Matteo Grattieri

List of Publications by Year in descending order

55 papers	2,070 citations	236925 25 h-index	233421 45 g-index
57 all docs	57 docs citations	57 times ranked	2040 citing authors

#	Article	IF	Citations
1	Self-Powered Biosensors. ACS Sensors, 2018, 3, 44-53.	7.8	229
2	Fundamentals, Applications, and Future Directions of Bioelectrocatalysis. Chemical Reviews, 2020, 120, 12903-12993.	47.7	227
3	Fast and efficient removal of chromium (VI) anionic species by a reusable chitosan-modified multi-walled carbon nanotube composite. Chemical Engineering Journal, 2018, 339, 259-267.	12.7	133
4	Modified biochar for phosphate adsorption in environmentally relevant conditions. Chemical Engineering Journal, 2020, 380, 122375.	12.7	115
5	Parameters characterization and optimization of activated carbon (AC) cathodes for microbial fuel cell application. Bioresource Technology, 2014, 163, 54-63.	9.6	102
6	Surface Modification of Microbial Fuel Cells Anodes: Approaches to Practical Design. Electrochimica Acta, 2014, 134, 116-126.	5.2	89
7	Floating microbial fuel cells as energy harvesters for signal transmission from natural water bodies. Journal of Power Sources, 2017, 340, 80-88.	7.8	83
8	Microbial fuel cells in saline and hypersaline environments: Advancements, challenges and future perspectives. Bioelectrochemistry, 2018, 120, 127-137.	4.6	78
9	A sustainable adsorbent for phosphate removal: modifying multi-walled carbon nanotubes with chitosan. Journal of Materials Science, 2018, 53, 12641-12649.	3.7	73
10	Microbial amperometric biosensor for online herbicide detection: Photocurrent inhibition of Anabaena variabilis. Electrochimica Acta, 2019, 302, 102-108.	5.2	61
11	Photobioelectrocatalysis of Intact Chloroplasts for Solar Energy Conversion. ACS Catalysis, 2017, 7, 2257-2265.	11.2	60
12	Bioelectrochemical Systems as a Multipurpose Biosensing Tool: Present Perspective and Future Outlook. ChemElectroChem, 2017, 4, 834-842.	3.4	56
13	Understanding Biophotocurrent Generation in Photosynthetic Purple Bacteria. ACS Catalysis, 2019, 9, 867-873.	11.2	56
14	Electrochemical Behavior of Stainless Steel Anodes in Membraneless Microbial Fuel Cells. Journal of the Electrochemical Society, 2014, 161, H62-H67.	2.9	46
15	Halotolerant extremophile bacteria from the Great Salt Lake for recycling pollutants in microbial fuel cells. Journal of Power Sources, 2017, 356, 310-318.	7.8	46
16	Performance explorations of single chamber microbial fuel cells by using various microelectrodes applied to biocathodes. International Journal of Hydrogen Energy, 2014, 39, 21837-21846.	7.1	39
17	PTFE effect on the electrocatalysis of the oxygen reduction reaction in membraneless microbial fuel cells. Bioelectrochemistry, 2015, 106, 240-247.	4.6	38
18	Sustainable Bioelectrosynthesis of the Bioplastic Polyhydroxybutyrate: Overcoming Substrate Requirement for NADH Regeneration. ACS Sustainable Chemistry and Engineering, 2018, 6, 4909-4915.	6.7	36

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19	Purple bacteria photo-bioelectrochemistry: enthralling challenges and opportunities. Photochemical and Photobiological Sciences, 2020, 19, 424-435.	2.9	36
20	Enhanced Bioelectrocatalysis of Shewanella oneidensis MR-1 by a Naphthoquinone Redox Polymer. ACS Energy Letters, 2017, 2, 1947-1951.	17.4	32
21	Advancing the fundamental understanding and practical applications of photo-bioelectrocatalysis. Chemical Communications, 2020, 56, 8553-8568.	4.1	31
22	Recent trends and advances in microbial electrochemical sensing technologies: An overview. Current Opinion in Electrochemistry, 2021, 30, 100762.	4.8	31
23	Sustainable Hypersaline Microbial Fuel Cells: Inexpensive Recyclable Polymer Supports for Carbon Nanotube Conductive Paint Anodes. ChemSusChem, 2017, 10, 2053-2058.	6.8	29
24	Rational design of artificial redox-mediating systems toward upgrading photobioelectrocatalysis. Photochemical and Photobiological Sciences, 2021, 20, 1333-1356.	2.9	29
25	Purple Bacteria and 3D Redox Hydrogels for Bioinspired Photoâ€bioelectrocatalysis. ChemSusChem, 2020, 13, 230-237.	6.8	28
26	Alginateâ€Encapsulated Bacteria for the Treatment of Hypersaline Solutions in Microbial Fuel Cells. ChemBioChem, 2018, 19, 1162-1169.	2.6	26
27	Tuning purple bacteria salt-tolerance for photobioelectrochemical systems in saline environments. Faraday Discussions, 2019, 215, 15-25.	3.2	23
28	Revisiting direct electron transfer in nanostructured carbon laccase oxygen cathodes. Bioelectrochemistry, 2016, 109, 101-107.	4.6	20
29	An engineered, non-diazotrophic cyanobacterium and its application in bioelectrochemical nitrogen fixation. Cell Reports Physical Science, 2021, 2, 100444.	5.6	19
30	Enzymatic Oxygen Microsensor Based on Bilirubin Oxidase Applied to Microbial Fuel Cells Analysis. Electroanalysis, 2015, 27, 327-335.	2.9	17
31	Editorsâ€™ Choiceâ€”Reviewâ€”Exploration of Computational Approaches for Understanding Microbial Electrochemical Systems: Opportunities and Future Directions. Journal of the Electrochemical Society, 2020, 167, 065502.	2.9	17
32	Unveiling salinity effects on photo-bioelectrocatalysis through combination of bioinformatics and electrochemistry. Electrochimica Acta, 2020, 337, 135731.	5.2	16
33	Online self-powered Cr(VI) monitoring with autochthonous Pseudomonas and a bio-inspired redox polymer. Analytical and Bioanalytical Chemistry, 2020, 412, 6449-6457.	3.7	15
34	Unbranched Hybrid Conducting Redox Polymers for Intact Chloroplast-Based Photobioelectrocatalysis. Langmuir, 2021, 37, 7821-7833.	3.5	15
35	Hypersaline Microbial Self-Powered Biosensor with Increased Sensitivity. Journal of the Electrochemical Society, 2018, 165, H251-H254.	2.9	14
36	Bio-Inspired Redox-Adhesive Polydopamine Matrix for Intact Bacteria Biohybrid Photoanodes. ACS Applied Materials & Interfaces, 2022, 14, 26631-26641.	8.0	14

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37	Non-Competitive Reversible Inhibition of Laccase by H2O2in Osmium Mediated Layer-By-Layer Multilayer O2Biocathodes. Journal of the Electrochemical Society, 2015, 162, G82-G86.	2.9	11
38	Chloroplast biosolar cell and self-powered herbicide monitoring. Chemical Communications, 2020, 56, 13161-13164.	4.1	11
39	Facilitated Electron Hopping in Nanolayer Oxygenâ€Insensitive Glucose Biosensor for Application in a Complex Matrix. ChemElectroChem, 2016, 3, 1884-1889.	3.4	10
40	Transitioning from batch to flow hypersaline microbial fuel cells. Electrochimica Acta, 2019, 317, 494-501.	5.2	10
41	Photobioelectrochemistry of intact photosynthetic bacteria: Advances and future outlook. Current Opinion in Electrochemistry, 2022, 34, 101018.	4.8	10
42	Unveiling complete lactate oxidation through a hybrid catalytic cascade. Electrochimica Acta, 2021, 376, 138044.	5.2	9
43	Decoupling energy and power. Nature Energy, 2018, 3, 8-9.	39.5	8
44	Investigating extracellular electron transfer of Rikenella microfusus: a recurring bacterium in mixed-species biofilms. Sustainable Energy and Fuels, 2017, 1, 1568-1572.	4.9	7
45	The periodic table of photosynthetic purple non-sulfur bacteria: intact cell-metal ions interactions. Photochemical and Photobiological Sciences, 2022, 21, 101-111.	2.9	7
46	Draft Genome Sequence of Salinivibrio sp. Strain EAGSL, a Biotechnologically Relevant Halophilic Microorganism. Microbiology Resource Announcements, 2020, 9, .	0.6	3
47	Halotolerance of Rhodobacter sphaeroides for saline and hypersaline wastewater bioremediation. , 2021, , .		3
48	Lag Time Spectrophotometric Assay for Studying Transport Limitation in Immobilized Enzymes. ACS Omega, 2018, 3, 11945-11949.	3.5	1
49	An Unbranched, Hybrid Conductive-Redox Polymer for Interfacing Intact Chloroplasts and Electrode Surfaces during Photobioelectrocatalysis. ECS Meeting Abstracts, 2021, MA2021-01, 1255-1255.	0.0	0
50	Photobioelectrochemistry of Intact Chloroplasts for Solar Energy Conversion. ECS Meeting Abstracts, 2017, , .	0.0	0
51	Extracellular Electron Transfer in Mixed Species Biofilms: The Role of Rikenella Microfusus. ECS Meeting Abstracts, 2017, , .	0.0	0
52	Extracellular Electron Transfer Mechanisms in a Moderately Halophilic Bacterium from the Great Salt Lake for High Salinity Heavy Metal Biosensing. ECS Meeting Abstracts, 2019, , .	0.0	0
53	Unveiling Purple Bacteria Salt Tolerance Mechanisms for Environmental Monitoring in Photo-Bioelectrochemical Systems. ECS Meeting Abstracts, 2019, , .	0.0	0
54	(Invited) Targeting Sustainability in Bioelectrochemical Systems for Water Quality Monitoring. ECS Meeting Abstracts, 2021, MA2021-02, 1517-1517.	0.0	0

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55	Intact Photosynthetic Bacteria-Based Electrochemical Biosensors. ECS Meeting Abstracts, 2022, MA2022-01, 1860-1860.	0.0	0