Angeles Val del Rio

List of Publications by Year in descending order

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78 papers

1,655 citations

257357 24 h-index 330025 37 g-index

81 all docs

81 docs citations

81 times ranked 1506 citing authors

#	Article	IF	CITATIONS
1	Greenhouse Gases Emissions from Wastewater Treatment Plants: Minimization, Treatment, and Prevention. Journal of Chemistry, 2016, 2016, 1-12.	0.9	91
2	Integration of the Anammox process to the rejection water and main stream lines of WWTPs. Chemosphere, 2015, 140, 99-105.	4.2	80
3	Long term operation of a granular sequencing batch reactor at pilot scale treating a low-strength wastewater. Chemical Engineering Journal, 2012, 198-199, 163-170.	6.6	72
4	Polyhydroxyalkanoates (PHAs) Production: A Feasible Economic Option for the Treatment of Sewage Sludge in Municipal Wastewater Treatment Plants?. Water (Switzerland), 2020, 12, 1118.	1.2	62
5	Nitrogen and Phosphorus Recovery From Anaerobically Pretreated Agro-Food Wastes: A Review. Frontiers in Sustainable Food Systems, 2019, 2, .	1.8	58
6	Thermal pre-treatment of aerobic granular sludge: Impact on anaerobic biodegradability. Water Research, 2011, 45, 6011-6020.	5 . 3	57
7	Filamentous bacteria existence in aerobic granular reactors. Bioprocess and Biosystems Engineering, 2015, 38, 841-851.	1.7	56
8	The granular biomass properties and the acclimation period affect the partial nitritation/anammox process stability at a low temperature and ammonium concentration. Process Biochemistry, 2016, 51, 2134-2142.	1.8	52
9	Operation of an aerobic granular pilot scale SBR plant to treat swine slurry. Process Biochemistry, 2013, 48, 1216-1221.	1.8	49
10	Nitrite oxidizing bacteria suppression based on in-situ free nitrous acid production at mainstream conditions. Separation and Purification Technology, 2017, 186, 55-62.	3.9	48
11	Effects of short- and long-term exposures of humic acid on the Anammox activity and microbial community. Environmental Science and Pollution Research, 2019, 26, 19012-19024.	2.7	45
12	Aerobic granular SBR systems applied to the treatment of industrial effluents. Journal of Environmental Management, 2012, 95, S88-S92.	3.8	44
13	Influence of biomass acclimation on the performance of a partial nitritation-anammox reactor treating industrial saline effluents. Chemosphere, 2018, 194, 131-138.	4.2	44
14	Does the feeding strategy enhance the aerobic granular sludge stability treating saline effluents?. Chemosphere, 2019, 226, 865-873.	4.2	44
15	Influence of dissolved oxygen concentration on the start-up of the anammox-based process: ELAN®. Water Science and Technology, 2015, 72, 520-527.	1.2	43
16	Performance and microbial features of the partial nitritation-anammox process treating fish canning wastewater with variable saltÂconcentrations. Journal of Environmental Management, 2018, 208, 112-121.	3.8	43
17	Pilot-scale ELAN \hat{A}^{\otimes} process applied to treat primary settled urban wastewater at low temperature via partial nitritation-anammox processes. Separation and Purification Technology, 2018, 200, 94-101.	3.9	40
18	Start up of a pilot scale aerobic granular reactor for organic matter and nitrogen removal. Journal of Chemical Technology and Biotechnology, 2011, 86, 763-768.	1.6	39

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19	Optimization of an enriched mixed culture to increase PHA accumulation using industrial saline complex wastewater as a substrate. Chemosphere, 2020, 247, 125873.	4.2	33
20	Treatment of high loaded swine slurry in an aerobic granular reactor. Water Science and Technology, 2011, 63, 1808-1814.	1.2	30
21	Enhanced ammonia removal at room temperature by pH controlled partial nitrification and subsequent anaerobic ammonium oxidation. Environmental Technology (United Kingdom), 2014, 35, 383-390.	1.2	29
22	Performance of partial nitritation-anammox processes at mainstream conditions in an IFAS system. Journal of Environmental Management, 2019, 250, 109538.	3.8	29
23	Bacterial community dynamics in longâ€term operation of a pilot plant using aerobic granular sludge to treat pig slurry. Biotechnology Progress, 2016, 32, 1212-1221.	1.3	28
24	PHA accumulation of a mixed microbial culture co-exists with ammonia partial nitritation. Chemical Engineering Journal, 2019, 360, 1255-1261.	6.6	26
25	Anaerobic digestion of aerobic granular biomass: effects of thermal preâ€treatment and addition of primary sludge. Journal of Chemical Technology and Biotechnology, 2014, 89, 690-697.	1.6	24
26	Granular biomass floatation: A simple kinetic/stoichiometric explanation. Chemical Engineering Journal, 2017, 311, 63-71.	6.6	24
27	Sludge volume index and suspended solids estimation of mature aerobic granular sludge by quantitative image analysis and chemometric tools. Separation and Purification Technology, 2020, 234, 116049.	3.9	24
28	Comparison of the anaerobic digestion of activated and aerobic granular sludges under brackish conditions. Chemical Engineering Journal, 2013, 231, 449-454.	6.6	23
29	Potential of endogenous PHA as electron donor for denitrification. Science of the Total Environment, 2019, 695, 133747.	3.9	21
30	Sequencing versus continuous granular sludge reactor for the treatment of freshwater aquaculture effluents. Water Research, 2021, 201, 117293.	5.3	20
31	Bacterial inactivation, photoreactivation and dark repair post flow-through pulsed UV disinfection. Journal of Water Process Engineering, 2021, 41, 102070.	2.6	18
32	Determination of the intrinsic kinetic parameters of ammonia-oxidizing and nitrite-oxidizing bacteria in granular and flocculent sludge. Separation and Purification Technology, 2019, 213, 571-577.	3.9	16
33	Mainstream anammox reactor performance treating municipal wastewater and batch study of temperature, pH and organic matter concentration cross-effects. Chemical Engineering Research and Design, 2021, 145, 195-202.	2.7	16
34	Partial Nitritation-Anammox Granules: Short-Term Inhibitory Effects of Seven Metals on Anammox Activity. Water, Air, and Soil Pollution, 2017, 228, 1.	1,1	15
35	Volatile fatty acid production from saline cooked mussel processing wastewater at low pH. Science of the Total Environment, 2020, 732, 139337.	3.9	15
36	A novel strategy for triacylglycerides and polyhydroxyalkanoates production using waste lipids. Science of the Total Environment, 2021, 763, 142944.	3.9	15

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37	Effect of coagulantâ€flocculant reagents on aerobic granular biomass. Journal of Chemical Technology and Biotechnology, 2012, 87, 908-913.	1.6	14
38	Novel system configuration with activated sludge like-geometry to develop aerobic granular biomass under continuous flow. Bioresource Technology, 2018, 267, 778-781.	4.8	14
39	High-Yield Synthesis of Poly(3-hydroxybutyrate- <i>co</i> -3-hydroxyvalerate) Copolymers in a Mixed Microbial Culture: Effect of Substrate Switching and F/M Ratio. Industrial & Engineering Chemistry Research, 2019, 58, 21921-21926.	1.8	14
40	Bottom-up approach in the assessment of environmental impacts and costs of an innovative anammox-based process for nitrogen removal. Journal of Environmental Management, 2018, 225, 112-119.	3.8	13
41	Inactivation efficiency of Bacillus endospores via modified flow-through PUV treatment with comparison to conventional LPUV treatment. Journal of Water Process Engineering, 2019, 27, 67-76.	2.6	12
42	Features of aerobic granular sludge formation treating fluctuating industrial saline wastewater at pilot scale. Journal of Environmental Management, 2021, 296, 113135.	3.8	12
43	How to cope with NOB activity and pig manure inhibition in a partial nitritation-anammox process?. Separation and Purification Technology, 2019, 212, 396-404.	3.9	11
44	Wastewater Valorization: Practice around the World at Pilot- and Full-Scale. International Journal of Environmental Research and Public Health, 2021, 18, 9466.	1.2	10
45	Performance of a two-stage partial nitritation-anammox system treating the supernatant of a sludge anaerobic digester pretreated by a thermal hydrolysis process. Chemical Engineering Journal, 2022, 429, 131301.	6.6	10
46	Dynamics of PHA-Accumulating Bacterial Communities Fed with Lipid-Rich Liquid Effluents from Fish-Canning Industries. Polymers, 2022, 14, 1396.	2.0	10
47	Optimizing upflow velocity and calcium precipitation in denitrifying granular systems. Process Biochemistry, 2015, 50, 1656-1661.	1.8	9
48	Feasible microbial accumulation of triacylglycerides from crude glycerol. Journal of Chemical Technology and Biotechnology, 2018, 93, 2644-2651.	1.6	9
49	Assessment of an aerobic granular sludge system in the presence of pharmaceutically active compounds by quantitative image analysis and chemometric techniques. Journal of Environmental Management, 2021, 289, 112474.	3.8	9
50	Effects of the cycle distribution on the performance of SBRs with aerobic granular biomass. Environmental Technology (United Kingdom), 2013, 34, 1463-1472.	1.2	8
51	Digested blackwater treatment in a partial nitritation-anammox reactor under repeated starvation and reactivation periods. Journal of Cleaner Production, 2020, 244, 118733.	4.6	8
52	Strategies for the valorisation of a protein-rich saline waste stream into polyhydroxyalkanoates (PHA). Bioresource Technology, 2021, 334, 124964.	4.8	8
53	Validation of a quantitative image analysis methodology for the assessment of the morphology and structure of aerobic granular sludge in the presence of pharmaceutically active compounds. Environmental Technology and Innovation, 2021, 23, 101639.	3.0	8
54	Open-culture biotechnological process for triacylglycerides and polyhydroxyalkanoates recovery from industrial waste fish oil under saline conditions. Separation and Purification Technology, 2021, 270, 118805.	3.9	8

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55	Effects of Inoculum Type and Aeration Flowrate on the Performance of Aerobic Granular SBRs. Processes, 2017, 5, 41.	1.3	7
56	Is the ammonia stripping pre-treatment suitable for the nitrogen removal via partial nitritation-anammox of OFMSW digestate?. Journal of Hazardous Materials, 2021, 403, 123458.	6.5	7
57	Application of biofilm reactors to improve ammonia oxidation in low nitrogen loaded wastewater. Water Science and Technology, 2011, 63, 1880-1886.	1.2	6
58	Recovery of Polyhydroxyalkanoates from Cooked Mussel Processing Wastewater at High Salinity and Acidic Conditions. Sustainability, 2020, 12, 10386.	1.6	6
59	Limits of the anammox process in granular systems to remove nitrogen at low temperature and nitrogen concentration. Chemical Engineering Research and Design, 2020, 138, 349-355.	2.7	5
60	Understanding the microbial trends in a nitritation reactor fed with primary settled municipal wastewater. Separation and Purification Technology, 2021, 256, 117828.	3.9	5
61	Assessment of a fast method to predict the biochemical methane potential based on biodegradable COD obtained by fractionation respirometric tests. Journal of Environmental Management, 2020, 269, 110695.	3.8	5
62	Short- and long-term orange dye effects on ammonium oxidizing and anammox bacteria activities. Water Science and Technology, 2017, 76, 79-86.	1.2	4
63	Biomass aggregation influences NaN3 short-term effects on anammox bacteria activity. Water Science and Technology, 2017, 75, 1007-1013.	1.2	4
64	Transformation of organic contamination from wastewater into bioplastics (polyhydroxyalkanoate) by microorganisms., 2020,, 415-433.		4
65	Application of Anammox-Based Processes in Urban WWTPs: Are We on the Right Track?. Processes, 2021, 9, 1334.	1.3	4
66	Valorization of lipid-rich wastewaters: A theoretical analysis to tackle the competition between polyhydroxyalkanoate and triacylglyceride-storing populations. Science of the Total Environment, 2022, 807, 150761.	3.9	4
67	Pilot-scale continuous flow granular reactor for the treatment of extremely low-strength recirculating aquaculture system wastewater. Journal of Environmental Chemical Engineering, 2022, 10, 107247.	3.3	4
68	Techno-Economic Evaluation of Ozone Application to Reduce Sludge Production in Small Urban WWTPs. Sustainability, 2022, 14, 2480.	1.6	4
69	Pulsed aeration enhances aerobic granular biomass properties. Biochemical Engineering Journal, 2019, 149, 107244.	1.8	3
70	Anammox Process. Advances in Environmental Engineering and Green Technologies Book Series, 2017, , 264-289.	0.3	3
71	Prediction of sludge settleability, density and suspended solids of aerobic granular sludge in the presence of pharmaceutically active compounds by quantitative image analysis and chemometric tools. Journal of Environmental Chemical Engineering, 2022, 10, 107136.	3.3	3
72	Simplified engineering design towards a competitive lipid-rich effluents valorization. Journal of Environmental Management, 2022, 317, 115433.	3.8	3

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73	Membrane Fouling Mitigation in MBR via the Feast–Famine Strategy to Enhance PHA Production by Activated Sludge. Membranes, 2022, 12, 703.	1.4	3
74	Monitoring the stability of aerobic granular sludge using fractal dimension analysis. Environmental Science: Water Research and Technology, 2021, 7, 706-713.	1.2	2
75	Monitoring morphological changes from activated sludge to aerobic granular sludge under distinct organic loading rates and increasing minimal imposed sludge settling velocities through quantitative image analysis. Chemosphere, 2022, 286, 131637.	4.2	2
76	Predicting Accumulation of Intermediate Compounds in Nitrification and Autotrophic Denitrification Processes: A Chemical Approach. BioMed Research International, 2019, 2019, 1-9.	0.9	1
77	Nutrients Pollution in Water Bodies. Advances in Environmental Engineering and Green Technologies Book Series, 2017, , 21-42.	0.3	1
78	Transformations, Treatment, and Prevention of Water Pollutants. Journal of Chemistry, 2016, 2016, 1-2.	0.9	0