

# Wei Zhang

## List of Publications by Year in descending order

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119  
papers

5,540  
citations

81889

39  
h-index

91872

69  
g-index

119  
all docs

119  
docs citations

119  
times ranked

6211  
citing authors

#	ARTICLE	IF	CITATIONS
1	A duodecennial national synthesis of antibiotics in China's major rivers and seas (2005â€“2016). <i>Science of the Total Environment</i> , 2018, 615, 906-917.	8.0	341
2	Mechanism of Arsenic Adsorption on Magnetite Nanoparticles from Water: Thermodynamic and Spectroscopic Studies. <i>Environmental Science &amp; Technology</i> , 2015, 49, 7726-7734.	10.0	314
3	Transport of Biochar Particles in Saturated Granular Media: Effects of Pyrolysis Temperature and Particle Size. <i>Environmental Science &amp; Technology</i> , 2013, 47, 821-828.	10.0	295
4	Transport and Fate of Microbial Pathogens in Agricultural Settings. <i>Critical Reviews in Environmental Science and Technology</i> , 2013, 43, 775-893.	12.8	197
5	Size effect of polystyrene microplastics on sorption of phenanthrene and nitrobenzene. <i>Ecotoxicology and Environmental Safety</i> , 2019, 173, 331-338.	6.0	189
6	Antagonistic Effects of Humic Acid and Iron Oxyhydroxide Grain-Coating on Biochar Nanoparticle Transport in Saturated Sand. <i>Environmental Science &amp; Technology</i> , 2013, 47, 5154-5161.	10.0	168
7	Insight into the distribution of pharmaceuticals in soil-water-plant systems. <i>Water Research</i> , 2019, 152, 38-46.	11.3	135
8	Quantification and characterization of dissolved organic carbon from biochars. <i>Geoderma</i> , 2019, 335, 161-169.	5.1	130
9	Aggregation Kinetics and Transport of Single-Walled Carbon Nanotubes at Low Surfactant Concentrations. <i>Environmental Science &amp; Technology</i> , 2012, 46, 4458-4465.	10.0	121
10	Transport and retention of biochar particles in porous media: effect of pH, ionic strength, and particle size. <i>Ecohydrology</i> , 2010, 3, 497-508.	2.4	109
11	Next-Generation Multifunctional Carbonâ€“Metal Nanohybrids for Energy and Environmental Applications. <i>Environmental Science &amp; Technology</i> , 2019, 53, 7265-7287.	10.0	109
12	Calcined layered double hydroxides/reduced graphene oxide composites with improved photocatalytic degradation of paracetamol and efficient oxidation-adsorption of As(III). <i>Applied Catalysis B: Environmental</i> , 2018, 225, 550-562.	20.2	103
13	Colloid Transport and Retention in Unsaturated Porous Media: Effect of Colloid Input Concentration. <i>Environmental Science &amp; Technology</i> , 2010, 44, 4965-4972.	10.0	101
14	Chemical Aging Changed Aggregation Kinetics and Transport of Biochar Colloids. <i>Environmental Science &amp; Technology</i> , 2019, 53, 8136-8146.	10.0	91
15	Mechanistic study on uptake and transport of pharmaceuticals in lettuce from water. <i>Environment International</i> , 2019, 131, 104976.	10.0	87
16	Morphology Control and Photocatalysis Enhancement by in Situ Hybridization of Cuprous Oxide with Nitrogen-Doped Carbon Quantum Dots. <i>Langmuir</i> , 2016, 32, 9418-9427.	3.5	86
17	Effects of humic and fulvic acids on aggregation of aqu/nC60 nanoparticles. <i>Water Research</i> , 2013, 47, 1793-1802.	11.3	85
18	Antibiotic resistance genes and bacterial communities in cornfield and pasture soils receiving swine and dairy manures. <i>Environmental Pollution</i> , 2019, 248, 947-957.	7.5	83

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19	Species-dependent response of food crops to polystyrene nanoplastics and microplastics. <i>Science of the Total Environment</i> , 2021, 796, 148750.	8.0	83
20	Photocatalytic degradation of cephalexin by ZnO nanowires under simulated sunlight: Kinetics, influencing factors, and mechanisms. <i>Environment International</i> , 2019, 132, 105105.	10.0	81
21	Ecotoxicological effects of sulfonamide on and its removal by the submerged plant <i>Vallisneria natans</i> (Lour.) Hara. <i>Water Research</i> , 2020, 170, 115354.	11.3	80
22	Experimental and theoretical investigations on Se(IV) and Se(VI) adsorption to UiO-66-based metal-organic frameworks. <i>Environmental Science: Nano</i> , 2018, 5, 1441-1453.	4.3	79
23	Activation of sulfite by single-atom Fe deposited graphitic carbon nitride for diclofenac removal: The synergistic effect of transition metal and photocatalysis. <i>Chemical Engineering Journal</i> , 2021, 407, 127167.	12.7	73
24	Comparison of accelerated solvent extraction and quick, easy, cheap, effective, rugged and safe method for extraction and determination of pharmaceuticals in vegetables. <i>Journal of Chromatography A</i> , 2015, 1404, 1-9.	3.7	68
25	A review of colloid transport in fractured rocks. <i>Journal of Mountain Science</i> , 2012, 9, 770-787.	2.0	67
26	Fly Ash-Amended Sand as Filter Media in Bioretention Cells to Improve Phosphorus Removal. <i>Water Environment Research</i> , 2008, 80, 507-516.	2.7	66
27	Impact of dissolved organic matter on colloid transport in the vadose zone: Deterministic approximation of transport deposition coefficients from polymeric coating characteristics. <i>Water Research</i> , 2011, 45, 1691-1701.	11.3	62
28	Hyperexponential and nonmonotonic retention of polyvinylpyrrolidone-coated silver nanoparticles in an Ultisol. <i>Journal of Contaminant Hydrology</i> , 2014, 164, 35-48.	3.3	61
29	Polyaromatic hydrocarbons in biochars and human health risks of food crops grown in biochar-amended soils: A synthesis study. <i>Environment International</i> , 2019, 130, 104899.	10.0	60
30	Novel Biochar-Plant Tandem Approach for Remediating Hexachlorobenzene Contaminated Soils: Proof-of-Concept and New Insight into the Rhizosphere. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 5464-5471.	5.2	55
31	Temporal physicochemical changes and transformation of biochar in a rice paddy: Insights from a 9-year field experiment. <i>Science of the Total Environment</i> , 2020, 721, 137670.	8.0	54
32	Phytoavailability and mechanism of bound PAH residues in field contaminated soils. <i>Environmental Pollution</i> , 2017, 222, 465-476.	7.5	53
33	Laboratory assessment of the mobility of water-dispersed engineered nanoparticles in a red soil (Ultisol). <i>Journal of Hydrology</i> , 2014, 519, 1677-1687.	5.4	51
34	Fullerene nanoparticles exhibit greater retention in freshwater sediment than in model porous media. <i>Water Research</i> , 2012, 46, 2992-3004.	11.3	50
35	Surfactant-Mediated Control of Colloid Pattern Assembly and Attachment Strength in Evaporating Droplets. <i>Langmuir</i> , 2013, 29, 1831-1840.	3.5	50
36	Pharmaceutical exposure changed antibiotic resistance genes and bacterial communities in soil-surface- and overhead-irrigated greenhouse lettuce. <i>Environment International</i> , 2019, 131, 105031.	10.0	48

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37	Micropore clogging by leachable pyrogenic organic carbon: A new perspective on sorption irreversibility and kinetics of hydrophobic organic contaminants to black carbon. <i>Environmental Pollution</i> , 2017, 220, 1349-1358.	7.5	47
38	Different degradation mechanisms of carbamazepine and diclofenac by single-atom Barium embedded g-C <sub>3</sub> N <sub>4</sub> : the role of photosensitization-like mechanism. <i>Journal of Hazardous Materials</i> , 2021, 416, 125936.	12.4	43
39	Bioavailability of Soil-Sorbed Tetracycline to <i>Escherichia coli</i> under Unsaturated Conditions. <i>Environmental Science &amp; Technology</i> , 2017, 51, 6165-6173.	10.0	41
40	Colloid retention at the meniscus-wall contact line in an open microchannel. <i>Water Research</i> , 2012, 46, 295-306.	11.3	39
41	Long-term sorption of lincomycin to biochars: The intertwined roles of pore diffusion and dissolved organic carbon. <i>Water Research</i> , 2019, 161, 108-118.	11.3	39
42	Progresses and emerging trends of arsenic research in the past 120 years. <i>Critical Reviews in Environmental Science and Technology</i> , 2021, 51, 1306-1353.	12.8	37
43	Sorption of Lincomycin by Manure-Derived Biochars from Water. <i>Journal of Environmental Quality</i> , 2016, 45, 519-527.	2.0	36
44	Simultaneous determination of organotin pesticides by HPLC-ICP-MS and their sorption, desorption, and transformation in freshwater sediments. <i>Water Research</i> , 2016, 95, 185-194.	11.3	36
45	Fabrication of niobium doped titanate nanoflakes with enhanced visible-light-driven photocatalytic activity for efficient ibuprofen degradation. <i>Chinese Chemical Letters</i> , 2019, 30, 2177-2180.	9.0	35
46	Roots-Enhanced Preferential Flows in Deciduous and Coniferous Forest Soils Revealed by Dual-Tracer Experiments. <i>Journal of Environmental Quality</i> , 2019, 48, 136-146.	2.0	35
47	Greater microbial carbon use efficiency and carbon sequestration in soils: Amendment of biochar versus crop straws. <i>GCB Bioenergy</i> , 2020, 12, 1092-1103.	5.6	35
48	Uptake and Accumulation of Pharmaceuticals in Overhead- and Surface-Irrigated Greenhouse Lettuce. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 822-830.	5.2	34
49	Plasmid binding to metal oxide nanoparticles inhibited lateral transfer of antibiotic resistance genes. <i>Environmental Science: Nano</i> , 2019, 6, 1310-1322.	4.3	34
50	A rapid screening technique for estimating nanoparticle transport in porous media. <i>Water Research</i> , 2013, 47, 4086-4094.	11.3	33
51	Reverse engineering of biochar. <i>Bioresource Technology</i> , 2015, 183, 163-174.	9.6	33
52	A coupled field study of subsurface fracture flow and colloid transport. <i>Journal of Hydrology</i> , 2015, 524, 476-488.	5.4	33
53	Extracellular Polymeric Substances Acting as a Permeable Barrier Hinder the Lateral Transfer of Antibiotic Resistance Genes. <i>Frontiers in Microbiology</i> , 2019, 10, 736.	3.5	33
54	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

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55	Temporal Changes in Aqu/C <sub>60</sub> Physical–Chemical, Deposition, and Transport Characteristics in Aqueous Systems. <i>Environmental Science &amp; Technology</i> , 2011, 45, 5170-5177.	10.0	31
56	Environmentally-relevant concentrations of Al(III) and Fe(III) cations induce aggregation of free DNA by complexation with phosphate group. <i>Water Research</i> , 2017, 123, 58-66.	11.3	30
57	Bacterial community assembly and antibiotic resistance genes in the lettuce-soil system upon antibiotic exposure. <i>Science of the Total Environment</i> , 2021, 778, 146255.	8.0	30
58	Modulating cellular cytotoxicity and phototoxicity of fluorescent organic salts through counterion pairing. <i>Scientific Reports</i> , 2019, 9, 15288.	3.3	29
59	Assessing transfer of pesticide residues from chrysanthemum flowers into tea solution and associated health risks. <i>Ecotoxicology and Environmental Safety</i> , 2020, 187, 109859.	6.0	29
60	Transport and retention of colloidal particles in partially saturated porous media: Effect of ionic strength. <i>Water Resources Research</i> , 2009, 45, .	4.2	28
61	Abiotic reduction of trifluralin and pendimethalin by sulfides in black-carbon-amended coastal sediments. <i>Journal of Hazardous Materials</i> , 2016, 310, 125-134.	12.4	28
62	Sediments inhibit adsorption of 17 $\beta$ -estradiol and 17 $\alpha$ -ethinylestradiol to carbon nanotubes and graphene oxide. <i>Environmental Science: Nano</i> , 2017, 4, 1900-1910.	4.3	28
63	Potential metabolism of pharmaceuticals in radish: Comparison of in vivo and in vitro exposure. <i>Environmental Pollution</i> , 2018, 242, 962-969.	7.5	28
64	Interactions between nanoparticles and fractal surfaces. <i>Water Research</i> , 2019, 151, 296-309.	11.3	28
65	Uptake and dissipation of metalaxyl-M, fludioxonil, cyantraniliprole and thiamethoxam in greenhouse chrysanthemum. <i>Environmental Pollution</i> , 2020, 257, 113499.	7.5	28
66	DNA Facilitates the Sorption of Polycyclic Aromatic Hydrocarbons on Montmorillonites. <i>Environmental Science &amp; Technology</i> , 2018, 52, 2694-2703.	10.0	27
67	A Fast and Easily Parallelizable Biosensor Method for Measuring Extractable Tetracyclines in Soils. <i>Environmental Science &amp; Technology</i> , 2020, 54, 758-767.	10.0	26
68	Impact of biochar amendment on the uptake, fate and bioavailability of pharmaceuticals in soil-radish systems. <i>Journal of Hazardous Materials</i> , 2020, 398, 122852.	12.4	26
69	Characterization of Plant Accumulation of Pharmaceuticals from Soils with Their Concentration in Soil Pore Water. <i>Environmental Science &amp; Technology</i> , 2022, 56, 9346-9355.	10.0	26
70	Quantification of Colloid Retention and Release by Straining and Energy Minima in Variably Saturated Porous Media. <i>Environmental Science &amp; Technology</i> , 2013, 47, 130724151622003.	10.0	24
71	Metabolic Demethylation and Oxidation of Caffeine during Uptake by Lettuce. <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 7907-7915.	5.2	24
72	Nonmonotonic Effect of Montmorillonites on the Horizontal Transfer of Antibiotic Resistance Genes to Bacteria. <i>Environmental Science and Technology Letters</i> , 2020, 7, 421-427.	8.7	24

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73	Effect of Soil Reduction on Phosphorus Sorption of an Organic-Rich Silt Loam. Soil Science Society of America Journal, 2010, 74, 240-249.	2.2	23
74	Effect of Hydrofracking Fluid on Colloid Transport in the Unsaturated Zone. Environmental Science & Technology, 2014, 48, 8266-8274.	10.0	23
75	Can pore-clogging by ash explain post-fire runoff?. International Journal of Wildland Fire, 2016, 25, 294.	2.4	23
76	Effects of reclaimed water matrix on fate of pharmaceuticals and personal care products in soil. Chemosphere, 2016, 156, 286-293.	8.2	22
77	Residue behavior and dietary intake risk assessment of three fungicides in tomatoes ( <i>Lycopersicon</i> ). Tj ETQq1 1 0.784314 rgBT /Overload 284-287.	2.7	20
78	Roxarsone exposure jeopardizes nitrogen removal and regulates bacterial community in biological sequential batch reactors. Ecotoxicology and Environmental Safety, 2018, 159, 232-239.	6.0	19
79	Stomata facilitate foliar sorption of silver nanoparticles by <i>Arabidopsis thaliana</i> . Environmental Pollution, 2022, 292, 118448.	7.5	19
80	Enhancement of Heavy Metals Retention in Sandy Soil by Amendment with Fly Ash. Transactions of the ASABE, 2008, 51, 1247-1254.	1.1	18
81	Bioavailability of tetracycline to antibiotic resistant <i>Escherichia coli</i> in water-clay systems. Environmental Pollution, 2018, 243, 1078-1086.	7.5	18
82	Global syndromes induced by changes in solutes of the world's large rivers. Nature Communications, 2021, 12, 5940.	12.8	17
83	Exposure to trace levels of metals and fluoroquinolones increases inflammation and tumorigenesis risk of zebrafish embryos. Environmental Science and Ecotechnology, 2022, 10, 100162.	13.5	17
84	Evaluation of Two Langmuir Models for Phosphorus Sorption of Phosphorus-Enriched Soils in New York for Environmental Applications. Soil Science, 2009, 174, 523-530.	0.9	16
85	Predicting crop root concentration factors of organic contaminants with machine learning models. Journal of Hazardous Materials, 2022, 424, 127437.	12.4	16
86	Hydrogen Production from Urea Sewage on NiFe-Based Porous Electrocatalysts. ACS Sustainable Chemistry and Engineering, 0, , .	6.7	15
87	Nutrient transport within three vegetative treatment areas receiving silage bunker runoff. Journal of Environmental Management, 2011, 92, 587-595.	7.8	14
88	Dynamics and sources of colloids in shallow groundwater in lowland wells and fracture flow in sloping farmland. Water Research, 2019, 156, 252-263.	11.3	14
89	Implication of cation-bridging interaction contribution to sorption of perfluoroalkyl carboxylic acids by soils. Chemosphere, 2022, 290, 133224.	8.2	14
90	The Effects of Timing of Inundation on Soil Physical Quality in the Water-Level Fluctuation Zone of the Three Gorges Reservoir Region, China. Vadose Zone Journal, 2018, 17, 1-12.	2.2	13

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91	Bacterial foraging facilitates aggregation of <i>Chlamydomonas microspheara</i> in an organic carbon source-limited aquatic environment. <i>Environmental Pollution</i> , 2020, 259, 113924.	7.5	13
92	Development of a new long-term drought resilient soil water retention technology. <i>Journal of Soils and Water Conservation</i> , 2014, 69, 154A-160A.	1.6	12
93	Transport of sodium dodecylbenzene sulfonate (SDBS)-dispersed carbon nanotubes and enhanced mobility of tetrabromobisphenol A (TBBPA) in saturated porous media. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 497, 205-213.	4.7	12
94	Comparing root concentration factors of antibiotics for lettuce ( <i>Lactuca sativa</i> ) measured in rhizosphere and bulk soils. <i>Chemosphere</i> , 2021, 262, 127677.	8.2	12
95	Uptake of cephalexin by lettuce, celery, and radish from water. <i>Chemosphere</i> , 2021, 263, 127916.	8.2	12
96	The impact of biofilm-forming potential and tafi production on transport of environmental <i>Salmonella</i> through unsaturated porous media. <i>Biologia (Poland)</i> , 2009, 64, 460-464.	1.5	11
97	Tracer movement through paired vegetative treatment areas receiving silage bunker runoff. <i>Journal of Soils and Water Conservation</i> , 2011, 66, 18-28.	1.6	11
98	Transport and Retention of <i>Phytophthora capsici</i> Zoospores in Saturated Porous Media. <i>Environmental Science &amp; Technology</i> , 2016, 50, 9270-9278.	10.0	11
99	Organochlorinated pesticides expedite the enzymatic degradation of DNA. <i>Communications Biology</i> , 2019, 2, 81.	4.4	11
100	Deposition and release of carboxylated graphene in saturated porous media: Effect of transient solution chemistry. <i>Chemosphere</i> , 2019, 235, 643-650.	8.2	10
101	Plant Root Exudates Decrease Mobility of Smectite Colloids in Porous Media in Contrast to Humic Acid. <i>Soil Science Society of America Journal</i> , 2015, 79, 467-475.	2.2	9
102	Effect of Clay Minerals on Transport of Surfactants Dispersed Multi-walled Carbon Nanotubes in Porous Media. <i>Acta Geologica Sinica</i> , 2017, 91, 135-144.	1.4	9
103	Light modulates the effect of antibiotic norfloxacin on photosynthetic processes of <i>Microcystis aeruginosa</i> . <i>Aquatic Toxicology</i> , 2021, 235, 105826.	4.0	8
104	Transcriptomic analysis of zebrafish ( <i>Danio rerio</i> ) embryos to assess integrated biotoxicity of Xitiaoxi River waters. <i>Environmental Pollution</i> , 2018, 242, 42-53.	7.5	7
105	Advancing Soil Physics for Securing Food, Water, Soil and Ecosystem Services. <i>Vadose Zone Journal</i> , 2018, 17, 1-7.	2.2	6
106	A comparative study on various indicators for evaluating soil health of three biochar materials application. <i>Journal of Cleaner Production</i> , 2022, 343, 131085.	9.3	6
107	Hydrogen bonding rather than cation bridging promotes graphene oxide attachment to lipid membranes in the presence of heavy metals. <i>Environmental Science: Nano</i> , 2020, 7, 2240-2251.	4.3	5
108	Assessing Consumer Buy and Pay Preferences for Labeled Food Products with Statistical and Machine Learning Methods. <i>Journal of Food Protection</i> , 2021, 84, 1560-1566.	1.7	3

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109	Application of BiVO <sub>4</sub> Microalgae Combined Treatment to Remove High Concentration Mixture of Sulfamethazine and Sulfadiazine. <i>Water (Switzerland)</i> , 2022, 14, 718.	2.7	3
110	Design and risk assessment tool for vegetative treatment areas receiving agricultural wastewater: Preliminary results. <i>Journal of Environmental Management</i> , 2010, 91, 1794-1801.	7.8	2
111	Biochar amendment changed soil-bound fractions of silver nanoparticles and ions but not their uptake by radish at an environmentally-relevant concentration. <i>Biochar</i> , 2020, 2, 307-317.	12.6	2
112	Biocolloids: Transport and Retention in Soils. <i>Encyclopedia of Earth Sciences Series</i> , 2011, , 66-70.	0.1	2
113	Rapid Sand Filtration of Recycled Irrigation Water Controlled Pythium Root Rot of Poinsettia in Greenhouse. <i>HortTechnology</i> , 2019, 29, 578-589.	0.9	2
114	Nano-goethite-mediated transformation of anthracene derivatives under low moisture conditions. <i>Environmental Science: Nano</i> , 2022, 9, 289-301.	4.3	2
115	NaCl salinity enhances tetracycline bioavailability to <i>Escherichia coli</i> on agar surfaces. <i>Chemosphere</i> , 2022, 302, 134921.	8.2	2
116	Impact of Climate Change on Physical and Biogeochemical Processes in the Hydrologic Cycle: Challenges and Perspectives. <i>British Journal of Environment and Climate Change</i> , 0, , 1-8.	0.3	1
117	Behavior of Silver Nanoparticles in Chlorinated Lettuce Wash Water. <i>Journal of Food Protection</i> , 2022, 85, 1061-1068.	1.7	1
118	Control of <i>Phytophthora capsici</i> diseases in greenhouse squash by fast-flow filtration. <i>Acta Horticulturae</i> , 2020, , 247-256.	0.2	0
119	Fate and transport in environmental quality. <i>Journal of Environmental Quality</i> , 2021, 50, 1282-1289.	2.0	0