Gregory V. Lowry

List of Publications by Citations

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	Towards a definition of inorganic nanoparticles from an environmental, health and safety perspective. *Nature Nanotechnology*, **2009**, 4, 634-41	28.7	1306
159	Environmental transformations of silver nanoparticles: impact on stability and toxicity. *Environmental Science & Technology*, **2012**, 46, 6900-14	10.3	1096
158	Transformations of nanomaterials in the environment. *Environmental Science & Technology*, **2012**, 46, 6893-9	10.3	835
157	Aggregation and sedimentation of aqueous nanoscale zerovalent iron dispersions. *Environmental Science & Technology*, **2007**, 41, 284-90	10.3	814
156	Nanoparticle aggregation: challenges to understanding transport and reactivity in the environment. *Journal of Environmental Quality*, **2010**, 39, 1909-24	3.4	791
155	Titanium dioxide (P25) produces reactive oxygen species in immortalized brain microglia (BV2): implications for nanoparticle neurotoxicity. *Environmental Science & Technology*, **2006**, 40, 4346-52	10.3	722
154	TCE dechlorination rates, pathways, and efficiency of nanoscale iron particles with different properties. *Environmental Science & Technology*, **2005**, 39, 1338-45	10.3	644
153	Stabilization of aqueous nanoscale zerovalent iron dispersions by anionic polyelectrolytes: adsorbed anionic polyelectrolyte layer properties and their effect on aggregation and sedimentation. *Journal of Nanoparticle Research*, **2008**, 10, 795-814	2.3	419
152	Sulfidation processes of PVP-coated silver nanoparticles in aqueous solution: impact on dissolution rate. *Environmental Science & Technology*, **2011**, 45, 5260-6	10.3	395
151	Effect of particle age (Fe0 content) and solution pH on NZVI reactivity: H2 evolution and TCE dechlorination. *Environmental Science & Technology*, **2006**, 40, 6085-90	10.3	380
150	Surface Modifications Enhance Nanoiron Transport and NAPL Targeting in Saturated Porous Media. *Environmental Engineering Science*, **2007**, 24, 45-57	2	368
149	Size-controlled dissolution of organic-coated silver nanoparticles. *Environmental Science & Technology*, **2012**, 46, 752-9	10.3	338
148	Long-term transformation and fate of manufactured ag nanoparticles in a simulated large scale freshwater emergent wetland. *Environmental Science & Technology*, **2012**, 46, 7027-36	10.3	321
147	Congener-specific dechlorination of dissolved PCBs by microscale and nanoscale zerovalent iron in a water/methanol solution. *Environmental Science & Technology*, **2004**, 38, 5208-16	10.3	314
146	Sulfidation of silver nanoparticles: natural antidote to their toxicity. *Environmental Science & Technology*, **2013**, 47, 13440-8	10.3	309
145	Effect of chloride on the dissolution rate of silver nanoparticles and toxicity to E. coli. *Environmental Science & Technology*, **2013**, 47, 5738-45	10.3	304
144	Fate of zinc oxide and silver nanoparticles in a pilot wastewater treatment plant and in processed biosolids. *Environmental Science & Technology*, **2014**, 48, 104-12	10.3	288

143	Adsorbed triblock copolymers deliver reactive iron nanoparticles to the oil/water interface. *Nano Letters*, **2005**, 5, 2489-94	11.5	282
142	Opportunities and challenges for nanotechnology in the agri-tech revolution. *Nature Nanotechnology*, **2019**, 14, 517-522	28.7	281
141	Effect of TCE concentration and dissolved groundwater solutes on NZVI-promoted TCE dechlorination and H2 evolution. *Environmental Science & Technology*, **2007**, 41, 7881-7	10.3	271
140	Low concentrations of silver nanoparticles in biosolids cause adverse ecosystem responses under realistic field scenario. *PLoS ONE*, **2013**, 8, e57189	3.7	258
139	Modeling nanomaterial environmental fate in aquatic systems. *Environmental Science & Technology*, **2015**, 49, 2587-93	10.3	209
138	Effects of nano-scale zero-valent iron particles on a mixed culture dechlorinating trichloroethylene. *Bioresource Technology*, **2010**, 101, 1141-6	11	206
137	Adsorbed polyelectrolyte coatings decrease Fe(0) nanoparticle reactivity with TCE in water: conceptual model and mechanisms. *Environmental Science & Technology*, **2009**, 43, 1507-14	10.3	199
136	Trichloroethene Hydrodechlorination in Water by Highly Disordered Monometallic Nanoiron. *Chemistry of Materials*, **2005**, 17, 5315-5322	9.6	193
135	Cysteine-induced modifications of zero-valent silver nanomaterials: implications for particle surface chemistry, aggregation, dissolution, and silver speciation. *Environmental Science & Technology*, **2012**, 46, 7037-45	10.3	192
134	Chemical transformations during aging of zerovalent iron nanoparticles in the presence of common groundwater dissolved constituents. *Environmental Science & Technology*, **2010**, 44, 3455-61	10.3	192
133	Guidance to improve the scientific value of zeta-potential measurements in nanoEHS. *Environmental Science: Nano*, **2016**, 3, 953-965	7.1	173
132	Methylation of mercury by bacteria exposed to dissolved, nanoparticulate, and microparticulate mercuric sulfides. *Environmental Science & Technology*, **2012**, 46, 6950-8	10.3	164
131	Field-scale transport and transformation of carboxymethylcellulose-stabilized nano zero-valent iron. *Environmental Science & Technology*, **2013**, 47, 1573-80	10.3	164
130	Removal of Antibiotic Florfenicol by Sulfide-Modified Nanoscale Zero-Valent Iron. *Environmental Science & Technology*, **2017**, 51, 11269-11277	10.3	163
129	Effect of kaolinite, silica fines and pH on transport of polymer-modified zero valent iron nano-particles in heterogeneous porous media. *Journal of Colloid and Interface Science*, **2012**, 370, 1-10	9.3	156
128	Nanoparticle Size and Coating Chemistry Control Foliar Uptake Pathways, Translocation, and Leaf-to-Rhizosphere Transport in Wheat. *ACS Nano*, **2019**, 13, 5291-5305	16.7	151
127	Nanotechnology for sustainable food production: promising opportunities and scientific challenges. *Environmental Science: Nano*, **2017**, 4, 767-781	7.1	148
126	Fe0 nanoparticles remain mobile in porous media after aging due to slow desorption of polymeric surface modifiers. *Environmental Science & Technology*, **2009**, 43, 3824-30	10.3	140

125	Using CaO- and MgO-rich industrial waste streams for carbon sequestration. *Energy Conversion and Management*, **2005**, 46, 687-699	10.6	139
124	Estimating attachment of nano- and submicrometer-particles coated with organic macromolecules in porous media: development of an empirical model. *Environmental Science & Technology*, **2010**, 44, 4531-8	10.3	137
123	Sulfidation mechanism for zinc oxide nanoparticles and the effect of sulfidation on their solubility. *Environmental Science & Technology*, **2013**, 47, 2527-34	10.3	132
122	Effects of molecular weight distribution and chemical properties of natural organic matter on gold nanoparticle aggregation. *Environmental Science & Technology*, **2013**, 47, 4245-54	10.3	128
121	Emerging contaminant or an old toxin in disguise? Silver nanoparticle impacts on ecosystems. *Environmental Science & Technology*, **2014**, 48, 5229-36	10.3	125
120	Transport and deposition of polymer-modified Fe0 nanoparticles in 2-D heterogeneous porous media: effects of particle concentration, Fe0 content, and coatings. *Environmental Science & Technology*, **2010**, 44, 9086-93	10.3	122
119	Natural organic matter alters biofilm tolerance to silver nanoparticles and dissolved silver. *Environmental Science & Technology*, **2012**, 46, 12687-96	10.3	121
118	Critical review: impacts of macromolecular coatings on critical physicochemical processes controlling environmental fate of nanomaterials. *Environmental Science: Nano*, **2016**, 3, 283-310	7.1	117
117	Hydrophobic interactions increase attachment of gum Arabic- and PVP-coated Ag nanoparticles to hydrophobic surfaces. *Environmental Science & Technology*, **2011**, 45, 5988-95	10.3	117
116	CuO Nanoparticle Dissolution and Toxicity to Wheat (Triticum aestivum) in Rhizosphere Soil. *Environmental Science & Technology*, **2018**, 52, 2888-2897	10.3	108
115	Dechlorination Mechanism of 2,4-Dichlorophenol by Magnetic MWCNTs Supported Pd/Fe Nanohybrids: Rapid Adsorption, Gradual Dechlorination, and Desorption of Phenol. *ACS Applied Materials & Interfaces*, **2016**, 8, 7333-42	9.5	107
114	Impact of sulfidation on the bioavailability and toxicity of silver nanoparticles to Caenorhabditis elegans. *Environmental Pollution*, **2015**, 196, 239-46	9.3	106
113	Reactivity, Selectivity, and Long-Term Performance of Sulfidized Nanoscale Zerovalent Iron with Different Properties. *Environmental Science & Technology*, **2019**, 53, 5936-5945	10.3	100
112	Impact of Surface Charge on Cerium Oxide Nanoparticle Uptake and Translocation by Wheat (Triticum aestivum). *Environmental Science & Technology*, **2017**, 51, 7361-7368	10.3	97
111	Empirical correlations to estimate agglomerate size and deposition during injection of a polyelectrolyte-modified Fe0 nanoparticle at high particle concentration in saturated sand. *Journal of Contaminant Hydrology*, **2010**, 118, 152-64	3.9	94
110	Technology readiness and overcoming barriers to sustainably implement nanotechnology-enabled plant agriculture. *Nature Food*, **2020**, 1, 416-425	14.4	90
109	Environmental occurrences, behavior, fate, and ecological effects of nanomaterials: an introduction to the special series. *Journal of Environmental Quality*, **2010**, 39, 1867-74	3.4	89
108	Current status and future direction for examining engineered nanoparticles in natural systems. *Environmental Chemistry*, **2014**, 11, 351	3.2	88

107	Sulfur Loading and Speciation Control the Hydrophobicity, Electron Transfer, Reactivity, and Selectivity of Sulfidized Nanoscale Zerovalent Iron. *Advanced Materials*, **2020**, 32, e1906910	24	83
106	Progress towards standardized and validated characterizations for measuring physicochemical properties of manufactured nanomaterials relevant to nano health and safety risks. *NanoImpact*, **2018**, 9, 14-30	5.6	83
105	Macroscopic and microscopic observations of particle-facilitated mercury transport from New Idria and Sulphur Bank mercury mine tailings. *Environmental Science & Technology*, **2004**, 38, 5101-11	10.3	83
104	Speciation Matters: Bioavailability of Silver and Silver Sulfide Nanoparticles to Alfalfa (Medicago sativa). *Environmental Science & Technology*, **2015**, 49, 8451-60	10.3	81
103	Correlation of the physicochemical properties of natural organic matter samples from different sources to their effects on gold nanoparticle aggregation in monovalent electrolyte. *Environmental Science & Technology*, **2015**, 49, 2188-98	10.3	79
102	Nanomaterials in Biosolids Inhibit Nodulation, Shift Microbial Community Composition, and Result in Increased Metal Uptake Relative to Bulk/Dissolved Metals. *Environmental Science & Technology*, **2015**, 49, 8751-8	10.3	77
101	Polymer-modified Fe0 nanoparticles target entrapped NAPL in two dimensional porous media: effect of particle concentration, NAPL saturation, and injection strategy. *Environmental Science & Technology*, **2011**, 45, 6102-9	10.3	77
100	Microbial bioavailability of covalently bound polymer coatings on model engineered nanomaterials. *Environmental Science & Technology*, **2011**, 45, 5253-9	10.3	76
99	Stream dynamics and chemical transformations control the environmental fate of silver and zinc oxide nanoparticles in a watershed-scale model. *Environmental Science & Technology*, **2015**, 49, 7285-93	10.3	75
98	Sulfidation of copper oxide nanoparticles and properties of resulting copper sulfide. *Environmental Science: Nano*, **2014**, 1, 347-357	7.1	73
97	A functional assay-based strategy for nanomaterial risk forecasting. *Science of the Total Environment*, **2015**, 536, 1029-1037	10.2	70
96	Meditations on the ubiquity and mutability of nano-sized materials in the environment. *ACS Nano*, **2011**, 5, 8466-70	16.7	70
95	Modeling nanosilver transformations in freshwater sediments. *Environmental Science & Technology*, **2013**, 47, 12920-8	10.3	69
94	Adsorption of polychlorinated biphenyls to activated carbon: equilibrium isotherms and a preliminary assessment of the effect of dissolved organic matter and biofilm loadings. *Water Research*, **2008**, 42, 575-84	12.5	68
93	Mechanisms of Neutralization of Bauxite Residue by Carbon Dioxide. *Journal of Environmental Engineering, ASCE*, **2009**, 135, 433-438	2	67
92	Distributing sulfidized nanoscale zerovalent iron onto phosphorus-functionalized biochar for enhanced removal of antibiotic florfenicol. *Chemical Engineering Journal*, **2019**, 359, 713-722	14.7	67
91	Time and Nanoparticle Concentration Affect the Extractability of Cu from CuO NP-Amended Soil. *Environmental Science & Technology*, **2017**, 51, 2226-2234	10.3	64
90	Bacterial Nanocellulose Aerogel Membranes: Novel High-Porosity Materials for Membrane Distillation. *Environmental Science and Technology Letters*, **2016**, 3, 85-91	11	61

89	Comparative study of polymeric stabilizers for magnetite nanoparticles using ATRP. *Langmuir*, **2010**, 26, 16890-900	4	58
88	Impacts of Pristine and Transformed Ag and Cu Engineered Nanomaterials on Surficial Sediment Microbial Communities Appear Short-Lived. *Environmental Science & Technology*, **2016**, 50, 2641-51	10.3	56
87	Effect of Soil Organic Matter, Soil pH, and Moisture Content on Solubility and Dissolution Rate of CuO NPs in Soil. *Environmental Science & Technology*, **2019**, 53, 4959-4967	10.3	55
86	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. *Environmental Science & Technology*, **2016**, 50, 872-80	10.3	55
85	Sulfur Dose and Sulfidation Time Affect Reactivity and Selectivity of Post-Sulfidized Nanoscale Zerovalent Iron. *Environmental Science & Technology*, **2019**, 53, 13344-13352	10.3	55
84	Chemistry of the Acid Neutralization Capacity of Bauxite Residue. *Environmental Engineering Science*, **2009**, 26, 873-881	2	55
83	Uptake and Distribution of Silver in the Aquatic Plant Landoltia punctata (Duckweed) Exposed to Silver and Silver Sulfide Nanoparticles. *Environmental Science & Technology*, **2017**, 51, 4936-4943	10.3	51
82	Guiding the design space for nanotechnology to advance sustainable crop production. *Nature Nanotechnology*, **2020**, 15, 801-810	28.7	49
81	Aging of Dissolved Copper and Copper-based Nanoparticles in Five Different Soils: Short-term Kinetics vs. Long-term Fate. *Journal of Environmental Quality*, **2017**, 46, 1198-1205	3.4	49
80	Thermal decomposition of nano-enabled thermoplastics: Possible environmental health and safety implications. *Journal of Hazardous Materials*, **2016**, 305, 87-95	12.8	46
79	Nanoparticle surface charge influences translocation and leaf distribution in vascular plants with contrasting anatomy. *Environmental Science: Nano*, **2019**, 6, 2508-2519	7.1	46
78	Development and Placement of a Sorbent-Amended Thin Layer Sediment Cap in the Anacostia River. *Soil and Sediment Contamination*, **2007**, 16, 313-322	3.2	46
77	Comparative Persistence of Engineered Nanoparticles in a Complex Aquatic Ecosystem. *Environmental Science & Technology*, **2018**, 52, 4072-4078	10.3	44
76	Size-Based Differential Transport, Uptake, and Mass Distribution of Ceria (CeO) Nanoparticles in Wetland Mesocosms. *Environmental Science & Technology*, **2018**, 52, 9768-9776	10.3	44
75	Gold nanoparticle biodissolution by a freshwater macrophyte and its associated microbiome. *Nature Nanotechnology*, **2018**, 13, 1072-1077	28.7	44
74	Parameter identifiability in application of soft particle electrokinetic theory to determine polymer and polyelectrolyte coating thicknesses on colloids. *Langmuir*, **2012**, 28, 10334-47	4	42
73	Iron and Sulfur Precursors Affect Crystalline Structure, Speciation, and Reactivity of Sulfidized Nanoscale Zerovalent Iron. *Environmental Science & Technology*, **2020**, 54, 13294-13303	10.3	41
72	Much ado about reframing the debate over appropriate fate descriptors in nanoparticle environmental risk modeling. *Environmental Science: Nano*, **2015**, 2, 27-32	7.1	39

71	In Situ Measurement of CuO and Cu(OH)2 Nanoparticle Dissolution Rates in Quiescent Freshwater Mesocosms. *Environmental Science and Technology Letters*, **2016**, 3, 375-380	11	39
70	In situ remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. *Environmental Science: Nano*, **2019**, 6, 1283-1302	7.1	38
69	Temperature- and pH-Responsive Star Polymers as Nanocarriers with Potential for Agrochemical Delivery. *ACS Nano*, **2020**, 14, 10954-10965	16.7	38
68	Physical and chemical characteristics of potential seal strata in regions considered for demonstrating geological saline CO2 sequestration. *Environmental Earth Sciences*, **2011**, 64, 925-948	2.9	38
67	A comparison of the effects of natural organic matter on sulfidated and nonsulfidated nanoscale zerovalent iron colloidal stability, toxicity, and reactivity to trichloroethylene. *Science of the Total Environment*, **2019**, 671, 254-261	10.2	37
66	Research strategy to determine when novel nanohybrids pose unique environmental risks. *Environmental Science: Nano*, **2015**, 2, 11-18	7.1	37
65	Mobility of Four Common Mercury Species in Model and Natural Unsaturated Soils. *Environmental Science & Technology*, **2016**, 50, 3342-51	10.3	37
64	Partitioning behavior of organic contaminants in carbon storage environments: a critical review. *Environmental Science & Technology*, **2013**, 47, 37-54	10.3	35
63	Distinct transcriptomic responses of Caenorhabditis elegans to pristine and sulfidized silver nanoparticles. *Environmental Pollution*, **2016**, 213, 314-321	9.3	34
62	Quantifying the efficiency and selectivity of organohalide dechlorination by zerovalent iron. *Environmental Sciences: Processes and Impacts*, **2020**, 22, 528-542	4.3	32
61	Field Evaluation of Bauxite Residue Neutralization by Carbon Dioxide, Vegetation, and Organic Amendments. *Journal of Environmental Engineering, ASCE*, **2010**, 136, 1045-1053	2	32
60	Critical Review: Role of Inorganic Nanoparticle Properties on Their Foliar Uptake and Translocation. *Environmental Science & Technology*, **2021**, 55, 13417-13431	10.3	32
59	Comparative lifecycle inventory (LCI) of greenhouse gas (GHG) emissions of enhanced oil recovery (EOR) methods using different CO2 sources. *International Journal of Greenhouse Gas Control*, **2013**, 16, 129-144	4.2	30
58	Temporal Evolution of Copper Distribution and Speciation in Roots of Triticum aestivum Exposed to CuO, Cu(OH), and CuS Nanoparticles. *Environmental Science & Technology*, **2018**, 52, 9777-9784	10.3	27
57	CuO Nanoparticles Alter the Rhizospheric Bacterial Community and Local Nitrogen Cycling for Wheat Grown in a Calcareous Soil. *Environmental Science & Technology*, **2020**, 54, 8699-8709	10.3	25
56	Protein coating composition targets nanoparticles to leaf stomata and trichomes. *Nanoscale*, **2020**, 12, 3630-3636	7.7	25
55	Life cycle considerations of nano-enabled agrochemicals: are today's tools up to the task?. *Environmental Science: Nano*, **2018**, 5, 1057-1069	7.1	25
54	Unveiling the Role of Sulfur in Rapid Defluorination of Florfenicol by Sulfidized Nanoscale Zero-Valent Iron in Water under Ambient Conditions. *Environmental Science & Technology*, **2021**, 55, 2628-2638	10.3	25

53	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. *Chemosphere*, **2017**, 183, 323-331	8.4	24
52	Effect of Initial Speciation of Copper- and Silver-Based Nanoparticles on Their Long-Term Fate and Phytoavailability in Freshwater Wetland Mesocosms. *Environmental Science & Technology*, **2017** , 51, 12114-12122	10.3	24
51	Modified MODFLOW-based model for simulating the agglomeration and transport of polymer-modified Fe nanoparticles in saturated porous media. *Environmental Science and Pollution Research*, **2018**, 25, 7180-7199	5.1	24
50	Effect of silver concentration and chemical transformations on release and antibacterial efficacy in silver-containing textiles. *NanoImpact*, **2018**, 11, 51-57	5.6	24
49	Biogenic Cyanide Production Promotes Dissolution of Gold Nanoparticles in Soil. *Environmental Science & Technology*, **2019**, 53, 1287-1295	10.3	24
48	Effect of emplaced nZVI mass and groundwater velocity on PCE dechlorination and hydrogen evolution in water-saturated sand. *Journal of Hazardous Materials*, **2017**, 322, 136-144	12.8	23
47	Effect of CeO2 nanomaterial surface functional groups on tissue and subcellular distribution of Ce in tomato (Solanum lycopersicum). *Environmental Science: Nano*, **2019**, 6, 273-285	7.1	23
46	Adsorbed poly(aspartate) coating limits the adverse effects of dissolved groundwater solutes on Fe nanoparticle reactivity with trichloroethylene. *Environmental Science and Pollution Research*, **2018**, 25, 7157-7169	5.1	23
45	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. *Environmental Science: Nano*, **2020**, 7, 13-36	7.1	23
44	Inhibition of bacterial surface colonization by immobilized silver nanoparticles depends critically on the planktonic bacterial concentration. *Journal of Colloid and Interface Science*, **2016**, 467, 17-27	9.3	22
43	Partitioning of uranyl between ferrihydrite and humic substances at acidic and circum-neutral pH. *Geochimica Et Cosmochimica Acta*, **2017**, 215, 122-140	5.5	22
42	Engineered nanoparticles interact with nutrients to intensify eutrophication in a wetland ecosystem experiment. *Ecological Applications*, **2018**, 28, 1435-1449	4.9	22
41	Impact of mercury speciation on its removal from water by activated carbon and organoclay. *Water Research*, **2019**, 157, 600-609	12.5	21
40	High molecular weight components of natural organic matter preferentially adsorb onto nanoscale zero valent iron and magnetite. *Science of the Total Environment*, **2018**, 628-629, 177-185	10.2	21
39	Press or pulse exposures determine the environmental fate of cerium nanoparticles in stream mesocosms. *Environmental Toxicology and Chemistry*, **2016**, 35, 1213-23	3.8	21
38	Biogeochemical transformations of mercury in solid waste landfills and pathways for release. *Environmental Sciences: Processes and Impacts*, **2016**, 18, 176-89	4.3	21
37	Nanotechnology patenting trends through an environmental lens: analysis of materials and applications. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	21
36	Accurate and fast numerical algorithms for tracking particle size distributions during nanoparticle aggregation and dissolution. *Environmental Science: Nano*, **2017**, 4, 89-104	7.1	19

35	Speciation of Mercury in Selected Areas of the Petroleum Value Chain. *Environmental Science & Technology*, **2018**, 52, 1655-1664	10.3	18
34	Characterization of engineered alumina nanofibers and their colloidal properties in water. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	17
33	Differential Reactivity of Copper- and Gold-Based Nanomaterials Controls Their Seasonal Biogeochemical Cycling and Fate in a Freshwater Wetland Mesocosm. *Environmental Science & Technology*, **2020**, 54, 1533-1544	10.3	17
32	Characterizing convective heat transfer coefficients in membrane distillation cassettes. *Journal of Membrane Science*, **2017**, 538, 108-121	9.6	14
31	Neutralization of Bauxite Residue with Acidic Fly Ash. *Environmental Engineering Science*, **2009**, 26, 431-440	2	14
30	Sulfidized Nanoscale Zero-Valent Iron: Tuning the Properties of This Complex Material for Efficient Groundwater Remediation. *Accounts of Materials Research*, **2021**, 2, 420-431	7.5	14
29	Persistence of copper-based nanoparticle-containing foliar sprays in Lactuca sativa (lettuce) characterized by spICP-MS. *Journal of Nanoparticle Research*, **2019**, 21, 1	2.3	13
28	From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. *Exploration*, **2021**, 1, 9-20		13
27	Measurement of Setschenow constants for six hydrophobic compounds in simulated brines and use in predictive modeling for oil and gas systems. *Chemosphere*, **2016**, 144, 2247-56	8.4	12
26	Nanoparticle core properties affect attachment of macromolecule-coated nanoparticles to silica surfaces. *Environmental Chemistry*, **2014**, 11, 257	3.2	12
25	Reduction in bacterial contamination of hospital textiles by a novel silver-based laundry treatment. *American Journal of Infection Control*, **2016**, 44, 1705-1708	3.8	11
24	Copper release and transformation following natural weathering of nano-enabled pressure-treated lumber. *Science of the Total Environment*, **2019**, 668, 234-244	10.2	10
23	Star Polymer Size, Charge Content, and Hydrophobicity Affect their Leaf Uptake and Translocation in Plants. *Environmental Science & Technology*, **2021**, 55, 10758-10768	10.3	9
22	Comparative Study of Effects of CO2Concentration and pH on Microbial Communities from a Saline Aquifer, a Depleted Oil Reservoir, and a Freshwater Aquifer. *Environmental Engineering Science*, **2016**, 33, 806-816	2	9
21	Measurement and Modeling of Setschenow Constants for Selected Hydrophilic Compounds in NaCl and CaCl Simulated Carbon Storage Brines. *Accounts of Chemical Research*, **2017**, 50, 1332-1341	24.3	8
20	Graphite nanoparticle addition to fertilizers reduces nitrate leaching in growth of lettuce (Lactuca sativa). *Environmental Science: Nano*, **2020**, 7, 127-138	7.1	8
19	Time-dependent bacterial transcriptional response to CuO nanoparticles differs from that of Cu2+ and provides insights into CuO nanoparticle toxicity mechanisms. *Environmental Science: Nano*, **2017**, 4, 2321-2335	7.1	7
18	Multistep Method to Extract Moderately Soluble Copper Oxide Nanoparticles from Soil for Quantification and Characterization. *Analytical Chemistry*, **2020**, 92, 9620-9628	7.8	6

17	New Linear Partitioning Models Based on Experimental Water: Supercritical CO2 Partitioning Data of Selected Organic Compounds. *Environmental Science & Technology*, **2016**, 50, 5135-42	10.3	6
16	Preparation of palladized carbon nanotubes encapsulated iron composites: highly efficient dechlorination for trichloroethylene and low corrosion of nanoiron. *Royal Society Open Science*, **2018**, 5, 172242	3.3	5
15	Response to Comment on "Sulfidation of Silver Nanoparticles: Natural Antidote to Their Toxicity" *Environmental Science & Technology*, **2014**, 48, 6051-6052	10.3	5
14	Methanol-based extraction protocol for insoluble and moderately water-soluble nanoparticles in plants to enable characterization by single particle ICP-MS. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 299-314	4.4	5
13	Impacts of Sediment Particle Grain Size and Mercury Speciation on Mercury Bioavailability Potential. *Environmental Science & Technology*, **2021**, 55, 12393-12402	10.3	5
12	Visualization tool for correlating nanomaterial properties and biological responses in zebrafish. *Environmental Science: Nano*, **2016**, 3, 1280-1292	7.1	4
11	Phosphate Polymer Nanogel for Selective and Efficient Rare Earth Element Recovery. *Environmental Science & Technology*, **2021**, 55, 12549-12560	10.3	4
10	Copper and Gold Nanoparticles Increase Nutrient Excretion Rates of Primary Consumers. *Environmental Science & Technology*, **2020**, 54, 10170-10180	10.3	3
9	Investigation of pore water and soil extraction tests for characterizing the fate of poorly soluble metal-oxide nanoparticles. *Chemosphere*, **2021**, 267, 128885	8.4	3
8	Amphiphilic Thiol Polymer Nanogel Removes Environmentally Relevant Mercury Species from Both Produced Water and Hydrocarbons. *Environmental Science & Technology*, **2021**, 55, 1231-1241	10.3	3
7	Star Polymers with Designed Reactive Oxygen Species Scavenging and Agent Delivery Functionality Promote Plant Stress Tolerance.. *ACS Nano*, **2022**, 16, 4467-4478	16.7	3
6	Sulfide-Modified NZVI (S-NZVI): Synthesis, Characterization, and Reactivity **2019**, 359-386		2
5	Inching closer to realistic exposure models. *Nature Nanotechnology*, **2018**, 13, 983-985	28.7	2
4	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
3	Challenges Facing the Environmental Nanotechnology Research Enterprise **2016**, 1-19		1
2	Sorption and transformation of biocides from hydraulic fracturing in the Marcellus Shale: a review. *Environmental Chemistry Letters*,1	13.3	
1	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		