Daniel Puyol

List of Publications by Year
in descending order

62 papers	2,222 citations	218592 26 h-index	223716 46 g-index
65 all docs	65 docs citations	65 times ranked	2323 citing authors

#	Article	IF	Citations
1	The synergy of catalysis and biotechnology as a tool to modulate the composition of biopolymers (polyhydroxyalkanoates) with lignocellulosic wastes. Catalysis Today, 2022, 397-399, 220-231.	2.2	3
2	Synergistic thermophilic coâ€fermentation of food and lignocellulosic urban waste with steam explosion pretreatment for efficient hydrogen and carboxylic acidÂproduction. Biofuels, Bioproducts and Biorefining, 2022, 16, 499-509.	1.9	5
3	Unraveling PHA production from urban organic waste with purple phototrophic bacteria via organic overload. Renewable and Sustainable Energy Reviews, 2022, 166, 112687.	8.2	15
4	Substrate availability drives mixed culture fermentation of glucose to lactate at steady state. Biotechnology and Bioengineering, 2021, 118, 1617-1629.	1.7	8
5	Assessment of Voltage Influence in Carbon Dioxide Fixation Process by a Photo-Bioelectrochemical System under Photoheterotrophy. Microorganisms, 2021, 9, 474.	1.6	7
6	Inhibition of the metabolism of mixed cultures of purple phototrophic bacteria by typical refinery and petrochemistry wastewater pollutants. Journal of Chemical Technology and Biotechnology, 2021, 96, 1893-1901.	1.6	1
7	Integrated sustainable process for polyhydroxyalkanoates production from lignocellulosic waste by purple phototrophic bacteria. GCB Bioenergy, 2021, 13, 862-875.	2.5	11
8	Up-scale challenges on biopolymer production from waste streams by Purple Phototrophic Bacteria mixed cultures: A critical review. Bioresource Technology, 2021, 327, 124820.	4.8	31
9	Biodiesel and biogas production from Isochrysis galbana using dry and wet lipid extraction: A biorefinery approach. Renewable Energy, 2020, 146, 188-195.	4.3	42
10	Contamination of N-poor wastewater with emerging pollutants does not affect the performance of purple phototrophic bacteria and the subsequent resource recovery potential. Journal of Hazardous Materials, 2020, 385, 121617.	6.5	21
11	Purple phototrophic bacteria as a platform to create the next generation of wastewater treatment plants: Energy and resource recovery. , 2020, , 255-280.		4
12	Food waste valorization by purple phototrophic bacteria and anaerobic digestion after thermal hydrolysis. Biomass and Bioenergy, 2020, 142, 105803.	2.9	15
13	Optimization of H2 Production through Minimization of CO2 Emissions by Mixed Cultures of Purple Phototrophic Bacteria in Aqueous Samples. Water (Switzerland), 2020, 12, 2015.	1.2	3
14	Alkalinity, and Not the Oxidation State of the Organic Substrate, Is the Key Factor in Domestic Wastewater Treatment by Mixed Cultures of Purple Phototrophic Bacteria. Resources, 2020, 9, 88.	1.6	5
15	Anaerobic digestion of purple phototrophic bacteria â€" The release step of the partition-release-recover concept. Bioresource Technology, 2020, 306, 123125.	4.8	5
16	Purple phototrophic bacteria for resource recovery: Challenges and opportunities. Biotechnology Advances, 2020, 43, 107567.	6.0	103
17	Exploring the inhibition boundaries of mixed cultures of purple phototrophic bacteria for wastewater treatment in anaerobic conditions. Water Research, 2020, 183, 116057.	5.3	18
18	Novel approach for the treatment of the organic fraction of municipal solid waste: Coupling thermal hydrolysis with anaerobic digestion and photo-fermentation. Science of the Total Environment, 2020, 714, 136845.	3.9	22

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19	A systematic optimization of piggery wastewater treatment with purple phototrophic bacteria. Chemosphere, 2020, 253, 126621.	4.2	20
20	Assessing the potential of purple phototrophic bacteria for the simultaneous treatment of piggery wastewater and upgrading of biogas. Bioresource Technology, 2019, 281, 10-17.	4.8	28
21	Removal of pharmaceutical compounds from urban wastewater by an advanced bio-oxidation process based on fungi Trametes versicolor immobilized in a continuous RBC system. Environmental Science and Pollution Research, 2018, 25, 34884-34892.	2.7	29
22	Exploring the effects of ZVI addition on resource recovery in the anaerobic digestion process. Chemical Engineering Journal, 2018, 335, 703-711.	6.6	56
23	Resource Recovery Potential From Lignocellulosic Feedstock Upon Lysis With Ionic Liquids. Frontiers in Bioengineering and Biotechnology, 2018, 6, 119.	2.0	20
24	Biological and Bioelectrochemical Systems for Hydrogen Production and Carbon Fixation Using Purple Phototrophic Bacteria. Frontiers in Energy Research, 2018, 6, .	1.2	36
25	White and infrared light continuous photobioreactors for resource recovery from poultry processing wastewater â€“ A comparison. Water Research, 2018, 144, 665-676.	5.3	64
26	Life Cycle Analysis of Anaerobic Digestion of Wastewater Treatment Plants. , 2018, , 269-295.		1
27	A mechanistic model for anaerobic phototrophs in domestic wastewater applications: Photo-anaerobic model (PAnM). Water Research, 2017, 116, 241-253.	5.3	68
28	Elemental copper nanoparticle toxicity to anaerobic ammonium oxidation and the influence of ethylene diamine-tetra acetic acid (EDTA) on copper toxicity. Chemosphere, 2017, 184, 730-737.	4.2	19
29	Enhanced anaerobic degradability of highly polluted pesticides-bearing wastewater under thermophilic conditions. Journal of Hazardous Materials, 2017, 339, 320-329.	6.5	30
30	Efficient Treatment of Synthetic Wastewater Contaminated with Emerging Pollutants by Anaerobic Purple Phototrophic Bacteria. Lecture Notes in Civil Engineering, 2017, , 324-330.	0.3	2
31	Editorial: Resource Recovery from Wastewater by Biological Technologies. Frontiers in Microbiology, 2017, 8, 998.	1.5	6
32	ZVI Addition in Continuous Anaerobic Digestion Systems Dramatically Decreases P Recovery Potential: Dynamic Modelling. Lecture Notes in Civil Engineering, 2017, , 211-217.	0.3	2
33	Low temperature treatment of domestic wastewater by purple phototrophic bacteria: Performance, activity, and community.. Water Research, 2016, 100, 537-545.	5.3	84
34	Domestic wastewater treatment with purple phototrophic bacteria using a novel continuous photo anaerobic membrane bioreactor. Water Research, 2016, 100, 486-495.	5.3	159
35	Wastewater sludges pretreated by different oxidation systems at mild conditions to promote the biogas formation in anaerobic processes. Environmental Science and Pollution Research, 2016, 23, 24393-24401.	2.7	14
36	Vacuum promotes metabolic shifts and increases biogenic hydrogen production in dark fermentation systems. Frontiers of Environmental Science and Engineering, 2016, 10, 513-521.	3.3	45

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37	Resource Recovery from Wastewater by Biological Technologies: Opportunities, Challenges, and Prospects. Frontiers in Microbiology, 2016, 7, 2106.	1.5	354
38	Elemental copper nanoparticle toxicity to different trophic groups involved in anaerobic and anoxic wastewater treatment processes. Science of the Total Environment, 2015, 512-513, 308-315.	3.9	21
39	Mathematical modelling of anaerobic digestion processes: applications and future needs. Reviews in Environmental Science and Biotechnology, 2015, 14, 595-613.	3.9	154
40	Inhibition of anaerobic ammonium oxidation by heavy metals. Journal of Chemical Technology and Biotechnology, 2015, 90, 830-837.	1.6	66
41	Role of biogenic sulfide in attenuating zinc oxide and copper nanoparticle toxicity to acetoclastic methanogenesis. Journal of Hazardous Materials, 2015, 283, 755-763.	6.5	45
42	Comparison of bioaugmented EGSB and GACâ€"FBB reactors and their combination with aerobic SBR for the abatement of chlorophenols. Chemical Engineering Journal, 2015, 259, 277-285.	6.6	25
43	Low-Temperature Anaerobic Treatment of Low-Strength Pentachlorophenol-Bearing Wastewater. , 2015, , 31-54.		0
44	Anaerobic Treatment of Wastewater from Used Industrial Oil Recovery. , 2015, , 3-25.		0
45	Anaerobic biodegradability of mixtures of pesticides in an expanded granular sludge bed reactor. Water Science and Technology, 2014, 69, 532-538.	1.2	13
46	Kinetics and thermodynamics of anaerobic ammonium oxidation process using Brocadia spp. dominated mixed cultures. Water Science and Technology, 2014, 69, 1682-1688.	1.2	4
47	The role of pH on the resistance of restingâ€•and active anammox bacteria to NO₂^{â^'} inhibition. Biotechnology and Bioengineering, 2014, 111, 1949-1956.	1.7	30
48	Pre-exposure to nitrite in the absence of ammonium strongly inhibits anammox. Water Research, 2014, 48, 52-60.	5.3	66
49	Nitrite (not free nitrous acid) is the main inhibitor of the anammox process at common pH conditions. Biotechnology Letters, 2014, 36, 547-551.	1.1	69
50	The intracellular proton gradient enables anaerobic ammonia oxidizing (anammox) bacteria to tolerate NO2â^' inhibition. Journal of Biotechnology, 2014, 192, 265-267.	1.9	8
51	Starved anammox cells are less resistant to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mtext>NO</mml:mtext></mml:mrow><mml:mn>2</mml:mn><m inhibition. Water Research, 2014, 65, 170-176.	5.3	45
52	High pH (and not free ammonia) is responsible for Anammox inhibition in mildly alkaline solutions with excess of ammonium. Biotechnology Letters, 2014, 36, 1981-1986.	1.1	29
53	Low-temperature anaerobic treatment of low-strength pentachlorophenol-bearing wastewater. Bioresource Technology, 2013, 140, 349-356.	4.8	24
54	Kinetic characterization of Brocadia spp.-dominated anammox cultures. Bioresource Technology, 2013, 139, 94-100.	4.8	63

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55	Dark fermentation: isolation and characterization of hydrogen-producing strains from sludges. International Microbiology, 2013, 16, 53-62.	1.1	12
56	Inhibition of methanogenesis by chlorophenols: a kinetic approach. New Biotechnology, 2012, 30, 51-61.	2.4	27
57	Anaerobic treatment of wastewater from used industrial oil recovery. Journal of Chemical Technology and Biotechnology, 2012, 87, 1320-1328.	1.6	18
58	Effect of 2,4,6-trichlorophenol on the microbial activity of adapted anaerobic granular sludge bioaugmented with Desulfitobacterium strains. New Biotechnology, 2011, 29, 79-89.	2.4	26
59	Cosmetic wastewater treatment by upflow anaerobic sludge blanket reactor. Journal of Hazardous Materials, 2011, 185, 1059-1065.	6.5	46
60	Anaerobic biodegradation of 2,4,6-trichlorophenol in expanded granular sludge bed and fluidized bed biofilm reactors bioaugmented with Desulfitobacterium spp.. Water Science and Technology, 2011, 64, 293-299.	1.2	7
61	Anaerobic biodegradation of 2,4,6-trichlorophenol by methanogenic granular sludge: role of co-substrates and methanogenic inhibition. Water Science and Technology, 2009, 59, 1449-1456.	1.2	9
62	Comparison of UASB and EGSB performance on the anaerobic biodegradation of 2,4-dichlorophenol. Chemosphere, 2009, 76, 1192-1198.	4.2	58