Xin Yang

List of Publications by Year
in descending order

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126	8,970	36303	45317
papers	citations	51	90
		h-index	g-index

126	126	126	5599
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Iron-mediated activation of persulfate and peroxymonosulfate in both homogeneous and heterogeneous ways: A review. Chemical Engineering Journal, 2020, 384, 123265.	12.7	544
2	Occurrence and removal of pharmaceuticals and personal care products (PPCPs) in an advanced wastewater reclamation plant. Water Research, 2011, 45, 5218-5228.	11.3	450
3	Radical Chemistry and Structural Relationships of PPCP Degradation by UV/Chlorine Treatment in Simulated Drinking Water. Environmental Science & Technology, 2017, 51, 10431-10439.	10.0	449
4	Characterization of algal organic matter and formation of DBPs from chlor(am)ination. Water Research, 2010, 44, 5897-5906.	11.3	327
5	Rate Constants and Mechanisms of the Reactions of Cl^{â€¢} and Cl₂^{â€¢â€“} with Trace Organic Contaminants. Environmental Science & Technology, 2019, 53, 11170-11182.	10.0	277
6	Roles of reactive chlorine species in trimethoprim degradation in the UV/chlorine process: Kinetics and transformation pathways. Water Research, 2016, 104, 272-282.	11.3	267
7	Factors affecting the roles of reactive species in the degradation of micropollutants by the UV/chlorine process. Water Research, 2017, 126, 351-360.	11.3	263
8	Formation of carbonaceous and nitrogenous disinfection by-products from the chlorination of Microcystis aeruginosa. Water Research, 2010, 44, 1934-1940.	11.3	252
9	Factors affecting formation of haloacetonitriles, haloketones, chloropicrin and cyanogen halides during chloramination. Water Research, 2007, 41, 1193-1200.	11.3	229
10	PPCP degradation by UV/chlorine treatment and its impact on DBP formation potential in real waters. Water Research, 2016, 98, 309-318.	11.3	186
11	Identifying the sources and fate of anthropogenically impacted dissolved organic matter (DOM) in urbanized rivers. Water Research, 2013, 47, 5027-5039.	11.3	165
12	The Multiple Role of Bromide Ion in PPCPs Degradation under UV/Chlorine Treatment. Environmental Science & Technology, 2018, 52, 1806-1816.	10.0	157
13	Nitrogenous disinfection byproducts formation and nitrogen origin exploration during chloramination of nitrogenous organic compounds. Water Research, 2010, 44, 2691-2702.	11.3	148
14	Precursors and nitrogen origins of trichloronitromethane and dichloroacetonitrile during chlorination/chloramination. Chemosphere, 2012, 88, 25-32.	8.2	144
15	Correlations between organic matter properties and DBP formation during chloramination. Water Research, 2008, 42, 2329-2339.	11.3	132
16	UV/chlorine treatment of carbamazepine: Transformation products and their formation kinetics. Water Research, 2017, 116, 254-265.	11.3	125
17	Reactivity of Chlorine Radicals (Cl^{â€¢} and Cl₂^{â€¢â€“}) with Dissolved Organic Matter and the Formation of Chlorinated Byproducts. Environmental Science & Technology, 2021, 55, 689-699.	10.0	124
18	Formation of disinfection byproducts upon chlorine dioxide preoxidation followed by chlorination or chloramination of natural organic matter. Chemosphere, 2013, 91, 1477-1485.	8.2	120

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19	Natural polyphenols enhanced the Cu(II)/peroxymonosulfate (PMS) oxidation: The contribution of Cu(III) and HOâ€¢. Water Research, 2020, 186, 116326.	11.3	117
20	Chlorination Byproduct Formation in the Presence of Humic Acid, Model Nitrogenous Organic Compounds, Ammonia, and Bromide. Environmental Science & Technology, 2004, 38, 4995-5001.	10.0	113
21	Photosensitized degradation of acetaminophen in natural organic matter solutions: The role of triplet states and oxygen. Water Research, 2017, 109, 266-273.	11.3	112
22	Multiple Roles of Dissolved Organic Matter in Advanced Oxidation Processes. Environmental Science & Technology, 2022, 56, 11111-11131.	10.0	112
23	DBP formation in breakpoint chlorination of wastewater. Water Research, 2005, 39, 4755-4767.	11.3	110
24	Surface-modified biochar in a bioretention system for Escherichia coli removal from stormwater. Chemosphere, 2017, 169, 89-98.	8.2	107
25	THM, HAA and CNCl formation from UV irradiation and chlor(am)ination of selected organic waters. Water Research, 2006, 40, 2033-2043.	11.3	105
26	Formation of disinfection byproducts from chlor(am)ination of algal organic matter. Journal of Hazardous Materials, 2011, 197, 378-388.	12.4	100
27	Investigation of disinfection byproducts formation in ferrate(VI) pre-oxidation of NOM and its model compounds followed by chlorination. Journal of Hazardous Materials, 2015, 292, 197-204.	12.4	97
28	Selective dissolution followed by EDDS washing of an e-waste contaminated soil: Extraction efficiency, fate of residual metals, and impact on soil environment. Chemosphere, 2017, 166, 489-496.	8.2	94
29	Formation of disinfection by-products after pre-oxidation with chlorine dioxide or ferrate. Water Research, 2013, 47, 5856-5864.	11.3	90
30	Occurrence and indicators of pharmaceuticals in Chinese streams: A nationwide study. Environmental Pollution, 2018, 236, 889-898.	7.5	90
31	Occurrence and fate of PPCPs and correlations with water quality parameters in urban riverine waters of the Pearl River Delta, South China. Environmental Science and Pollution Research, 2013, 20, 5864-5875.	5.3	87
32	Ciprofloxacin adsorption on graphene and granular activated carbon: kinetics, isotherms, and effects of solution chemistry. Environmental Technology (United Kingdom), 2015, 36, 3094-3102.	2.2	84
33	The roles of halides in the acetaminophen degradation by UV/H2O2 treatment: Kinetics, mechanisms, and products analysis. Chemical Engineering Journal, 2015, 271, 214-222.	12.7	80
34	Formation of halogenated organic byproducts during medium-pressure UV and chlorine coexposure of model compounds, NOM and bromide. Water Research, 2011, 45, 6545-6554.	11.3	76
35	Discovering the Importance of ClO^{â€¢} in a Coupled Electrochemical System for the Simultaneous Removal of Carbon and Nitrogen from Secondary Coking Wastewater Effluent. Environmental Science & Technology, 2020, 54, 9015-9024.	10.0	76
36	Impact of metal ions, metal oxides, and nanoparticles on the formation of disinfection byproducts during chlorination. Chemical Engineering Journal, 2017, 317, 777-792.	12.7	75

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37	A novel peroxymonosulfate (PMS)-enhanced iron coagulation process for simultaneous removal of trace organic pollutants in water. Water Research, 2020, 185, 116136.	11.3	74
38	Do poly(lactic acid) microplastics instigate a threat? A perception for their dynamic towards environmental pollution and toxicity. Science of the Total Environment, 2022, 832, 155014.	8.0	74
39	The occurrence of disinfection by-products in municipal drinking water in China's Pearl River Delta and a multipathway cancer risk assessment. Science of the Total Environment, 2013, 447, 108-115.	8.0	72
40	Disinfection byproducts and their toxicity in wastewater effluents treated by the mixing oxidant of ClO2/Cl2. Water Research, 2019, 162, 471-481.	11.3	70
41	Integrating EDDS-enhanced washing with low-cost stabilization of metal-contaminated soil from an e-waste recycling site. Chemosphere, 2016, 159, 426-432.	8.2	65
42	Gallic acid accelerated BDE47 degradation in PMS/Fe(III) system: Oxidation intermediates autocatalyzed redox cycling of iron. Chemical Engineering Journal, 2020, 384, 123248.	12.7	64
43	Comparison of colorimetric and membrane introduction mass spectrometry techniques for chloramine analysis. Water Research, 2007, 41, 3097-3102.	11.3	62
44	Chlorite formation during ClO2 oxidation of model compounds having various functional groups and humic substances. Water Research, 2019, 159, 348-357.	11.3	62
45	The occurrence of polybrominated diphenyl ether (PBDE) contamination in soil, water/sediment, and air. Environmental Science and Pollution Research, 2019, 26, 23219-23241.	5.3	61
46	Occurrence of nitrogenous and carbonaceous disinfection byproducts in drinking water distributed in Shenzhen, China. Chemosphere, 2017, 188, 257-264.	8.2	60
47	Effects of ozone and ozone/peroxide pretreatments on disinfection byproduct formation during subsequent chlorination and chloramination. Journal of Hazardous Materials, 2012, 239-240, 348-354.	12.4	57
48	Degradation of 2,2â€²,4,4â€²-tetrabromodiphenyl ether (BDE-47) by a nano zerovalent iron-activated persulfate process: The effect of metal ions. Chemical Engineering Journal, 2017, 317, 613-622.	12.7	57
49	Sorption performance and mechanism of a sludge-derived char as porous carbon-based hybrid adsorbent for benzene derivatives in aqueous solution. Journal of Hazardous Materials, 2014, 274, 205-211.	12.4	56
50	Synergistic removal of ammonium by monochloramine photolysis. Water Research, 2019, 152, 226-233.	11.3	56
51	Photochemical oxidation of PPCPs using a combination of solar irradiation and free available chlorine. Science of the Total Environment, 2019, 682, 629-638.	8.0	52
52	Roles and Knowledge Gaps of Point-of-Use Technologies for Mitigating Health Risks from Disinfection Byproducts in Tap Water: A Critical Review. Water Research, 2021, 200, 117265.	11.3	51
53	Rate Constants and Mechanisms for Reactions of Bromine Radicals with Trace Organic Contaminants. Environmental Science & Technology, 2021, 55, 10502-10513.	10.0	51
54	The influence of the UV/chlorine advanced oxidation of natural organic matter for micropollutant degradation on the formation of DBPs and toxicity during post-chlorination. Chemical Engineering Journal, 2019, 373, 870-879.	12.7	50

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55	The reactions of chlorine dioxide with inorganic and organic compounds in water treatment: kinetics and mechanisms. Environmental Science: Water Research and Technology, 2020, 6, 2287-2312.	2.4	50
56	Enhanced removal of Cr(VI) in the Fe(III)/natural polyphenols system: role of the in situ generated Fe(II). Journal of Hazardous Materials, 2019, 377, 321-329.	12.4	49
57	Molecular characterization of transformation and halogenation of natural organic matter during the UV/chlorine AOP using FT-ICR mass spectrometry. Journal of Environmental Sciences, 2021, 102, 24-36.	6.1	49
58	Oxidation of tetrabromobisphenol A (TBBPA) by peroxymonosulfate: The role of in-situ formed HOBr. Water Research, 2020, 169, 115202.	11.3	47
59	Effects of UV irradiation and UV/chlorine co-exposure on natural organic matter in water. Science of the Total Environment, 2012, 414, 576-584.	8.0	45
60	Removal of chlorinated organic solvents from hydraulic fracturing wastewater by bare and entrapped nanoscale zero-valent iron. Chemosphere, 2018, 196, 9-17.	8.2	45
61	Nitrogen Origins and the Role of Ozonation in the Formation of Haloacetonitriles and Halonitromethanes in Chlorine Water Treatment. Environmental Science & Technology, 2012, 46, 12832-12838.	10.0	41
62	A Novel UVA/ClO₂ Advanced Oxidation Process for the Degradation of Micropollutants in Water. Environmental Science & Technology, 2022, 56, 1257-1266.	10.0	40
63	Removal of natural organic matter using surfactant-modified iron oxide-coated sand. Journal of Hazardous Materials, 2010, 174, 567-572.	12.4	39
64	Elimination kinetics and detoxification mechanisms of microcystin-LR during UV/Chlorine process. Chemosphere, 2019, 214, 702-709.	8.2	39
65	ClO2 pre-oxidation changes the yields and formation pathways of chloroform and chloral hydrate from phenolic precursors during chlorination. Water Research, 2019, 148, 250-260.	11.3	38
66	Treating disinfection byproducts with UV or solar irradiation and in UV advanced oxidation processes: A review. Journal of Hazardous Materials, 2021, 408, 124435.	12.4	38
67	Kinetics and Transformations of Diverse Dissolved Organic Matter Fractions with Sulfate Radicals. Environmental Science & Technology, 2022, 56, 4457-4466.	10.0	38
68	Quantification of aqueous cyanogen chloride and cyanogen bromide in environmental samples by MIMS. Water Research, 2005, 39, 1709-1718.	11.3	37
69	A solar-to-chemical conversion efficiency up to 0.26% achieved in ambient conditions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	37
70	Copper Inhibition of Triplet-Induced Reactions Involving Natural Organic Matter. Environmental Science & Technology, 2018, 52, 2742-2750.	10.0	36
71	Combining solar irradiation with chlorination enhances the photochemical decomposition of microcystin-LR. Water Research, 2019, 159, 324-332.	11.3	36
72	The multiple roles of chlorite on the concentrations of radicals and ozone and formation of chlorate during UV photolysis of free chlorine. Water Research, 2021, 190, 116680.	11.3	36

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73	Differential UVâ€“vis absorbance can characterize the reaction of organic matter with ClO2. Water Research, 2018, 139, 442-449.	11.3	35
74	Prediction of adsorption capacity for pharmaceuticals, personal care products and endocrine disrupting chemicals onto various adsorbent materials. Chemosphere, 2020, 238, 124658.	8.2	35
75	Degradation of tetrabromobisphenol A by ferrate(VI)-CaSO3 process: Kinetics, products, and impacts on following disinfection by-products formation. Journal of Hazardous Materials, 2021, 412, 125297.	12.4	35
76	Redox-Active Moieties in Dissolved Organic Matter Accelerate the Degradation of Nitroimidazoles in SO₄^{â€¢â€“}-Based Oxidation. Environmental Science & Technology, 2021, 55, 14844-14853.	10.0	35
77	Effect of UV/chlorine treatment on photophysical and photochemical properties of dissolved organic matter. Water Research, 2021, 192, 116857.	11.3	34
78	Effect of pH on the formation of disinfection byproducts in ferrate(VI) pre-oxidation and subsequent chlorination. Separation and Purification Technology, 2015, 156, 980-986.	7.9	33
79	DBP formation from degradation of DEET and ibuprofen by UV/chlorine process and subsequent post-chlorination. Journal of Environmental Sciences, 2017, 58, 146-154.	6.1	33
80	Bromine Radical (Br^{â€¢} and Br₂^{â€¢â€“}) Reactivity with Dissolved Organic Matter and Brominated Organic Byproduct Formation. Environmental Science & Technology, 2022, 56, 5189-5199.	10.0	33
81	Enhancement effects of ultrasound on secondary wastewater effluent disinfection by sodium hypochlorite and disinfection by-products analysis. Ultrasonics Sonochemistry, 2016, 29, 60-66.	8.2	32
82	Degradation and DBP formations from pyrimidines and purines bases during sequential or simultaneous use of UV and chlorine. Water Research, 2019, 165, 115023.	11.3	32
83	Multi-angle comparison of UV/chlorine, UV/monochloramine, and UV/chlorine dioxide processes for water treatment and reuse. Water Research, 2022, 217, 118414.	11.3	32
84	Kinetics and Mechanisms of Virus Inactivation by Chlorine Dioxide in Water Treatment: A Review. Bulletin of Environmental Contamination and Toxicology, 2021, 106, 560-567.	2.7	30
85	Electrospray Ionization-Tandem Mass Spectrometry Method for Differentiating Chlorine Substitution in Disinfection Byproduct Formation. Environmental Science & Technology, 2014, 48, 4877-4884.	10.0	29
86	Role of Chlorine Dioxide in N-Nitrosodimethylamine Formation from Oxidation of Model Amines. Environmental Science & Technology, 2015, 49, 11429-11437.	10.0	28
87	Both viable and inactivated amoeba spores protect their intracellular bacteria from drinking water disinfection. Journal of Hazardous Materials, 2021, 417, 126006.	12.4	27
88	Coexposure Degradation of Purine Derivatives in the Sulfate Radical-Mediated Oxidation Process. Environmental Science & Technology, 2020, 54, 1186-1195.	10.0	26
89	Microplastics in the environment: Sampling, pretreatment, analysis and occurrence based on current and newly-exploited chromatographic approaches. Science of the Total Environment, 2021, 794, 148725.	8.0	26
90	Mechanisms and kinetics study on the trihalomethanes formation with carbon nanoparticle precursors. Chemosphere, 2016, 154, 391-397.	8.2	25

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91	The role of chlorine oxide radical (ClOâ€¢) in the degradation of polychoro-1,3-butadienes in UV/chlorine treatment: kinetics and mechanisms. Water Research, 2020, 183, 116056.	11.3	25
92	Micropollutant abatement and byproduct formation during the co-exposure of chlorine dioxide (ClO2) and UVC radiation. Journal of Hazardous Materials, 2021, 419, 126424.	12.4	25
93	Influence of ultrasound enhancement on chlorine dioxide consumption and disinfection by-products formation for secondary effluents disinfection. Ultrasonics Sonochemistry, 2016, 28, 376-381.	8.2	23
94	Sorption, mobility, and bioavailability of PBDEs in the agricultural soils: Roles of co-existing metals, dissolved organic matter, and fertilizers. Science of the Total Environment, 2018, 619-620, 1153-1162.	8.0	23
95	Effects of KMnO4/NaHSO3 pre-oxidation on the formation potential of disinfection by-products during subsequent chlorination. Chemical Engineering Journal, 2019, 372, 825-835.	12.7	22
96	Copper Inhibition of Triplet-Sensitized Phototransformation of Phenolic and Amine Contaminants. Environmental Science & Technology, 2020, 54, 9980-9989.	10.0	22
97	Simultaneous removal of algae, microcystins and disinfection byproduct precursors by peroxymonosulfate (PMS)-enhanced Fe(III) coagulation. Chemical Engineering Journal, 2022, 445, 136689.	12.7	22
98	Application of Pretreatment Methods for Reliable Dissolved Organic Nitrogen Analysis in Waterâ€”A Review. Critical Reviews in Environmental Science and Technology, 2015, 45, 249-276.	12.8	20
99	Emerging investigators series: disinfection by-products in mixed chlorine dioxide and chlorine water treatment. Environmental Science: Water Research and Technology, 2016, 2, 838-847.	2.4	20
100	Transformation of dissolved organic matter during biological wastewater treatment and relationships with the formation of nitrogenous disinfection byproducts. Water Research, 2022, 222, 118870.	11.3	20
101	Cu(II)-catalyzed degradation of ampicillin: effect of pH and dissolved oxygen. Environmental Science and Pollution Research, 2018, 25, 4279-4288.	5.3	19
102	Role of Antioxidant Moieties in the Quenching of a Purine Radical by Dissolved Organic Matter. Environmental Science & Technology, 2022, 56, 546-555.	10.0	19
103	Characteristics and DBP formation of dissolved organic matter from leachates of fresh and aged leaf litter. Chemosphere, 2016, 152, 335-344.	8.2	18
104	Spontaneous exciton dissociation in organic photocatalyst under ambient conditions for highly efficient synthesis of hydrogen peroxide. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	17
105	Tetracycline antibiotics as precursors of dichloroacetamide and other disinfection byproducts during chlorination and chloramination. Chemosphere, 2021, 270, 128628.	8.2	16
106	UV254 irradiation of N-chloro-Î±-amino acids: Kinetics, mechanisms, and N-DBP formation potentials. Water Research, 2021, 199, 117204.	11.3	16
107	ClO2 pre-oxidation changes dissolved organic matter at the molecular level and reduces chloro-organic byproducts and toxicity of water treated by the UV/chlorine process. Water Research, 2022, 216, 118341.	11.3	15
108	ClO2 pre-oxidation impacts the formation and nitrogen origins of dichloroacetonitrile and dichloroacetamide during subsequent chloramination. Water Research, 2020, 186, 116313.	11.3	13

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109	Kinetics of cyanogen chloride destruction by chemical reduction methods. Water Research, 2005, 39, 2114-2124.	11.3	12
110	Transformation of adenine and cytosine in chlorination â€" An ESI-tqMS investigation. Chemosphere, 2019, 234, 505-512.	8.2	12
111	Distinct effects of copper on the degradation of Î²-lactam antibiotics in fulvic acid solutions during light and dark cycle. Environmental Science and Ecotechnology, 2020, 3, 100051.	13.5	12
112	Factors affecting the formation of iodo-trihalomethanes during oxidation with chlorine dioxide. Journal of Hazardous Materials, 2014, 264, 91-97.	12.4	11
113	Prediction of Photolysis Kinetics of Viral Genomes under UV254 Irradiation to Estimate Virus Infectivity Loss. Water Research, 2021, 198, 117165.	11.3	10
114	Defining the molecular properties of N-nitrosodimethylamine (NDMA) precursors using computational chemistry. Environmental Science: Water Research and Technology, 2017, 3, 502-512.	2.4	9
115	Sequential ClO2-UV/chlorine process for micropollutant removal and disinfection byproduct control. Science of the Total Environment, 2022, 806, 150354.	8.0	9
116	Dosing low-level ferrous iron in coagulation enhances the removal of micropollutants, chlorite and chlorate during advanced water treatment. Journal of Environmental Sciences, 2022, 117, 119-128.	6.1	9
117	Bromide significantly promoted the abatement of micropollutants by peroxymonosulfate: Roles of HOBr and Br2. Chemical Engineering Journal, 2022, 443, 136492.	12.7	9
118	Dichlorine radicals (Cl2â€¢â€") promote the photodegradation of propranolol in estuarine and coastal waters. Journal of Hazardous Materials, 2021, 414, 125536.	12.4	8
119	Exploration of reaction rates of chlorine dioxide with tryptophan residue in oligopeptides and proteins. Journal of Environmental Sciences, 2020, 93, 129-136.	6.1	7
120	Enhanced formation of dichloroacetamide and dichloroacetonitrile during chloramination of drinking water and model organic matters in the presence of copper corrosion products. Science of the Total Environment, 2021, 785, 147242.	8.0	6
121	Synergistic cytotoxicity of binary combinations of inorganic and organic disinfection byproducts assessed by real-time cell analysis. Journal of Environmental Sciences, 2022, 117, 222-231.	6.1	5
122	Effluent Particle Size and Permeability of Polyvinylchloride Membranes after Sodium Hypochlorite Exposure. Journal of Environmental Engineering, ASCE, 2013, 139, 712-718.	1.4	4
123	Bromide and Other Halide Ion Removal From Drinking Waters Using Silverâ€Amended Coagulation. Journal - American Water Works Association, 2018, 110, 13-24.	0.3	4
124	A Review on Hexachloro-1,3-butadiene (HCBD): Sources, Occurrence, Toxicity and Transformation. Bulletin of Environmental Contamination and Toxicology, 2020, 104, 1-7.	2.7	4
125	Enhanced formation of trichloronitromethane precursors during UV/monochloramine treatment. Journal of Hazardous Materials, 2022, 422, 126813.	12.4	4
126	A Portable Plasma Sterilizer. Plasma Chemistry and Plasma Processing, 2017, 37, 77-97.	2.4	2