

Tiecheng Wang

List of Publications by Year in descending order

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71
papers

3,540
citations

117625

34
h-index

144013

57
g-index

71
all docs

71
docs citations

71
times ranked

2331
citing authors

#	ARTICLE	IF	CITATIONS
1	Long-term phototransformation of microplastics under simulated sunlight irradiation in aquatic environments: Roles of reactive oxygen species. <i>Water Research</i> , 2020, 173, 115564.	11.3	296
2	Formation of Environmentally Persistent Free Radicals on Microplastics under Light Irradiation. <i>Environmental Science & Technology</i> , 2019, 53, 8177-8186.	10.0	295
3	Evaluation of the potentials of humic acid removal in water by gas phase surface discharge plasma. <i>Water Research</i> , 2016, 89, 28-38.	11.3	139
4	Novel Cu(II)-EDTA Decomplexation by Discharge Plasma Oxidation and Coupled Cu Removal by Alkaline Precipitation: Underneath Mechanisms. <i>Environmental Science & Technology</i> , 2018, 52, 7884-7891.	10.0	137
5	Enhancement of Germination and Seedling Growth of Wheat Seed Using Dielectric Barrier Discharge Plasma with Various Gas Sources. <i>Plasma Chemistry and Plasma Processing</i> , 2017, 37, 1105-1119.	2.4	117
6	Alleviation of adverse effects of drought stress on wheat seed germination using atmospheric dielectric barrier discharge plasma treatment. <i>Scientific Reports</i> , 2017, 7, 16680.	3.3	106
7	Evaluation of the potential of dimethyl phthalate degradation in aqueous using sodium percarbonate activated by discharge plasma. <i>Chemical Engineering Journal</i> , 2018, 346, 65-76.	12.7	98
8	A green strategy for simultaneous Cu(II)-EDTA decomplexation and Cu precipitation from water by bicarbonate-activated hydrogen peroxide/chemical precipitation. <i>Chemical Engineering Journal</i> , 2019, 370, 1298-1309.	12.7	93
9	Decomplexation of EDTA-chelated copper and removal of copper ions by non-thermal plasma oxidation/alkaline precipitation. <i>Chemical Engineering Journal</i> , 2019, 362, 487-496.	12.7	93
10	Charge mediated interaction of polystyrene nanoplastic (PSNP) with minerals in aqueous phase. <i>Water Research</i> , 2020, 178, 115861.	11.3	89
11	Probing the aging processes and mechanisms of microplastic under simulated multiple actions generated by discharge plasma. <i>Journal of Hazardous Materials</i> , 2020, 398, 122956.	12.4	85
12	Highly efficient photocatalytic degradation toward perfluorooctanoic acid by bromine doped BiOI with high exposure of (001) facet. <i>Applied Catalysis B: Environmental</i> , 2020, 268, 118442.	20.2	83
13	Efficient degradation of antibiotics by non-thermal discharge plasma: Highlight the impacts of molecular structures and degradation pathways. <i>Chemical Engineering Journal</i> , 2020, 395, 125091.	12.7	82
14	The photodegradation processes and mechanisms of polyvinyl chloride and polyethylene terephthalate microplastic in aquatic environments: Important role of clay minerals. <i>Water Research</i> , 2022, 208, 117879.	11.3	82
15	Remediation of organophosphorus pesticide polluted soil using persulfate oxidation activated by microwave. <i>Journal of Hazardous Materials</i> , 2021, 401, 123361.	12.4	74
16	High frequency discharge plasma induced plasticizer elimination in water: Removal performance and residual toxicity. <i>Journal of Hazardous Materials</i> , 2020, 383, 121185.	12.4	71
17	Enhanced cytotoxicity of photoaged phenol-formaldehyde resins microplastics: Combined effects of environmentally persistent free radicals, reactive oxygen species, and conjugated carbonyls. <i>Environment International</i> , 2020, 145, 106137.	10.0	71
18	Endogenously activated persulfate by non-thermal plasma for Cu(II)-EDTA decomplexation: Synergistic effect and mechanisms. <i>Chemical Engineering Journal</i> , 2021, 406, 126774.	12.7	67

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19	Evaluation of the potential of p-nitrophenol degradation in dredged sediment by pulsed discharge plasma. <i>Water Research</i> , 2015, 84, 18-24.	11.3	65
20	Evaluation of activated carbon fiber supported nanoscale zero-valent iron for chromium (VI) removal from groundwater in a permeable reactive column. <i>Journal of Environmental Management</i> , 2017, 201, 378-387.	7.8	58
21	Non-thermal plasma oxidation of Cu(II)-EDTA and simultaneous Cu(II) elimination by chemical precipitation. <i>Journal of Environmental Management</i> , 2019, 248, 109237.	7.8	57
22	Review on remediation of organic-contaminated soil by discharge plasma: Plasma types, impact factors, plasma-assisted catalysis, and indexes for remediation. <i>Chemical Engineering Journal</i> , 2022, 436, 135239.	12.7	56
23	Activation of persulfate and removal of ethyl-parathion from soil: Effect of microwave irradiation. <i>Chemosphere</i> , 2020, 253, 126679.	8.2	55
24	Insights into the underlying mechanisms for integrated inactivation of <i>A. spiroides</i> and depression of disinfection byproducts by plasma oxidation. <i>Water Research</i> , 2021, 196, 117027.	11.3	55
25	Glyphosate contaminated soil remediation by atmospheric pressure dielectric barrier discharge plasma and its residual toxicity evaluation. <i>Journal of Hazardous Materials</i> , 2016, 320, 539-546.	12.4	54
26	Organic acids enhanced decoloration of azo dye in gas phase surface discharge plasma system. <i>Journal of Hazardous Materials</i> , 2016, 302, 65-71.	12.4	54
27	Inorganic anions influenced the photoaging kinetics and mechanism of polystyrene microplastic under the simulated sunlight: Role of reactive radical species. <i>Water Research</i> , 2022, 216, 118294.	11.3	52
28	Pyrene contaminated soil remediation using microwave/magnetite activated persulfate oxidation. <i>Chemosphere</i> , 2022, 286, 131787.	8.2	48
29	Mechanisms for Highly Efficient Mineralization of Bisphenol A by Heterostructured Ag ₂ WO ₄ /Ag ₃ PO ₄ under Simulated Solar Light. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4177-4185.	6.7	42
30	Humic acid removal from micro-polluted source water in the presence of inorganic salts in a gas-phase surface discharge plasma system. <i>Separation and Purification Technology</i> , 2017, 187, 334-342.	7.9	40
31	Excess sludge disintegration by discharge plasma oxidation: Efficiency and underlying mechanisms. <i>Science of the Total Environment</i> , 2021, 774, 145127.	8.0	39
32	Highly Efficient Degradation toward Tylosin in the Aqueous Solution by Carbon Spheres/g-C ₃ N ₄ Composites under Simulated Sunlight Irradiation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 12776-12786.	6.7	38
33	Dimethyl phthalate elimination from micro-polluted source water by surface discharge plasma: Performance, active species roles and mechanisms. <i>Journal of Hazardous Materials</i> , 2018, 357, 279-288.	12.4	36
34	Insights into Uptake, Translocation, and Transformation Mechanisms of Perfluorophosphinates and Perfluorophosphonates in Wheat (<i>Triticum aestivum</i> L.). <i>Environmental Science & Technology</i> , 2020, 54, 276-285.	10.0	35
35	First report on the sources, vertical distribution and human health risks of legacy and novel per- and polyfluoroalkyl substances in groundwater from the Loess Plateau, China. <i>Journal of Hazardous Materials</i> , 2021, 404, 124134.	12.4	34
36	Enhanced degradation of azo dye in wastewater by pulsed discharge plasma coupled with MWCNTs-TiO ₂ /Al ₂ O ₃ composite photocatalyst. <i>Journal of Environmental Management</i> , 2016, 172, 186-192.	7.8	33

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37	Highly effective photocatalytic decomplexation of Cu-EDTA by MIL-53(Fe): Highlight the important roles of Fe. <i>Chemical Engineering Journal</i> , 2021, 424, 130515.	12.7	33
38	Inhibited conjugative transfer of antibiotic resistance genes in antibiotic resistant bacteria by surface plasma. <i>Water Research</i> , 2021, 204, 117630.	11.3	31
39	High-efficient decomplexation of Cu-EDTA and Cu removal by high-frequency non-thermal plasma oxidation/alkaline precipitation. <i>Separation and Purification Technology</i> , 2021, 257, 117885.	7.9	30
40	Effective removal of the heavy metal-organic complex Cu-EDTA from water by catalytic persulfate oxidation: Performance and mechanisms. <i>Journal of Cleaner Production</i> , 2021, 314, 128119.	9.3	28
41	High-efficient removal of tetrabromobisphenol A in aqueous by dielectric barrier discharge: Performance and degradation pathways. <i>Separation and Purification Technology</i> , 2020, 240, 116615.	7.9	26
42	Purification of dye wastewater using bicarbonate activated hydrogen peroxide: Reaction process and mechanisms. <i>Separation and Purification Technology</i> , 2020, 232, 115974.	7.9	25
43	Greatly enhanced oxidative activity of γ -MnO ₂ to degrade organic pollutants driven by dominantly exposed {111} facets. <i>Journal of Hazardous Materials</i> , 2021, 413, 125285.	12.4	25
44	The First Observation of the Formation of Persistent Aminoxyl Radicals and Reactive Nitrogen Species on Photoirradiated Nitrogen-Containing Microplastics. <i>Environmental Science & Technology</i> , 2022, 56, 779-789.	10.0	24
45	Plasma induced efficient removal of antibiotic-resistant <i>Escherichia coli</i> and antibiotic resistance genes, and inhibition of gene transfer by conjugation. <i>Journal of Hazardous Materials</i> , 2021, 419, 126465.	12.4	23
46	Photodegradation of microplastics mediated by different types of soil: The effect of soil components. <i>Science of the Total Environment</i> , 2022, 802, 149840.	8.0	23
47	Self-catalytic Fenton-like reactions stimulated synergistic Cu-EDTA decomplexation and Cu recovery by glow plasma electrolysis. <i>Chemical Engineering Journal</i> , 2022, 433, 134601.	12.7	23
48	Surface plasma induced elimination of antibiotic-resistant <i>Escherichia coli</i> and resistance genes: Antibiotic resistance, horizontal gene transfer, and mechanisms. <i>Separation and Purification Technology</i> , 2021, 275, 119185.	7.9	22
49	Performance Evaluation of Hybrid Gas-Liquid Pulse Discharge Plasma-Induced Degradation of Polyvinyl Alcohol-Containing Wastewater. <i>Plasma Chemistry and Plasma Processing</i> , 2014, 34, 1115-1127.	2.4	20
50	Environmental free radicals efficiently inhibit the conjugative transfer of antibiotic resistance by altering cellular metabolism and plasmid transfer. <i>Water Research</i> , 2022, 209, 117946.	11.3	20
51	Insights into the highly efficient detoxification of the biotoxin patulin in water by discharge plasma oxidation. <i>Chemical Engineering Journal</i> , 2021, 411, 128432.	12.7	19
52	Decomplexation of Cu(II)-natural organic matter complex by non-thermal plasma oxidation: Process and mechanisms. <i>Journal of Hazardous Materials</i> , 2020, 389, 121828.	12.4	18
53	Bioavailability and Bioaccumulation of 6:2 Fluorotelomer Sulfonate, 6:2 Chlorinated Polyfluoroalkyl Ether Sulfonates, and Perfluorophosphinates in a Soil-Plant System. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 4325-4334.	5.2	18
54	Theoretical and experimental insights into electron-induced efficient defluorination of perfluorooctanoic acid and perfluorooctane sulfonate by mesoporous plasma. <i>Chemical Engineering Journal</i> , 2022, 430, 132922.	12.7	17

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55	Three-dimensional spatial distribution of legacy and novel poly/perfluoroalkyl substances in the Tibetan Plateau soil: Implications for transport and sources. <i>Environment International</i> , 2022, 158, 107007.	10.0	17
56	Persistent free radicals in humin under redox conditions and their impact in transforming polycyclic aromatic hydrocarbons. <i>Frontiers of Environmental Science and Engineering</i> , 2020, 14, 1.	6.0	16
57	Simultaneous Cu-EDTA oxidation decomplexation and Cr(VI) reduction in water by persulfate/formate system: Reaction process and mechanisms. <i>Chemical Engineering Journal</i> , 2022, 427, 131584.	12.7	16
58	Theoretical and experimental insights into the mechanisms of C6/C6 PFPIA degradation by dielectric barrier discharge plasma. <i>Journal of Hazardous Materials</i> , 2022, 424, 127522.	12.4	16
59	Underlying mechanisms of promoted formation of haloacetic acids disinfection byproducts after indometacin degradation by non-thermal discharge plasma. <i>Water Research</i> , 2022, 220, 118701.	11.3	16
60	FT-ICR/MS deciphers formation of unknown macromolecular disinfection byproducts from algal organic matters after plasma oxidation. <i>Water Research</i> , 2022, 218, 118492.	11.3	15
61	High-efficient decomplexation of Cu-HA by discharge plasma: Process and mechanisms. <i>Separation and Purification Technology</i> , 2020, 248, 117137.	7.9	12
62	Insights into the impacts of dissolved organic matter of different origins on bioaccumulation and translocation of per- and polyfluoroalkyl substances (PFASs) in wheat. <i>Environmental Pollution</i> , 2022, 293, 118604.	7.5	12
63	Oxygen Limitation Accelerates Regeneration of Active Sites on a MnO ₂ Surface: Promoting Transformation of Organic Matter and Carbon Preservation. <i>Environmental Science & Technology</i> , 2022, 56, 9806-9815.	10.0	11
64	Photocatalytic Degradation of Acid Orange II Using Activated Carbon Fiber-Supported Cobalt Phthalocyanine Coupled with Hydrogen Peroxide. <i>Water, Air, and Soil Pollution</i> , 2016, 227, 1.	2.4	9
65	Low-molecular-weight organic acids impede the degradation of naphthol in iron oxides/persulfate systems: Implications for research experiments in pure conditions. <i>Chemosphere</i> , 2019, 225, 1-8.	8.2	8
66	Potential impact of active substances in non-thermal discharge plasma process on microbial community structures and enzymatic activities in uncontaminated soil. <i>Journal of Hazardous Materials</i> , 2020, 393, 122489.	12.4	8
67	Simultaneous production of low molecular weight chitosan and reducing sugar via high molecular chitosan depolymerization by surface discharge plasma. <i>Journal of Cleaner Production</i> , 2021, 316, 128295.	9.3	7
68	Simultaneous removal of antibiotic-resistant bacteria and its resistance genes in water by plasma oxidation: Highlights the effects of inorganic ions. <i>Separation and Purification Technology</i> , 2021, 278, 119672.	7.9	6
69	Enhanced removal of acid orange II from aqueous solution by V and N co-doping TiO ₂ -MWCNTs/Al ₂ O ₃ composite photocatalyst induced by pulsed discharge plasma. <i>Water Science and Technology</i> , 2021, 83, 257-270.	2.5	6
70	Chlorinated disinfection by-product formation during DOM removal by discharge plasma: Insights into DOC structure alterations. <i>Separation and Purification Technology</i> , 2022, 294, 121183.	7.9	6
71	Insights into DNA Structures during Antibiotic-Resistance Gene Elimination by Mesoporous Plasma. <i>ACS ES&T Water</i> , 2022, 2, 128-136.	4.6	5