

# Annemiek Ter Heijne

## List of Publications by Year in descending order

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Version: 2024-02-01

87  
papers

5,430  
citations

76294

40  
h-index

82499

72  
g-index

90  
all docs

90  
docs citations

90  
times ranked

3718  
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous electron shuttling by sulfide oxidizing bacteria as a novel strategy to produce electric current. <i>Journal of Hazardous Materials</i> , 2022, 424, 127358.	6.5	8
2	The effect of intermittent anode potential regimes on the morphology and extracellular matrix composition of electro-active bacteria. <i>Biofilm</i> , 2022, 4, 100064.	1.5	10
3	Reduced overpotential of methane-producing biocathodes: Effect of current and electrode storage capacity. <i>Bioresource Technology</i> , 2022, 347, 126650.	4.8	3
4	Application of ammonium fertilizers recovered by an Electrochemical System. <i>Resources, Conservation and Recycling</i> , 2022, 181, 106225.	5.3	10
5	Real-time monitoring of biofilm thickness allows for determination of acetate limitations in bio-anodes. <i>Bioresource Technology Reports</i> , 2022, 18, 101028.	1.5	6
6	Methane-Dependent Extracellular Electron Transfer at the Bioanode by the Anaerobic Archaeal Methanotroph <i>Candidatus Methanoperedens</i> . <i>Frontiers in Microbiology</i> , 2022, 13, 820989.	1.5	10
7	Opportunities for visual techniques to determine characteristics and limitations of electro-active biofilms. <i>Biotechnology Advances</i> , 2022, 60, 108011.	6.0	4
8	Electron Storage in Electroactive Biofilms. <i>Trends in Biotechnology</i> , 2021, 39, 34-42.	4.9	56
9	Making the best use of capacitive current: Comparison between fixed and moving granular bioanodes. <i>Journal of Power Sources</i> , 2021, 489, 229453.	4.0	4
10	Theory of transport and recovery in microbial electrosynthesis of acetate from $\text{CO}_2$ . <i>Electrochimica Acta</i> , 2021, 379, 138029.	2.6	9
11	Improving the discharge of capacitive granules in a moving bed reactor. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105556.	3.3	3
12	Donnan Dialysis for scaling mitigation during electrochemical ammonium recovery from complex wastewater. <i>Water Research</i> , 2021, 201, 117260.	5.3	21
13	Effect of process conditions on the performance of a dual-reactor biodesulfurization process. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106450.	3.3	9
14	Bio-electrochemical degradability of prospective wastewaters to determine their ammonium recovery potential. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 47, 101423.	1.7	0
15	Heat potential, generation, recovery and utilization from composting: A review. <i>Resources, Conservation and Recycling</i> , 2021, 175, 105850.	5.3	34
16	An acid-templated ice membrane for selective proton transport. <i>International Journal of Energy Research</i> , 2021, 45, 8041-8048.	2.2	2
17	Biologically enhanced hydrogen sulfide absorption from sour gas under haloalkaline conditions. <i>Journal of Hazardous Materials</i> , 2020, 383, 121104.	6.5	28
18	Combination of bioelectrochemical systems and electrochemical capacitors: Principles, analysis and opportunities. <i>Biotechnology Advances</i> , 2020, 39, 107456.	6.0	55

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19	Competition of electrogens with methanogens for hydrogen in bioanodes. <i>Water Research</i> , 2020, 170, 115292.	5.3	20
20	Minimal Bipolar Membrane Cell Configuration for Scaling Up Ammonium Recovery. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17359-17367.	3.2	26
21	Considerations for application of granular activated carbon as capacitive bioanode in bioelectrochemical systems. <i>Renewable Energy</i> , 2020, 157, 782-792.	4.3	29
22	Bioelectrochemistry for flexible control of biological processes. <i>Environmental Science and Ecotechnology</i> , 2020, 1, 100011.	6.7	6
23	Exploiting Donnan Dialysis to enhance ammonia recovery in an electrochemical system. <i>Chemical Engineering Journal</i> , 2020, 395, 125143.	6.6	18
24	Microbial reduction of organosulfur compounds at cathodes in bioelectrochemical systems. <i>Environmental Science and Ecotechnology</i> , 2020, 1, 100009.	6.7	12
25	Screening for electrical conductivity in anaerobic granular sludge from full-scale wastewater treatment reactors. <i>Biochemical Engineering Journal</i> , 2020, 159, 107575.	1.8	10
26	Urine Addition as a Nutrient Source for Biological Wood Oxidation at 40 °C. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17079-17087.	3.2	2
27	Theory of Ion and Electron Transport Coupled with Biochemical Conversions in an Electroactive Biofilm. <i>Physical Review Applied</i> , 2019, 12, .	1.5	18
28	Redox-flow battery design for a methane-producing bioelectrochemical system. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 21464-21469.	3.8	23
29	3D biofilm visualization and quantification on granular bioanodes with magnetic resonance imaging. <i>Water Research</i> , 2019, 167, 115059.	5.3	17
30	The granular capacitive moving bed reactor for the scale up of bioanodes. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 2738-2748.	1.6	16
31	Electrochemical and microbiological characterization of single carbon granules in a multi-anode microbial fuel cell. <i>Journal of Power Sources</i> , 2019, 435, 126514.	4.0	25
32	Increasing the Selectivity for Sulfur Formation in Biological Gas Desulfurization. <i>Environmental Science &amp; Technology</i> , 2019, 53, 4519-4527.	4.6	69
33	The concept of load ratio applied to bioelectrochemical systems for ammonia recovery. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 2055-2061.	1.6	19
34	Comparison of Two Sustainable Counter Electrodes for Energy Storage in the Microbial Rechargeable Battery. <i>ChemElectroChem</i> , 2019, 6, 2464-2473.	1.7	6
35	Anaerobic biological fermentation of urine as a strategy to enhance the performance of a microbial electrolysis cell (MEC). <i>Renewable Energy</i> , 2019, 139, 936-943.	4.3	29
36	Haloalkaliphilic microorganisms assist sulfide removal in a microbial electrolysis cell. <i>Journal of Hazardous Materials</i> , 2019, 363, 197-204.	6.5	29

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37	(Bio)electrochemical ammonia recovery: progress and perspectives. Applied Microbiology and Biotechnology, 2018, 102, 3865-3878.	1.7	130
38	In situ Biofilm Quantification in Bioelectrochemical Systems by using Optical Coherence Tomography. ChemSusChem, 2018, 11, 2171-2178.	3.6	30
39	Influence of carbon anode properties on performance and microbiome of Microbial Electrolysis Cells operated on urine. Electrochimica Acta, 2018, 267, 122-132.	2.6	20
40	Metal recovery by microbial electro-metallurgy. Progress in Materials Science, 2018, 94, 435-461.	16.0	110
41	Resource Recovery From Wastes and Wastewaters Using Bioelectrochemical Systems. , 2018, , 535-570.		5
42	Bacteria as an Electron Shuttle for Sulfide Oxidation. Environmental Science and Technology Letters, 2018, 5, 495-499.	3.9	37
43	Granular Carbon-Based Electrodes as Cathodes in Methane-Producing Bioelectrochemical Systems. Frontiers in Bioengineering and Biotechnology, 2018, 6, 78.	2.0	48
44	Quantification of bio-anode capacitance in bioelectrochemical systems using Electrochemical Impedance Spectroscopy. Journal of Power Sources, 2018, 400, 533-538.	4.0	50
45	Ammonia recovery from urine in a scaled-up Microbial Electrolysis Cell. Journal of Power Sources, 2017, 356, 491-499.	4.0	132
46	Hydrogen Gas Recycling for Energy Efficient Ammonia Recovery in Electrochemical Systems. Environmental Science & Technology, 2017, 51, 3110-3116.	4.6	82
47	Membrane Selectivity Determines Energetic Losses for Ion Transport in Bioelectrochemical Systems. ChemistrySelect, 2017, 2, 3462-3470.	0.7	38
48	Prototype of a scaled-up microbial fuel cell for copper recovery. Journal of Chemical Technology and Biotechnology, 2017, 92, 2817-2824.	1.6	20
49	Load ratio determines the ammonia recovery and energy input of an electrochemical system. Water Research, 2017, 111, 330-337.	5.3	89
50	Mixed Culture Biocathodes for Production of Hydrogen, Methane, and Carboxylates. Advances in Biochemical Engineering/Biotechnology, 2017, 167, 203-229.	0.6	12
51	Heat-Treated Stainless Steel Felt as a New Cathode Material in a Methane-Producing Bioelectrochemical System. ACS Sustainable Chemistry and Engineering, 2017, 5, 11346-11353.	3.2	59
52	Gas diffusion electrodes improve hydrogen gas mass transfer for a hydrogen oxidizing bioanode. Journal of Chemical Technology and Biotechnology, 2017, 92, 2963-2968.	1.6	9
53	Investigating bacterial community changes and organic substrate degradation in microbial fuel cells operating on real human urine. Environmental Science: Water Research and Technology, 2017, 3, 897-904.	1.2	34
54	Competition between Methanogens and Acetogens in Biocathodes: A Comparison between Potentiostatic and Galvanostatic Control. International Journal of Molecular Sciences, 2017, 18, 204.	1.8	42

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55	Low Substrate Loading Limits Methanogenesis and Leads to High Coulombic Efficiency in Bioelectrochemical Systems. <i>Microorganisms</i> , 2016, 4, 7.	1.6	63
56	Bioelectrochemical enhancement of methane production in low temperature anaerobic digestion at 10Å°C. <i>Water Research</i> , 2016, 99, 281-287.	5.3	103
57	Wood Degradation by Thermotolerant and Thermophilic Fungi for Sustainable Heat Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 6355-6361.	3.2	4
58	Bioelectrochemical Power-to-Gas: State of the Art and Future Perspectives. <i>Trends in Biotechnology</i> , 2016, 34, 879-894.	4.9	174
59	Performance of single carbon granules as perspective for larger scale capacitive bioanodes. <i>Journal of Power Sources</i> , 2016, 325, 690-696.	4.0	66
60	Gas-permeable hydrophobic membranes enable transport of CO <sub>2</sub> and NH <sub>3</sub> to improve performance of bioelectrochemical systems. <i>Environmental Science: Water Research and Technology</i> , 2016, 2, 743-748.	1.2	13
61	Hydrogen as electron donor for copper removal in bioelectrochemical systems. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 5758-5764.	3.8	35
62	Microbial Rechargeable Battery: Energy Storage and Recovery through Acetate. <i>Environmental Science and Technology Letters</i> , 2016, 3, 144-149.	3.9	27
63	High rate copper and energy recovery in microbial fuel cells. <i>Frontiers in Microbiology</i> , 2015, 6, 527.	1.5	55
64	Analysis of the mechanisms of bioelectrochemical methane production by mixed cultures. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 963-970.	1.6	107
65	Analysis of bio-anode performance through electrochemical impedance spectroscopy. <i>Bioelectrochemistry</i> , 2015, 106, 64-72.	2.4	45
66	Carbon dioxide reduction by mixed and pure cultures in microbial electrosynthesis using an assembly of graphite felt and stainless steel as a cathode. <i>Bioresource Technology</i> , 2015, 195, 14-24.	4.8	276
67	Bioelectrochemical systems for nitrogen removal and recovery from wastewater. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 22-33.	1.2	117
68	Fluidized Capacitive Bioanode As a Novel Reactor Concept for the Microbial Fuel Cell. <i>Environmental Science &amp; Technology</i> , 2015, 49, 1929-1935.	4.6	86
69	Theory of ion transport with fast acid-base equilibrations in bioelectrochemical systems. <i>Physical Review E</i> , 2014, 90, 013302.	0.8	51
70	Steady-state performance and chemical efficiency of Microbial Electrolysis Cells. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 7201-7208.	3.8	46
71	Influence of the thickness of the capacitive layer on the performance of bioanodes in Microbial Fuel Cells. <i>Journal of Power Sources</i> , 2013, 243, 611-616.	4.0	59
72	Bioelectrochemical Production of Caproate and Caprylate from Acetate by Mixed Cultures. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 513-518.	3.2	155

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73	Microbial Community Analysis of a Methane-Producing Biocathode in a Bioelectrochemical System. <i>Archaea</i> , 2013, 2013, 1-12.	2.3	98
74	Microbial electrolysis cells for production of methane from CO <sub>2</sub> : long-term performance and perspectives. <i>International Journal of Energy Research</i> , 2012, 36, 809-819.	2.2	172
75	Bioelectrochemical Systems: An Outlook for Practical Applications. <i>ChemSusChem</i> , 2012, 5, 1012-1019.	3.6	220
76	Identifying charge and mass transfer resistances of an oxygen reducing biocathode. <i>Energy and Environmental Science</i> , 2011, 4, 5035.	15.6	107
77	Microbial Communities and Electrochemical Performance of Titanium-Based Anodic Electrodes in a Microbial Fuel Cell. <i>Applied and Environmental Microbiology</i> , 2011, 77, 1069-1075.	1.4	66
78	Butler-Volmer-Monod model for describing bio-anode polarization curves. <i>Bioresource Technology</i> , 2011, 102, 381-387.	4.8	123
79	Performance of a scaled-up Microbial Fuel Cell with iron reduction as the cathode reaction. <i>Journal of Power Sources</i> , 2011, 196, 7572-7577.	4.0	55
80	New applications and performance of bioelectrochemical systems. <i>Applied Microbiology and Biotechnology</i> , 2010, 85, 1673-1685.	1.7	237
81	Copper Recovery Combined with Electricity Production in a Microbial Fuel Cell. <i>Environmental Science &amp; Technology</i> , 2010, 44, 4376-4381.	4.6	322
82	Cathode Potential and Mass Transfer Determine Performance of Oxygen Reducing Biocathodes in Microbial Fuel Cells. <i>Environmental Science &amp; Technology</i> , 2010, 44, 7151-7156.	4.6	125
83	Analysis and Improvement of a Scaled-Up and Stacked Microbial Fuel Cell. <i>Environmental Science &amp; Technology</i> , 2009, 43, 9038-9042.	4.6	182
84	Performance of non-porous graphite and titanium-based anodes in microbial fuel cells. <i>Electrochimica Acta</i> , 2008, 53, 5697-5703.	2.6	192
85	Feasibility Study on Electrochemical Impedance Spectroscopy for Microbial Fuel Cells: Measurement Modes & Data Validation. <i>ECS Transactions</i> , 2008, 13, 27-41.	0.3	16
86	Microbial Fuel Cell Operation with Continuous Biological Ferrous Iron Oxidation of the Catholyte. <i>Environmental Science &amp; Technology</i> , 2007, 41, 4130-4134.	4.6	149
87	A Bipolar Membrane Combined with Ferric Iron Reduction as an Efficient Cathode System in Microbial Fuel Cells. <i>Environmental Science &amp; Technology</i> , 2006, 40, 5200-5205.	4.6	280