

Fernando L Rosario-Ortiz

List of Publications by Year in descending order

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89
papers

4,792
citations

87723

38
h-index

98622

67
g-index

92
all docs

92
docs citations

92
times ranked

4028
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of UV/H ₂ O ₂ treatment for the oxidation of pharmaceuticals in wastewater. <i>Water Research</i> , 2010, 44, 1440-1448.	5.3	245
2	Formation of oxidation byproducts from ozonation of wastewater. <i>Water Research</i> , 2007, 41, 1481-1490.	5.3	243
3	Singlet Oxygen Formation from Wastewater Organic Matter. <i>Environmental Science & Technology</i> , 2013, 47, 8179-8186.	4.6	238
4	Effect of ozone exposure on the oxidation of trace organic contaminants in wastewater. <i>Water Research</i> , 2009, 43, 1005-1014.	5.3	228
5	Probe Compounds to Assess the Photochemical Activity of Dissolved Organic Matter. <i>Environmental Science & Technology</i> , 2016, 50, 12532-12547.	4.6	214
6	Photochemical Formation of Hydroxyl Radical from Effluent Organic Matter. <i>Environmental Science & Technology</i> , 2012, 46, 3788-3794.	4.6	165
7	Critical analysis of commonly used fluorescence metrics to characterize dissolved organic matter. <i>Water Research</i> , 2014, 49, 327-338.	5.3	123
8	Using Ultraviolet Absorbance and Color To Assess Pharmaceutical Oxidation during Ozonation of Wastewater. <i>Environmental Science & Technology</i> , 2009, 43, 4858-4863.	4.6	118
9	Reactivity of Effluent Organic Matter (EfOM) with Hydroxyl Radical as a Function of Molecular Weight. <i>Environmental Science & Technology</i> , 2010, 44, 5714-5720.	4.6	118
10	Effect of oxidant exposure on the release of intracellular microcystin, MIB, and geosmin from three cyanobacteria species. <i>Water Research</i> , 2014, 52, 251-259.	5.3	118
11	How do you like your tap water?. <i>Science</i> , 2016, 351, 912-914.	6.0	115
12	Photochemical Formation of Hydroxyl Radical from Effluent Organic Matter: Role of Composition. <i>Environmental Science & Technology</i> , 2013, 47, 12073-12080.	4.6	114
13	Multiple Roles of Dissolved Organic Matter in Advanced Oxidation Processes. <i>Environmental Science & Technology</i> , 2022, 56, 11111-11131.	4.6	112
14	Intracellular Organic Matter from Cyanobacteria as a Precursor for Carbonaceous and Nitrogenous Disinfection Byproducts. <i>Environmental Science & Technology</i> , 2013, 47, 6332-6340.	4.6	111
15	Identifying the factors that influence the reactivity of effluent organic matter with hydroxyl radicals. <i>Water Research</i> , 2014, 50, 408-419.	5.3	111
16	Investigation of the Coupled Effects of Molecular Weight and Charge-Transfer Interactions on the Optical and Photochemical Properties of Dissolved Organic Matter. <i>Environmental Science & Technology</i> , 2016, 50, 8093-8102.	4.6	97
17	Wildfires Alter Forest Watersheds and Threaten Drinking Water Quality. <i>Accounts of Chemical Research</i> , 2019, 52, 1234-1244.	7.6	97
18	Characterization of dissolved organic matter in drinking water sources impacted by multiple tributaries. <i>Water Research</i> , 2007, 41, 4115-4128.	5.3	95

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19	Predicting Reactive Intermediate Quantum Yields from Dissolved Organic Matter Photolysis Using Optical Properties and Antioxidant Capacity. <i>Environmental Science & Technology</i> , 2017, 51, 5404-5413.	4.6	91
20	Some issues limiting photo(cata)lysis application in water pollutant control: A critical review from chemistry perspectives. <i>Water Research</i> , 2020, 174, 115605.	5.3	91
21	Quantitative Correlation of Absolute Hydroxyl Radical Rate Constants with Non-Isolated Effluent Organic Matter Bulk Properties in Water. <i>Environmental Science & Technology</i> , 2008, 42, 5924-5930.	4.6	88
22	Using digital flow cytometry to assess the degradation of three cyanobacteria species after oxidation processes. <i>Water Research</i> , 2013, 47, 3752-3761.	5.3	78
23	Temperature Dependence of the Photochemical Formation of Hydroxyl Radical from Dissolved Organic Matter. <i>Environmental Science & Technology</i> , 2015, 49, 4147-4154.	4.6	77
24	Impact of Halides on the Photoproduction of Reactive Intermediates from Organic Matter. <i>Environmental Science & Technology</i> , 2013, 47, 13949-13956.	4.6	76
25	Temperature Dependence of the Reaction between the Hydroxyl Radical and Organic Matter. <i>Environmental Science & Technology</i> , 2011, 45, 6932-6937.	4.6	73
26	Drinking water treatment response following a Colorado wildfire. <i>Water Research</i> , 2016, 105, 187-198.	5.3	69
27	Ozone and chlorine reactions with dissolved organic matter - Assessment of oxidant-reactive moieties by optical measurements and the electron donating capacities. <i>Water Research</i> , 2018, 144, 64-75.	5.3	67
28	In-stream sources and links between particulate and dissolved black carbon following a wildfire. <i>Biogeochemistry</i> , 2015, 124, 145-161.	1.7	66
29	Photochemical degradation of atenolol, carbamazepine, meprobamate, phenytoin and primidone in wastewater effluents. <i>Journal of Hazardous Materials</i> , 2015, 282, 216-223.	6.5	64
30	Evaluating fluorescence spectroscopy as a tool to characterize cyanobacteria intracellular organic matter upon simulated release and oxidation in natural water. <i>Water Research</i> , 2015, 68, 432-443.	5.3	62
31	The Case Against Charge Transfer Interactions in Dissolved Organic Matter Photophysics. <i>Environmental Science & Technology</i> , 2018, 52, 406-414.	4.6	60
32	Water treatment implications after the High Park Wildfire, Colorado. <i>Journal - American Water Works Association</i> , 2014, 106, E189.	0.2	58
33	Evaluation of enhanced coagulation pretreatment to improve ozone oxidation efficiency in wastewater. <i>Water Research</i> , 2011, 45, 5191-5199.	5.3	52
34	Oversimplification of Dissolved Organic Matter Fluorescence Analysis: Potential Pitfalls of Current Methods. <i>Environmental Science & Technology</i> , 2017, 51, 759-761.	4.6	51
35	Characterization of the Polarity of Natural Organic Matter under Ambient Conditions by the Polarity Rapid Assessment Method (PRAM). <i>Environmental Science & Technology</i> , 2007, 41, 4895-4900.	4.6	46
36	Quantum Yields for the Formation of Reactive Intermediates from Dissolved Organic Matter Samples from the Suwannee River. <i>Environmental Engineering Science</i> , 2015, 32, 31-37.	0.8	45

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37	Molecular and Spectroscopic Characterization of Water Extractable Organic Matter from Thermally Altered Soils Reveal Insight into Disinfection Byproduct Precursors. <i>Environmental Science & Technology</i> , 2017, 51, 771-779.	4.6	42
38	Effects of Ozone on the Photochemical and Photophysical Properties of Dissolved Organic Matter. <i>Environmental Science & Technology</i> , 2019, 53, 5622-5632.	4.6	41
39	Photolysis and photocatalysis of haloacetic acids in water: A review of kinetics, influencing factors, products, pathways, and mechanisms. <i>Journal of Hazardous Materials</i> , 2020, 391, 122143.	6.5	39
40	Enhanced DOC removal using anion and cation ion exchange resins. <i>Water Research</i> , 2016, 88, 981-989.	5.3	36
41	Low levels of iron enhance UV/H ₂ O ₂ efficiency at neutral pH. <i>Water Research</i> , 2018, 130, 234-242.	5.3	36
42	Examining the Role of Effluent Organic Matter Components on the Decomposition of Ozone and Formation of Hydroxyl Radicals in Wastewater. <i>Ozone: Science and Engineering</i> , 2012, 34, 42-48.	1.4	34
43	Modeling Nonequilibrium Adsorption of MIB and Sulfamethoxazole by Powdered Activated Carbon and the Role of Dissolved Organic Matter Competition. <i>Environmental Science & Technology</i> , 2014, 48, 13735-13742.	4.6	33
44	Photodegradation of cyanotoxins in surface waters. <i>Water Research</i> , 2021, 192, 116804.	5.3	31
45	Analysis of formaldehyde formation in wastewater using on-fiber derivatization-“solid-phase microextraction”-gas chromatography-“mass spectrometry. <i>Journal of Chromatography A</i> , 2008, 1210, 25-29.	1.8	25
46	Effect of Ozonation on Trihalomethane and Haloacetic Acid Formation and Speciation in a Full-Scale Distribution System. <i>Ozone: Science and Engineering</i> , 2011, 33, 14-22.	1.4	25
47	Characterization of fulvic acids by liquid chromatography-quadrupole time-of-flight mass spectrometry. <i>Journal of Chromatography A</i> , 2009, 1216, 1319-1324.	1.8	24
48	Emerging investigators series: a critical review of decision support systems for water treatment: making the case for incorporating climate change and climate extremes. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 18-36.	1.2	24
49	Water treatment process evaluation of wildfire-affected sediment leachates. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 352-365.	1.2	23
50	Analysis of p-chlorobenzoic acid in water by liquid chromatography-“tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2007, 1164, 219-223.	1.8	22
51	Temperature Dependence of Dissolved Organic Matter Fluorescence. <i>Environmental Science & Technology</i> , 2018, 52, 9022-9032.	4.6	22
52	Computational Assessment of the Three-Dimensional Configuration of Dissolved Organic Matter Chromophores and Influence on Absorption Spectra. <i>Environmental Science & Technology</i> , 2020, 54, 15904-15913.	4.6	22
53	Wildfires: Identification of a new suite of aromatic polycarboxylic acids in ash and surface water. <i>Science of the Total Environment</i> , 2021, 770, 144661.	3.9	22
54	Photochemical Fate of Amicarbazone in Aqueous Media: Laboratory Measurement and Simulations. <i>Environmental Engineering Science</i> , 2015, 32, 730-740.	0.8	21

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55	Evaluation of optical surrogates for the characterization of DOM removal by coagulation. <i>Environmental Science: Water Research and Technology</i> , 2015, 1, 493-506.	1.2	20
56	Nitrogen Enrichment during Soil Organic Matter Burning and Molecular Evidence of Maillard Reactions. <i>Environmental Science & Technology</i> , 2022, 56, 4597-4609.	4.6	20
57	Kinetics of the reaction between the hydroxyl radical and organic matter standards from the International Humic Substance Society. <i>Journal of Soils and Sediments</i> , 2014, 14, 298-304.	1.5	19
58	Molecular Transformation of Crude Oil Contaminated Soil after Bioelectrochemical Degradation Revealed by FT-ICR Mass Spectrometry. <i>Environmental Science & Technology</i> , 2020, 54, 2500-2509.	4.6	19
59	Molecular Identification of Water-Extractable Organic Carbon from Thermally Heated Soils: C-13 NMR and Accurate Mass Analyses Find Benzene and Pyridine Carboxylic Acids. <i>Environmental Science & Technology</i> , 2020, 54, 2994-3001.	4.6	19
60	Advancing Critical Applications of High Resolution Mass Spectrometry for DOM Assessments: Re-Engaging with Mass Spectral Principles, Limitations, and Data Analysis. <i>Environmental Science & Technology</i> , 2020, 54, 11654-11656.	4.6	18
61	Real-Time Detection and Identification of Aqueous Chlorine Transformation Products Using QTOF MS. <i>Analytical Chemistry</i> , 2008, 80, 4193-4199.	3.2	17
62	Relation between Optical Properties and Formation of Reactive Intermediates from Different Size Fractions of Organic Matter. <i>ACS Symposium Series</i> , 2014, , 159-179.	0.5	17
63	Computational Calculation of Dissolved Organic Matter Absorption Spectra. <i>Environmental Science & Technology</i> , 2022, 56, 491-500.	4.6	16
64	Methodology for selection of optical parameters as wastewater effluent organic matter surrogates. <i>Water Research</i> , 2020, 170, 115321.	5.3	15
65	Characterizing Limits of Precision for Dissolved Organic Nitrogen Calculations. <i>Environmental Science and Technology Letters</i> , 2017, 4, 452-456.	3.9	14
66	Photochemical Aging of Atmospheric Particulate Matter in the Aqueous Phase. <i>Environmental Science & Technology</i> , 2021, 55, 13152-13163.	4.6	14
67	Photochemical degradation of Corexit components in ocean water. <i>Chemosphere</i> , 2014, 111, 596-602.	4.2	13
68	Optical properties and photochemical production of hydroxyl radical and singlet oxygen after ozonation of dissolved organic matter. <i>Environmental Science: Water Research and Technology</i> , 2021, 7, 346-356.	1.2	13
69	Foreseen Effects of Climate-Impacted Scenarios on the Photochemical Fate of Selected Cyanotoxins in Surface Freshwaters. <i>Environmental Science & Technology</i> , 2021, 55, 10928-10934.	4.6	13
70	Spectral evaluation of watershed DOM and DBP precursors. <i>Journal - American Water Works Association</i> , 2013, 105, E173.	0.2	12
71	Photochemical fate of solvent constituents of Corexit oil dispersants. <i>Water Research</i> , 2014, 52, 101-111.	5.3	12
72	Characterization and spatial distribution of particulate and soluble carbon and nitrogen from wildfire-impacted sediments. <i>Journal of Soils and Sediments</i> , 2018, 18, 1314-1326.	1.5	12

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73	Preparing for Wildfires and Extreme Weather: Plant Design and Operation Recommendations. Journal - American Water Works Association, 2018, 110, 32-40.	0.2	11
74	Impact of Light Screening and Photosensitization by Surface Water Organic Matter on Enterococcus Faecalis Inactivation. Environmental Engineering Science, 2016, 33, 365-373.	0.8	10
75	Photochemical generation of reactive intermediates from urban-waste bio-organic substances under UV and solar irradiation. Environmental Science and Pollution Research, 2017, 24, 18470-18478.	2.7	10
76	Determination of COREXIT components used in the Deepwater Horizon cleanup by liquid chromatography-ion trap mass spectrometry. Analytical Methods, 2014, 6, 5498-5502.	1.3	8
77	Regulating Chlorophyll a to Control DBP Precursors in Water Supply Reservoirs. Journal - American Water Works Association, 2015, 107, E603.	0.2	8
78	Iron Speciation in PM 2.5 From Urban, Agriculture, and Mixed Environments in Colorado, USA. Earth and Space Science, 2020, 7, e2020EA001262.	1.1	8
79	Use of optical properties for evaluating the presence of pyrogenic organic matter in thermally altered soil leachates. Environmental Sciences: Processes and Impacts, 2020, 22, 981-992.	1.7	7
80	Laboratory simulation of postfire effects on conventional drinking water treatment and disinfection byproduct formation. AWWA Water Science, 2019, 1, e1155.	1.0	6
81	Advances in the characterization of the polarity of DOM under ambient water quality conditions using the polarity rapid assessment method. Water Science and Technology: Water Supply, 2008, 8, 725-733.	1.0	4
82	Application of a novel polarity method for the characterization of natural organic matter during water treatment. Journal of Water Supply: Research and Technology - AQUA, 2009, 58, 159-169.	0.6	4
83	Comparison of two polarity measurements of hydrophobic organic matter for the evaluation of water treatment processes: XAD resin and PRAM. Water Science and Technology, 2012, 66, 2418-2424.	1.2	4
84	Assessing the source of the photochemical formation of hydroxylating species from dissolved organic matter using model sensitizers. Environmental Sciences: Processes and Impacts, 2022, 24, 102-115.	1.7	4
85	Multi-objective optimization of water treatment operations for disinfection byproduct control. Environmental Science: Water Research and Technology, 2020, 6, 702-714.	1.2	3
86	Impact of simulated wildfire on disinfection byproduct formation potential. AWWA Water Science, 2021, 3, .	1.0	3
87	Preface "special issue in memory of Frank J. Stevenson. Journal of Soils and Sediments, 2018, 18, 1209-1211.	1.5	2
88	A Tribute to George R. Aiken. Environmental Science & Technology, 2018, 52, 4489-4489.	4.6	1
89	Hearing All Voices to Address Environmental Challenges at a Global Scale. Environmental Science & Technology, 0, , .	4.6	1