Thja Sleutels

List of Publications by Year
in descending order

65 papers	4,846 citations	159585 30 h-index	106344 65 g-index
66 all docs	66 docs citations	66 times ranked	3346 citing authors

#	Article	IF	Citations
1	Microbial Electrolysis Cells for High Yield Hydrogen Gas Production from Organic Matter. Environmental Science & Technology, 2008, 42, 8630-8640.	10.0	1,091
2	Ammonium recovery and energy production from urine by a microbial fuel cell. Water Research, 2012, 46, 2627-2636.	11.3	381
3	New applications and performance of bioelectrochemical systems. Applied Microbiology and Biotechnology, 2010, 85, 1673-1685.	3.6	237
4	Bioelectrochemical Systems: An Outlook for Practical Applications. ChemSusChem, 2012, 5, 1012-1019.	6.8	220
5	Ion transport resistance in Microbial Electrolysis Cells with anion and cation exchange membranes. International Journal of Hydrogen Energy, 2009, 34, 3612-3620.	7.1	219
6	Effect of the type of ion exchange membrane on performance, ion transport, and pH in biocatalyzed electrolysis of wastewater. Water Science and Technology, 2008, 57, 1757-1762.	2.5	189
7	Hydrogen production and ammonium recovery from urine by a Microbial Electrolysis Cell. International Journal of Hydrogen Energy, 2014, 39, 4771-4778.	7.1	170
8	Capacitive Bioanodes Enable Renewable Energy Storage in Microbial Fuel Cells. Environmental Science & Technology, 2012, 46, 3554-3560.	10.0	168
9	Bioelectrochemical Production of Caproate and Caprylate from Acetate by Mixed Cultures. ACS Sustainable Chemistry and Engineering, 2013, 1, 513-518.	6.7	155
10	Ammonia recovery from urine in a scaled-up Microbial Electrolysis Cell. Journal of Power Sources, 2017, 356, 491-499.	7.8	132
11	(Bio)electrochemical ammonia recovery: progress and perspectives. Applied Microbiology and Biotechnology, 2018, 102, 3865-3878.	3.6	130
12	Effect of operational parameters on Coulombic efficiency in bioelectrochemical systems. Bioresource Technology, 2011, 102, 11172-11176.	9.6	126
13	Bioelectrochemical systems for nitrogen removal and recovery from wastewater. Environmental Science: Water Research and Technology, 2015, 1, 22-33.	2.4	117
14	Improved performance of porous bio-anodes in microbial electrolysis cells by enhancing mass and charge transport. International Journal of Hydrogen Energy, 2009, 34, 9655-9661.	7.1	103
15	Possibilities for extremophilic microorganisms in microbial electrochemical systems. FEMS Microbiology Reviews, 2016, 40, 164-181.	8.6	99
16	Fluidized Capacitive Bioanode As a Novel Reactor Concept for the Microbial Fuel Cell. Environmental Science & Technology, 2015, 49, 1929-1935.	10.0	86
17	Hydrogen Gas Recycling for Energy Efficient Ammonia Recovery in Electrochemical Systems. Environmental Science & Technology, 2017, 51, 3110-3116.	10.0	82
18	Performance of single carbon granules as perspective for larger scale capacitive bioanodes. Journal of Power Sources, 2016, 325, 690-696.	7.8	66

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19	Low Substrate Loading Limits Methanogenesis and Leads to High Coulombic Efficiency in Bioelectrochemical Systems. Microorganisms, 2016, 4, 7.	3.6	63
20	Influence of the thickness of the capacitive layer on the performance of bioanodes in Microbial Fuel Cells. Journal of Power Sources, 2013, 243, 611-616.	7.8	59
21	Electron Storage in Electroactive Biofilms. Trends in Biotechnology, 2021, 39, 34-42.	9.3	56
22	High rate copper and energy recovery in microbial fuel cells. Frontiers in Microbiology, 2015, 6, 527.	3.5	55
23	Combination of bioelectrochemical systems and electrochemical capacitors: Principles, analysis and opportunities. Biotechnology Advances, 2020, 39, 107456.	11.7	55
24	Quantification of bio-anode capacitance in bioelectrochemical systems using Electrochemical Impedance Spectroscopy. Journal of Power Sources, 2018, 400, 533-538.	7.8	50
25	Steady-state performance and chemical efficiency of Microbial Electrolysis Cells. International Journal of Hydrogen Energy, 2013, 38, 7201-7208.	7.1	46
26	Energy-Efficient Ammonia Recovery in an Up-Scaled Hydrogen Gas Recycling Electrochemical System. ACS Sustainable Chemistry and Engineering, 2018, 6, 7638-7644.	6.7	43
27	Effect of mass and charge transport speed and direction in porous anodes on microbial electrolysis cell performance. Bioresource Technology, 2011, 102, 399-403.	9.6	42
28	Competition between Methanogens and Acetogens in Biocathodes: A Comparison between Potentiostatic and Galvanostatic Control. International Journal of Molecular Sciences, 2017, 18, 204.	4.1	42
29	Membrane Selectivity Determines Energetic Losses for Ion Transport in Bioelectrochemical Systems. ChemistrySelect, 2017, 2, 3462-3470.	1.5	38
30	Hydrogen as electron donor for copper removal in bioelectrochemical systems. International Journal of Hydrogen Energy, 2016, 41, 5758-5764.	7.1	35
31	Reduction of pH Buffer Requirement in Bioelectrochemical Systems. Environmental Science & Technology, 2010, 44, 8259-8263.	10.0	31
32	Inâ€…situ Biofilm Quantification in Bioelectrochemical Systems by using Optical Coherence Tomography. ChemSusChem, 2018, 11, 2171-2178.	6.8	30
33	Haloalkaliphilic microorganisms assist sulfide removal in a microbial electrolysis cell. Journal of Hazardous Materials, 2019, 363, 197-204.	12.4	29
34	Considerations for application of granular activated carbon as capacitive bioanode in bioelectrochemical systems. Renewable Energy, 2020, 157, 782-792.	8.9	29
35	Microbial Rechargeable Battery: Energy Storage and Recovery through Acetate. Environmental Science and Technology Letters, 2016, 3, 144-149.	8.7	27
36	Minimal Bipolar Membrane Cell Configuration for Scaling Up Ammonium Recovery. ACS Sustainable Chemistry and Engineering, 2020, 8, 17359-17367.	6.7	26

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37	Safeguarding the microbial water quality from source to tap. Npj Clean Water, 2021, 4, .	8.0	25
38	Ammonia recovery from anaerobic digester centrate using onsite pilot scale bipolar membrane electrodialysis coupled to membrane stripping. Water Research, 2022, 218, 118504.	11.3	22
39	Donnan Dialysis for scaling mitigation during electrochemical ammonium recovery from complex wastewater. Water Research, 2021, 201, 117260.	11.3	21
40	Prototype of a scaledâ€up microbial fuel cell for copper recovery. Journal of Chemical Technology and Biotechnology, 2017, 92, 2817-2824.	3.2	20
41	Competition of electrogens with methanogens for hydrogen in bioanodes. Water Research, 2020, 170, 115292.	11.3	20
42	Exploiting Donnan Dialysis to enhance ammonia recovery in an electrochemical system. Chemical Engineering Journal, 2020, 395, 125143.	12.7	18
43	Fouling fractionation in reverse electrodialysis with natural feed waters demonstrates dual media rapid filtration as an effective pre-treatment for fresh water. Desalination, 2021, 518, 115277.	8.2	18
44	Relating MEC population dynamics to anode performance from DGGE and electrical data. Systematic and Applied Microbiology, 2013, 36, 408-416.	2.8	17
45	The granular capacitive moving bed reactor for the scale up of bioanodes. Journal of Chemical Technology and Biotechnology, 2019, 94, 2738-2748.	3.2	16
46	The RED Fouling Monitor: A novel tool for fouling analysis. Journal of Membrane Science, 2019, 570-571, 294-302.	8.2	15
47	Gas-permeable hydrophobic membranes enable transport of CO₂ and NH₃ to improve performance of bioelectrochemical systems. Environmental Science: Water Research and Technology, 2016, 2, 743-748.	2.4	13
48	Mixed Culture Biocathodes for Production of Hydrogen, Methane, and Carboxylates. Advances in Biochemical Engineering/Biotechnology, 2017, 167, 203-229.	1.1	12
49	The effect of intermittent anode potential regimes on the morphology and extracellular matrix composition of electro-active bacteria. Biofilm, 2022, 4, 100064.	3.8	10
50	Application of ammonium fertilizers recovered by an Electrochemical System. Resources, Conservation and Recycling, 2022, 181, 106225.	10.8	10
51	Methane-Dependent Extracellular Electron Transfer at the Bioanode by the Anaerobic Archaeal Methanotroph â€œCandidatus Methanoperedensâ€. Frontiers in Microbiology, 2022, 13, 820989.	3.5	10
52	Gas diffusion electrodes improve hydrogen gas mass transfer for a hydrogen oxidizing bioanode. Journal of Chemical Technology and Biotechnology, 2017, 92, 2963-2968.	3.2	9
53	Hydrogen oxidizing bacteria are capable of removing orthophosphate to ultra-low concentrations in a fed batch reactor configuration. Bioresource Technology, 2020, 311, 123494.	9.6	9
54	Microbial Community and Metabolic Activity in Thiocyanate Degrading Low Temperature Microbial Fuel Cells. Frontiers in Microbiology, 2018, 9, 2308.	3.5	7

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55	Comparison of Two Sustainable Counter Electrodes for Energy Storage in the Microbial Rechargeable Battery. ChemElectroChem, 2019, 6, 2464-2473.	3.4	6
56	Real-time monitoring of biofilm thickness allows for determination of acetate limitations in bio-anodes. Bioresource Technology Reports, 2022, 18, 101028.	2.7	6
57	Enrichment of Hydrogen-Oxidizing Bacteria from High-Temperature and High-Salinity Environments. Applied and Environmental Microbiology, 2021, 87, .	3.1	5
58	Effective orthophosphate removal from surface water using hydrogen-oxidizing bacteria: Moving towards applicability. Science of the Total Environment, 2021, 800, 149648.	8.0	5
59	Effects of Current on the Membrane and Boundary Layer Selectivity in Electrochemical Systems Designed for Nutrient Recovery. ACS Sustainable Chemistry and Engineering, 2022, 10, 9411-9418.	6.7	5
60	Making the best use of capacitive current: Comparison between fixed and moving granular bioanodes. Journal of Power Sources, 2021, 489, 229453.	7.8	4
61	Opportunities for visual techniques to determine characteristics and limitations of electro-active biofilms. Biotechnology Advances, 2022, 60, 108011.	11.7	4
62	Improving the discharge of capacitive granules in a moving bed reactor. Journal of Environmental Chemical Engineering, 2021, 9, 105556.	6.7	3
63	An acidâ€doped ice membrane for selective proton transport. International Journal of Energy Research, 2021, 45, 8041-8048.	4.5	2
64	Enhanced Phototrophic Biomass Productivity through Supply of Hydrogen Gas. Environmental Science and Technology Letters, 2020, 7, 861-865.	8.7	1
65	Bio-electrochemical degradability of prospective wastewaters to determine their ammonium recovery potential. Sustainable Energy Technologies and Assessments, 2021, 47, 101423.	2.7	0