M Alcina Pereira

List of Publications by Citations

80 papers	2,698 citations	30 h-index	51 g-index
85 ext. papers	3,061 ext. citations	6.8 avg, IF	5.1 L-index

#	Paper	IF	Citations
80	Anaerobic biodegradation of oleic and palmitic acids: evidence of mass transfer limitations caused by long chain fatty acid accumulation onto the anaerobic sludge. *Biotechnology and Bioengineering*, **2005**, 92, 15-23	4.9	221
79	Waste lipids to energy: how to optimize methane production from long-chain fatty acids (LCFA). *Microbial Biotechnology*, **2009**, 2, 538-50	6.3	195
78	Mineralization of LCFA associated with anaerobic sludge: Kinetics, enhancement of methanogenic activity, and effect of VFA. *Biotechnology and Bioengineering*, **2004**, 88, 502-11	4.9	138
77	Analysis of the microbial community of the biocathode of a hydrogen-producing microbial electrolysis cell. *Applied Microbiology and Biotechnology*, **2011**, 92, 1083-93	5.7	126
76	Effects of lipids and oleic acid on biomass development in anaerobic fixed-bed reactors. Part II: Oleic acid toxicity and biodegradability. *Water Research*, **2001**, 35, 264-70	12.5	100
75	A design of experiments to assess phosphorous removal and crystal properties in struvite precipitation of source separated urine using different Mg sources. *Chemical Engineering Journal*, **2016**, 298, 146-153	14.7	99
74	Carbon nanotubes accelerate methane production in pure cultures of methanogens and in a syntrophic coculture. *Environmental Microbiology*, **2017**, 19, 2727-2739	5.2	94
73	Molecular assessment of complex microbial communities degrading long chain fatty acids in methanogenic bioreactors. *FEMS Microbiology Ecology*, **2007**, 60, 252-65	4.3	89
72	Microbial communities involved in anaerobic degradation of unsaturated or saturated long-chain fatty acids. *Applied and Environmental Microbiology*, **2007**, 73, 1054-64	4.8	86
71	Production of fermented cheese whey-based beverage using kefir grains as starter culture: evaluation of morphological and microbial variations. *Bioresource Technology*, **2010**, 101, 8843-50	11	74
70	Activity and viability of methanogens in anaerobic digestion of unsaturated and saturated long-chain fatty acids. *Applied and Environmental Microbiology*, **2013**, 79, 4239-45	4.8	70
69	Detection and quantification of long chain fatty acids in liquid and solid samples and its relevance to understand anaerobic digestion of lipids. *Bioresource Technology*, **2009**, 100, 91-6	11	70
68	Effect of lipids and oleic acid on biomass development in anaerobic fixed-bed reactors. Part I: Biofilm growth and activity. *Water Research*, **2001**, 35, 255-63	12.5	69
67	Enhancement of methane production from long chain fatty acid based effluents. *Bioresource Technology*, **2008**, 99, 4086-95	11	68
66	Thermophilic co-digestion of organic fraction of municipal solid wastes with FOG wastes from a sewage treatment plant: reactor performance and microbial community monitoring. *Bioresource Technology*, **2011**, 102, 4734-41	11	64
65	Influence of adsorption and anaerobic granular sludge characteristics on long chain fatty acids inhibition process. *Water Research*, **2012**, 46, 5268-78	12.5	55
64	Ultrasound intensification suppresses the need of methanol excess during the biodiesel production with Lipozyme TL-IM. *Ultrasonics Sonochemistry*, **2015**, 27, 530-535	8.9	48

63	Engineered heat treated methanogenic granules: a promising biotechnological approach for extreme thermophilic biohydrogen production. *Bioresource Technology*, **2010**, 101, 9577-86	11	46
62	Garden and food waste co-fermentation for biohydrogen and biomethane production in a two-step hyperthermophilic-mesophilic process. *Bioresource Technology*, **2019**, 278, 180-186	11	45
61	Boosting dark fermentation with co-cultures of extreme thermophiles for biohythane production from garden waste. *Bioresource Technology*, **2016**, 219, 132-138	11	44
60	Molecular monitoring of microbial diversity in expanded granular sludge bed (EGSB) reactors treating oleic acid. *FEMS Microbiology Ecology*, **2002**, 41, 95-103	4.3	43
59	Bioaugmentation of sewage sludge with Trametes versicolor in solid-phase biopiles produces degradation of pharmaceuticals and affects microbial communities. *Environmental Science & Technology*, **2012**, 46, 12012-20	10.3	42
58	Toxicity of long chain fatty acids towards acetate conversion by Methanosaeta concilii and Methanosarcina mazei. *Microbial Biotechnology*, **2016**, 9, 514-8	6.3	40
57	Effects of the acidogenic biomass on the performance of an anaerobic membrane bioreactor for wastewater treatment. *Bioresource Technology*, **2009**, 100, 1951-6	11	39
56	Conversion of Cn-Unsaturated into Cn-2-Saturated LCFA Can Occur Uncoupled from Methanogenesis in Anaerobic Bioreactors. *Environmental Science & Technology*, **2016**, 50, 3082-90	10.3	37
55	Influence of tetracycline on the microbial community composition and activity of nitrifying biofilms. *Chemosphere*, **2014**, 117, 295-302	8.4	36
54	Rhodococcus opacus B4: a promising bacterium for production of biofuels and biobased chemicals. *AMB Express*, **2016**, 6, 35	4.1	35
53	Long-term acclimation of anaerobic sludges for high-rate methanogenesis from LCFA. *Biomass and Bioenergy*, **2014**, 67, 297-303	5.3	35
52	Study of 16 Portuguese activated sludge systems based on filamentous bacteria populations and their relationships with environmental parameters. *Applied Microbiology and Biotechnology*, **2015**, 99, 5307-16	5.7	34
51	Continuous fungal treatment of non-sterile veterinary hospital effluent: pharmaceuticals removal and microbial community assessment. *Applied Microbiology and Biotechnology*, **2016**, 100, 2401-15	5.7	30
50	Operation of an anaerobic filter and an EGSB reactor for the treatment of an oleic acid-based effluent: influence of inoculum quality. *Process Biochemistry*, **2002**, 37, 1025-1031	4.8	29
49	Influence of physico-chemical properties of porous microcarriers on the adhesion of an anaerobic consortium. *Journal of Industrial Microbiology and Biotechnology*, **2000**, 24, 181-186	4.2	29
48	Biohythane production from marine macroalgae Sargassum sp. coupling dark fermentation and anaerobic digestion. *Bioresource Technology*, **2015**, 190, 251-6	11	28
47	Anaerobic granular sludge as a biocatalyst for 1,3-propanediol production from glycerol in continuous bioreactors. *Bioresource Technology*, **2014**, 155, 28-33	11	27
46	Investigating bacterial community changes and organic substrate degradation in microbial fuel cells operating on real human urine. *Environmental Science: Water Research and Technology*, **2017**, 3, 897-904	4.2	26

45	Anaerobic microbial LCFA degradation in bioreactors. *Water Science and Technology*, **2008**, 57, 439-44	2.2	25
44	Development of image analysis techniques as a tool to detect and quantify morphological changes in anaerobic sludge: II. Application to a granule deterioration process triggered by contact with oleic acid. *Biotechnology and Bioengineering*, **2004**, 87, 194-9	4.9	24
43	Degradation of oleic acid in anaerobic filters: the effect of inoculum acclimatization and biomass recirculation. *Water Environment Research*, **2001**, 73, 612-21	2.8	24
42	Strategies to suppress hydrogen-consuming microorganisms affect macro and micro scale structure and microbiology of granular sludge. *Biotechnology and Bioengineering*, **2011**, 108, 1766-75	4.9	22
41	Insight into the Role of Facultative Bacteria Stimulated by Microaeration in Continuous Bioreactors Converting LCFA to Methane. *Environmental Science & Technology*, **2018**, 52, 6497-6507	10.3	22
40	Electron Storage in Electroactive Biofilms. *Trends in Biotechnology*, **2021**, 39, 34-42	15.1	21
39	Biological treatment of produced water coupled with recovery of neutral lipids. *Water Research*, **2018**, 147, 33-42	12.5	21
38	Anaerobic biological fermentation of urine as a strategy to enhance the performance of a microbial electrolysis cell (MEC). *Renewable Energy*, **2019**, 139, 936-943	8.1	19
37	In vitro assessment of prebiotic properties of xylooligosaccharides produced by Bacillus subtilis 3610. *Carbohydrate Polymers*, **2020**, 229, 115460	10.3	17
36	Inhibition Studies with 2-Bromoethanesulfonate Reveal a Novel Syntrophic Relationship in Anaerobic Oleate Degradation. *Applied and Environmental Microbiology*, **2019**, 85,	4.8	17
35	In vitro fermentation of raffinose to unravel its potential as prebiotic ingredient. *LWT - Food Science and Technology*, **2020**, 126, 109322	5.4	16
34	Endurance of methanogenic archaea in anaerobic bioreactors treating oleate-based wastewater. *Applied Microbiology and Biotechnology*, **2013**, 97, 2211-8	5.7	16
33	A New Device to Select Microcarriers for Biomass Immobilization: Application to an Anaerobic Consortium. *Water Environment Research*, **1999**, 71, 209-217	2.8	16
32	Influence of carbon anode properties on performance and microbiome of Microbial Electrolysis Cells operated on urine. *Electrochimica Acta*, **2018**, 267, 122-132	6.7	15
31	Valorization of lubricant-based wastewater for bacterial neutral lipids production: Growth-linked biosynthesis. *Water Research*, **2016**, 101, 17-24	12.5	13
30	Biofilms formed on humic substances: response to flow conditions and carbon concentrations. *Bioresource Technology*, **2010**, 101, 6888-94	11	12
29	Tuning culturing conditions towards the production of neutral lipids from lubricant-based wastewater in open mixed bacterial communities. *Water Research*, **2018**, 144, 532-542	12.5	10
28	Improvement of Biomethane Production from Sewage Sludge in Co-digestion with Glycerol and Waste Frying Oil, Using a Design of Experiments. *Bioenergy Research*, **2018**, 11, 763-771	3.1	9

27	On the independence of hydrogen production from methanogenic suppressor in olive mill wastewater. *International Journal of Hydrogen Energy*, **2014**, 39, 6402-6406	6.7	8
26	Hydrogen Production by Clostridium cellulolyticum a Cellulolytic and Hydrogen-Producing Bacteria Using Sugarcane Bagasse. *Waste and Biomass Valorization*, **2019**, 10, 827-837	3.2	8
25	Influence of carrier concentration on the control of Galactomyces geotrichum bulking and bacterial community of biofilm reactors. *Desalination and Water Treatment*, **2012**, 41, 325-334		7
24	Production of added value bacterial lipids through valorisation of hydrocarbon-contaminated cork waste. *Science of the Total Environment*, **2017**, 605-606, 677-682	10.2	6
23	Anaerobic degradation of oleic acid by suspended and granular sludge: identification of palmitic acid as a key intermediate. *Water Science and Technology*, **2002**, 45, 139-44	2.2	6
22	A new method to study interactions between biomass and packing material in anaerobic filters. *Biotechnology Letters*, **1998**, 12, 277-283		5
21	Intensification of methane production from waste frying oil in a biogas-lift bioreactor. *Renewable Energy*, **2021**, 168, 1141-1148	8.1	5
20	Designing a functional rice muffin formulated with prebiotic oligosaccharides and sugar reduction. *Food Bioscience*, **2021**, 40, 100858	4.9	4
19	Sequencing batch airlift reactors (SBAR): a suitable technology for treatment and valorization of mineral oil wastewaters towards lipids production. *Journal of Hazardous Materials*, **2021**, 409, 124492	12.8	3
18	Anaerobic Digestion of Lipid-Rich Waste. *Springer Protocols*, **2015**, 221-236	0.3	2
17	Multi-Walled Carbon Nanotubes Enhance Methanogenesis from Diverse Organic Compounds in Anaerobic Sludge and River Sediments. *Applied Sciences (Switzerland)*, **2020**, 10, 8184	2.6	2
16	Dissolved oxygen concentration as a strategy to select type and composition of bacterial storage lipids produced during oilfield produced water treatment. *Environmental Technology and Innovation* , **2021**, 23, 101693	7	2
15	Harnessing the Power of PCR Molecular Fingerprinting Methods and Next Generation Sequencing for Understanding Structure and Function in Microbial Communities. *Methods in Molecular Biology*, **2017**, 1620, 225-248	1.4	1
14	Multiple and flexible roles of facultative anaerobic bacteria in microaerophilic oleate degradation. *Environmental Microbiology*, **2020**, 22, 3650-3659	5.2	1
13	A methodology for a quantitative interpretation of DGGE with the help of mathematical modelling: application in biohydrogen production. *Water Science and Technology*, **2014**, 69, 511-7	2.2	1
12	The Role of Marine Anaerobic Bacteria and Archaea in Bioenergy Production **2013**, 445-469		1
11	Influence of the organic loading rate on the growth of Galactomyces geotrichum in activated sludge. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2012**, 47, 565-9	2.3	1
10	A Deep Learning Approach to Forecast the Influent Flow in Wastewater Treatment Plants. *Lecture Notes in Computer Science*, **2020**, 362-373	0.9	1

9	Zeolite addition to improve biohydrogen production from dark fermentation of C5/C6-sugars and Sargassum sp. biomass. *Scientific Reports*, **2021**, 11, 16350	4.9	1
8	Corksorb Enhances Alkane Degradation by Hydrocarbonoclastic Bacteria. *Frontiers in Microbiology*, **2021**, 12, 618270	5.7	1
7	Hydrocarbon Toxicity towards Hydrogenotrophic Methanogens in Oily Waste Streams. *Energies*, **2021**, 14, 4830	3.1	1
6	Oil and Hydrocarbon-Producing Bacteria **2018**, 1-17		
5	Bioelectrochemical Systems for Production of Valuable Compounds **2019**, 311-323		
4	Biomethanation Potential of Biological and Other Wastes **2013**, 369-396		
3	Evaluating Unidimensional Convolutional Neural Networks to Forecast the Influent pH of Wastewater Treatment Plants. *Lecture Notes in Computer Science*, **2021**, 446-457	0.9	
2	Oil and Hydrocarbon-Producing Bacteria **2019**, 471-487		
1	A Tree-Based Approach to Forecast the Total Nitrogen in Wastewater Treatment Plants. *Lecture Notes in Networks and Systems*, **2022**, 137-147	0.5	