Ruggero Rossi

List of Publications by Year
in descending order

33 papers	2,115 citations	331670 21 h-index	395702 33 g-index
33 all docs	33 docs citations	33 times ranked	1762 citing authors

#	Article	IF	Citations
1	Electroactive microorganisms in bioelectrochemical systems. Nature Reviews Microbiology, 2019, 17, 307-319.	28.6	890
2	Evaluating a multi-panel air cathode through electrochemical and biotic tests. Water Research, 2019, 148, 51-59.	11.3	128
3	Low-cost Feâ€“Nâ€“C catalyst derived from Fe (III)-chitosan hydrogel to enhance power production in microbial fuel cells. Chemical Engineering Journal, 2020, 380, 122522.	12.7	87
4	In situ biofilm removal from air cathodes in microbial fuel cells treating domestic wastewater. Bioresource Technology, 2018, 265, 200-206.	9.6	82
5	Evaluation of Electrode and Solution Area-Based Resistances Enables Quantitative Comparisons of Factors Impacting Microbial Fuel Cell Performance. Environmental Science & Technology, 2019, 53, 3977-3986.	10.0	79
6	Impact of Ohmic Resistance on Measured Electrode Potentials and Maximum Power Production in Microbial Fuel Cells. Environmental Science & Technology, 2018, 52, 8977-8985.	10.0	73
7	Pilot scale microbial fuel cells using air cathodes for producing electricity while treating wastewater. Water Research, 2022, 215, 118208.	11.3	60
8	Applying the electrode potential slope method as a tool to quantitatively evaluate the performance of individual microbial electrolysis cell components. Bioresource Technology, 2019, 287, 121418.	9.6	53
9	Impact of flow recirculation and anode dimensions on performance of a large scale microbial fuel cell. Journal of Power Sources, 2019, 412, 294-300.	7.8	50
10	Using reverse osmosis membranes to control ion transport during water electrolysis. Energy and Environmental Science, 2020, 13, 3138-3148.	30.8	49
11	Assessment of a metalâ€“organic framework catalyst in air cathode microbial fuel cells over time with different buffers and solutions. Bioresource Technology, 2017, 233, 399-405.	9.6	48
12	Impact of cathodic electron acceptor on microbial fuel cell internal resistance. Bioresource Technology, 2020, 316, 123919.	9.6	45
13	Unraveling the contributions of internal resistance components in two-chamber microbial fuel cells using the electrode potential slope analysis. Electrochimica Acta, 2020, 348, 136291.	5.2	39
14	Using an anion exchange membrane for effective hydroxide ion transport enables high power densities in microbial fuel cells. Chemical Engineering Journal, 2021, 422, 130150.	12.7	39
15	Enabling the use of seawater for hydrogen gas production in water electrolyzers. Joule, 2021, 5, 760-762.	24.0	37
16	Quantifying the factors limiting performance and rates in microbial fuel cells using the electrode potential slope analysis combined with electrical impedance spectroscopy. Electrochimica Acta, 2020, 348, 136330.	5.2	33
17	High performance flow through microbial fuel cells with anion exchange membrane. Journal of Power Sources, 2020, 475, 228633.	7.8	31
18	Impact of external resistance acclimation on charge transfer and diffusion resistance in bench-scale microbial fuel cells. Bioresource Technology, 2020, 318, 123921.	9.6	31

#	Article	IF	Citations
19	Balancing Water Dissociation and Current Densities To Enable Sustainable Hydrogen Production with Bipolar Membranes in Microbial Electrolysis Cells. Environmental Science & Technology, 2019, 53, 14761-14768.	10.0	28
20	Mitigating external and internal cathode fouling using a polymer bonded separator in microbial fuel cells. Bioresource Technology, 2018, 249, 1080-1084.	9.6	27
21	Impact of cleaning procedures on restoring cathode performance for microbial fuel cells treating domestic wastewater. Bioresource Technology, 2019, 290, 121759.	9.6	26
22	Using a vapor-fed anode and saline catholyte to manage ion transport in a proton exchange membrane electrolyzer. Energy and Environmental Science, 2021, 14, 6041-6049.	30.8	22
23	Comparison of different chemical treatments of brush and flat carbon electrodes to improve performance of microbial fuel cells. Bioresource Technology, 2021, 342, 125932.	9.6	20
24	Chronoamperometry and linear sweep voltammetry reveals the adverse impact of high carbonate buffer concentrations on anode performance in microbial fuel cells. Journal of Power Sources, 2020, 476, 228715.	7.8	19
25	Continuous Flow Microbial Flow Cell with an Anion Exchange Membrane for Treating Low Conductivity and Poorly Buffered Wastewater. ACS Sustainable Chemistry and Engineering, 2021, 9, 2946-2954.	6.7	19
26	The impact of different types of high surface area brush fibers with different electrical conductivity and biocompatibility on the rates of methane generation in anaerobic digestion. Science of the Total Environment, 2021, 787, 147683.	8.0	19
27	Vapor-Fed Cathode Microbial Electrolysis Cells with Closely Spaced Electrodes Enables Greatly Improved Performance. Environmental Science & Technology, 2022, 56, 1211-1220.	10.0	16
28	High-rate microbial electrosynthesis using a zero-gap flow cell and vapor-fed anode design. Water Research, 2022, 219, 118597.	11.3	16
29	Using copper-based biocathodes to improve carbon dioxide conversion efficiency into methane in microbial methanogenesis cells. Chemical Engineering Journal, 2022, 435, 135076.	12.7	14
30	Adapting Aluminum-Doped Zinc Oxide for Electrically Conductive Membranes Fabricated by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2020, 12, 963-969.	8.0	10
31	Energy Use for Electricity Generation Requires an Assessment More Directly Relevant to Climate Change. ACS Energy Letters, 2020, 5, 3514-3517.	17.4	10
32	Changes in electrode resistances and limiting currents as a function of microbial electrolysis cell reactor configurations. Electrochimica Acta, 2021, 388, 138590.	5.2	9
33	Improving microbial electrolysis stability using flow-through brush electrodes and monitoring anode potentials relative to thermodynamic minima. International Journal of Hydrogen Energy, 2021, 46, 9514-9522.	7.1	6