

Gregory V. Lowry

List of Publications by Year in Descending Order

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Version: 2024-04-10

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

160 papers	18,666 citations	67 h-index	136 g-index
170 ext. papers	20,897 ext. citations	9.4 avg, IF	7.07 L-index

#	Paper	IF	Citations
160	Star Polymers with Designed Reactive Oxygen Species Scavenging and Agent Delivery Functionality Promote Plant Stress Tolerance.. <i>ACS Nano</i> , 2022 , 16, 4467-4478	16.7	3
159	Biological Barriers, Processes, and Transformations at the Soil-Plant-Atmosphere Interfaces Driving the Uptake, Translocation, and Bioavailability of Inorganic Nanoparticles to Plants 2022 , 123-152		
158	Critical Review: Role of Inorganic Nanoparticle Properties on Their Foliar Uptake and Translocation. <i>Environmental Science & Technology</i> , 2021 , 55, 13417-13431	10.3	32
157	Sulfidized Nanoscale Zero-Valent Iron: Tuning the Properties of This Complex Material for Efficient Groundwater Remediation. <i>Accounts of Materials Research</i> , 2021 , 2, 420-431	7.5	14
156	Star Polymer Size, Charge Content, and Hydrophobicity Affect their Leaf Uptake and Translocation in Plants. <i>Environmental Science & Technology</i> , 2021 , 55, 10758-10768	10.3	9
155	Methanol-based extraction protocol for insoluble and moderately water-soluble nanoparticles in plants to enable characterization by single particle ICP-MS. <i>Analytical and Bioanalytical Chemistry</i> , 2021 , 413, 299-314	4.4	5
154	Investigation of pore water and soil extraction tests for characterizing the fate of poorly soluble metal-oxide nanoparticles. <i>Chemosphere</i> , 2021 , 267, 128885	8.4	3
153	Amphiphilic Thiol Polymer Nanogel Removes Environmentally Relevant Mercury Species from Both Produced Water and Hydrocarbons. <i>Environmental Science & Technology</i> , 2021 , 55, 1231-1241	10.3	3
152	Unveiling the Role of Sulfur in Rapid Defluorination of Florfenicol by Sulfidized Nanoscale Zero-Valent Iron in Water under Ambient Conditions. <i>Environmental Science & Technology</i> , 2021 , 55, 2628-2638	10.3	25
151	From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. <i>Exploration</i> , 2021 , 1, 9-20		13
150	Phosphate Polymer Nanogel for Selective and Efficient Rare Earth Element Recovery. <i>Environmental Science & Technology</i> , 2021 , 55, 12549-12560	10.3	4
149	Impacts of Sediment Particle Grain Size and Mercury Speciation on Mercury Bioavailability Potential. <i>Environmental Science & Technology</i> , 2021 , 55, 12393-12402	10.3	5
148	Guiding the design space for nanotechnology to advance sustainable crop production. <i>Nature Nanotechnology</i> , 2020 , 15, 801-810	28.7	49
147	Sulfur Loading and Speciation Control the Hydrophobicity, Electron Transfer, Reactivity, and Selectivity of Sulfidized Nanoscale Zerovalent Iron. <i>Advanced Materials</i> , 2020 , 32, e1906910	24	83
146	Quantifying the efficiency and selectivity of organohalide dechlorination by zerovalent iron. <i>Environmental Sciences: Processes and Impacts</i> , 2020 , 22, 528-542	4.3	32
145	Temperature- and pH-Responsive Star Polymers as Nanocarriers with Potential for Agrochemical Delivery. <i>ACS Nano</i> , 2020 , 14, 10954-10965	16.7	38
144	CuO Nanoparticles Alter the Rhizospheric Bacterial Community and Local Nitrogen Cycling for Wheat Grown in a Calcareous Soil. <i>Environmental Science & Technology</i> , 2020 , 54, 8699-8709	10.3	25

143	Multistep Method to Extract Moderately Soluble Copper Oxide Nanoparticles from Soil for Quantification and Characterization. <i>Analytical Chemistry</i> , 2020 , 92, 9620-9628	7.8	6
142	Protein coating composition targets nanoparticles to leaf stomata and trichomes. <i>Nanoscale</i> , 2020 , 12, 3630-3636	7.7	25
141	Differential Reactivity of Copper- and Gold-Based Nanomaterials Controls Their Seasonal Biogeochemical Cycling and Fate in a Freshwater Wetland Mesocosm. <i>Environmental Science & Technology</i> , 2020 , 54, 1533-1544	10.3	17
140	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. <i>Environmental Science: Nano</i> , 2020 , 7, 13-36	7.1	23
139	Graphite nanoparticle addition to fertilizers reduces nitrate leaching in growth of lettuce (<i>Lactuca sativa</i>). <i>Environmental Science: Nano</i> , 2020 , 7, 127-138	7.1	8
138	Iron and Sulfur Precursors Affect Crystalline Structure, Speciation, and Reactivity of Sulfidized Nanoscale Zerovalent Iron. <i>Environmental Science & Technology</i> , 2020 , 54, 13294-13303	10.3	41
137	Copper and Gold Nanoparticles Increase Nutrient Excretion Rates of Primary Consumers. <i>Environmental Science & Technology</i> , 2020 , 54, 10170-10180	10.3	3
136	Technology readiness and overcoming barriers to sustainably implement nanotechnology-enabled plant agriculture. <i>Nature Food</i> , 2020 , 1, 416-425	14.4	90
135	Effect of CeO ₂ nanomaterial surface functional groups on tissue and subcellular distribution of Ce in tomato (<i>Solanum lycopersicum</i>). <i>Environmental Science: Nano</i> , 2019 , 6, 273-285	7.1	23
134	Mechanistic, Mechanistic-Based Empirical, and Continuum-Based Concepts and Models for the Transport of Polyelectrolyte-Modified Nanoscale Zerovalent Iron (NZVI) in Saturated Porous Media 2019 , 235-291		1
133	Sulfide-Modified NZVI (S-NZVI): Synthesis, Characterization, and Reactivity 2019 , 359-386		2
132	Opportunities and challenges for nanotechnology in the agri-tech revolution. <i>Nature Nanotechnology</i> , 2019 , 14, 517-522	28.7	281
131	Nanoparticle Size and Coating Chemistry Control Foliar Uptake Pathways, Translocation, and Leaf-to-Rhizosphere Transport in Wheat. <i>ACS Nano</i> , 2019 , 13, 5291-5305	16.7	151
130	Reactivity, Selectivity, and Long-Term Performance of Sulfidized Nanoscale Zerovalent Iron with Different Properties. <i>Environmental Science & Technology</i> , 2019 , 53, 5936-5945	10.3	100
129	Copper release and transformation following natural weathering of nano-enabled pressure-treated lumber. <i>Science of the Total Environment</i> , 2019 , 668, 234-244	10.2	10
128	Effect of Soil Organic Matter, Soil pH, and Moisture Content on Solubility and Dissolution Rate of CuO NPs in Soil. <i>Environmental Science & Technology</i> , 2019 , 53, 4959-4967	10.3	55
127	Impact of mercury speciation on its removal from water by activated carbon and organoclay. <i>Water Research</i> , 2019 , 157, 600-609	12.5	21
126	In situ remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. <i>Environmental Science: Nano</i> , 2019 , 6, 1283-1302	7.1	38

125	A comparison of the effects of natural organic matter on sulfidated and nonsulfidated nanoscale zerovalent iron colloidal stability, toxicity, and reactivity to trichloroethylene. <i>Science of the Total Environment</i> , 2019 , 671, 254-261	10.2	37
124	Persistence of copper-based nanoparticle-containing foliar sprays in <i>Lactuca sativa</i> (lettuce) characterized by spICP-MS. <i>Journal of Nanoparticle Research</i> , 2019 , 21, 1	2.3	13
123	Nanoparticle surface charge influences translocation and leaf distribution in vascular plants with contrasting anatomy. <i>Environmental Science: Nano</i> , 2019 , 6, 2508-2519	7.1	46
122	Sulfur Dose and Sulfidation Time Affect Reactivity and Selectivity of Post-Sulfidized Nanoscale Zerovalent Iron. <i>Environmental Science & Technology</i> , 2019 , 53, 13344-13352	10.3	55
121	Biogenic Cyanide Production Promotes Dissolution of Gold Nanoparticles in Soil. <i>Environmental Science & Technology</i> , 2019 , 53, 1287-1295	10.3	24
120	Distributing sulfidized nanoscale zerovalent iron onto phosphorus-functionalized biochar for enhanced removal of antibiotic florfenicol. <i>Chemical Engineering Journal</i> , 2019 , 359, 713-722	14.7	67
119	Adsorbed poly(aspartate) coating limits the adverse effects of dissolved groundwater solutes on Fe nanoparticle reactivity with trichloroethylene. <i>Environmental Science and Pollution Research</i> , 2018 , 25, 7157-7169	5.1	23
118	Modified MODFLOW-based model for simulating the agglomeration and transport of polymer-modified Fe nanoparticles in saturated porous media. <i>Environmental Science and Pollution Research</i> , 2018 , 25, 7180-7199	5.1	24
117	Comparative Persistence of Engineered Nanoparticles in a Complex Aquatic Ecosystem. <i>Environmental Science & Technology</i> , 2018 , 52, 4072-4078	10.3	44
116	Life cycle considerations of nano-enabled agrochemicals: are today's tools up to the task?. <i>Environmental Science: Nano</i> , 2018 , 5, 1057-1069	7.1	25
115	High molecular weight components of natural organic matter preferentially adsorb onto nanoscale zero valent iron and magnetite. <i>Science of the Total Environment</i> , 2018 , 628-629, 177-185	10.2	21
114	Effect of silver concentration and chemical transformations on release and antibacterial efficacy in silver-containing textiles. <i>NanoImpact</i> , 2018 , 11, 51-57	5.6	24
113	CuO Nanoparticle Dissolution and Toxicity to Wheat (<i>Triticum aestivum</i>) in Rhizosphere Soil. <i>Environmental Science & Technology</i> , 2018 , 52, 2888-2897	10.3	108
112	Progress towards standardized and validated characterizations for measuring physicochemical properties of manufactured nanomaterials relevant to nano health and safety risks. <i>NanoImpact</i> , 2018 , 9, 14-30	5.6	83
111	Size-Based Differential Transport, Uptake, and Mass Distribution of Ceria (CeO) Nanoparticles in Wetland Mesocosms. <i>Environmental Science & Technology</i> , 2018 , 52, 9768-9776	10.3	44
110	Temporal Evolution of Copper Distribution and Speciation in Roots of <i>Triticum aestivum</i> Exposed to CuO, Cu(OH), and CuS Nanoparticles. <i>Environmental Science & Technology</i> , 2018 , 52, 9777-9784	10.3	27
109	Preparation of palladized carbon nanotubes encapsulated iron composites: highly efficient dechlorination for trichloroethylene and low corrosion of nanoiron. <i>Royal Society Open Science</i> , 2018 , 5, 172242	3.3	5
108	Gold nanoparticle biodissolution by a freshwater macrophyte and its associated microbiome. <i>Nature Nanotechnology</i> , 2018 , 13, 1072-1077	28.7	44

107	Speciation of Mercury in Selected Areas of the Petroleum Value Chain. <i>Environmental Science & Technology</i> , 2018 , 52, 1655-1664	10.3	18
106	Inching closer to realistic exposure models. <i>Nature Nanotechnology</i> , 2018 , 13, 983-985	28.7	2
105	Engineered nanoparticles interact with nutrients to intensify eutrophication in a wetland ecosystem experiment. <i>Ecological Applications</i> , 2018 , 28, 1435-1449	4.9	22
104	Effect of emplaced nZVI mass and groundwater velocity on PCE dechlorination and hydrogen evolution in water-saturated sand. <i>Journal of Hazardous Materials</i> , 2017 , 322, 136-144	12.8	23
103	Time and Nanoparticle Concentration Affect the Extractability of Cu from CuO NP-Amended Soil. <i>Environmental Science & Technology</i> , 2017 , 51, 2226-2234	10.3	64
102	Nanotechnology for sustainable food production: promising opportunities and scientific challenges. <i>Environmental Science: Nano</i> , 2017 , 4, 767-781	7.1	148
101	Electromagnetic induction of foam-based nanoscale zerovalent iron (NZVI) particles to thermally enhance non-aqueous phase liquid (NAPL) volatilization in unsaturated porous media: Proof of concept. <i>Chemosphere</i> , 2017 , 183, 323-331	8.4	24
100	Measurement and Modeling of Setschenow Constants for Selected Hydrophilic Compounds in NaCl and CaCl Simulated Carbon Storage Brines. <i>Accounts of Chemical Research</i> , 2017 , 50, 1332-1341	24.3	8
99	Characterizing convective heat transfer coefficients in membrane distillation cassettes. <i>Journal of Membrane Science</i> , 2017 , 538, 108-121	9.6	14
98	Impact of Surface Charge on Cerium Oxide Nanoparticle Uptake and Translocation by Wheat (<i>Triticum aestivum</i>). <i>Environmental Science & Technology</i> , 2017 , 51, 7361-7368	10.3	97
97	Uptake and Distribution of Silver in the Aquatic Plant <i>Landoltia punctata</i> (Duckweed) Exposed to Silver and Silver Sulfide Nanoparticles. <i>Environmental Science & Technology</i> , 2017 , 51, 4936-4943	10.3	51
96	Effect of Initial Speciation of Copper- and Silver-Based Nanoparticles on Their Long-Term Fate and Phytoavailability in Freshwater Wetland Mesocosms. <i>Environmental Science & Technology</i> , 2017 , 51, 12114-12122	10.3	24
95	Time-dependent bacterial transcriptional response to CuO nanoparticles differs from that of Cu ²⁺ and provides insights into CuO nanoparticle toxicity mechanisms. <i>Environmental Science: Nano</i> , 2017 , 4, 2321-2335	7.1	7
94	Removal of Antibiotic Florfenicol by Sulfide-Modified Nanoscale Zero-Valent Iron. <i>Environmental Science & Technology</i> , 2017 , 51, 11269-11277	10.3	163
93	Partitioning of uranyl between ferrihydrite and humic substances at acidic and circum-neutral pH. <i>Geochimica Et Cosmochimica Acta</i> , 2017 , 215, 122-140	5.5	22
92	Aging of Dissolved Copper and Copper-based Nanoparticles in Five Different Soils: Short-term Kinetics vs. Long-term Fate. <i>Journal of Environmental Quality</i> , 2017 , 46, 1198-1205	3.4	49
91	Accurate and fast numerical algorithms for tracking particle size distributions during nanoparticle aggregation and dissolution. <i>Environmental Science: Nano</i> , 2017 , 4, 89-104	7.1	19
90	Guidance to improve the scientific value of zeta-potential measurements in nanoEHS. <i>Environmental Science: Nano</i> , 2016 , 3, 953-965	7.1	173

89	In Situ Measurement of CuO and Cu(OH) ₂ Nanoparticle Dissolution Rates in Quiescent Freshwater Mesocosms. <i>Environmental Science and Technology Letters</i> , 2016 , 3, 375-380	11	39
88	Press or pulse exposures determine the environmental fate of cerium nanoparticles in stream mesocosms. <i>Environmental Toxicology and Chemistry</i> , 2016 , 35, 1213-23	3.8	21
87	Critical review: impacts of macromolecular coatings on critical physicochemical processes controlling environmental fate of nanomaterials. <i>Environmental Science: Nano</i> , 2016 , 3, 283-310	7.1	117
86	Thermal decomposition of nano-enabled thermoplastics: Possible environmental health and safety implications. <i>Journal of Hazardous Materials</i> , 2016 , 305, 87-95	12.8	46
85	Electromagnetic Induction of Zerovalent Iron (ZVI) Powder and Nanoscale Zerovalent Iron (NZVI) Particles Enhances Dechlorination of Trichloroethylene in Contaminated Groundwater and Soil: Proof of Concept. <i>Environmental Science & Technology</i> , 2016 , 50, 872-80	10.3	55
84	Bacterial Nanocellulose Aerogel Membranes: Novel High-Porosity Materials for Membrane Distillation. <i>Environmental Science and Technology Letters</i> , 2016 , 3, 85-91	11	61
83	Impacts of Pristine and Transformed Ag and Cu Engineered Nanomaterials on Surficial Sediment Microbial Communities Appear Short-Lived. <i>Environmental Science & Technology</i> , 2016 , 50, 2641-51	10.3	56
82	Inhibition of bacterial surface colonization by immobilized silver nanoparticles depends critically on the planktonic bacterial concentration. <i>Journal of Colloid and Interface Science</i> , 2016 , 467, 17-27	9.3	22
81	Distinct transcriptomic responses of <i>Caenorhabditis elegans</i> to pristine and sulfidized silver nanoparticles. <i>Environmental Pollution</i> , 2016 , 213, 314-321	9.3	34
80	Mobility of Four Common Mercury Species in Model and Natural Unsaturated Soils. <i>Environmental Science & Technology</i> , 2016 , 50, 3342-51	10.3	37
79	Dechlorination Mechanism of 2,4-Dichlorophenol by Magnetic MWCNTs Supported Pd/Fe Nanohybrids: Rapid Adsorption, Gradual Dechlorination, and Desorption of Phenol. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 7333-42	9.5	107
78	Biogeochemical transformations of mercury in solid waste landfills and pathways for release. <i>Environmental Sciences: Processes and Impacts</i> , 2016 , 18, 176-89	4.3	21
77	Measurement of Setschenow constants for six hydrophobic compounds in simulated brines and use in predictive modeling for oil and gas systems. <i>Chemosphere</i> , 2016 , 144, 2247-56	8.4	12
76	Comparative Study of Effects of CO ₂ Concentration and pH on Microbial Communities from a Saline Aquifer, a Depleted Oil Reservoir, and a Freshwater Aquifer. <i>Environmental Engineering Science</i> , 2016 , 33, 806-816	2	9
75	New Linear Partitioning Models Based on Experimental Water: Supercritical CO ₂ Partitioning Data of Selected Organic Compounds. <i>Environmental Science & Technology</i> , 2016 , 50, 5135-42	10.3	6
74	Reduction in bacterial contamination of hospital textiles by a novel silver-based laundry treatment. <i>American Journal of Infection Control</i> , 2016 , 44, 1705-1708	3.8	11
73	Challenges Facing the Environmental Nanotechnology Research Enterprise 2016 , 1-19		1
72	Visualization tool for correlating nanomaterial properties and biological responses in zebrafish. <i>Environmental Science: Nano</i> , 2016 , 3, 1280-1292	7.1	4

71	Nanomaterials in Biosolids Inhibit Nodulation, Shift Microbial Community Composition, and Result in Increased Metal Uptake Relative to Bulk/Dissolved Metals. <i>Environmental Science & Technology</i> , 2015 , 49, 8751-8	10.3	77
70	A functional assay-based strategy for nanomaterial risk forecasting. <i>Science of the Total Environment</i> , 2015 , 536, 1029-1037	10.2	70
69	Speciation Matters: Bioavailability of Silver and Silver Sulfide Nanoparticles to Alfalfa (<i>Medicago sativa</i>). <i>Environmental Science & Technology</i> , 2015 , 49, 8451-60	10.3	81
68	Characterization of engineered alumina nanofibers and their colloidal properties in water. <i>Journal of Nanoparticle Research</i> , 2015 , 17, 1	2.3	17
67	Much ado about Reframing the debate over appropriate fate descriptors in nanoparticle environmental risk modeling. <i>Environmental Science: Nano</i> , 2015 , 2, 27-32	7.1	39
66	Research strategy to determine when novel nanohybrids pose unique environmental risks. <i>Environmental Science: Nano</i> , 2015 , 2, 11-18	7.1	37
65	Impact of sulfidation on the bioavailability and toxicity of silver nanoparticles to <i>Caenorhabditis elegans</i> . <i>Environmental Pollution</i> , 2015 , 196, 239-46	9.3	106
64	Stream dynamics and chemical transformations control the environmental fate of silver and zinc oxide nanoparticles in a watershed-scale model. <i>Environmental Science & Technology</i> , 2015 , 49, 7285-93	10.3	75
63	Modeling nanomaterial environmental fate in aquatic systems. <i>Environmental Science & Technology</i> , 2015 , 49, 2587-93	10.3	209
62	Correlation of the physicochemical properties of natural organic matter samples from different sources to their effects on gold nanoparticle aggregation in monovalent electrolyte. <i>Environmental Science & Technology</i> , 2015 , 49, 2188-98	10.3	79
61	Fate of zinc oxide and silver nanoparticles in a pilot wastewater treatment plant and in processed biosolids. <i>Environmental Science & Technology</i> , 2014 , 48, 104-12	10.3	288
60	Sulfidation of copper oxide nanoparticles and properties of resulting copper sulfide. <i>Environmental Science: Nano</i> , 2014 , 1, 347-357	7.1	73
59	Response to Comment on Sulfidation of Silver Nanoparticles: Natural Antidote to Their Toxicity	10.3	5
58	Emerging contaminant or an old toxin in disguise? Silver nanoparticle impacts on ecosystems. <i>Environmental Science & Technology</i> , 2014 , 48, 5229-36	10.3	125
57	Nanoparticle core properties affect attachment of macromolecule-coated nanoparticles to silica surfaces. <i>Environmental Chemistry</i> , 2014 , 11, 257	3.2	12
56	Current status and future direction for examining engineered nanoparticles in natural systems. <i>Environmental Chemistry</i> , 2014 , 11, 351	3.2	88
55	Comparative lifecycle inventory (LCI) of greenhouse gas (GHG) emissions of enhanced oil recovery (EOR) methods using different CO2 sources. <i>International Journal of Greenhouse Gas Control</i> , 2013 , 16, 129-144	4.2	30
54	Sulfidation of silver nanoparticles: natural antidote to their toxicity. <i>Environmental Science & Technology</i> , 2013 , 47, 13440-8	10.3	309

53	Modeling nanosilver transformations in freshwater sediments. <i>Environmental Science & Technology</i> , 2013 , 47, 12920-8	10.3	69
52	Sulfidation mechanism for zinc oxide nanoparticles and the effect of sulfidation on their solubility. <i>Environmental Science & Technology</i> , 2013 , 47, 2527-34	10.3	132
51	Field-scale transport and transformation of carboxymethylcellulose-stabilized nano zero-valent iron. <i>Environmental Science & Technology</i> , 2013 , 47, 1573-80	10.3	164
50	Effects of molecular weight distribution and chemical properties of natural organic matter on gold nanoparticle aggregation. <i>Environmental Science & Technology</i> , 2013 , 47, 4245-54	10.3	128
49	Effect of chloride on the dissolution rate of silver nanoparticles and toxicity to E. coli. <i>Environmental Science & Technology</i> , 2013 , 47, 5738-45	10.3	304
48	Partitioning behavior of organic contaminants in carbon storage environments: a critical review. <i>Environmental Science & Technology</i> , 2013 , 47, 37-54	10.3	35
47	Low concentrations of silver nanoparticles in biosolids cause adverse ecosystem responses under realistic field scenario. <i>PLoS ONE</i> , 2013 , 8, e57189	3.7	258
46	Effect of kaolinite, silica fines and pH on transport of polymer-modified zero valent iron nano-particles in heterogeneous porous media. <i>Journal of Colloid and Interface Science</i> , 2012 , 370, 1-10	9.3	156
45	Natural organic matter alters biofilm tolerance to silver nanoparticles and dissolved silver. <i>Environmental Science & Technology</i> , 2012 , 46, 12687-96	10.3	121
44	Methylation of mercury by bacteria exposed to dissolved, nanoparticulate, and microparticulate mercuric sulfides. <i>Environmental Science & Technology</i> , 2012 , 46, 6950-8	10.3	164
43	Nanotechnology patenting trends through an environmental lens: analysis of materials and applications. <i>Journal of Nanoparticle Research</i> , 2012 , 14, 1	2.3	21
42	Parameter identifiability in application of soft particle electrokinetic theory to determine polymer and polyelectrolyte coating thicknesses on colloids. <i>Langmuir</i> , 2012 , 28, 10334-47	4	42
41	Environmental transformations of silver nanoparticles: impact on stability and toxicity. <i>Environmental Science & Technology</i> , 2012 , 46, 6900-14	10.3	1096
40	Long-term transformation and fate of manufactured ag nanoparticles in a simulated large scale freshwater emergent wetland. <i>Environmental Science & Technology</i> , 2012 , 46, 7027-36	10.3	321
39	Size-controlled dissolution of organic-coated silver nanoparticles. <i>Environmental Science & Technology</i> , 2012 , 46, 752-9	10.3	338
38	Cysteine-induced modifications of zero-valent silver nanomaterials: implications for particle surface chemistry, aggregation, dissolution, and silver speciation. <i>Environmental Science & Technology</i> , 2012 , 46, 7037-45	10.3	192
37	Transformations of nanomaterials in the environment. <i>Environmental Science & Technology</i> , 2012 , 46, 6893-9	10.3	835
36	Sulfidation processes of PVP-coated silver nanoparticles in aqueous solution: impact on dissolution rate. <i>Environmental Science & Technology</i> , 2011 , 45, 5260-6	10.3	395

35	Hydrophobic interactions increase attachment of gum Arabic- and PVP-coated Ag nanoparticles to hydrophobic surfaces. <i>Environmental Science & Technology</i> , 2011 , 45, 5988-95	10.3	117
34	Meditations on the ubiquity and mutability of nano-sized materials in the environment. <i>ACS Nano</i> , 2011 , 5, 8466-70	16.7	70
33	Physical and chemical characteristics of potential seal strata in regions considered for demonstrating geological saline CO ₂ sequestration. <i>Environmental Earth Sciences</i> , 2011 , 64, 925-948	2.9	38
32	Microbial bioavailability of covalently bound polymer coatings on model engineered nanomaterials. <i>Environmental Science & Technology</i> , 2011 , 45, 5253-9	10.3	76
31	Polymer-modified Fe ⁰ nanoparticles target entrapped NAPL in two dimensional porous media: effect of particle concentration, NAPL saturation, and injection strategy. <i>Environmental Science & Technology</i> , 2011 , 45, 6102-9	10.3	77
30	Field Evaluation of Bauxite Residue Neutralization by Carbon Dioxide, Vegetation, and Organic Amendments. <i>Journal of Environmental Engineering, ASCE</i> , 2010 , 136, 1045-1053	2	32
29	Transport and deposition of polymer-modified Fe ⁰ nanoparticles in 2-D heterogeneous porous media: effects of particle concentration, Fe ⁰ content, and coatings. <i>Environmental Science & Technology</i> , 2010 , 44, 9086-93	10.3	122
28	Estimating attachment of nano- and submicrometer-particles coated with organic macromolecules in porous media: development of an empirical model. <i>Environmental Science & Technology</i> , 2010 , 44, 4531-8	10.3	137
27	Comparative study of polymeric stabilizers for magnetite nanoparticles using ATRP. <i>Langmuir</i> , 2010 , 26, 16890-900	4	58
26	Chemical transformations during aging of zerovalent iron nanoparticles in the presence of common groundwater dissolved constituents. <i>Environmental Science & Technology</i> , 2010 , 44, 3455-61	10.3	192
25	Environmental occurrences, behavior, fate, and ecological effects of nanomaterials: an introduction to the special series. <i>Journal of Environmental Quality</i> , 2010 , 39, 1867-74	3.4	89
24	Nanoparticle aggregation: challenges to understanding transport and reactivity in the environment. <i>Journal of Environmental Quality</i> , 2010 , 39, 1909-24	3.4	79 ¹
23	Empirical correlations to estimate agglomerate size and deposition during injection of a polyelectrolyte-modified Fe ⁰ nanoparticle at high particle concentration in saturated sand. <i>Journal of Contaminant Hydrology</i> , 2010 , 118, 152-64	3.9	94
22	Effects of nano-scale zero-valent iron particles on a mixed culture dechlorinating trichloroethylene. <i>Bioresource Technology</i> , 2010 , 101, 1141-6	11	206
21	Chemistry of the Acid Neutralization Capacity of Bauxite Residue. <i>Environmental Engineering Science</i> , 2009 , 26, 873-881	2	55
20	Neutralization of Bauxite Residue with Acidic Fly Ash. <i>Environmental Engineering Science</i> , 2009 , 26, 431-440	2	14
19	Towards a definition of inorganic nanoparticles from an environmental, health and safety perspective. <i>Nature Nanotechnology</i> , 2009 , 4, 634-41	28.7	1306
18	Adsorbed polyelectrolyte coatings decrease Fe(0) nanoparticle reactivity with TCE in water: conceptual model and mechanisms. <i>Environmental Science & Technology</i> , 2009 , 43, 1507-14	10.3	199

17	Fe0 nanoparticles remain mobile in porous media after aging due to slow desorption of polymeric surface modifiers. <i>Environmental Science & Technology</i> , 2009 , 43, 3824-30	10.3	140
16	Mechanisms of Neutralization of Bauxite Residue by Carbon Dioxide. <i>Journal of Environmental Engineering, ASCE</i> , 2009 , 135, 433-438	2	67
15	Adsorption of polychlorinated biphenyls to activated carbon: equilibrium isotherms and a preliminary assessment of the effect of dissolved organic matter and biofilm loadings. <i>Water Research</i> , 2008 , 42, 575-84	12.5	68
14	Stabilization of aqueous nanoscale zerovalent iron dispersions by anionic polyelectrolytes: adsorbed anionic polyelectrolyte layer properties and their effect on aggregation and sedimentation. <i>Journal of Nanoparticle Research</i> , 2008 , 10, 795-814	2.3	419
13	Development and Placement of a Sorbent-Amended Thin Layer Sediment Cap in the Anacostia River. <i>Soil and Sediment Contamination</i> , 2007 , 16, 313-322	3.2	46
12	Surface Modifications Enhance Nanoiron Transport and NAPL Targeting in Saturated Porous Media. <i>Environmental Engineering Science</i> , 2007 , 24, 45-57	2	368
11	Effect of TCE concentration and dissolved groundwater solutes on NZVI-promoted TCE dechlorination and H ₂ evolution. <i>Environmental Science & Technology</i> , 2007 , 41, 7881-7	10.3	271
10	Aggregation and sedimentation of aqueous nanoscale zerovalent iron dispersions. <i>Environmental Science & Technology</i> , 2007 , 41, 284-90	10.3	814
9	Titanium dioxide (P25) produces reactive oxygen species in immortalized brain microglia (BV2): implications for nanoparticle neurotoxicity. <i>Environmental Science & Technology</i> , 2006 , 40, 4346-52	10.3	722
8	Effect of particle age (Fe ₀ content) and solution pH on NZVI reactivity: H ₂ evolution and TCE dechlorination. <i>Environmental Science & Technology</i> , 2006 , 40, 6085-90	10.3	380
7	Adsorbed triblock copolymers deliver reactive iron nanoparticles to the oil/water interface. <i>Nano Letters</i> , 2005 , 5, 2489-94	11.5	282
6	Trichloroethene Hydrodechlorination in Water by Highly Disordered Monometallic Nanoiron. <i>Chemistry of Materials</i> , 2005 , 17, 5315-5322	9.6	193
5	TCE dechlorination rates, pathways, and efficiency of nanoscale iron particles with different properties. <i>Environmental Science & Technology</i> , 2005 , 39, 1338-45	10.3	644
4	Using CaO- and MgO-rich industrial waste streams for carbon sequestration. <i>Energy Conversion and Management</i> , 2005 , 46, 687-699	10.6	139
3	Macroscopic and microscopic observations of particle-facilitated mercury transport from New Idria and Sulphur Bank mercury mine tailings. <i>Environmental Science & Technology</i> , 2004 , 38, 5101-11	10.3	83
2	Congener-specific dechlorination of dissolved PCBs by microscale and nanoscale zerovalent iron in a water/methanol solution. <i>Environmental Science & Technology</i> , 2004 , 38, 5208-16	10.3	314
1	Sorption and transformation of biocides from hydraulic fracturing in the Marcellus Shale: a review. <i>Environmental Chemistry Letters</i> , 1	13.3	