David P B T B Strik

List of Publications by Year
in descending order

75 papers	6,313 citations	61857 43 h-index	85405 71 g-index
75 all docs	75 docs citations	75 times ranked	3885 citing authors

#	Article	IF	Citations
1	Chain Elongation with Reactor Microbiomes: Open-Culture Biotechnology To Produce Biochemicals. Environmental Science & Technology, 2016, 50, 2796-2810.	4.6	426
2	An overview on emerging bioelectrochemical systems (BESs): Technology for sustainable electricity, waste remediation, resource recovery, chemical production and beyond. Renewable Energy, 2016, 98, 153-170.	4.3	334
3	Green electricity production with living plants and bacteria in a fuel cell. International Journal of Energy Research, 2008, 32, 870-876.	2.2	313
4	Carbon dioxide reduction by mixed and pure cultures in microbial electrosynthesis using an assembly of graphite felt and stainless steel as a cathode. Bioresource Technology, 2015, 195, 14-24.	4.8	276
5	New applications and performance of bioelectrochemical systems. Applied Microbiology and Biotechnology, 2010, 85, 1673-1685.	1.7	237
6	Microbial solar cells: applying photosynthetic and electrochemically active organisms. Trends in Biotechnology, 2011, 29, 41-49.	4.9	225
7	Concurrent bio-electricity and biomass production in three Plant-Microbial Fuel Cells using Spartina anglica, Arundinella anomala and Arundo donax. Bioresource Technology, 2010, 101, 3541-3547.	4.8	202
8	Biotransformation of carbon dioxide in bioelectrochemical systems: State of the art and future prospects. Journal of Power Sources, 2017, 356, 256-273.	4.0	194
9	Two-stage medium chain fatty acid (MCFA) production from municipal solid waste and ethanol. Applied Energy, 2014, 116, 223-229.	5.1	181
10	Application of redox mediators to accelerate the transformation of reactive azo dyes in anaerobic bioreactors. Biotechnology and Bioengineering, 2001, 75, 691-701.	1.7	171
11	Application of gas diffusion biocathode in microbial electrosynthesis from carbon dioxide. Environmental Science and Pollution Research, 2016, 23, 22292-22308.	2.7	170
12	Renewable sustainable biocatalyzed electricity production in a photosynthetic algal microbial fuel cell (PAMFC). Applied Microbiology and Biotechnology, 2008, 81, 659-668.	1.7	163
13	Long-term performance of a plant microbial fuel cell with Spartina anglica. Applied Microbiology and Biotechnology, 2010, 86, 973-981.	1.7	163
14	Long-term operation of microbial electrosynthesis cell reducing CO2 to multi-carbon chemicals with a mixed culture avoiding methanogenesis. Bioelectrochemistry, 2017, 113, 26-34.	2.4	154
15	Critical Biofilm Growth throughout Unmodified Carbon Felts Allows Continuous Bioelectrochemical Chain Elongation from CO2 up to Caproate at High Current Density. Frontiers in Energy Research, 2018, 6, .	1.2	146
16	Electricity generation by a plant microbial fuel cell with an integrated oxygen reducing biocathode. Applied Energy, 2015, 137, 151-157.	5.1	136
17	Consecutive lactate formation and chain elongation to reduce exogenous chemicals input in repeated-batch food waste fermentation. Water Research, 2020, 169, 115215.	5.3	132
18	Controlling Ethanol Use in Chain Elongation by CO₂ Loading Rate. Environmental Science & Technology, 2018, 52, 1496-1505.	4.6	127

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19	Cathode Potential and Mass Transfer Determine Performance of Oxygen Reducing Biocathodes in Microbial Fuel Cells. Environmental Science & Technology, 2010, 44, 7151-7156.	4.6	125
20	Microbial community structure elucidates performance of Glyceria maxima plant microbial fuel cell. Applied Microbiology and Biotechnology, 2012, 94, 537-548.	1.7	121
21	Production of Caproic Acid from Mixed Organic Waste: An Environmental Life Cycle Perspective. Environmental Science & Technology, 2017, 51, 7159-7168.	4.6	120
22	Compost in plant microbial fuel cell for bioelectricity generation. Waste Management, 2015, 36, 63-69.	3.7	118
23	Prediction of trace compounds in biogas from anaerobic digestion using the MATLAB Neural Network Toolbox. Environmental Modelling and Software, 2005, 20, 803-810.	1.9	117
24	Solar Energy Powered Microbial Fuel Cell with a Reversible Bioelectrode. Environmental Science & Technology, 2010, 44, 532-537.	4.6	117
25	Identifying charge and mass transfer resistances of an oxygen reducing biocathode. Energy and Environmental Science, 2011, 4, 5035.	15.6	107
26	Selective short-chain carboxylates production: A review of control mechanisms to direct mixed culture fermentations. Critical Reviews in Environmental Science and Technology, 2016, 46, 592-634.	6.6	101
27	A pH-based control of ammonia in biogas during anaerobic digestion of artificial pig manure and maize silage. Process Biochemistry, 2006, 41, 1235-1238.	1.8	99
28	Continuous Longâ€Term Bioelectrochemical Chain Elongation to Butyrate. ChemElectroChem, 2017, 4, 386-395.	1.7	95
29	Electricity generation by a novel design tubular plant microbial fuel cell. Biomass and Bioenergy, 2013, 51, 60-67.	2.9	89
30	New plant-growth medium for increased power output of the Plant-Microbial Fuel Cell. Bioresource Technology, 2012, 104, 417-423.	4.8	80
31	Bioelectrochemical conversion of CO₂ to chemicals: CO₂ as a next generation feedstock for electricity-driven bioproduction in batch and continuous modes. Faraday Discussions, 2017, 202, 433-449.	1.6	79
32	Development of an Effective Chain Elongation Process From Acidified Food Waste and Ethanol Into n-Caproate. Frontiers in Bioengineering and Biotechnology, 2018, 6, 50.	2.0	79
33	The flat-plate plant-microbial fuel cell: the effect of a new design on internal resistances. Biotechnology for Biofuels, 2012, 5, 70.	6.2	74
34	Resilience of roof-top Plant-Microbial Fuel Cells during Dutch winter. Biomass and Bioenergy, 2013, 51, 1-7.	2.9	71
35	Electricity from wetlands: Tubular plant microbial fuels with silicone gas-diffusion biocathodes. Applied Energy, 2017, 185, 642-649.	5.1	65
36	Methanol as an alternative electron donor in chain elongation for butyrate and caproate formation. Biomass and Bioenergy, 2016, 93, 201-208.	2.9	58

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37	Techno-economic assessment of microbial electrosynthesis from CO2 and/or organics: An interdisciplinary roadmap towards future research and application. Applied Energy, 2020, 279, 115775.	5.1	58
38	In situ acetate separation in microbial electrosynthesis from CO2 using ion-exchange resin. Electrochimica Acta, 2017, 237, 267-275.	2.6	52
39	Electricity production with living plants on a green roof: environmental performance of the plantâ€microbial fuel cell. Biofuels, Bioproducts and Biorefining, 2013, 7, 52-64.	1.9	51
40	Characterization of the internal resistance of a plant microbial fuel cell. Electrochimica Acta, 2012, 72, 165-171.	2.6	50
41	Rhizosphere anode model explains high oxygen levels during operation of a Glyceria maxima PMFC. Bioresource Technology, 2012, 108, 60-67.	4.8	48
42	Monophyletic group of unclassified Î³- Proteobacteria dominates in mixed culture biofilm of high-performing oxygen reducing biocathode. Bioelectrochemistry, 2015, 106, 167-176.	2.4	48
43	Plant microbial fuel cell applied in wetlands: Spatial, temporal and potential electricity generation of Spartina anglica salt marshes and Phragmites australis peat soils. Biomass and Bioenergy, 2015, 83, 543-550.	2.9	47
44	Enhanced selectivity to butyrate and caproate above acetate in continuous bioelectrochemical chain elongation from CO2: Steering with CO2 loading rate and hydraulic retention time. Bioresource Technology Reports, 2019, 7, 100284.	1.5	47
45	Effect of n-Caproate Concentration on Chain Elongation and Competing Processes. ACS Sustainable Chemistry and Engineering, 2018, 6, 7499-7506.	3.2	42
46	Branched Medium Chain Fatty Acids: Iso-Caproate Formation from Iso-Butyrate Broadens the Product Spectrum for Microbial Chain Elongation. Environmental Science & Technology, 2019, 53, 7704-7713.	4.6	40
47	Continuous n-valerate formation from propionate and methanol in an anaerobic chain elongation open-culture bioreactor. Biotechnology for Biofuels, 2019, 12, 132.	6.2	40
48	Granular sludge formation and characterization in a chain elongation process. Process Biochemistry, 2016, 51, 1594-1598.	1.8	39
49	Performance and Long Distance Data Acquisition via LoRa Technology of a Tubular Plant Microbial Fuel Cell Located in a Paddy Field in West Kalimantan, Indonesia. Sensors, 2019, 19, 4647.	2.1	30
50	Methanol-Based Chain Elongation with Acetate to n-Butyrate and Isobutyrate at Varying Selectivities Dependent on pH. ACS Sustainable Chemistry and Engineering, 2020, 8, 8184-8194.	3.2	28
51	Isobutyrate biosynthesis via methanol chain elongation: converting organic wastes to platform chemicals. Journal of Chemical Technology and Biotechnology, 2017, 92, 1370-1379.	1.6	27
52	Activated Carbon Mixed with Marine Sediment is Suitable as Bioanode Material for Spartina anglica Sediment/Plant Microbial Fuel Cell: Plant Growth, Electricity Generation, and Spatial Microbial Community Diversity. Water (Switzerland), 2019, 11, 1810.	1.2	26
53	pH and Temperature Determine Performance of Oxygen Reducing Biocathodes. Electroanalysis, 2013, 25, 652-655.	1.5	20
54	Feasibility Study on Electrochemical Impedance Spectroscopy for Microbial Fuel Cells: Measurement Modes & Data Validation. ECS Transactions, 2008, 13, 27-41.	0.3	16

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55	Bioelectrochemical Chain Elongation of Shortâ€Chain Fatty Acids Creates Steering Opportunities for Selective Formation of nâ€Butyrate, nâ€Valerate or nâ€Caproate. ChemistrySelect, 2020, 5, 9127-9133.	0.7	16
56	Increase of power output by change of ion transport direction in a plant microbial fuel cell. International Journal of Energy Research, 2013, 37, 1103-1111.	2.2	13
57	Lactate Metabolism and Microbiome Composition Are Affected by Nitrogen Gas Supply in Continuous Lactate-Based Chain Elongation. Fermentation, 2021, 7, 41.	1.4	10
58	Concurrent use of methanol and ethanol for chain-elongating short chain fatty acids into caproate and isobutyrate. Journal of Environmental Management, 2020, 258, 110008.	3.8	9
59	nZVI Impacts Substrate Conversion and Microbiome Composition in Chain Elongation From D- and L-Lactate Substrates. Frontiers in Bioengineering and Biotechnology, 2021, 9, 666582.	2.0	9
60	Cyclic Voltammetry is Invasive on Microbial Electrosynthesis. ChemElectroChem, 2021, 8, 3384-3396.	1.7	9
61	A Thin Layer of Activated Carbon Deposited on Polyurethane Cube Leads to New Conductive Bioanode for (Plant) Microbial Fuel Cell. Energies, 2020, 13, 574.	1.6	9
62	CO₂ Conversion by Combining a Copper Electrocatalyst and Wildâ€type Microorganisms. ChemCatChem, 2020, 12, 3900-3912.	1.8	8
63	Marine Sediment Mixed With Activated Carbon Allows Electricity Production and Storage From Internal and External Energy Sources: A New Rechargeable Bio-Battery With Bi-Directional Electron Transfer Properties. Frontiers in Microbiology, 2019, 10, 934.	1.5	7
64	Electricity generation from wetlands with activated carbon bioanode. IOP Conference Series: Earth and Environmental Science, 2018, 131, 012046.	0.2	6
65	Electrodes for Cathodic Microbial Electrosynthesis Processes: Key Developments and Criteria for Effective Research and Implementation. , 2017, , 429-473.		6
66	Designing a Selective n-Caproate Adsorptionâ€“Recovery Process with Granular Activated Carbon and Screening of Conductive Materials in Chain Elongation. ACS ES&T Engineering, 2022, 2, 54-64.	3.7	6
67	Catalytic Cooperation between a Copper Oxide Electrocatalyst and a Microbial Community for Microbial Electrosynthesis. ChemPlusChem, 2021, 86, 763-777.	1.3	5
68	Concentration-dependent effects of nickel doping on activated carbon biocathodes. Catalysis Science and Technology, 2022, 12, 2500-2518.	2.1	5
69	Reactor microbiome enriches vegetable oil with n-caproate and n-caprylate for potential functionalized feed additive production via extractive lactate-based chain elongation. Biotechnology for Biofuels, 2021, 14, 232.	6.2	5
70	Integrated Product Separation in Bioelectrochemical CO2Reduction for Improved Process Efficiency. Chemie-Ingenieur-Technik, 2016, 88, 1255-1256.	0.4	4
71	Waterâ€Based Synthesis of Hydrophobic Ionic Liquids [N₈₈₈₈][oleate] and [P_{666,14}][oleate] and their Bioprocess Compatibility. ChemistryOpen, 2018, 7, 878-884.	0.9	4
72	Open Culture Ethanol-Based Chain Elongation to Form Medium Chain Branched Carboxylates and Alcohols. Frontiers in Bioengineering and Biotechnology, 2021, 9, 697439.	2.0	4

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73	Editorial: Microbial Chain Elongation- Close the Carbon Loop by Connecting-Communities. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	4
74	Product Specificity Influenced by Catholyte Conditions during the Microbial Electrosynthesis Process CO2to Acetate. Chemie-Ingenieur-Technik, 2016, 88, 1253-1253.	0.4	0
75	Plant-Microbial Fuel Cells Serve the Environment and People. , 2020, , 315-327.		0