Marc Edwards

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/12068015/publications.pdf

Version: 2024-02-01

127 papers	6,801 citations	41258 49 h-index	69108 77 g-index
127 all docs	127 docs citations	127 times ranked	4568 citing authors

#	Article	IF	Citations
1	Chemistry of arsenic removal during coagulation and Feâ€“Mn oxidation. Journal - American Water Works Association, 1994, 86, 64-78.	0.2	262
2	Elevated Blood Lead in Young Children Due to Lead-Contaminated Drinking Water: Washington, DC, 2001â–2004. Environmental Science & Technology, 2009, 43, 1618-1623.	4.6	245
3	IRON PIPE corrosion IN DISTRIBUTION SYSTEMS. Journal - American Water Works Association, 2001, 93, 88-100.	0.2	235
4	Molecular Survey of the Occurrence of Legionella spp., Mycobacterium spp., Pseudomonas aeruginosa, and Amoeba Hosts in Two Chloraminated Drinking Water Distribution Systems. Applied and Environmental Microbiology, 2012, 78, 6285-6294.	1.4	233
5	Boron in the Environment. Critical Reviews in Environmental Science and Technology, 2005, 35, 81-114.	6.6	204
6	role of chlorine and chloramine in corrosion of leadâ€bearing plumbing materials. Journal - American Water Works Association, 2004, 96, 69-81.	0.2	196
7	Lead (Pb) in Tap Water and in Blood: Implications for Lead Exposure in the United States. Critical Reviews in Environmental Science and Technology, 2012, 42, 1297-1352.	6.6	164
8	Nitrification in Drinking Water Systems. Critical Reviews in Environmental Science and Technology, 2009, 39, 153-208.	6.6	150
9	Modeling Silica Sorption to Iron Hydroxide. Environmental Science & Technology, 2002, 36, 582-587.	4.6	149
10	Role of temperature, chlorine, and organic matter in copper corrosion by-product release in soft water. Water Research, 2001, 35, 683-690.	5.3	137
11	Predicting As removal during metal hydroxide precipitation. Journal - American Water Works Association, 1997, 89, 75-86.	0.2	119
12	Fetal Death and Reduced Birth Rates Associated with Exposure to Lead-Contaminated Drinking Water. Environmental Science & Technology, 2014, 48, 739-746.	4.6	119
13	Implications of Aqueous Silica Sorption to Iron Hydroxide:Â Mobilization of Iron Colloids and Interference with Sorption of Arsenate and Humic Substances. Environmental Science & Technology, 2001, 35, 3158-3162.	4.6	117
14	Chlorideâ€toâ€sulfate mass ratio and lead leaching to water. Journal - American Water Works Association, 2007, 99, 96-109.	0.2	109
15	The pitting corrosion of copper. Journal - American Water Works Association, 1994, 86, 74-90.	0.2	104
16	Predicting DOC removal during enhanced coagulation. Journal - American Water Works Association, 1997, 89, 78-89.	0.2	104
17	Phosphate inhibition of soluble copper corrosion by-product release. Corrosion Science, 2002, 44, 1057-1071.	3.0	104
18	Lead Particles in Potable Water. Journal - American Water Works Association, 2007, 99, 107-117.	0.2	103

#	Article	IF	Citations
19	Alkalinity, pH, and copper corrosion byâ€product release. Journal - American Water Works Association, 1996, 88, 81-94.	0.2	97
20	Impact of advanced water conservation features and new copper pipe on rapid chloramine decay and microbial regrowth. Water Research, 2012, 46, 611-621.	5.3	97
21	Role of organic acidity in sorption of natural organic matter (NOM) to oxide surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 107, 297-307.	2.3	93
22	Phosphate inhibitor use at US utilities. Journal - American Water Works Association, 2002, 94, 57-63.	0.2	91
23	Corrosion control on the basis of utility experience. Journal - American Water Works Association, 1995, 87, 74-85.	0.2	85
24	Role of Temperature and pH in Cu(OH)2Solubility. Environmental Science & Technology, 1999, 33, 2607-2610.	4.6	84
25	Effect of PHOSPHATE inhibitors on lead release from pipes. Journal - American Water Works Association, 2002, 94, 79-90.	0.2	83
26	Phosphine in soils, sludges, biogases and atmospheric implicationsâ€”a review. Ecological Engineering, 2005, 24, 457-463.	1.6	80
27	Incidence of waterborne lead in private drinking water systems in Virginia. Journal of Water and Health, 2015, 13, 897-908.	1.1	78
28	Profile Sampling To Characterize Particulate Lead Risks in Potable Water. Environmental Science & Technology, 2014, 48, 6836-6843.	4.6	76
29	Considerations in As analysis and speciation. Journal - American Water Works Association, 1998, 90, 103-113.	0.2	75
30	Phosphine gas in the upper troposphere. Atmospheric Environment, 2003, 37, 2429-2433.	1.9	70
31	Effect of Flow Rate and Lead/Copper Pipe Sequence on Lead Release from Service Lines. Water Research, 2012, 46, 4142-4152.	5.3	68
32	Experimental determination of the oral bioavailability and bioaccessibility of lead particles. Chemistry Central Journal, 2012, 6, 138.	2.6	68
33	Increased Lead in Water Associated with Iron Corrosion. Environmental Engineering Science, 2015, 32, 361-369.	0.8	68
34	Leadâ€contaminated water from brass plumbing devices in new buildings. Journal - American Water Works Association, 2010, 102, 66-76.	0.2	66
35	The importance of temperature in assessing iron pipe corrosion in water distribution systems. Environmental Monitoring and Assessment, 2002, 77, 229-242.	1.3	65
36	Accelerated chloramine decay and microbial growth by nitrification in premise plumbing. Journal - American Water Works Association, 2009, 101, 51-62.	0.2	65

#	Article	IF	Citations
37	Organic matter and copper corrosion by-product release: a mechanistic study. Corrosion Science, 2001, 43, 1-18.	3.0	64
38	Seasonal Variations in Lead Release to Potable Water. Environmental Science & Technology, 2016, 50, 5269-5277.	4.6	61
39	Reduced Phosphorus Compounds in the Environment. Critical Reviews in Environmental Science and Technology, 2005, 35, 333-364.	6.6	60
40	Investigating dissolved lead at the tap using various sampling protocols. Journal - American Water Works Association, 2011, 103, 55-67.	0.2	57
41	Temporal and spatial distributions of phosphine in Taihu Lake, China. Science of the Total Environment, 2004, 323, 169-178.	3.9	55
42	Desktop guidance for mitigating Pb and Cu corrosion byâ€products. Journal - American Water Works Association, 1999, 91, 66-77.	0.2	54
43	Some effects of aqueous silica on the corrosion of iron. Water Research, 2003, 37, 1080-1090.	5.3	54
44	Galvanic corrosion after simulated smallâ€scale partial lead service line replacements. Journal - American Water Works Association, 2011, 103, 85-99.	0.2	54
45	Importance of Pb and Cu Particulate Species for Corrosion Control. Journal of Environmental Engineering, ASCE, 2004, 130, 136-144.	0.7	53
46	Analysis of Reduced Phosphorus in Samples of Environmental Interest. Environmental Science & Technology, 2005, 39, 4369-4376.	4.6	52
47	Transformation of NOM by Ozone and its Effect on Iron and Aluminum Solubility. Journal - American Water Works Association, 1992, 84, 56-66.	0.2	51
48	Solubility controls on aluminum in drinking water at relatively low and high pH. Water Research, 2002, 36, 4356-4368.	5.3	51
49	Nitrification in Premise Plumbing: Role of Phosphate, pH and Pipe Corrosion. Environmental Science & Technology, 2008, 42, 4280-4284.	4.6	51
50	The blue water phenomenon. Journal - American Water Works Association, 2000, 92, 72-82.	0.2	49
51	Simultaneous Monitoring of Phosphine and of Phosphorus Species in Taihu Lake Sediments and Phosphine Emission from Lake Sediments. Biogeochemistry, 2005, 76, 283-298.	1.7	49
52	Intake of lead (Pb) from tap water of homes with leaded and low lead plumbing systems. Science of the Total Environment, 2018, 644, 1346-1356.	3.9	48
53	Coagulation With Hydrolyzing Metal Salts: Mechanisms and Water Quality Impacts. Critical Reviews in Environmental Science and Technology, 2014, 44, 303-347.	6.6	47
54	Role of Calcium in the Coagulation of NOM with Ferric Chloride. Environmental Science & Technology, 2017, 51, 11652-11659.	4.6	47

#	Article	IF	Citations
55	Effect of Preozonation on Coagulantâ€“NOM Interactions. Journal - American Water Works Association, 1992, 84, 63-72.	0.2	45
56	The influence of silica and calcium on arsenate sorption to oxide surfaces. Journal of Water Supply: Research and Technology - AQUA, 2005, 54, 201-211.	0.6	45
57	Effects of Bulk Water Chemistry on Autogenous Healing of Concrete. Journal of Materials in Civil Engineering, 2010, 22, 515-524.	1.3	44
58	Potential Reversal and the Effects of Flow Pattern on Galvanic Corrosion of Lead. Environmental Science & Technology, 2012, 46, 10941-10947.	4.6	44
59	A human exposome framework for guiding risk management and holistic assessment of recycled water quality. Environmental Science: Water Research and Technology, 2016, 2, 580-598.	1.2	44
60	Determination of total chromium in environmental water samples. Water Research, 2004, 38, 2827-2838.	5.3	43
61	Effects of flow, brass location, tube materials and temperature on corrosion of brass plumbing devices. Corrosion Science, 2011, 53, 1813-1824.	3.0	43
62	Phosphate Inhibitors and Red Water in Stagnant Iron Pipes. Journal of Environmental Engineering, ASCE, 2000, 126, 1096-1102.	0.7	41
63	Effect of aluminium solids and chlorine on cold water pitting of copper. Corrosion Science, 2004, 46, 3069-3088.	3.0	41
64	Lead Contamination of Potable Water Due to Nitrification. Environmental Science & Technology, 2009, 43, 1890-1895.	4.6	41
65	Matrix bound phosphine formation and depletion in eutrophic lake sediment fermentationâ€”simulation of different environmental factors. Anaerobe, 2005, 11, 273-279.	1.0	40
66	Impact of treatment on Pb release from full and partially replaced harvested Lead Service Lines (LSLs). Water Research, 2013, 47, 661-671.	5.3	40
67	Assessing risk with increasingly stringent public health goals: the case of water lead and blood lead in children. Journal of Water and Health, 2014, 12, 57-68.	1.1	39
68	Reduced risk estimations after remediation of lead (Pb) in drinking water at two US school districts. Science of the Total Environment, 2014, 466-467, 1011-1021.	3.9	39
69	A Mechanistic Study of Ozoneâ€Induced Particle Destabilization. Journal - American Water Works Association, 1991, 83, 96-105.	0.2	37
70	Phosphine and methylphosphine production by simulated lightningâ€”a study for the volatile phosphorus cycle and cloud formation in the earth atmosphere. Atmospheric Environment, 2004, 38, 6867-6874.	1.9	37
71	Phosphine from Rocks: Mechanically Driven Phosphate Reduction?. Environmental Science & Technology, 2005, 39, 8295-8299.	4.6	37
72	Long-Term Behavior of Simulated Partial Lead Service Line Replacements. Environmental Engineering Science, 2016, 33, 53-64.	0.8	37

#	Article	IF	Citations
73	Accelerated Testing of Copper Corrosion. Journal - American Water Works Association, 1993, 85, 105-113.	0.2	32
74	Increasing alkalinity to reduce turbidity. Journal - American Water Works Association, 2000, 92, 44-54.	0.2	31
75	The role of temperature gradients in residential copper pipe corrosion. Corrosion Science, 2004, 46, 1883-1894.	3.0	31
76	Profiling Private Water Systems to Identify Patterns of Waterborne Lead Exposure. Environmental Science & Technology, 2015, 49, 12697-12704.	4.6	31
77	Relationship between Organic Carbon and Opportunistic Pathogens in Simulated Glass Water Heaters. Pathogens, 2015, 4, 355-372.	1.2	31
78	Copper in the Urban Water Cycle. Critical Reviews in Environmental Science and Technology, 2000, 30, 297-326.	6.6	30
79	Lead removal from tap water using POU devices. Journal - American Water Works Association, 2010, 102, 91-105.	0.2	29
80	Convective Mixing in Distal Pipes Exacerbates Legionella pneumophila Growth in Hot Water Plumbing. Pathogens, 2016, 5, 29.	1.2	29
81	Predicting fullâ€scale TOC removal. Journal - American Water Works Association, 1999, 91, 159-170.	0.2	28
82	Failing Our Children: Lead in U.S. School Drinking Water. New Solutions, 2010, 20, 25-47.	0.6	28
83	Role of Aluminosilicate deposits in Lead and Copper Corrosion. Journal - American Water Works Association, 2001, 93, 104-112.	0.2	27
84	Effectiveness of Prevailing Flush Guidelines to Prevent Exposure to Lead in Tap Water. International Journal of Environmental Research and Public Health, 2018, 15, 1537.	1.2	26
85	Critical evaluation of the NSF 61 Section 9 test water for Lead. Journal - American Water Works Association, 2007, 99, 133-143.	0.2	25
86	Developing a framework for classifying water lead levels at private drinking water systems: A Bayesian Belief Network approach. Water Research, 2021, 189, 116641.	5.3	23
87	Anticipating effects of water quality changes on iron corrosion and red water. Journal of Water Supply: Research and Technology - AQUA, 2007, 56, 55-68.	0.6	22
88	Lead leaching from inline brass devices: A critical evaluation of the existing standard. Journal - American Water Works Association, 2005, 97, 66-78.	0.2	21
89	Effect of Nitrification and GAC Filtration on Copper and Lead Leaching in Home Plumbing Systems. Journal of Environmental Engineering, ASCE, 2008, 134, 521-530.	0.7	21
90	Effect of nitrification on corrosion of galvanized iron, copper, and concrete. Journal - American Water Works Association, 2010, 102, 83-93.	0.2	21

#	Article	IF	Citations
91	Copper pitting in chlorinated, highâ€pH potable water. Journal - American Water Works Association, 2011, 103, 86-98.	0.2	21
92	Effects of pH, chloride, bicarbonate, and phosphate on brass dezincification. Journal - American Water Works Association, 2011, 103, 90-102.	0.2	20
93	Understanding how brass ball valves passing certification testing can cause elevated lead in water when installed. Water Research, 2012, 46, 3240-3250.	5.3	19
94	The Relationship Between Discolored Water from Corrosion of Old Iron Pipe and Source Water Conditions. Environmental Engineering Science, 2018, 35, 943-952.	0.8	19
95	Boron Removal via Formation of Magnesium Silicate Solids during Precipitative Softening. Journal of Environmental Engineering, ASCE, 2007, 133, 149-156.	0.7	18
96	Precipitative Removal of As, Ba, B, Cr, Sr, and V Using Sodium Carbonate. Journal of Environmental Engineering, ASCE, 2006, 132, 489-496.	0.7	17
97	Zinc content in brass and its influence on lead leaching. Journal - American Water Works Association, 2011, 103, 76-83.	0.2	17
98	Inhibition of Copper Pitting Corrosion in Aggressive Potable Waters. International Journal of Corrosion, 2012, 2012, 1-16.	0.6	17
99	Potential Challenges Meeting the American Academy of Pediatricsâ€™ Lead in School Drinking Water Goal of 1ÂÎ¼g/L. Corrosion, 2018, 74, 914-917.	0.5	16
100	Copper Deposition Corrosion Elevates Lead Release to Potable Water. Journal - American Water Works Association, 2015, 107, E627.	0.2	15
101	Effect of connection type on galvanic corrosion between lead and copper pipes. Journal - American Water Works Association, 2013, 105, E576.	0.2	14
102	Quantifying Leadâ€Leaching Potential From Plumbing Exposed to Aggressive Waters. Journal - American Water Works Association, 2016, 108, E458.	0.2	14
103	Nutrients and metals effects on nitrification in drinking water systems. Journal - American Water Works Association, 2010, 102, 56-66.	0.2	12
104	Metaphosphate reversion in Laboratory and Pipeâ€Rig Experiments. Journal - American Water Works Association, 2003, 95, 172-178.	0.2	11
105	The presence of trace phosphine in Lake Taihu water. International Journal of Environmental Analytical Chemistry, 2010, 90, 737-746.	1.8	11
106	In situ remediation of leaks in potable water supply systems. Corrosion Reviews, 2013, 31, 105-122.	1.0	11
107	Disparities in well water outreach and assistance offered by local health departments: A North Carolina case study. Science of the Total Environment, 2020, 747, 141173.	3.9	11
108	Unintended Consequences of Chloramine Hit Home. Proceedings of the Water Environment Federation, 2005, 2005, 240-256.	0.0	10

#	Article	IF	Citations
109	Controlling copper corrosion in new construction by organic matter removal. Journal - American Water Works Association, 2012, 104, E310.	0.2	9
110	Effect of zinc and orthophosphate corrosion inhibitors on cementâ€based pipes. Journal - American Water Works Association, 2012, 104, E1.	0.2	8
111	Degradation of Drinking Water Treatment Plant Infrastructure from Enhanced Coagulation. Journal of Infrastructure Systems, 2003, 9, 145-156.	1.0	7
112	Americaâ€™s Path to Drinking Water Infrastructure Inequality and Environmental Injustice: The Case of Flint, Michigan. , 2018, , 79-97.		7
113	Evaluation of Preparedness and Recovery Needs of Private Well Users After the Great Louisiana Flood of 2016. Journal of Public Health Management and Practice, 2021, 27, 577-587.	0.7	7
114	Evaluating â€œLead-Freeâ€•Brass Performance in Potable Water. Corrosion, 2019, 75, 865-875.	0.5	6
115	Developing early warning systems to predict water lead levels in tap water for private systems. Water Research, 2022, 221, 118787.	5.3	6
116	Secondary effects of implementing arsenic removal treatmentâ€"focus on corrosion and microbial regrowth. Journal - American Water Works Association, 2008, 100, 108-121.	0.2	5
117	Benchâ€Scale Evaluation of Innovative Arsenicâ€Removal Processes. Journal - American Water Works Association, 2002, 94, 78-87.	0.2	4
118	Improving state-level emergency well disinfection strategies in the United States. Science of the Total Environment, 2020, 720, 137451.	3.9	4
119	Bottled and Well Water Quality in a Small Central Appalachian Community: Household-Level Analysis of Enteric Pathogens, Inorganic Chemicals, and Health Outcomes in Rural Southwest Virginia. International Journal of Environmental Research and Public Health, 2022, 19, 8610.	1.2	4
120	Deposition Corrosion of Galvanized Steel in the Presence of Copper. Corrosion, 2015, , .	0.5	3
121	Impact of Leak Size, Pipe Wall Thickness, Water Pressure, and Leak Orientation on Autogenous Metallic Pipe Leak Repair. Corrosion, 2017, 73, 868-879.	0.5	3
122	Water Chemistry Impact on Autogenous Metallic Pipe Leak Repair in Simulated Potable Water Systems. Corrosion, 2017, 73, 1017-1029.	0.5	3
123	A Standardized Test Protocol for Evaluation of Scale Reduction Technologies. Environmental Engineering Science, 2021, 38, 1109-1119.	0.8	3
124	Iron Clogging of Lead-Certified Point-of-Use Pitcher Filters. Environmental Engineering Science, 2022, 39, 587-597.	0.8	3
125	In Situ Remediation of Iron Pipe Leaks with Calcium Carbonate, Silica, and Wood Ash Particles in Potable Water Systems. Environmental Engineering Science, 2018, 35, 11-18.	0.8	2
126	Flow Electrification and Non-Uniform Corrosion in Low Conductivity Potable Waters. Journal of the Electrochemical Society, 2016, 163, C139-C144.	1.3	1

#	Article	IF	Citations
127	Issues associated with use of dielectrics in drinking water systems. Journal - American Water Works Association, 2014, 106, E328.	0.2	0