M D Balaguer

List of Publications by Year
in descending order

101 papers	5,007 citations	81434 41 h-index	107981 68 g-index
101 all docs	101 docs citations	101 times ranked	4554 citing authors

#	Article	IF	Citations
1	Electrochemical water softening as pretreatment for nitrate electro bioremediation. Science of the Total Environment, 2022, 806, 150433.	3.9	10
2	Unveiling microbial electricity driven anoxic ammonium removal. Bioresource Technology Reports, 2022, 17, 100975.	1.5	4
3	Electro-cultivation of hydrogen-oxidizing bacteria to accumulate ammonium and carbon dioxide into protein-rich biomass. Bioresource Technology Reports, 2022, 18, 101010.	1.5	1
4	Thermodynamic approach to foresee experimental CO2 reduction to organic compounds. Bioresource Technology, 2022, 354, 127181.	4.8	7
5	Effect of hydraulic retention time on the electro-bioremediation of nitrate in saline groundwater. Science of the Total Environment, 2022, 845, 157236.	3.9	4
6	Electrifying biotrickling filters for the treatment of aquaponics wastewater. Bioresource Technology, 2021, 319, 124221.	4.8	14
7	Thermophilic bio-electro carbon dioxide recycling harnessing renewable energy surplus. Bioresource Technology, 2021, 321, 124423.	4.8	15
8	Electro-bioremediation of nitrate and arsenite polluted groundwater. Water Research, 2021, 190, 116748.	5.3	34
9	Scaling-Up and Long-Term Operation of a Full-Scale Two-Stage Partial Nitritation-Anammox System Treating Landfill Leachate. Processes, 2021, 9, 800.	1.3	18
10	Electrified biotrickling filters as tertiary urban wastewater treatment. Case Studies in Chemical and Environmental Engineering, 2021, 4, 100143.	2.9	1
11	Bio-electro CO2 recycling platform based on two separated steps. Journal of Environmental Chemical Engineering, 2021, 9, 105909.	3.3	15
12	Combining electro-bioremediation of nitrate in saline groundwater with concomitant chlorine production. Water Research, 2021, 206, 117736.	5.3	10
13	Carbon dioxide to bio-oil in a bioelectrochemical system-assisted microalgae biorefinery process. Sustainable Energy and Fuels, 2021, 6, 150-161.	2.5	22
14	Achieving nitratation repression in an SBR at mainstream conditions through inorganic carbon limitation. International Biodeterioration and Biodegradation, 2020, 147, 104865.	1.9	3
15	Thermophilic bio-electro CO₂ recycling into organic compounds. Green Chemistry, 2020, 22, 2947-2955.	4.6	16
16	Approaching Bioelectrochemical Systems to Real Facilities Within the Framework of CO2 Valorization and Biogas Upgrading. Advances in Science, Technology and Innovation, 2020, , 3-5.	0.2	0
17	Niches for Bioelectrochemical Systems in Wastewater Treatment Plants. Advances in Science, Technology and Innovation, 2020, , 329-331.	0.2	0
18	Biogas upgrading, CO2 valorisation and economic revaluation of bioelectrochemical systems through anodic chlorine production in the framework of wastewater treatment plants. Science of the Total Environment, 2019, 690, 352-360.	3.9	53

#	Article	IF	Citations
19	Niches for bioelectrochemical systems on the recovery of water, carbon and nitrogen in wastewater treatment plants. Biomass and Bioenergy, 2019, 130, 105380.	2.9	12
20	Unravelling the factors that influence the bio-electrorecycling of carbon dioxide towards biofuels. Green Chemistry, 2019, 21, 684-691.	4.6	29
21	Denitrifying nirK-containing alphaproteobacteria exhibit different electrode driven nitrite reduction capacities. Bioelectrochemistry, 2018, 121, 74-83.	2.4	26
22	Towards a methodology for recovering Kâ€struvite from manure. Journal of Chemical Technology and Biotechnology, 2018, 93, 1558-1562.	1.6	14
23	Opportunities for groundwater microbial electroâ€remediation. Microbial Biotechnology, 2018, 11, 119-135.	2.0	53
24	Hydrodynamic simulations and biological modelling of an Anammox reactor. Journal of Chemical Technology and Biotechnology, 2018, 93, 1190-1197.	1.6	1
25	Bio-electrorecycling of carbon dioxide into bioplastics. Green Chemistry, 2018, 20, 4058-4066.	4.6	76
26	Microbial electrosynthesis of butyrate from carbon dioxide: Production and extraction. Bioelectrochemistry, 2017, 117, 57-64.	2.4	159
27	Tracking bio-hydrogen-mediated production of commodity chemicals from carbon dioxide and renewable electricity. Bioresource Technology, 2017, 228, 201-209.	4.8	34
28	Long-term assessment of six-stacked scaled-up MFCs treating swine manure with different electrode materials. Environmental Science: Water Research and Technology, 2017, 3, 947-959.	1.2	45
29	Employing Microbial Electrochemical Technology-driven electro-Fenton oxidation for the removal of recalcitrant organics from sanitary landfill leachate. Bioresource Technology, 2017, 243, 949-956.	4.8	48
30	Influence of iron species on integrated microbial fuel cell and electro-Fenton process treating landfill leachate. Chemical Engineering Journal, 2017, 328, 57-65.	6.6	55
31	Effect of hydraulic retention time and substrate availability in denitrifying bioelectrochemical systems. Environmental Science: Water Research and Technology, 2017, 3, 922-929.	1.2	30
32	Modelling the simultaneous production and separation of acetic acid from CO₂ using an anion exchange membrane microbial electrosynthesis system. Journal of Chemical Technology and Biotechnology, 2017, 92, 1211-1217.	1.6	11
33	On the Edge of Research and Technological Application: A Critical Review of Electromethanogenesis. International Journal of Molecular Sciences, 2017, 18, 874.	1.8	170
34	Multiparametric control for enhanced biofilm selection in microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2016, 91, 1720-1727.	1.6	42
35	Controlling struvite particlesâ€™ size using the up-flow velocity. Chemical Engineering Journal, 2016, 302, 819-827.	6.6	63
36	AdaptaciÃ³n transcultural, validaciÃ³n y valoraciÃ³n de las propiedades psicomÃ©tricas, de la versiÃ³n espaÃ±ola del cuestionario Western Ontario Shoulder Instability Index. Revista EspaÃ±ola De CirugÃa OrtopÃ©dica Y TraumatologÃa, 2016, 60, 335-345.	0.1	12

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37	Continuous acetate production through microbial electrosynthesis from <scp>CO₂</scp> with microbial mixed culture. Journal of Chemical Technology and Biotechnology, 2016, 91, 921-927.	1.6	128
38	Bidirectional microbial electron transfer: Switching an acetate oxidizing biofilm to nitrate reducing conditions. Biosensors and Bioelectronics, 2016, 75, 352-358.	5.3	88
39	External Resistances Applied to MFC Affect Core Microbiome and Swine Manure Treatment Efficiencies. PLoS ONE, 2016, 11, e0164044.	1.1	34
40	Role of Operating Conditions on Energetic Pathways in a Microbial Fuel Cell. Energy Procedia, 2015, 74, 728-735.	1.8	35
41	Microbiome characterization of MFCs used for the treatment of swine manure. Journal of Hazardous Materials, 2015, 288, 60-68.	6.5	55
42	Microbial electrosynthesis of butyrate from carbon dioxide. Chemical Communications, 2015, 51, 3235-3238.	2.2	242
43	Deciphering the electron transfer mechanisms for biogas upgrading to biomethane within a mixed culture biocathode. RSC Advances, 2015, 5, 52243-52251.	1.7	75
44	Monitoring and engineering reactor microbiomes of denitrifying bioelectrochemical systems. RSC Advances, 2015, 5, 68326-68333.	1.7	39
45	Anode hydrodynamics in bioelectrochemical systems. RSC Advances, 2015, 5, 78994-79000.	1.7	31
46	Cathode potential and anode electron donor evaluation for a suitable treatment of nitrate-contaminated groundwater in bioelectrochemical systems. Chemical Engineering Journal, 2015, 263, 151-159.	6.6	113
47	Spectrometric characterization of the effluent dissolved organic matter from an anammox reactor shows correlation between the EEM signature and anammox growth. Chemosphere, 2014, 117, 271-277.	4.2	29
48	Reducing start-up time and minimizing energy losses of Microbial Fuel Cells using Maximum Power Point Tracking strategy. Journal of Power Sources, 2014, 269, 403-411.	4.0	73
49	Assessment of biotic and abiotic graphite cathodes for hydrogen production in microbial electrolysis cells. International Journal of Hydrogen Energy, 2014, 39, 1297-1305.	3.8	80
50	Anoxic phases are the main N2O contributor in partial nitritation reactors treating high nitrogen loads with alternate aeration. Bioresource Technology, 2014, 163, 92-99.	4.8	42
51	Coupling anammox and advanced oxidation-based technologies for mature landfill leachate treatment. Journal of Hazardous Materials, 2013, 258-259, 27-34.	6.5	72
52	Grey water treatment at a sports centre for reuse in irrigation: A case study. Environmental Technology (United Kingdom), 2013, 34, 1385-1392.	1.2	16
53	Nitrous oxide reduction genetic potential from the microbial community of an intermittently aerated partial nitritation SBR treating mature landfill leachate. Water Research, 2013, 47, 7066-7077.	5.3	70
54	Biocatalysed sulphate removal in a BES cathode. Bioresource Technology, 2013, 130, 218-223.	4.8	92

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55	Bioremediation of nitrateâ€polluted groundwater in a microbial fuel cell. Journal of Chemical Technology and Biotechnology, 2013, 88, 1690-1696.	1.6	95
56	Denitrifying Bacterial Communities Affect Current Production and Nitrous Oxide Accumulation in a Microbial Fuel Cell. PLoS ONE, 2013, 8, e63460.	1.1	74
57	Response to high nitrite concentrations of anammox biomass from two SBR fed on synthetic wastewater and landfill leachate. Chemical Engineering Journal, 2012, 209, 62-68.	6.6	40
58	Effect of temperature on AOB activity of a partial nitritation SBR treating landfill leachate with extremely high nitrogen concentration. Bioresource Technology, 2012, 126, 283-289.	4.8	108
59	Autotrophic Denitrification in Microbial Fuel Cells Treating Low Ionic Strength Waters. Environmental Science & Technology, 2012, 46, 2309-2315.	4.6	159
60	Impact of influent characteristics on a partial nitritation SBR treating high nitrogen loaded wastewater. Bioresource Technology, 2012, 111, 62-69.	4.8	60
61	Sludge production based on organic matter and nitrogen removal performances. Water Practice and Technology, 2011, 6, .	1.0	3
62	Modified calibration protocol evaluated in a model-based testing of SBR flexibility. Bioprocess and Biosystems Engineering, 2011, 34, 205-214.	1.7	10
63	Autotrophic nitrite removal in the cathode of microbial fuel cells. Bioresource Technology, 2011, 102, 4462-4467.	4.8	132
64	Microbial fuel cell application in landfill leachate treatment. Journal of Hazardous Materials, 2011, 185, 763-767.	6.5	139
65	Simultaneous domestic wastewater treatment and renewable energy production using microbial fuel cells (MFCs). Water Science and Technology, 2011, 64, 904-909.	1.2	50
66	Effect of pH on nutrient dynamics and electricity production using microbial fuel cells. Bioresource Technology, 2010, 101, 9594-9599.	4.8	133
67	The role of nitrate and nitrite in a granular sludge process treating low-strength wastewater. Chemical Engineering Journal, 2010, 164, 208-213.	6.6	42
68	Effect of cycle changes on simultaneous biological nutrient removal in a sequencing batch reactor (SBR). Environmental Technology (United Kingdom), 2010, 31, 285-294.	1.2	7
69	Systematic model development for partial nitrification of landfill leachate in a SBR. Water Science and Technology, 2010, 61, 2199-2210.	1.2	13
70	The effect of urban landfill leachate characteristics on the coexistence of anammox bacteria and heterotrophic denitrifiers. Water Science and Technology, 2010, 61, 1065-1071.	1.2	30
71	Combining partial nitritation and heterotrophic denitritation for the treatment of landfill leachate previous to an anammox reactor. Water Science and Technology, 2010, 61, 1949-1955.	1.2	20
72	Long-term operation of a partial nitritation pilot plant treating leachate with extremely high ammonium concentration prior to an anammox process. Bioresource Technology, 2009, 100, 5624-5632.	4.8	78

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73	Development of batch-culture enrichment coupled to molecular detection for screening of natural and man-made environments in search of anammox bacteria for N-removal bioreactors systems. Chemosphere, 2009, 75, 169-179.	4.2	43
74	Nitrogen removal from landfill leachate using the SBR technology. Environmental Technology (United Kingdom), 2009, 30, 283-290.	1.2	27
75	Startâ€up and enrichment of a granular anammox SBR to treat high nitrogen load wastewaters. Journal of Chemical Technology and Biotechnology, 2008, 83, 233-241.	1.6	118
76	Operational strategy for a partial nitritationâ€“sequencing batch reactor treating urban landfill leachate to achieve a stable influent for an anammox reactor. Journal of Chemical Technology and Biotechnology, 2008, 83, 365-371.	1.6	25
77	Heterotrophic denitrification on granular anammox SBR treating urban landfill leachate. Water Science and Technology, 2008, 58, 1749-1755.	1.2	91
78	Selection between alcohols and volatile fatty acids as external carbon sources for EBPR. Water Research, 2008, 42, 557-566.	5.3	77
79	Biological nutrient removal by applying SBR technology in small wastewater treatment plants: carbon source and C/N/P ratio effects. Water Science and Technology, 2007, 55, 135-141.	1.2	26
80	OPERATIONAL STRATEGY OF A PARTIAL NITRITATION-SBR (PN-SBR) TREATING URBAN LANDFILL LEACHATE TO ACHIEVE A STABLE INFLUENT FOR AN ANAMMOX REACTOR. Proceedings of the Water Environment Federation, 2007, 2007, 483-494.	0.0	3
81	Partial ammonium oxidation to nitrite of high ammonium content urban landfill leachates. Water Research, 2007, 41, 3317-3326.	5.3	157
82	A Model for the Simulation of the SHARON Process: pH as a Key Factor. Environmental Technology (United Kingdom), 2007, 28, 255-265.	1.2	46
83	Biological nutrient removal in a sequencing batch reactor using ethanol as carbon source. Journal of Chemical Technology and Biotechnology, 2007, 82, 898-904.	1.6	28
84	Model-based evaluation of an on-line control strategy for SBRs based on OUR and ORP measurements. Water Science and Technology, 2006, 53, 161-169.	1.2	19
85	An on-line optimisation of a SBR cycle for carbon and nitrogen removal based on on-line pH and OUR: the role of dissolved oxygen control. Water Science and Technology, 2006, 53, 171-178.	1.2	27
86	On-line oxygen uptake rate as a new tool for monitoring and controlling the SBR process. Computer Aided Chemical Engineering, 2005, 20, 1291-1296.	0.3	5
87	Development and Implementation of a Real-Time Control System for Nitrogen Removal Using OUR and ORP as End Points. Industrial & Engineering Chemistry Research, 2005, 44, 3367-3373.	1.8	60
88	Carbonaceous adsorbents from sewage sludge and their application in a combined activated sludge-powdered activated carbon (AS-PAC) treatment. Carbon, 2004, 42, 1389-1394.	5.4	63
89	Activated carbons developed from surplus sewage sludge for the removal of dyes from dilute aqueous solutions. Chemical Engineering Journal, 2003, 94, 231-239.	6.6	291
90	Textile Dyeing Wastewater Treatment in a Sequencing Batch Reactor System. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2003, 38, 2089-2099.	0.9	6

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91	Towards waste minimisation in WWTP: activated carbon from biological sludge and its application in liquid phase adsorption. Journal of Chemical Technology and Biotechnology, 2002, 77, 825-833.	1.6	40
92	Title is missing!. Biotechnology Letters, 2002, 24, 163-168.	1.1	12
93	Isotherm Model Analysis for the Adsorption of Cd (II), Cu (II), Ni (II), and Zn (II) on Anaerobically Digested Sludge. Journal of Colloid and Interface Science, 2000, 232, 64-70.	5.0	34
94	Pilot Plant Evaluation for Hydrogen Sulphide Biological Treatment: Determination of Optimal Conditions Linking Experimental and Mathematical Modelling. Environmental Technology (United) Tj ETQq0 0 0 rgBT/Overlock 10 Tf 50	1.2	10
95	Competitive biosorption of copper, cadmium, nickel and zinc from metal ion mixtures using anaerobically digested sludge. Process Metallurgy, 1999, 9, 175-183.	0.1	0
96	A Comparison of Different Support Materials in Anaerobic Fluidized Bed Reactors for the Treatment of Vinasse. Environmental Technology (United Kingdom), 1997, 18, 539-544.	1.2	32
97	Heavy metal binding to anaerobic sludge. Water Research, 1997, 31, 997-1004.	5.3	36
98	Feasibility of Activated Carbon Production from Biological Sludge by Chemical Activation with ZnCl2 and H2SO4. Environmental Technology (United Kingdom), 1996, 17, 667-671.	1.2	57
99	Anaerobic fluidized bed reactor with sepiolite as support for anaerobic treatment of vinasse. Biotechnology Letters, 1992, 14, 433-438.	1.1	41
100	Start-up of an UASB reactor treating potato-starch wastewater using an alkalimetric follow-up procedure. Biomass and Bioenergy, 1992, 3, 389-392.	2.9	9
101	Utilisation of pumice stone as support for the anaerobic treatment of vinasse with a fluidized bed reactor. Environmental Technology (United Kingdom), 1991, 12, 1167-1173.	1.2	10