

# Robert Delatolla

## List of Publications by Year in descending order

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62  
papers

1,786  
citations

377584

21  
h-index

355658

38  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1980  
citing authors

#	ARTICLE	IF	CITATIONS
1	Carrier surface modification for enhanced attachment and growth of anammox biofilm. <i>Science of the Total Environment</i> , 2022, 811, 151317.	3.9	12
2	Biofilm morphology and microbiome of sequencing batch moving bed biofilm reactors treating cheese production wastewater. <i>Bioresource Technology Reports</i> , 2022, 17, 100898.	1.5	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. <i>Journal of Environmental Sciences</i> , 2022, 122, 138-149.	3.2	8
4	A wastewater-based epidemic model for SARS-CoV-2 with application to three Canadian cities. <i>Epidemics</i> , 2022, 39, 100560.	1.5	53
5	The need of an environmental justice approach for wastewater based epidemiology for rural and disadvantaged communities: A review in California. <i>Current Opinion in Environmental Science and Health</i> , 2022, 27, 100348.	2.1	15
6	Metagenomics of Wastewater Influent from Wastewater Treatment Facilities across Ontario in the Era of Emerging SARS-CoV-2 Variants of Concern. <i>Microbiology Resource Announcements</i> , 2022, 11, .	0.3	11
7	Quantitative analysis of SARS-CoV-2 RNA from wastewater solids in communities with low COVID-19 incidence and prevalence. <i>Water Research</i> , 2021, 188, 116560.	5.3	297
8	Biofilm and microbiome response of attached growth nitrification systems across incremental decreases to low temperatures. <i>Journal of Water Process Engineering</i> , 2021, 39, 101730.	2.6	8
9	Plant-wide systems microbiology for the wastewater industry. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 1687-1706.	1.2	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. <i>Science of the Total Environment</i> , 2021, 770, 145319.	3.9	159
11	Total iron removal from aqueous solution by using modified clinoptilolite. <i>Ain Shams Engineering Journal</i> , 2021, 13, 101495-101495.	3.5	4
12	Two moving bed biofilm reactors in series for carbon, nitrogen, and phosphorous removal from high organic wastewaters. <i>Journal of Water Process Engineering</i> , 2021, 41, 102088.	2.6	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. <i>Journal of Environmental Sciences</i> , 2021, 107, 218-229.	3.2	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. <i>Water Research</i> , 2021, 205, 117681.	5.3	48
15	COVID-19 wastewater surveillance in rural communities: Comparison of lagoon and pumping station samples. <i>Science of the Total Environment</i> , 2021, 801, 149618.	3.9	36
16	Elevated loading rates as a low operational intensity and small land footprint design strategy to achieve partial nitrification. <i>Journal of Water Process Engineering</i> , 2021, 44, 102381.	2.6	5
17	The impact of biofilm thickness-restraint and carrier type on attached growth system performance, solids characteristics and settleability. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 2843-2855.	1.2	6
18	A novel stochastic wastewater quality modeling based on fuzzy techniques. <i>Journal of Environmental Health Science &amp; Engineering</i> , 2020, 18, 1099-1120.	1.4	15

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19	Anammox attachment and biofilm development on surface-modified carriers with planktonic- and biofilm-based inoculation. <i>Bioresource Technology</i> , 2020, 317, 124030.	4.8	30
20	Wastewater lagoon solids, phosphorus, and algae removal using discfiltration. <i>Water Quality Research Journal of Canada</i> , 2020, 55, 382-393.	1.2	3
21	Microbial response of nitrifying biofilms to cold-shock. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 3428-3439.	1.2	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. <i>Chemosphere</i> , 2020, 252, 126407.	4.2	17
23	Performance and Kinetics of a Pond-Constructed Wetland System Treating Beef Manure Pile and Exercise Yard Runoff in Eastern Ontario. <i>Water (Switzerland)</i> , 2020, 12, 168.	1.2	4
24	Molecular weight distribution of pretreated thickened waste activated sludge and fat, oil, and grease. <i>Environmental Science and Pollution Research</i> , 2020, 27, 13227-13236.	2.7	3
25	Insight on the microbial activity and microbiome in partial nitrification systems: CuO nanoparticles impact under different pH levels. <i>Environmental Engineering Research</i> , 2020, 25, 960-968.	1.5	1
26	Partial nitrification at elevated loading rates: design curves and biofilm characteristics. <i>Bioprocess and Biosystems Engineering</i> , 2019, 42, 1809-1818.	1.7	8
27	Numerical investigation on the impact of wind-induced hydraulics on dissolved oxygen characteristics in a shallow stormwater pond. <i>Water Quality Research Journal of Canada</i> , 2019, 54, 309-325.	1.2	6
28	Nitrifying moving bed biofilm reactor: Performance at low temperatures and response to cold-shock. <i>Chemosphere</i> , 2019, 229, 295-302.	4.2	17
29	Meso and micro-scale effects of loading and air scouring on nitrifying bio-cord biofilm. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 1183-1190.	1.2	8
30	Predicting wastewater treatment plant quality parameters using a novel hybrid linear-nonlinear methodology. <i>Journal of Environmental Management</i> , 2019, 240, 463-474.	3.8	71
31	Ultrasonic pretreatment for anaerobic digestion of suspended and attached growth sludges. <i>Water Quality Research Journal of Canada</i> , 2019, 54, 265-277.	1.2	7
32	Microwave vs. alkaline-microwave pretreatment for enhancing Thickened Waste Activated Sludge and fat, oil, and grease solubilization, degradation and biogas production. <i>Journal of Environmental Management</i> , 2019, 233, 378-392.	3.8	30
33	Hypoxic conditions in stormwater retention ponds: potential for hydrogen sulfide emission. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 642-653.	1.2	7
34	Nitrifying bio-cord reactor: performance optimization and effects of substratum and air scouring. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 480-488.	1.2	9
35	Simultaneous anaerobic oxidation/partial nitrificationâ€“denitrification for cost-effective and efficient removal of organic carbon and nitrogen from highly polluted streams. <i>Environmental Technology (United Kingdom)</i> , 2019, 40, 2114-2126.	1.2	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. <i>Journal of Environmental Management</i> , 2018, 217, 416-428.	3.8	31

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37	Natural continuous influent nitrifier immigration effects on nitrification and the microbial community of activated sludge systems. <i>Journal of Environmental Sciences</i> , 2018, 74, 159-167.	3.2	17
38	Investigation of copper inhibition of nitrifying moving bed biofilm (MBBR) reactors during long term operations. <i>Bioprocess and Biosystems Engineering</i> , 2018, 41, 1485-1495.	1.7	7
39	Low temperature MBBR nitrification: Microbiome analysis. <i>Water Research</i> , 2017, 111, 224-233.	5.3	115
40	Rapid start-up of nitrifying MBBRs at low temperatures: nitrification, biofilm response and microbiome analysis. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 731-739.	1.7	35
41	Post carbon removal nitrifying MBBR operation at high loading and exposure to starvation conditions. <i>Bioresource Technology</i> , 2017, 239, 318-325.	4.8	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. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 686-698.	1.2	5
43	Protein to polysaccharide ratio in EPS as an indicator of non-optimized operation of tertiary nitrifying MBBR. <i>Water Quality Research Journal of Canada</i> , 2016, 51, 297-306.	1.2	12
44	Semi-continuous mesophilic anaerobic co-digestion of thermally pretreated scum. <i>Water Quality Research Journal of Canada</i> , 2016, 51, 117-127.	1.2	1
45	Thermophilic and hyper-thermophilic co-digestion of waste activated sludge and fat, oil and grease: Evaluating and modeling methane production. <i>Journal of Environmental Management</i> , 2016, 183, 551-561.	3.8	44
46	Meso and micro-scale response of post carbon removal nitrifying MBBR biofilm across carrier type and loading. <i>Water Research</i> , 2016, 91, 235-243.	5.3	45
47	Pilot-scale tertiary MBBR nitrification at 1Â°C: characterization of ammonia removal rate, solids settleability and biofilm characteristics. <i>Environmental Technology (United Kingdom)</i> , 2016, 37, 2124-2132.	1.2	30
48	Carrier effects on tertiary nitrifying moving bed biofilm reactor: An examination of performance, biofilm and biologically produced solids. <i>Environmental Technology (United Kingdom)</i> , 2016, 37, 662-671.	1.2	28
49	MBBR Nitrification Achieved at 1Â°C to Meet Discharge Regulations. <i>Proceedings of the Water Environment Federation</i> , 2016, 2016, 5983-5989.	0.0	0
50	An Investigation of Moving Bed Biofilm Reactor Nitrification during Long-Term Exposure to Cold Temperatures. <i>Water Environment Research</i> , 2014, 86, 36-42.	1.3	25
51	Investigation of settleability of biologically produced solids and biofilm morphology in moving bed bioreactors (MBBRs). <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 1839-1848.	1.7	23
52	Nitrifying moving bed biofilm reactor (MBBR) biofilm and biomass response to long term exposure to 1Â°C. <i>Water Research</i> , 2014, 49, 215-224.	5.3	119
53	Field study of moving bed biofilm reactor technology for post-treatment of wastewater lagoon effluent at 1Â°C. <i>Environmental Technology (United Kingdom)</i> , 2014, 35, 1596-1604.	1.2	45
54	Biodegradability and mesophilic co-digestion of municipal sludge and scum. <i>Bioprocess and Biosystems Engineering</i> , 2013, 36, 1703-1714.	1.7	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.	1.3	3
56	Nitrification kinetics and modified model for the Rideau River, Canada. Water Quality Research Journal of Canada, 2013, 48, 192-201.	1.2	4
57	Effects of Long Exposure to Low Temperatures on Nitrifying Biofilm and Biomass in Wastewater Treatment. Water Environment Research, 2012, 84, 328-338.	1.3	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.	1.2	21
59	In situ characterization of nitrifying biofilm: Minimizing biomass loss and preserving perspective. Water Research, 2009, 43, 1775-1787.	5.3	45
60	Rapid and reliable quantification of biofilm weight and nitrogen content of biofilm attached to polystyrene beads. Water Research, 2008, 42, 3082-3088.	5.3	22
61	Upgrading municipal lagoons in temperate and cold climates: Total nitrogen removal and phosphorus assimilation at ultra-low temperatures. Water and Environment Journal, 0, , .	1.0	2
62	Biofilm thickness restraint carriers enhance free nitrous acid inhibition for partial nitrification. Water Quality Research Journal of Canada, 0, , .	1.2	1