Robert Delatolla

List of Publications by Year
in descending order

62 papers	1,786 citations	331670 21 h-index	315739 38 g-index
72 all docs	72 docs citations	72 times ranked	1779 citing authors

#	Article	IF	Citations
1	Carrier surface modification for enhanced attachment and growth of anammox biofilm. Science of the Total Environment, 2022, 811, 151317.	8.0	12
2	Biofilm morphology and microbiome of sequencing batch moving bed biofilm reactors treating cheese production wastewater. Bioresource Technology Reports, 2022, 17, 100898.	2.7	5
3	Influence of MBBR carrier geometrical properties and biofilm thickness restraint on biofilm properties, effluent particle size distribution, settling velocity distribution, and settling behaviour. Journal of Environmental Sciences, 2022, 122, 138-149.	6.1	8
4	A wastewater-based epidemic model for SARS-CoV-2 with application to three Canadian cities. Epidemics, 2022, 39, 100560.	3.0	53
5	The need of an environmental justice approach for wastewater based epidemiology for rural and disadvantaged communities: A review in California. Current Opinion in Environmental Science and Health, 2022, 27, 100348.	4.1	15
6	Metagenomics of Wastewater Influent from Wastewater Treatment Facilities across Ontario in the Era of Emerging SARS-CoV-2 Variants of Concern. Microbiology Resource Announcements, 2022, 11, .	0.6	11
7	Quantitative analysis of SARS-CoV-2 RNA from wastewater solids in communities with low COVID-19 incidence and prevalence. Water Research, 2021, 188, 116560.	11.3	297
8	Biofilm and microbiome response of attached growth nitrification systems across incremental decreases to low temperatures. Journal of Water Process Engineering, 2021, 39, 101730.	5.6	8
9	Plant-wide systems microbiology for the wastewater industry. Environmental Science: Water Research and Technology, 2021, 7, 1687-1706.	2.4	7
10	Catching a resurgence: Increase in SARS-CoV-2 viral RNA identified in wastewater 48Âh before COVID-19 clinical tests and 96Âh before hospitalizations. Science of the Total Environment, 2021, 770, 145319.	8.0	159
11	Total iron removal from aqueous solution by using modified clinoptilolite. Ain Shams Engineering Journal, 2021, 13, 101495-101495.	6.1	4
12	Two moving bed biofilm reactors in series for carbon, nitrogen, and phosphorous removal from high organic wastewaters. Journal of Water Process Engineering, 2021, 41, 102088.	5.6	14
13	Comparison of approaches to quantify SARS-CoV-2 in wastewater using RT-qPCR: Results and implications from a collaborative inter-laboratory study in Canada. Journal of Environmental Sciences, 2021, 107, 218-229.	6.1	91
14	Near real-time determination of B.1.1.7 in proportion to total SARS-CoV-2 viral load in wastewater using an allele-specific primer extension PCR strategy. Water Research, 2021, 205, 117681.	11.3	48
15	COVID-19 wastewater surveillance in rural communities: Comparison of lagoon and pumping station samples. Science of the Total Environment, 2021, 801, 149618.	8.0	36
16	Elevated loading rates as a low operational intensity and small land footprint design strategy to achieve partial nitritation. Journal of Water Process Engineering, 2021, 44, 102381.	5.6	5
17	The impact of biofilm thickness-restraint and carrier type on attached growth system performance, solids characteristics and settleability. Environmental Science: Water Research and Technology, 2020, 6, 2843-2855.	2.4	6
18	A novel stochastic wastewater quality modeling based on fuzzy techniques. Journal of Environmental Health Science & Engineering, 2020, 18, 1099-1120.	3.0	15

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19	Anammox attachment and biofilm development on surface-modified carriers with planktonic- and biofilm-based inoculation. Bioresource Technology, 2020, 317, 124030.	9.6	30
20	Wastewater lagoon solids, phosphorus, and algae removal using discfiltration. Water Quality Research Journal of Canada, 2020, 55, 382-393.	2.7	3
21	Microbial response of nitrifying biofilms to cold-shock. Environmental Science: Water Research and Technology, 2020, 6, 3428-3439.	2.4	0
22	Kinetic effects of anaerobic staging and aeration rates on sequencing batch moving bed biofilm reactors: Carbon, nitrogen, and phosphorus treatment of cheese production wastewater. Chemosphere, 2020, 252, 126407.	8.2	17
23	Performance and Kinetics of a Pond-Constructed Wetland System Treating Beef Manure Pile and Exercise Yard Runoff in Eastern Ontario. Water (Switzerland), 2020, 12, 168.	2.7	4
24	Molecular weight distribution of pretreated thickened waste activated sludge and fat, oil, and grease. Environmental Science and Pollution Research, 2020, 27, 13227-13236.	5.3	3
25	Insight on the microbial activity and microbiome in partial nitrification systems: CuO nanoparticles impact under different pH levels. Environmental Engineering Research, 2020, 25, 960-968.	2.5	1
26	Partial nitritation at elevated loading rates: design curves and biofilm characteristics. Bioprocess and Biosystems Engineering, 2019, 42, 1809-1818.	3.4	8
27	Numerical investigation on the impact of wind-induced hydraulics on dissolved oxygen characteristics in a shallow stormwater pond. Water Quality Research Journal of Canada, 2019, 54, 309-325.	2.7	6
28	Nitrifying moving bed biofilm reactor: Performance at low temperatures and response to cold-shock. Chemosphere, 2019, 229, 295-302.	8.2	17
29	Meso and micro-scale effects of loading and air scouring on nitrifying bio-cord biofilm. Environmental Science: Water Research and Technology, 2019, 5, 1183-1190.	2.4	8
30	Predicting wastewater treatment plant quality parameters using a novel hybrid linear-nonlinear methodology. Journal of Environmental Management, 2019, 240, 463-474.	7.8	71
31	Ultrasonic pretreatment for anaerobic digestion of suspended and attached growth sludges. Water Quality Research Journal of Canada, 2019, 54, 265-277.	2.7	7
32	Microwave vs. alkaline-microwave pretreatment for enhancing Thickened Waste Activated Sludge and fat, oil, and grease solubilization, degradation and biogas production. Journal of Environmental Management, 2019, 233, 378-392.	7.8	30
33	Hypoxic conditions in stormwater retention ponds: potential for hydrogen sulfide emission. Environmental Technology (United Kingdom), 2019, 40, 642-653.	2.2	7
34	Nitrifying bio-cord reactor: performance optimization and effects of substratum and air scouring. Environmental Technology (United Kingdom), 2019, 40, 480-488.	2.2	9
35	Simultaneous anaerobic oxidation/partial nitrificationâ€“denitrification for cost-effective and efficient removal of organic carbon and nitrogen from highly polluted streams. Environmental Technology (United Kingdom), 2019, 40, 2114-2126.	2.2	8
36	Improving biogas production from anaerobic co-digestion of Thickened Waste Activated Sludge (TWAS) and fat, oil and grease (FOG) using a dual-stage hyper-thermophilic/thermophilic semi-continuous reactor. Journal of Environmental Management, 2018, 217, 416-428.	7.8	31

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37	Natural continuous influent nitrifier immigration effects on nitrification and the microbial community of activated sludge systems. Journal of Environmental Sciences, 2018, 74, 159-167.	6.1	17
38	Investigation of copper inhibition of nitrifying moving bed biofilm (MBBR) reactors during long term operations. Bioprocess and Biosystems Engineering, 2018, 41, 1485-1495.	3.4	7
39	Low temperature MBBR nitrification: Microbiome analysis. Water Research, 2017, 111, 224-233.	11.3	115
40	Rapid start-up of nitrifying MBBRs at low temperatures: nitrification, biofilm response and microbiome analysis. Bioprocess and Biosystems Engineering, 2017, 40, 731-739.	3.4	35
41	Post carbon removal nitrifying MBBR operation at high loading and exposure to starvation conditions. Bioresource Technology, 2017, 239, 318-325.	9.6	12
42	Emerging investigators series: hydrogen sulfide production in municipal stormwater retention ponds under ice covered conditions: a study of water quality and SRB populations. Environmental Science: Water Research and Technology, 2017, 3, 686-698.	2.4	5
43	Protein to polysaccharide ratio in EPS as an indicator of non-optimized operation of tertiary nitrifying MBBR. Water Quality Research Journal of Canada, 2016, 51, 297-306.	2.7	12
44	Semi-continuous mesophilic anaerobic co-digestion of thermally pretreated scum. Water Quality Research Journal of Canada, 2016, 51, 117-127.	2.7	1
45	Thermophilic and hyper-thermophilic co-digestion of waste activated sludge and fat, oil and grease: Evaluating and modeling methane production. Journal of Environmental Management, 2016, 183, 551-561.	7.8	44
46	Meso and micro-scale response of post carbon removal nitrifying MBBR biofilm across carrier type and loading. Water Research, 2016, 91, 235-243.	11.3	45
47	Pilot-scale tertiary MBBR nitrification at 1Â°C: characterization of ammonia removal rate, solids settleability and biofilm characteristics. Environmental Technology (United Kingdom), 2016, 37, 2124-2132.	2.2	30
48	Carrier effects on tertiary nitrifying moving bed biofilm reactor: An examination of performance, biofilm and biologically produced solids. Environmental Technology (United Kingdom), 2016, 37, 662-671.	2.2	28
49	MBBR Nitrification Achieved at 1Â°C to Meet Discharge Regulations. Proceedings of the Water Environment Federation, 2016, 2016, 5983-5989.	0.0	0
50	An Investigation of Moving Bed Biofilm Reactor Nitrification during Longâ€Term Exposure to Cold Temperatures. Water Environment Research, 2014, 86, 36-42.	2.7	25
51	Investigation of settleability of biologically produced solids and biofilm morphology in moving bed bioreactors (MBBRs). Bioprocess and Biosystems Engineering, 2014, 37, 1839-1848.	3.4	23
52	Nitrifying moving bed biofilm reactor (MBBR) biofilm and biomass response to long term exposure to 1ÂÂ°C. Water Research, 2014, 49, 215-224.	11.3	119
53	Field study of moving bed biofilm reactor technology for post-treatment of wastewater lagoon effluent at 1Â°C. Environmental Technology (United Kingdom), 2014, 35, 1596-1604.	2.2	45
54	Biodegradability and mesophilic co-digestion of municipal sludge and scum. Bioprocess and Biosystems Engineering, 2013, 36, 1703-1714.	3.4	2

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55	Potential of water hyacinth for phytoremediation in low temperature environment. Environmental Progress and Sustainable Energy, 2013, 32, 976-981.	2.3	3
56	Nitrification kinetics and modified model for the Rideau River, Canada. Water Quality Research Journal of Canada, 2013, 48, 192-201.	2.7	4
57	Effects of Long Exposure to Low Temperatures on Nitrifying Biofilm and Biomass in Wastewater Treatment. Water Environment Research, 2012, 84, 328-338.	2.7	32
58	Investigation of Laboratory-Scale and Pilot-Scale Attached Growth Ammonia Removal Kinetics at Cold Temperature and Low Influent Carbon. Water Quality Research Journal of Canada, 2010, 45, 427-436.	2.7	21
59	In situ characterization of nitrifying biofilm: Minimizing biomass loss and preserving perspective. Water Research, 2009, 43, 1775-1787.	11.3	45
60	Rapid and reliable quantification of biofilm weight and nitrogen content of biofilm attached to polystyrene beads. Water Research, 2008, 42, 3082-3088.	11.3	22
61	Upgrading municipal lagoons in temperate and cold climates: Total nitrogen removal and phosphorus assimilation at ultraâ€low temperatures. Water and Environment Journal, 0, , .	2.2	2
62	Biofilm thickness restraint carriers enhance free nitrous acid inhibition for partial nitritation. Water Quality Research Journal of Canada, 0, , .	2.7	1