

Benito J Mariñas

List of Publications by Year in descending order

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104
papers

12,379
citations

71004

43
h-index

40945

97
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104
all docs

104
docs citations

104
times ranked

15608
citing authors

#	ARTICLE	IF	CITATIONS
1	Science and technology for water purification in the coming decades. <i>Nature</i> , 2008, 452, 301-310.	13.7	6,795
2	Lewis-Acid-Catalyzed Interfacial Polymerization of Covalent Organic Framework Films. <i>CheM</i> , 2018, 4, 308-317.	5.8	364
3	Toxic Impact of Bromide and Iodide on Drinking Water Disinfected with Chlorine or Chloramines. <i>Environmental Science & Technology</i> , 2014, 48, 12362-12369.	4.6	215
4	Pore blockage effect of NOM on atrazine adsorption kinetics of PAC: the roles of PAC pore size distribution and NOM molecular weight. <i>Water Research</i> , 2003, 37, 4863-4872.	5.3	174
5	Inactivation of <i>Cryptosporidium parvum</i> oocysts with ozone. <i>Water Research</i> , 1999, 33, 2481-2488.	5.3	172
6	Occurrence and Comparative Toxicity of Haloacetaldehyde Disinfection Byproducts in Drinking Water. <i>Environmental Science & Technology</i> , 2015, 49, 13749-13759.	4.6	167
7	Development and Performance Characterization of a Polyimine Covalent Organic Framework Thin-Film Composite Nanofiltration Membrane. <i>Environmental Science & Technology</i> , 2017, 51, 14352-14359.	4.6	166
8	Kinetics of <i>Escherichia coli</i> inactivation with ozone. <i>Water Research</i> , 1997, 31, 1355-1362.	5.3	164
9	Quantification of Functional Groups and Modeling of Their Ionization Behavior in the Active Layer of FT30 Reverse Osmosis Membrane. <i>Environmental Science & Technology</i> , 2008, 42, 5260-5266.	4.6	159
10	Depth Heterogeneity of Fully Aromatic Polyamide Active Layers in Reverse Osmosis and Nanofiltration Membranes. <i>Environmental Science & Technology</i> , 2011, 45, 4513-4520.	4.6	150
11	Waterborne Viruses: A Barrier to Safe Drinking Water. <i>PLoS Pathogens</i> , 2015, 11, e1004867.	2.1	144
12	Physico-chemical characterization of NF/RO membrane active layers by Rutherford backscattering spectrometry. <i>Journal of Membrane Science</i> , 2006, 282, 71-81.	4.1	120
13	Inactivation of <i>Escherichia coli</i> with ozone: chemical and inactivation kinetics. <i>Water Research</i> , 1999, 33, 2633-2641.	5.3	116
14	Absorption of water in the active layer of reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2009, 331, 143-151.	4.1	111
15	Science and technology for water purification in the coming decades. , 2009, , 337-346.		110
16	Ionization Behavior, Stoichiometry of Association, and Accessibility of Functional Groups in the Active Layers of Reverse Osmosis and Nanofiltration Membranes. <i>Environmental Science & Technology</i> , 2010, 44, 6808-6814.	4.6	97
17	Inactivation of Bacteriophage MS2 with Potassium Ferrate(VI). <i>Environmental Science & Technology</i> , 2012, 46, 12079-12087.	4.6	94
18	Sequential inactivation of <i>Cryptosporidium parvum</i> oocysts with ozone and free chlorine. <i>Water Research</i> , 2000, 34, 3591-3597.	5.3	93

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19	Direct detection of human adenovirus or SARS-CoV-2 with ability to inform infectivity using DNA aptamer-nanopore sensors. <i>Science Advances</i> , 2021, 7, eabh2848.	4.7	87
20	Synergy in sequential inactivation of <i>Cryptosporidium parvum</i> with ozone/free chlorine and ozone/monochloramine. <i>Water Research</i> , 2000, 34, 4121-4130.	5.3	81
21	Inactivation of <i>Bacillus subtilis</i> spores with ozone and monochloramine. <i>Water Research</i> , 2003, 37, 833-844.	5.3	80
22	Effects of Powdered Activated Carbon Pore Size Distribution on the Competitive Adsorption of Aqueous Atrazine and Natural Organic Matter. <i>Environmental Science & Technology</i> , 2008, 42, 1227-1231.	4.6	75
23	Bromamine Decomposition Kinetics in Aqueous Solutions. <i>Environmental Science & Technology</i> , 2004, 38, 2111-2119.	4.6	74
24	Inactivation of <i>Cryptosporidium parvum</i> oocysts with ozone and monochloramine at low temperature. <i>Water Research</i> , 2001, 35, 41-48.	5.3	71
25	Role of Chlorine and Oxygen in the Photocatalytic Degradation of Trichloroethylene Vapor on TiO ₂ Films. <i>Environmental Science & Technology</i> , 1997, 31, 562-568.	4.6	70
26	Formation of Cyanogen Chloride from the Reaction of Monochloramine with Formaldehyde. <i>Environmental Science & Technology</i> , 1999, 33, 4239-4249.	4.6	70
27	Treatment of Coliphage MS2 with Palladium-Modified Nitrogen-Doped Titanium Oxide Photocatalyst Illuminated by Visible Light. <i>Environmental Science & Technology</i> , 2008, 42, 6148-6153.	4.6	69
28	Inactivation of <i>bacillus subtilis</i> spores and formation of bromate during ozonation. <i>Water Research</i> , 2001, 35, 2950-2960.	5.3	67
29	Inactivation of <i>Cryptosporidium parvum</i> oocysts with ozone and free chlorine. <i>Water Research</i> , 2002, 36, 4053-4063.	5.3	65
30	Nanofiltration Membranes Based on Rigid Star Amphiphiles. <i>Chemistry of Materials</i> , 2007, 19, 3194-3204.	3.2	64
31	Growth dynamics of interfacially polymerized polyamide layers by diffuse reflectance spectroscopy and Rutherford backscattering spectrometry. <i>Journal of Membrane Science</i> , 2013, 429, 71-80.	4.1	62
32	Reverse osmosis treatment of multicomponent electrolyte solutions. <i>Journal of Membrane Science</i> , 1992, 72, 211-229.	4.1	60
33	Physico-chemical integrity of nanofiltration/reverse osmosis membranes during characterization by Rutherford backscattering spectrometry. <i>Journal of Membrane Science</i> , 2007, 291, 77-85.	4.1	60
34	Toxicity of Drinking Water Disinfection Byproducts: Cell Cycle Alterations Induced by the Monohaloacetonitriles. <i>Environmental Science & Technology</i> , 2014, 48, 11662-11669.	4.6	59
35	Nanofiltration Membranes with Modified Active Layer Using Aromatic Polyamide Dendrimers. <i>Advanced Functional Materials</i> , 2013, 23, 598-607.	7.8	56
36	Kinetics of Bromochloramine Formation and Decomposition. <i>Environmental Science & Technology</i> , 2014, 48, 2843-2852.	4.6	56

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37	Reducing the Pore Size of Covalent Organic Frameworks in Thin-Film Composite Membranes Enhances Solute Rejection. , 2019, 1, 440-446.		55
38	Mammalian Cell DNA Damage and Repair Kinetics of Monohaloacetic Acid Drinking Water Disinfection By-Products. Environmental Science & Technology, 2009, 43, 8437-8442.	4.6	52
39	Chloroacetonitrile and <i>N</i> ,2-Dichloroacetamide Formation from the Reaction of Chloroacetaldehyde and Monochloramine in Water. Environmental Science & Technology, 2013, 47, 12382-12390.	4.6	51
40	Mechanistic Aspects of Adenovirus Serotype 2 Inactivation with Free Chlorine. Applied and Environmental Microbiology, 2010, 76, 2946-2954.	1.4	50
41	Removal of biological and non-biological viral surrogates by spiral-wound reverse osmosis membrane elements with intact and compromised integrity. Water Research, 2004, 38, 3821-3832.	5.3	49
42	Kinetics of adenovirus type 2 inactivation with free chlorine. Water Research, 2009, 43, 2916-2926.	5.3	48
43	Modeling the Effect of Charge Density in the Active Layers of Reverse Osmosis and Nanofiltration Membranes on the Rejection of Arsenic(III) and Potassium Iodide. Environmental Science & Technology, 2013, 47, 420-428.	4.6	48
44	Role of Disinfectant Concentration and pH in the Inactivation Kinetics of <i>Cryptosporidium parvum</i> Oocysts with Ozone and Monochloramine. Environmental Science & Technology, 2001, 35, 2752-2757.	4.6	47
45	Role of Water in the Photocatalytic Degradation of Trichloroethylene Vapor on TiO ₂ Films. Environmental Science & Technology, 1997, 31, 1440-1445.	4.6	46
46	Sequential inactivation of <i>Cryptosporidium parvum</i> oocysts with chlorine dioxide followed by free chlorine or monochloramine. Water Research, 2002, 36, 178-188.	5.3	45
47	Effect of Exposure to UV-C Irradiation and Monochloramine on Adenovirus Serotype 2 Early Protein Expression and DNA Replication. Applied and Environmental Microbiology, 2008, 74, 3774-3782.	1.4	45
48	Adsorption of trace organic compounds in CRISTALÂ® processes. Desalination, 1998, 117, 265-271.	4.0	44
49	Modified Indigo Method For Gaseous And Aqueous Ozone Analyses. Ozone: Science and Engineering, 1995, 17, 329-344.	1.4	39
50	Three-Component Competitive Adsorption Model for Flow-Through PAC Systems. 1. Model Development and Verification with a PAC/Membrane System. Environmental Science & Technology, 2003, 37, 2997-3004.	4.6	39
51	Modeling <i>Cryptosporidium parvum</i> Oocyst Inactivation and Bromate Formation in a Full-Scale Ozone Contactor. Environmental Science & Technology, 2005, 39, 9343-9350.	4.6	39
52	Simplification of the IAST for activated carbon adsorption of trace organic compounds from natural water. Water Research, 2007, 41, 440-448.	5.3	38
53	Inactivation kinetics of adenovirus serotype 2 with monochloramine. Water Research, 2008, 42, 1467-1474.	5.3	38
54	Analysis of the Viral Replication Cycle of Adenovirus Serotype 2 after Inactivation by Free Chlorine. Environmental Science & Technology, 2015, 49, 4584-4590.	4.6	38

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55	Competitive Effects of Natural Organic Matter: Parametrization and Verification of the Three-Component Adsorption Model COMPSORB. <i>Environmental Science & Technology</i> , 2006, 40, 350-356.	4.6	37
56	Bromide Ion Effect on <i>N</i> -Nitrosodimethylamine Formation by Monochloramine. <i>Environmental Science & Technology</i> , 2012, 46, 5085-5092.	4.6	37
57	Simultaneous Prediction of <i>Cryptosporidium parvum</i> Oocyst Inactivation and Bromate Formation during Ozonation of Synthetic Waters. <i>Environmental Science & Technology</i> , 2004, 38, 2232-2241.	4.6	36
58	Modeling <i>Cryptosporidium parvum</i> oocyst inactivation and bromate in a flow-through ozone contactor treating natural water. <i>Water Research</i> , 2007, 41, 467-475.	5.3	36
59	Inactivation of <i>Mycobacterium avium</i> with Free Chlorine. <i>Environmental Science & Technology</i> , 2007, 41, 5096-5102.	4.6	35
60	Three-Component Competitive Adsorption Model for Fixed-Bed and Moving-Bed Granular Activated Carbon Adsorbers. Part I. Model Development. <i>Environmental Science & Technology</i> , 2006, 40, 6805-6811.	4.6	34
61	Predominant <i>N</i> -Haloacetamide and Haloacetonitrile Formation in Drinking Water via the Aldehyde Reaction Pathway. <i>Environmental Science & Technology</i> , 2019, 53, 850-859.	4.6	34
62	Displacement Effect of NOM on Atrazine Adsorption by PACs with Different Pore Size Distributions. <i>Environmental Science & Technology</i> , 2002, 36, 1510-1515.	4.6	33
63	Partitioning of salt ions in FT30 reverse osmosis membranes. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	32
64	A Bayesian method of estimating kinetic parameters for the inactivation of <i>Cryptosporidium parvum</i> oocysts with chlorine dioxide and ozone. <i>Water Research</i> , 2003, 37, 4533-4543.	5.3	30
65	Atrazine removal by powdered activated carbon in floc blanket reactors. <i>Water Research</i> , 2000, 34, 4070-4080.	5.3	29
66	RBS Characterization of Arsenic(III) Partitioning from Aqueous Phase into the Active Layers of Thin-Film Composite NF/RO Membranes. <i>Environmental Science & Technology</i> , 2007, 41, 3290-3295.	4.6	29
67	Enhancing the Performance of Nanofiltration Membranes by Modifying the Active Layer with Aramide Dendrimers. <i>Environmental Science & Technology</i> , 2012, 46, 9592-9599.	4.6	29
68	Acetonitrile and <i>N</i> -Chloroacetamide Formation from the Reaction of Acetaldehyde and Monochloramine. <i>Environmental Science & Technology</i> , 2015, 49, 9954-9963.	4.6	29
69	Chemically activated carbon on a fiberglass substrate for removal of trace atrazine from water. <i>Journal of Materials Chemistry</i> , 2006, 16, 3375-3380.	6.7	27
70	Inactivation of <i>Mycobacterium avium</i> with chlorine dioxide. <i>Water Research</i> , 2008, 42, 1531-1538.	5.3	26
71	Changes in Physicochemical and Transport Properties of a Reverse Osmosis Membrane Exposed to Chloraminated Seawater. <i>Environmental Science & Technology</i> , 2015, 49, 2301-2309.	4.6	26
72	Improving membrane integrity monitoring indirect methods to reduce plant downtime and increase microbial removal credit. <i>Desalination</i> , 2002, 149, 493-497.	4.0	25

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73	Performance Characterization of Nanofiltration Membranes Based on Rigid Star Amphiphiles. <i>Environmental Science & Technology</i> , 2007, 41, 6246-6252.	4.6	24
74	Effect of Pore-Blocking Background Compounds on the Kinetics of Trace Organic Contaminant Desorption from Activated Carbon. <i>Environmental Science & Technology</i> , 2008, 42, 4825-4830.	4.6	24
75	Inactivation of <i>Cryptosporidium</i> Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. I: Model Development. <i>Journal of Environmental Engineering, ASCE</i> , 2002, 128, 514-521.	0.7	23
76	Application of a three-component competitive adsorption model to evaluate and optimize granular activated carbon systems. <i>Water Research</i> , 2007, 41, 3289-3298.	5.3	22
77	Inactivation of <i>Mycobacterium avium</i> with Monochloramine. <i>Environmental Science & Technology</i> , 2008, 42, 8051-8056.	4.6	21
78	Adenovirus Replication Cycle Disruption from Exposure to Polychromatic Ultraviolet Irradiation. <i>Environmental Science & Technology</i> , 2018, 52, 3652-3659.	4.6	21
79	Three-Component Competitive Adsorption Model for Fixed-Bed and Moving-Bed Granular Activated Carbon Adsorbers. Part II. Model Parameterization and Verification. <i>Environmental Science & Technology</i> , 2006, 40, 6812-6817.	4.6	19
80	Inactivation of <i>Cryptosporidium</i> Oocysts in a Pilot-Scale Ozone Bubble-Diffuser Contactor. II: Model Validation and Application. <i>Journal of Environmental Engineering, ASCE</i> , 2002, 128, 522-532.	0.7	16
81	Microbial Passage in Low Pressure Membrane Elements with Compromised Integrity. <i>Environmental Science & Technology</i> , 2005, 39, 4270-4279.	4.6	16
82	Desalination of municipal wastewater for horticultural reuse: Process description and evaluation. <i>Desalination</i> , 1995, 103, 1-10.	4.0	15
83	Effect of Strongly Competing Background Compounds on the Kinetics of Trace Organic Contaminant Desorption from Activated Carbon. <i>Environmental Science & Technology</i> , 2008, 42, 2606-2611.	4.6	15
84	Stoichiometry and kinetics of the reaction of nitrite with free chlorine in aqueous solutions. <i>Environmental Science & Technology</i> , 1990, 24, 1711-1716.	4.6	14
85	Reconciling DLVO and non-DLVO Forces and Their Implications for Ion Rejection by a Polyamide Membrane. <i>Langmuir</i> , 2017, 33, 8982-8992.	1.6	14
86	Three-Component Adsorption Modeling to Evaluate and Improve Integrated Sorption Membrane Processes. <i>Environmental Science & Technology</i> , 2007, 41, 6547-6553.	4.6	13
87	Characterizing Bacteriophage PR772 as a Potential Surrogate for Adenovirus in Water Disinfection: A Comparative Analysis of Inactivation Kinetics and Replication Cycle Inhibition by Free Chlorine. <i>Environmental Science & Technology</i> , 2016, 50, 2522-2529.	4.6	13
88	Three-Component Competitive Adsorption Model for Flow-Through PAC Systems. 2. Model Application to a PAC/Membrane System. <i>Environmental Science & Technology</i> , 2003, 37, 3005-3011.	4.6	12
89	Cyanogen Bromide Formation from the Reactions of Monobromamine and Dibromamine with Cyanide Ion. <i>Environmental Science & Technology</i> , 2006, 40, 2559-2564.	4.6	12
90	Internalization of Fluoride in Hydroxyapatite Nanoparticles. <i>Environmental Science & Technology</i> , 2021, 55, 2639-2651.	4.6	12

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91	Isotopic fractionation and overall permeation of lithium by a thin-film composite polyamide reverse osmosis membrane. <i>Journal of Membrane Science</i> , 1994, 88, 231-241.	4.1	11
92	Inactivation Kinetics and Replication Cycle Inhibition of Adenovirus by Monochloramine. <i>Environmental Science and Technology Letters</i> , 2016, 3, 185-189.	3.9	10
93	The hydroxide-assisted hydrolysis of cyanogen chloride in aqueous solution. <i>Water Research</i> , 2001, 35, 643-648.	5.3	8
94	Development and Performance Characterization of a Polyamide Nanofiltration Membrane Modified with Covalently Bonded Aramide Dendrimers. <i>Environmental Science & Technology</i> , 2013, 47, 130711065921008.	4.6	8
95	Atom Probe Tomography of Encapsulated Hydroxyapatite Nanoparticles. <i>Small Methods</i> , 2021, 5, e2000692.	4.6	8
96	Desalination of agricultural drainage return water. Part II: Analysis of the performance of a 13,000 GDP RO unit. <i>Desalination</i> , 1987, 61, 263-274.	4.0	7
97	Development of a Ct equation taking into consideration the effect of lot variability on the inactivation of <i>Cryptosporidium parvum</i> oocysts with ozone. <i>Water Research</i> , 2005, 39, 2429-2437.	5.3	4
98	Cytotoxicity analysis of water disinfection byproducts with a micro-pillar microfluidic device. <i>Lab on A Chip</i> , 2012, 12, 3891.	3.1	4
99	Inactivation of Coxsackievirus by Chlorine, Silver, and Solar Disinfection for Safe Global Water. <i>Proceedings of the Water Environment Federation</i> , 2011, 2011, 64-71.	0.0	1
100	Response to comments on "Stoichiometry and kinetics of the reaction of nitrite with free chlorine in aqueous solutions". <i>Environmental Science & Technology</i> , 1992, 26, 1847-1847.	4.6	0
101	Improving the Control of Viral Pathogens By Pou Technologies Used in Developing Regions. <i>Proceedings of the Water Environment Federation</i> , 2009, 2009, 195-201.	0.0	0
102	Assessment of Suitable Drinking Water Technologies for Disinfection of DNA Viruses: Providing Global Safe Water. <i>Proceedings of the Water Environment Federation</i> , 2011, 2011, 80-83.	0.0	0
103	Atomic-scale Observation of Hydroxyapatite Nanoparticle. <i>Microscopy and Microanalysis</i> , 2019, 25, 2528-2529.	0.2	0
104	Inside Front Cover: Atom Probe Tomography of Encapsulated Hydroxyapatite Nanoparticles (Small) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.6	0