Deng-jun Wang

List of Publications by Year
in descending order

68 papers	3,482 citations	126858 33 h-index	143943 57 g-index
72 all docs	72 docs citations	72 times ranked	2901 citing authors

#	Article	IF	Citations
1	Transport of Biochar Particles in Saturated Granular Media: Effects of Pyrolysis Temperature and Particle Size. Environmental Science & Technology, 2013, 47, 821-828.	4.6	295
2	Nano-enabled pesticides for sustainable agriculture and global food security. Nature Nanotechnology, 2022, 17, 347-360.	15.6	219
3	Humic Acid Facilitates the Transport of ARS-Labeled Hydroxyapatite Nanoparticles in Iron Oxyhydroxide-Coated Sand. Environmental Science & Technology, 2012, 46, 2738-2745.	4.6	172
4	Antagonistic Effects of Humic Acid and Iron Oxyhydroxide Grain-Coating on Biochar Nanoparticle Transport in Saturated Sand. Environmental Science & Technology, 2013, 47, 5154-5161.	4.6	168
5	Heterogeneous activation of persulfate by reduced graphene oxideâ€"elemental silver/magnetite nanohybrids for the oxidative degradation of pharmaceuticals and endocrine disrupting compounds in water. Applied Catalysis B: Environmental, 2018, 225, 91-99.	10.8	144
6	Transport and retention of biochar nanoparticles in a paddy soil under environmentally-relevant solution chemistry conditions. Environmental Pollution, 2017, 230, 540-549.	3.7	138
7	Potential utility of graphene-based nano spinel ferrites as adsorbent and photocatalyst for removing organic/inorganic contaminants from aqueous solutions: A mini review. Chemosphere, 2019, 221, 392-402.	4.2	131
8	Facilitated transport of Cu with hydroxyapatite nanoparticles in saturated sand: Effects of solution ionic strength and composition. Water Research, 2011, 45, 5905-5915.	5.3	109
9	Next-Generation Multifunctional Carbonâ€"Metal Nanohybrids for Energy and Environmental Applications. Environmental Science & Technology, 2019, 53, 7265-7287.	4.6	109
10	Modeling the transport of TiO2 nanoparticle aggregates in saturated and unsaturated granular media: Effects of ionic strength and pH. Water Research, 2013, 47, 1399-1408.	5.3	97
11	Effect of Size-Selective Retention on the Cotransport of Hydroxyapatite and Goethite Nanoparticles in Saturated Porous Media. Environmental Science & Technology, 2015, 49, 8461-8470.	4.6	93
12	Transport and re-entrainment of soil colloids in saturated packed column: effects of pH and ionic strength. Journal of Soils and Sediments, 2011, 11, 491-503.	1.5	89
13	Critical review of microplastics removal from the environment. Chemosphere, 2022, 293, 133557.	4.2	89
14	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
15	Transport and retention of silver nanoparticles in soil: Effects of input concentration, particle size and surface coating. Science of the Total Environment, 2019, 648, 102-108.	3.9	68
16	Accelerated photocatalytic degradation of organic pollutants over carbonate-rich lanthanum-substituted zinc spinel ferrite assembled reduced graphene oxide by ultraviolet (UV)-activated persulfate. Chemical Engineering Journal, 2020, 393, 124733.	6.6	67
17	Facilitated transport of cadmium by biochar-Fe3O4 nanocomposites in water-saturated natural soils. Science of the Total Environment, 2019, 684, 265-275.	3.9	65
18	Hyperexponential and nonmonotonic retention of polyvinylpyrrolidone-coated silver nanoparticles in an Ultisol. Journal of Contaminant Hydrology, 2014, 164, 35-48.	1.6	61

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19	Evaluation of water quality in surface water and shallow groundwater: a case study of a rare earth mining area in southern Jiangxi Province, China. Environmental Monitoring and Assessment, 2016, 188, 24.	1.3	61
20	Effect of reduced humic acid on the transport of ferrihydrite nanoparticles under anoxic conditions. Water Research, 2017, 109, 347-357.	5.3	61
21	Role of solution chemistry in the retention and release of graphene oxide nanomaterials in uncoated and iron oxide-coated sand. Science of the Total Environment, 2017, 579, 776-785.	3.9	55
22	Transport behavior of humic acid-modified nano-hydroxyapatite in saturated packed column: Effects of Cu, ionic strength, and ionic composition. Journal of Colloid and Interface Science, 2011, 360, 398-407.	5.0	54
23	Laboratory assessment of the mobility of water-dispersed engineered nanoparticles in a red soil (Ultisol). Journal of Hydrology, 2014, 519, 1677-1687.	2.3	51
24	Evaluation of the colloidal stability and adsorption performance of reduced graphene oxideâ€“elemental silver/magnetite nanohybrids for selected toxic heavy metals in aqueous solutions. Applied Surface Science, 2019, 471, 8-17.	3.1	51
25	Transport and Retention of Polyvinylpyrrolidoneâ€Coated Silver Nanoparticles in Natural Soils. Vadose Zone Journal, 2015, 14, 1-13.	1.3	48
26	Co-transport of U(VI) and akaganÃ©ite colloids in water-saturated porous media: Role of U(VI) concentration, pH and ionic strength. Water Research, 2018, 147, 350-361.	5.3	48
27	Transport of ARS-labeled hydroxyapatite nanoparticles in saturated granular media is influenced by surface charge variability even in the presence of humic acid. Journal of Hazardous Materials, 2012, 229-230, 170-176.	6.5	43
28	Effects of Escherichia coli and phosphate on the transport of titanium dioxide nanoparticles in heterogeneous porous media. Water Research, 2018, 146, 264-274.	5.3	43
29	Effects of low-molecular-weight organic acids on the dissolution of hydroxyapatite nanoparticles. Environmental Science: Nano, 2016, 3, 768-779.	2.2	40
30	Stability of co-existing ZnO and TiO2 nanomaterials in natural water: Aggregation and sedimentation mechanisms. Chemosphere, 2017, 184, 1125-1133.	4.2	40
31	Biochar effectively inhibits the horizontal transfer of antibiotic resistance genes via transformation. Journal of Hazardous Materials, 2022, 423, 127150.	6.5	40
32	Facilitated Transport of Copper with Hydroxyapatite Nanoparticles in Saturated Sand. Soil Science Society of America Journal, 2012, 76, 375-388.	1.2	39
33	Cotransport of hydroxyapatite nanoparticles and hematite colloids in saturated porous media: Mechanistic insights from mathematical modeling and phosphate oxygen isotope fractionation. Journal of Contaminant Hydrology, 2015, 182, 194-209.	1.6	37
34	Transport of fluorescently labeled hydroxyapatite nanoparticles in saturated granular media at environmentally relevant concentrations of surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 457, 58-66.	2.3	34
35	Impact of Redox Reactions on Colloid Transport in Saturated Porous Media: An Example of Ferrihydrite Colloids Transport in the Presence of Sulfide. Environmental Science & Technology, 2016, 50, 10968-10977.	4.6	31
36	Elucidating the Role of Sulfide on the Stability of Ferrihydrite Colloids under Anoxic Conditions. Environmental Science & Technology, 2019, 53, 4173-4184.	4.6	31

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37	Carboxymethylcellulose Mediates the Transport of Carbon Nanotubeâ€"Magnetite Nanohybrid Aggregates in Water-Saturated Porous Media. Environmental Science & Technology, 2017, 51, 12405-12415.	4.6	30
38	Inhibited transport of graphene oxide nanoparticles in granular quartz sand coated with Bacillus subtilis and Pseudomonas putida biofilms. Chemosphere, 2017, 169, 1-8.	4.2	30
39	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
40	Release and stability of water dispersible biochar colloids in aquatic environments: Effects of pyrolysis temperature, particle size, and solution chemistry. Environmental Pollution, 2020, 260, 114037.	3.7	28
41	Small-scale interaction of iron and phosphorus in flooded soils with rice growth. Science of the Total Environment, 2019, 669, 911-919.	3.9	26
42	Interactions of extracellular DNA with aromatized biochar and protection against degradation by DNase I. Journal of Environmental Sciences, 2021, 101, 205-216.	3.2	26
43	Synergistic effects of phosphorus and humic acid on the transport of anatase titanium dioxide nanoparticles in water-saturated porous media. Environmental Pollution, 2018, 243, 1368-1375.	3.7	22
44	Biochar nanoparticles with different pyrolysis temperatures mediate cadmium transport in water-saturated soils: Effects of ionic strength and humic acid. Science of the Total Environment, 2022, 806, 150668.	3.9	20
45	Modeling the Transport of the â€œNew-Horizonâ€•Reduced Graphene Oxideâ€"Metal Oxide Nanohybrids in Water-Saturated Porous Media. Environmental Science & Technology, 2018, 52, 4610-4622.	4.6	19
46	Transport and retention patterns of fragmental microplastics in saturated and unsaturated porous media: A real-time pore-scale visualization. Water Research, 2022, 214, 118195.	5.3	19
47	Detachment of fullerene nC60 nanoparticles in saturated porous media under flow/stop-flow conditions: Column experiments and mechanistic explanations. Environmental Pollution, 2016, 213, 698-709.	3.7	18
48	Facilitated transport of nTiO2-kaolin aggregates by bacteria and phosphate in water-saturated quartz sand. Science of the Total Environment, 2020, 713, 136589.	3.9	18
49	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
50	Heteroaggregation and dissolution of silver nanoparticles by iron oxide colloids under environmentally relevant conditions. Environmental Science: Nano, 2019, 6, 195-206.	2.2	16
51	Aggregation of reduced graphene oxide and its nanohybrids with magnetite and elemental silver under environmentally relevant conditions. Journal of Nanoparticle Research, 2018, 20, 93.	0.8	15
52	Differential antimicrobial activity of silver nanoparticles to bacteria Bacillus subtilis and Escherichia coli, and toxicity to crop plant Zea mays and beneficial B. subtilis-inoculated Z. mays. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	14
53	Trophic transfer of Cd from duckweed (<i>Lemna minor</i> L.) to tilapia (<i>Oreochromis) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	2.2	14
54	Recent Developments in Engineered Nanomaterials for Water Treatment and Environmental Remediation. , 2018, , 849-882.		12

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55	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
56	Deposition and release of carboxylated graphene in saturated porous media: Effect of transient solution chemistry. Chemosphere, 2019, 235, 643-650.	4.2	10
57	Formation, aggregation, and transport of NOMâ€“Cr(<scp>iii</scp>) colloids in aquatic environments. Environmental Science: Nano, 2022, 9, 1133-1145.	2.2	10
58	Calcium and magnesium enhance arsenate rhizotoxicity and uptake in <i>Triticum aestivum</i>. Environmental Toxicology and Chemistry, 2011, 30, 1642-1648.	2.2	9
59	Surface heterogeneity mediated transport of hydrochar nanoparticles in heterogeneous porous media. Environmental Science and Pollution Research, 2020, 27, 32842-32855.	2.7	9
60	Transport of perfluorooctanoic acid in unsaturated porous media mediated by SDBS. Journal of Hydrology, 2022, 607, 127479.	2.3	9
61	Phosphate and humic acid inhibit corrosion of green-synthesized nano-iron particles to remove Cr(VI) and facilitate their cotransport. Chemical Engineering Journal, 2022, 450, 136415.	6.6	9
62	Characterizing surface electrochemical properties of simulated bulk soil <i>in situ</i> by streaming potential measurements. European Journal of Soil Science, 2019, 70, 1063-1072.	1.8	8
63	Loading and Bioavailability of Colloidal Phosphorus in the Estuarine Gradient of the Deer Creekâ€Susquehanna River Transect in the Chesapeake Bay. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3717-3726.	1.3	8
64	Cotransport of Cu with Graphene Oxide in Saturated Porous Media with Varying Degrees of Geochemical Heterogeneity. Water (Switzerland), 2020, 12, 444.	1.2	5
65	Observed equilibrium partition and second-order kinetic interaction of quantum dot nanoparticles in saturated porous media. Journal of Contaminant Hydrology, 2021, 240, 103799.	1.6	5
66	A mechanistic study of ciprofloxacin adsorption by goethite in the presence of silver and titanium dioxide nanoparticles. Journal of Environmental Sciences, 2022, 118, 46-56.	3.2	4
67	Quantification of the redox properties of microplastics and their effect on arsenite oxidation. Fundamental Research, 2023, 3, 777-785.	1.6	4
68	Precipitant Effects on Aggregates Structure of Asphaltene and Their Implications for Groundwater Remediation. Water (Switzerland), 2020, 12, 2116.	1.2	2