Urs von Gunten

List of Publications by Year
in descending order

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260 papers	40,942 citations	2322 98 h-index	2509 196 g-index
263 all docs	263 docs citations	263 times ranked	21397 citing authors

#	Article	IF	Citations
1	The Challenge of Micropollutants in Aquatic Systems. Science, 2006, 313, 1072-1077.	12.6	2,873
2	Ozonation of drinking water: Part I. Oxidation kinetics and product formation. Water Research, 2003, 37, 1443-1467.	11.3	1,960
3	Persulfate-Based Advanced Oxidation: Critical Assessment of Opportunities and Roadblocks. Environmental Science & Technology, 2020, 54, 3064-3081.	10.0	1,779
4	Reactions of chlorine with inorganic and organic compounds during water treatmentâ€"Kinetics and mechanisms: A critical review. Water Research, 2008, 42, 13-51.	11.3	1,557
5	Global Water Pollution and Human Health. Annual Review of Environment and Resources, 2010, 35, 109-136.	13.4	1,381
6	Oxidation of Pharmaceuticals during Ozonation and Advanced Oxidation Processes. Environmental Science & Technology, 2003, 37, 1016-1024.	10.0	1,370
7	Ozonation of drinking water: Part II. Disinfection and by-product formation in presence of bromide, iodide or chlorine. Water Research, 2003, 37, 1469-1487.	11.3	1,122
8	Elimination of Organic Micropollutants in a Municipal Wastewater Treatment Plant Upgraded with a Full-Scale Post-Ozonation Followed by Sand Filtration. Environmental Science & Technology, 2009, 43, 7862-7869.	10.0	726
9	Oxidation of Pharmaceuticals during Ozonation of Municipal Wastewater Effluents:Â A Pilot Study. Environmental Science & Technology, 2005, 39, 4290-4299.	10.0	713
10	Oxidative transformation of micropollutants during municipal wastewater treatment: Comparison of kinetic aspects of selective (chlorine, chlorine dioxide, ferrateVI, and ozone) and non-selective oxidants (hydroxyl radical). Water Research, 2010, 44, 555-566.	11.3	632
11	Hydroxyl Radical/Ozone Ratios During Ozonation Processes. I. The R_{ct}Concept. Ozone: Science and Engineering, 1999, 21, 239-260.	2.5	610
12	Bromate Formation during Ozonization of Bromide-Containing Waters: Interaction of Ozone and Hydroxyl Radical Reactions. Environmental Science & Technology, 1994, 28, 1234-1242.	10.0	508
13	Oxidation Processes in Water Treatment: Are We on Track?. Environmental Science & Technology, 2018, 52, 5062-5075.	10.0	452
14	Oxidation of Antibacterial Molecules by Aqueous Ozone:â€‰ Moiety-Specific Reaction Kinetics and Application to Ozone-Based Wastewater Treatment. Environmental Science & Technology, 2006, 40, 1969-1977.	10.0	416
15	Oxidative treatment of bromide-containing waters: Formation of bromine and its reactions with inorganic and organic compounds â€" A critical review. Water Research, 2014, 48, 15-42.	11.3	412
16	Photosensitizer Method to Determine Rate Constants for the Reaction of Carbonate Radical with Organic Compounds. Environmental Science & Technology, 2005, 39, 9182-9188.	10.0	407
17	Comparison of the efficiency of OH radical formation during ozonation and the advanced oxidation processes O3/H2O2 and UV/H2O2. Water Research, 2006, 40, 3695-3704.	11.3	407
18	Chlorination of natural organic matter: kinetics of chlorination and of THM formation. Water Research, 2002, 36, 65-74.	11.3	402

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19	Effect of Dissolved Organic Matter on the Transformation of Contaminants Induced by Excited Triplet States and the Hydroxyl Radical. Environmental Science & Technology, 2011, 45, 1334-1340.	10.0	388
20	Evaluation of a full-scale wastewater treatment plant upgraded with ozonation and biological post-treatments: Abatement of micropollutants, formation of transformation products and oxidation by-products. Water Research, 2018, 129, 486-498.	11.3	361
21	Prediction of Micropollutant Elimination during Ozonation of Municipal Wastewater Effluents: Use of Kinetic and Water Specific Information. Environmental Science & Technology, 2013, 47, 5872-5881.	10.0	355
22	Degradation Kinetics of Atrazine and Its Degradation Products with Ozone and OH Radicals:â€‰ A Predictive Tool for Drinking Water Treatment. Environmental Science & Technology, 2000, 34, 591-597.	10.0	350
23	Chlorination of Phenols:Â Kinetics and Formation of Chloroform. Environmental Science & Technology, 2002, 36, 884-890.	10.0	343
24	The Chlorine Dilemma. Science, 2011, 331, 42-43.	12.6	338
25	Phototransformation of selected pharmaceuticals during UV treatment of drinking water. Water Research, 2008, 42, 121-128.	11.3	335
26	Formation of Iodo-Trihalomethanes during Disinfection and Oxidation of Iodide-Containing Waters. Environmental Science & Technology, 2000, 34, 2784-2791.	10.0	333
27	Oxidation of Iodide and Hypoiodous Acid in the Disinfection of Natural Waters. Environmental Science & Technology, 1999, 33, 4040-4045.	10.0	327
28	Advanced Oxidation of Bromide-Containing Waters:Â Bromate Formation Mechanisms. Environmental Science & Technology, 1998, 32, 63-70.	10.0	309
29	Elimination of Micropollutants during Post-Treatment of Hospital Wastewater with Powdered Activated Carbon, Ozone, and UV. Environmental Science & Technology, 2013, 47, 7899-7908.	10.0	309
30	Quantitative structureâ€“activity relationships (QSARs) for the transformation of organic micropollutants during oxidative water treatment. Water Research, 2012, 46, 6177-6195.	11.3	305
31	Solar Oxidation and Removal of Arsenic at Circumneutral pH in Iron Containing Waters. Environmental Science & Technology, 2001, 35, 2114-2121.	10.0	304
32	Ferrate (Fe(VI)) Application for Municipal Wastewater Treatment: A Novel Process for Simultaneous Micropollutant Oxidation and Phosphate Removal. Environmental Science & Technology, 2009, 43, 3831-3838.	10.0	296
33	Efficiency and energy requirements for the transformation of organic micropollutants by ozone, O3/H2O2 and UV/H2O2. Water Research, 2011, 45, 3811-3822.	11.3	288
34	Oxidation of pharmaceuticals during water treatment with chlorine dioxide. Water Research, 2005, 39, 3607-3617.	11.3	280
35	Hydroxyl Radical/Ozone Ratios During Ozonation Processes. II. The Effect of Temperature, pH, Alkalinity, and DOM Properties. Ozone: Science and Engineering, 2000, 22, 123-150.	2.5	269
36	Kinetics of the Oxidation of Phenols and Phenolic Endocrine Disruptors during Water Treatment with Ferrate (Fe(VI)). Environmental Science & Technology, 2005, 39, 8978-8984.	10.0	265

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37	Efficiency of activated carbon to transform ozone into OH radicals: Influence of operational parameters. Water Research, 2005, 39, 3189-3198.	11.3	265
38	Kinetic assessment and modeling of an ozonation step for full-scale municipal wastewater treatment: Micropollutant oxidation, by-product formation and disinfection. Water Research, 2011, 45, 605-617.	11.3	261
39	Ozonation of Carbamazepine in Drinking Water:â€‰ Identification and Kinetic Study of Major Oxidation Products. Environmental Science & Technology, 2005, 39, 8014-8022.	10.0	259
40	Bromate Minimization during Ozonation:Â Mechanistic Considerations. Environmental Science & Technology, 2001, 35, 2525-2531.	10.0	253
41	Reaction of Ferrate(VI) with ABTS and Self-Decay of Ferrate(VI): Kinetics and Mechanisms. Environmental Science & Technology, 2014, 48, 5154-5162.	10.0	248
42	Ozonation of reverse osmosis concentrate: Kinetics and efficiency of beta blocker oxidation. Water Research, 2008, 42, 3003-3012.	11.3	244
43	Chemical Oxidation of Dissolved Organic Matter by Chlorine Dioxide, Chlorine, And Ozone: Effects on Its Optical and Antioxidant Properties. Environmental Science & Technology, 2013, 47, 11147-11156.	10.0	244
44	Chemistry of Ozone in Water and Wastewater Treatment: From Basic Principles to Applications. , 2012, , .		236
45	Removal of Estrogenic Activity and Formation of Oxidation Products during Ozonation of 17Î±-Ethinylestradiol. Environmental Science & Technology, 2004, 38, 5177-5186.	10.0	235
46	Interactions of Fluoroquinolone Antibacterial Agents with Aqueous Chlorine:Â Reaction Kinetics, Mechanisms, and Transformation Pathways. Environmental Science & Technology, 2005, 39, 7065-7076.	10.0	235
47	Reaction of bromine and chlorine with phenolic compounds and natural organic matter extracts â€“ Electrophilic aromatic substitution and oxidation. Water Research, 2015, 85, 476-486.	11.3	235
48	Oxidation of Antibacterial Compounds by Ozone and Hydroxyl Radical: Elimination of Biological Activity during Aqueous Ozonation Processes. Environmental Science & Technology, 2009, 43, 2498-2504.	10.0	233
49	Oxidation ofN-Nitrosodimethylamine (NDMA) Precursors with Ozone and Chlorine Dioxide:Â Kinetics and Effect on NDMA Formation Potential. Environmental Science & Technology, 2007, 41, 2056-2063.	10.0	223
50	Oxidative elimination of cyanotoxins: Comparison of ozone, chlorine, chlorine dioxide and permanganate. Water Research, 2007, 41, 3381-3393.	11.3	222
51	Oxidative degradation of N-nitrosodimethylamine by conventional ozonation and the advanced oxidation process ozone/hydrogen peroxide. Water Research, 2007, 41, 581-590.	11.3	216
52	Mechanistic and kinetic evaluation of organic disinfection by-product and assimilable organic carbon (AOC) formation during the ozonation of drinking water. Water Research, 2006, 40, 2275-2286.	11.3	214
53	Spectrophotometric determination of ferrate (Fe(VI)) in water by ABTS. Water Research, 2005, 39, 1946-1953.	11.3	211
54	Ozonation and Advanced Oxidation of Wastewater: Effect of O3Dose, pH, DOM and HOâ€¢-Scavengers on Ozone Decomposition and HOâ€¢Generation. Ozone: Science and Engineering, 2006, 28, 247-259.	2.5	199

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55	Prediction of micropollutant elimination during ozonation of a hospital wastewater effluent. Water Research, 2014, 64, 134-148.	11.3	198
56	Ozonation of organic compounds in water and wastewater: A critical review. Water Research, 2022, 213, 118053.	11.3	193
57	Characterization of natural organic matter adsorption in granular activated carbon adsorbers. Water Research, 2011, 45, 3951-3959.	11.3	191
58	Measurement of the initial phase of ozone decomposition in water and wastewater by means of a continuous quench-flow system: Application to disinfection and pharmaceutical oxidation. Water Research, 2006, 40, 1884-1894.	11.3	186
59	Phenols and Amine Induced HOâ€¢Generation During the Initial Phase of Natural Water Ozonation. Environmental Science & Technology, 2006, 40, 3057-3063.	10.0	177
60	Kinetics of membrane damage to high (HNA) and low (LNA) nucleic acid bacterial clusters in drinking water by ozone, chlorine, chlorine dioxide, monochloramine, ferrate(VI), and permanganate. Water Research, 2011, 45, 1490-1500.	11.3	175
61	Development of surrogate correlation models to predict trace organic contaminant oxidation and microbial inactivation during ozonation. Water Research, 2012, 46, 6257-6272.	11.3	175
62	Inactivation of Antibiotic Resistant Bacteria and Resistance Genes by Ozone: From Laboratory Experiments to Full-Scale Wastewater Treatment. Environmental Science & Technology, 2016, 50, 11862-11871.	10.0	175
63	Evaluation of the persistence of transformation products from ozonation of trace organic compounds â€“ A critical review. Water Research, 2015, 68, 150-170.	11.3	174
64	Methods for the photometric determination of reactive bromine and chlorine species with ABTS. Water Research, 2000, 34, 4343-4350.	11.3	173
65	Kinetics and mechanisms of formation of bromophenols during drinking water chlorination: Assessment of taste and odor development. Water Research, 2005, 39, 2979-2993.	11.3	170
66	Determination of Iodide and Iodate by Ion Chromatography with Postcolumn Reaction and UV/Visible Detection. Analytical Chemistry, 1999, 71, 34-38.	6.5	167
67	Oxidation Kinetics of Selected Taste and Odor Compounds During Ozonation of Drinking Water. Environmental Science & Technology, 2007, 41, 626-631.	10.0	163
68	Kinetics and Mechanistic Aspects of As(III) Oxidation by Aqueous Chlorine, Chloramines, and Ozone:Â Relevance to Drinking Water Treatment. Environmental Science & Technology, 2006, 40, 3285-3292.	10.0	155
69	MTBE Oxidation by Conventional Ozonation and the Combination Ozone/Hydrogen Peroxide:Â Efficiency of the Processes and Bromate Formation. Environmental Science & Technology, 2001, 35, 4252-4259.	10.0	153
70	Selective Oxidation of Key Functional Groups in Cyanotoxins during Drinking Water Ozonation. Environmental Science & Technology, 2007, 41, 4397-4404.	10.0	152
71	Trade-Offs in Disinfection Byproduct Formation Associated with Precursor Preoxidation for Control of N-Nitrosodimethylamine Formation. Environmental Science & Technology, 2012, 46, 4809-4818.	10.0	152
72	Kinetics and Mechanisms of N-Nitrosodimethylamine Formation upon Ozonation of N,N-Dimethylsulfamide-Containing Waters: Bromide Catalysis. Environmental Science & Technology, 2010, 44, 5762-5768.	10.0	147

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73	Organic Contaminant Abatement in Reclaimed Water by UV/H₂O₂ and a Combined Process Consisting of O₃/H₂O₂ Followed by UV/H₂O₂: Prediction of Abatement Efficiency, Energy Consumption, and Byproduct Formation. Environmental Science & Technology, 2016, 50, 3809-3819.	10.0	146
74	Fingerprinting the reactive toxicity pathways of 50 drinking water disinfection by-products. Water Research, 2016, 91, 19-30.	11.3	144
75	Efficient Removal of Estrogenic Activity during Oxidative Treatment of Waters Containing Steroid Estrogens. Environmental Science & Technology, 2008, 42, 6333-6339.	10.0	136
76	Characterization of Oxidation processes: ozonation and the AOP O₃/H₂O₂. Journal - American Water Works Association, 2001, 93, 90-100.	0.3	133
77	Kinetics of the reaction between hydrogen peroxide and hypobromous acid: Implication on water treatment and natural systems. Water Research, 1997, 31, 900-906.	11.3	132
78	Advances in predicting organic contaminant abatement during ozonation of municipal wastewater effluent: reaction kinetics, transformation products, and changes of biological effects. Environmental Science: Water Research and Technology, 2016, 2, 421-442.	2.4	131
79	Kinetic and Mechanistic Investigations of the Oxidation of Tramadol by Ferrate and Ozone. Environmental Science & Technology, 2012, 46, 876-884.	10.0	129
80	Effect of operational and water quality parameters on conventional ozonation and the advanced oxidation process O3/H2O2: Kinetics of micropollutant abatement, transformation product and bromate formation in a surface water. Water Research, 2017, 122, 234-245.	11.3	129
81	Bromide Sources and Loads in Swiss Surface Waters and Their Relevance for Bromate Formation during Wastewater Ozonation. Environmental Science & Technology, 2016, 50, 9825-9834.	10.0	127
82	Influence of Carbonate on the Ozone/Hydrogen Peroxide Based Advanced Oxidation Process for Drinking Water Treatment. Ozone: Science and Engineering, 2000, 22, 305-328.	2.5	124
83	Enhanced Bromate Control during Ozonation:Â The Chlorine-Ammonia Process. Environmental Science & Technology, 2004, 38, 5187-5195.	10.0	124
84	Kinetics of triclosan oxidation by aqueous ozone and consequent loss of antibacterial activity: Relevance to municipal wastewater ozonation. Water Research, 2007, 41, 2481-2490.	11.3	124
85	Implications of sequential use of UV and ozone for drinking water quality. Water Research, 2006, 40, 1864-1876.	11.3	123
86	Sunlight-induced transformation of sulfadiazine and sulfamethoxazole in surface waters and wastewater effluents. Water Research, 2014, 57, 183-192.	11.3	121
87	Mechanistic Study on the Formation of Cl-/Br-/I-Trihalomethanes during Chlorination/Chloramination Combined with a Theoretical Cytotoxicity Evaluation. Environmental Science & Technology, 2015, 49, 11105-11114.	10.0	119
88	Adsorption as a cause for iron isotope fractionation in reduced groundwater. Geochimica Et Cosmochimica Acta, 2005, 69, 4175-4185.	3.9	118
89	Iodate and Iodo-Trihalomethane Formation during Chlorination of Iodide-Containing Waters: Role of Bromide. Environmental Science & Technology, 2012, 46, 7350-7357.	10.0	117
90	How do you like your tap water?. Science, 2016, 351, 912-914.	12.6	115

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91	Formation of assimilable organic carbon during oxidation of natural waters with ozone, chlorine dioxide, chlorine, permanganate, and ferrate. Water Research, 2011, 45, 2002-2010.	11.3	113
92	Formation and reactivity of inorganic and organic chloramines and bromamines during oxidative water treatment. Water Research, 2017, 110, 91-101.	11.3	113
93	Biogeochemical changes in groundwater-infiltration systems: Column studies. Geochimica Et Cosmochimica Acta, 1993, 57, 3895-3906.	3.9	112
94	A Tale of Two Treatments: The Multiple Barrier Approach to Removing Chemical Contaminants During Potable Water Reuse. Accounts of Chemical Research, 2019, 52, 615-622.	15.6	112
95	Emerging risks from ballast water treatment: The run-up to the International Ballast Water Management Convention. Chemosphere, 2014, 112, 256-266.	8.2	108
96	Degradation rates of benzotriazoles and benzothiazoles under UV-C irradiation and the advanced oxidation process UV/H2O2. Water Research, 2015, 74, 143-154.	11.3	108
97	Options and limitations for bromate control during ozonation of wastewater. Water Research, 2017, 116, 76-85.	11.3	105
98	Non-target screening to trace ozonation transformation products in a wastewater treatment train including different post-treatments. Water Research, 2018, 142, 267-278.	11.3	105
99	Formation of assimilable organic carbon (AOC) and specific natural organic matter (NOM) fractions during ozonation of phytoplankton. Water Research, 2007, 41, 1447-1454.	11.3	102
100	Mechanisms of Phenol Ozonationâ€"Kinetics of Formation of Primary and Secondary Reaction Products. Ozone: Science and Engineering, 2009, 31, 201-215.	2.5	101
101	Differences in the chlorine reactivity of four microcystin analogues. Water Research, 2006, 40, 1200-1209.	11.3	100
102	Oxidation of suspected N-nitrosodimethylamine (NDMA) precursors by ferrate (VI): Kinetics and effect on the NDMA formation potential of natural waters. Water Research, 2008, 42, 433-441.	11.3	98
103	Occurrence of dissolved and particle-bound taste and odor compounds in Swiss lake waters. Water Research, 2009, 43, 2191-2200.	11.3	97
104	Enhanced N-nitrosamine formation in pool water by UV irradiation of chlorinated secondary amines in the presence of monochloramine. Water Research, 2013, 47, 79-90.	11.3	97
105	Formation of Iodinated Organic Compounds by Oxidation of Iodide-Containing Waters with Manganese Dioxide. Environmental Science & Technology, 2009, 43, 7003-7009.	10.0	95
106	Combination of UV absorbance and electron donating capacity to assess degradation of micropollutants and formation of bromate during ozonation of wastewater effluents. Water Research, 2015, 81, 388-397.	11.3	95
107	Comparison of methylisoborneol and geosmin abatement in surface water by conventional ozonation and an electro-peroxone process. Water Research, 2017, 108, 373-382.	11.3	95
108	Ozonation of iodide-containing waters: Selective oxidation of iodide to iodate with simultaneous minimization of bromate and I-THMs. Water Research, 2013, 47, 1953-1960.	11.3	93

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109	Molecular-Level Transformation of Dissolved Organic Matter during Oxidation by Ozone and Hydroxyl Radical. Environmental Science & Technology, 2020, 54, 10351-10360.	10.0	93
110	Simultaneous determination of bromide, bromate and nitrite in low Î¼g lâ¯1 levels by ion chromatography without sample pretreatment. Water Research, 1999, 33, 3239-3244.	11.3	92
111	Transformation of Î²-Lactam Antibacterial Agents during Aqueous Ozonation: Reaction Pathways and Quantitative Bioassay of Biologically-Active Oxidation Products. Environmental Science & Technology, 2010, 44, 5940-5948.	10.0	92
112	Peracetic Acid Oxidation of Saline Waters in the Absence and Presence of H₂O₂: Secondary Oxidant and Disinfection Byproduct Formation. Environmental Science & Technology, 2015, 49, 1698-1705.	10.0	91
113	Ozonation of Para-Substituted Phenolic Compounds Yields p-Benzoquinones, Other Cyclic Î±,Î²-Unsaturated Ketones, and Substituted Catechols. Environmental Science & Technology, 2018, 52, 4763-4773.	10.0	91
114	Reactions of Ferrate(VI) with Iodide and Hypoiodous Acid: Kinetics, Pathways, and Implications for the Fate of Iodine during Water Treatment. Environmental Science & Technology, 2018, 52, 7458-7467.	10.0	89
115	Oxidation of iodide and iodine on birnessite (Î´-MnO2) in the pH range 4â€“8. Water Research, 2009, 43, 3417-3426.	11.3	87
116	Novel test procedure to evaluate the treatability of wastewater with ozone. Water Research, 2015, 75, 324-335.	11.3	87
117	Kinetics of Inactivation of Waterborne Enteric Viruses by Ozone. Environmental Science & Technology, 2018, 52, 2170-2177.	10.0	84
118	Reductive Dissolution of Fe(III) (Hydr)oxides by Cysteine: Kinetics and Mechanism. Journal of Colloid and Interface Science, 1997, 194, 194-206.	9.4	83
119	Development of Prediction Models for the Reactivity of Organic Compounds with Ozone in Aqueous Solution by Quantum Chemical Calculations: The Role of Delocalized and Localized Molecular Orbitals. Environmental Science & Technology, 2015, 49, 9925-9935.	10.0	83
120	Iron isotope fractionation and atom exchange during sorption of ferrous iron to mineral surfaces. Geochimica Et Cosmochimica Acta, 2009, 73, 1795-1812.	3.9	82
121	Formation of N-nitrosamines from chlorination and chloramination of molecular weight fractions of natural organic matter. Water Research, 2013, 47, 535-546.	11.3	80
122	Photosensitizing and Inhibitory Effects of Ozonated Dissolved Organic Matter on Triplet-Induced Contaminant Transformation. Environmental Science & Technology, 2015, 49, 8541-8549.	10.0	80
123	Bromate formation in advanced oxidation processes. Journal - American Water Works Association, 1996, 88, 53-65.	0.3	79
124	Enhanced Bromate Formation during Chlorination of Bromide-Containing Waters in the Presence of CuO: Catalytic Disproportionation of Hypobromous Acid. Environmental Science & Technology, 2012, 46, 11054-11061.	10.0	79
125	Sulfamethoxazole and isoproturon degradation and detoxification by a laccase-mediator system: Influence of treatment conditions and mechanistic aspects. Biochemical Engineering Journal, 2015, 103, 47-59.	3.6	79
126	Permeability of low molecular weight organics through nanofiltration membranes. Water Research, 2007, 41, 3968-3976.	11.3	76

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127	Oxidation of cetirizine, fexofenadine and hydrochlorothiazide during ozonation: Kinetics and formation of transformation products. Water Research, 2016, 94, 350-362.	11.3	75
128	Trihalomethane formation by chlorination of ammonium- and bromide-containing groundwater in water supplies of Hanoi, Vietnam. Water Research, 2003, 37, 3242-3252.	11.3	74
129	Reactions of aliphatic amines with ozone: Kinetics and mechanisms. Water Research, 2019, 157, 514-528.	11.3	74
130	Hypoiodous acid: kinetics of the buffer-catalyzed disproportionation. Water Research, 2000, 34, 3197-3203.	11.3	73
131	Mechanistic Aspects of the Formation of Adsorbable Organic Bromine during Chlorination of Bromide-containing Synthetic Waters. Environmental Science & Technology, 2017, 51, 5146-5155.	10.0	71
132	By-products formation during drinking water disinfection: a tool to assess disinfection efficiency?. Water Research, 2001, 35, 2095-2099.	11.3	70
133	Ag-doped carbon aerogels for removing halide ions in water treatment. Water Research, 2007, 41, 1031-1037.	11.3	69
134	Removal of bromide and iodide anions from drinking water by silver-activated carbon aerogels. Journal of Colloid and Interface Science, 2006, 300, 437-441.	9.4	68
135	Inactivation efficiency of Escherichia coli and autochthonous bacteria during ozonation of municipal wastewater effluents quantified with flow cytometry and adenosine tri-phosphate analyses. Water Research, 2016, 101, 617-627.	11.3	68
136	Inactivation of bacillus subtilis spores and formation of bromate during ozonation. Water Research, 2001, 35, 2950-2960.	11.3	67
137	Ozone and chlorine reactions with dissolved organic matter - Assessment of oxidant-reactive moieties by optical measurements and the electron donating capacities. Water Research, 2018, 144, 64-75.	11.3	67
138	DNA degradation by the mixture of copper and catechol is caused by DNA-copper-hydroperoxo complexes, probably DNA-Cu(I)OOH. Environmental and Molecular Mutagenesis, 2000, 36, 5-12.	2.2	66
139	In Situ Formation of Free Chlorine During ClO₂Treatment: Implications on the Formation of Disinfection Byproducts. Environmental Science & Technology, 2018, 52, 13421-13429.	10.0	66
140	Formation of disinfection by-products during ballast water treatment with ozone, chlorine, and peracetic acid: influence of water quality parameters. Environmental Science: Water Research and Technology, 2015, 1, 465-480.	2.4	65
141	Sample Enrichment for Bioanalytical Assessment of Disinfected Drinking Water: Concentrating the Polar, the Volatiles, and the Unknowns. Environmental Science & Technology, 2016, 50, 6495-6505.	10.0	63
142	Combination of Ozone with Activated Carbon as an Alternative to Conventional Advanced Oxidation Processes. Ozone: Science and Engineering, 2006, 28, 237-245.	2.5	62
143	Transformation of 17Î±-Ethinylestradiol during Water Chlorination: Effects of Bromide on Kinetics, Products, and Transformation Pathways. Environmental Science & Technology, 2009, 43, 480-487.	10.0	62
144	Ozonation of Source-Separated Urine for Resource Recovery and Waste Minimization: Process Modeling, Reaction Chemistry, and Operational Considerations. Environmental Science & Technology, 2008, 42, 9329-9337.	10.0	61

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145	Oxidation of Manganese(II) during Chlorination: Role of Bromide. Environmental Science & Technology, 2013, 47, 8716-8723.	10.0	60
146	Chlorination of Phenols Revisited: Unexpected Formation of Î±,Î²-Unsaturated C₄-Dicarbonyl Ring Cleavage Products. Environmental Science & Technology, 2020, 54, 826-834.	10.0	60
147	Metal-doped carbon aerogels as catalysts during ozonation processes in aqueous solutions. Water Research, 2006, 40, 3375-3384.	11.3	58
148	Evaluation of Functional Groups Responsible for Chloroform Formation during Water Chlorination Using Compound Specific Isotope Analysis. Environmental Science & Technology, 2008, 42, 7778-7785.	10.0	58
149	Kinetics and mechanisms of nitrate and ammonium formation during ozonation of dissolved organic nitrogen. Water Research, 2017, 108, 451-461.	11.3	58
150	Formation of N-Nitrosodimethylamine during Chloramination of Secondary and Tertiary Amines: Role of Molecular Oxygen and Radical Intermediates. Environmental Science & Technology, 2017, 51, 280-290.	10.0	58
151	Enhanced transformation of sulfonamide antibiotics by manganese(IV) oxide in the presence of model humic constituents. Water Research, 2019, 153, 200-207.	11.3	57
152	Primary products of the oxygenation of iron(II) at an oxicâ€"anoxic boundary: Nucleation, aggregation, and aging. Journal of Colloid and Interface Science, 1991, 145, 127-139.	9.4	56
153	Photolysis of inorganic chloramines and efficiency of trichloramine abatement by UV treatment ofÂswimming pool water. Water Research, 2014, 56, 280-291.	11.3	56
154	Ozone disinfection of waterborne pathogens and their surrogates: A critical review. Water Research, 2022, 214, 118206.	11.3	55
155	Molecular Mechanism of NDMA Formation from N,N-Dimethylsulfamide During Ozonation: Quantum Chemical Insights into a Bromide-Catalyzed Pathway. Environmental Science & Technology, 2015, 49, 4163-4175.	10.0	53
156	Kinetic and Mechanistic Aspects of the Reactions of Iodide and Hypoiodous Acid with Permanganate: Oxidation and Disproportionation. Environmental Science & Technology, 2016, 50, 4358-4365.	10.0	53
157	Probing the Photosensitizing and Inhibitory Effects of Dissolved Organic Matter by Using N,N-dimethyl-4-cyanoaniline (DMABN). Environmental Science & Technology, 2016, 50, 10997-11007.	10.0	51
158	Micropollutant Oxidation Studied by Quantum Chemical Computations: Methodology and Applications to Thermodynamics, Kinetics, and Reaction Mechanisms. Accounts of Chemical Research, 2019, 52, 605-614.	15.6	50
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