

# Ruggero Rossi

## List of Publications by Year in descending order

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33  
papers

2,115  
citations

331259

21  
h-index

395343

33  
g-index

33  
all docs

33  
docs citations

33  
times ranked

1762  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electroactive microorganisms in bioelectrochemical systems. <i>Nature Reviews Microbiology</i> , 2019, 17, 307-319.	13.6	890
2	Evaluating a multi-panel air cathode through electrochemical and biotic tests. <i>Water Research</i> , 2019, 148, 51-59.	5.3	128
3	Low-cost Fe-N-C catalyst derived from Fe (III)-chitosan hydrogel to enhance power production in microbial fuel cells. <i>Chemical Engineering Journal</i> , 2020, 380, 122522.	6.6	87
4	In situ biofilm removal from air cathodes in microbial fuel cells treating domestic wastewater. <i>Bioresource Technology</i> , 2018, 265, 200-206.	4.8	82
5	Evaluation of Electrode and Solution Area-Based Resistances Enables Quantitative Comparisons of Factors Impacting Microbial Fuel Cell Performance. <i>Environmental Science &amp; Technology</i> , 2019, 53, 3977-3986.	4.6	79
6	Impact of Ohmic Resistance on Measured Electrode Potentials and Maximum Power Production in Microbial Fuel Cells. <i>Environmental Science &amp; Technology</i> , 2018, 52, 8977-8985.	4.6	73
7	Pilot scale microbial fuel cells using air cathodes for producing electricity while treating wastewater. <i>Water Research</i> , 2022, 215, 118208.	5.3	60
8	Applying the electrode potential slope method as a tool to quantitatively evaluate the performance of individual microbial electrolysis cell components. <i>Bioresource Technology</i> , 2019, 287, 121418.	4.8	53
9	Impact of flow recirculation and anode dimensions on performance of a large scale microbial fuel cell. <i>Journal of Power Sources</i> , 2019, 412, 294-300.	4.0	50
10	Using reverse osmosis membranes to control ion transport during water electrolysis. <i>Energy and Environmental Science</i> , 2020, 13, 3138-3148.	15.6	49
11	Assessment of a metal-organic framework catalyst in air cathode microbial fuel cells over time with different buffers and solutions. <i>Bioresource Technology</i> , 2017, 233, 399-405.	4.8	48
12	Impact of cathodic electron acceptor on microbial fuel cell internal resistance. <i>Bioresource Technology</i> , 2020, 316, 123919.	4.8	45
13	Unraveling the contributions of internal resistance components in two-chamber microbial fuel cells using the electrode potential slope analysis. <i>Electrochimica Acta</i> , 2020, 348, 136291.	2.6	39
14	Using an anion exchange membrane for effective hydroxide ion transport enables high power densities in microbial fuel cells. <i>Chemical Engineering Journal</i> , 2021, 422, 130150.	6.6	39
15	Enabling the use of seawater for hydrogen gas production in water electrolyzers. <i>Joule</i> , 2021, 5, 760-762.	11.7	37
16	Quantifying the factors limiting performance and rates in microbial fuel cells using the electrode potential slope analysis combined with electrical impedance spectroscopy. <i>Electrochimica Acta</i> , 2020, 348, 136330.	2.6	33
17	High performance flow through microbial fuel cells with anion exchange membrane. <i>Journal of Power Sources</i> , 2020, 475, 228633.	4.0	31
18	Impact of external resistance acclimation on charge transfer and diffusion resistance in bench-scale microbial fuel cells. <i>Bioresource Technology</i> , 2020, 318, 123921.	4.8	31

#	ARTICLE	IF	CITATIONS
19	Balancing Water Dissociation and Current Densities To Enable Sustainable Hydrogen Production with Bipolar Membranes in Microbial Electrolysis Cells. <i>Environmental Science &amp; Technology</i> , 2019, 53, 14761-14768.	4.6	28
20	Mitigating external and internal cathode fouling using a polymer bonded separator in microbial fuel cells. <i>Bioresource Technology</i> , 2018, 249, 1080-1084.	4.8	27
21	Impact of cleaning procedures on restoring cathode performance for microbial fuel cells treating domestic wastewater. <i>Bioresource Technology</i> , 2019, 290, 121759.	4.8	26
22	Using a vapor-fed anode and saline catholyte to manage ion transport in a proton exchange membrane electrolyzer. <i>Energy and Environmental Science</i> , 2021, 14, 6041-6049.	15.6	22
23	Comparison of different chemical treatments of brush and flat carbon electrodes to improve performance of microbial fuel cells. <i>Bioresource Technology</i> , 2021, 342, 125932.	4.8	20
24	Chronoamperometry and linear sweep voltammetry reveals the adverse impact of high carbonate buffer concentrations on anode performance in microbial fuel cells. <i>Journal of Power Sources</i> , 2020, 476, 228715.	4.0	19
25	Continuous Flow Microbial Flow Cell with an Anion Exchange Membrane for Treating Low Conductivity and Poorly Buffered Wastewater. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 2946-2954.	3.2	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. <i>Science of the Total Environment</i> , 2021, 787, 147683.	3.9	19
27	Vapor-Fed Cathode Microbial Electrolysis Cells with Closely Spaced Electrodes Enables Greatly Improved Performance. <i>Environmental Science &amp; Technology</i> , 2022, 56, 1211-1220.	4.6	16
28	High-rate microbial electrosynthesis using a zero-gap flow cell and vapor-fed anode design. <i>Water Research</i> , 2022, 219, 118597.	5.3	16
29	Using copper-based biocathodes to improve carbon dioxide conversion efficiency into methane in microbial methanogenesis cells. <i>Chemical Engineering Journal</i> , 2022, 435, 135076.	6.6	14
30	Adapting Aluminum-Doped Zinc Oxide for Electrically Conductive Membranes Fabricated by Atomic Layer Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 963-969.	4.0	10
31	Energy Use for Electricity Generation Requires an Assessment More Directly Relevant to Climate Change. <i>ACS Energy Letters</i> , 2020, 5, 3514-3517.	8.8	10
32	Changes in electrode resistances and limiting currents as a function of microbial electrolysis cell reactor configurations. <i>Electrochimica Acta</i> , 2021, 388, 138590.	2.6	9
33	Improving microbial electrolysis stability using flow-through brush electrodes and monitoring anode potentials relative to thermodynamic minima. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 9514-9522.	3.8	6