Wei Chen

List of Publications by Year
in descending order

102 papers	7,424 citations	41 h-index	84 g-index
103 all docs	103 docs citations	103 times ranked	9983 citing authors

81434
62345

#	Article	IF	Citations
1	Adsorption of Polar and Nonpolar Organic Chemicals to Carbon Nanotubes. Environmental Science & Technology, 2007, 41, 8295-8300.	4.6	683
2	Mechanisms for strong adsorption of tetracycline to carbon nanotubes: A comparative study using activated carbon and graphite as adsorbents. Environmental Science & Technology, 2009, 43, 2322-2327.	4.6	670
3	Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes. Environmental Science & Technology, 2008, 42, 6862-6868.	4.6	345
4	Improved <i>In Vitro</i> and <i>In Vivo</i> Biocompatibility of Graphene Oxide through Surface Modification: Poly(Acrylic Acid)-Functionalization is Superior to PEGylation. ACS Nano, 2016, 10, 3267-3281.	7.3	324
5	Adsorption of Sulfonamide Antibiotics to Multiwalled Carbon Nanotubes. Langmuir, 2009, 25, 11608-11613.	1.6	308
6	Aging Significantly Affects Mobility and Contaminant-Mobilizing Ability of Nanoplastics in Saturated Loamy Sand. Environmental Science & Technology, 2019, 53, 5805-5815.	4.6	258
7	Adsorption of Nonionic Aromatic Compounds to Single-Walled Carbon Nanotubes: Effects of Aqueous Solution Chemistry. Environmental Science & Technology, 2008, 42, 7225-7230.	4.6	247
8	Adsorption of sulfonamides to demineralized pine wood biochars prepared under different thermochemical conditions. Environmental Pollution, 2014, 186, 187-194.	3.7	221
9	Bi₂O₃â^'Bi₂WO₆ Composite Microspheres: Hydrothermal Synthesis and Photocatalytic Performances. Journal of Physical Chemistry C, 2011, 115, 5220-5225.	1.5	219
10	Immobilization of lead and cadmium from aqueous solution and contaminated sediment using nano-hydroxyapatite. Environmental Pollution, 2010, 158, 514-519.	3.7	207
11	Polystyrene Nanoplastics-Enhanced Contaminant Transport: Role of Irreversible Adsorption in Glassy Polymeric Domain. Environmental Science & Technology, 2018, 52, 2677-2685.	4.6	185
12	Facet-Dependent Catalytic Activity of Nanosheet-Assembled Bismuth Oxyiodide Microspheres in Degradation of Bisphenol A. Environmental Science & Technology, 2015, 49, 6240-6248.	4.6	179
13	Graphene Nanosheets and Graphite Oxide as Promising Adsorbents for Removal of Organic Contaminants from Aqueous Solution. Journal of Environmental Quality, 2013, 42, 191-198.	1.0	136
14	Directed Synthesis of Hierarchical Nanostructured TiO₂ Catalysts and their Morphology-Dependent Photocatalysis for Phenol Degradation. Environmental Science & Technology, 2008, 42, 2342-2348.	4.6	131
15	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Technology, 2017, 51, 10274-10281.	4.6	129
16	Regional Variation in Water-Related Impacts of Shale Gas Development and Implications for Emerging International Plays. Environmental Science & Technology, 2014, 48, 8298-8306.	4.6	111
17	Adsorption of polar, nonpolar, and substituted aromatics to colloidal graphene oxide nanoparticles. Environmental Pollution, 2014, 186, 226-233.	3.7	104
18	pH-dependent effect of zinc on arsenic adsorption to magnetite nanoparticles. Water Research, 2010, 44, 5693-5701.	5.3	96

#	Article	IF	Citations
19	Factors controlling transport of graphene oxide nanoparticles in saturated sand columns. Environmental Toxicology and Chemistry, 2014, 33, 998-1004.	2.2	91
20	Adsorption of single-ringed N- and S-heterocyclic aromatics on carbon nanotubes. Carbon, 2010, 48, 3906-3915.	5.4	90
21	Transport of Sulfide-Reduced Graphene Oxide in Saturated Quartz Sand: Cation-Dependent Retention Mechanisms. Environmental Science & Technology, 2015, 49, 11468-11475.	4.6	87
22	Reduced graphene oxide enhances horseradish peroxidase stability by serving as radical scavenger and redox mediator. Carbon, 2015, 94, 531-538.	5.4	81
23	Cation-Inhibited Transport of Graphene Oxide Nanomaterials in Saturated Porous Media: The Hofmeister Effects. Environmental Science & Technology, 2017, 51, 828-837.	4.6	77
24	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater â€“ a perspective. Environmental Science: Nano, 2020, 7, 2178-2194.	2.2	74
25	Enhanced Transport of Phenanthrene and 1-Naphthol by Colloidal Graphene Oxide Nanoparticles in Saturated Soil. Environmental Science & Technology, 2014, 48, 10136-10144.	4.6	73
26	Engineered nanoparticles for hydrocarbon detection in oil-field rocks. Energy and Environmental Science, 2011, 4, 505-509.	15.6	72
27	Facilitated Transport of 2,2â€²,5,5â€²-Polychlorinated Biphenyl and Phenanthrene by Fullerene Nanoparticles through Sandy Soil Columns. Environmental Science & Technology, 2011, 45, 1341-1348.	4.6	71
28	Manganese Peroxidase Degrades Pristine but Not Surface-Oxidized (Carboxylated) Single-Walled Carbon Nanotubes. Environmental Science & Technology, 2014, 48, 7918-7923.	4.6	68
29	Species-dependent effects of biochar amendment on bioaccumulation of atrazine in earthworms. Environmental Pollution, 2014, 186, 241-247.	3.7	67
30	Concentration Dependent Effects of Bovine Serum Albumin on Graphene Oxide Colloidal Stability in Aquatic Environment. Environmental Science & Technology, 2018, 52, 7212-7219.	4.6	67
31	Transport of graphene oxide nanoparticles in saturated sandy soil. Environmental Sciences: Processes and Impacts, 2014, 16, 2268-2277.	1.7	65
32	<i>In situ</i>remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. Environmental Science: Nano, 2019, 6, 1283-1302.	2.2	65
33	Improving Photocatalytic Water Treatment through Nanocrystal Engineering: Mesoporous Nanosheet-Assembled 3D BiOCl Hierarchical Nanostructures That Induce Unprecedented Large Vacancies. Environmental Science & Technology, 2018, 52, 6872-6880.	4.6	63
34	Transformation of graphene oxide by chlorination and chloramination: Implications for environmental transport and fate. Water Research, 2016, 103, 416-423.	5.3	59
35	Colloidal stability of reduced graphene oxide materials prepared using different reducing agents. Environmental Science: Nano, 2016, 3, 1062-1071.	2.2	56
36	Enhanced removal of sulfonamide antibiotics by KOH-activated anthracite coal: Batch and fixed-bed studies. Environmental Pollution, 2016, 211, 425-434.	3.7	55

#	Article	IF	Citations
37	Environmental transformation of natural and engineered carbon nanoparticles and implications for the fate of organic contaminants. Environmental Science: Nano, 2018, 5, 2500-2518.	2.2	54
38	Facet-Dependent Adsorption and Fractionation of Natural Organic Matter on Crystalline Metal Oxide Nanoparticles. Environmental Science & Technology, 2020, 54, 8622-8631.	4.6	54
39	Reductive dechlorination of hexachloroethane by sulfide in aqueous solutions mediated by graphene oxide and carbon nanotubes. Carbon, 2014, 72, 74-81.	5.4	53
40	Activity of catalase adsorbed to carbon nanotubes: Effects of carbon nanotube surface properties. Talanta, 2013, 113, 142-147.	2.9	47
41	Release of polycyclic aromatic hydrocarbons from biochar fine particles in simulated lung fluids: Implications for bioavailability and risks of airborne aromatics. Science of the Total Environment, 2019, 655, 1159-1168.	3.9	46
42	Effects of sulfide reduction on adsorption affinities of colloidal graphene oxide nanoparticles for phenanthrene and 1-naphthol. Environmental Pollution, 2015, 196, 371-378.	3.7	42
43	Enhanced Hydrolysis of <i>p</i>-Nitrophenyl Phosphate by Iron (Hydr)oxide Nanoparticles: Roles of Exposed Facets. Environmental Science & Technology, 2020, 54, 8658-8667.	4.6	42
44	Sorption and Mobility of Charged Organic Compounds: How to Confront and Overcome Limitations in Their Assessment. Environmental Science & Technology, 2022, 56, 4702-4710.	4.6	41
45	Adsorption of tetracycline to nano-NiO: the effect of co-existing Cu(ii) ions and environmental implications. Environmental Sciences: Processes and Impacts, 2014, 16, 1462.	1.7	40
46	Sulfide induces physical damages and chemical transformation of microplastics via radical oxidation and sulfide addition. Water Research, 2021, 197, 117100.	5.3	40
47	Catalytic Effects of Functionalized Carbon Nanotubes on Dehydrochlorination of 1,1,2,2-Tetrachloroethane. Environmental Science & Technology, 2014, 48, 3856-3863.	4.6	39
48	Transformation of graphene oxide by ferrous iron: Environmental implications. Environmental Toxicology and Chemistry, 2015, 34, 1975-1982.	2.2	39
49	Effects of clay minerals on transport of graphene oxide in saturated porous media. Environmental Toxicology and Chemistry, 2017, 36, 655-660.	2.2	38
50	Aggregation morphology is a key factor determining protein adsorption on graphene oxide and reduced graphene oxide nanomaterials. Environmental Science: Nano, 2019, 6, 1303-1309.	2.2	38
51	Key Physicochemical Properties Dictating Gastrointestinal Bioaccessibility of Microplastics-Associated Organic Xenobiotics: Insights from a Deep Learning Approach. Environmental Science & Technology, 2020, 54, 12051-12062.	4.6	38
52	Self-Damaging Aerobic Reduction of Graphene Oxide by <i>Escherichia coli</i>: Role of GO-Mediated Extracellular Superoxide Formation. Environmental Science & Technology, 2018, 52, 12783-12791.	4.6	35
53	Influence of light wavelength on the photoactivity, physicochemical transformation, and fate of graphene oxide in aqueous media. Environmental Science: Nano, 2018, 5, 2590-2603.	2.2	34
54	Effects of chemical oxidation on sorption and desorption of PAHs in typical Chinese soils. Environmental Pollution, 2009, 157, 1894-1903.	3.7	32

#	Article	IF	Citations
55	Facet-dependent evolution of surface defects in anatase TiO₂ by thermal treatment: implications for environmental applications of photocatalysis. Environmental Science: Nano, 2019, 6, 1740-1753.	2.2	32
56	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. Environmental Science: Nano, 2020, 7, 13-36.	2.2	32
57	Bioremediation of highly contaminated oilfield soil: Bioaugmentation for enhancing aromatic compounds removal. Frontiers of Environmental Science and Engineering, 2014, 8, 293-304.	3.3	31
58	Enhanced adsorption of aromatic chemicals on boron and nitrogen co-doped single-walled carbon nanotubes. Environmental Science: Nano, 2017, 4, 558-564.	2.2	31
59	Comparison of Earthworm Bioaccumulation between Readily Desorbable and Desorption-Resistant Naphthalene: Implications for Biouptake Routes. Environmental Science & Technology, 2010, 44, 323-328.	4.6	30
60	Humic acidâ€mediated transport of tetracycline and pyrene in saturated porous media. Environmental Toxicology and Chemistry, 2012, 31, 534-541.	2.2	30
61	Genotoxicity and Cytotoxicity of Cadmium Sulfide Nanomaterials to Mice: Comparison Between Nanorods and Nanodots. Environmental Engineering Science, 2014, 31, 373-380.	0.8	30
62	Facet Energy and Reactivity versus Cytotoxicity: The Surprising Behavior of CdS Nanorods. Nano Letters, 2016, 16, 688-694.	4.5	30
63	Binding of Benzo[<i>a</i>]pyrene Alters the Bioreactivity of Fine Biochar Particles toward Macrophages Leading to Deregulated Macrophagic Defense and Autophagy. ACS Nano, 2021, 15, 9717-9731.	7.3	29
64	Sorption of nitroaromatics to soils: Comparison of the importance of soil organic matter versus clay. Environmental Toxicology and Chemistry, 2009, 28, 1447-1454.	2.2	28
65	Transformation and destabilization of graphene oxide in reducing aqueous solutions containing sulfide. Environmental Toxicology and Chemistry, 2014, 33, 2647-2653.	2.2	28
66	Effects of ozone and produced hydroxyl radicals on the transformation of graphene oxide in aqueous media. Environmental Science: Nano, 2019, 6, 2484-2494.	2.2	27
67	Transport of graphene oxide in saturated quartz sand containing iron oxides. Science of the Total Environment, 2019, 657, 1450-1459.	3.9	27
68	Dehydrochlorination of activated carbon-bound 1,1,2,2-tetrachloroethane: Implications for carbonaceous material-based soil/sediment remediation. Carbon, 2014, 78, 578-588.	5.4	24
69	Link between black carbon and resistant desorption of PAHs on soil and sediment. Journal of Soils and Sediments, 2012, 12, 713-723.	1.5	23
70	Reduction of graphene oxide alters its cyto-compatibility towards primary and immortalized macrophages. Nanoscale, 2018, 10, 14637-14650.	2.8	23
71	Mechanistic Insights from Discrete Molecular Dynamics Simulations of Pesticideâ€“Nanoparticle Interactions. Environmental Science & Technology, 2017, 51, 8396-8404.	4.6	22
72	Facet-dependent generation of superoxide radical anions by ZnO nanomaterials under simulated solar light. Environmental Science: Nano, 2018, 5, 2864-2875.	2.2	22

#	Article	IF	Citations
73	RESISTANT DESORPTION OF HYDROPHOBIC ORGANIC CONTAMINANTS IN TYPICAL CHINESE SOILS: IMPLICATIONS FOR LONG-TERM FATE AND SOIL QUALITY STANDARDS. Environmental Toxicology and Chemistry, 2008, 27, 235.	2.2	21
74	Effect of copper ion on adsorption of chlorinated phenols and 1â€naphthylamine to surfaceâ€modified carbon nanotubes. Environmental Toxicology and Chemistry, 2012, 31, 100-107.	2.2	21
75	The oxidation capacity of Mn 3 O 4 nanoparticles is significantly enhanced by anchoring them onto reduced graphene oxide to facilitate regeneration of surface-associated Mn(III). Water Research, 2016, 103, 101-108.	5.3	21
76	Contaminantâ€mobilizing capability of fullerene nanoparticles (<i>n</i>C₆₀): Effect of solventâ€exchange process in <i>n</i>C₆₀ formation. Environmental Toxicology and Chemistry, 2013, 32, 329-336.	2.2	20
77	Sulfidation of Ag and ZnO Nanomaterials Significantly Affects Protein Corona Composition: Implications for Human Exposure to Environmentally Aged Nanomaterials. Environmental Science & Technology, 2019, 53, 14296-14307.	4.6	20
78	BIOAVAILABILITY OF POLYCYCLIC AROMATIC HYDROCARBONS SEQUESTERED IN SEDIMENT: MICROBIAL STUDY AND MODEL PREDICTION. Environmental Toxicology and Chemistry, 2007, 26, 878.	2.2	19
79	Current Methods and Prospects for Analysis and Characterization of Nanomaterials in the Environment. Environmental Science & Technology, 2022, 56, 7426-7447.	4.6	19
80	Enhanced dehydrochlorination of 1,1,2,2-tetrachloroethane by graphene-based nanomaterials. Environmental Pollution, 2016, 214, 341-348.	3.7	17
81	Effects of Cu(II) and Ni(II) ions on adsorption of tetracycline to functionalized carbon nanotubes. Journal of Zhejiang University: Science A, 2014, 15, 653-661.	1.3	16
82	Biochar Fine Particles Enhance Uptake of Benzo(a)pyrene to Macrophages and Epithelial Cells via Different Mechanisms. Environmental Science and Technology Letters, 2021, 8, 218-223.	3.9	15
83	Sorption and Resistant Desorption of Atrazine in Typical Chinese Soils. Journal of Environmental Quality, 2009, 38, 171-179.	1.0	14
84	Nano-TiO₂-Catalyzed Dehydrochlorination of 1,1,2,2-Tetrachloroethane: Roles of Crystalline Phase and Exposed Facets. Environmental Science & Technology, 2018, 52, 4031-4039.	4.6	14
85	Synergistic role of different soil components in slow sorption kinetics of polar organic contaminants. Environmental Pollution, 2014, 184, 123-130.	3.7	12
86	Photolysis of graphene oxide in the presence of nitrate: implications for graphene oxide integrity in water and wastewater treatment. Environmental Science: Nano, 2019, 6, 136-145.	2.2	11
87	Response to Comment on â€œAdsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubesâ€ Environmental Science & Technology, 2009, 43, 3400-3401.	4.6	10
88	Chloramination of graphene oxide significantly affects its transport properties in saturated porous media. NanoImpact, 2016, 3-4, 90-95.	2.4	10
89	Effects of the preparation method and humic-acid modification on the mobility and contaminant-mobilizing capability of fullerene nanoparticles (nC60). Environmental Sciences: Processes and Impacts, 2014, 16, 1282.	1.7	9
90	RELEASE OF ADSORBED POLYCYCLIC AROMATIC HYDROCARBONS UNDER COSOLVENT TREATMENT: IMPLICATIONS FOR AVAILABILITY AND FATE. Environmental Toxicology and Chemistry, 2008, 27, 112.	2.2	8

#	ARTICLE	IF	CITATIONS
91	Release of hexachlorocyclohexanes from historically and freshly contaminated soils in China: Implications for fate and regulation. Environmental Pollution, 2008, 156, 753-759.	3.7	7
92	Sulfide and ferrous iron preferentially target specific surface O-functional groups of graphene oxide: implications for accumulation of contaminants. Environmental Science: Nano, 2020, 7, 462-471.	2.2	7
93	Nanostructured manganese oxides exhibit facet-dependent oxidation capabilities. Environmental Science: Nano, 2020, 7, 3840-3848.	2.2	7
94	Natural organic matter facilitates formation and microbial methylation of mercury selenide nanoparticles. Environmental Science: Nano, 2021, 8, 67-75.	2.2	7
95	A Program for Evaluating Dual-Equilibrium Desorption Effects on Remediation. Ground Water, 2004, 42, 620-624.	0.7	6
96	Sorption of monoaromatic compounds to heated and unheated coals, humic acid, and biochar: Implication for using combustion method to quantify sorption contribution of carbonaceous geosorbents in soil. Applied Geochemistry, 2013, 35, 289-296.	1.4	6
97	Environmental reduction of carbon nanomaterials affects their capabilities to accumulate aromatic compounds. NanoImpact, 2016, 1, 21-28.	2.4	6
98	Targeting specific cell organelles with different-faceted nanocrystals that are selectively recognized by organelle-targeting peptides. Chemical Communications, 2020, 56, 7613-7616.	2.2	6
99	Leaching of organic carbon enhances mobility of biochar nanoparticles in saturated porous media. Environmental Science: Nano, 2021, 8, 2584-2594.	2.2	4
100	Engineering of CoSe₂ Nanosheets via Vacancy Manipulation for Efficient Cancer Therapy. ACS Applied Bio Materials, 2020, 3, 7800-7809.	2.3	4
101	Effect of Heat Treatment on Sorption of Polar and Nonpolar Compounds to Montmorillonites and Soils. Journal of Environmental Quality, 2012, 41, 1284-1289.	1.0	2
102	Reply to the â€˜Comment on â€œColloidal stability of reduced graphene oxide materials prepared using different reducing agentsâ€â€™ by M. Moazzami Gudarzi, <i>Environ. Sci.: Nano</i>, 2017, 4, DOI: 10.1039/C6EN00424E. Environmental Science: Nano, 2017, 4, 2421-2422.	2.2	0