Abraham Esteve-Nunez

List of Publications by Year
in descending order

64	3,066	136950	161849
papers	citations	32 h-index	54 g-index

70	70	70	2564
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Câ€Type Cytochromes Wire Electricityâ€Producing Bacteria to Electrodes. Angewandte Chemie - International Edition, 2008, 47, 4874-4877.	13.8	209
2	Fluorescent properties of câ€type cytochromes reveal their potential role as an extracytoplasmic electron sink in Geobacter sulfurreducens. Environmental Microbiology, 2008, 10, 497-505.	3.8	209
3	Growth of Geobacter sulfurreducens under nutrientâ€limiting conditions in continuous culture. Environmental Microbiology, 2005, 7, 641-648.	3.8	185
4	Whole Cell Electrochemistry of Electricity-Producing Microorganisms Evidence an Adaptation for Optimal Exocellular Electron Transport. Environmental Science & Technology, 2008, 42, 2445-2450.	10.0	155
5	The proteome of dissimilatory metal-reducing microorganism Geobacter sulfurreducens under various growth conditions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 1198-1206.	2.3	128
6	Electrochemical insight into the mechanism of electron transport in biofilms of Geobacter sulfurreducens. Electrochimica Acta, 2011, 56, 10791-10795.	5.2	109
7	PnrA, a new nitroreductase-family enzyme in the TNT-degrading strain Pseudomonas putida JLR11. Environmental Microbiology, 2005, 7, 1211-1219.	3.8	101
8	Microbial Electrochemical Technologies for Wastewater Treatment: Principles and Evolution from Microbial Fuel Cells to Bioelectrochemical-Based Constructed Wetlands. Water (Switzerland), 2018, 10, 1128.	2.7	91
9	Metabolism of 2,4,6-Trinitrotoluene byPseudomonassp. JLR11. Environmental Science & Technology, 1998, 32, 3802-3808.	10.0	90
10	Microbial electrochemistry for bioremediation. Environmental Science and Ecotechnology, 2020, 1, 100013.	13.5	83
11	Electroactive biochar outperforms highly conductive carbon materials for biodegrading pollutants by enhancing microbial extracellular electron transfer. Carbon, 2019, 146, 597-609.	10.3	79
12	Genetic Characterization of a Single Bifunctional Enzyme for Fumarate Reduction and Succinate Oxidation in Geobacter sulfurreducens and Engineering of Fumarate Reduction in Geobacter metallireducens. Journal of Bacteriology, 2006, 188, 450-455.	2.2	77
13	Silica Colloid Formation Enhances Performance of Sediment Microbial Fuel Cells in a Low Conductivity Soil. Environmental Science & Technology, 2013, 47, 2117-2122.	10.0	73
14	Direct Correlation between Rates of Anaerobic Respiration and Levels of mRNA for Key Respiratory Genes in Geobacter sulfurreducens. Applied and Environmental Microbiology, 2004, 70, 5183-5189.	3.1	67
15	A severe reduction in the cytochrome <scp>C</scp> content of <scp>G</scp>eobacter sulfurreducens eliminates its capacity for extracellular electron transfer. Environmental Microbiology Reports, 2015, 7, 219-226.	2.4	65
16	DNA Microarray and Proteomic Analyses of the RpoS Regulon in Geobacter sulfurreducens. Journal of Bacteriology, 2006, 188, 2792-2800.	2.2	62
17	TNT biotransformation: when chemistry confronts mineralization. Applied Microbiology and Biotechnology, 2007, 76, 267-277.	3.6	61
18	ATR-SEIRAs characterization of surface redox processes in G. sulfurreducens. Bioelectrochemistry, 2010, 78, 25-29.	4.6	61

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19	Microbial-electrochemical bioremediation and detoxification of dibenzothiophene-polluted soil. Chemosphere, 2014, 101, 61-65.	8.2	61
20	Electroactive biofilm-based constructed wetland (EABB-CW): A mesocosm-scale test of an innovative setup for wastewater treatment. Science of the Total Environment, 2019, 659, 796-806.	8.0	60
21	Assimilation of Nitrogen from Nitrite and Trinitrotoluene in Pseudomonas putida JLR11. Journal of Bacteriology, 2005, 187, 396-399.	2.2	59
22	Merging microbial electrochemical systems with electrocoagulation pretreatment for achieving a complete treatment of brewery wastewater. Chemical Engineering Journal, 2017, 330, 1068-1074.	12.7	57
23	Strategies for merging microbial fuel cell technologies in water desalination processes: Start-up protocol and desalination efficiency assessment. Journal of Power Sources, 2017, 356, 519-528.	7.8	50
24	Geobacter Dominates the Inner Layers of a Stratified Biofilm on a Fluidized Anode During Brewery Wastewater Treatment. Frontiers in Microbiology, 2018, 9, 378.	3.5	48
25	Cleaning-up atrazine-polluted soil by using Microbial Electroremediating Cells. Chemosphere, 2016, 161, 365-371.	8.2	46
26	Electroactive Biochar for Large-Scale Environmental Applications of Microbial Electrochemistry. ACS Sustainable Chemistry and Engineering, 2019, 7, 18198-18212.	6.7	46
27	Comparative Performance of Microbial Desalination Cells Using Air Diffusion and Liquid Cathode Reactions: Study of the Salt Removal and Desalination Efficiency. Frontiers in Energy Research, 2019, 7, .	2.3	42
28	Preferential Reduction of Fe(III) over Fumarate by Geobacter sulfurreducens. Journal of Bacteriology, 2004, 186, 2897-2899.	2.2	41
29	The Planktonic Relationship Between Fluidâ€Like Electrodes and Bacteria: Wiring in Motion. ChemSusChem, 2017, 10, 693-700.	6.8	40
30	Biological and Bioelectrochemical Systems for Hydrogen Production and Carbon Fixation Using Purple Phototrophic Bacteria. Frontiers in Energy Research, 2018, 6, .	2.3	36
31	Bioelectroventing: an electrochemicalâ€assisted bioremediation strategy for cleaningâ€up atrazineâ€polluted soils. Microbial Biotechnology, 2018, 11, 50-62.	4.2	33
32	Opportunities behind the unusual ability of geobacter sulfurreducens for exocellular respiration and electricity production. Energy and Environmental Science, 2011, 4, 2066.	30.8	28
33	Differential protein expression in the metal-reducing bacteriumGeobacter sulfurreducens strain PCA grown with fumarate or ferric citrate. Proteomics, 2006, 6, 632-640.	2.2	27
34	Silica immobilization of Geobacter sulfurreducens for constructing readyâ€toâ€use artificial bioelectrodes. Microbial Biotechnology, 2018, 11, 39-49.	4.2	27
35	Novel bioelectrochemical strategies for domesticating the electron flow in constructed wetlands. Science of the Total Environment, 2020, 735, 139522.	8.0	27
36	Computational prediction of RpoS and RpoD regulatory sites in Geobacter sulfurreducens using sequence and gene expression information. Gene, 2006, 384, 73-95.	2.2	26

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37	Strategies for Reducing the Start-up Operation of Microbial Electrochemical Treatments of Urban Wastewater. Energies, 2015, 8, 14064-14077.	3.1	25
38	Stimulating soil microorganisms for mineralizing the herbicide isoproturon by means of microbial electroremediating cells. Microbial Biotechnology, 2016, 9, 369-380.	4.2	25
39	Integrating a microbial electrochemical system into a classical wastewater treatment configuration for removing nitrogen from low COD effluents. Environmental Science: Water Research and Technology, 2016, 2, 884-893.	2.4	24
40	A new concept in constructed wetlands: assessment of aerobic electroconductive biofilters. Environmental Science: Water Research and Technology, 2020, 6, 1312-1323.	2.4	24
41	Anodic shifting of the microbial community profile to enhance oxidative metabolism in soil. Soil Biology and Biochemistry, 2018, 116, 131-138.	8.8	22
42	Designing strategies for operating Microbial Electrochemical Systems to clean up polluted soils under non-flooded conditions. Bioelectrochemistry, 2018, 124, 142-148.	4.6	20
43	Desalination of brackish water using a microbial desalination cell: Analysis of the electrochemical behaviour. Electrochimica Acta, 2021, 388, 138570.	5.2	18
44	A review on antibiotics removal: Leveraging the combination of grey and green techniques. Science of the Total Environment, 2022, 838, 156427.	8.0	18
45	An in-situ surface electrochemistry approach toward whole-cell studies: Charge transfer between Geobacter sulfurreducens and electrified metal/electrolyte interfaces through linker molecules. Electrochimica Acta, 2013, 112, 933-942.	5.2	17
46	Where do we stand to oversee the coronaviruses in aqueous and aerosol environment? Characteristics of transmission and possible curb strategies. Chemical Engineering Journal, 2021, 413, 127522.	12.7	15
47	Detoxification of wastewater containing pharmaceuticals using horizontal flow bioelectrochemical filter. Bioresource Technology Reports, 2019, 7, 100296.	2.7	13
48	Multi-Criteria Evaluation and Sensitivity Analysis for the Optimal Location of Constructed Wetlands (METland) at Oceanic and Mediterranean Areas. International Journal of Environmental Research and Public Health, 2021, 18, 5415.	2.6	13
49	Assessing METlandÂ® Design and Performance Through LCA: Techno-Environmental Study With Multifunctional Unit Perspective. Frontiers in Microbiology, 2021, 12, 652173.	3.5	13
50	An in situ surface electrochemistry approach towards whole-cell studies: the structure and reactivity of a Geobacter sulfurreducens submonolayer on electrified metal/electrolyte interfaces. Physical Chemistry Chemical Physics, 2014, 16, 22229-22236.	2.8	12
51	Screen-Printed Electrodes: New Tools for Developing Microbial Electrochemistry at Microscale Level. Energies, 2015, 8, 13211-13221.	3.1	12
52	Bed electrodes in microbial electrochemistry: setup, operation and characterization. ChemTexts, 2019, 5, 1.	1.9	12
53	Electrodes boost microbial metabolism to mineralize antibiotics in manure. Bioelectrochemistry, 2019, 128, 283-290.	4.6	12
54	Evaluating bioelectrochemically-assisted constructed wetland (METlandÂ®) for treating wastewater: Analysis of materials, performance and electroactive communities. Chemical Engineering Journal, 2022, 440, 135748.	12.7	12

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55	Upgrading fluidized bed bioelectrochemical reactors for treating brewery wastewater by using a fluid-like electrode. Chemical Engineering Journal, 2021, 406, 127103.	12.7	11
56	Algae-Assisted Microbial Desalination Cell: Analysis of Cathode Performance and Desalination Efficiency Assessment. Processes, 2021, 9, 2011.	2.8	11
57	Draft Genome Sequence of Pseudomonas putida JLR11, a Facultative Anaerobic 2,4,6-Trinitrotoluene Biotransforming Bacterium. Genome Announcements, 2015, 3, .	0.8	7
58	GeomarkersversusBiomarkers: Paleoenvironmental and Astrobiological Significance. Ambio, 2007, 36, 425-426.	5.5	6
59	Microbial Electrochemical Fluidized Bed Reactor: A Promising Solution for Removing Pollutants From Pharmaceutical Industrial Wastewater. Frontiers in Microbiology, 2021, 12, 737112.	3.5	5
60	Microbial Electrochemically Assisted Treatment Wetlands: Current Flow Density as a Performance Indicator in Real-Scale Systems in Mediterranean and Northern European Locations. Frontiers in Microbiology, 2022, 13, 843135.	3.5	5
61	Impact of chemical and microbiological water quality on bacterial community assemblage of San Juan River (Sierra del Rosario, Biosphere Reserve, Cuba). Tecnologia Y Ciencias Del Agua, 2021, 12, 82-123.	0.3	4
62	Physiological Evidence for Respiration of TNT by Pseudomonas sp. JLR11. , 2004, , 229-240.		3
63	Supporting Operational Decisions on Desalination Plants from Process Modelling and Simulation to Monitoring and Automated Control with Machine Learning. Lecture Notes in Business Information Processing, 2020, , 150-164.	1.0	2
64	Metals recovery from wastewater by microbial electrochemical technologies. , 2020, , 281-307.		0