

Elijah Joel Petersen

List of Publications by Year in descending order

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85
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6,365
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50170

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times ranked

6844
citing authors

#	ARTICLE	IF	CITATIONS
1	Solving Familiar Problems: Leveraging Environmental Testing Methods for Nanomaterials to Evaluate Microplastics and Nanoplastics. <i>Nanomaterials</i> , 2022, 12, 1332.	1.9	5
2	IVIVE: Facilitating the Use of In Vitro Toxicity Data in Risk Assessment and Decision Making. <i>Toxics</i> , 2022, 10, 232.	1.6	35
3	Development of a 96-Well Electrophilic Allergen Screening Assay for Skin Sensitization Using a Measurement Science Approach. <i>Toxics</i> , 2022, 10, 257.	1.6	4
4	Current ecotoxicity testing needs among selected U.S. federal agencies. <i>Regulatory Toxicology and Pharmacology</i> , 2022, 133, 105195.	1.3	5
5	Resources for Developing Reliable and Reproducible <i>In Vitro</i> Toxicological Test Methods. <i>Chemical Research in Toxicology</i> , 2021, 34, 1367-1369.	1.7	5
6	New guidance brings clarity to environmental hazard and behaviour testing of nanomaterials. <i>Nature Nanotechnology</i> , 2021, 16, 482-483.	15.6	13
7	Comparative study of multiwall carbon nanotube nanocomposites by Raman, SEM, and XPS measurement techniques. <i>Composites Science and Technology</i> , 2021, 208, 108753.	3.8	47
8	Bridging international approaches on nanoEHS. <i>Nature Nanotechnology</i> , 2021, 16, 608-611.	15.6	6
9	Use of Cause-and-Effect Analysis to Optimize the Reliability of <i>In Vitro</i> Inhalation Toxicity Measurements Using an Air-Liquid Interface. <i>Chemical Research in Toxicology</i> , 2021, 34, 1370-1385.	1.7	11
10	Combining secondary ion mass spectrometry image depth profiling and single particle inductively coupled plasma mass spectrometry to investigate the uptake and biodistribution of gold nanoparticles in <i>Caenorhabditis elegans</i> . <i>Analytica Chimica Acta</i> , 2021, 1175, 338671.	2.6	8
11	Characteristics to consider when selecting a positive control material for an in vitro assay. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2021, 38, 365-376.	0.9	10
12	U.S. Federal Agency interests and key considerations for new approach methodologies for nanomaterials. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2021, , .	0.9	5
13	Cause-and-Effect Analysis as a Tool To Improve the Reproducibility of Nanobioassays: Four Case Studies. <i>Chemical Research in Toxicology</i> , 2020, 33, 1039-1054.	1.7	27
14	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. <i>Environmental Science: Nano</i> , 2020, 7, 13-36.	2.2	32
15	Selection of an Optimal Abrasion Wheel Type for Nano-Coating Wear Studies under Wet or Dry Abrasion Conditions. <i>Nanomaterials</i> , 2020, 10, 1445.	1.9	1
16	Parametric Optimization of an Air-Liquid Interface System for Flow-Through Inhalation Exposure to Nanoparticles: Assessing Dosimetry and Intracellular Uptake of CeO ₂ Nanoparticles. <i>Nanomaterials</i> , 2020, 10, 2369.	1.9	25
17	Toward Sustainable Environmental Quality: Priority Research Questions for North America. <i>Environmental Toxicology and Chemistry</i> , 2019, 38, 1606-1624.	2.2	43
18	Determining what really counts: modeling and measuring nanoparticle number concentrations. <i>Environmental Science: Nano</i> , 2019, 6, 2876-2896.	2.2	31

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19	Strategies for robust and accurate experimental approaches to quantify nanomaterial bioaccumulation across a broad range of organisms. <i>Environmental Science: Nano</i> , 2019, 6, 1619-1656.	2.2	48
20	Detection and Quantification of Graphene-Family Nanomaterials in the Environment. <i>Environmental Science & Technology</i> , 2018, 52, 4491-4513.	4.6	147
21	Agglomeration of <i>Escherichia coli</i> with Positively Charged Nanoparticles Can Lead to Artifacts in a Standard <i>Caenorhabditis elegans</i> Toxicity Assay. <i>Environmental Science & Technology</i> , 2018, 52, 5968-5978.	4.6	68
22	Counting <i>Caenorhabditis elegans</i> : Protocol Optimization and Applications for Population Growth and Toxicity Studies in Liquid Medium. <i>Scientific Reports</i> , 2018, 8, 904.	1.6	37
23	Efficient electrochemical degradation of multiwall carbon nanotubes. <i>Journal of Hazardous Materials</i> , 2018, 354, 275-282.	6.5	14
24	Biophysical characterization of functionalized titania nanoparticles and their application in dental adhesives. <i>Acta Biomaterialia</i> , 2017, 53, 585-597.	4.1	40
25	Increasing evidence indicates low bioaccumulation of carbon nanotubes. <i>Environmental Science: Nano</i> , 2017, 4, 747-766.	2.2	48
26	Impact of UV irradiation on multiwall carbon nanotubes in nanocomposites: Formation of entangled surface layer and mechanisms of release resistance. <i>Carbon</i> , 2017, 116, 191-200.	5.4	43
27	Biological Uptake, Distribution, and Depuration of Radio-Labeled Graphene in Adult Zebrafish: Effects of Graphene Size and Natural Organic Matter. <i>ACS Nano</i> , 2017, 11, 2872-2885.	7.3	98
28	Separation, Sizing, and Quantitation of Engineered Nanoparticles in an Organism Model Using Inductively Coupled Plasma Mass Spectrometry and Image Analysis. <i>ACS Nano</i> , 2017, 11, 526-540.	7.3	38
29	Multiple Method Analysis of TiO ₂ Nanoparticle Uptake in Rice (<i>Oryza sativa</i> L.) Plants. <i>Environmental Science & Technology</i> , 2017, 51, 10615-10623.	4.6	84
30	Colloidal properties and stability of aqueous suspensions of few-layer graphene: Importance of graphene concentration. <i>Environmental Pollution</i> , 2017, 220, 469-477.	3.7	50
31	Toward achieving harmonization in a nanocytotoxicity assay measurement through an interlaboratory comparison study. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2017, 34, 201-218.	0.9	52
32	Separation of Bacteria, Protozoa and Carbon Nanotubes by Density Gradient Centrifugation. <i>Nanomaterials</i> , 2016, 6, 181.	1.9	24
33	Nanomaterials in the aquatic environment: A European Union–United States perspective on the status of ecotoxicity testing, research priorities, and challenges ahead. <i>Environmental Toxicology and Chemistry</i> , 2016, 35, 1055-1067.	2.2	163
34	Quantification of Carbon Nanotubes in Environmental Matrices: Current Capabilities, Case Studies, and Future Prospects. <i>Environmental Science & Technology</i> , 2016, 50, 4587-4605.	4.6	104
35	Considerations of Environmentally Relevant Test Conditions for Improved Evaluation of Ecological Hazards of Engineered Nanomaterials. <i>Environmental Science & Technology</i> , 2016, 50, 6124-6145.	4.6	191
36	Exposure of few layer graphene to <i>Limnodrilus hoffmeisteri</i> modifies the graphene and changes its bioaccumulation by other organisms. <i>Carbon</i> , 2016, 109, 566-574.	5.4	47

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37	Bioaccumulation of Multiwall Carbon Nanotubes in <i>Tetrahymena thermophila</i> by Direct Feeding or Trophic Transfer. <i>Environmental Science & Technology</i> , 2016, 50, 8876-8885.	4.6	61
38	Estimation and uncertainty analysis of dose response in an inter-laboratory experiment. <i>Metrologia</i> , 2016, 53, S40-S45.	0.6	2
39	Impact of and correction for instrument sensitivity drift on nanoparticle size measurements by single-particle ICP-MS. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 5099-5108.	1.9	15
40	Retention of ¹⁴ C-labeled multiwall carbon nanotubes by humic acid and polymers: Roles of macromolecule properties. <i>Carbon</i> , 2016, 99, 229-237.	5.4	21
41	Biodistribution and toxicity of radio-labeled few layer graphene in mice after intratracheal instillation. <i>Particle and Fibre Toxicology</i> , 2015, 13, 7.	2.8	93
42	<i>In Response</i> : Measurement science challenges that complicate the assessment of the potential ecotoxicological risks of carbon nanomaterials—A governmental perspective. <i>Environmental Toxicology and Chemistry</i> , 2015, 34, 955-957.	2.2	1
43	Degradation of ¹⁴ C-labeled few layer graphene via Fenton reaction: Reaction rates, characterization of reaction products, and potential ecological effects. <i>Water Research</i> , 2015, 84, 49-57.	5.3	72
44	Adapting OECD Aquatic Toxicity Tests for Use with Manufactured Nanomaterials: Key Issues and Consensus Recommendations. <i>Environmental Science & Technology</i> , 2015, 49, 9532-9547.	4.6	153
45	Nanomaterial Categorization for Assessing Risk Potential To Facilitate Regulatory Decision-Making. <i>ACS Nano</i> , 2015, 9, 3409-3417.	7.3	129
46	<i>Post hoc</i> Interlaboratory Comparison of Single Particle ICP-MS Size Measurements of NIST Gold Nanoparticle Reference Materials. <i>Analytical Chemistry</i> , 2015, 87, 8809-8817.	3.2	62
47	Use of Cause-and-Effect Analysis to Design a High-Quality Nanocytotoxicology Assay. <i>Chemical Research in Toxicology</i> , 2015, 28, 21-30.	1.7	65
48	Microscopic investigation of single-wall carbon nanotube uptake by <i>Daphnia magna</i> . <i>Nanotoxicology</i> , 2014, 8, 2-10.	1.6	60
49	Effect of gold nanoparticles and ciprofloxacin on microbial catabolism: a community-based approach. <i>Environmental Toxicology and Chemistry</i> , 2014, 33, 44-51.	2.2	17
50	Methods to assess the impact of UV irradiation on the surface chemistry and structure of multiwall carbon nanotube epoxy nanocomposites. <i>Carbon</i> , 2014, 69, 194-205.	5.4	105
51	DNA Damaging Potential of Photoactivated P25 Titanium Dioxide Nanoparticles. <i>Chemical Research in Toxicology</i> , 2014, 27, 1877-1884.	1.7	40
52	Identification and Avoidance of Potential Artifacts and Misinterpretations in Nanomaterial Ecotoxicity Measurements. <i>Environmental Science & Technology</i> , 2014, 48, 4226-4246.	4.6	209
53	Degradation of multiwall carbon nanotubes by bacteria. <i>Environmental Pollution</i> , 2013, 181, 335-339.	3.7	108
54	A screening study on the fate of fullerenes (nC ₆₀) and their toxic implications in natural freshwaters. <i>Environmental Toxicology and Chemistry</i> , 2013, 32, 1224-1232.	2.2	48

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55	Biological Uptake and Depuration of Radio-labeled Graphene by <i>Daphnia magna</i> . Environmental Science & Technology, 2013, 47, 12524-12531.	4.6	131
56	Protective Roles of Single-Wall Carbon Nanotubes in Ultrasonication-Induced DNA Base Damage. Small, 2013, 9, 205-208.	5.2	32
57	NIST gold nanoparticle reference materials do not induce oxidative DNA damage. Nanotoxicology, 2013, 7, 21-29.	1.6	54
58	Impact of size and sorption on degradation of trichloroethylene and polychlorinated biphenyls by nano-scale zerovalent iron. Journal of Hazardous Materials, 2012, 243, 73-79.	6.5	38
59	Copper Oxide Nanoparticle Mediated DNA Damage in Terrestrial Plant Models. Environmental Science & Technology, 2012, 46, 1819-1827.	4.6	424
60	Toxicity of fullerene (C ₆₀) to sediment-dwelling invertebrate <i>Chironomus riparius</i> larvae. Environmental Toxicology and Chemistry, 2012, 31, 2108-2116.	2.2	44
61	Interactions of ¹⁴ C-labeled multi-walled carbon nanotubes with soil minerals in water. Environmental Pollution, 2012, 166, 75-81.	3.7	65
62	Pilot estuarine mesocosm study on the environmental fate of Silver nanomaterials leached from consumer products. Science of the Total Environment, 2012, 421-422, 267-272.	3.9	113
63	Methodological considerations for testing the ecotoxicity of carbon nanotubes and fullerenes: Review. Environmental Toxicology and Chemistry, 2012, 31, 60-72.	2.2	113
64	Impact of Porous Media Grain Size on the Transport of Multi-walled Carbon Nanotubes. Environmental Science & Technology, 2011, 45, 9765-9775.	4.6	119
65	Phase Distribution of ¹⁴ C-Labeled Multiwalled Carbon Nanotubes in Aqueous Systems Containing Model Solids: Peat. Environmental Science & Technology, 2011, 45, 1356-1362.	4.6	62
66	Influence of Polyethyleneimine Graftings of Multi-Walled Carbon Nanotubes on their Accumulation and Elimination by and Toxicity to <i>Daphnia magna</i> . Environmental Science & Technology, 2011, 45, 1133-1138.	4.6	102
67	Potential Release Pathways, Environmental Fate, And Ecological Risks of Carbon Nanotubes. Environmental Science & Technology, 2011, 45, 9837-9856.	4.6	446
68	Effects of Polyethyleneimine-Mediated Functionalization of Multi-Walled Carbon Nanotubes on Earthworm Bioaccumulation and Sorption by Soils. Environmental Science & Technology, 2011, 45, 3718-3724.	4.6	68
69	Effects of aging and mixed nonaqueous-phase liquid sources in soil systems on earthworm bioaccumulation, microbial degradation, sequestration, and aqueous desorption of pyrene. Environmental Toxicology and Chemistry, 2011, 30, 988-996.	2.2	2
70	Aqueous fullerene aggregates (nC ₆₀) generate minimal reactive oxygen species and are of low toxicity in fish: a revision of previous reports. Current Opinion in Biotechnology, 2011, 22, 533-537.	3.3	59
71	Mechanisms and measurements of nanomaterial-induced oxidative damage to DNA. Analytical and Bioanalytical Chemistry, 2010, 398, 613-650.	1.9	153
72	Analysis of fullerene-C ₆₀ and kinetic measurements for its accumulation and depuration in <i>Daphnia magna</i> . Environmental Toxicology and Chemistry, 2010, 29, 1072-1078.	2.2	102

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73	Relevance of octanolâ€‘water distribution measurements to the potential ecological uptake of multiâ€‘walled carbon nanotubes. <i>Environmental Toxicology and Chemistry</i> , 2010, 29, 1106-1112.	2.2	57
74	Multifunctional Dendrimer-Modified Multiwalled Carbon Nanotubes: Synthesis, Characterization, and In Vitro Cancer Cell Targeting and Imaging. <i>Biomacromolecules</i> , 2009, 10, 1744-1750.	2.6	145
75	Influence of Carbon Nanotubes on Pyrene Bioaccumulation from Contaminated Soils by Earthworms. <i>Environmental Science & Technology</i> , 2009, 43, 4181-4187.	4.6	143
76	Mobility of Multiwalled Carbon Nanotubes in Porous Media. <i>Environmental Science & Technology</i> , 2009, 43, 8153-8158.	4.6	132
77	Biological Uptake and Depuration of Carbon Nanotubes by <i>Daphnia magna</i> . <i>Environmental Science & Technology</i> , 2009, 43, 2969-2975.	4.6	244
78	Polyethyleneimine-Mediated Functionalization of Multiwalled Carbon Nanotubes: Synthesis, Characterization, and In Vitro Toxicity Assay. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3150-3156.	1.5	122
79	Tunable Synthesis and Immobilization of Zero-Valent Iron Nanoparticles for Environmental Applications. <i>Environmental Science & Technology</i> , 2008, 42, 8884-8889.	4.6	82
80	Development of Engineered Natural Organic Sorbents for Environmental Applications. 4. Effects on Biodegradation and Distribution of Pyrene in Soils. <i>Environmental Science & Technology</i> , 2008, 42, 1283-1289.	4.6	21
81	Bioaccumulation of Radio-Labeled Carbon Nanotubes by <i>Eisenia foetida</i> . <i>Environmental Science & Technology</i> , 2008, 42, 3090-3095.	4.6	162
82	Ecological Uptake and Depuration of Carbon Nanotubes by <i>Lumbricus variegatus</i> . <i>Environmental Health Perspectives</i> , 2008, 116, 496-500.	2.8	151
83	Development of Engineered Natural Organic Sorbents for Environmental Applications:Â 3. Reducing PAH Mobility and Bioavailability in Contaminated Soil and Sediment Systems. <i>Environmental Science & Technology</i> , 2007, 41, 2901-2907.	4.6	26
84	Variability of North American regulatory guidance for heavy metal contamination of residential soil. <i>Journal of Environmental Engineering and Science</i> , 2006, 5, 485-508.	0.3	25
85	Heavy Metal Contamination in the Brownfield Soils of Cleveland. <i>Soil and Sediment Contamination</i> , 2002, 11, 719-750.	1.1	50