Dong-Mei Zhou

List of Publications by Year
in descending order

118 papers	8,350 citations	66234 42 h-index	46693 89 g-index
118 all docs	118 docs citations	118 times ranked	6119 citing authors

#	Article	IF	Citations
1	Manipulation of Persistent Free Radicals in Biochar To Activate Persulfate for Contaminant Degradation. Environmental Science & Technology, 2015, 49, 5645-5653.	4.6	684
2	Activation of Persulfate by Quinones: Free Radical Reactions and Implication for the Degradation of PCBs. Environmental Science & Technology, 2013, 47, 4605-4611.	4.6	673
3	Key Role of Persistent Free Radicals in Hydrogen Peroxide Activation by Biochar: Implications to Organic Contaminant Degradation. Environmental Science & Technology, 2014, 48, 1902-1910.	4.6	589
4	Superoxide radical driving the activation of persulfate by magnetite nanoparticles: Implications for the degradation of PCBs. Applied Catalysis B: Environmental, 2013, 129, 325-332.	10.8	420
5	Sulfate radical-based degradation of polychlorinated biphenyls: Effects of chloride ion and reaction kinetics. Journal of Hazardous Materials, 2012, 227-228, 394-401.	6.5	356
6	Mechanistic understanding of polychlorinated biphenyls degradation by peroxymonosulfate activated with CuFe2O4 nanoparticles: Key role of superoxide radicals. Chemical Engineering Journal, 2018, 348, 526-534.	6.6	291
7	Mechanism of hydroxyl radical generation from biochar suspensions: Implications to diethyl phthalate degradation. Bioresource Technology, 2015, 176, 210-217.	4.8	284
8	POLSOIL: research on soil pollution in China. Environmental Science and Pollution Research, 2018, 25, 1-3.	2.7	260
9	New insight into the mechanism of peroxymonosulfate activation by sulfur-containing minerals: Role of sulfur conversion in sulfate radical generation. Water Research, 2018, 142, 208-216.	5.3	254
10	Photogeneration of reactive oxygen species from biochar suspension for diethyl phthalate degradation. Applied Catalysis B: Environmental, 2017, 214, 34-45.	10.8	247
11	Efficient transformation of DDTs with Persulfate Activation by Zero-valent Iron Nanoparticles: A Mechanistic Study. Journal of Hazardous Materials, 2016, 316, 232-241.	6.5	181
12	Activation of persulfate with vanadium species for PCBs degradation: A mechanistic study. Applied Catalysis B: Environmental, 2017, 202, 1-11.	10.8	175
13	Transformation of polychlorinated biphenyls by persulfate at ambient temperature. Chemosphere, 2013, 90, 1573-1580.	4.2	140
14	Zero-valent iron activated persulfate remediation of polycyclic aromatic hydrocarbon-contaminated soils: An in situ pilot-scale study. Chemical Engineering Journal, 2019, 355, 65-75.	6.6	139
15	Superoxide mediated production of hydroxyl radicals by magnetite nanoparticles: Demonstration in the degradation of 2-chlorobiphenyl. Journal of Hazardous Materials, 2013, 250-251, 68-75.	6.5	126
16	Reductive Hexachloroethane Degradation by S₂O₈^{â€¢â€“} with Thermal Activation of Persulfate under Anaerobic Conditions. Environmental Science & Technology, 2018, 52, 8548-8557.	4.6	117
17	Redox-Active Oxygen-Containing Functional Groups in Activated Carbon Facilitate Microbial Reduction of Ferrihydrite. Environmental Science & Technology, 2017, 51, 9709-9717.	4.6	113
18	Mechanisms of Interaction between Persulfate and Soil Constituents: Activation, Free Radical Formation, Conversion, and Identification. Environmental Science & Technology, 2018, 52, 14352-14361.	4.6	109

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19	Effects of exposure pathways on the accumulation and phytotoxicity of silver nanoparticles in soybean and rice. Nanotoxicology, 2017, 11, 699-709.	1.6	107
20	Efficient activation of persulfate decomposition by Cu2FeSnS4 nanomaterial for bisphenol A degradation: Kinetics, performance and mechanism studies. Applied Catalysis B: Environmental, 2019, 253, 278-285.	10.8	107
21	Synergy between Iron and Selenide on FeSe₂(111) Surface Driving Peroxymonosulfate Activation for Efficient Degradation of Pollutants. Environmental Science & Technology, 2020, 54, 15489-15498.	4.6	90
22	New Insights into the Mechanism of the Catalytic Decomposition of Hydrogen Peroxide by Activated Carbon: Implications for Degradation of Diethyl Phthalate. Industrial & Engineering Chemistry Research, 2014, 53, 19925-19933.	1.8	86
23	Biofilms and extracellular polymeric substances mediate the transport of graphene oxide nanoparticles in saturated porous media. Journal of Hazardous Materials, 2015, 300, 467-474.	6.5	83
24	Roxarsone binding to soil-derived dissolved organic matter: Insights from multi-spectroscopic techniques. Chemosphere, 2016, 155, 225-233.	4.2	83
25	Effect of iron oxide reductive dissolution on the transformation and immobilization of arsenic in soils: New insights from X-ray photoelectron and X-ray absorption spectroscopy. Journal of Hazardous Materials, 2014, 279, 212-219.	6.5	77
26	Effect of Organic Matter on Sorption of Zn on Soil: Elucidation by Wien Effect Measurements and EXAFS Spectroscopy. Environmental Science & Technology, 2016, 50, 2931-2937.	4.6	77
27	Adsorption of diethyl phthalate ester to clay minerals. Chemosphere, 2015, 119, 690-696.	4.2	75
28	Efficient transformation of DDT by peroxymonosulfate activated with cobalt in aqueous systems: Kinetics, products, and reactive species identification. Chemosphere, 2016, 148, 68-76.	4.2	71
29	A Mechanistic Understanding of Hydrogen Peroxide Decomposition by Vanadium Minerals for Diethyl Phthalate Degradation. Environmental Science & Technology, 2018, 52, 2178-2185.	4.6	69
30	Homogenous activation of persulfate by different species of vanadium ions for PCBs degradation. Chemical Engineering Journal, 2017, 323, 84-95.	6.6	61
31	Significant contribution of metastable particulate organic matter to natural formation of silver nanoparticles in soils. Nature Communications, 2019, 10, 3775.	5.8	57
32	The degradation of diethyl phthalate by reduced smectite clays and dissolved oxygen. Chemical Engineering Journal, 2019, 355, 247-254.	6.6	56
33	The transformation and fate of silver nanoparticles in paddy soil: effects of soil organic matter and redox conditions. Environmental Science: Nano, 2017, 4, 919-928.	2.2	55
34	Environmental and human health risks from metal exposures nearby a Pb-Zn-Ag mine, China. Science of the Total Environment, 2020, 698, 134326.	3.9	55
35	A Meta-Analysis on Phenotypic Variation in Cadmium Accumulation of Rice and Wheat: Implications for Food Cadmium Risk Control. Pedosphere, 2019, 29, 545-553.	2.1	51
36	Comparison of Persulfate Activation and Fenton Reaction in Remediating an Organophosphorus Pesticides-Polluted Soil. Pedosphere, 2017, 27, 465-474.	2.1	48

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37	Surface-bound radical control rapid organic contaminant degradation through peroxymonosulfate activation by reduced Fe-bearing smectite clays. Journal of Hazardous Materials, 2020, 389, 121819.	6.5	48
38	Active Iron Phases Regulate the Abiotic Transformation of Organic Carbon during Redox Fluctuation Cycles of Paddy Soil. Environmental Science & Technology, 2021, 55, 14281-14293.	4.6	48
39	Oxidation mechanism of As(III) in the presence of polyphenols: New insights into the reactive oxygen species. Chemical Engineering Journal, 2016, 285, 69-76.	6.6	47
40	Genotypic variation and mechanism in uptake and translocation of perfluorooctanoic acid (PFOA) in lettuce (Lactuca sativa L.) cultivars grown in PFOA-polluted soils. Science of the Total Environment, 2018, 636, 999-1008.	3.9	45
41	Sorption Mechanism, Kinetics, and Isotherms of Di-<i>n</i>-butyl Phthalate to Different Soil Particle-Size Fractions. Journal of Agricultural and Food Chemistry, 2019, 67, 4734-4745.	2.4	45
42	Efficient activation of peroxymonosulfate by copper sulfide for diethyl phthalate degradation: Performance, radical generation and mechanism. Science of the Total Environment, 2020, 749, 142387.	3.9	44
43	Mechanistic understanding of reduced AgNP phytotoxicity induced by extracellular polymeric substances. Journal of Hazardous Materials, 2016, 308, 21-28.	6.5	43
44	Mechanism and Implication of the Sorption of Perfluorooctanoic Acid by Varying Soil Size Fractions. Journal of Agricultural and Food Chemistry, 2018, 66, 11569-11579.	2.4	43
45	Discerning the Sources of Silver Nanoparticle in a Terrestrial Food Chain by Stable Isotope Tracer Technique. Environmental Science & Technology, 2019, 53, 3802-3810.	4.6	42
46	Automatic pH control system enhances the dechlorination of 2,4,4â€²-trichlorobiphenyl and extracted PCBs from contaminated soil by nanoscale Fe0 and Pd/Fe0. Environmental Science and Pollution Research, 2012, 19, 448-457.	2.7	41
47	The effects of Fe-bearing smectite clays on OH formation and diethyl phthalate degradation with polyphenols and H2O2. Journal of Hazardous Materials, 2018, 357, 483-490.	6.5	41
48	Active iron species driven hydroxyl radicals formation in oxygenation of different paddy soils: Implications to polycyclic aromatic hydrocarbons degradation. Water Research, 2021, 203, 117484.	5.3	40
49	Farmland heavy metals can migrate to deep soil at a regional scale: A case study on a wastewater-irrigated area in China. Environmental Pollution, 2021, 281, 116977.	3.7	39
50	Inhibition Mechanisms of Zn Precipitation on Aluminum Oxide by Glyphosate: A ³¹P NMR and Zn EXAFS Study. Environmental Science & Technology, 2013, 47, 4211-4219.	4.6	37
51	Effects of clay minerals on diethyl phthalate degradation in Fenton reactions. Chemosphere, 2016, 165, 52-58.	4.2	37
52	Pyrogenic Carbon Initiated the Generation of Hydroxyl Radicals from the Oxidation of Sulfide. Environmental Science & Technology, 2021, 55, 6001-6011.	4.6	36
53	Efficient transformation of DDT with peroxymonosulfate activation by different crystallographic MnO2. Science of the Total Environment, 2021, 759, 142864.	3.9	34
54	Cotransformation of Carbon Dots and Contaminant under Light in Aqueous Solutions: A Mechanistic Study. Environmental Science & Technology, 2019, 53, 6235-6244.	4.6	33

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55	Photochemical characterization of paddy water during rice cultivation: Formation of reactive intermediates for As(III) oxidation. Water Research, 2021, 206, 117721.	5.3	33
56	Evidence for the generation of reactive oxygen species from hydroquinone and benzoquinone: Roles in arsenite oxidation. Chemosphere, 2016, 150, 71-78.	4.2	32
57	Cd(II) retention and remobilization on Î´-MnO2 and Mn(III)-rich Î´-MnO2 affected by Mn(II). Environment International, 2019, 130, 104932.	4.8	32
58	Transfer and toxicity of silver nanoparticles in the food chain. Environmental Science: Nano, 2021, 8, 1519-1535.	2.2	32
59	Alteration of Crop Yield and Quality of Three Vegetables upon Exposure to Silver Nanoparticles in Sludge-Amended Soil. ACS Sustainable Chemistry and Engineering, 2020, 8, 2472-2480.	3.2	31
60	Effects of Soil Organic Matter on Sorption of Metal Ions on Soil Clay Particles. Soil Science Society of America Journal, 2015, 79, 794-802.	1.2	30
61	Fate of As(III) and As(V) during Microbial Reduction of Arsenic-Bearing Ferrihydrite Facilitated by Activated Carbon. ACS Earth and Space Chemistry, 2018, 2, 878-887.	1.2	30
62	Determination of Trace Perfluoroalkyl Carboxylic Acids in Edible Crop Matrices: Matrix Effect and Method Development. Journal of Agricultural and Food Chemistry, 2017, 65, 8763-8772.	2.4	29
63	Uptake, translocation, and transformation of silver nanoparticles in plants. Environmental Science: Nano, 2022, 9, 12-39.	2.2	29
64	Thiol-functionalized metalâ€“organic frameworks embedded with chelator-modified magnetite for high-efficiency and recyclable mercury removal in aqueous solutions. Journal of Materials Chemistry A, 2022, 10, 6724-6730.	5.2	29
65	MoS₂ Nanosheetsâ€“Cyanobacteria Interaction: Reprogrammed Carbon and Nitrogen Metabolism. ACS Nano, 2021, 15, 16344-16356.	7.3	28
66	Remediation of polychlorinated biphenyl-contaminated soil by soil washing and subsequent TiO2 photocatalytic degradation. Journal of Soils and Sediments, 2012, 12, 1371-1379.	1.5	27
67	Differential bioaccumulation patterns of nanosized and dissolved silver in a land snail Achatina fulica. Environmental Pollution, 2017, 222, 50-57.	3.7	27
68	Intraspecific variability of ciprofloxacin accumulation, tolerance, and metabolism in Chinese flowering cabbage (Brassica parachinensis). Journal of Hazardous Materials, 2018, 349, 252-261.	6.5	27
69	Sorption kinetics, isotherms, and mechanism of aniline aerofloat to agricultural soils with various physicochemical properties. Ecotoxicology and Environmental Safety, 2018, 154, 84-91.	2.9	27
70	Nonselective uptake of silver and gold nanoparticles by wheat. Nanotoxicology, 2019, 13, 1073-1086.	1.6	27
71	Soil geochemistry and digestive solubilization control mercury bioaccumulation in the earthworm Pheretima guillemi. Journal of Hazardous Materials, 2015, 292, 44-51.	6.5	26
72	Extraction and speciation analysis of roxarsone and its metabolites from soils with different physicochemical properties. Journal of Soils and Sediments, 2016, 16, 1557-1568.	1.5	26

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73	Transformation of tetracyclines induced by Fe(III)-bearing smectite clays under anoxic dark conditions. Water Research, 2019, 165, 114997.	5.3	26
74	Uptake kinetics of silver nanoparticles by plant: relative importance of particles and dissolved ions. Nanotoxicology, 2020, 14, 654-666.	1.6	26
75	Cultivar-Dependent Accumulation and Translocation of Perfluorooctanesulfonate among Lettuce (Lactuca sativa L.) Cultivars Grown on Perfluorooctanesulfonate-Contaminated Soil. Journal of Agricultural and Food Chemistry, 2018, 66, 13096-13106.	2.4	25
76	Rapid DDTs degradation by thermally activated persulfate in soil under aerobic and anaerobic conditions: Reductive radicals vs. oxidative radicals. Journal of Hazardous Materials, 2021, 402, 123557.	6.5	25
77	Natural degradation of roxarsone in contrasting soils: Degradation kinetics and transformation products. Science of the Total Environment, 2017, 607-608, 132-140.	3.9	24
78	Effects of molecular weight-fractionated natural organic matter on the phytoavailability of silver nanoparticles. Environmental Science: Nano, 2018, 5, 969-979.	2.2	24
79	The formation of â€¢OH with Fe-bearing smectite clays and low-molecular-weight thiols: Implication of As(III) removal. Water Research, 2020, 174, 115631.	5.3	24
80	High retention of silver sulfide nanoparticles in natural soils. Journal of Hazardous Materials, 2019, 378, 120735.	6.5	23
81	Efficient transformation of diethyl phthalate using calcium peroxide activated by pyrite. Chemosphere, 2020, 253, 126662.	4.2	23
82	Role of Reduced Sulfur in the Transformation of Cd(II) Immobilized by Î´-MnO₂. Environmental Science & Technology, 2020, 54, 14955-14963.	4.6	22
83	Dissolution and Transformation of ZnO Nano- and Microparticles in Soil Mineral Suspensions. ACS Earth and Space Chemistry, 2019, 3, 495-502.	1.2	18
84	Retention of silver nanoparticles and silver ion to natural soils: effects of soil physicochemical properties. Journal of Soils and Sediments, 2018, 18, 2491-2499.	1.5	17
85	Oral bioaccessibility of silver nanoparticles and ions in natural soils: Importance of soil properties. Environmental Pollution, 2018, 243, 364-373.	3.7	17
86	Long-term dissolution and transformation of ZnO in soils: The roles of soil pH and ZnO particle size. Journal of Hazardous Materials, 2021, 415, 125604.	6.5	17
87	Mechanistic Study of the Effects of Agricultural Amendments on Photochemical Processes in Paddy Water during Rice Growth. Environmental Science & Technology, 2022, 56, 4221-4230.	4.6	17
88	Efficient chlorinated alkanes degradation in soil by combining alkali hydrolysis with thermally activated persulfate. Journal of Hazardous Materials, 2022, 438, 129571.	6.5	17
89	Aging reduces the bioavailability of copper and cadmium in soil immobilized by biochars with various concentrations of endogenous metals. Science of the Total Environment, 2021, 797, 149136.	3.9	16
90	Global Picture of Protein Regulation in Response to Dibutyl Phthalate (DBP) Stress of Two <i>Brassica parachinensis</i> Cultivars Differing in DBP Accumulation. Journal of Agricultural and Food Chemistry, 2018, 66, 4768-4779.	2.4	15

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91	Contrasting effects of iron plaque on the bioavailability of metallic and sulfidized silver nanoparticles to rice. Environmental Pollution, 2020, 260, 113969.	3.7	15
92	Photooxidation mechanism of As(III) by straw-derived dissolved organic matter. Science of the Total Environment, 2021, 757, 144049.	3.9	15
93	Identifying Plant Stress Responses to Roxarsone in Soybean Root Exudates: New Insights from Two-Dimensional Correlation Spectroscopy. Journal of Agricultural and Food Chemistry, 2018, 66, 53-62.	2.4	14
94	Nano Fe2O3 embedded in montmorillonite with citric acid enhanced photocatalytic activity of nanoparticles towards diethyl phthalate. Journal of Environmental Sciences, 2021, 101, 248-259.	3.2	14
95	Mechanism of significant enhancement of VO2-Fenton-like reactions by oxalic acid for diethyl phthalate degradation. Separation and Purification Technology, 2021, 279, 119671.	3.9	14
96	Weathered Microplastics Induce Silver Nanoparticle Formation. Environmental Science and Technology Letters, 2022, 9, 179-185.	3.9	14
97	Metabolic response of earthworms (Pheretima guillemi) to silver nanoparticles in sludge-amended soil. Environmental Pollution, 2022, 300, 118954.	3.7	14
98	Hydroxyl radical formation during oxygen-mediated oxidation of ferrous iron on mineral surface: Dependence on mineral identity. Journal of Hazardous Materials, 2022, 434, 128861.	6.5	14
99	The overlooked oxidative dissolution of silver sulfide nanoparticles by thermal activation of persulfate: Processes, mechanisms, and influencing factors. Science of the Total Environment, 2021, 760, 144504.	3.9	13
100	Phytotoxicity and uptake of roxarsone by wheat (Triticum aestivum L.) seedlings. Environmental Pollution, 2016, 219, 210-218.	3.7	12
101	Pyridinic- and Pyrrolic Nitrogen in Pyrogenic Carbon Improves Electron Shuttling during Microbial Fe(III) Reduction. ACS Earth and Space Chemistry, 2021, 5, 900-909.	1.2	11
102	Macroscopic and microscopic investigation of adsorption and precipitation of Zn on Î³-alumina in the absence and presence of As. Chemosphere, 2017, 178, 309-316.	4.2	9
103	Copper(I) Promotes Silver Sulfide Dissolution and Increases Silver Phytoavailability. Environmental Science & Technology, 2020, 54, 5589-5597.	4.6	9
104	Rice exposure to silver nanoparticles in a life cycle study: effect of dose responses on grain metabolomic profile, yield, and soil bacteria. Environmental Science: Nano, 2022, 9, 2195-2206.	2.2	9
105	Effects of lowâ€molecularâ€weight organic acids on the acute lethality, accumulation, and enzyme activity of cadmium in <i>Eisenia fetida</i> in a simulated soil solution. Environmental Toxicology and Chemistry, 2017, 36, 1005-1011.	2.2	8
106	Biotic Process Dominated the Uptake and Transformation of Ag⁺ by <i>Shewanella oneidensis</i> MR-1. Environmental Science & Technology, 2022, 56, 2366-2377.	4.6	8
107	Efficient activation of peroxymonosulfate by C₃N₅ doped with cobalt for organic contaminant degradation. Environmental Science: Nano, 2022, 9, 2534-2547.	2.2	8
108	Effect of Straw Return on Hydroxyl Radical Formation in Paddy Soil. Bulletin of Environmental Contamination and Toxicology, 2021, 106, 211-217.	1.3	7

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109	Hydroxyl radicals induced mineralization of organic carbon during oxygenation of ferrous mineral-organic matter associations: Adsorption versus coprecipitation. Science of the Total Environment, 2022, 816, 151667.	3.9	6
110	Effect of metal cations on antimicrobial activity and compartmentalization of silver in Shewanella oneidensis MR-1 upon exposure to silver ions. Science of the Total Environment, 2022, 838, 156401.	3.9	6
111	Rapid As(III) oxidation mediated by activated carbons: Reactive species vs. direct oxidation. Science of the Total Environment, 2022, 822, 153536.	3.9	5
112	Mechanistic insight into sulfite-enhanced diethyl phthalate degradation by hydrogen atom under UV light. Separation and Purification Technology, 2022, 295, 121310.	3.9	5
113	Dynamic changes of reactive oxygen species in paddy overlying water: mechanisms and implications. Journal of Soils and Sediments, 2022, 22, 1746-1760.	1.5	4
114	Quantification of the redox properties of microplastics and their effect on arsenite oxidation. Fundamental Research, 2023, 3, 777-785.	1.6	4
115	Copper pre-exposure reduces AgNP bioavailability to wheat. Science of the Total Environment, 2020, 707, 136084.	3.9	3
116	Response to Comment on â€œRedox-Active Oxygen-Containing Functional Groups in Activated Carbon Facilitate Microbial Reduction of Ferrihydriteâ€. Environmental Science & Technology, 2018, 52, 4487-4488.	4.6	1
117	Reactive oxygen species formation in thiols solution mediated by pyrogenic carbon under aerobic conditions. Journal of Hazardous Materials, 2021, 415, 125726.	6.5	1
118	Greater Bioaccessibility of Silver Nanoparticles in Earthworm than in Soils. Bulletin of Environmental Contamination and Toxicology, 2022, , 1.	1.3	0