

# Francis L De Los Reyes

## List of Publications by Year in descending order

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Version: 2024-02-01

105  
papers

3,012  
citations

279487

23  
h-index

174990

52  
g-index

108  
all docs

108  
docs citations

108  
times ranked

3481  
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparing Rates of Change in SARS-CoV-2 Wastewater Load and Clinical Cases in 19 Sewersheds Across Four Major Metropolitan Areas in the United States. <i>ACS ES&amp;T Water</i> , 2022, 2, 2233-2242.	2.3	6
2	Development of trash exclusion for mechanized pit latrine emptying. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 1714-1722.	1.2	3
3	Impact of sampling depth on pathogen detection in pit latrines. <i>PLoS Neglected Tropical Diseases</i> , 2021, 15, e0009176.	1.3	17
4	Global Water, Sanitation, and Hygiene Approaches: Anthropological Contributions and Future Directions for Engineering. <i>Environmental Engineering Science</i> , 2021, 38, 402-417.	0.8	18
5	Chlorophyll a and non-pigmented biomass are sufficient predictors for estimating light attenuation during cultivation of <i>Dunaliella viridis</i> . <i>Algal Research</i> , 2021, 55, 102283.	2.4	4
6	The role of emptying services in provision of safely managed sanitation: A classification and quantification of the needs of LMICs. <i>Journal of Environmental Management</i> , 2021, 290, 112612.	3.8	8
7	Microbial Contamination in Environmental Waters of Rural and Agriculturally-Dominated Landscapes Following Hurricane Florence. <i>ACS ES&amp;T Water</i> , 2021, 1, 2012-2019.	2.3	9
8	SARS-CoV-2 Wastewater Surveillance for Public Health Action. <i>Emerging Infectious Diseases</i> , 2021, 27, 1-8.	2.0	73
9	Increased loading stress leads to convergence of microbial communities and high methane yields in adapted anaerobic co-digesters. <i>Water Research</i> , 2020, 169, 115155.	5.3	13
10	Modeling cell aggregate morphology during aerobic granulation in activated sludge processes reveals the combined effect of substrate and shear. <i>Water Research</i> , 2020, 170, 115384.	5.3	18
11	Enhancement of biogas yield during anaerobic digestion of <i>Jatropha curcas</i> seed by pretreatment and co-digestion with mango peels. <i>Biomass Conversion and Biorefinery</i> , 2020, , 1.	2.9	1
12	Wastewater-Based Epidemiology: Global Collaborative to Maximize Contributions in the Fight Against COVID-19. <i>Environmental Science &amp; Technology</i> , 2020, 54, 7754-7757.	4.6	337
13	Fat, oil, and grease (FOG) deposits yield higher methane than FOG in anaerobic co-digestion with waste activated sludge. <i>Journal of Environmental Management</i> , 2020, 268, 110708.	3.8	19
14	Assessment of alternative herbicides for residential sewer root treatment and their effects on downstream treatment plant nitrification. <i>Journal of Environmental Management</i> , 2020, 258, 110058.	3.8	4
15	Dynamic Modeling of Microalgae Growth and Lipid Production under Transient Light and Nitrogen Conditions. <i>Environmental Science &amp; Technology</i> , 2019, 53, 11560-11568.	4.6	24
16	Relating nitrogen concentration and light intensity to the growth and lipid accumulation of <i>Dunaliella viridis</i> in a photobioreactor. <i>Journal of Applied Phycology</i> , 2019, 31, 3397-3409.	1.5	10
17	Global diversity and biogeography of bacterial communities in wastewater treatment plants. <i>Nature Microbiology</i> , 2019, 4, 1183-1195.	5.9	491
18	Systems and Methods for Studying Microbial Processes and Communities in Landfills. <i>Advances in Environmental Microbiology</i> , 2019, , 129-150.	0.1	5

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19	Measuring the Shape and Size of Activated Sludge Particles Immobilized in Agar with an Open Source Software Pipeline. <i>Journal of Visualized Experiments</i> , 2019, , .	0.2	0
20	Microbial ecological succession during municipal solid waste decomposition. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 5731-5740.	1.7	23
21	Kenaf addition has mixed effects on process performance of sequencing batch reactors treating municipal wastewater. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 711-720.	1.2	1
22	Development of Photochemical Microsensors for Evaluating Photosynthetic Light Dose Distributions in Microalgal Photobioreactors. <i>Environmental Science &amp; Technology</i> , 2018, 52, 12538-12545.	4.6	2
23	Controlling aerobic biological floc size using Couette-Taylor Bioreactors. <i>Water Research</i> , 2018, 147, 177-183.	5.3	3
24	Amending anaerobic bioreactors with pyrogenic carbonaceous materials: the influence of material properties on methane generation. <i>Environmental Science: Water Research and Technology</i> , 2018, 4, 1794-1806.	1.2	20
25	Steam Application to Destroy Foam-Forming Bacteria in Activated Sludge Systems. <i>Journal of Environmental Engineering, ASCE</i> , 2017, 143, .	0.7	3
26	Characterization of pit latrines to support the design and selection of emptying tools in peri-urban Mzuzu, Malawi. <i>Journal of Water Sanitation and Hygiene for Development</i> , 2017, 7, 151-155.	0.7	8
27	Designing local solutions for emptying pit latrines in low-income urban settlements (Malawi). <i>Physics and Chemistry of the Earth</i> , 2017, 100, 336-342.	1.2	20
28	A critical review of fat, oil, and grease (FOG) in sewer collection systems: Challenges and control. <i>Critical Reviews in Environmental Science and Technology</i> , 2017, 47, 1191-1217.	6.6	39
29	Construction and Setup of a Bench-scale Algal Photosynthetic Bioreactor with Temperature, Light, and pH Monitoring for Kinetic Growth Tests. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	3
30	Trash removal methods for improved mechanical emptying of pit latrines using a screw auger. <i>Journal of Water Sanitation and Hygiene for Development</i> , 2017, 7, 85-91.	0.7	7
31	Quantifying in situ growth rate of a filamentous bacterial species in activated sludge using rRNA:rDNA ratio. <i>FEMS Microbiology Letters</i> , 2016, 363, fnw255.	0.7	2
32	Shifts in microbial communities in bioaugmented grease interceptors removing fat, oil, and grease (FOG). <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 7025-7035.	1.7	8
33	FLUID SHEAR VARIATION POTENTIALLY PLAYS A ROLE IN AEROBIC GRANULAR SLUDGE FORMATION. <i>Proceedings of the Water Environment Federation</i> , 2016, 2016, 5737-5744.	0.0	0
34	Modified Auger for Pit Latrine Desludging in Developing Countries. <i>Procedia Engineering</i> , 2015, 107, 427-429.	1.2	2
35	A methodological framework for linking bioreactor function to microbial communities and environmental conditions. <i>Current Opinion in Biotechnology</i> , 2015, 33, 112-118.	3.3	18
36	Aerosolization of a Human Norovirus Surrogate, Bacteriophage MS2, during Simulated Vomiting. <i>PLoS ONE</i> , 2015, 10, e0134277.	1.1	46

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37	Using 16S metagenomics to determine microbial population shifts associated with a 336% boost in methane yield during anaerobic co-digestion of grease waste. Proceedings of the Water Environment Federation, 2015, 2015, 6112-6118.	0.0	0
38	Power earth auger modification for waste extraction from pit latrines. Journal of Water Sanitation and Hygiene for Development, 2014, 4, 72-80.	0.7	10
39	Structural integrity affects nitrogen removal activity of granules in semi-continuous reactors. Biodegradation, 2014, 25, 923-934.	1.5	4
40	Mechanisms of Fat, Oil and Grease (FOG) deposit formation in sewer lines. Water Research, 2013, 47, 4451-4459.	5.3	88
41	Determining the limits of anaerobic co-digestion of thickened waste activated sludge with grease interceptor waste. Water Research, 2013, 47, 3835-3844.	5.3	95
42	Effects of Powdered Kenaf Supplementation on the Performance of Lab-Scale Activated Sludge Reactors. Proceedings of the Water Environment Federation, 2013, 2013, 5125-5131.	0.0	0
43	Developing Resilient Anaerobic Co-digesting Microbial Communities. Proceedings of the Water Environment Federation, 2013, 2013, 771-777.	0.0	0
44	Developing Resilient Anaerobic Co-digesting Microbial Communities. Proceedings of the Water Environment Federation, 2013, 2013, 764-770.	0.0	0
45	Physicochemical Characterization of Grease Interceptors with and without Biological Product Addition. Water Environment Research, 2012, 84, 195-201.	1.3	16
46	Quantification of the Denitrification Gene nosZ in a Full Scale Wastewater Treatment Plant Using qPCR. Proceedings of the Water Environment Federation, 2012, 2012, 3772-3778.	0.0	0
47	Who's doing what in activated sludge: Relating microbial function to identity using a novel molecular method. Proceedings of the Water Environment Federation, 2012, 2012, 6927-6932.	0.0	0
48	Anaerobic Co-Digestion of Grease Trap Waste. Proceedings of the Water Environment Federation, 2012, 2012, 5428-5434.	0.0	1
49	Aerobic Granulation Can Be Induced By Shear Variability. Proceedings of the Water Environment Federation, 2012, 2012, 6921-6926.	0.0	0
50	Effect of Penicillin on Nitrite-Oxidizing Bacteria in Activated Sludge. Applied Biochemistry and Biotechnology, 2012, 166, 1983-1990.	1.4	4
51	Identification of Nitrite-Reducing Bacteria Using Sequential mRNA Fluorescence In Situ Hybridization and Fluorescence-Assisted Cell Sorting. Microbial Ecology, 2012, 64, 256-267.	1.4	12
52	Comparison of Bacteria and Archaea communities in municipal solid waste, individual refuse components, and leachate. FEMS Microbiology Ecology, 2012, 79, 465-473.	1.3	35
53	Anaerobic co-digestion of fat, oil, and grease (FOG): A review of gas production and process limitations. Chemical Engineering Research and Design, 2012, 90, 231-245.	2.7	290
54	Evidence for Fat, Oil, and Grease (FOG) Deposit Formation Mechanisms in Sewer Lines. Environmental Science & Technology, 2011, 45, 4385-4391.	4.6	96

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55	Critical evaluation of solid waste sample processing for DNA-based microbial community analysis. <i>Biodegradation</i> , 2011, 22, 189-204.	1.5	19
56	Microbial community of a volcanic mudspring in the Philippines as revealed by 16S rDNA sequence analysis and fluorescence in situ hybridization. <i>World Journal of Microbiology and Biotechnology</i> , 2011, 27, 859-867.	1.7	7
57	Effect of Spatial Differences in Microbial Activity, pH, and Substrate Levels on Methanogenesis Initiation in Refuse. <i>Applied and Environmental Microbiology</i> , 2011, 77, 2381-2391.	1.4	126
58	Use of Molecular Tools to Identify Microbial Communities in a Full Scale Biotrickling Filter Treating Odors from a Municipal WWTP. <i>Proceedings of the Water Environment Federation</i> , 2010, 2010, 855-863.	0.0	1
59	Impact of Storm-Water Runoff on Clogging and Fecal Bacteria Reduction in Sand Columns. <i>Journal of Environmental Engineering, ASCE</i> , 2010, 136, 1435-1441.	0.7	9
60	Transport Behavior of Surrogate Biological Warfare Agents in a Simulated Landfill: Effect of Leachate Recirculation and Water Infiltration. <i>Environmental Science &amp; Technology</i> , 2010, 44, 8622-8628.	4.6	4
61	Challenges in determining causation in structure–function studies using molecular biological techniques. <i>Water Research</i> , 2010, 44, 4948-4957.	5.3	16
62	Multiple approaches to assess filamentous bacterial growth in activated sludge under different carbon source conditions. <i>Journal of Applied Microbiology</i> , 2009, 106, 682-691.	1.4	20
63	Clarifying the roles of kinetics and diffusion in activated sludge filamentous bulking. <i>Biotechnology and Bioengineering</i> , 2008, 101, 327-336.	1.7	25
64	Monitoring Microbial Shifts during Activated Sludge Floc and Aerobic Granule Development. <i>Proceedings of the Water Environment Federation</i> , 2008, 2008, 4672-4678.	0.0	0
65	Quantifying the In Situ Growth Rate of a Filament and a Floc-former in Activated Sludge. <i>Proceedings of the Water Environment Federation</i> , 2008, 2008, 4660-4671.	0.0	0
66	Development of Quantitative Real-Time PCR Assays for Detection and Quantification of Surrogate Biological Warfare Agents in Building Debris and Leachate. <i>Applied and Environmental Microbiology</i> , 2007, 73, 6557-6565.	1.4	49
67	A New Framework for Analyzing Filamentous Bulking in Activated Sludge: Roles for Kinetics and Diffusion. <i>Proceedings of the Water Environment Federation</i> , 2006, 2006, 4884-4894.	0.0	0
68	Microbial community structure of activated sludge during aerobic granulation in an annular gap bioreactor. <i>Water Science and Technology</i> , 2006, 54, 139-146.	1.2	48
69	Investigating Steam Application for Reducing Foaming in Activated Sludge Systems. <i>Proceedings of the Water Environment Federation</i> , 2006, 2006, 321-330.	0.0	4
70	Molecular Methods in Biological Systems. <i>Water Environment Research</i> , 2005, 77, 718-779.	1.3	0
71	High levels of nitrifying bacteria in intermittently aerated reactors treating high ammonia wastewater. <i>FEMS Microbiology Ecology</i> , 2005, 54, 391-400.	1.3	34
72	Changes in the rRNA levels of specific microbial groups in activated sludge during sample handling and storage. <i>Letters in Applied Microbiology</i> , 2005, 41, 208-215.	1.0	7

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73	Substrate uptake tests and quantitative FISH show differences in kinetic growth of bulking and non-bulking activated sludge. <i>Biotechnology and Bioengineering</i> , 2005, 92, 729-739.	1.7	20
74	Nitrogen Removal from Anaerobically Pretreated Swine Wastewater in an Intermittent Aeration Process. , 2005, , .		0
75	Integrating Decay, Storage, Kinetic Selection, and Filamentous Backbone Factors in a Bacterial Competition Model. <i>Water Environment Research</i> , 2005, 77, 287-296.	1.3	18
76	WHAT DO FILAMENTS LIKE TO EAT? USING DGGE AND FISH TO TEST THE EFFECT OF CARBON SOURCE AND SEED SLUDGE ON FILAMENTOUS GROWTH IN ACTIVATED SLUDGE. <i>Proceedings of the Water Environment Federation</i> , 2005, 2005, 5890-5900.	0.0	0
77	Effects of Aeration Cycles on Nitrifying Bacterial Populations and Nitrogen Removal in Intermittently Aerated Reactors. <i>Applied and Environmental Microbiology</i> , 2005, 71, 8565-8572.	1.4	81
78	Relationship of Species-Specific Filament Levels to Filamentous Bulking in Activated Sludge. <i>Applied and Environmental Microbiology</i> , 2004, 70, 2420-2428.	1.4	54
79	OPTIMIZATION OF INTERMITTENT AERATION FOR NITROGEN REMOVAL FROM SWINE WASTEWATER. <i>Proceedings of the Water Environment Federation</i> , 2004, 2004, 238-245.	0.0	0
80	HEAT TREATMENT COMBINED WITH CATION ADDITION TO IMPROVE THE DEWATERABILITY OF WASTE ACTIVATED SLUDGE. <i>Proceedings of the Water Environment Federation</i> , 2004, 2004, 48-57.	0.0	0
81	EFFECTS OF AERATION CYCLES ON POPULATIONS OF NITRIFYING BACTERIA AND NITROGEN REMOVAL IN INTERMITTENTLY-AERATED REACTORS. <i>Proceedings of the Water Environment Federation</i> , 2004, 2004, 776-789.	0.0	1
82	DETERMINING GROWTH RATE, YIELD AND MAINTENANCE COEFFICIENT OF FILAMENTS AND FLOC FORMERS USING SUBSTRATE UPTAKE TESTS AND METABOLIC MODELING. <i>Proceedings of the Water Environment Federation</i> , 2004, 2004, 690-700.	0.0	0
83	Molecular Methods in Biological Systems. <i>Water Environment Research</i> , 2004, 76, 605-667.	1.3	0
84	POPULATION DYNAMICS OF NITRIFYING BACTERIA IN INTERMITTENTLY-AERATED REACTORS TREATING HIGH NITROGEN WASTEWATER. <i>Proceedings of the Water Environment Federation</i> , 2003, 2003, 585-590.	0.0	0
85	QUANTIFYING SPECIES-SPECIFIC FILAMENTOUS BULKING THRESHOLDS USING MOLECULAR AND REACTOR STUDIES. <i>Proceedings of the Water Environment Federation</i> , 2003, 2003, 740-749.	0.0	0
86	Molecular Methods in Biological Systems. <i>Water Environment Research</i> , 2003, 75, 65-139.	1.3	0
87	MODELING THE COMPETITION BETWEEN FILAMENTS AND FLOC FORMERS: INTEGRATING DECAY RATE, STORAGE, KINETIC SELECTION, AND FILAMENTOUS BACKBONE THEORY. <i>Proceedings of the Water Environment Federation</i> , 2002, 2002, 47-58.	0.0	3
88	Microbial Community Structures in Foaming and Nonfoaming Full-Scale Wastewater Treatment Plants. <i>Water Environment Research</i> , 2002, 74, 437-449.	1.3	42
89	Role of filamentous microorganisms in activated sludge foaming: relationship of mycolata levels to foaming initiation and stability. <i>Water Research</i> , 2002, 36, 445-459.	5.3	94
90	Optimization of activated sludge designs using genetic algorithms. <i>Water Science and Technology</i> , 2002, 45, 187-198.	1.2	9

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91	Molecular Methods in Biological Systems. Water Environment Research, 2002, 74, 71-105.	1.3	0
92	Quantifying filamentous microorganisms in activated sludge before, during, and after an incident of foaming by oligonucleotide probe hybridizations and antibody staining. Water Research, 2001, 35, 3325-3336.	5.3	55
93	Molecular Methods in Biological Systems. Water Environment Research, 2001, 73, 116-150.	1.3	0
94	CHARACTERIZATION OF FILAMENTOUS BULKING IN ACTIVATED SLUDGE USING OLIGONUCLEOTIDE HYBRIDIZATION PROBES. Proceedings of the Water Environment Federation, 2001, 2001, 708-717.	0.0	0
95	System-Wide Optimization of Wastewater Treatment Plants Using Genetic Algorithms. , 2001, , 1.		3
96	THE RELATIONSHIP OF FILAMENT LEVELS TO FOAMING IN ACTIVATED SLUDGE DETERMINED BY OLIGONUCLEOTIDE PROBE HYBRIDIZATIONS. Proceedings of the Water Environment Federation, 2000, 2000, 13-21.	0.0	0
97	Simultaneous oligonucleotide probe hybridization and immunostaining for in situ detection of Gordona species in activated sludge. FEMS Microbiology Ecology, 1999, 29, 129-136.	1.3	16
98	Interfacing phylogenetic oligonucleotide probe hybridizations with representations of microbial populations and specific growth rates in mathematical models of activated sludge processes. Water Science and Technology, 1999, 39, 11.	1.2	7
99	Interfacing phylogenetic oligonucleotide probe hybridizations with representations of microbial populations and specific growth rates in mathematical models of activated sludge processes. Water Science and Technology, 1999, 39, 11-20.	1.2	11
100	Characterization of filamentous foaming in activated sludge systems using oligonucleotide hybridization probes and antibody probes. Water Science and Technology, 1998, 37, 485.	1.2	26
101	Identification and quantification of strains in activated sludge systems using comparative rRNA sequence analysis and phylogenetic hybridization probes. Water Science and Technology, 1998, 37, 521.	1.2	7
102	Characterization of filamentous foaming in activated sludge systems using oligonucleotide hybridization probes and antibody probes. Water Science and Technology, 1998, 37, 485-493.	1.2	38
103	Quantification of <i>Gordona amarae</i> Strains in Foaming Activated Sludge and Anaerobic Digester Systems with Oligonucleotide Hybridization Probes. Applied and Environmental Microbiology, 1998, 64, 2503-2512.	1.4	68
104	Identification and quantification of <i>Gordona amarae</i> strains in activated sludge systems using comparative rRNA sequence analysis and phylogenetic hybridization probes. Water Science and Technology, 1998, 37, 521-525.	1.2	4
105	Group-specific small-subunit rRNA hybridization probes to characterize filamentous foaming in activated sludge systems. Applied and Environmental Microbiology, 1997, 63, 1107-1117.	1.4	141