

# Julian Carrera

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3640339/publications.pdf>

Version: 2024-02-01

86  
papers

4,098  
citations

81839

39  
h-index

118793

62  
g-index

88  
all docs

88  
docs citations

88  
times ranked

3498  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ammonium oxidation activity promotes stable nitrification and granulation of ammonium oxidizing bacteria. <i>Journal of Water Process Engineering</i> , 2022, 45, 102505.	2.6	1
2	Coupling anammox and heterotrophic denitrification activity at mainstream conditions in a single reactor unit. <i>Chemical Engineering Journal</i> , 2022, 431, 134087.	6.6	19
3	Increasing the energy production in an urban wastewater treatment plant using a high-rate activated sludge: Pilot plant demonstration and energy balance. <i>Journal of Cleaner Production</i> , 2022, 354, 131734.	4.6	13
4	Review about bioproduction of Volatile Fatty Acids from wastes and wastewaters: Influence of operating conditions and organic composition of the substrate. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107917.	3.3	29
5	Increasing resource circularity in wastewater treatment: Environmental implications of technological upgrades. <i>Science of the Total Environment</i> , 2022, 838, 156422.	3.9	11
6	Effective dampening of temperature effects in an anammox reactor treating real mainstream wastewater. <i>Journal of Water Process Engineering</i> , 2021, 40, 101853.	2.6	10
7	Towards PHA Production from Wastes: The Bioconversion Potential of Different Activated Sludge and Food Industry Wastes into VFAs Through Acidogenic Fermentation. <i>Waste and Biomass Valorization</i> , 2021, 12, 6861-6873.	1.8	16
8	Impact of the nitrifying community dynamics on the partial nitrification process performed by an AOB-enriched culture in a granular sludge airlift reactor. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106691.	3.3	11
9	Recovery of polyhydroxyalkanoates (PHAs) from wastewater: A review. <i>Bioresource Technology</i> , 2020, 297, 122478.	4.8	136
10	Two-stage granular sludge partial nitrification/anammox process for the treatment of digestate from the anaerobic digestion of the organic fraction of municipal solid waste. <i>Waste Management</i> , 2019, 100, 36-44.	3.7	28
11	Glycosylated amyloid-like proteins in the structural extracellular polymers of aerobic granular sludge enriched with ammonium-oxidizing bacteria. <i>MicrobiologyOpen</i> , 2018, 7, e00616.	1.2	53
12	Stable long-term operation of an upflow anammox sludge bed reactor at mainstream conditions. <i>Water Research</i> , 2018, 128, 331-340.	5.3	138
13	Enrichment of a mixed microbial culture for polyhydroxyalkanoates production: Effect of pH and N and P concentrations. <i>Science of the Total Environment</i> , 2017, 583, 300-307.	3.9	78
14	Simultaneous partial nitrification and 2-fluorophenol biodegradation with aerobic granular biomass: Reactor performance and microbial communities. <i>Bioresource Technology</i> , 2017, 238, 232-240.	4.8	21
15	Low-strength wastewater treatment in an anammox UASB reactor: Effect of the liquid upflow velocity. <i>Chemical Engineering Journal</i> , 2017, 313, 217-225.	6.6	56
16	Effect of temperature on N <sub>2</sub> O emissions from a highly enriched nitrifying granular sludge performing partial nitrification of a low-strength wastewater. <i>Chemosphere</i> , 2017, 185, 336-343.	4.2	33
17	Kinetic and microbiological characterization of aerobic granules performing partial nitrification of a low-strength wastewater at 10°C. <i>Water Research</i> , 2016, 101, 147-156.	5.3	96
18	Denitrification in an anoxic granular reactor using phenol as sole organic carbon source. <i>Chemical Engineering Journal</i> , 2016, 288, 289-297.	6.6	32

#	ARTICLE	IF	CITATIONS
19	Biodegradation of a high-strength wastewater containing a mixture of ammonium, aromatic compounds and salts with simultaneous nitritation in an aerobic granular reactor. <i>Process Biochemistry</i> , 2016, 51, 399-407.	1.8	46
20	Long-term performance and stability of a continuous granular airlift reactor treating a high-strength wastewater containing a mixture of aromatic compounds. <i>Journal of Hazardous Materials</i> , 2016, 303, 154-161.	6.5	20
21	Would a two-stage N-removal be a suitable technology to implement at full scale the use of anammox for sewage treatment?. <i>Water Science and Technology</i> , 2015, 72, 858-864.	1.2	33
22	Stable partial nitritation for low-strength wastewater at low temperature in an aerobic granular reactor. <i>Water Research</i> , 2015, 80, 149-158.	5.3	139
23	Inhibition of the anammox activity by aromatic compounds. <i>Chemical Engineering Journal</i> , 2015, 279, 681-688.	6.6	31
24	Microbial community shifts on an anammox reactor after a temperature shock using 454-pyrosequencing analysis. <i>Bioresource Technology</i> , 2015, 181, 207-213.	4.8	92
25	Long-term impact of salinity on the performance and microbial population of an aerobic granular reactor treating a high-strength aromatic wastewater. <i>Bioresource Technology</i> , 2015, 198, 844-851.	4.8	88
26	Achievement of high rate nitritation with aerobic granular sludge reactors enhanced by sludge recirculation events. <i>Frontiers of Environmental Science and Engineering</i> , 2015, 9, 528-533.	3.3	2
27	Sequentially alternating pollutant scenarios of phenolic compounds in a continuous aerobic granular sludge reactor performing simultaneous partial nitritation and o-cresol biodegradation. <i>Bioresource Technology</i> , 2014, 161, 354-361.	4.8	18
28	Effect of process parameters and operational mode on nitrous oxide emissions from a nitritation reactor treating reject wastewater. <i>Water Research</i> , 2014, 49, 23-33.	5.3	73
29	High-throughput nitritation of reject water with a novel ammonium control loop: Stable effluent generation for anammox or heterotrophic denitritation. <i>Chemical Engineering Journal</i> , 2014, 243, 265-271.	6.6	24
30	Partial nitritation and o-cresol removal with aerobic granular biomass in a continuous airlift reactor. <i>Water Research</i> , 2014, 48, 354-362.	5.3	63
31	Closed-loop control of ammonium concentration in nitritation: Convenient for reactor operation but also for modeling. <i>Bioresource Technology</i> , 2013, 128, 655-663.	4.8	33
32	Aerobic biodegradation of a mixture of monosubstituted phenols in a sequencing batch reactor. <i>Journal of Hazardous Materials</i> , 2013, 260, 563-568.	6.5	19
33	Efficient and automated start-up of a pilot reactor for nitritation of reject water: From batch granulation to high rate continuous operation. <i>Chemical Engineering Journal</i> , 2013, 226, 319-325.	6.6	13
34	Simultaneous nitritation and p-nitrophenol removal using aerobic granular biomass in a continuous airlift reactor. <i>Bioresource Technology</i> , 2013, 150, 307-313.	4.8	41
35	A novel control strategy for enhancing biological N-removal in a granular sequencing batch reactor: A model-based study. <i>Chemical Engineering Journal</i> , 2013, 232, 468-477.	6.6	24
36	Fast start-up and controlled operation during a long-term period of a high-rate partial nitrification activated sludge system. <i>Environmental Technology (United Kingdom)</i> , 2012, 33, 1361-1366.	1.2	14

#	ARTICLE	IF	CITATIONS
37	Long term operation of a granular sequencing batch reactor at pilot scale treating a low-strength wastewater. <i>Chemical Engineering Journal</i> , 2012, 198-199, 163-170.	6.6	72
38	Bioaugmentation for treating transient or continuous p-nitrophenol shock loads in an aerobic sequencing batch reactor. <i>Bioresource Technology</i> , 2012, 123, 150-156.	4.8	40
39	Catalytic wet air oxidation of a high strength p-nitrophenol wastewater over Ru and Pt catalysts: Influence of the reaction conditions on biodegradability enhancement. <i>Applied Catalysis B: Environmental</i> , 2012, 123-124, 141-150.	10.8	68
40	Kinetics of aerobic biodegradation of dihydroxybenzenes by a p-nitrophenol-degrading activated sludge. <i>Bioresource Technology</i> , 2012, 110, 57-62.	4.8	28
41	Effect of cerium dioxide, titanium dioxide, silver, and gold nanoparticles on the activity of microbial communities intended in wastewater treatment. <i>Journal of Hazardous Materials</i> , 2012, 199-200, 64-72.	6.5	202
42	Long-term starvation and subsequent reactivation of a high-rate partial nitrification activated sludge pilot plant. <i>Bioresource Technology</i> , 2011, 102, 9870-9875.	4.8	40
43	Denitritation of a high-strength nitrite wastewater in a sequencing batch reactor using different organic carbon sources. <i>Chemical Engineering Journal</i> , 2011, 172, 994-998.	6.6	39
44	Characterization of a p-nitrophenol-degrading mixed culture with an improved methodology of fluorescence <i>in situ</i> hybridization and confocal laser scanning microscopy. <i>Journal of Chemical Technology and Biotechnology</i> , 2011, 86, 1405-1412.	1.6	8
45	Bioaugmentation as a tool for improving the start-up and stability of a pilot-scale partial nitrification biofilm airlift reactor. <i>Bioresource Technology</i> , 2011, 102, 4370-4375.	4.8	43
46	Modelling the pH dependence of the kinetics of aerobic p-nitrophenol biodegradation. <i>Journal of Hazardous Materials</i> , 2011, 186, 1947-1953.	6.5	17
47	Modelling aerobic granular SBR at variable COD/N ratios including accurate description of total solids concentration. <i>Biochemical Engineering Journal</i> , 2010, 49, 173-184.	1.8	27
48	Inhibitory impact of quinone-like compounds over partial nitrification. <i>Chemosphere</i> , 2010, 80, 474-480.	4.2	10
49	Combined effect of inorganic carbon limitation and inhibition by free ammonia and free nitrous acid on ammonia oxidizing bacteria. <i>Bioresource Technology</i> , 2010, 101, 6051-6058.	4.8	63
50	Applying Ratio Control in a Continuous Granular Reactor to Achieve Full Nitritation under Stable Operating Conditions. <i>Environmental Science &amp; Technology</i> , 2010, 44, 8930-8935.	4.6	93
51	Expert control for a stable operation of a partial nitrification system to treat highly concentrated ammonium wastewater. <i>Water Science and Technology</i> , 2009, 60, 1191-1199.	1.2	8
52	Model-based study of nitrite accumulation with OUR control in two continuous nitrifying activated sludge configurations. <i>Water Science and Technology</i> , 2009, 60, 2685-2693.	1.2	2
53	Automated thresholding method (ATM) for biomass fraction determination using FISH and confocal microscopy. <i>Journal of Chemical Technology and Biotechnology</i> , 2009, 84, 1140-1145.	1.6	39
54	Calibration of a kinetic model for wet air oxidation (WAO) of substituted phenols: Influence of experimental data on model prediction and practical identifiability. <i>Chemical Engineering Journal</i> , 2009, 150, 328-336.	6.6	4

#	ARTICLE	IF	CITATIONS
55	Total and stable washout of nitrite oxidizing bacteria from a nitrifying continuous activated sludge system using automatic control based on Oxygen Uptake Rate measurements. <i>Water Research</i> , 2009, 43, 2761-2772.	5.3	113
56	Enrichment of a K-strategist microbial population able to biodegrade p-nitrophenol in a sequencing batch reactor. <i>Water Research</i> , 2009, 43, 3871-3883.	5.3	44
57	Start-up of a nitrification system with automatic control to treat highly concentrated ammonium wastewater: Experimental results and modeling. <i>Chemical Engineering Journal</i> , 2008, 144, 407-419.	6.6	78
58	Wet air oxidation (WAO) as a precursor to biological treatment of substituted phenols: Refractory nature of the WAO intermediates. <i>Chemical Engineering Journal</i> , 2008, 144, 205-212.	6.6	31
59	Model-based Design of a Control Strategy for Optimal Start-up of a High-Strength Nitrification System. <i>Environmental Technology (United Kingdom)</i> , 2007, 28, 185-194.	1.2	2
60	Phenol wastewater remediation: advanced oxidation processes coupled to a biological treatment. <i>Water Science and Technology</i> , 2007, 55, 221-227.	1.2	29
61	Inorganic carbon limitations on nitrification: Experimental assessment and modelling. <i>Water Research</i> , 2007, 41, 277-286.	5.3	101
62	Integrated catalytic wet air oxidation and aerobic biological treatment in a municipal WWTP of a high-strength o-cresol wastewater. <i>Chemosphere</i> , 2007, 66, 2096-2105.	4.2	45
63	Biodegradability enhancement of phenolic compounds by Hydrogen Peroxide Promoted Catalytic Wet Air Oxidation. <i>Catalysis Today</i> , 2007, 124, 191-197.	2.2	27
64	Catalytic wet air oxidation of substituted phenols: Temperature and pressure effect on the pollutant removal, the catalyst preservation and the biodegradability enhancement. <i>Chemical Engineering Journal</i> , 2007, 132, 105-115.	6.6	54
65	Catalytic and non-catalytic wet air oxidation of sodium dodecylbenzene sulfonate: Kinetics and biodegradability enhancement. <i>Journal of Hazardous Materials</i> , 2007, 144, 655-662.	6.5	12
66	Net P-removal deterioration in enriched PAO sludge subjected to permanent aerobic conditions. <i>Journal of Biotechnology</i> , 2006, 123, 117-126.	1.9	47
67	Improving the start-up of an EBPR system using OUR to control the aerobic phase length: a simulation study. <i>Water Science and Technology</i> , 2006, 53, 253-262.	1.2	5
68	Observation and mathematical description of the acceleration phenomenon in batch respirograms associated with ammonium oxidation. <i>Water Science and Technology</i> , 2006, 54, 181-188.	1.2	19
69	The Influence of Experimental Data Quality and Quantity on Parameter Estimation Accuracy. <i>Education for Chemical Engineers</i> , 2006, 1, 139-145.	2.8	34
70	Simulation of a novel strategy for improving a biological phosphorus removal system start-up. <i>Computer Aided Chemical Engineering</i> , 2005, 20, 475-480.	0.3	0
71	Aerobic phosphorus release linked to acetate uptake: Influence of PAO intracellular storage compounds. <i>Biochemical Engineering Journal</i> , 2005, 26, 184-190.	1.8	74
72	Catalytic wet air oxidation of substituted phenols using activated carbon as catalyst. <i>Applied Catalysis B: Environmental</i> , 2005, 58, 105-114.	10.8	108

#	ARTICLE	IF	CITATIONS
73	A new approach for modelling simultaneous storage and growth processes for activated sludge systems under aerobic conditions. <i>Biotechnology and Bioengineering</i> , 2005, 92, 600-613.	1.7	98
74	Respirometric estimation of the oxygen affinity constants for biological ammonium and nitrite oxidation. <i>Journal of Chemical Technology and Biotechnology</i> , 2005, 80, 388-396.	1.6	132
75	Limitations of ASM1 and ASM3: a comparison based on batch oxygen uptake rate profiles from different full-scale wastewater treatment plants. <i>Water Science and Technology</i> , 2005, 52, 69-77.	1.2	37
76	Respirometric calibration and validation of a biological nitrite oxidation model including biomass growth and substrate inhibition. <i>Water Research</i> , 2005, 39, 4574-4584.	5.3	48
77	An off-line respirometric procedure to determine inhibition and toxicity of biodegradable compounds in biomass from an industrial WWTP. <i>Water Science and Technology</i> , 2004, 48, 267-275.	1.2	22
78	Improving the Biological Nitrogen Removal Process in Pharmaceutical Wastewater Treatment Plants: A Case Study. <i>Environmental Technology (United Kingdom)</i> , 2004, 25, 423-431.	1.2	4
79	Kinetic models for nitrification inhibition by ammonium and nitrite in a suspended and an immobilised biomass systems. <i>Process Biochemistry</i> , 2004, 39, 1159-1165.	1.8	115
80	Aerobic phosphorus release linked to acetate uptake in bio-P sludge: Process modeling using oxygen uptake rate. <i>Biotechnology and Bioengineering</i> , 2004, 85, 722-733.	1.7	55
81	Effect of influent COD/N ratio on biological nitrogen removal (BNR) from high-strength ammonium industrial wastewater. <i>Process Biochemistry</i> , 2004, 39, 2035-2041.	1.8	191
82	Inhibition of nitrification by fluoride in high-strength ammonium wastewater in activated sludge. <i>Process Biochemistry</i> , 2003, 39, 73-79.	1.8	15
83	Biological nitrogen removal of high-strength ammonium industrial wastewater with two-sludge system. <i>Water Research</i> , 2003, 37, 4211-4221.	5.3	148
84	Title is missing!. <i>Biotechnology Letters</i> , 2002, 24, 2063-2066.	1.1	27
85	Effect of Different Operational Parameters in the Enhanced Biological Phosphorus Removal Process. Experimental Design and Results. <i>Environmental Technology (United Kingdom)</i> , 2001, 22, 1439-1446.	1.2	8
86	Effect of Different Operational Parameters in the Enhanced Biological Phosphorus Removal Process. Experimental Design and Results. <i>Environmental Technology (United Kingdom)</i> , 2001, 22, 1439-1446.	1.2	13