Korneel Rabaey

List of Publications by Year
in descending order

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245 papers	34,889 citations	4658 85 h-index	3486 182 g-index
253 all docs	253 docs citations	253 times ranked	15571 citing authors

#	Article	IF	Citations
1	Microbial Fuel Cells:Â Methodology and Technologyâ€. Environmental Science & Technology, 2006, 40, 5181-5192.	10.0	4,962
2	Microbial fuel cells: novel biotechnology for energy generation. Trends in Biotechnology, 2005, 23, 291-298.	9.3	1,853
3	Conversion of Wastes into Bioelectricity and Chemicals by Using Microbial Electrochemical Technologies. Science, 2012, 337, 686-690.	12.6	1,515
4	Microbial electrosynthesis â€" revisiting the electrical route for microbial production. Nature Reviews Microbiology, 2010, 8, 706-716.	28.6	1,321
5	Biofuel Cells Select for Microbial Consortia That Self-Mediate Electron Transfer. Applied and Environmental Microbiology, 2004, 70, 5373-5382.	3.1	1,090
6	Towards practical implementation of bioelectrochemical wastewater treatment. Trends in Biotechnology, 2008, 26, 450-459.	9.3	1,039
7	Microbial Phenazine Production Enhances Electron Transfer in Biofuel Cells. Environmental Science & Technology, 2005, 39, 3401-3408.	10.0	859
8	Continuous Electricity Generation at High Voltages and Currents Using Stacked Microbial Fuel Cells. Environmental Science & Technology, 2006, 40, 3388-3394.	10.0	775
9	Biological Denitrification in Microbial Fuel Cells. Environmental Science & Technology, 2007, 41, 3354-3360.	10.0	739
10	A microbial fuel cell capable of converting glucose to electricity at high rate and efficiency. Biotechnology Letters, 2003, 25, 1531-1535.	2.2	631
11	Tubular Microbial Fuel Cells for Efficient Electricity Generation. Environmental Science & Technology, 2005, 39, 8077-8082.	10.0	597
12	Global Phosphorus Scarcity and Full-Scale P-Recovery Techniques: A Review. Critical Reviews in Environmental Science and Technology, 2015, 45, 336-384.	12.8	528
13	Microbial ecology meets electrochemistry: electricity-driven and driving communities. ISME Journal, 2007, 1, 9-18.	9.8	433
14	Microbial fuel cells for simultaneous carbon and nitrogen removal. Water Research, 2008, 42, 3013-3024.	11.3	412
15	Minimizing losses in bio-electrochemical systems: the road to applications. Applied Microbiology and Biotechnology, 2008, 79, 901-913.	3.6	382
16	Efficient hydrogen peroxide generation from organic matter in a bioelectrochemical system. Electrochemistry Communications, 2009, 11, 1752-1755.	4.7	371
17	Microbial Fuel Cells for Sulfide Removalâ€. Environmental Science & Technology, 2006, 40, 5218-5224.	10.0	366
18	Open Air Biocathode Enables Effective Electricity Generation with Microbial Fuel Cells. Environmental Science & Technology, 2007, 41, 7564-7569.	10.0	359

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19	The anode potential regulates bacterial activity in microbial fuel cells. Applied Microbiology and Biotechnology, 2008, 78, 409-418.	3.6	350
20	Simultaneous nitrification, denitrification and carbon removal in microbial fuel cells. Water Research, 2010, 44, 2970-2980.	11.3	341
21	Microbial Fuel Cells in Relation to Conventional Anaerobic Digestion Technology. Engineering in Life Sciences, 2006, 6, 285-292.	3.6	337
22	Deterministic processes guide long-term synchronised population dynamics in replicate anaerobic digesters. ISME Journal, 2014, 8, 2015-2028.	9.8	328
23	Chain elongation in anaerobic reactor microbiomes to recover resources from waste. Current Opinion in Biotechnology, 2014, 27, 115-122.	6.6	322
24	Decolorization of Azo Dyes in Bioelectrochemical Systems. Environmental Science & Technology, 2009, 43, 5137-5143.	10.0	299
25	Effects of Surface Charge and Hydrophobicity on Anodic Biofilm Formation, Community Composition, and Current Generation in Bioelectrochemical Systems. Environmental Science & Technology, 2013, 47, 7563-7570.	10.0	294
26	Microbial Fuel Cells Generating Electricity from Rhizodeposits of Rice Plants. Environmental Science & Technology, 2008, 42, 3053-3058.	10.0	281
27	Metabolites produced by Pseudomonas sp. enable a Gram-positive bacterium to achieve extracellular electron transfer. Applied Microbiology and Biotechnology, 2008, 77, 1119-1129.	3.6	272
28	Cathodic oxygen reduction catalyzed by bacteria in microbial fuel cells. ISME Journal, 2008, 2, 519-527.	9.8	268
29	Efficient Reduction of Nitrobenzene to Aniline with a Biocatalyzed Cathode. Environmental Science & Technology, 2011, 45, 10186-10193.	10.0	254
30	Non-catalyzed cathodic oxygen reduction at graphite granules in microbial fuel cells. Electrochimica Acta, 2007, 53, 598-603.	5.2	250
31	Engineering electrodes for microbial electrocatalysis. Current Opinion in Biotechnology, 2015, 33, 149-156.	6.6	248
32	Life Cycle Assessment of High-Rate Anaerobic Treatment, Microbial Fuel Cells, and Microbial Electrolysis Cells. Environmental Science & Technology, 2010, 44, 3629-3637.	10.0	247
33	Selective Enrichment Establishes a Stable Performing Community for Microbial Electrosynthesis of Acetate from CO₂. Environmental Science & Technology, 2015, 49, 8833-8843.	10.0	243
34	Electro-Fermentation â€“ Merging Electrochemistry with Fermentation in Industrial Applications. Trends in Biotechnology, 2016, 34, 866-878.	9.3	235
35	Microbial electrosynthesis from CO2: forever a promise?. Current Opinion in Biotechnology, 2020, 62, 48-57.	6.6	232
36	Electron and Carbon Balances in Microbial Fuel Cells Reveal Temporary Bacterial Storage Behavior During Electricity Generation. Environmental Science & Technology, 2007, 41, 2915-2921.	10.0	231

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37	Metabolic and practical considerations on microbial electrosynthesis. Current Opinion in Biotechnology, 2011, 22, 371-377.	6.6	207
38	Nitrobenzene Removal in Bioelectrochemical Systems. Environmental Science & Technology, 2009, 43, 8690-8695.	10.0	191
39	Microbial fuel cells operating on mixed fatty acids. Bioresource Technology, 2010, 101, 1233-1238.	9.6	188
40	Syntrophic Processes Drive the Conversion of Glucose in Microbial Fuel Cell Anodes. Environmental Science & Technology, 2008, 42, 7937-7943.	10.0	186
41	Electrochemical Resource Recovery from Digestate to Prevent Ammonia Toxicity during Anaerobic Digestion. Environmental Science & Technology, 2012, 46, 12209-12216.	10.0	185
42	Sequential anodeâ€“cathode configuration improves cathodic oxygen reduction and effluent quality of microbial fuel cells. Water Research, 2008, 42, 1387-1396.	11.3	181
43	Initial development and structure of biofilms on microbial fuel cell anodes. BMC Microbiology, 2010, 10, 98.	3.3	180
44	High Current Generation Coupled to Caustic Production Using a Lamellar Bioelectrochemical System. Environmental Science & Technology, 2010, 44, 4315-4321.	10.0	179
45	A logical data representation framework for electricity-driven bioproduction processes. Biotechnology Advances, 2015, 33, 736-744.	11.7	174
46	The Chemical Route to a Carbon Dioxide Neutral World. ChemSusChem, 2017, 10, 1039-1055.	6.8	174
47	Integrated Production, Extraction, and Concentration of Acetic Acid from CO₂ through Microbial Electrosynthesis. Environmental Science and Technology Letters, 2015, 2, 325-328.	8.7	161
48	Biofilm stratification during simultaneous nitrification and denitrification (SND) at a biocathode. Bioresource Technology, 2011, 102, 334-341.	9.6	160
49	Electrochemical oxidation of reverse osmosis concentrate on mixed metal oxide (MMO) titanium coated electrodes. Water Research, 2011, 45, 4951-4959.	11.3	152
50	A critical revisit of the key parameters used to describe microbial electrochemical systems. Electrochimica Acta, 2014, 140, 191-208.	5.2	148
51	Electrochemical oxidation of trace organic contaminants in reverse osmosis concentrate using RuO2/IrO2-coated titanium anodes. Water Research, 2011, 45, 1579-1586.	11.3	140
52	Continuous long-term electricity-driven bioproduction of carboxylates and isopropanol from CO 2 with a mixed microbial community. Journal of CO2 Utilization, 2017, 20, 141-149.	6.8	138
53	Bacterial community structure corresponds to performance during cathodic nitrate reduction. ISME Journal, 2010, 4, 1443-1455.	9.8	137
54	Biomass retention on electrodes rather than electrical current enhances stability in anaerobic digestion. Water Research, 2014, 54, 211-221.	11.3	133

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55	Electrochemical oxidation of electrodialysed reverse osmosis concentrate on Ti/Ptâ€“IrO2, Ti/SnO2â€“Sb and boron-doped diamond electrodes. Water Research, 2013, 47, 242-250.	11.3	132
56	Flame Oxidation of Stainless Steel Felt Enhances Anodic Biofilm Formation and Current Output in Bioelectrochemical Systems. Environmental Science & Technology, 2014, 48, 7151-7156.	10.0	131
57	Use of Pseudomonas species producing phenazine-based metabolites in the anodes of microbial fuel cells to improve electricity generation. Applied Microbiology and Biotechnology, 2008, 80, 985-993.	3.6	128
58	High shear enrichment improves the performance of the anodophilic microbial consortium in a microbial fuel cell. Microbial Biotechnology, 2008, 1, 487-496.	4.2	128
59	Electron Fluxes in a Microbial Fuel Cell Performing Carbon and Nitrogen Removal. Environmental Science & Technology, 2009, 43, 5144-5149.	10.0	126
60	Mainstream Ammonium Recovery to Advance Sustainable Urban Wastewater Management. Environmental Science & Technology, 2019, 53, 11066-11079.	10.0	126
61	Decoupling Livestock from Land Use through Industrial Feed Production Pathways. Environmental Science & Technology, 2018, 52, 7351-7359.	10.0	124
62	Genomeâ€centric resolution of microbial diversity, metabolism and interactions in anaerobic digestion. Environmental Microbiology, 2016, 18, 3144-3158.	3.8	123
63	Combining biocatalyzed electrolysis with anaerobic digestion. Water Science and Technology, 2008, 57, 575-579.	2.5	122
64	Spontaneous electrochemical removal of aqueous sulfide. Water Research, 2008, 42, 4965-4975.	11.3	120
65	Electrobioremediation of oil spills. Water Research, 2017, 114, 351-370.	11.3	119
66	In-line and selective phase separation of medium-chain carboxylic acids using membrane electrolysis. Chemical Communications, 2015, 51, 6847-6850.	4.1	117
67	Electrochemically driven extraction and recovery of ammonia from human urine. Water Research, 2015, 87, 367-377.	11.3	116
68	Towards a carbon-negative sustainable bio-based economy. Frontiers in Plant Science, 2013, 4, 174.	3.6	114
69	Outlook for benefits of sediment microbial fuel cells with two bioâ€electrodes. Microbial Biotechnology, 2008, 1, 446-462.	4.2	110
70	Metal recovery by microbial electro-metallurgy. Progress in Materials Science, 2018, 94, 435-461.	32.8	110
71	Greenhouse gas emissions from rice microcosms amended with a plant microbial fuel cell. Applied Microbiology and Biotechnology, 2014, 98, 3205-3217.	3.6	108
72	Interfacing anaerobic digestion with (bio)electrochemical systems: Potentials and challenges. Water Research, 2018, 146, 244-255.	11.3	108

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73	A novel tubular microbial electrolysis cell for high rate hydrogen production. Journal of Power Sources, 2017, 356, 484-490.	7.8	107
74	Phenazines and biosurfactants interact in the biological control of soilâ€borne diseases caused by Pythium spp.. Environmental Microbiology, 2008, 10, 778-788.	3.8	106
75	The electron donating capacity of biochar is dramatically underestimated. Scientific Reports, 2016, 6, 32870.	3.3	106
76	Electrolytic Membrane Extraction Enables Production of Fine Chemicals from Biorefinery Sidestreams. Environmental Science & Technology, 2014, 48, 7135-7142.	10.0	105
77	Product Diversity Linked to Substrate Usage in Chain Elongation by Mixed-Culture Fermentation. Environmental Science & Technology, 2016, 50, 6467-6476.	10.0	105
78	Temperature and solids retention time control microbial population dynamics and volatile fatty acid production in replicated anaerobic digesters. Scientific Reports, 2015, 5, 8496.	3.3	104
79	Non-invasive characterization of electrochemically active microbial biofilms using confocal Raman microscopy. Energy and Environmental Science, 2012, 5, 7017.	30.8	101
80	Porous nickel hollow fiber cathodes coated with CNTs for efficient microbial electrosynthesis of acetate from CO₂usingSporomusa ovata. Journal of Materials Chemistry A, 2018, 6, 17201-17211.	10.3	100
81	Concomitant Leaching and Electrochemical Extraction of Rare Earth Elements from Monazite. Environmental Science & Technology, 2017, 51, 1654-1661.	10.0	98
82	Captureâ€“Fermentâ€“Upgrade: A Three-Step Approach for the Valorization of Sewage Organics as Commodities. Environmental Science & Technology, 2018, 52, 6729-6742.	10.0	97
83	Electrolytic extraction drives volatile fatty acid chain elongation through lactic acid and replaces chemical pH control in thin stillage fermentation. Biotechnology for Biofuels, 2015, 8, 221.	6.2	96
84	Upgrading syngas fermentation effluent using Clostridium kluyveri in a continuous fermentation. Biotechnology for Biofuels, 2017, 10, 83.	6.2	94
85	Electrochemical sulfide oxidation from domestic wastewater using mixed metal-coated titanium electrodes. Water Research, 2011, 45, 5381-5388.	11.3	93
86	Electrochemical Ammonia Recovery from Source-Separated Urine for Microbial Protein Production. Environmental Science & Technology, 2017, 51, 13143-13150.	10.0	89
87	Upgrading the value of anaerobic digestion via chemical production from grid injected biomethane. Energy and Environmental Science, 2018, 11, 1788-1802.	30.8	88
88	Carbon and Electron Fluxes during the Electricity Driven 1,3-Propanediol Biosynthesis from Glycerol. Environmental Science & Technology, 2013, 47, 11199-11205.	10.0	86
89	Microbes and the Next Nitrogen Revolution. Environmental Science & Technology, 2017, 51, 7297-7303.	10.0	85
90	Mildly acidic pH selects for chain elongation to caproic acid over alternative pathways during lactic acid fermentation. Water Research, 2020, 186, 116396.	11.3	83

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91	Microbial electrochemistry for bioremediation. Environmental Science and Ecotechnology, 2020, 1, 100013.	13.5	83
92	Anoxic metabolism and biochemical production in Pseudomonas putida F1 driven by a bioelectrochemical system. Biotechnology for Biofuels, 2016, 9, 39.	6.2	82
93	Electrochemical sulfide removal and recovery from paper mill anaerobic treatment effluent. Water Research, 2010, 44, 2563-2571.	11.3	80
94	Electroactive Biofilms for Sensing: Reflections and Perspectives. ACS Sensors, 2017, 2, 1072-1085.	7.8	79
95	Operational and technical considerations for microbial electrosynthesis. Biochemical Society Transactions, 2012, 40, 1233-1238.	3.4	76
96	Electrochemical Abatement of Hydrogen Sulfide from Waste Streams. Critical Reviews in Environmental Science and Technology, 2015, 45, 1555-1578.	12.8	75
97	Electricity-assisted production of caproic acid from grass. Biotechnology for Biofuels, 2017, 10, 180.	6.2	75
98	Anodes Stimulate Anaerobic Toluene Degradation via Sulfur Cycling in Marine Sediments. Applied and Environmental Microbiology, 2016, 82, 297-307.	3.1	74
99	Electrochemical degradation of the Î²-blocker metoprolol by Ti/Ru0.7Ir0.3O2 and Ti/SnO2-Sb electrodes. Water Research, 2011, 45, 3205-3214.	11.3	72
100	Electrochemical Nutrient Recovery Enables Ammonia Toxicity Control and Biogas Desulfurization in Anaerobic Digestion. Environmental Science & Technology, 2015, 49, 948-955.	10.0	72
101	A Clostridium Group IV Species Dominates and Suppresses a Mixed Culture Fermentation by Tolerance to Medium Chain Fatty Acids Products. Frontiers in Bioengineering and Biotechnology, 2017, 5, 8.	4.1	71
102	Microbial fuel cell cathodes: from bottleneck to prime opportunity?. Water Science and Technology, 2008, 57, 655-659.	2.5	70
103	Role of Sulfur during Acetate Oxidation in Biological Anodes. Environmental Science & Technology, 2009, 43, 3839-3845.	10.0	69
104	Heat-treated stainless steel felt as scalable anode material for bioelectrochemical systems. Bioresource Technology, 2015, 195, 46-50.	9.6	69
105	Electrochemical sulfide removal from synthetic and real domestic wastewater at high current densities. Water Research, 2011, 45, 2281-2289.	11.3	66
106	The Diversity of Techniques to Study Electrochemically Active Biofilms Highlights the Need for Standardization. ChemSusChem, 2012, 5, 1027-1038.	6.8	66
107	Redox dependent metabolic shift in Clostridium autoethanogenum by extracellular electron supply. Biotechnology for Biofuels, 2016, 9, 249.	6.2	65
108	Nitrogen cycling in Bioregenerative Life Support Systems: Challenges for waste refinery and food production processes. Progress in Aerospace Sciences, 2017, 91, 87-98.	12.1	65

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109	Dynamics of Cathode-Associated Microbial Communities and Metabolite Profiles in a Glycerol-Fed Bioelectrochemical System. Applied and Environmental Microbiology, 2013, 79, 4008-4014.	3.1	64
110	Bioelectrochemical Systems: From Extracellular Electron Transfer to Biotechnological Application. Water Intelligence Online, 0, 8, .	0.3	63
111	Membrane electrolysis for the removal of Mg2+ and Ca2+ from lithium rich brines. Water Research, 2019, 154, 117-124.	11.3	63
112	Granular fermentation enables high rate caproic acid production from solid-free thin stillage. Green Chemistry, 2019, 21, 1330-1339.	9.0	60
113	Biofilm Formation by Clostridium ljungdahlii Is Induced by Sodium Chloride Stress: Experimental Evaluation and Transcriptome Analysis. PLoS ONE, 2017, 12, e0170406.	2.5	60
114	Electrochemical regeneration of sulfur loaded electrodes. Electrochemistry Communications, 2009, 11, 1437-1440.	4.7	58
115	Anode potential influences the structure and function of anodic electrode and electrolyte-associated microbiomes. Scientific Reports, 2016, 6, 39114.	3.3	57
116	High salinity in molasses wastewaters shifts anaerobic digestion to carboxylate production. Water Research, 2016, 98, 293-301.	11.3	57
117	Impact of iron salts on activated sludge and interaction with nitrite or nitrate. Bioresource Technology, 2003, 88, 229-239.	9.6	55
118	Membrane stripping enables effective electrochemical ammonia recovery from urine while retaining microorganisms and micropollutants. Water Research, 2019, 150, 349-357.	11.3	54
119	Bio-electrochemical COD removal for energy-efficient, maximum and robust nitrogen recovery from urine through membrane aerated nitrification. Water Research, 2020, 185, 116223.	11.3	54
120	Oxygen-reducing microbial cathodes monitoring toxic shocks in tap water. Biosensors and Bioelectronics, 2019, 132, 115-121.	10.1	53
121	A Novel Shewanella Isolate Enhances Corrosion by Using Metallic Iron as the Electron Donor with Fumarate as the Electron Acceptor. Applied and Environmental Microbiology, 2018, 84, .	3.1	52
122	Electrochemical sulfide removal and caustic recovery from spent caustic streams. Water Research, 2016, 92, 38-43.	11.3	51
123	Periodic polarization of electroactive biofilms increases current density and charge carriers concentration while modifying biofilm structure. Biosensors and Bioelectronics, 2018, 121, 183-191.	10.1	49
124	Effect of speciation and composition on the kinetics and precipitation of arsenic sulfide from industrial metallurgical wastewater. Journal of Hazardous Materials, 2021, 409, 124418.	12.4	49
125	Low temperature calcium hydroxide treatment enhances anaerobic methane production from (extruded) biomass. Bioresource Technology, 2015, 176, 181-188.	9.6	48
126	The type of ion selective membrane determines stability and production levels of microbial electrosynthesis. Bioresource Technology, 2017, 224, 358-364.	9.6	47

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127	Dielectrophoresis-Based Discrimination of Bacteria at the Strain Level Based on Their Surface Properties. PLoS ONE, 2013, 8, e76751.	2.5	47
128	Surfactant treatment of carbon felt enhances anodic microbial electrocatalysis in bioelectrochemical systems. Electrochemistry Communications, 2014, 39, 1-4.	4.7	46
129	The hydrogen gas bio-based economy and the production of renewable building block chemicals, food and energy. New Biotechnology, 2020, 55, 12-18.	4.4	46
130	Pyrolytic carbon-coated stainless steel felt as a high-performance anode for bioelectrochemical systems. Bioresource Technology, 2016, 211, 664-668.	9.6	45
131	A review of sustainable sanitation systems in Africa. Reviews in Environmental Science and Biotechnology, 2016, 15, 465-478.	8.1	45
132	Electrochemical oxidation of iron and alkalinity generation for efficient sulfide control in sewers. Water Research, 2017, 118, 114-120.	11.3	45
133	A novel high-throughput method for kinetic characterisation of anaerobic bioproduction strains, applied to Clostridium kluyveri. Scientific Reports, 2018, 8, 9724.	3.3	44
134	Dehalogenation of Iodinated X-ray Contrast Media in a Bioelectrochemical System. Environmental Science & Technology, 2011, 45, 782-788.	10.0	43
135	Rapid and Quantitative Assessment of Redox Conduction Across Electroactive Biofilms by using Double Potential Step Chronoamperometry. ChemElectroChem, 2017, 4, 1026-1036.	3.4	41
136	Minireview: The Potential of Enhanced Manganese Redox Cycling for Sediment Oxidation. Geomicrobiology Journal, 2007, 24, 547-558.	2.0	39
137	Carbon emission avoidance and capture by producing in-reactor microbial biomass based food, feed and slow release fertilizer: Potentials and limitations. Science of the Total Environment, 2018, 644, 1525-1530.	8.0	39
138	AnAcetobacteriumstrain isolated with metallic iron as electron donor enhances iron corrosion by a similar mechanism asSporomusa sphaeroides. FEMS Microbiology Ecology, 2019, 95, .	2.7	39
139	The third route: Using extreme decentralization to create resilient urban water systems. Water Research, 2020, 185, 116276.	11.3	39
140	A review on ion-exchange nanofiber membranes: properties, structure and application in electrochemical (waste)water treatment. Separation and Purification Technology, 2022, 287, 120529.	7.9	39
141	A Gibbs Free Energy-Based Assessment of Microbial Electrocatalysis. Trends in Biotechnology, 2017, 35, 393-406.	9.3	37
142	Electrochemical tap water softening: A zero chemical input approach. Water Research, 2020, 169, 115263.	11.3	37
143	Use of SWATH mass spectrometry for quantitative proteomic investigation of Shewanella oneidensis MR-1 biofilms grown on graphite cloth electrodes. Systematic and Applied Microbiology, 2015, 38, 135-139.	2.8	36
144	Biochar and activated carbon enhance ethanol conversion and selectivity to caproic acid by Clostridium kluyveri. Bioresource Technology, 2021, 319, 124236.	9.6	36

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145	Production and extraction of medium chain carboxylic acids at a semi-pilot scale. Chemical Engineering Journal, 2021, 416, 127886.	12.7	36
146	Spatial uniformity of microbial diversity in a continuous bioelectrochemical system. Bioresource Technology, 2013, 129, 599-605.	9.6	35
147	Ionic liquid ion exchange: exclusion from strong interactions condemns cations to the most weakly interacting anions and dictates reaction equilibrium. Green Chemistry, 2018, 20, 4277-4286.	9.0	35
148	High-rate activated sludge systems combined with dissolved air flotation enable effective organics removal and recovery. Bioresource Technology, 2019, 291, 121833.	9.6	35
149	Integrating anaerobic digestion and slow pyrolysis improves the product portfolio of a cocoa waste biorefinery. Sustainable Energy and Fuels, 2020, 4, 3712-3725.	4.9	35
150	Development of bioelectrocatalytic activity stimulates mixedâ€culture reduction of glycerol in a bioelectrochemical system. Microbial Biotechnology, 2015, 8, 483-489.	4.2	34
151	Direct and Indirect Effects of Increased CO₂ Partial Pressure on the Bioenergetics of Syntrophic Propionate and Butyrate Conversion. Environmental Science & Technology, 2020, 54, 12583-12592.	10.0	33
152	Extraction and Esterification of Lowâ€Ŧiter Shortâ€Chain Volatile Fatty Acids from Anaerobic Fermentation with Ionic Liquids. ChemSusChem, 2016, 9, 2059-2063.	6.8	32
153	Dynamically Adaptive Control System for Bioanodes in Serially Stacked Bioelectrochemical Systems. Environmental Science & Technology, 2013, 47, 5488-5494.	10.0	31
154	Microbial protein production from methane via electrochemical biogas upgrading. Chemical Engineering Journal, 2020, 391, 123625.	12.7	31
155	Production of carboxylates from high rate activated sludge through fermentation. Bioresource Technology, 2016, 217, 165-172.	9.6	30
156	Bridging spatially segregated redox zones with a microbial electrochemical snorkel triggers biogeochemical cycles in oil-contaminated River Tyne (UK) sediments. Water Research, 2017, 127, 11-21.	11.3	30
157	Empowering electroactive microorganisms for soil remediation: Challenges in the bioelectrochemical removal of petroleum hydrocarbons. Chemical Engineering Journal, 2021, 419, 130008.	12.7	30
158	Hydrodynamic chronoamperometry for probing kinetics of anaerobic microbial metabolism â€“ case study of Faecalibacterium prausnitzii. Scientific Reports, 2015, 5, 11484.	3.3	29
159	Cocoa residues as viable biomass for renewable energy production through anaerobic digestion. Bioresource Technology, 2018, 265, 568-572.	9.6	28
160	Electrochemically Induced Precipitation Enables Fresh Urine Stabilization and Facilitates Source Separation. Environmental Science & Technology, 2020, 54, 3618-3627.	10.0	28
161	Redistribution of wastewater alkalinity with a microbial fuel cell to support nitrification of reject water. Water Research, 2011, 45, 2691-2699.	11.3	27
162	Anode materials for sulfide oxidation in alkaline wastewater: An activity and stability performance comparison. Water Research, 2019, 149, 111-119.	11.3	27

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163	Casimicrobium huifangae gen. nov., sp. nov., a Ubiquitous â€œMost-Wantedâ€•Core Bacterial Taxon from Municipal Wastewater Treatment Plants. Applied and Environmental Microbiology, 2020, 86, .	3.1	26
164	Electrochemical treatment of industrial sulfidic spent caustic streams for sulfide removal and caustic recovery. Journal of Hazardous Materials, 2020, 388, 121770.	12.4	25
165	Lithium carbonate recovery from brines using membrane electrolysis. Journal of Membrane Science, 2020, 615, 118416.	8.2	25
166	Enrichment and characterisation of ethanol chain elongating communities from natural and engineered environments. Scientific Reports, 2020, 10, 3682.	3.3	25
167	Long-term field test of an electrochemical method for sulfide removal from sewage. Water Research, 2012, 46, 3085-3093.	11.3	24
168	Editorial overview: Energy Biotechnology. Current Opinion in Biotechnology, 2014, 27, v-vi.	6.6	24
169	Sanitation of blackwater via sequential wetland and electrochemical treatment. Npj Clean Water, 2018, 1, .	8.0	24
170	Ammonia recovery from brines originating from a municipal wastewater ion exchange process and valorization of recovered nitrogen into microbial protein. Chemical Engineering Journal, 2022, 427, 130896.	12.7	24
171	Evaluating the potential impact of proton carriers on syntrophic propionate oxidation. Scientific Reports, 2015, 5, 18364.	3.3	23
172	Simultaneous use of caustic and oxygen for efficient sulfide control in sewers. Science of the Total Environment, 2017, 601-602, 776-783.	8.0	23
173	Ethanol:propionate ratio drives product selectivity in odd-chain elongation with Clostridium kluyveri and mixed communities. Bioresource Technology, 2020, 313, 123651.	9.6	23
174	A chip-based 128-channel potentiostat for high-throughput studies of bioelectrochemical systems: Optimal electrode potentials for anodic biofilms. Biosensors and Bioelectronics, 2021, 174, 112813.	10.1	23
175	Digestion of high rate activated sludge coupled to biochar formation for soil improvement in the tropics. Water Research, 2015, 81, 216-222.	11.3	22
176	Effect of the anode potential on the physiology and proteome of Shewanella oneidensis MR-1. Bioelectrochemistry, 2018, 119, 172-179.	4.6	22
177	Membrane Electrolysis Assisted Gas Fermentation for Enhanced Acetic Acid Production. Frontiers in Energy Research, 2018, 6, .	2.3	21
178	Anaerobic ureolysis of source-separated urine for NH3 recovery enables direct removal of divalent ions at the toilet. Water Research, 2019, 148, 97-105.	11.3	21
179	Membrane electrolysis-assisted CO2 and H2S extraction as innovative pretreatment method for biological biogas upgrading. Chemical Engineering Journal, 2019, 361, 1479-1486.	12.7	21
180	The third route: A techno-economic evaluation of extreme water and wastewater decentralization. Water Research, 2022, 218, 118408.	11.3	21

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181	Electrochemical caustic generation from sewage. Electrochemistry Communications, 2011, 13, 1202-1204.	4.7	20
182	Assessing the potential for upâ€¢cycling recovered resources from anaerobic digestion through microbial protein production. Microbial Biotechnology, 2021, 14, 897-910.	4.2	20
183	Enhanced Product Recovery from Glycerol Fermentation into 3-Carbon Compounds in a Bioelectrochemical System Combined with In Situ Extraction. Frontiers in Bioengineering and Biotechnology, 2016, 4, 73.	4.1	19
184	Acetate accumulation enhances mixed culture fermentation of biomass to lactic acid. Applied Microbiology and Biotechnology, 2016, 100, 8337-8348.	3.6	19
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