Leanne Marie Gilbertson

List of Publications by Year
in descending order

41 papers	2,293 citations	377584 21 h-index	312153 41 g-index
42 all docs	42 docs citations	42 times ranked	3484 citing authors

#	Article	IF	Citations
1	Inspiring a nanocircular economy. Environmental Science: Nano, 2022, 9, 839-840.	2.2	3
2	Similar toxicity mechanisms between graphene oxide and oxidized multi-walled carbon nanotubes in Microcystis aeruginosa. Chemosphere, 2021, 265, 129137.	4.2	29
3	Towards resolution of antibacterial mechanisms in metal and metal oxide nanomaterials: a meta-analysis of the influence of study design on mechanistic conclusions. Environmental Science: Nano, 2021, 8, 37-66.	2.2	16
4	Using C-Doping to Identify Photocatalytic Properties of Graphitic Carbon Nitride That Govern Antibacterial Efficacy. ACS ES&T Water, 2021, 1, 269-280.	2.3	23
5	Emerging investigator series: a multispecies analysis of the relationship between oxygen content and toxicity in graphene oxide. Environmental Science: Nano, 2021, 8, 1543-1559.	2.2	1
6	Role of bacterial motility in differential resistance mechanisms of silver nanoparticles and silver ions. Nature Nanotechnology, 2021, 16, 996-1003.	15.6	112
7	A Classification Model to Identify Direct-Acting Mutagenic Polycyclic Aromatic Hydrocarbon Transformation Products. Chemical Research in Toxicology, 2021, 34, 2273-2286.	1.7	3
8	Graphite nanoparticle addition to fertilizers reduces nitrate leaching in growth of lettuce (Lactuca) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.2	18
9	Network Analysis for Prioritizing Biodegradation Metabolites of Polycyclic Aromatic Hydrocarbons. Environmental Science & Technology, 2020, 54, 10735-10744.	4.6	12
10	Sustainability coursework: student perspectives and reflections on design thinking. International Journal of Sustainability in Higher Education, 2020, 21, 593-611.	1.6	21
11	Technology readiness and overcoming barriers to sustainably implement nanotechnology-enabled plant agriculture. Nature Food, 2020, 1, 416-425.	6.2	239
12	Unveiling the Synergistic Role of Oxygen Functional Groups in the Graphene-Mediated Oxidation of Glutathione. ACS Applied Materials & Interfaces, 2020, 12, 45753-45762.	4.0	12
13	Guiding the design space for nanotechnology to advance sustainable crop production. Nature Nanotechnology, 2020, 15, 801-810.	15.6	119
14	Emerging investigator series: connecting concepts of coinage metal stability across length scales. Environmental Science: Nano, 2019, 6, 2674-2696.	2.2	5
15	Structureâ€“Propertyâ€“Toxicity Relationships of Graphene Oxide: Role of Surface Chemistry on the Mechanisms of Interaction with Bacteria. Environmental Science & Technology, 2019, 53, 14679-14687.	4.6	37
16	Leveraging electrochemistry to uncover the role of nitrogen in the biological reactivity of nitrogen-doped graphene. Environmental Science: Nano, 2019, 6, 3525-3538.	2.2	12
17	Opportunities and challenges for nanotechnology in the agri-tech revolution. Nature Nanotechnology, 2019, 14, 517-522.	15.6	572
18	Copper release and transformation following natural weathering of nano-enabled pressure-treated lumber. Science of the Total Environment, 2019, 668, 234-244.	3.9	12

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19	Atom Conversion Efficiency: A New Sustainability Metric Applied to Nitrogen and Phosphorus Use in Agriculture. ACS Sustainable Chemistry and Engineering, 2018, 6, 4453-4463.	3.2	34
20	Life cycle considerations of nano-enabled agrochemicals: are today's tools up to the task?. Environmental Science: Nano, 2018, 5, 1057-1069.	2.2	26
21	Impacts of broth chemistry on silver ion release, surface chemistry composition, and bacterial cytotoxicity of silver nanoparticles. Environmental Science: Nano, 2018, 5, 304-312.	2.2	21
22	A framework for sustainable nanomaterial selection and design based on performance, hazard, and economic considerations. Nature Nanotechnology, 2018, 13, 708-714.	15.6	89
23	Opportunities to advance sustainable design of nano-enabled agriculture identified through a literature review. Environmental Science: Nano, 2018, 5, 11-26.	2.2	57
24	Life Cycle Impact and Benefit Trade-Offs of a Produced Water and Abandoned Mine Drainage Cotreatment Process. Environmental Science & Technology, 2018, 52, 13995-14005.	4.6	7
25	Rational Ligand Design To Improve Agrochemical Delivery Efficiency and Advance Agriculture Sustainability. ACS Sustainable Chemistry and Engineering, 2018, 6, 13599-13610.	3.2	37
26	Emerging investigator series: it's not all about the ion: support for particle-specific contributions to silver nanoparticle antimicrobial activity. Environmental Science: Nano, 2018, 5, 2047-2068.	2.2	61
27	Research highlights: applications of life-cycle assessment as a tool for characterizing environmental impacts of engineered nanomaterials. Environmental Science: Nano, 2017, 4, 276-281.	2.2	17
28	Informing rational design of graphene oxide through surface chemistry manipulations: properties governing electrochemical and biological activities. Green Chemistry, 2017, 19, 2826-2838.	4.6	19
29	Methodology for quantifying engineered nanomaterial release from diverse product matrices under outdoor weathering conditions and implications for life cycle assessment. Environmental Science: Nano, 2017, 4, 1784-1797.	2.2	22
30	Evaluating the Use of Alternatives Assessment To Compare Bulk Organic Chemical and Nanomaterial Alternatives to Brominated Flame Retardants. ACS Sustainable Chemistry and Engineering, 2016, 4, 6019-6030.	3.2	6
31	Shape-Dependent Surface Reactivity and Antimicrobial Activity of Nano-Cupric Oxide. Environmental Science & Technology, 2016, 50, 3975-3984.	4.6	96
32	Life Cycle Payback Estimates of Nanosilver Enabled Textiles under Different Silver Loading, Release, And Laundering Scenarios Informed by Literature Review. Environmental Science & Technology, 2015, 49, 7529-7542.	4.6	44
33	Coordinating modeling and experimental research of engineered nanomaterials to improve life cycle assessment studies. Environmental Science: Nano, 2015, 2, 669-682.	2.2	39
34	Highly Conductive Single-Walled Carbon Nanotube Thin Film Preparation by Direct Alignment on Substrates from Water Dispersions. Langmuir, 2015, 31, 1155-1163.	1.6	18
35	Toward safer multi-walled carbon nanotube design: Establishing a statistical model that relates surface charge and embryonic zebrafish mortality. Nanotoxicology, 2015, 10, 1-10.	1.6	25
36	Enhanced dispersion and electronic performance of single-walled carbon nanotube thin films without surfactant: A comprehensive study of various treatment processes. Carbon, 2015, 93, 1008-1020.	5.4	11

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37	Designing nanomaterials to maximize performance and minimize undesirable implications guided by the Principles of Green Chemistry. Chemical Society Reviews, 2015, 44, 5758-5777.	18.7	183
38	Life Cycle Impacts and Benefits of a Carbon Nanotube-Enabled Chemical Gas Sensor. Environmental Science & Technology, 2014, 48, 11360-11368.	4.6	48
39	Toward Tailored Functional Design of Multi-Walled Carbon Nanotubes (MWNTs): Electrochemical and Antimicrobial Activity Enhancement via Oxidation and Selective Reduction. Environmental Science & Technology, 2014, 48, 5938-5945.	4.6	44
40	Realizing Comparable Oxidative and Cytotoxic Potential of Single- and Multiwalled Carbon Nanotubes through Annealing. Environmental Science & Technology, 2013, 47, 130726133045005.	4.6	24
41	Impact of Surface Functionalization on Bacterial Cytotoxicity of Single-Walled Carbon Nanotubes. Environmental Science & Technology, 2012, 46, 6297-6305.	4.6	119