Jian Zhao

List of Publications by Year
in descending order

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123 papers	8,690 citations	53660 45 h-index	43802 91 g-index
124 all docs	124 docs citations	124 times ranked	9363 citing authors

#	Article	IF	Citations
1	Xylem- and Phloem-Based Transport of CuO Nanoparticles in Maize (Zea mays L.). Environmental Science & Technology, 2012, 46, 4434-4441.	4.6	601
2	Graphene in the Aquatic Environment: Adsorption, Dispersion, Toxicity and Transformation. Environmental Science & Technology, 2014, 48, 9995-10009.	4.6	573
3	Environmental source, fate, and toxicity of microplastics. Journal of Hazardous Materials, 2021, 407, 124357.	6.5	414
4	Sorption of antibiotic sulfamethoxazole varies with biochars produced at different temperatures. Environmental Pollution, 2013, 181, 60-67.	3.7	334
5	Toxicity and Internalization of CuO Nanoparticles to Prokaryotic Alga Microcystis aeruginosa as Affected by Dissolved Organic Matter. Environmental Science & Technology, 2011, 45, 6032-6040.	4.6	323
6	Characteristics and nutrient values of biochars produced from giant reed at different temperatures. Bioresource Technology, 2013, 130, 463-471.	4.8	301
7	CuO Nanoparticle Interaction with Human Epithelial Cells: Cellular Uptake, Location, Export, and Genotoxicity. Chemical Research in Toxicology, 2012, 25, 1512-1521.	1.7	269
8	Effects of Solution Chemistry on Adsorption of Selected Pharmaceuticals and Personal Care Products (PPCPs) by Graphenes and Carbon Nanotubes. Environmental Science & Technology, 2014, 48, 13197-13206.	4.6	246
9	Identification and Avoidance of Potential Artifacts and Misinterpretations in Nanomaterial Ecotoxicity Measurements. Environmental Science & Technology, 2014, 48, 4226-4246.	4.6	209
10	Environmental processes and toxicity of metallic nanoparticles in aquatic systems as affected by natural organic matter. Environmental Science: Nano, 2016, 3, 240-255.	2.2	208
11	Mechanistic understanding toward the toxicity of graphene-family materials to freshwater algae. Water Research, 2017, 111, 18-27.	5.3	203
12	Photodegradation Elevated the Toxicity of Polystyrene Microplastics to Grouper (Epinephelus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 2020, 54, 6202-6212.	4.6	187
13	Heteroaggregation of Graphene Oxide with Minerals in Aqueous Phase. Environmental Science & Technology, 2015, 49, 2849-2857.	4.6	182
14	Formation and Physicochemical Characteristics of Nano Biochar: Insight into Chemical and Colloidal Stability. Environmental Science & Technology, 2018, 52, 10369-10379.	4.6	178
15	Interaction of Microplastics with Antibiotics in Aquatic Environment: Distribution, Adsorption, and Toxicity. Environmental Science & Technology, 2021, 55, 15579-15595.	4.6	169
16	CuO Nanoparticle Interaction with Arabidopsis thaliana: Toxicity, Parent-Progeny Transfer, and Gene Expression. Environmental Science & Technology, 2016, 50, 6008-6016.	4.6	160
17	Mitigation of CuO nanoparticle-induced bacterial membrane damage by dissolved organic matter. Water Research, 2013, 47, 4169-4178.	5.3	152
18	Distribution of CuO nanoparticles in juvenile carp (Cyprinus carpio) and their potential toxicity. Journal of Hazardous Materials, 2011, 197, 304-310.	6.5	151

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19	Enhanced Adsorption of p-Arsanilic Acid from Water by Amine-Modified UiO-67 as Examined Using Extended X-ray Absorption Fine Structure, X-ray Photoelectron Spectroscopy, and Density Functional Theory Calculations. Environmental Science & Technology, 2018, 52, 3466-3475.	4.6	148
20	Synergy between cobalt and nickel on NiCo2O4 nanosheets promotes peroxymonosulfate activation for efficient norfloxacin degradation. Applied Catalysis B: Environmental, 2022, 306, 121091.	10.8	148
21	Adsorption and inhibition of acetylcholinesterase by different nanoparticles. Chemosphere, 2009, 77, 67-73.	4.2	132
22	Uptake of Engineered Nanoparticles by Food Crops: Characterization, Mechanisms, and Implications. Annual Review of Food Science and Technology, 2018, 9, 129-153.	5.1	131
23	Adsorption and Desorption of Phenanthrene on Carbon Nanotubes in Simulated Gastrointestinal Fluids. Environmental Science & Technology, 2011, 45, 6018-6024.	4.6	125
24	Interactions of CuO nanoparticles with the algae Chlorella pyrenoidosa: adhesion, uptake, and toxicity. Nanotoxicology, 2016, 10, 1297-1305.	1.6	120
25	Microplastics Reduce Lipid Digestion in Simulated Human Gastrointestinal System. Environmental Science & Technology, 2020, 54, 12285-12294.	4.6	115
26	Adsorption of sulfonamides on reduced graphene oxides as affected by pH and dissolved organic matter. Environmental Pollution, 2016, 210, 85-93.	3.7	109
27	Oneâ€Step Assembly of a Biomimetic Biopolymer Coating for Particle Surface Engineering. Advanced Materials, 2018, 30, e1802851.	11.1	108
28	Remediation of petroleum contaminated soils through composting and rhizosphere degradation. Journal of Hazardous Materials, 2011, 190, 677-685.	6.5	105
29	Adsorption of Phenanthrene on Multilayer Graphene as Affected by Surfactant and Exfoliation. Environmental Science & Technology, 2014, 48, 331-339.	4.6	101
30	Oxidative stress-induced toxicity of CuO nanoparticles and related toxicogenomic responses in Arabidopsis thaliana. Environmental Pollution, 2016, 212, 605-614.	3.7	95
31	Enhanced removal of roxarsone by Fe₃O₄@3D graphene nanocomposites: synergistic adsorption and mechanism. Environmental Science: Nano, 2017, 4, 2134-2143.	2.2	89
32	Engineered nanomaterials in the environment: Are they safe?. Critical Reviews in Environmental Science and Technology, 2021, 51, 1443-1478.	6.6	88
33	Uptake, Distribution, and Transformation of CuO NPs in a Floating Plant Eichhornia crassipes and Related Stomatal Responses. Environmental Science & Technology, 2017, 51, 7686-7695.	4.6	82
34	Degradation of Tetrabromobisphenol A by Sulfidated Nanoscale Zerovalent Iron in a Dynamic Two-Step Anoxic/Oxic Process. Environmental Science & Technology, 2019, 53, 8105-8114.	4.6	75
35	Effects of Chloride Ions on Dissolution, ROS Generation, and Toxicity of Silver Nanoparticles under UV Irradiation. Environmental Science & Technology, 2018, 52, 4842-4849.	4.6	73
36	Effect of co-existing kaolinite and goethite on the aggregation of graphene oxide in the aquatic environment. Water Research, 2016, 102, 313-320.	5.3	72

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37	Biodegradation of Crude Oil in Contaminated Soils by Free and Immobilized Microorganisms. Pedosphere, 2012, 22, 717-725.	2.1	70
38	Rapid capture of trace precious metals by amyloid-like protein membrane with high adsorption capacity and selectivity. Journal of Materials Chemistry A, 2020, 8, 3438-3449.	5.2	67
39	Graphene quantum dots in alveolar macrophage: uptake-exocytosis, accumulation in nuclei, nuclear responses and DNA cleavage. Particle and Fibre Toxicology, 2018, 15, 45.	2.8	65
40	Adsorption of Bovine Serum Albumin and Lysozyme on Functionalized Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 22249-22257.	1.5	59
41	Trophic transfer and accumulation of TiO2 nanoparticles from clamworm (Perinereis aibuhitensis) to juvenile turbot (Scophthalmus maximus) along a marine benthic food chain. Water Research, 2016, 95, 250-259.	5.3	59
42	Self-assembled proteinaceous wound dressings attenuate secondary trauma and improve wound healing in vivo. Journal of Materials Chemistry B, 2018, 6, 4645-4655.	2.9	57
43	Pulmonary Surfactant Suppressed Phenanthrene Adsorption on Carbon Nanotubes through Solubilization and Competition As Examined by Passive Dosing Technique. Environmental Science & Technology, 2012, 46, 5369-5377.	4.6	56
44	Carbon Nanoparticle Hybrid Aerogels: 3D Double-Interconnected Network Porous Microstructure, Thermoelectric, and Solvent-Removal Functions. ACS Applied Materials & Interfaces, 2017, 9, 21820-21828.	4.0	56
45	Toxicity of GO to Freshwater Algae in the Presence of Al₂O₃ Particles with Different Morphologies: Importance of Heteroaggregation. Environmental Science & Technology, 2018, 52, 13448-13456.	4.6	47
46	Copper Oxide Nanoparticle-Embedded Hydrogels Enhance Nutrient Supply and Growth of Lettuce (Lactuca sativa) Infected with Fusarium oxysporum f. sp. lactucae. Environmental Science & Technology, 2021, 55, 13432-13442.	4.6	46
47	Phenanthrene binding by humic acidâ€“protein complexes as studied by passive dosing technique. Environmental Pollution, 2014, 184, 145-153.	3.7	45
48	Downregulation of PCAF by miR-181a/b Provides Feedback Regulation to TNF-Î±â€“Induced Transcription of Proinflammatory Genes in Liver Epithelial Cells. Journal of Immunology, 2012, 188, 1266-1274.	0.4	44
49	A strategy to improve the thermoelectric performance of conducting polymer nanostructures. Journal of Materials Chemistry C, 2017, 5, 47-53.	2.7	44
50	Interaction of CuO nanoparticles with duckweed (Lemna minor. L): Uptake, distribution and ROS production sites. Environmental Pollution, 2018, 243, 543-552.	3.7	41
51	Accumulation of metal-based nanoparticles in marine bivalve mollusks from offshore aquaculture as detected by single particle ICP-MS. Environmental Pollution, 2020, 260, 114043.	3.7	40
52	Interaction of CuO nanoparticles with plant cells: internalization, oxidative stress, electron transport chain disruption, and toxicogenomic responses. Environmental Science: Nano, 2018, 5, 2269-2281.	2.2	39
53	Interaction of graphene oxide with co-existing arsenite and arsenate: Adsorption, transformation and combined toxicity. Environment International, 2019, 131, 104992.	4.8	38
54	Characteristics of algae-derived biochars and their sorption and remediation performance for sulfamethoxazole in marine environment. Chemical Engineering Journal, 2022, 430, 133092.	6.6	38

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55	Photo-transformation of graphene oxide in the presence of co-existing metal ions regulated its toxicity to freshwater algae. Water Research, 2020, 176, 115735.	5.3	37
56	Individual and combined applications of biochar and pyroligneous acid mitigate dissemination of antibiotic resistance genes in agricultural soil. Science of the Total Environment, 2021, 796, 148962.	3.9	37
57	Detection of phthalate esters in seawater by stir bar sorptive extraction and gas chromatographyâ€“mass spectrometry. Marine Pollution Bulletin, 2016, 108, 163-170.	2.3	33
58	Role of Nanoscale Hydroxyapatite in Disease Suppression of Fusarium-Infected Tomato. Environmental Science & Technology, 2021, 55, 13465-13476.	4.6	33
59	Adsorption and inhibition of butyrylcholinesterase by different engineered nanoparticles. Chemosphere, 2010, 79, 86-92.	4.2	32
60	Inhibitory effects and oxidative target site of dibutyl phthalate on Karenia brevis. Chemosphere, 2015, 132, 32-39.	4.2	30
61	Genotoxic response and damage recovery of macrophages to graphene quantum dots. Science of the Total Environment, 2019, 664, 536-545.	3.9	30
62	Benzo[a]pyrene and heavy metal ion adsorption on nanoplastics regulated by humic acid: Cooperation/competition mechanisms revealed by molecular dynamics simulations. Journal of Hazardous Materials, 2022, 424, 127431.	6.5	30
63	Pyroligneous acid mitigated dissemination of antibiotic resistance genes in soil. Environment International, 2020, 145, 106158.	4.8	29
64	Humic acid mitigated toxicity of graphene-family materials to algae through reducing oxidative stress and heteroaggregation. Environmental Science: Nano, 2019, 6, 1909-1920.	2.2	28
65	Accurate Prediction of Neoadjuvant Chemotherapy Pathological Complete Remission (pCR) for the Four Sub-Types of Breast Cancer. IEEE Access, 2019, 7, 134697-134706.	2.6	27
66	Graphene oxide mediated reduction of silver ions to silver nanoparticles under environmentally relevant conditions: Kinetics and mechanisms. Science of the Total Environment, 2019, 679, 270-278.	3.9	27
67	New insight into the photo-transformation mechanisms of graphene oxide under UV-A, UV-B and UV-C lights. Journal of Hazardous Materials, 2021, 403, 123683.	6.5	27
68	Dispersant selection for nanomaterials: Insight into dispersing functionalized carbon nanotubes by small polar aromatic organic molecules. Carbon, 2015, 91, 494-505.	5.4	26
69	Amyloidâ€Mediated Fabrication of Organicâ€“Inorganic Hybrid Materials and Their Biomedical Applications. Advanced Materials Interfaces, 2020, 7, 2001060.	1.9	26
70	Enhanced degradation of norfloxacin by Ce-mediated Fe-MIL-101: catalytic mechanism, degradation pathways, and potential applications in wastewater treatment. Environmental Science: Nano, 2021, 8, 2347-2359.	2.2	26
71	Functionalized polystyrene nanoplastic-induced energy homeostasis imbalance and the immunomodulation dysfunction of marine clams (Meretrix meretrix) at environmentally relevant concentrations. Environmental Science: Nano, 2021, 8, 2030-2048.	2.2	25
72	Trophic transfer of TiO₂ nanoparticles from marine microalga (Nitzschia closterium) to scallop (Chlamys farreri) and related toxicity. Environmental Science: Nano, 2017, 4, 415-424.	2.2	24

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73	Cleavage and transformation inhibition of extracellular antibiotic resistance genes by graphene oxides with different lateral sizes. Science of the Total Environment, 2019, 695, 133932.	3.9	24
74	Molecular modeling of nanoplastic transformations in alveolar fluid and impacts on the lung surfactant film. Journal of Hazardous Materials, 2022, 427, 127872.	6.5	24
75	Environmental risks of disposable face masks during the pandemic of COVID-19: Challenges and management. Science of the Total Environment, 2022, 825, 153880.	3.9	24
76	Interaction and combined toxicity of microplastics and per- and polyfluoroalkyl substances in aquatic environment. Frontiers of Environmental Science and Engineering, 2022, 16, .	3.3	23
77	The Fate of p-Nitrophenol in Goethite-Rich and Sulfide-Containing Dynamic Anoxic/Oxic Environments. Environmental Science & Technology, 2020, 54, 9427-9436.	4.6	21
78	Progress in antimony capturing by superior materials: Mechanisms, properties and perspectives. Chemical Engineering Journal, 2021, 419, 130013.	6.6	21
79	Advances and challenges of broadband solar absorbers for efficient solar steam generation. Environmental Science: Nano, 2022, 9, 2264-2296.	2.2	20
80	An amyloid-like proteinaceous adsorbent for uranium extraction from aqueous medium. Journal of Materials Chemistry A, 2022, 10, 14906-14916.	5.2	19
81	Transformation and species identification of CuO nanoparticles in plant cells (<i>Nicotiana) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	2.2	18
82	Simultaneous Removal of Selenite and Selenate by Nanosized Zerovalent Iron in Anoxic Systems: The Overlooked Role of Selenite. Environmental Science & Technology, 2021, 55, 6299-6308.	4.6	18
83	Controlling Longâ€Distance Photoactuation with Protein Additives. Small, 2020, 16, e2000043.	5.2	17
84	Selenite capture by MIL-101 (Fe) through Fe O Se bonds at free coordination Fe sites. Journal of Hazardous Materials, 2022, 424, 127715.	6.5	17
85	Biomimetic Amyloid-like Protein/Laponite Nanocomposite Thin Film through Regulating Protein Conformation. ACS Applied Materials & Interfaces, 2020, 12, 35435-35444.	4.0	16
86	CuO Nanoparticle Exposure Impairs the Root Tip Cell Walls of Arabidopsis thaliana Seedlings. Water, Air, and Soil Pollution, 2020, 231, 1.	1.1	16
87	Light-driven inactivation of harmful algae Microcystis aeruginosa and degradation of microcystin by oxygen-doped carbon nitride nanosheets. Chemical Engineering Journal, 2021, 417, 128094.	6.6	16
88	Aggregation of graphene oxide and its environmental implications in the aquatic environment. Chinese Chemical Letters, 2023, 34, 107327.	4.8	15
89	Effects of Low-Molecular-Weight Organic Acids on Soil Micropores and Implication for Organic Contaminant Availability. Communications in Soil Science and Plant Analysis, 2014, 45, 1120-1132.	0.6	14
90	Facile synthesis of hierarchical Ti3C2@FeOOH nanocomposites for antimony contaminated wastewater treatment: Performance, mechanisms, reutilization, and sustainability. Chemical Engineering Journal, 2022, 450, 138038.	6.6	14

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91	Graphitic Carbon Nitride (C3N4) Reduces Cadmium and Arsenic Phytotoxicity and Accumulation in Rice (Oryza sativa L.). Nanomaterials, 2021, 11, 839.	1.9	13
92	Precise Tailoring of Polyester Bottlebrush Amphiphiles toward Ecoâ€Friendly Photonic Pigments via Interfacial Selfâ€Assembly. Angewandte Chemie - International Edition, 2022, 61, .	7.2	13
93	Dynamically Vulcanized Styrene-Butadiene Rubber/Ethylene-Vinyl Acetate Copolymer/High Impact Polystyrene Blends Compatibilized by Styrene-Butadiene-Styrene Block Copolymer. Journal of Macromolecular Science - Physics, 2010, 50, 51-61.	0.4	11
94	Rheological, mechanical and morphological properties of thermoplastic vulcanizates based on high impact polystyrene and styreneâ€butadiene rubber. Journal of Applied Polymer Science, 2010, 117, 2523-2529.	1.3	10
95	Vc-Functionalized Fe3O4 Nanocomposites as Peroxidase-like Mimetics for H2O2 and Glucose Sensing. Chemical Research in Chinese Universities, 2018, 34, 260-268.	1.3	10
96	Simultaneous Temperature and Strain Measurements Using Polarization-Maintaining Few-Mode Bragg Gratings. Sensors, 2019, 19, 5221.	2.1	10
97	Transfer and transformation of CeO₂ NPs along a terrestrial trophic food chain. Environmental Science: Nano, 2020, 7, 588-598.	2.2	8
98	Few-Mode Fibers With Uniform Differential Mode Group Delay for Microwave Photonic Signal Processing. IEEE Access, 2020, 8, 135176-135183.	2.6	8
99	Phosphate induced surface transformation alleviated the cytotoxicity of Y2O3 nanoparticles to tobacco BY-2 cells. Science of the Total Environment, 2020, 732, 139276.	3.9	8
100	Adsorption and bioaccessibility of phenanthrene on carbon nanotubes in the in vitro gastrointestinal system. Science of the Total Environment, 2016, 566-567, 50-56.	3.9	6
101	Adsorption and catalytic degradation of preservative parabens by graphene-family nanomaterials. Science of the Total Environment, 2022, 806, 150520.	3.9	6
102	Fate of ¹⁴C-labeled few-layer graphene in natural soils: competitive roles of ferric oxides. Environmental Science: Nano, 2021, 8, 1425-1436.	2.2	6
103	Plant regeneration via somatic embryogenesis of Elymus sibiricus cv. â€˜chuancao No. 2â€™. Plant Cell, Tissue and Organ Culture, 2006, 84, 285-292.	1.2	5
104	Study of a Coil Heat Exchanger with an Ice Storage System. Energies, 2017, 10, 1982.	1.6	5
105	Superior Deep-Ultraviolet Source Pumped by an Electron Beam for NLOS Communication. IEEE Transactions on Electron Devices, 2020, 67, 3391-3394.	1.6	5
106	Agrobacteriumâ€“mediated genetic transformation of Elymus breviaristatus with Pseudomonas pseudoalcaligenes insecticidal protein gene. Plant Cell, Tissue and Organ Culture, 2007, 89, 159-168.	1.2	4
107	Competitive and/or cooperative interactions of graphene-family materials and benzo[a]pyrene with pulmonary surfactant: a computational and experimental study. Particle and Fibre Toxicology, 2021, 18, 46.	2.8	3
108	Combustion characteristic of coalâ€“ammonia composite. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2017, 39, 345-351.	1.2	2

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109	Heteroaggregation between graphene oxide and titanium dioxide particles of different shapes in aqueous phase. Journal of Hazardous Materials, 2022, 428, 128146.	6.5	2
110	Precise Tailoring of Polyester Bottlebrush Amphiphiles toward Ecoâ€Friendly Photonic Pigments via Interfacial Selfâ€Assembly. Angewandte Chemie, 2022, 134, .	1.6	2
111	Dispersion of particles in the coatings characterized by laser scanning confocal micrscopy (LSCM) I: Vertical dispersion of particles in the coatings and the weathering property studied by orthogonal analysis method of LSCM. Science China Technological Sciences, 2010, 53, 2247-2251.	2.0	1
112	Study on the Pyrolysis Characterization of Rice Husk Var in CO₂/N₂ Atmosphere. , 2022, , .		1
113	Hydrocarbon degradation potential of autochthonous bacteria from the Yellow River delta soil. Diqiu Huaxue, 2006, 25, 249-249.	0.5	0
114	An Approach to Accelerate Diagnosis by Isomorphic Determining. , 2009, , .		0
115	A research of cooperative control method on multisystem containing CST for automobile safety. , 2011, , .		0
116	Optimization of the level of SS crash barrier Overpass Bridge on highway. , 2011, , .		0
117	Theoretical and Experimental Investigations of Identifying the Ingredients of an Oilâ€“Water Mixture Based on a Characteristic Fluid Inverse Problem. International Journal of Thermophysics, 2016, 37, 1.	1.0	0
118	Ultrathinâ€Branched Pt Grown on Quasiâ€Sphere Pd with Enhanced Electrocatalytic Performances. ChemistrySelect, 2018, 3, 1531-1536.	0.7	0
119	Intelligent performance monitoring for high-speed short-reach optical networks. , 2021, , .		0
120	Opto-Electronic Neural Networks Based on Few-Mode Fiber. , 2021, , .		0
121	Simultaneous Monitoring of CD and OSNR Based on Delay-Tap Sampling and Image Processing. , 2021, , .		0
122	Performance Analysis of Vortex Tube-Ejector Absorption Refrigeration Cycle Driven by Ocean Thermal Energy. , 2022, , .		0
123	Theoretical Study on Non-pump Rankine Cycle of Ocean Thermal Energy. , 2022, , .		0