Jason M Unrine

List of Publications by Year
in descending order

79 papers	6,198 citations	66343 42 h-index	71685 76 g-index
79 all docs	79 docs citations	79 times ranked	6540 citing authors

#	Article	IF	Citations
1	Responses of soil bacteria and fungal communities to pristine and sulfidized zinc oxide nanoparticles relative to Zn ions. Journal of Hazardous Materials, 2021, 405, 124258.	12.4	28
2	Foreword to the research front on â€˜Plastics in the Environmentâ€™. Environmental Chemistry, 2021, 18, 91.	1.5	0
3	Effects of Soil pH and Coatings on the Efficacy of Polymer coated ZnO Nanoparticulate fertilizers in Wheat (<i>Triticum aestivum</i>). Environmental Science & Technology, 2021, 55, 13532-13540.	10.0	16
4	Delivery of short hairpin RNA in the neotropical brown stink bug, Euschistus heros, using a composite nanomaterial. Pesticide Biochemistry and Physiology, 2021, 177, 104906.	3.6	5
5	The preparation temperature influences the physicochemical nature and activity of nanoceria. Beilstein Journal of Nanotechnology, 2021, 12, 525-540.	2.8	0
6	Bloodâ€™s Concentration of Lead and Arsenic Associated with Anemia in Peruvian Children. Journal of Environmental and Public Health, 2021, 2021, 1-8.	0.9	3
7	A comparison of blood and toenails as biomarkers of childrenâ€™s exposure to lead and their correlation with cognitive function. Science of the Total Environment, 2020, 700, 134519.	8.0	15
8	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. Environmental Science: Nano, 2020, 7, 13-36.	4.3	32
9	Optimizing the dispersion of nanoparticulate TiO2-based UV filters in a non-polar medium used in sunscreen formulations â€“ The roles of surfactants and particle coatings. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 599, 124792.	4.7	14
10	RNAi in <i>Spodoptera frugiperda</i> Sf9 Cells via Nanomaterial Mediated Delivery of dsRNA: A Comparison of Poly-<scp>l</scp>-arginine Polyplexes and Poly-<scp>l</scp>-arginine-Functionalized Au Nanoparticles. ACS Applied Materials & Interfaces, 2020, 12, 25645-25657.	8.0	17
11	Polymer-Coated Hydroxyapatite Nanocarrier for Double-Stranded RNA Delivery. Journal of Agricultural and Food Chemistry, 2020, 68, 6811-6818.	5.2	20
12	Nanoceria distribution and effects are mouse-strain dependent. Nanotoxicology, 2020, 14, 827-846.	3.0	11
13	Comparison of Nanomaterials for Delivery of Double-Stranded RNA inCaenorhabditis elegans. Journal of Agricultural and Food Chemistry, 2020, 68, 7926-7934.	5.2	10
14	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.	10.0	29
15	Efficacy of chitosan/double-stranded RNA polyplex nanoparticles for gene silencing under variable environmental conditions. Environmental Science: Nano, 2020, 7, 1582-1592.	4.3	9
16	Evidence of nickel and other trace elements and their relationship to clinical findings in acute Mesoamerican Nephropathy: A case-control analysis. PLoS ONE, 2020, 15, e0240988.	2.5	23
17	Nanoparticle surface charge influences translocation and leaf distribution in vascular plants with contrasting anatomy. Environmental Science: Nano, 2019, 6, 2508-2519.	4.3	81
18	Surface coating effects on the sorption and dissolution of ZnO nanoparticles in soil. Environmental Science: Nano, 2019, 6, 2495-2507.	4.3	15

#	Article	IF	Citations
19	Foreword to the Research Front on â€˜Nanotechnology and Agriculture'. Environmental Chemistry, 2019, 16, 375.	1.5	0
20	Genomic mutations after multigenerational exposure of Caenorhabditis elegans to pristine and sulfidized silver nanoparticles. Environmental Pollution, 2019, 254, 113078.	7.5	31
21	Effect of CeO₂ nanomaterial surface functional groups on tissue and subcellular distribution of Ce in tomato (<i>Solanum lycopersicum</i>). Environmental Science: Nano, 2019, 6, 273-285.	4.3	32
22	Enhanced toxicity of environmentally transformed ZnO nanoparticles relative to Zn ions in the epibenthic amphipod <i>Hyalella azteca</i>. Environmental Science: Nano, 2019, 6, 325-340.	4.3	36
23	Toxicogenomic responses of Caenorhabditis elegans to pristine and transformed zinc oxide nanoparticles. Environmental Pollution, 2019, 247, 917-926.	7.5	34
24	Nanoparticle Size and Coating Chemistry Control Foliar Uptake Pathways, Translocation, and Leaf-to-Rhizosphere Transport in Wheat. ACS Nano, 2019, 13, 5291-5305.	14.6	303
25	Strategies for robust and accurate experimental approaches to quantify nanomaterial bioaccumulation across a broad range of organisms. Environmental Science: Nano, 2019, 6, 1619-1656.	4.3	48
26	A case-control study of trace-element status and lung cancer in Appalachian Kentucky. PLoS ONE, 2019, 14, e0212340.	2.5	12
27	Uptake and Bioactivity of Chitosan/Double-Stranded RNA Polyplex Nanoparticles in <i>Caenorhabditis elegans</i>. Environmental Science & Technology, 2019, 53, 3832-3840.	10.0	26
28	Surface-controlled dissolution rates: a case study of nanoceria in carboxylic acid solutions. Environmental Science: Nano, 2019, 6, 1478-1492.	4.3	14
29	Carboxylic acids accelerate acidic environment-mediated nanoceria dissolution. Nanotoxicology, 2019, 13, 455-475.	3.0	19
30	Comparing plantâ€“insect trophic transfer of Cu from lab-synthesised nano-Cu(OH)2 with a commercial nano-Cu(OH)2 fungicide formulation. Environmental Chemistry, 2019, 16, 411.	1.5	21
31	Functionalized-ZnO-Nanoparticle Seed Treatments to Enhance Growth and Zn Content of Wheat (<i>Triticum aestivum</i>) Seedlings. Journal of Agricultural and Food Chemistry, 2018, 66, 12166-12178.	5.2	47
32	Engineered nanoparticles interact with nutrients to intensify eutrophication in a wetland ecosystem experiment. Ecological Applications, 2018, 28, 1435-1449.	3.8	30
33	Size-Based Differential Transport, Uptake, and Mass Distribution of Ceria (CeO₂) Nanoparticles in Wetland Mesocosms. Environmental Science & Technology, 2018, 52, 9768-9776.	10.0	52
34	Dosing, Not the Dose: Comparing Chronic and Pulsed Silver Nanoparticle Exposures. Environmental Science & Technology, 2018, 52, 10048-10056.	10.0	24
35	Plant and Microbial Responses to Repeated Cu(OH)2 Nanopesticide Exposures Under Different Fertilization Levels in an Agro-Ecosystem. Frontiers in Microbiology, 2018, 9, 1769.	3.5	48
36	Gold nanoparticle biodissolution by a freshwater macrophyte and its associated microbiome. Nature Nanotechnology, 2018, 13, 1072-1077.	31.5	68

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37	Nanotechnology for sustainable food production: promising opportunities and scientific challenges. Environmental Science: Nano, 2017, 4, 767-781.	4.3	202
38	Impact of Surface Charge on Cerium Oxide Nanoparticle Uptake and Translocation by Wheat (<i>Triticum aestivum</i>). Environmental Science & Technology, 2017, 51, 7361-7368.	10.0	133
39	The role of charge in the toxicity of polymer-coated cerium oxide nanomaterials to Caenorhabditis elegans. Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, 2017, 201, 1-10.	2.6	12
40	Effects of biosolids from a wastewater treatment plant receiving manufactured nanomaterials on Medicago truncatula and associated soil microbial communities at low nanomaterial concentrations. Science of the Total Environment, 2017, 609, 799-806.	8.0	32
41	<i>In Situ</i> Measurement of CuO and Cu(OH)₂ Nanoparticle Dissolution Rates in Quiescent Freshwater Mesocosms. Environmental Science and Technology Letters, 2016, 3, 375-380.	8.7	50
42	Press or pulse exposures determine the environmental fate of cerium nanoparticles in stream mesocosms. Environmental Toxicology and Chemistry, 2016, 35, 1213-1223.	4.3	22
43	Effect of natural organic matter on dissolution and toxicity of sulfidized silver nanoparticles to Caenorhabditis elegans. Environmental Science: Nano, 2016, 3, 728-736.	4.3	63
44	Distinct transcriptomic responses of Caenorhabditis elegans to pristine and sulfidized silver nanoparticles. Environmental Pollution, 2016, 213, 314-321.	7.5	44
45	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, 8751-8758.	10.0	90
46	A functional assay-based strategy for nanomaterial risk forecasting. Science of the Total Environment, 2015, 536, 1029-1037.	8.0	79
47	Toxicogenomic Responses of the Model Legume <i>Medicago truncatula</i> to Aged Biosolids Containing a Mixture of Nanomaterials (TiO₂, Ag, and ZnO) from a Pilot Wastewater Treatment Plant. Environmental Science & Technology, 2015, 49, 8759-8768.	10.0	70
48	Chitosan, Carbon Quantum Dot, and Silica Nanoparticle Mediated dsRNA Delivery for Gene Silencing in <i>Aedes aegypti</i>: A Comparative Analysis. ACS Applied Materials & Interfaces, 2015, 7, 19530-19535.	8.0	141
49	Impact of sulfidation on the bioavailability and toxicity of silver nanoparticles to Caenorhabditis elegans. Environmental Pollution, 2015, 196, 239-246.	7.5	122
50	Influence of Natural Organic Matter and Surface Charge on the Toxicity and Bioaccumulation of Functionalized Ceria Nanoparticles in <i>Caenorhabditis elegans</i>. Environmental Science & Technology, 2014, 48, 1280-1289.	10.0	145
51	Fate of Zinc Oxide and Silver Nanoparticles in a Pilot Wastewater Treatment Plant and in Processed Biosolids. Environmental Science & Technology, 2014, 48, 104-112.	10.0	326
52	Environmental release, fate and ecotoxicological effects of manufactured ceria nanomaterials. Environmental Science: Nano, 2014, 1, 533-548.	4.3	110
53	Multitechnique Investigation of the pH Dependence of Phosphate Induced Transformations of ZnO Nanoparticles. Environmental Science & Technology, 2014, 48, 4757-4764.	10.0	85
54	Inâ€...Vivo Processing of Ceria Nanoparticles inside Liver: Impact on Freeâ€Radical Scavenging Activity and Oxidative Stress. ChemPlusChem, 2014, 79, 1083-1088.	2.8	65

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55	Toxicity and Transcriptomic Analysis in <i>Hyalella azteca</i> Suggests Increased Exposure and Susceptibility of Epibenthic Organisms to Zinc Oxide Nanoparticles. Environmental Science & Technology, 2013, 47, 9453-9460.	10.0	28
56	Behavior of Ag nanoparticles in soil: Effects of particle surface coating, aging and sewage sludge amendment. Environmental Pollution, 2013, 182, 141-149.	7.5	129
57	Elevated concentrations of trace elements in soil do not necessarily reflect metals available to plants. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2013, 48, 219-225.	1.5	8
58	Low Concentrations of Silver Nanoparticles in Biosolids Cause Adverse Ecosystem Responses under Realistic Field Scenario. PLoS ONE, 2013, 8, e57189.	2.5	284
59	Rat brain pro-oxidant effects of peripherally administered 5nm ceria 30 days after exposure. NeuroToxicology, 2012, 33, 1147-1155.	3.0	44
60	Bioaccumulation of Gold Nanomaterials by <i>Manduca sexta</i>through Dietary Uptake of Surface Contaminated Plant Tissue. Environmental Science & Technology, 2012, 46, 12672-12678.	10.0	73
61	Toxicogenomic Responses of the Model Organism Caenorhabditis elegans to Gold Nanoparticles. Environmental Science & Technology, 2012, 46, 4115-4124.	10.0	92
62	Distribution, Elimination, and Biopersistence to 90 Days of a Systemically Introduced 30 nm Ceria-Engineered Nanomaterial in Rats. Toxicological Sciences, 2012, 127, 256-268.	3.1	114
63	Bioavailability of Gold Nanomaterials to Plants: Importance of Particle Size and Surface Coating. Environmental Science & Technology, 2012, 46, 8467-8474.	10.0	221
64	Trophic Transfer of Au Nanoparticles from Soil along a Simulated Terrestrial Food Chain.. Environmental Science & Technology, 2012, 46, 9753-9760.	10.0	147
65	Uptake, distribution and toxicity of gold nanoparticles in tobacco (<i>Nicotiana xanthi</i>) seedlings. Nanotoxicology, 2012, 6, 353-360.	3.0	192
66	Biotic and Abiotic Interactions in Aquatic Microcosms Determine Fate and Toxicity of Ag Nanoparticles: Part 2â€"Toxicity and Ag Speciation. Environmental Science & Technology, 2012, 46, 6925-6933.	10.0	128
67	Biotic and Abiotic Interactions in Aquatic Microcosms Determine Fate and Toxicity of Ag Nanoparticles. Part 1. Aggregation and Dissolution. Environmental Science & Technology, 2012, 46, 6915-6924.	10.0	173
68	Analysis of engineered nanomaterials in complex matrices (environment and biota): General considerations and conceptual case studies. Environmental Toxicology and Chemistry, 2012, 31, 32-49.	4.3	390
69	Microbial Bioavailability of Covalently Bound Polymer Coatings on Model Engineered Nanomaterials. Environmental Science & Technology, 2011, 45, 5253-5259.	10.0	84
70	Evidence for Biomagnification of Gold Nanoparticles within a Terrestrial Food Chain. Environmental Science & Technology, 2011, 45, 776-781.	10.0	317
71	Effect of silver nanoparticle surface coating on bioaccumulation and reproductive toxicity in earthworms (<i>Eisenia fetida</i>). Nanotoxicology, 2011, 5, 432-444.	3.0	186
72	Characterization of LipL as a Non-heme, Fe(II)-dependent Î±-Ketoglutarate:UMP Dioxygenase That Generates Uridine-5â€²-aldehyde during A-90289 Biosynthesis*. Journal of Biological Chemistry, 2011, 286, 7885-7892.	3.4	47

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73	Concentrations of Arsenic, Chromium, and Nickel in Toenail Samples From Appalachian Kentucky Residents. Journal of Environmental Pathology, Toxicology and Oncology, 2011, 30, 213-223.	1.2	31
74	Effects of Particle Size on Chemical Speciation and Bioavailability of Copper to Earthworms (<i>Eisenia fetida</i>) Exposed to Copper Nanoparticles. Journal of Environmental Quality, 2010, 39, 1942-1953.	2.0	153
75	Evidence for Bioavailability of Au Nanoparticles from Soil and Biodistribution within Earthworms (<i>Eisenia fetida</i>). Environmental Science & Technology, 2010, 44, 8308-8313.	10.0	135
76	Biodistribution and oxidative stress effects of a systemically-introduced commercial ceria engineered nanomaterial. Nanotoxicology, 2009, 3, 234-248.	3.0	92
77	Bioaccumulation of trace elements in omnivorous amphibian larvae: Implications for amphibian health and contaminant transport. Environmental Pollution, 2007, 149, 182-192.	7.5	97
78	DIETARY MERCURY EXPOSURE AND BIOACCUMULATION IN SOUTHERN LEOPARD FROG (RANA) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	4.3	26
79	ADVERSE EFFECTS OF ECOLOGICALLY RELEVANT DIETARY MERCURY EXPOSURE IN SOUTHERN LEOPARD FROG (RANA SPHENOCEPHALA) LARVAE. Environmental Toxicology and Chemistry, 2004, 23, 2964.	4.3	43