

Wei Chen

List of Publications by Year in descending order

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102
papers

7,424
citations

71102

41
h-index

53230

85
g-index

103
all docs

103
docs citations

103
times ranked

8862
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption of Polar and Nonpolar Organic Chemicals to Carbon Nanotubes. Environmental Science & Technology, 2007, 41, 8295-8300.	10.0	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.	10.0	670
3	Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes. Environmental Science & Technology, 2008, 42, 6862-6868.	10.0	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.	14.6	324
5	Adsorption of Sulfonamide Antibiotics to Multiwalled Carbon Nanotubes. Langmuir, 2009, 25, 11608-11613.	3.5	308
6	Aging Significantly Affects Mobility and Contaminant-Mobilizing Ability of Nanoplastics in Saturated Loamy Sand. Environmental Science & Technology, 2019, 53, 5805-5815.	10.0	258
7	Adsorption of Nonionic Aromatic Compounds to Single-Walled Carbon Nanotubes: Effects of Aqueous Solution Chemistry. Environmental Science & Technology, 2008, 42, 7225-7230.	10.0	247
8	Adsorption of sulfonamides to demineralized pine wood biochars prepared under different thermochemical conditions. Environmental Pollution, 2014, 186, 187-194.	7.5	221
9	Bi ₂ O ₃ ~Bi ₂ WO ₆ Composite Microspheres: Hydrothermal Synthesis and Photocatalytic Performances. Journal of Physical Chemistry C, 2011, 115, 5220-5225.	3.1	219
10	Immobilization of lead and cadmium from aqueous solution and contaminated sediment using nano-hydroxyapatite. Environmental Pollution, 2010, 158, 514-519.	7.5	207
11	Polystyrene Nanoplastics-Enhanced Contaminant Transport: Role of Irreversible Adsorption in Glassy Polymeric Domain. Environmental Science & Technology, 2018, 52, 2677-2685.	10.0	185
12	Facet-Dependent Catalytic Activity of Nanosheet-Assembled Bismuth Oxyiodide Microspheres in Degradation of Bisphenol A. Environmental Science & Technology, 2015, 49, 6240-6248.	10.0	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.	2.0	136
14	Directed Synthesis of Hierarchical Nanostructured TiO ₂ Catalysts and their Morphology-Dependent Photocatalysis for Phenol Degradation. Environmental Science & Technology, 2008, 42, 2342-2348.	10.0	131
15	Advanced Materials, Technologies, and Complex Systems Analyses: Emerging Opportunities to Enhance Urban Water Security. Environmental Science & Technology, 2017, 51, 10274-10281.	10.0	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.	10.0	111
17	Adsorption of polar, nonpolar, and substituted aromatics to colloidal graphene oxide nanoparticles. Environmental Pollution, 2014, 186, 226-233.	7.5	104
18	pH-dependent effect of zinc on arsenic adsorption to magnetite nanoparticles. Water Research, 2010, 44, 5693-5701.	11.3	96

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19	Factors controlling transport of graphene oxide nanoparticles in saturated sand columns. <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 998-1004.	4.3	91
20	Adsorption of single-ringed N- and S-heterocyclic aromatics on carbon nanotubes. <i>Carbon</i> , 2010, 48, 3906-3915.	10.3	90
21	Transport of Sulfide-Reduced Graphene Oxide in Saturated Quartz Sand: Cation-Dependent Retention Mechanisms. <i>Environmental Science & Technology</i> , 2015, 49, 11468-11475.	10.0	87
22	Reduced graphene oxide enhances horseradish peroxidase stability by serving as radical scavenger and redox mediator. <i>Carbon</i> , 2015, 94, 531-538.	10.3	81
23	Cation-Inhibited Transport of Graphene Oxide Nanomaterials in Saturated Porous Media: The Hofmeister Effects. <i>Environmental Science & Technology</i> , 2017, 51, 828-837.	10.0	77
24	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater – a perspective. <i>Environmental Science: Nano</i> , 2020, 7, 2178-2194.	4.3	74
25	Enhanced Transport of Phenanthrene and 1-Naphthol by Colloidal Graphene Oxide Nanoparticles in Saturated Soil. <i>Environmental Science & Technology</i> , 2014, 48, 10136-10144.	10.0	73
26	Engineered nanoparticles for hydrocarbon detection in oil-field rocks. <i>Energy and Environmental Science</i> , 2011, 4, 505-509.	30.8	72
27	Facilitated Transport of 2,2,5,5-Tetrachlorinated Biphenyl and Phenanthrene by Fullerene Nanoparticles through Sandy Soil Columns. <i>Environmental Science & Technology</i> , 2011, 45, 1341-1348.	10.0	71
28	Manganese Peroxidase Degrades Pristine but Not Surface-Oxidized (Carboxylated) Single-Walled Carbon Nanotubes. <i>Environmental Science & Technology</i> , 2014, 48, 7918-7923.	10.0	68
29	Species-dependent effects of biochar amendment on bioaccumulation of atrazine in earthworms. <i>Environmental Pollution</i> , 2014, 186, 241-247.	7.5	67
30	Concentration Dependent Effects of Bovine Serum Albumin on Graphene Oxide Colloidal Stability in Aquatic Environment. <i>Environmental Science & Technology</i> , 2018, 52, 7212-7219.	10.0	67
31	Transport of graphene oxide nanoparticles in saturated sandy soil. <i>Environmental Sciences: Processes and Impacts</i> , 2014, 16, 2268-2277.	3.5	65
32	In situ remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. <i>Environmental Science: Nano</i> , 2019, 6, 1283-1302.	4.3	65
33	Improving Photocatalytic Water Treatment through Nanocrystal Engineering: Mesoporous Nanosheet-Assembled 3D BiOI Hierarchical Nanostructures That Induce Unprecedented Large Vacancies. <i>Environmental Science & Technology</i> , 2018, 52, 6872-6880.	10.0	63
34	Transformation of graphene oxide by chlorination and chloramination: Implications for environmental transport and fate. <i>Water Research</i> , 2016, 103, 416-423.	11.3	59
35	Colloidal stability of reduced graphene oxide materials prepared using different reducing agents. <i>Environmental Science: Nano</i> , 2016, 3, 1062-1071.	4.3	56
36	Enhanced removal of sulfonamide antibiotics by KOH-activated anthracite coal: Batch and fixed-bed studies. <i>Environmental Pollution</i> , 2016, 211, 425-434.	7.5	55

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37	Environmental transformation of natural and engineered carbon nanoparticles and implications for the fate of organic contaminants. <i>Environmental Science: Nano</i> , 2018, 5, 2500-2518.	4.3	54
38	Facet-Dependent Adsorption and Fractionation of Natural Organic Matter on Crystalline Metal Oxide Nanoparticles. <i>Environmental Science & Technology</i> , 2020, 54, 8622-8631.	10.0	54
39	Reductive dechlorination of hexachloroethane by sulfide in aqueous solutions mediated by graphene oxide and carbon nanotubes. <i>Carbon</i> , 2014, 72, 74-81.	10.3	53
40	Activity of catalase adsorbed to carbon nanotubes: Effects of carbon nanotube surface properties. <i>Talanta</i> , 2013, 113, 142-147.	5.5	47
41	Release of polycyclic aromatic hydrocarbons from biochar fine particles in simulated lung fluids: Implications for bioavailability and risks of airborne aromatics. <i>Science of the Total Environment</i> , 2019, 655, 1159-1168.	8.0	46
42	Effects of sulfide reduction on adsorption affinities of colloidal graphene oxide nanoparticles for phenanthrene and 1-naphthol. <i>Environmental Pollution</i> , 2015, 196, 371-378.	7.5	42
43	Enhanced Hydrolysis of <i>p</i> -Nitrophenyl Phosphate by Iron (Hydr)oxide Nanoparticles: Roles of Exposed Facets. <i>Environmental Science & Technology</i> , 2020, 54, 8658-8667.	10.0	42
44	Sorption and Mobility of Charged Organic Compounds: How to Confront and Overcome Limitations in Their Assessment. <i>Environmental Science & Technology</i> , 2022, 56, 4702-4710.	10.0	41
45	Adsorption of tetracycline to nano-NiO: the effect of co-existing Cu(II) ions and environmental implications. <i>Environmental Sciences: Processes and Impacts</i> , 2014, 16, 1462.	3.5	40
46	Sulfide induces physical damages and chemical transformation of microplastics via radical oxidation and sulfide addition. <i>Water Research</i> , 2021, 197, 117100.	11.3	40
47	Catalytic Effects of Functionalized Carbon Nanotubes on Dehydrochlorination of 1,1,2,2-Tetrachloroethane. <i>Environmental Science & Technology</i> , 2014, 48, 3856-3863.	10.0	39
48	Transformation of graphene oxide by ferrous iron: Environmental implications. <i>Environmental Toxicology and Chemistry</i> , 2015, 34, 1975-1982.	4.3	39
49	Effects of clay minerals on transport of graphene oxide in saturated porous media. <i>Environmental Toxicology and Chemistry</i> , 2017, 36, 655-660.	4.3	38
50	Aggregation morphology is a key factor determining protein adsorption on graphene oxide and reduced graphene oxide nanomaterials. <i>Environmental Science: Nano</i> , 2019, 6, 1303-1309.	4.3	38
51	Key Physicochemical Properties Dictating Gastrointestinal Bioaccessibility of Microplastics-Associated Organic Xenobiotics: Insights from a Deep Learning Approach. <i>Environmental Science & Technology</i> , 2020, 54, 12051-12062.	10.0	38
52	Self-Damaging Aerobic Reduction of Graphene Oxide by <i>Escherichia coli</i> : Role of GO-Mediated Extracellular Superoxide Formation. <i>Environmental Science & Technology</i> , 2018, 52, 12783-12791.	10.0	35
53	Influence of light wavelength on the photoactivity, physicochemical transformation, and fate of graphene oxide in aqueous media. <i>Environmental Science: Nano</i> , 2018, 5, 2590-2603.	4.3	34
54	Effects of chemical oxidation on sorption and desorption of PAHs in typical Chinese soils. <i>Environmental Pollution</i> , 2009, 157, 1894-1903.	7.5	32

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55	Facet-dependent evolution of surface defects in anatase TiO ₂ by thermal treatment: implications for environmental applications of photocatalysis. <i>Environmental Science: Nano</i> , 2019, 6, 1740-1753.	4.3	32
56	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. <i>Environmental Science: Nano</i> , 2020, 7, 13-36.	4.3	32
57	Bioremediation of highly contaminated oilfield soil: Bioaugmentation for enhancing aromatic compounds removal. <i>Frontiers of Environmental Science and Engineering</i> , 2014, 8, 293-304.	6.0	31
58	Enhanced adsorption of aromatic chemicals on boron and nitrogen co-doped single-walled carbon nanotubes. <i>Environmental Science: Nano</i> , 2017, 4, 558-564.	4.3	31
59	Comparison of Earthworm Bioaccumulation between Readily Desorbable and Desorption-Resistant Naphthalene: Implications for Biouptake Routes. <i>Environmental Science & Technology</i> , 2010, 44, 323-328.	10.0	30
60	Humic acid-mediated transport of tetracycline and pyrene in saturated porous media. <i>Environmental Toxicology and Chemistry</i> , 2012, 31, 534-541.	4.3	30
61	Genotoxicity and Cytotoxicity of Cadmium Sulfide Nanomaterials to Mice: Comparison Between Nanorods and Nanodots. <i>Environmental Engineering Science</i> , 2014, 31, 373-380.	1.6	30
62	Facet Energy and Reactivity versus Cytotoxicity: The Surprising Behavior of CdS Nanorods. <i>Nano Letters</i> , 2016, 16, 688-694.	9.1	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. <i>ACS Nano</i> , 2021, 15, 9717-9731.	14.6	29
64	Sorption of nitroaromatics to soils: Comparison of the importance of soil organic matter versus clay. <i>Environmental Toxicology and Chemistry</i> , 2009, 28, 1447-1454.	4.3	28
65	Transformation and destabilization of graphene oxide in reducing aqueous solutions containing sulfide. <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 2647-2653.	4.3	28
66	Effects of ozone and produced hydroxyl radicals on the transformation of graphene oxide in aqueous media. <i>Environmental Science: Nano</i> , 2019, 6, 2484-2494.	4.3	27
67	Transport of graphene oxide in saturated quartz sand containing iron oxides. <i>Science of the Total Environment</i> , 2019, 657, 1450-1459.	8.0	27
68	Dehydrochlorination of activated carbon-bound 1,1,2,2-tetrachloroethane: Implications for carbonaceous material-based soil/sediment remediation. <i>Carbon</i> , 2014, 78, 578-588.	10.3	24
69	Link between black carbon and resistant desorption of PAHs on soil and sediment. <i>Journal of Soils and Sediments</i> , 2012, 12, 713-723.	3.0	23
70	Reduction of graphene oxide alters its cyto-compatibility towards primary and immortalized macrophages. <i>Nanoscale</i> , 2018, 10, 14637-14650.	5.6	23
71	Mechanistic Insights from Discrete Molecular Dynamics Simulations of Pesticide-Nanoparticle Interactions. <i>Environmental Science & Technology</i> , 2017, 51, 8396-8404.	10.0	22
72	Facet-dependent generation of superoxide radical anions by ZnO nanomaterials under simulated solar light. <i>Environmental Science: Nano</i> , 2018, 5, 2864-2875.	4.3	22

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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.	4.3	21
74	Effect of copper ion on adsorption of chlorinated phenols and 1-naphthylamine to surface-modified carbon nanotubes. Environmental Toxicology and Chemistry, 2012, 31, 100-107.	4.3	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.	11.3	21
76	Contaminant-mobilizing capability of fullerene nanoparticles (C ₆₀): Effect of solvent-exchange process in C ₆₀ formation. Environmental Toxicology and Chemistry, 2013, 32, 329-336.	4.3	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.	10.0	20
78	BIOAVAILABILITY OF POLYCYCLIC AROMATIC HYDROCARBONS SEQUESTERED IN SEDIMENT: MICROBIAL STUDY AND MODEL PREDICTION. Environmental Toxicology and Chemistry, 2007, 26, 878.	4.3	19
79	Current Methods and Prospects for Analysis and Characterization of Nanomaterials in the Environment. Environmental Science & Technology, 2022, 56, 7426-7447.	10.0	19
80	Enhanced dehydrochlorination of 1,1,2,2-tetrachloroethane by graphene-based nanomaterials. Environmental Pollution, 2016, 214, 341-348.	7.5	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.	2.4	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.	8.7	15
83	Sorption and Resistant Desorption of Atrazine in Typical Chinese Soils. Journal of Environmental Quality, 2009, 38, 171-179.	2.0	14
84	Nano-TiO ₂ -Catalyzed Dehydrochlorination of 1,1,2,2-Tetrachloroethane: Roles of Crystalline Phase and Exposed Facets. Environmental Science & Technology, 2018, 52, 4031-4039.	10.0	14
85	Synergistic role of different soil components in slow sorption kinetics of polar organic contaminants. Environmental Pollution, 2014, 184, 123-130.	7.5	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.	4.3	11
87	Response to Comment on "Adsorption of Hydroxyl- and Amino-Substituted Aromatics to Carbon Nanotubes". Environmental Science & Technology, 2009, 43, 3400-3401.	10.0	10
88	Chloramination of graphene oxide significantly affects its transport properties in saturated porous media. NanolImpact, 2016, 3-4, 90-95.	4.5	10
89	Effects of the preparation method and humic-acid modification on the mobility and contaminant-mobilizing capability of fullerene nanoparticles (nC ₆₀). Environmental Sciences: Processes and Impacts, 2014, 16, 1282.	3.5	9
90	RELEASE OF ADSORBED POLYCYCLIC AROMATIC HYDROCARBONS UNDER COSOLVENT TREATMENT: IMPLICATIONS FOR AVAILABILITY AND FATE. Environmental Toxicology and Chemistry, 2008, 27, 112.	4.3	8

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91	Release of hexachlorocyclohexanes from historically and freshly contaminated soils in China: Implications for fate and regulation. <i>Environmental Pollution</i> , 2008, 156, 753-759.	7.5	7
92	Sulfide and ferrous iron preferentially target specific surface O-functional groups of graphene oxide: implications for accumulation of contaminants. <i>Environmental Science: Nano</i> , 2020, 7, 462-471.	4.3	7
93	Nanostructured manganese oxides exhibit facet-dependent oxidation capabilities. <i>Environmental Science: Nano</i> , 2020, 7, 3840-3848.	4.3	7
94	Natural organic matter facilitates formation and microbial methylation of mercury selenide nanoparticles. <i>Environmental Science: Nano</i> , 2021, 8, 67-75.	4.3	7
95	A Program for Evaluating Dual-Equilibrium Desorption Effects on Remediation. <i>Ground Water</i> , 2004, 42, 620-624.	1.3	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. <i>Applied Geochemistry</i> , 2013, 35, 289-296.	3.0	6
97	Environmental reduction of carbon nanomaterials affects their capabilities to accumulate aromatic compounds. <i>NanoImpact</i> , 2016, 1, 21-28.	4.5	6
98	Targeting specific cell organelles with different-faceted nanocrystals that are selectively recognized by organelle-targeting peptides. <i>Chemical Communications</i> , 2020, 56, 7613-7616.	4.1	6
99	Leaching of organic carbon enhances mobility of biochar nanoparticles in saturated porous media. <i>Environmental Science: Nano</i> , 2021, 8, 2584-2594.	4.3	4
100	Engineering of CoSe ₂ Nanosheets via Vacancy Manipulation for Efficient Cancer Therapy. <i>ACS Applied Bio Materials</i> , 2020, 3, 7800-7809.	4.6	4
101	Effect of Heat Treatment on Sorption of Polar and Nonpolar Compounds to Montmorillonites and Soils. <i>Journal of Environmental Quality</i> , 2012, 41, 1284-1289.	2.0	2
102	Reply to the "Comment on "Colloidal stability of reduced graphene oxide materials prepared using different reducing agents" by M. Moazzami-Gudarzi, <i>Environ. Sci.: Nano</i>, 2017, 4, DOI: 10.1039/C6EN00424E. <i>Environmental Science: Nano</i> , 2017, 4, 2421-2422.	4.3	0