JesÃºs Colprim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5267435/publications.pdf

Version: 2024-02-01

122 papers	5,718 citations	50244 46 h-index	85498 71 g-index
122 all docs	122 docs citations	122 times ranked	4337 citing authors

#	Article	IF	Citations
1	Microbial electrosynthesis of butyrate from carbon dioxide. Chemical Communications, 2015, 51, 3235-3238.	2.2	242
2	On the Edge of Research and Technological Application: A Critical Review of Electromethanogenesis. International Journal of Molecular Sciences, 2017, 18, 874.	1.8	170
3	Autotrophic Denitrification in Microbial Fuel Cells Treating Low Ionic Strength Waters. Environmental Science & Technology, 2012, 46, 2309-2315.	4.6	159
4	Microbial electrosynthesis of butyrate from carbon dioxide: Production and extraction. Bioelectrochemistry, 2017, 117, 57-64.	2.4	159
5	Partial ammonium oxidation to nitrite of high ammonium content urban landfill leachates. Water Research, 2007, 41, 3317-3326.	5.3	157
6	Microbial fuel cell application in landfill leachate treatment. Journal of Hazardous Materials, 2011, 185, 763-767.	6.5	139
7	Effect of pH on nutrient dynamics and electricity production using microbial fuel cells. Bioresource Technology, 2010, 101, 9594-9599.	4.8	133
8	Autotrophic nitrite removal in the cathode of microbial fuel cells. Bioresource Technology, 2011, 102, 4462-4467.	4.8	132
9	Continuous acetate production through microbial electrosynthesis from <scp>CO₂</scp> with microbial mixed culture. Journal of Chemical Technology and Biotechnology, 2016, 91, 921-927.	1.6	128
10	Startâ€up and enrichment of a granular anammox SBR to treat high nitrogen load wastewaters. Journal of Chemical Technology and Biotechnology, 2008, 83, 233-241.	1.6	118
11	Assessment of operational conditions towards mainstream partial nitritation-anammox stability at moderate to low temperature: Reactor performance and bacterial community. Chemical Engineering Journal, 2018, 350, 192-200.	6.6	118
12	Cathode potential and anode electron donor evaluation for a suitable treatment of nitrate-contaminated groundwater in bioelectrochemical systems. Chemical Engineering Journal, 2015, 263, 151-159.	6.6	113
13	Incubation at 25 Â°C prevents acid crash and enhances alcohol production in Clostridium carboxidivorans P7. Bioresource Technology, 2015, 192, 296-303.	4.8	111
14	Extracellular electron transfer of biocathodes: Revealing the potentials for nitrate and nitrite reduction of denitrifying microbiomes dominated by Thiobacillus sp.. Electrochemistry Communications, 2014, 49, 93-97.	2.3	109
15	Effect of temperature on AOB activity of a partial nitritation SBR treating landfill leachate with extremely high nitrogen concentration. Bioresource Technology, 2012, 126, 283-289.	4.8	108
16	Minimization of sludge production by a side-stream reactor under anoxic conditions in a pilot plant. Bioresource Technology, 2013, 129, 229-235.	4.8	102
17	Low Fermentation pH Is a Trigger to Alcohol Production, but a Killer to Chain Elongation. Frontiers in Microbiology, 2016, 7, 702.	1.5	97
18	Bioremediation of nitrateâ€polluted groundwater in a microbial fuel cell. Journal of Chemical Technology and Biotechnology, 2013, 88, 1690-1696.	1.6	95

#	Article	IF	Citations
19	Biocatalysed sulphate removal in a BES cathode. Bioresource Technology, 2013, 130, 218-223.	4.8	92
20	Heterotrophic denitrification on granular anammox SBR treating urban landfill leachate. Water Science and Technology, 2008, 58, 1749-1755.	1.2	91
21	Bidirectional microbial electron transfer: Switching an acetate oxidizing biofilm to nitrate reducing conditions. Biosensors and Bioelectronics, 2016, 75, 352-358.	5.3	88
22	Microbial electricity driven anoxic ammonium removal. Water Research, 2018, 130, 168-175.	5.3	81
23	Fuzzy control of dissolved oxygen in a sequencing batch reactor pilot plant. Chemical Engineering Journal, 2005, 111, 13-19.	6.6	80
24	Assessment of biotic and abiotic graphite cathodes for hydrogen production in microbial electrolysis cells. International Journal of Hydrogen Energy, 2014, 39, 1297-1305.	3.8	80
25	Long-term operation of a partial nitritation pilot plant treating leachate with extremely high ammonium concentration prior to an anammox process. Bioresource Technology, 2009, 100, 5624-5632.	4.8	78
26	Selection between alcohols and volatile fatty acids as external carbon sources for EBPR. Water Research, 2008, 42, 557-566.	5.3	77
27	Bio-electrorecycling of carbon dioxide into bioplastics. Green Chemistry, 2018, 20, 4058-4066.	4.6	76
28	Deciphering the electron transfer mechanisms for biogas upgrading to biomethane within a mixed culture biocathode. RSC Advances, 2015, 5, 52243-52251.	1.7	75
29	Denitrifying Bacterial Communities Affect Current Production and Nitrous Oxide Accumulation in a Microbial Fuel Cell. PLoS ONE, 2013, 8, e63460.	1.1	74
30	Reducing start-up time and minimizing energy losses of Microbial Fuel Cells using Maximum Power Point Tracking strategy. Journal of Power Sources, 2014, 269, 403-411.	4.0	73
31	Coupling anammox and advanced oxidation-based technologies for mature landfill leachate treatment. Journal of Hazardous Materials, 2013, 258-259, 27-34.	6.5	72
32	Phosphorus recovery through biologically induced precipitation by partial nitritation-anammox granular biomass. Chemical Engineering Journal, 2017, 327, 881-888.	6.6	72
33	Nitrous oxide reduction genetic potential from the microbial community of an intermittently aerated partial nitritation SBR treating mature landfill leachate. Water Research, 2013, 47, 7066-7077.	5.3	70
34	Active heterotrophic and autotrophic biomass distribution between fixed and suspended systems in a hybrid biological reactor. Water Science and Technology, 2002, 46, 397-404.	1.2	66
35	Controlling struvite particlesâ€™ size using the up-flow velocity. Chemical Engineering Journal, 2016, 302, 819-827.	6.6	63
36	A hybrid supervisory system to support WWTP operation: implementation and validation. Water Science and Technology, 2002, 45, 289-297.	1.2	62

#	Article	IF	Citations
37	Wastewater nitrogen removal in SBRs, applying a step-feed strategy: from lab-scale to pilot-plant operation. Water Science and Technology, 2004, 50, 89-96.	1.2	60
38	Development and Implementation of a Real-Time Control System for Nitrogen Removal Using OUR and ORP as End Points. Industrial & Engineering Chemistry Research, 2005, 44, 3367-3373.	1.8	60
39	Impact of influent characteristics on a partial nitritation SBR treating high nitrogen loaded wastewater. Bioresource Technology, 2012, 111, 62-69.	4.8	60
40	Microbiome characterization of MFCs used for the treatment of swine manure. Journal of Hazardous Materials, 2015, 288, 60-68.	6.5	55
41	Influence of iron species on integrated microbial fuel cell and electro-Fenton process treating landfill leachate. Chemical Engineering Journal, 2017, 328, 57-65.	6.6	55
42	Data evaluation of full-scale wastewater treatment plants by mass balance. Water Research, 2008, 42, 4645-4655.	5.3	53
43	Opportunities for groundwater microbial electroâ€remediation. Microbial Biotechnology, 2018, 11, 119-135.	2.0	53
44	Biogas upgrading, CO2 valorisation and economic revaluation of bioelectrochemical systems through anodic chlorine production in the framework of wastewater treatment plants. Science of the Total Environment, 2019, 690, 352-360.	3.9	53
45	Simultaneous domestic wastewater treatment and renewable energy production using microbial fuel cells (MFCs). Water Science and Technology, 2011, 64, 904-909.	1.2	50
46	Employing Microbial Electrochemical Technology-driven electro-Fenton oxidation for the removal of recalcitrant organics from sanitary landfill leachate. Bioresource Technology, 2017, 243, 949-956.	4.8	48
47	Prediction of parameters characterizing the state of a pollution removal biologic process. Engineering Applications of Artificial Intelligence, 2005, 18, 559-573.	4.3	47
48	A Model for the Simulation of the SHARON Process: pH as a Key Factor. Environmental Technology (United Kingdom), 2007, 28, 255-265.	1.2	46
49	Long-term assessment of six-stacked scaled-up MFCs treating swine manure with different electrode materials. Environmental Science: Water Research and Technology, 2017, 3, 947-959.	1.2	45
50	Energy Saving in a Wastewater Treatment Process: an Application of Fuzzy Logic Control. Environmental Technology (United Kingdom), 2005, 26, 1263-1270.	1.2	43
51	Development of batch-culture enrichment coupled to molecular detection for screening of natural and man-made environments in search of anammox bacteria for N-removal bioreactors systems. Chemosphere, 2009, 75, 169-179.	4.2	43
52	The role of nitrate and nitrite in a granular sludge process treating low-strength wastewater. Chemical Engineering Journal, 2010, 164, 208-213.	6.6	42
53	Anoxic phases are the main N2O contributor in partial nitritation reactors treating high nitrogen loads with alternate aeration. Bioresource Technology, 2014, 163, 92-99.	4.8	42
54	Multiparametric control for enhanced biofilm selection in microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2016, 91, 1720-1727.	1.6	42

#	Article	IF	Citations
55	Response to high nitrite concentrations of anammox biomass from two SBR fed on synthetic wastewater and landfill leachate. Chemical Engineering Journal, 2012, 209, 62-68.	6.6	40
56	Monitoring and engineering reactor microbiomes of denitrifying bioelectrochemical systems. RSC Advances, 2015, 5, 68326-68333.	1.7	39
57	The effect of primary sedimentation on full-scale WWTP nutrient removal performance. Water Research, 2010, 44, 3375-3384.	5.3	36
58	Role of Operating Conditions on Energetic Pathways in a Microbial Fuel Cell. Energy Procedia, 2015, 74, 728-735.	1.8	35
59	Tracking bio-hydrogen-mediated production of commodity chemicals from carbon dioxide and renewable electricity. Bioresource Technology, 2017, 228, 201-209.	4.8	34
60	External Resistances Applied to MFC Affect Core Microbiome and Swine Manure Treatment Efficiencies. PLoS ONE, 2016, 11, e0164044.	1.1	34
61	Control of sludge height in a secondary settler using fuzzy algorithms. Computers and Chemical Engineering, 2006, 30, 1235-1242.	2.0	31
62	Anode hydrodynamics in bioelectrochemical systems. RSC Advances, 2015, 5, 78994-79000.	1.7	31
63	The effect of urban landfill leachate characteristics on the coexistence of anammox bacteria and heterotrophic denitrifiers. Water Science and Technology, 2010, 61, 1065-1071.	1.2	30
64	Effect of hydraulic retention time and substrate availability in denitrifying bioelectrochemical systems. Environmental Science: Water Research and Technology, 2017, 3, 922-929.	1.2	30
65	Spectrometric characterization of the effluent dissolved organic matter from an anammox reactor shows correlation between the EEM signature and anammox growth. Chemosphere, 2014, 117, 271-277.	4.2	29
66	Unravelling the factors that influence the bio-electrorecycling of carbon dioxide towards biofuels. Green Chemistry, 2019, 21, 684-691.	4.6	29
67	Biological nutrient removal in a sequencing batch reactor using ethanol as carbon source. Journal of Chemical Technology and Biotechnology, 2007, 82, 898-904.	1.6	28
68	An on-line optimisation of a SBR cycle for carbon and nitrogen removal based on on-line pH and OUR: the role of dissolved oxygen control. Water Science and Technology, 2006, 53, 171-178.	1.2	27
69	Nitrogen removal from landfill leachate using the SBR technology. Environmental Technology (United Kingdom), 2009, 30, 283-290.	1.2	27
70	Recovery of Phosphorus from Waste Water Profiting from Biological Nitrogen Treatment: Upstream, Concomitant or Downstream Precipitation Alternatives. Agronomy, 2020, 10, 1039.	1.3	27
71	Biological nutrient removal by applying SBR technology in small wastewater treatment plants: carbon source and C/N/P ratio effects. Water Science and Technology, 2007, 55, 135-141.	1.2	26
72	Microbial fuel cell technology as a downstream process of a membrane bioreactor for sludge reduction. Chemical Engineering Journal, 2017, 326, 222-230.	6.6	26

#	Article	IF	Citations
73	Denitrifying nirK-containing alphaproteobacteria exhibit different electrode driven nitrite reduction capacities. Bioelectrochemistry, 2018, 121, 74-83.	2.4	26
74	Operational strategy for a partial nitritationâ€“sequencing batch reactor treating urban landfill leachate to achieve a stable influent for an anammox reactor. Journal of Chemical Technology and Biotechnology, 2008, 83, 365-371.	1.6	25
75	How can alcohol production be improved in carboxydotrophic clostridia?. Process Biochemistry, 2015, 50, 1047-1055.	1.8	25
76	The ManureEcoMine pilot installation: advanced integration of technologies for the management of organics and nutrients in livestock waste. Water Science and Technology, 2017, 75, 1281-1293.	1.2	21
77	Combining partial nitritation and heterotrophic denitritation for the treatment of landfill leachate previous to an anammox reactor. Water Science and Technology, 2010, 61, 1949-1955.	1.2	20
78	Model-based evaluation of an on-line control strategy for SBRs based on OUR and ORP measurements. Water Science and Technology, 2006, 53, 161-169.	1.2	19
79	Effect of suspended solids and its role on struvite formation from digested manure. Journal of Chemical Technology and Biotechnology, 2018, 93, 2758-2765.	1.6	18
80	Scaling-Up and Long-Term Operation of a Full-Scale Two-Stage Partial Nitritation-Anammox System Treating Landfill Leachate. Processes, 2021, 9, 800.	1.3	18
81	Impact of formate on the growth and productivity of Clostridium ljungdahlii PETC and Clostridium carboxidivorans P7 grown on syngas. International Microbiology, 2014, 17, 195-204.	1.1	18
82	Multivariate Principal Component Analysis and Case-Based Reasoning for monitoring, fault detection and diagnosis in a WWTP. Water Science and Technology, 2011, 64, 1661-1667.	1.2	17
83	Effects of extremely low bulk liquid DO on autotrophic nitrogen removal performance and NOB suppression in sideâ€and mainstream oneâ€stage PNA. Journal of Chemical Technology and Biotechnology, 2018, 93, 2931-2941.	1.6	17
84	Grey water treatment at a sports centre for reuse in irrigation: A case study. Environmental Technology (United Kingdom), 2013, 34, 1385-1392.	1.2	16
85	Microbial Community Pathways for the Production of Volatile Fatty Acids From CO2 and Electricity. Frontiers in Energy Research, 2018, 6, .	1.2	16
86	Thermophilic bio-electro CO₂ recycling into organic compounds. Green Chemistry, 2020, 22, 2947-2955.	4.6	16
87	Hydroxyapatite Formation in a Single-Stage Anammox-Based Batch Treatment System: Reactor Performance, Phosphorus Recovery, and Microbial Community. ACS Sustainable Chemistry and Engineering, 2021, 9, 2745-2761.	3.2	16
88	Potassium recovery from centrate: taking advantage of autotrophic nitrogen removal for multiâ€nutrient recovery. Journal of Chemical Technology and Biotechnology, 2019, 94, 819-828.	1.6	15
89	Assessment of zooplankton-based eco-sustainable wastewater treatment at laboratory scale. Chemosphere, 2020, 238, 124683.	4.2	15
90	Bio-electro CO2 recycling platform based on two separated steps. Journal of Environmental Chemical Engineering, 2021, 9, 105909.	3.3	15

#	Article	IF	Citations
91	Towards a methodology for recovering Kâ€struvite from manure. Journal of Chemical Technology and Biotechnology, 2018, 93, 1558-1562.	1.6	14
92	Systematic model development for partial nitrification of landfill leachate in a SBR. Water Science and Technology, 2010, 61, 2199-2210.	1.2	13
93	Conversion of sewage sludge to commodity chemicals via syngas fermentation. Water Science and Technology, 2015, 72, 415-420.	1.2	12
94	Effect of ethanol and butanol on autotrophic growth of model homoacetogens. FEMS Microbiology Letters, 2018, 365, .	0.7	12
95	Niches for bioelectrochemical systems on the recovery of water, carbon and nitrogen in wastewater treatment plants. Biomass and Bioenergy, 2019, 130, 105380.	2.9	12
96	Modelling the simultaneous production and separation of acetic acid from CO₂ using an anion exchange membrane microbial electrosynthesis system. Journal of Chemical Technology and Biotechnology, 2017, 92, 1211-1217.	1.6	11
97	Modified calibration protocol evaluated in a model-based testing of SBR flexibility. Bioprocess and Biosystems Engineering, 2011, 34, 205-214.	1.7	10
98	Integrated side-stream reactor for biological nutrient removal and minimization of sludge production. Water Science and Technology, 2015, 71, 1056-1064.	1.2	10
99	[NiFe]-hydrogenases are constitutively expressed in an enriched Methanobacterium sp. population during electromethanogenesis. PLoS ONE, 2019, 14, e0215029.	1.1	10
100	Biological Nitrogen Removal from Domestic Wastewater. , 2011, , 329-340.		9
101	Effect of cycle changes on simultaneous biological nutrient removal in a sequencing batch reactor (SBR). Environmental Technology (United Kingdom), 2010, 31, 285-294.	1.2	7
102	Characterization and mitigation of nitrous oxide (N₂O) emissions from partial and fullâ€nitrification BNR processes based on postâ€anoxic aeration control. Biotechnology and Bioengineering, 2015, 112, 2241-2247.	1.7	7
103	Textile Dyeing Wastewater Treatment in a Sequencing Batch Reactor System. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2003, 38, 2089-2099.	0.9	6
104	Steering bio-electro recycling of carbon dioxide towards target compounds through novel inoculation and feeding strategies. Journal of Environmental Chemical Engineering, 2021, 9, 105549.	3.3	6
105	Enhancing biological nitrogen removal in a small wastewater treatment plant by regulating the air supply. Water Science and Technology, 2004, 48, 445-452.	1.2	5
106	On-line oxygen uptake rate as a new tool for monitoring and controlling the SBR process. Computer Aided Chemical Engineering, 2005, 20, 1291-1296.	0.3	5
107	Qualitative estimation of <scp>SBR</scp> biological nutrient removal performance for wastewater treatment. Journal of Chemical Technology and Biotechnology, 2013, 88, 1305-1313.	1.6	4
108	OPERATIONAL STRATEGY OF A PARTIAL NITRITATION-SBR (PN-SBR) TREATING URBAN LANDFILL LEACHATE TO ACHIEVE A STABLE INFLUENT FOR AN ANAMMOX REACTOR. Proceedings of the Water Environment Federation, 2007, 2007, 483-494.	0.0	3

#	Article	IF	Citations
109	Sludge production based on organic matter and nitrogen removal performances. Water Practice and Technology, 2011, 6, .	1.0	3
110	Achieving nitratation repression in an SBR at mainstream conditions through inorganic carbon limitation. International Biodeterioration and Biodegradation, 2020, 147, 104865.	1.9	3
111	Biological Nitrogen Removal From Domestic Wastewater. , 2011, , 285-296.		2
112	Operational and control practices to improve the performance of small wastewater treatment plants in Catalonia. Water Science and Technology, 2000, 41, 53-56.	1.2	1
113	Hydrodynamic simulations and biological modelling of an Anammox reactor. Journal of Chemical Technology and Biotechnology, 2018, 93, 1190-1197.	1.6	1
114	Specific detection of â€œClostridium autoethanogenumâ€ Clostridium ljungdahlii and Clostridium carboxidivorans in complex bioreactor samples. FEMS Microbiology Letters, 2018, 365, .	0.7	1
115	Electroactive Biofilms in Water and Air Pollution Treatment. , 2016, , 183-204.		1
116	Nutrients recovery from wastewater streams. , 2017, , 369-398.		1
117	Granularity determination of activated sludge through on-line profiles by means of case-based reasoning. Water Science and Technology, 2014, 69, 760-767.	1.2	0
118	Microbial electrochemical technology (MET) platform for turning carbon dioxide into a suitable substrate for a chain-elongation fermenter. New Biotechnology, 2018, 44, S42.	2.4	0
119	Biofilms for One-stage Autotrophic Nitrogen Removal. , 2016, , 205-222.		0
120	Coupling Multiphase Hydrodynamic Simulations and Biological Modelling of an Anammox Reactor. Lecture Notes in Civil Engineering, 2017, , 701-705.	0.3	0
121	Approaching Bioelectrochemical Systems to Real Facilities Within the Framework of CO2 Valorization and Biogas Upgrading. Advances in Science, Technology and Innovation, 2020, , 3-5.	0.2	0
122	Niches for Bioelectrochemical Systems in Wastewater Treatment Plants. Advances in Science, Technology and Innovation, 2020, , 329-331.	0.2	0