Jorge Rodriguez

List of Publications by Year
in descending order

58 papers	2,542 citations	270111 25 h-index	214428 50 g-index
64 all docs	64 docs citations	64 times ranked	3330 citing authors

#	Article	IF	Citations
1	Modelling bioelectrochemical denitrification in absence of electron donors for groundwater treatment. Chemosphere, 2022, 286, 131850.	4.2	0
2	Model-based design and operation of biotrickling filters for foul air H2S removal at wastewater networks. Journal of Environmental Chemical Engineering, 2022, , 107372.	3.3	4
3	Modelling the impact of interventions on the progress of the COVID-19 outbreak including age segregation. PLoS ONE, 2021, 16, e0248243.	1.1	5
4	On the selectivity of butyric acid photoreforming over Au/TiO2 and Pt/TiO2 by UV and visible radiation: A combined experimental and theoretical study. Applied Catalysis A: General, 2021, 624, 118321.	2.2	8
5	Green Extraction of Volatile Fatty Acids from Fermented Wastewater Using Hydrophobic Deep Eutectic Solvents. Fermentation, 2021, 7, 226.	1.4	26
6	Water microbial disinfection via supported nAg/Kaolin in a fixed-bed reactor configuration. Applied Clay Science, 2020, 184, 105387.	2.6	10
7	Growth and Nitrate Uptake in Nannochloropsis gaditana and Tetraselmis chuii Cultures Grown in Sequential Batch Reactors. Frontiers in Marine Science, 2020, 7, .	1.2	12
8	A model predictive optimal control system for the practical automatic start-up of anaerobic digesters. Water Research, 2020, 174, 115599.	5.3	9
9	Reply for comment on "A compilation and bioenergetic evaluation of syntrophic microbial growth yields in anaerobic digestion" by PatÃ³n, M. and RodrÃguez, J. [Water research 162 (2019), 516â€“517]. Water Research, 2020, 173, 115427.	5.3	0
10	Comprehensive Bioenergetic Evaluation of Microbial Pathway Variants in Syntrophic Propionate Oxidation. MSystems, 2020, 5, .	1.7	8
11	Hydrogen and Propane Production From Butyric Acid Photoreforming Over Pt-TiO2. Frontiers in Chemistry, 2019, 7, 563.	1.8	11
12	Integration of bioenergetics in the ADM1 and its impact on model predictions. Water Science and Technology, 2019, 80, 339-346.	1.2	5
13	A compilation and bioenergetic evaluation of syntrophic microbial growth yields in anaerobic digestion. Water Research, 2019, 159, 176-183.	5.3	11
14	Activity corrections are required for accurate anaerobic digestion modelling. Water Science and Technology, 2018, 77, 2057-2067.	1.2	11
15	Modelling sulfate reduction in anaerobic digestion: Complexity evaluation and parameter calibration. Water Research, 2018, 130, 255-262.	5.3	29
16	Electron bifurcation mechanism and homoacetogenesis explain products yields in mixed culture anaerobic fermentations. Water Research, 2018, 141, 349-356.	5.3	43
17	A Multiple Reaction Modelling Framework for Microbial Electrochemical Technologies. International Journal of Molecular Sciences, 2017, 18, 86.	1.8	4
18	Inoculum composition determines microbial community and function in an anaerobic sequential batch reactor. PLoS ONE, 2017, 12, e0171369.	1.1	23

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19	Generalized parameter estimation and calibration for biokinetic models using correlation and single variable optimisations: Application to sulfate reduction modelling in anaerobic digestion. Water Research, 2017, 122, 407-418.	5.3	15
20	Dynamic Thermodynamic Simulation of ADM1 Validates the Hydrogen Inhibition Approach and Suggests an Unfeasible Butyrate Degradation Pathway. Lecture Notes in Civil Engineering, 2017, , 260-265.	0.3	0
21	Thermodynamic Modelling Is Needed to Describe the Effect of High Temperature on Microbial Nitrogen Removal Processes. Lecture Notes in Civil Engineering, 2017, , 37-42.	0.3	1
22	A Novel Analysis Method for Paired-Sample Microbial Ecology Experiments. PLoS ONE, 2016, 11, e0154804.	1.1	9
23	Surveys, simulation and single-cell assays relate function and phylogeny in a lake ecosystem. Nature Microbiology, 2016, 1, 16130.	5.9	33
24	Metabolic Energy-Based Modelling Explains Product Yielding in Anaerobic Mixed Culture Fermentations. PLoS ONE, 2015, 10, e0126739.	1.1	61
25	Control strategy for maximum anaerobic co-digestion performance. Water Research, 2015, 80, 209-216.	5.3	21
26	Microbial catabolic activities are naturally selected by metabolic energy harvest rate. ISME Journal, 2015, 9, 2630-2641.	4.4	69
27	Modelling Anaerobic Digestion Processes. , 2015, , 133-160.		1
28	Mathematical modelling of anaerobic digestion processes: applications and future needs. Reviews in Environmental Science and Biotechnology, 2015, 14, 595-613.	3.9	154
29	Kinetic modelling of anaerobic hydrolysis of solid wastes, including disintegration processes. Waste Management, 2015, 35, 96-104.	3.7	52
30	Simultaneous saccharification and fermentation of solid household waste following mild pretreatment using a mix of hydrolytic enzymes in combination with Saccharomyces cerevisiae. Applied Microbiology and Biotechnology, 2015, 99, 929-938.	1.7	20
31	Optimisation of substrate blends in anaerobic co-digestion using adaptive linear programming. Bioresource Technology, 2014, 173, 159-167.	4.8	40
32	Molecular Analysis for Screening Human Bacterial Pathogens in Municipal Wastewater Treatment and Reuse. Environmental Science & Technology, 2014, 48, 11610-11619.	4.6	71
33	A systematic strain selection approach for halotolerant and halophilic bioprocess development: a review. Extremophiles, 2014, 18, 629-639.	0.9	9
34	Generalised modelling approach for anaerobic co-digestion of fermentable substrates. Bioresource Technology, 2013, 147, 525-533.	4.8	37
35	Enhanced performance of sulfate reducing bacteria based biocathode using stainless steel mesh on activated carbon fabric electrode. Bioresource Technology, 2013, 150, 172-180.	4.8	42
36	Integration of biohydrogen, biomethane and bioelectrochemical systems. Renewable Energy, 2013, 49, 188-192.	4.3	64

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37	Linking thermodynamics and kinetics to assess pathway reversibility in anaerobic bioprocesses. Energy and Environmental Science, 2013, 6, 3780.	15.6	104
38	Increasing power recovery and organic removal efficiency using extended longitudinal tubular microbial fuel cell (MFC) reactors. Energy and Environmental Science, 2011, 4, 459-465.	15.6	59
39	Model selection, identification and validation in anaerobic digestion: A review. Water Research, 2011, 45, 5347-5364.	5.3	243
40	Modular tubular microbial fuel cells for energy recovery during sucrose wastewater treatment at low organic loading rate. Bioresource Technology, 2010, 101, 1190-1198.	4.8	133
41	Simultaneous effects of pH and substrate concentration on hydrogen production by acidogenic fermentation. Electronic Journal of Biotechnology, 2010, 13, .	1.2	1
42	Metabolic models to investigate energy limited anaerobic ecosystems. Water Science and Technology, 2009, 60, 1669-1675.	1.2	11
43	An implementation framework for wastewater treatment models requiring a minimum programming expertise. Water Science and Technology, 2009, 59, 367-380.	1.2	14
44	Determination of the adequate minimum model complexity required in anaerobic bioprocesses using experimental data. Journal of Chemical Technology and Biotechnology, 2008, 83, 1694-1702.	1.6	13
45	Energy-based models for environmental biotechnology. Trends in Biotechnology, 2008, 26, 366-374.	4.9	58
46	ADM1 can be applied to continuous bio-hydrogen production using a variable stoichiometry approach. Water Research, 2008, 42, 4379-4385.	5.3	52
47	Modeling mixed culture fermentations; the role of different electron carriers. Water Science and Technology, 2008, 57, 493-497.	1.2	14
48	Microbial ecology meets electrochemistry: electricity-driven and driving communities. ISME Journal, 2007, 1, 9-18.	4.4	433
49	A hydrogen-based variable-gain controller for anaerobic digestion processes. Water Science and Technology, 2006, 54, 57-62.	1.2	22
50	Can we assess the model complexity for a bioprocess: theory and example of the anaerobic digestion process. Water Science and Technology, 2006, 53, 85-92.	1.2	43
51	Modeling product formation in anaerobic mixed culture fermentations. Biotechnology and Bioengineering, 2006, 93, 592-606.	1.7	196
52	Variable stoichiometry with thermodynamic control in ADM1. Water Science and Technology, 2006, 54, 101-110.	1.2	47
53	Optimization under fuzzy if-then rules using stochastic algorithms. Computer Aided Chemical Engineering, 2005, 20, 181-186.	0.3	1
54	An integrated system to remote monitor and control anaerobic wastewater treatment plants through the internet. Water Science and Technology, 2005, 52, 457-464.	1.2	20

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55	Diagnosis of acidification states in an anaerobic wastewater treatment plant using a fuzzy-based expert system. Control Engineering Practice, 2004, 12, 59-64.	3.2	46
56	Expert system for the on-line diagnosis of anaerobic wastewater treatment plants. Water Science and Technology, 2002, 45, 195-200.	1.2	11
57	Rule-based diagnosis and supervision of a pilot-scale wastewater treatment plant using fuzzy logic techniques. Expert Systems With Applications, 2002, 22, 11-20.	4.4	55
58	Advanced monitoring and control of anaerobic wastewater treatment plants: diagnosis and supervision by a fuzzy-based expert system. Water Science and Technology, 2001, 43, 191-198.	1.2	35