

Guodong Fang

List of Publications by Year in descending order

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95
papers

7,759
citations

66343

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51608

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docs citations

95
times ranked

5190
citing authors

#	ARTICLE	IF	CITATIONS
1	Manipulation of Persistent Free Radicals in Biochar To Activate Persulfate for Contaminant Degradation. <i>Environmental Science & Technology</i> , 2015, 49, 5645-5653.	10.0	684
2	Activation of Persulfate by Quinones: Free Radical Reactions and Implication for the Degradation of PCBs. <i>Environmental Science & Technology</i> , 2013, 47, 4605-4611.	10.0	673
3	Key Role of Persistent Free Radicals in Hydrogen Peroxide Activation by Biochar: Implications to Organic Contaminant Degradation. <i>Environmental Science & Technology</i> , 2014, 48, 1902-1910.	10.0	589
4	Superoxide radical driving the activation of persulfate by magnetite nanoparticles: Implications for the degradation of PCBs. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 325-332.	20.2	420
5	Mechanistic understanding of polychlorinated biphenyls degradation by peroxymonosulfate activated with CuFe ₂ O ₄ nanoparticles: Key role of superoxide radicals. <i>Chemical Engineering Journal</i> , 2018, 348, 526-534.	12.7	291
6	Mechanism of hydroxyl radical generation from biochar suspensions: Implications to diethyl phthalate degradation. <i>Bioresource Technology</i> , 2015, 176, 210-217.	9.6	284
7	New insight into the mechanism of peroxymonosulfate activation by sulfur-containing minerals: Role of sulfur conversion in sulfate radical generation. <i>Water Research</i> , 2018, 142, 208-216.	11.3	254
8	Photogeneration of reactive oxygen species from biochar suspension for diethyl phthalate degradation. <i>Applied Catalysis B: Environmental</i> , 2017, 214, 34-45.	20.2	247
9	Fe ₃ O ₄ @ ¹² -CD nanocomposite as heterogeneous Fenton-like catalyst for enhanced degradation of 4-chlorophenol (4-CP). <i>Applied Catalysis B: Environmental</i> , 2016, 188, 113-122.	20.2	235
10	Efficient transformation of DDTs with Persulfate Activation by Zero-valent Iron Nanoparticles: A Mechanistic Study. <i>Journal of Hazardous Materials</i> , 2016, 316, 232-241.	12.4	181
11	Activation of persulfate with vanadium species for PCBs degradation: A mechanistic study. <i>Applied Catalysis B: Environmental</i> , 2017, 202, 1-11.	20.2	175
12	A scientometric review of biochar research in the past 20 years (1998–2018). <i>Biochar</i> , 2019, 1, 23-43.	12.6	160
13	Contribution of alcohol radicals to contaminant degradation in quenching studies of persulfate activation process. <i>Water Research</i> , 2018, 139, 66-73.	11.3	148
14	Zero-valent iron activated persulfate remediation of polycyclic aromatic hydrocarbon-contaminated soils: An in situ pilot-scale study. <i>Chemical Engineering Journal</i> , 2019, 355, 65-75.	12.7	139
15	Reductive Hexachloroethane Degradation by S ₂ O ₈ ²⁻ with Thermal Activation of Persulfate under Anaerobic Conditions. <i>Environmental Science & Technology</i> , 2018, 52, 8548-8557.	10.0	117
16	Limitations and prospects of sulfate-radical based advanced oxidation processes. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103849.	6.7	116
17	Redox-Active Oxygen-Containing Functional Groups in Activated Carbon Facilitate Microbial Reduction of Ferrihydrite. <i>Environmental Science & Technology</i> , 2017, 51, 9709-9717.	10.0	113
18	Mechanisms of Interaction between Persulfate and Soil Constituents: Activation, Free Radical Formation, Conversion, and Identification. <i>Environmental Science & Technology</i> , 2018, 52, 14352-14361.	10.0	109

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19	Efficient activation of persulfate decomposition by Cu ₂ FeSnS ₄ nanomaterial for bisphenol A degradation: Kinetics, performance and mechanism studies. <i>Applied Catalysis B: Environmental</i> , 2019, 253, 278-285.	20.2	107
20	Fractions of Cu, Cd, and enzyme activities in a contaminated soil as affected by applications of micro- and nanohydroxyapatite. <i>Journal of Soils and Sediments</i> , 2013, 13, 742-752.	3.0	92
21	Synergy between Iron and Selenide on FeSe ₂ (111) Surface Driving Peroxymonosulfate Activation for Efficient Degradation of Pollutants. <i>Environmental Science & Technology</i> , 2020, 54, 15489-15498.	10.0	90
22	Leachability, availability and bioaccessibility of Cu and Cd in a contaminated soil treated with apatite, lime and charcoal: A five-year field experiment. <i>Ecotoxicology and Environmental Safety</i> , 2016, 134, 148-155.	6.0	88
23	A novel peroxymonosulfate activation process by periclase for efficient singlet oxygen-mediated degradation of organic pollutants. <i>Chemical Engineering Journal</i> , 2021, 403, 126445.	12.7	87
24	New Insights into the Mechanism of the Catalytic Decomposition of Hydrogen Peroxide by Activated Carbon: Implications for Degradation of Diethyl Phthalate. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 19925-19933.	3.7	86
25	Enhanced PCBs sorption on biochars as affected by environmental factors: Humic acid and metal cations. <i>Environmental Pollution</i> , 2013, 172, 86-93.	7.5	84
26	Biomass Schiff base polymer-derived N-doped porous carbon embedded with CoO nanodots for adsorption and catalytic degradation of chlorophenol by peroxymonosulfate. <i>Journal of Hazardous Materials</i> , 2020, 384, 121345.	12.4	80
27	Peroxymonosulfate activation by localized electrons of ZnO oxygen vacancies for contaminant degradation. <i>Chemical Engineering Journal</i> , 2021, 416, 128996.	12.7	73
28	Efficient transformation of DDT by peroxymonosulfate activated with cobalt in aqueous systems: Kinetics, products, and reactive species identification. <i>Chemosphere</i> , 2016, 148, 68-76.	8.2	71
29	Mechanism of metal sulfides accelerating Fe(II)/Fe(III) redox cycling to enhance pollutant degradation by persulfate: Metallic active sites vs. reducing sulfur species. <i>Journal of Hazardous Materials</i> , 2021, 404, 124175.	12.4	71
30	A Mechanistic Understanding of Hydrogen Peroxide Decomposition by Vanadium Minerals for Diethyl Phthalate Degradation. <i>Environmental Science & Technology</i> , 2018, 52, 2178-2185.	10.0	69
31	Surfactant and oxidant enhanced electrokinetic remediation of a PCBs polluted soil. <i>Separation and Purification Technology</i> , 2014, 123, 106-113.	7.9	66
32	Homogenous activation of persulfate by different species of vanadium ions for PCBs degradation. <i>Chemical Engineering Journal</i> , 2017, 323, 84-95.	12.7	61
33	Degradation of 2,4-D in soils by Fe ₃ O ₄ nanoparticles combined with stimulating indigenous microbes. <i>Environmental Science and Pollution Research</i> , 2012, 19, 784-793.	5.3	59
34	The degradation of diethyl phthalate by reduced smectite clays and dissolved oxygen. <i>Chemical Engineering Journal</i> , 2019, 355, 247-254.	12.7	56
35	Electrokinetic delivery of persulfate to remediate PCBs polluted soils: Effect of injection spot. <i>Chemosphere</i> , 2014, 117, 410-418.	8.2	54
36	Immobilization of Cu and Cd in a contaminated soil: one- and four-year field effects. <i>Journal of Soils and Sediments</i> , 2014, 14, 1397-1406.	3.0	51

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37	A new insight into the immobilization mechanism of Zn on biochar: the role of anions dissolved from ash. <i>Scientific Reports</i> , 2016, 6, 33630.	3.3	51
38	Bioavailability and mobility of copper and cadmium in polluted soil after phytostabilization using different plants aided by limestone. <i>Chemosphere</i> , 2020, 242, 125252.	8.2	49
39	Comparison of Persulfate Activation and Fenton Reaction in Remediating an Organophosphorus Pesticides-Polluted Soil. <i>Pedosphere</i> , 2017, 27, 465-474.	4.0	48
40	Surface-bound radical control rapid organic contaminant degradation through peroxymonosulfate activation by reduced Fe-bearing smectite clays. <i>Journal of Hazardous Materials</i> , 2020, 389, 121819.	12.4	48
41	Active Iron Phases Regulate the Abiotic Transformation of Organic Carbon during Redox Fluctuation Cycles of Paddy Soil. <i>Environmental Science & Technology</i> , 2021, 55, 14281-14293.	10.0	48
42	Oxidation mechanism of As(III) in the presence of polyphenols: New insights into the reactive oxygen species. <i>Chemical Engineering Journal</i> , 2016, 285, 69-76.	12.7	47
43	Efficient activation of peroxymonosulfate by copper sulfide for diethyl phthalate degradation: Performance, radical generation and mechanism. <i>Science of the Total Environment</i> , 2020, 749, 142387.	8.0	44
44	Review of chemical and electrokinetic remediation of PCBs contaminated soils and sediments. <i>Environmental Sciences: Processes and Impacts</i> , 2016, 18, 1140-1156.	3.5	42
45	The effects of Fe-bearing smectite clays on OH formation and diethyl phthalate degradation with polyphenols and H ₂ O ₂ . <i>Journal of Hazardous Materials</i> , 2018, 357, 483-490.	12.4	41
46	Active iron species driven hydroxyl radicals formation in oxygenation of different paddy soils: Implications to polycyclic aromatic hydrocarbons degradation. <i>Water Research</i> , 2021, 203, 117484.	11.3	40
47	Dry-wet and freeze-thaw aging activate endogenous copper and cadmium in biochar. <i>Journal of Cleaner Production</i> , 2021, 288, 125605.	9.3	39
48	Evaluation of enhanced soil washing process with tea saponin in a peanut oil "water solvent system for the extraction of <scp>PBDEs</scp>/<scp>PCBs</scp>/<scp>PAHs</scp> and heavy metals from an electronic waste site followed by vetiver grass phytoremediation. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 2027-2035.	3.2	37
49	Effects of clay minerals on diethyl phthalate degradation in Fenton reactions. <i>Chemosphere</i> , 2016, 165, 52-58.	8.2	37
50	Sustainability of in situ remediation of Cu- and Cd-contaminated soils with one-time application of amendments in Guixi, China. <i>Journal of Soils and Sediments</i> , 2016, 16, 1498-1508.	3.0	36
51	Pyrogenic Carbon Initiated the Generation of Hydroxyl Radicals from the Oxidation of Sulfide. <i>Environmental Science & Technology</i> , 2021, 55, 6001-6011.	10.0	36
52	A novel sulfite coupling electro-fenton reactions with ferrous sulfide cathode for anthracene degradation. <i>Chemical Engineering Journal</i> , 2020, 400, 125945.	12.7	35
53	Activation of inorganic peroxides with magnetic graphene for the removal of antibiotics from wastewater. <i>Environmental Science: Nano</i> , 2021, 8, 960-977.	4.3	34
54	Effects of iron (hydr)oxides on the degradation of diethyl phthalate ester in heterogeneous (photo)-Fenton reactions. <i>Journal of Environmental Sciences</i> , 2019, 80, 5-13.	6.1	33

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55	Cotransformation of Carbon Dots and Contaminant under Light in Aqueous Solutions: A Mechanistic Study. <i>Environmental Science & Technology</i> , 2019, 53, 6235-6244.	10.0	33
56	An N,S-Anchored Single-Atom Catalyst Derived from Domestic Waste for Environmental Remediation. <i>ACS ES&T Engineering</i> , 2021, 1, 1460-1469.	7.6	33
57	Photochemical characterization of paddy water during rice cultivation: Formation of reactive intermediates for As(III) oxidation. <i>Water Research</i> , 2021, 206, 117721.	11.3	33
58	Evidence for the generation of reactive oxygen species from hydroquinone and benzoquinone: Roles in arsenite oxidation. <i>Chemosphere</i> , 2016, 150, 71-78.	8.2	32
59	Biochar decreased the bioavailability of Zn to rice and wheat grains: Insights from microscopic to macroscopic scales. <i>Science of the Total Environment</i> , 2018, 621, 160-167.	8.0	32
60	Cu ₂ O@ β -cyclodextrin as a synergistic catalyst for hydroxyl radical generation and molecular recognitive destruction of aromatic pollutants at neutral pH. <i>Journal of Hazardous Materials</i> , 2018, 357, 109-118.	12.4	30
61	Fate of As(III) and As(V) during Microbial Reduction of Arsenic-Bearing Ferrihydrite Facilitated by Activated Carbon. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 878-887.	2.7	30
62	Remediation of polychlorinated biphenyl-contaminated soil by soil washing and subsequent TiO ₂ photocatalytic degradation. <i>Journal of Soils and Sediments</i> , 2012, 12, 1371-1379.	3.0	27
63	Persistent Free Radicals from Low-Molecular-Weight Organic Compounds Enhance Cross-Coupling Reactions and Toxicity of Anthracene on Amorphous Silica Surfaces under Light. <i>Environmental Science & Technology</i> , 2021, 55, 3716-3726.	10.0	27
64	Transformation of tetracyclines induced by Fe(III)-bearing smectite clays under anoxic dark conditions. <i>Water Research</i> , 2019, 165, 114997.	11.3	26
65	Rapid DDTs degradation by thermally activated persulfate in soil under aerobic and anaerobic conditions: Reductive radicals vs. oxidative radicals. <i>Journal of Hazardous Materials</i> , 2021, 402, 123557.	12.4	25
66	Electrokinetic delivery of anodic in situ generated active chlorine to remediate diesel-contaminated sand. <i>Chemical Engineering Journal</i> , 2018, 337, 499-505.	12.7	24
67	The formation of $\cdot\text{OH}$ with Fe-bearing smectite clays and low-molecular-weight thiols: Implication of As(III) removal. <i>Water Research</i> , 2020, 174, 115631.	11.3	24
68	Efficient transformation of diethyl phthalate using calcium peroxide activated by pyrite. <i>Chemosphere</i> , 2020, 253, 126662.	8.2	23
69	In situ stabilization of the adsorbed Co ²⁺ and Ni ²⁺ in rice straw biochar based on LDH and its reutilization in the activation of peroxymonosulfate. <i>Journal of Hazardous Materials</i> , 2021, 416, 126215.	12.4	23
70	Facile ball milling preparation of sulfur-doped carbon as peroxymonosulfate activator for efficient removal of organic pollutants. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106536.	6.7	22
71	Enhanced soil washing process for the remediation of PBDEs/Pb/Cd-contaminated electronic waste site with carboxymethyl chitosan in a sunflower oil/water solvent system and microbial augmentation. <i>Environmental Science and Pollution Research</i> , 2015, 22, 2687-2698.	5.3	21
72	Highly effective removal of BPA with boron-doped graphene shell wrapped FeS ₂ nanoparticles in electro-Fenton process: Performance and mechanism. <i>Separation and Purification Technology</i> , 2021, 267, 118680.	7.9	20

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73	Advances of single-atom catalysts for applications in persulfate-based advanced oxidation technologies. <i>Current Opinion in Chemical Engineering</i> , 2021, 34, 100757.	7.8	20
74	The mechanism of 2-chlorobiphenyl oxidative degradation by nanoscale zero-valent iron in the presence of dissolved oxygen. <i>Environmental Science and Pollution Research</i> , 2018, 25, 2265-2272.	5.3	19
75	Mechanistic Study of the Effects of Agricultural Amendments on Photochemical Processes in Paddy Water during Rice Growth. <i>Environmental Science & Technology</i> , 2022, 56, 4221-4230.	10.0	17
76	Efficient chlorinated alkanes degradation in soil by combining alkali hydrolysis with thermally activated persulfate. <i>Journal of Hazardous Materials</i> , 2022, 438, 129571.	12.4	17
77	A novel electrokinetic remediation with in-situ generation of H ₂ O ₂ for soil PAHs removal. <i>Journal of Hazardous Materials</i> , 2022, 428, 128273.	12.4	16
78	Nano Fe ₂ O ₃ embedded in montmorillonite with citric acid enhanced photocatalytic activity of nanoparticles towards diethyl phthalate. <i>Journal of Environmental Sciences</i> , 2021, 101, 248-259.	6.1	14
79	Mechanism of significant enhancement of VO ₂ -Fenton-like reactions by oxalic acid for diethyl phthalate degradation. <i>Separation and Purification Technology</i> , 2021, 279, 119671.	7.9	14
80	Weathered Microplastics Induce Silver Nanoparticle Formation. <i>Environmental Science and Technology Letters</i> , 2022, 9, 179-185.	8.7	14
81	Hydroxyl radical formation during oxygen-mediated oxidation of ferrous iron on mineral surface: Dependence on mineral identity. <i>Journal of Hazardous Materials</i> , 2022, 434, 128861.	12.4	14
82	Nano-Fe ₂ O ₃ enhanced photocatalytic degradation of diethyl phthalate ester by citric Acid/UV (300-400 nm): A mechanism study. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 360, 78-85.	3.9	13
83	The overlooked oxidative dissolution of silver sulfide nanoparticles by thermal activation of persulfate: Processes, mechanisms, and influencing factors. <i>Science of the Total Environment</i> , 2021, 760, 144504.	8.0	13
84	Hydroxylamine promoted hydroxyl radical production and organic contaminants degradation in oxygenation of pyrite. <i>Journal of Hazardous Materials</i> , 2022, 429, 128380.	12.4	13
85	Sorption mechanism of zinc on reed, lignin, and reed- and lignin-derived biochars: kinetics, equilibrium, and spectroscopic studies. <i>Journal of Soils and Sediments</i> , 2018, 18, 2535-2543.	3.0	11
86	Pyridinic- and Pyrrolic Nitrogen in Pyrogenic Carbon Improves Electron Shuttling during Microbial Fe(III) Reduction. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 900-909.	2.7	11
87	Efficient activation of peroxymonosulfate by C ₃ N ₅ doped with cobalt for organic contaminant degradation. <i>Environmental Science: Nano</i> , 2022, 9, 2534-2547.	4.3	8
88	Measuring the bioavailability of polychlorinated biphenyls to earthworms in soil enriched with biochar or activated carbon using triolein-embedded cellulose acetate membrane. <i>Journal of Soils and Sediments</i> , 2016, 16, 527-536.	3.0	7
89	Oxytetracycline induced the redox of iron and promoted the oxidation of As(III). <i>Science of the Total Environment</i> , 2022, 828, 154381.	8.0	6
90	Foliar application of SiO ₂ and ZnO nanoparticles affected polycyclic aromatic hydrocarbons uptake of Amaranth (<i>Amaranthus tricolor</i> L.): A metabolomics and typical statistical analysis. <i>Science of the Total Environment</i> , 2022, 833, 155258.	8.0	6

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91	Rapid As(III) oxidation mediated by activated carbons: Reactive species vs. direct oxidation. Science of the Total Environment, 2022, 822, 153536.	8.0	5
92	Mechanistic insight into sulfite-enhanced diethyl phthalate degradation by hydrogen atom under UV light. Separation and Purification Technology, 2022, 295, 121310.	7.9	5
93	Quantification of the redox properties of microplastics and their effect on arsenite oxidation. Fundamental Research, 2023, 3, 777-785.	3.3	4
94	Response to Comment on "Redox-Active Oxygen-Containing Functional Groups in Activated Carbon Facilitate Microbial Reduction of Ferrihydrite". Environmental Science & Technology, 2018, 52, 4487-4488.	10.0	1
95	Reactive oxygen species formation in thiols solution mediated by pyrogenic carbon under aerobic conditions. Journal of Hazardous Materials, 2021, 415, 125726.	12.4	1