Chii Shang

List of Publications by Year
in descending order

88 papers	7,430 citations	57758 44 h-index	53230 85 g-index
88 all docs	88 docs citations	88 times ranked	4520 citing authors

#	ARTICLE	IF	CITATIONS
1	The Roles of Reactive Species in Micropollutant Degradation in the UV/Free Chlorine System. Environmental Science & Technology, 2014, 48, 1859-1868.	10.0	774
2	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
3	Kinetics and pathways of ibuprofen degradation by the UV/chlorine advanced oxidation process. Water Research, 2016, 90, 301-308.	11.3	351
4	Characterization of algal organic matter and formation of DBPs from chlor(am)ination. Water Research, 2010, 44, 5897-5906.	11.3	327
5	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
6	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
7	Bromate Formation from Bromide Oxidation by the UV/Persulfate Process. Environmental Science & Technology, 2012, 46, 8976-8983.	10.0	256
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	The Multiple Role of Bromide Ion in PPCPs Degradation under UV/Chlorine Treatment. Environmental Science & Technology, 2018, 52, 1806-1816.	10.0	157
12	ATR-FTIR and XPS study on the structure of complexes formed upon the adsorption of simple organic acids on aluminum hydroxide. Journal of Environmental Sciences, 2007, 19, 438-443.	6.1	154
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	A Fe(II)/citrate/UV/PMS process for carbamazepine degradation at a very low Fe(II)/PMS ratio and neutral pH: The mechanisms. Water Research, 2017, 124, 446-453.	11.3	147
15	Role of Humic Acid and Quinone Model Compounds in Bromate Reduction by Zerovalent Iron. Environmental Science & Technology, 2005, 39, 1092-1100.	10.0	143
16	Differentiation and Quantification of Free Chlorine and Inorganic Chloramines in Aqueous Solution by MIMS. Environmental Science & Technology, 1999, 33, 2218-2223.	10.0	133
17	Correlations between organic matter properties and DBP formation during chloramination. Water Research, 2008, 42, 2329-2339.	11.3	132
18	UV/chlorine treatment of carbamazepine: Transformation products and their formation kinetics. Water Research, 2017, 116, 254-265.	11.3	125

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19	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
20	DBP formation in breakpoint chlorination of wastewater. Water Research, 2005, 39, 4755-4767.	11.3	110
21	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
22	Bromate formation in bromide-containing water through the cobalt-mediated activation of peroxymonosulfate. Water Research, 2015, 83, 132-140.	11.3	103
23	Wavelength-dependent chlorine photolysis and subsequent radical production using UV-LEDs as light sources. Water Research, 2018, 142, 452-458.	11.3	98
24	A review on the degradation efficiency, DBP formation, and toxicity variation in the UV/chlorine treatment of micropollutants. Chemical Engineering Journal, 2021, 424, 130053.	12.7	91
25	Recycling and reuse of rusted iron particles containing core-shell Fe-FeOOH for ibuprofen removal: Adsorption and persulfate-based advanced oxidation. Journal of Cleaner Production, 2018, 178, 441-448.	9.3	86
26	ATR-FTIR investigation on the complexation of myo-inositol hexaphosphate with aluminum hydroxide. Journal of Colloid and Interface Science, 2006, 293, 296-302.	9.4	81
27	Surface complexation of condensed phosphate to aluminum hydroxide: An ATR-FTIR spectroscopic investigation. Journal of Colloid and Interface Science, 2005, 289, 319-327.	9.4	79
28	Novel Visible Light-Driven Photocatalytic Chlorine Activation Process for Carbamazepine Degradation in Drinking Water. Environmental Science & Technology, 2020, 54, 11584-11593.	10.0	79
29	Breakpoint Chemistry and Volatile Byproduct Formation Resulting from Chlorination of Model Organic-N Compounds. Environmental Science & Technology, 2000, 34, 1721-1728.	10.0	77
30	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
31	UV Photolysis of Mono- and Dichloramine Using UV-LEDs as Radiation Sources: Photodecay Rates and Radical Concentrations. Environmental Science & Technology, 2020, 54, 8420-8429.	10.0	74
32	Kinetics and mechanisms of pH-dependent degradation of halonitromethanes by UV photolysis. Water Research, 2013, 47, 1257-1266.	11.3	73
33	Bromate formation from the oxidation of bromide in the UV/chlorine process with low pressure and medium pressure UV lamps. Chemosphere, 2017, 183, 582-588.	8.2	72
34	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
35	Comparison of colorimetric and membrane introduction mass spectrometry techniques for chloramine analysis. Water Research, 2007, 41, 3097-3102.	11.3	62
36	Effect of Reductive Property of Activated Carbon on Total Organic Halogen Analysis. Environmental Science & Technology, 2010, 44, 2105-2111.	10.0	62

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37	Bacteriophage MS-2 removal by submerged membrane bioreactor. Water Research, 2005, 39, 4211-4219.	11.3	60
38	Influence of the UV/H₂O₂ Advanced Oxidation Process on Dissolved Organic Matter and the Connection between Elemental Composition and Disinfection Byproduct Formation. Environmental Science & Technology, 2020, 54, 14964-14973.	10.0	60
39	Degradation kinetics and pathways of haloacetonitriles by the UV/persulfate process. Chemical Engineering Journal, 2017, 320, 478-484.	12.7	57
40	Removal of micropollutants in drinking water using UV-LED/chlorine advanced oxidation process followed by activated carbon adsorption. Water Research, 2020, 185, 116297.	11.3	53
41	Formation of haloacetic acids during monochloramination. Water Research, 2004, 38, 2375-2383.	11.3	50
42	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
43	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
44	Enhanced photocatalytic reduction of chromium (VI) by Cu-doped TiO 2 under UV-A irradiation. Separation and Purification Technology, 2018, 190, 53-59.	7.9	48
45	Chlorination of pure bacterial cultures in aqueous solution. Water Research, 2001, 35, 244-254.	11.3	45
46	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
47	E. coli and bacteriophage MS2 disinfection by UV, ozone and the combined UV and ozone processes. Frontiers of Environmental Science and Engineering, 2014, 8, 547-552.	6.0	41
48	A Novel UVA/ClO₂ Advanced Oxidation Process for the Degradation of Micropollutants in Water. Environmental Science & Technology, 2022, 56, 1257-1266.	10.0	40
49	Coupling Light Emitting Diodes with Photocatalyst-Coated Optical Fibers Improves Quantum Yield of Pollutant Oxidation. Environmental Science & Technology, 2017, 51, 13319-13326.	10.0	39
50	Quantification of aqueous cyanogen chloride and cyanogen bromide in environmental samples by MIMS. Water Research, 2005, 39, 1709-1718.	11.3	37
51	What Water Professionals Should Know about Antibiotics and Antibiotic Resistance: An Overview. ACS ES&T Water, 2021, 1, 1334-1351.	4.6	37
52	MS2 Coliphage Inactivation with UV Irradiation and Free Chlorine/Monochloramine. Environmental Engineering Science, 2007, 24, 1321-1332.	1.6	36
53	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
54	Removal of aqueous hydrogen sulfide by granular ferric hydroxideâ€"Kinetics, capacity and reuse. Chemosphere, 2014, 117, 324-329.	8.2	35

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55	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
56	Concentration-dependent chloride effect on radical distribution and micropollutant degradation in the sulfate radical-based AOPs. Journal of Hazardous Materials, 2022, 430, 128450.	12.4	32
57	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
58	Controlling bromate formation in the Co(II)/peroxymonosulfate process by ammonia, chlorine-ammonia and ammonia-chlorine pretreatment strategies. Water Research, 2018, 139, 220-227.	11.3	30
59	Electrospray Ionization-Tandem Mass Spectrometry Method for Differentiating Chlorine Substitution in Disinfection Byproduct Formation. Environmental Science & Technology, 2014, 48, 4877-4884.	10.0	29
60	Evanescent waves modulate energy efficiency of photocatalysis within TiO2 coated optical fibers illuminated using LEDs. Nature Communications, 2021, 12, 4101.	12.8	28
61	Oxidative degradation of N-Nitrosopyrrolidine by the ozone/UV process: Kinetics and pathways. Chemosphere, 2016, 150, 731-739.	8.2	26
62	Kinetics and mechanisms of degradation of chloroacetonitriles by the UV/H2O2 process. Water Research, 2016, 99, 209-215.	11.3	25
63	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
64	Effect of Fe(III) on the bromate reduction by humic substances in aqueous solution. Journal of Environmental Sciences, 2008, 20, 257-261.	6.1	24
65	A novel Fe(II)/citrate/UV/peroxymonosulfate process for micropollutant degradation: Optimization by response surface methodology and effects of water matrices. Chemosphere, 2017, 184, 417-428.	8.2	24
66	The fate of dichloroacetonitrile in UV/Cl₂and UV/H₂O₂processes: implications on potable water reuse. Environmental Science: Water Research and Technology, 2018, 4, 1295-1302.	2.4	23
67	Rapid degradation of dichloroacetonitrile by hydrated electron (eaqâ€“) produced in vacuum ultraviolet photolysis. Chemosphere, 2020, 256, 126994.	8.2	23
68	Influence of pre-ozonation of DOM on micropollutant abatement by UV-based advanced oxidation processes. Journal of Hazardous Materials, 2020, 391, 122201.	12.4	23
69	Visible light-driven g-C3N4 peroxymonosulfate activation process for carbamazepine degradation: Activation mechanism and matrix effects. Chemosphere, 2022, 286, 131906.	8.2	22
70	Degradation Investigation of Selected Taste and Odor Compounds by a UV/Chlorine Advanced Oxidation Process. International Journal of Environmental Research and Public Health, 2018, 15, 284.	2.6	21
71	Microbial iron reduction enhances in-situ control of biogenic hydrogen sulfide by FeOOH granules in sediments of polluted urban waters. Water Research, 2020, 171, 115453.	11.3	21
72	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

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73	Oxidative debromination of 2,2-bis(bromomethyl)-1,3-propanediol by UV/persulfate process and corresponding formation of brominated by-products. Chemosphere, 2019, 228, 735-743.	8.2	19
74	Near-Ultraviolet Light-Driven Photocatalytic Chlorine Activation Process with Novel Chlorine Activation Mechanisms. ACS ES&T Water, 2021, 1, 2067-2075.	4.6	15
75	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
76	Simultaneous removal of hydrogen sulfide, phosphate and emerging organic contaminants, and improvement of sludge dewaterability by oxidant dosing in sulfide-iron-laden sludge. Water Research, 2021, 203, 117557.	11.3	14
77	Removal of aqueous fullerene nC60 from wastewater by alum-enhanced primary treatment. Separation and Purification Technology, 2013, 116, 61-66.	7.9	13
78	Kinetics of cyanogen chloride destruction by chemical reduction methods. Water Research, 2005, 39, 2114-2124.	11.3	12
79	Transformation of adenine and cytosine in chlorination â€" An ESI-tqMS investigation. Chemosphere, 2019, 234, 505-512.	8.2	12
80	New Insights into Micropollutant Abatement in Ammonia-Containing Water by the UV/Breakpoint Chlorination Process. ACS ES&T Water, 2021, 1, 1025-1034.	4.6	10
81	Sequential ClO2-UV/chlorine process for micropollutant removal and disinfection byproduct control. Science of the Total Environment, 2022, 806, 150354.	8.0	9
82	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
83	Degradation of aliphatic halogenated contaminants in water by UVA/Cuâ€"TiO2 and UVA/TiO2 photocatalytic processes: Structure-activity relationship and role of reactive species. Chemosphere, 2020, 260, 127644.	8.2	7
84	Factors Affecting Inactivation Behavior in the Monochloramination Range. Journal of Environmental Engineering, ASCE, 2005, 131, 119-129.	1.4	6
85	A modified method of high molecular weight adsorbable organic chlorine measurement in saline water: Dialysis pretreatment. Science of the Total Environment, 2018, 639, 258-262.	8.0	5
86	Revisiting the protocol for determining submicromolar concentrations of ozone in the water treated by advanced oxidation processes. Chemosphere, 2022, 303, 135117.	8.2	3
87	Effects of operating conditions on disinfection by-product formation, calculated toxicity, and changes in organic matter structures during seawater chlorination. Water Research, 2022, 220, 118631.	11.3	2
88	Laboratory study investigating the regeneration potential of iron particles by and the hydrodynamics of a dam-break generated flow from an infinite reservoir into a channel with an adverse slope. Environmental Fluid Mechanics, 2016, 16, 1043-1064.	1.6	0