by acclimating biocathode with intermittent step-up voltage. Bioresource Technology, 2021, 337, 125376.	4.8	15

#	Article	IF	Citations
19	Modeling and Upscaling Analysis of Gas Diffusion Electrode-Based Electrochemical Carbon Dioxide Reduction Systems. ACS Sustainable Chemistry and Engineering, 2021, 9, 351-361.	3.2	34
20	Promoting Extracellular Electron Transfer of Shewanella oneidensis MR-1 by Optimizing the Periplasmic Cytochrome c Network. Frontiers in Microbiology, 2021, 12, 727709.	1.5	25
21	External resistance acclimation regulates bio-anode: new perspective from biofilm structure and its correlation with anode performance. Bioprocess and Biosystems Engineering, 2021, 45, 269.	1.7	4
22	Combination of plasma oxidation process with microbial fuel cell for mineralizing methylene blue with high energy efficiency. Journal of Hazardous Materials, 2020, 384, 121307.	6.5	39
23	High electrochemical activity of a Ti/SnO2â€“Sb electrode electrodeposited using deep eutectic solvent. Chemosphere, 2020, 239, 124715.	4.2	51
24	Cobaltâ€‘nitrogenâ€‘carbon nanotube co-implanted activated carbon as efficient cathodic oxygen reduction catalyst in microbial fuel cells. Journal of Electroanalytical Chemistry, 2020, 876, 114498.	1.9	12
25	Facile sealing treatment with stannous citrate complex to enhance performance of electrodeposited Ti/SnO2â€“Sb electrode. Chemosphere, 2020, 255, 126973.	4.2	13
26	Defective S/N co-doped carbon cloth via a one-step process for effective electroreduction of nitrogen to ammonia. RSC Advances, 2020, 10, 9814-9823.	1.7	11
27	Efficient treatment of high-concentration sulfurous wastewater by using electrochemical oxidation process with Ti/SnO2â€“Sb anode and air cathode. SN Applied Sciences, 2020, 2, 1.	1.5	2
28	A lotus leaf like vertical hierarchical solar vapor generator for stable and efficient evaporation of high-salinity brine. Chemical Engineering Journal, 2020, 401, 126108.	6.6	68
29	Elucidating deactivation mechanisms of Pd-doped and un-doped Ti/SnO2-Sb electrodes. Journal of Alloys and Compounds, 2020, 834, 155184.	2.8	27
30	Highly Efficient Solar Vapor Generator Enabled by a 3D Hierarchical Structure Constructed with Hydrophilic Carbon Felt for Desalination and Wastewater Treatment. ACS Applied Materials & Interfaces, 2019, 11, 32038-32045.	4.0	49
31	Shear Stress Affects Biofilm Structure and Consequently Current Generation of Bioanode in Microbial Electrochemical Systems (MESs). Frontiers in Microbiology, 2019, 10, 398.	1.5	17
32	Functional group surface modifications for enhancing the formation and performance of exoelectrogenic biofilms on the anode of a bioelectrochemical system. Critical Reviews in Biotechnology, 2019, 39, 1015-1030.	5.1	37
33	Enhancing efficiency of carbonized wood based solar steam generator for wastewater treatment by optimizing the thickness. Solar Energy, 2019, 193, 434-441.	2.9	55
34	Enhancement of the denitrification activity by exoelectrogens in single-chamber air cathode microbial fuel cells. Chemosphere, 2019, 225, 548-556.	4.2	37
35	Sensitivity to Oxygen in Microbial Electrochemical Systems Biofilms. IScience, 2019, 13, 163-172.	1.9	36
36	Effect of nitrate on electricity generation in single-chamber air cathode microbial fuel cells. Chemical Engineering Journal, 2018, 337, 661-670.	6.6	57

#	Article	IF	Citations
37	Influence of soluble microbial products on the long-term stability of air cathodes in microbial fuel cells. Electrochimica Acta, 2018, 261, 557-564.	2.6	26
38	Effective swine wastewater treatment by combining microbial fuel cells with flocculation. Chemosphere, 2017, 182, 567-573.	4.2	75
39	Current density reversibly alters metabolic spatial structure of exoelectrogenic anode biofilms. Journal of Power Sources, 2017, 356, 566-571.	4.0	40
40	Improving the power generation of microbial fuel cells by modifying the anode with single-wall carbon nanohorns. Biotechnology Letters, 2017, 39, 1515-1520.	1.1	25
41	Enhanced power production of microbial fuel cells by reducing the oxygen and nitrogen functional groups of carbon cloth anode. Surface and Interface Analysis, 2017, 49, 410-418.	0.8	12
42	Enhancing hydrogen production with Niâ€“P coated nickel foam as cathode catalyst in single chamber microbial electrolysis cells. International Journal of Hydrogen Energy, 2017, 42, 3641-3646.	3.8	45
43	Complete Genome Sequence of Geobacter anodireducens SD-1 ^T , a Salt-Tolerant Exoelectrogenic Microbe in Bioelectrochemical Systems. Genome Announcements, 2016, 4, .	0.8	5
44	The effect of biofilm thickness on electrochemical activity of Geobacter sulfurreducens. International Journal of Hydrogen Energy, 2016, 41, 16523-16528.	3.8	120
45	Inhibition of microbial growth on air cathodes of single chamber microbial fuel cells by incorporating enrofloxacin into the catalyst layer. Biosensors and Bioelectronics, 2015, 72, 44-50.	5.3	76
46	Temporal-Spatial Changes in Viabilities and Electrochemical Properties of Anode Biofilms. Environmental Science & Technology, 2015, 49, 5227-5235.	4.6	175
47	<scp>G</scp>eobacter sp. <scp>SD</scp>â€1 with enhanced electrochemical activity in highâ€salt concentration solutions. Environmental Microbiology Reports, 2014, 6, 723-729.	1.0	49
48	Anode modification with formic acid: A simple and effective method to improve the power generation of microbial fuel cells. Applied Surface Science, 2014, 320, 281-286.	3.1	34
49	Microbial community in microbial fuel cell (MFC) medium and effluent enriched with purple photosynthetic bacterium (Rhodopseudomonas sp.). AMB Express, 2014, 4, 22.	1.4	43
50	Geobacter anodireducens sp. nov., an exoelectrogenic microbe in bioelectrochemical systems. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 3485-3491.	0.8	103
51	Effects of hydraulic pressure on the performance of single chamber air-cathode microbial fuel cells. Biosensors and Bioelectronics, 2014, 56, 264-270.	5.3	25
52	Enhancing power generation of scale-up microbial fuel cells by optimizing the leading-out terminal of anode. Journal of Power Sources, 2014, 248, 931-938.	4.0	43
53	Air-cathode preparation with activated carbon as catalyst, PTFE as binder and nickel foam as current collector for microbial fuel cells. Bioelectrochemistry, 2013, 92, 22-26.	2.4	129
54	Wastewater Treatment with Concomitant Bioenergy Production Using Microbial Fuel Cells. , 2012, , 405-452.		2

#	Article	IF	Citations
55	Efficient recovery of nano-sized iron oxide particles from synthetic acid-mine drainage (AMD) water using fuel cell technologies. Water Research, 2011, 45, 303-307.	5.3	65
56	Impact of salinity on cathode catalyst performance in microbial fuel cells (MFCs). International Journal of Hydrogen Energy, 2011, 36, 13900-13906.	3.8	44
57	Evaluation of carbon-based materials in tubular biocathode microbial fuel cells in terms of hexavalent chromium reduction and electricity generation. Chemical Engineering Journal, 2011, 166, 652-661.	6.6	121
58	Bioelectrochemical systems for efficient recalcitrant wastes treatment. Journal of Chemical Technology and Biotechnology, 2011, 86, 481-491.	1.6	121
59	Increasing power generation for scaling up single-chamber air cathode microbial fuel cells. Bioresource Technology, 2011, 102, 4468-4473.	4.8	281
60	Electricity generation of single-chamber microbial fuel cells at low temperatures. Biosensors and Bioelectronics, 2011, 26, 1913-1917.	5.3	115
61	Scalable air cathode microbial fuel cells using glass fiber separators, plastic mesh supporters, and graphite fiber brush anodes. Bioresource Technology, 2011, 102, 372-375.	4.8	90
62	High hydrogen production rate of microbial electrolysis cell (MEC) with reduced electrode spacing. Bioresource Technology, 2011, 102, 3571-3574.	4.8	164
63	Mesh optimization for microbial fuel cell cathodes constructed around stainless steel mesh current collectors. Journal of Power Sources, 2011, 196, 1097-1102.	4.0	89
64	Isolation of the exoelectrogenic denitrifying bacterium Comamonas denitrificans based on dilution to extinction. Applied Microbiology and Biotechnology, 2010, 85, 1575-1587.	1.7	179
65	Microbial Fuel Cell Cathodes With Poly(dimethylsiloxane) Diffusion Layers Constructed around Stainless Steel Mesh Current Collectors. Environmental Science & Technology, 2010, 44, 1490-1495.	4.6	155
66	The use of nylon and glass fiber filter separators with different pore sizes in air-cathode single-chamber microbial fuel cells. Energy and Environmental Science, 2010, 3, 659.	15.6	134
67	Change in microbial communities in acetate- and glucose-fed microbial fuel cells in the presence of light. Biosensors and Bioelectronics, 2009, 25, 105-111.	5.3	116
68	Electrochemical reduction of oxygen with iron phthalocyanine in neutral media. Journal of Applied Electrochemistry, 2009, 39, 705-711.	1.5	82
69	Source of methane and methods to control its formation in single chamber microbial electrolysis cells. International Journal of Hydrogen Energy, 2009, 34, 3653-3658.	3.8	187
70	Power generation using an activated carbon and metal mesh cathode in a microbial fuel cell. Electrochemistry Communications, 2009, 11, 2177-2179.	2.3	358
71	Direct Biological Conversion of Electrical Current into Methane by Electromethanogenesis. Environmental Science & Technology, 2009, 43, 3953-3958.	4.6	1,033
72	Use of Carbon Mesh Anodes and the Effect of Different Pretreatment Methods on Power Production in Microbial Fuel Cells. Environmental Science & Technology, 2009, 43, 6870-6874.	4.6	486

#	Article	IF	Citations
73	Separator Characteristics for Increasing Performance of Microbial Fuel Cells. Environmental Science & Technology, 2009, 43, 8456-8461.	4.6	291
74	Scale-up of membrane-free single-chamber microbial fuel cells. Journal of Power Sources, 2008, 179, 274-279.	4.0	255
75	Microbial Electrolysis Cells for High Yield Hydrogen Gas Production from Organic Matter. Environmental Science & Technology, 2008, 42, 8630-8640.	4.6	1,091
76	Evaluation of catalysts and membranes for high yield biohydrogen production via electrohydrogenesis in microbial electrolysis cells (MECs). Water Science and Technology, 2008, 58, 853-857.	1.2	42
77	Sustainable and efficient biohydrogen production via electrohydrogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18871-18873.	3.3	576
78	Electricity Generation from Synthetic Acid-Mine Drainage (AMD) Water using Fuel Cell Technologies. Environmental Science & Technology, 2007, 41, 8149-8153.	4.6	108
79	Graphite Fiber Brush Anodes for Increased Power Production in Air-Cathode Microbial Fuel Cells. Environmental Science & Technology, 2007, 41, 3341-3346.	4.6	1,100
80	Tubular Membrane Cathodes for Scalable Power Generation in Microbial Fuel Cells. Environmental Science & Technology, 2007, 41, 3347-3353.	4.6	156
81	Ammonia treatment of carbon cloth anodes to enhance power generation of microbial fuel cells. Electrochemistry Communications, 2007, 9, 492-496.	2.3	634
82	Microbial fuel cell performance with non-Pt cathode catalysts. Journal of Power Sources, 2007, 171, 275-281.	4.0	281
83	Power Densities Using Different Cathode Catalysts (Pt and CoTMPP) and Polymer Binders (Nafion and) Tj ETQq1 1 0.784314 rgBT /Over 364-369.	4.6	769
84	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
85	Increased performance of single-chamber microbial fuel cells using an improved cathode structure. Electrochemistry Communications, 2006, 8, 489-494.	2.3	978
86	Power densities using different cathode catalysts (Pt and CoTMPP) and polymer binders (nafion and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.6	29
87	Production of Electricity from Acetate or Butyrate Using a Single-Chamber Microbial Fuel Cell. Environmental Science & Technology, 2005, 39, 658-662.	4.6	892
88	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