Wen-Long Wang

List of Publications by Year
in descending order

68 papers	2,750 citations	201674 27 h-index	189892 50 g-index
70 all docs	70 docs citations	70 times ranked	2431 citing authors

#	Article	IF	Citations
1	Synergistic effect between UV and chlorine (UV/chlorine) on the degradation of carbamazepine: Influence factors and radical species. Water Research, 2016, 98, 190-198.	11.3	331
2	Comparison of UV-LED and low pressure UV for water disinfection: Photoreactivation and dark repair of Escherichia coli. Water Research, 2017, 126, 134-143.	11.3	199
3	Photolysis of Enrofloxacin in aqueous systems under simulated sunlight irradiation: Kinetics, mechanism and toxicity of photolysis products. Chemosphere, 2011, 85, 892-897.	8.2	138
4	Degradation of natural organic matter by UV/chlorine oxidation: Molecular decomposition, formation of oxidation byproducts and cytotoxicity. Water Research, 2017, 124, 251-258.	11.3	137
5	Potential risks from UV/H2O2 oxidation and UV photocatalysis: A review of toxic, assimilable, and sensory-unpleasant transformation products. Water Research, 2018, 141, 109-125.	11.3	132
6	Light-source-dependent role of nitrate and humic acid in tetracycline photolysis: Kinetics and mechanism. Chemosphere, 2013, 92, 1423-1429.	8.2	131
7	UV/chlorine as an advanced oxidation process for the degradation of benzalkonium chloride: Synergistic effect, transformation products and toxicity evaluation. Water Research, 2017, 114, 246-253.	11.3	112
8	Degradation of polyvinyl alcohol (PVA) by UV/chlorine oxidation: Radical roles, influencing factors, and degradation pathway. Water Research, 2017, 124, 381-387.	11.3	107
9	Photocatalytic degradation kinetics and mechanism of pentachlorophenol based on Superoxide radicals. Journal of Environmental Sciences, 2011, 23, 1911-1918.	6.1	88
10	Light-emitting diodes as an emerging UV source for UV/chlorine oxidation: Carbamazepine degradation and toxicity changes. Chemical Engineering Journal, 2017, 310, 148-156.	12.7	87
11	Advanced treatment of bio-treated dyeing and finishing wastewater using ozone-biological activated carbon: A study on the synergistic effects. Chemical Engineering Journal, 2019, 359, 168-175.	12.7	53
12	High-valent iron-oxo species mediated cyclic oxidation through single-atom Fe-N6 sites with high peroxymonosulfate utilization rate. Applied Catalysis B: Environmental, 2022, 305, 121049.	20.2	48
13	Health risk assessment of phthalate esters (PAEs) in drinking water sources of China. Environmental Science and Pollution Research, 2015, 22, 3620-3630.	5.3	46
14	Elimination of chlorine-refractory carbamazepine by breakpoint chlorination: Reactive species and oxidation byproducts. Water Research, 2018, 129, 115-122.	11.3	43
15	2-Phosphonobutane-1,2,4-tricarboxylic acid (PBTCA) degradation by ozonation: Kinetics, phosphorus transformation, anti-precipitation property changes and phosphorus removal. Water Research, 2019, 148, 334-343.	11.3	43
16	Comparison of carbonized and graphitized carbon fiber electrodes under flow-through electrode system (FES) for high-efficiency bacterial inactivation. Water Research, 2020, 168, 115150.	11.3	40
17	Degradation of dodecyl dimethyl benzyl ammonium chloride (DDBAC) as a non-oxidizing biocide in reverse osmosis system using UV/persulfate: Kinetics, degradation pathways, and toxicity evaluation. Chemical Engineering Journal, 2018, 352, 283-292.	12.7	39
18	Enhanced attached growth of microalgae Scenedesmus. LX1 through ambient bacterial pre-coating of cotton fiber carriers. Bioresource Technology, 2016, 218, 643-649.	9.6	38

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19	Characterizing the molecular weight distribution of dissolved organic matter by measuring the contents of electron-donating moieties, UV absorbance, and fluorescence intensity. Environment International, 2020, 137, 105570.	10.0	38
20	The promotions on radical formation and micropollutant degradation by the synergies between ozone and chemical reagents (synergistic ozonation): A review. Journal of Hazardous Materials, 2021, 418, 126327.	12.4	38
21	Elimination of disinfection byproduct formation potential in reclaimed water during solar light irradiation. Water Research, 2016, 95, 260-267.	11.3	36
22	A study of synergistic oxidation between ozone and chlorine on benzalkonium chloride degradation: Reactive species and degradation pathway. Chemical Engineering Journal, 2020, 382, 122856.	12.7	35
23	Non-volatile disinfection byproducts are far more toxic to mammalian cells than volatile byproducts. Water Research, 2020, 183, 116080.	11.3	35
24	UV/chlorine oxidation of the phosphonate antiscalant 1-Hydroxyethane-1, 1-diphosphonic acid (HEDP) used for reverse osmosis processes: Organic phosphorus removal and scale inhibition properties changes. Journal of Environmental Management, 2019, 237, 180-186.	7.8	34
25	Low-voltage alternating current powered polydopamine-protected copper phosphide nanowire for electroporation-disinfection in water. Journal of Materials Chemistry A, 2019, 7, 7347-7354.	10.3	33
26	Degradation of methylisothiazolinone biocide using a carbon fiber felt-based flow-through electrode system (FES) via anodic oxidation. Chemical Engineering Journal, 2020, 384, 123239.	12.7	33
27	Enhancement effect among a UV, persulfate, and copper (UV/PS/Cu2+) system on the degradation of nonoxidizing biocide: The kinetics, radical species, and degradation pathway. Chemical Engineering Journal, 2020, 382, 122312.	12.7	32
28	Combination of catalytic ozonation by regenerated granular activated carbon (rGAC) and biological activated carbon in the advanced treatment of textile wastewater for reclamation. Chemosphere, 2019, 231, 369-377.	8.2	30
29	The application of UV/PS oxidation for removal of a quaternary ammonium compound of dodecyl trimethyl ammonium chloride (DTAC): The kinetics and mechanism. Science of the Total Environment, 2019, 655, 1261-1269.	8.0	28
30	Matrix-enhanced adsorption removal of trace BPA by controlling the interlayer hydrophobic environment of montmorillonite. Applied Clay Science, 2015, 104, 81-87.	5.2	26
31	Photocatalytic degradation of the antiviral drug Tamiflu by UV-A/TiO2: Kinetics and mechanisms. Chemosphere, 2015, 131, 41-47.	8.2	26
32	Ammonia-Mediated Bromate Inhibition during Ozonation Promotes the Toxicity Due to Organic Byproduct Transformation. Environmental Science & Technology, 2020, 54, 8926-8937.	10.0	26
33	Comparison of UV/H2O2 and UV/PS processes for the treatment of reverse osmosis concentrate from municipal wastewater reclamation. Chemical Engineering Journal, 2020, 388, 124260.	12.7	25
34	Removal of fluorescence and ultraviolet absorbance of dissolved organic matter in reclaimed water by solar light. Journal of Environmental Sciences, 2016, 43, 118-127.	6.1	24
35	Removal of C.I. Reactive Red 2 by low pressure UV/chlorine advanced oxidation. Journal of Environmental Sciences, 2016, 41, 227-234.	6.1	24
36	Toxicity of Ozonated Wastewater to HepG2 Cells: Taking Full Account of Nonvolatile, Volatile, and Inorganic Byproducts. Environmental Science & Technology, 2021, 55, 10597-10607.	10.0	24

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37	Adsorption removal of antiviral drug oseltamivir and its metabolite oseltamivir carboxylate by carbon nanotubes: Effects of carbon nanotube properties and media. Journal of Environmental Management, 2015, 162, 326-333.	7.8	23
38	Chlorinated effluent organic matter causes higher toxicity than chlorinated natural organic matter by inducing more intracellular reactive oxygen species. Science of the Total Environment, 2020, 701, 134881.	8.0	23
39	Graphene oxide enhanced ozonation of 5-chloro-2-methyl-4-isothiazolin-3-one: Kinetics, degradation pathway, and toxicity. Journal of Hazardous Materials, 2020, 394, 122563.	12.4	23
40	Degradation of atrazine (ATZ) by ammonia/chlorine synergistic oxidation process. Chemical Engineering Journal, 2021, 415, 128841.	12.7	22
41	Comprehensive GCÃ—GC-qMS with a mass-to-charge ratio difference extraction method to identify new brominated byproducts during ozonation and their toxicity assessment. Journal of Hazardous Materials, 2021, 403, 124103.	12.4	18
42	Reduction of cytotoxicity and DNA double-strand break effects of wastewater by ferrate(VI): Roles of oxidation and coagulation. Water Research, 2021, 205, 117667.	11.3	18
43	Promotive effects of vacuum-UV/UV (185/254Ânm) light on elimination of recalcitrant trace organic contaminants by UV-AOPs during wastewater treatment and reclamation: A review. Science of the Total Environment, 2022, 818, 151776.	8.0	18
44	Synergistic effects of ozone/peroxymonosulfate for isothiazolinone biocides degradation: Kinetics, synergistic performance and influencing factors. Environmental Pollution, 2022, 294, 118626.	7.5	18
45	Enhanced decomposition of 1,4-dioxane in water by ozonation under alkaline condition. Water Science and Technology, 2014, 70, 1934-1940.	2.5	16
46	Elimination of isothiazolinone biocides in reverse osmosis concentrate by ozonation: A two-phase kinetics and a non-linear surrogate model. Journal of Hazardous Materials, 2020, 389, 121898.	12.4	16
47	Applications of UV/H2O2, UV/persulfate, and UV/persulfate/Cu2+ for the elimination of reverse osmosis concentrate generated from municipal wastewater reclamation treatment plant: Toxicity, transformation products, and disinfection byproducts. Science of the Total Environment, 2021, 762, 144161.	8.0	16
48	Evolution of low molecular weight organic compounds during ultrapure water production process: A pilot-scale study. Science of the Total Environment, 2022, 830, 154713.	8.0	16
49	Surrogates for the removal by ozonation of the cytotoxicity and DNA double-strand break effects of wastewater on mammalian cells. Environment International, 2020, 135, 105369.	10.0	15
50	Enhancing disinfection performance of the carbon fiber-based flow-through electrode system (FES) by alternating pulse current (APC) with low-frequency square wave. Chemical Engineering Journal, 2021, 410, 128399.	12.7	14
51	Understanding the influence of pre-ozonation on the formation of disinfection byproducts and cytotoxicity during post-chlorination of natural organic matter: UV absorbance and electron-donating-moiety of molecular weight fractions. Environment International, 2021, 157, 106793.	10.0	14
52	Elimination of amino trimethylene phosphonic acid (ATMP) antiscalant in reverse osmosis concentrate using ozone: Anti-precipitation property changes and phosphorus removal. Chemosphere, 2022, 291, 133027.	8.2	14
53	Mechanism and kinetics of methylisothiazolinone removal by cultivation of Scenedesmus sp. LX1. Journal of Hazardous Materials, 2020, 386, 121959.	12.4	12
54	Promoted ozonation for the decomposition of 1,4-dioxane by activated carbon. Water Science and Technology: Water Supply, 2017, 17, 613-620.	2.1	11

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55	Ammonia/chlorine synergistic oxidation process applied to the removal of N, N-diethyl-3-toluamide. Chemical Engineering Journal, 2020, 380, 122409.	12.7	11
56	Degradation of non-oxidizing biocide benzalkonium chloride and bulk dissolved organic matter in reverse osmosis concentrate by UV/chlorine oxidation. Journal of Hazardous Materials, 2020, 396, 122669.	12.4	11
57	Self-sensitized photodegradation of benzisothiazolinone by low-pressure UV-C irradiation: Kinetics, mechanisms, and the effect of media. Separation and Purification Technology, 2017, 189, 419-424.	7.9	8
58	Study on synergistic effect of ozone and monochloramine on the degradation of chloromethylisothiazolinone biocide. Science of the Total Environment, 2021, 754, 141598.	8.0	8
59	Removal of methylisothiazolinone biocide from wastewater by VUV/UV advanced oxidation process: Kinetics, mechanisms and toxicity. Journal of Environmental Management, 2022, 315, 115107.	7.8	8
60	Ozonation of phosphonate antiscalant 1-hydroxyethane-1,1-diphosphonic acid in reverse osmosis concentrate: Kinetics, phosphorus transformation, and anti-precipitation property changes. Separation and Purification Technology, 2022, 297, 121385.	7.9	7
61	Comparison of disinfection-residual-bacteria (DRB) after seven different kinds of disinfection: Biofilm formation, membrane fouling and mechanisms. Science of the Total Environment, 2022, 844, 157079.	8.0	7
62	Application of quantum chemical descriptors into quantitative structure-property relationship models for prediction of the photolysis half-life of PCBs in water. Frontiers of Environmental Science and Engineering in China, 2011, 5, 505-511.	0.8	6
63	Characteristics of the formation and toxicity index of nine newly identified brominated disinfection byproducts during wastewater ozonation. Science of the Total Environment, 2022, 824, 153924.	8.0	6
64	Adsorption of Isothiazolone Biocides in Textile Reverse Osmosis Concentrate by Powdered Activated Carbon. Water (Switzerland), 2018, 10, 532.	2.7	4
65	Advanced oxidation of dodecyl dimethyl benzyl ammonium chloride by VUV/UV/chlorine: Synergistic effect, radicals, and degradation pathway. Separation and Purification Technology, 2022, 292, 121012.	7.9	4
66	Degradation of chloromethylisothiazolinone antimicrobial by Vacuum-Ultraviolet/Ultraviolet irradiation: Reactive species, degradation pathway and toxicity evaluation. Chemosphere, 2022, 302, 134821.	8.2	1
67	Essential role of sunlight irradiation in aqueous micropollutant transformations: influence of the water matrix and changes in toxicities. Environmental Science: Water Research and Technology, 2022, 8, 1619-1638.	2.4	1
68	Reply to Comment on â€œPhotolysis of Enrofloxacin in aqueous systems under simulated sunlight irradiation: Kinetics, mechanism and toxicity of photolysis productsâ€•[Li et al., Chemosphere 85 (2011) 892â€“897]. Chemosphere, 2013, 92, 1581-1584.	8.2	0