

# Xiangru Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

83  
papers

6,963  
citations

50170

46  
h-index

56606

83  
g-index

83  
all docs

83  
docs citations

83  
times ranked

3232  
citing authors

#	ARTICLE	IF	CITATIONS
1	Inputs of disinfection by-products to the marine environment from various industrial activities: Comparison to natural production. <i>Water Research</i> , 2022, 217, 118383.	5.3	18
2	Which Micropollutants in Water Environments Deserve More Attention Globally?. <i>Environmental Science &amp; Technology</i> , 2022, 56, 13-29.	4.6	176
3	Effects of ultrasonication on the DBP formation and toxicity during chlorination of saline wastewater effluents. <i>Journal of Environmental Sciences</i> , 2022, 117, 326-335.	3.2	12
4	Low chlorine impurity might be beneficial in chlorine dioxide disinfection. <i>Water Research</i> , 2021, 188, 116520.	5.3	38
5	Addition of lemon before boiling chlorinated tap water: A strategy to control halogenated disinfection byproducts. <i>Chemosphere</i> , 2021, 263, 127954.	4.2	21
6	How Much of the Total Organic Halogen and Developmental Toxicity of Chlorinated Drinking Water Might Be Attributed to Aromatic Halogenated DBPs?. <i>Environmental Science &amp; Technology</i> , 2021, 55, 5906-5916.	4.6	129
7	Roles and Knowledge Gaps of Point-of-Use Technologies for Mitigating Health Risks from Disinfection Byproducts in Tap Water: A Critical Review. <i>Water Research</i> , 2021, 200, 117265.	5.3	51
8	A review on the degradation efficiency, DBP formation, and toxicity variation in the UV/chlorine treatment of micropollutants. <i>Chemical Engineering Journal</i> , 2021, 424, 130053.	6.6	91
9	Nonhalogenated Aromatic DBPs in Drinking Water Chlorination: A Gap between NOM and Halogenated Aromatic DBPs. <i>Environmental Science &amp; Technology</i> , 2020, 54, 1646-1656.	4.6	175
10	Formation mechanisms of emerging organic contaminants during on-line membrane cleaning with NaOCl in MBR. <i>Journal of Hazardous Materials</i> , 2020, 386, 121966.	6.5	29
11	Application of Fourier transform ion cyclotron resonance mass spectrometry to characterize natural organic matter. <i>Chemosphere</i> , 2020, 260, 127458.	4.2	46
12	Identification, formation and control of polar brominated disinfection byproducts during cooking with edible salt, organic matter and simulated tap water. <i>Water Research</i> , 2020, 172, 115526.	5.3	23
13	Effects of ascorbate and carbonate on the conversion and developmental toxicity of halogenated disinfection byproducts during boiling of tap water. <i>Chemosphere</i> , 2020, 254, 126890.	4.2	25
14	Volatile DBPs contributed marginally to the developmental toxicity of drinking water DBP mixtures against <i>Platynereis dumerilii</i> . <i>Chemosphere</i> , 2020, 252, 126611.	4.2	33
15	Exposure to disinfection by-products in swimming pools and biomarkers of genotoxicity and respiratory damage â€” The PISCINA2 Study. <i>Environment International</i> , 2019, 131, 104988.	4.8	26
16	Effects of dechlorination conditions on the developmental toxicity of a chlorinated saline primary sewage effluent: Excessive dechlorination is better than not enough. <i>Science of the Total Environment</i> , 2019, 692, 117-126.	3.9	27
17	Transformation of adenine and cytosine in chlorination â€” An ESI-tqMS investigation. <i>Chemosphere</i> , 2019, 234, 505-512.	4.2	12
18	Underestimated risk from ozonation of wastewater containing bromide: Both organic byproducts and bromate contributed to the toxicity increase. <i>Water Research</i> , 2019, 162, 43-52.	5.3	121

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19	Application of (LC/)MS/MS precursor ion scan for evaluating the occurrence, formation and control of polar halogenated DBPs in disinfected waters: A review. <i>Water Research</i> , 2019, 158, 322-337.	5.3	157
20	Conversion of haloacid disinfection byproducts to amino acids via ammonolysis. <i>Chemosphere</i> , 2019, 224, 351-359.	4.2	13
21	Integral model of a reacting chlorine jet in ammonia nitrogen and treated primary effluent. <i>Journal of Hydro-Environment Research</i> , 2019, 27, 50-64.	1.0	5
22	Current methods for analyzing drinking water disinfection byproducts. <i>Current Opinion in Environmental Science and Health</i> , 2019, 7, 98-107.	2.1	44
23	Phototransformation of halophenolic disinfection byproducts in receiving seawater: Kinetics, products, and toxicity. <i>Water Research</i> , 2019, 150, 68-76.	5.3	52
24	Tracing the sources of iodine species in a non-saline wastewater. <i>Chemosphere</i> , 2018, 205, 643-648.	4.2	16
25	Chemical cleaning-associated generation of dissolved organic matter and halogenated byproducts in ceramic MBR: Ozone versus hypochlorite. <i>Water Research</i> , 2018, 140, 243-250.	5.3	63
26	A smart strategy for controlling disinfection byproducts by reversing the sequence of activated carbon adsorption and chlorine disinfection. <i>Science Bulletin</i> , 2018, 63, 1167-1169.	4.3	22
27	A facile and green pretreatment method for nonionic total organic halogen (NTOX) analysis in water – Step I. Using electro dialysis to separate NTOX and halides. <i>Water Research</i> , 2018, 145, 631-639.	5.3	20
28	Evaluating the Comparative Toxicity of DBP Mixtures from Different Disinfection Scenarios: A New Approach by Combining Freeze-Drying or Rotoevaporation with a Marine Polychaete Bioassay. <i>Environmental Science &amp; Technology</i> , 2018, 52, 10552-10561.	4.6	173
29	Mystery of the high chlorine consumption in disinfecting a chemically enhanced primary saline sewage. <i>Water Research</i> , 2018, 145, 181-189.	5.3	27
30	A facile and green pretreatment method for nonionic total organic halogen (NTOX) analysis in water – Step II. Using photolysis to convert NTOX completely into halides. <i>Water Research</i> , 2018, 145, 579-587.	5.3	32
31	A new approach to controlling halogenated DBPs by GAC adsorption of aromatic intermediates from chlorine disinfection: Effects of bromide and contact time. <i>Separation and Purification Technology</i> , 2018, 203, 260-267.	3.9	82
32	Three-step effluent chlorination increases disinfection efficiency and reduces DBP formation and toxicity. <i>Chemosphere</i> , 2017, 168, 1302-1308.	4.2	98
33	Removal of Intermediate Aromatic Halogenated DBPs by Activated Carbon Adsorption: A New Approach to Controlling Halogenated DBPs in Chlorinated Drinking Water. <i>Environmental Science &amp; Technology</i> , 2017, 51, 3435-3444.	4.6	230
34	Characterization of halogenated DBPs and identification of new DBPs trihalomethanols in chlorine dioxide treated drinking water with multiple extractions. <i>Journal of Environmental Sciences</i> , 2017, 58, 83-92.	3.2	73
35	Acute changes in serum immune markers due to swimming in a chlorinated pool. <i>Environment International</i> , 2017, 105, 1-11.	4.8	32
36	Fate of dissolved organic matter and byproducts generated from on-line chemical cleaning with sodium hypochlorite in MBR. <i>Chemical Engineering Journal</i> , 2017, 323, 233-242.	6.6	50

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37	Two-step chlorination: A new approach to disinfection of a primary sewage effluent. <i>Water Research</i> , 2017, 108, 339-347.	5.3	83
38	Bromate formation from the oxidation of bromide in the UV/chlorine process with low pressure and medium pressure UV lamps. <i>Chemosphere</i> , 2017, 183, 582-588.	4.2	72
39	Photoconversion of Chlorinated Saline Wastewater DBPs in Receiving Seawater is Overall a Detoxification Process. <i>Environmental Science &amp; Technology</i> , 2017, 51, 58-67.	4.6	73
40	Transformation among Aromatic Iodinated Disinfection Byproducts in the Presence of Monochloramine: From Monoiodophenol to Triiodophenol and Diiodonitrophenol. <i>Environmental Science &amp; Technology</i> , 2017, 51, 10562-10571.	4.6	72
41	Modeling the formation of TOCl, TOBr and TOI during chlor(am)ination of drinking water. <i>Water Research</i> , 2016, 96, 166-176.	5.3	156
42	Environmental and personal determinants of the uptake of disinfection by-products during swimming. <i>Environmental Research</i> , 2016, 149, 206-215.	3.7	39
43	Current trends in the analysis and identification of emerging disinfection byproducts. <i>Trends in Environmental Analytical Chemistry</i> , 2016, 10, 24-34.	5.3	127
44	Generation of dissolved organic matter and byproducts from activated sludge during contact with sodium hypochlorite and its implications to on-line chemical cleaning in MBR. <i>Water Research</i> , 2016, 104, 44-52.	5.3	72
45	Characterization of natural organic matter in drinking water: Sample preparation and analytical approaches. <i>Trends in Environmental Analytical Chemistry</i> , 2016, 12, 23-30.	5.3	53
46	Formation and toxicity of halogenated disinfection byproducts resulting from linear alkylbenzene sulfonates. <i>Chemosphere</i> , 2016, 149, 70-75.	4.2	54
47	Identification, toxicity and control of iodinated disinfection byproducts in cooking with simulated chlor(am)inated tap water and iodized table salt. <i>Water Research</i> , 2016, 88, 60-68.	5.3	123
48	Effect of Boiling on Halogenated DBPs and Their Developmental Toxicity in Real Tap Waters. <i>ACS Symposium Series</i> , 2015, , 45-60.	0.5	10
49	Comparative Toxicity of Chlorinated Saline and Freshwater Wastewater Effluents to Marine Organisms. <i>Environmental Science &amp; Technology</i> , 2015, 49, 14475-14483.	4.6	81
50	Detection, identification and formation of new iodinated disinfection byproducts in chlorinated saline wastewater effluents. <i>Water Research</i> , 2015, 68, 77-86.	5.3	111
51	Whole pictures of halogenated disinfection byproducts in tap water from China's cities. <i>Frontiers of Environmental Science and Engineering</i> , 2015, 9, 121-130.	3.3	21
52	Halopyrroles: A New Group of Highly Toxic Disinfection Byproducts Formed in Chlorinated Saline Wastewater. <i>Environmental Science &amp; Technology</i> , 2014, 48, 11846-11852.	4.6	96
53	Formation of Brominated Disinfection Byproducts during Chloramination of Drinking Water: New Polar Species and Overall Kinetics. <i>Environmental Science &amp; Technology</i> , 2014, 48, 2579-2588.	4.6	218
54	Electrospray Ionization-Tandem Mass Spectrometry Method for Differentiating Chlorine Substitution in Disinfection Byproduct Formation. <i>Environmental Science &amp; Technology</i> , 2014, 48, 4877-4884.	4.6	29

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55	Comparative toxicity of new halophenolic DBPs in chlorinated saline wastewater effluents against a marine alga: Halophenolic DBPs are generally more toxic than haloaliphatic ones. <i>Water Research</i> , 2014, 65, 64-72.	5.3	662
56	Boiling of Simulated Tap Water: Effect on Polar Brominated Disinfection Byproducts, Halogen Speciation, and Cytotoxicity. <i>Environmental Science &amp; Technology</i> , 2014, 48, 149-156.	4.6	108
57	Determination of iodide, iodate and organo-iodine in waters with a new total organic iodine measurement approach. <i>Water Research</i> , 2013, 47, 6660-6669.	5.3	84
58	Total organic iodine measurement: A new approach with UPLC/ESI-MS for off-line iodide separation/detection. <i>Water Research</i> , 2013, 47, 163-172.	5.3	45
59	Four Groups of New Aromatic Halogenated Disinfection Byproducts: Effect of Bromide Concentration on Their Formation and Speciation in Chlorinated Drinking Water. <i>Environmental Science &amp; Technology</i> , 2013, 47, 1265-1273.	4.6	298
60	Formation of new brominated disinfection byproducts during chlorination of saline sewage effluents. <i>Water Research</i> , 2013, 47, 2710-2718.	5.3	126
61	Comparative Developmental Toxicity of New Aromatic Halogenated DBPs in a Chlorinated Saline Sewage Effluent to the Marine Polychaete <i>Platynereis dumerilii</i> . <i>Environmental Science &amp; Technology</i> , 2013, 47, 10868-10876.	4.6	456
62	Effect of quenching time and quenching agent dose on total organic halogen measurement. <i>International Journal of Environmental Analytical Chemistry</i> , 2013, 93, 1146-1158.	1.8	25
63	New Halogenated Disinfection Byproducts in Swimming Pool Water and Their Permeability across Skin. <i>Environmental Science &amp; Technology</i> , 2012, 46, 7112-7119.	4.6	96
64	Penetration of polar brominated DBPs through the activated carbon columns during total organic bromine analysis. <i>Journal of Environmental Monitoring</i> , 2011, 13, 2851.	2.1	11
65	Formation and Decomposition of New and Unknown Polar Brominated Disinfection Byproducts during Chlorination. <i>Environmental Science &amp; Technology</i> , 2011, 45, 2194-2201.	4.6	243
66	Evaluation and improvement of total organic bromine analysis with respect to reductive property of activated carbon. <i>Water Research</i> , 2011, 45, 1229-1237.	5.3	42
67	Formation of halogenated organic byproducts during medium-pressure UV and chlorine coexposure of model compounds, NOM and bromide. <i>Water Research</i> , 2011, 45, 6545-6554.	5.3	76
68	Effects of enhanced coagulation on polar halogenated disinfection byproducts in drinking water. <i>Separation and Purification Technology</i> , 2010, 76, 26-32.	3.9	33
69	Effect of Reductive Property of Activated Carbon on Total Organic Halogen Analysis. <i>Environmental Science &amp; Technology</i> , 2010, 44, 2105-2111.	4.6	62
70	A Picture of Polar Iodinated Disinfection Byproducts in Drinking Water by (UPLC)/ESI-tqMS. <i>Environmental Science &amp; Technology</i> , 2009, 43, 9287-9293.	4.6	119
71	A new method for differentiating adducts of common drinking water DBPs from higher molecular weight DBPs in electrospray ionization-mass spectrometry analysis. <i>Water Research</i> , 2009, 43, 2093-2100.	5.3	37
72	Effect of NOM on arsenic adsorption by TiO <sub>2</sub> in simulated As(III)-contaminated raw waters. <i>Water Research</i> , 2008, 42, 2309-2319.	5.3	60

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73	Fast Selective Detection of Polar Brominated Disinfection Byproducts in Drinking Water Using Precursor Ion Scans. <i>Environmental Science &amp; Technology</i> , 2008, 42, 6598-6603.	4.6	121
74	Effect of Copper(II) on Natural Organic Matter Removal During Drinking Water Coagulation Using Aluminum-Based Coagulants. <i>Water Environment Research</i> , 2007, 79, 593-599.	1.3	23
75	Formation, adsorption and separation of high molecular weight disinfection byproducts resulting from chlorination of aquatic humic substances. <i>Water Research</i> , 2006, 40, 221-230.	5.3	43
76	Removal of low-molecular weight DBPs and inorganic ions for characterization of high-molecular weight DBPs in drinking water. <i>Water Research</i> , 2006, 40, 1043-1051.	5.3	6
77	Characterization of High Molecular Weight Disinfection Byproducts from Chlorination of Humic Substances with/without Coagulation Pretreatment Using UPLC-SEC-ESI-MS/MS. <i>Environmental Science &amp; Technology</i> , 2005, 39, 963-972.	4.6	73
78	Effects of temperature and chemical addition on the formation of bromoorganic DBPs during ozonation. <i>Water Research</i> , 2005, 39, 423-435.	5.3	41
79	An electrospray ionization-tandem mass spectrometry method for identifying chlorinated drinking water disinfection byproducts. <i>Water Research</i> , 2004, 38, 3920-3930.	5.3	38
80	Characterization of High Molecular Weight Disinfection Byproducts Resulting from Chlorination of Aquatic Humic Substances. <i>Environmental Science &amp; Technology</i> , 2002, 36, 4033-4038.	4.6	61
81	Decomposition of trihaloacetic acids and formation of the corresponding trihalomethanes in drinking water. <i>Water Research</i> , 2002, 36, 3665-3673.	5.3	150
82	Differentiation of Total Organic Brominated and Chlorinated Compounds in Total Organic Halide Measurement: A New Approach with an Ion-Chromatographic Technique. <i>ACS Symposium Series</i> , 2000, , 330-342.	0.5	20
83	Characterization and Comparison of Disinfection By-Products of Four Major Disinfectants. <i>ACS Symposium Series</i> , 2000, , 299-314.	0.5	72