Zhaoxia Ji

List of Publications by Year
in descending order

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85 papers	14,424 citations	23500 58 h-index	54797 84 g-index
86 all docs	86 docs citations	86 times ranked	18818 citing authors

#	Article	IF	Citations
1	Stability and Aggregation of Metal Oxide Nanoparticles in Natural Aqueous Matrices. Environmental Science & Technology, 2010, 44, 1962-1967.	4.6	1,162
2	Engineered Design of Mesoporous Silica Nanoparticles to Deliver Doxorubicin and P-Glycoprotein siRNA to Overcome Drug Resistance in a Cancer Cell Line. ACS Nano, 2010, 4, 4539-4550.	7.3	817
3	Use of Metal Oxide Nanoparticle Band Gap To Develop a Predictive Paradigm for Oxidative Stress and Acute Pulmonary Inflammation. ACS Nano, 2012, 6, 4349-4368.	7.3	718
4	Codelivery of an Optimal Drug/siRNA Combination Using Mesoporous Silica Nanoparticles To Overcome Drug Resistance in Breast Cancer in Vitro and in Vivo. ACS Nano, 2013, 7, 994-1005.	7.3	525
5	Nanomaterial Toxicity Testing in the 21st Century: Use of a Predictive Toxicological Approach and High-Throughput Screening. Accounts of Chemical Research, 2013, 46, 607-621.	7.6	501
6	Use of a Rapid Cytotoxicity Screening Approach To Engineer a Safer Zinc Oxide Nanoparticle through Iron Doping. ACS Nano, 2010, 4, 15-29.	7.3	464
7	Toxicity Mechanisms in Escherichia coli Vary for Silver Nanoparticles and Differ from Ionic Silver. ACS Nano, 2014, 8, 374-386.	7.3	458
8	Use of Size and a Copolymer Design Feature To Improve the Biodistribution and the Enhanced Permeability and Retention Effect of Doxorubicin-Loaded Mesoporous Silica Nanoparticles in a Murine Xenograft Tumor Model. ACS Nano, 2011, 5, 4131-4144.	7.3	446
9	Processing Pathway Dependence of Amorphous Silica Nanoparticle Toxicity: Colloidal vs Pyrolytic. Journal of the American Chemical Society, 2012, 134, 15790-15804.	6.6	372
10	Use of a Lipid-Coated Mesoporous Silica Nanoparticle Platform for Synergistic Gemcitabine and Paclitaxel Delivery to Human Pancreatic Cancer in Mice. ACS Nano, 2015, 9, 3540-3557.	7.3	367
11	Role of Fe Doping in Tuning the Band Gap of TiO₂ for the Photo-Oxidation-Induced Cytotoxicity Paradigm. Journal of the American Chemical Society, 2011, 133, 11270-11278.	6.6	346
12	Decreased Dissolution of ZnO by Iron Doping Yields Nanoparticles with Reduced Toxicity in the Rodent Lung and Zebrafish Embryos. ACS Nano, 2011, 5, 1223-1235.	7.3	341
13	Aspect Ratio Determines the Quantity of Mesoporous Silica Nanoparticle Uptake by a Small GTPase-Dependent Macropinocytosis Mechanism. ACS Nano, 2011, 5, 4434-4447.	7.3	330
14	Designed Synthesis of CeO₂ Nanorods and Nanowires for Studying Toxicological Effects of High Aspect Ratio Nanomaterials. ACS Nano, 2012, 6, 5366-5380.	7.3	323
15	Surface Defects on Plate-Shaped Silver Nanoparticles Contribute to Its Hazard Potential in a Fish Gill Cell Line and Zebrafish Embryos. ACS Nano, 2012, 6, 3745-3759.	7.3	318
16	Use of a High-Throughput Screening Approach Coupled with In Vivo Zebrafish Embryo Screening To Develop Hazard Ranking for Engineered Nanomaterials. ACS Nano, 2011, 5, 1805-1817.	7.3	306
17	Dispersion and Stability Optimization of TiO₂ Nanoparticles in Cell Culture Media. Environmental Science & Technology, 2010, 44, 7309-7314.	4.6	288
18	Comparative environmental fate and toxicity of copper nanomaterials. NanoImpact, 2017, 7, 28-40.	2.4	277

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19	Surface Charge and Cellular Processing of Covalently Functionalized Multiwall Carbon Nanotubes Determine Pulmonary Toxicity. ACS Nano, 2013, 7, 2352-2368.	7.3	265
20	Use of Coated Silver Nanoparticles to Understand the Relationship of Particle Dissolution and Bioavailability to Cell and Lung Toxicological Potential. Small, 2014, 10, 385-398.	5.2	242
21	Surface Oxidation of Graphene Oxide Determines Membrane Damage, Lipid Peroxidation, and Cytotoxicity in Macrophages in a Pulmonary Toxicity Model. ACS Nano, 2018, 12, 1390-1402.	7.3	221
22	Surface Interactions with Compartmentalized Cellular Phosphates Explain Rare Earth Oxide Nanoparticle Hazard and Provide Opportunities for Safer Design. ACS Nano, 2014, 8, 1771-1783.	7.3	212
23	Cerium Dioxide Nanoparticles Induce Apoptosis and Autophagy in Human Peripheral Blood Monocytes. ACS Nano, 2012, 6, 5820-5829.	7.3	203
24	Engineering an Effective Immune Adjuvant by Designed Control of Shape and Crystallinity of Aluminum Oxyhydroxide Nanoparticles. ACS Nano, 2013, 7, 10834-10849.	7.3	192
25	Dispersal State of Multiwalled Carbon Nanotubes Elicits Profibrogenic Cellular Responses That Correlate with Fibrogenesis Biomarkers and Fibrosis in the Murine Lung. ACS Nano, 2011, 5, 9772-9787.	7.3	178
26	High Content Screening in Zebrafish Speeds up Hazard Ranking of Transition Metal Oxide Nanoparticles. ACS Nano, 2011, 5, 7284-7295.	7.3	176
27	Identification and Optimization of Carbon Radicals on Hydrated Graphene Oxide for Ubiquitous Antibacterial Coatings. ACS Nano, 2016, 10, 10966-10980.	7.3	172
28	NLRP3 Inflammasome Activation Induced by Engineered Nanomaterials. Small, 2013, 9, 1595-1607.	5.2	166
29	Organ-Specific and Size-Dependent Ag Nanoparticle Toxicity in Gills and Intestines of Adult Zebrafish. ACS Nano, 2015, 9, 9573-9584.	7.3	164
30	Two-Wave Nanotherapy To Target the Stroma and Optimize Gemcitabine Delivery To a Human Pancreatic Cancer Model in Mice. ACS Nano, 2013, 7, 10048-10065.	7.3	163
31	Pluronic F108 Coating Decreases the Lung Fibrosis Potential of Multiwall Carbon Nanotubes by Reducing Lysosomal Injury. Nano Letters, 2012, 12, 3050-3061.	4.5	159
32	Classification NanoSAR Development for Cytotoxicity of Metal Oxide Nanoparticles. Small, 2011, 7, 1118-1126.	5.2	156
33	Quantitative Techniques for Assessing and Controlling the Dispersion and Biological Effects of Multiwalled Carbon Nanotubes in Mammalian Tissue Culture Cells. ACS Nano, 2010, 4, 7241-7252.	7.3	151
34	NADPH Oxidase-Dependent NLRP3 Inflammasome Activation and its Important Role in Lung Fibrosis by Multiwalled Carbon Nanotubes. Small, 2015, 11, 2087-2097.	5.2	149
35	Nanomaterials in the Environment: From Materials to High-Throughput Screening to Organisms. ACS Nano, 2011, 5, 13-20.	7.3	145
36	Interference in Autophagosome Fusion by Rare Earth Nanoparticles Disrupts Autophagic Flux and Regulation of an Interleukin-1Î² Producing Inflammasome. ACS Nano, 2014, 8, 10280-10292.	7.3	142

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37	PdO Doping Tunes Band-Gap Energy Levels as Well as Oxidative Stress Responses to a Co₃O₄ p-Type Semiconductor in Cells and the Lung. Journal of the American Chemical Society, 2014, 136, 6406-6420.	6.6	136
38	Enhancing the Imaging and Biosafety of Upconversion Nanoparticles through Phosphonate Coating. ACS Nano, 2015, 9, 3293-3306.	7.3	130
39	Toxicity of Metal Oxide Nanoparticles in Escherichia coli Correlates with Conduction Band and Hydration Energies. Environmental Science & Technology, 2015, 49, 1105-1112.	4.6	127
40	Cu Nanoparticles Have Different Impacts in Escherichia coli and Lactobacillus brevis than Their Microsized and Ionic Analogues. ACS Nano, 2015, 9, 7215-7225.	7.3	120
41	Zebrafish Highâ€Throughput Screening to Study the Impact of Dissolvable Metal Oxide Nanoparticles on the Hatching Enzyme, ZHE1. Small, 2013, 9, 1776-1785.	5.2	112
42	Reduction of Acute Inflammatory Effects of Fumed Silica Nanoparticles in the Lung by Adjusting Silanol Display through Calcination and Metal Doping. ACS Nano, 2015, 9, 9357-9372.	7.3	108
43	Use of a Pro-Fibrogenic Mechanism-Based Predictive Toxicological Approach for Tiered Testing and Decision Analysis of Carbonaceous Nanomaterials. ACS Nano, 2015, 9, 3032-3043.	7.3	107
44	Safe-by-Design CuO NanoparticlesviaFe-Doping, Cuâ€“O Bond Length Variation, and Biological Assessment in Cells and Zebrafish Embryos. ACS Nano, 2017, 11, 501-515.	7.3	107
45	Differences in the Toxicological Potential of 2D versus Aggregated Molybdenum Disulfide in the Lung. Small, 2015, 11, 5079-5087.	5.2	105
46	Aspect Ratio Plays a Role in the Hazard Potential of CeO₂ Nanoparticles in Mouse Lung and Zebrafish Gastrointestinal Tract. ACS Nano, 2014, 8, 4450-4464.	7.3	98
47	Long-Term Effects of Multiwalled Carbon Nanotubes and Graphene on Microbial Communities in Dry Soil. Environmental Science & Technology, 2016, 50, 3965-3974.	4.6	91
48	Size of TiO2 nanoparticles influences their phototoxicity: an in vitro investigation. Archives of Toxicology, 2013, 87, 99-109.	1.9	87
49	Differential Expression of Syndecan-1 Mediates Cationic Nanoparticle Toxicity in Undifferentiated versus Differentiated Normal Human Bronchial Epithelial Cells. ACS Nano, 2011, 5, 2756-2769.	7.3	86
50	Engineered Graphene Oxide Nanocomposite Capable of Preventing the Evolution of Antimicrobial Resistance. ACS Nano, 2019, 13, 11488-11499.	7.3	84
51	Influence of Material Properties on TiO2 Nanoparticle Agglomeration. PLoS ONE, 2013, 8, e81239.	1.1	82
52	Agglomeration Determines Effects of Carbonaceous Nanomaterials on Soybean Nodulation, Dinitrogen Fixation Potential, and Growth in Soil. ACS Nano, 2017, 11, 5753-5765.	7.3	80
53	Redox-Triggered Gatekeeper-Enveloped Starlike Hollow Silica Nanoparticles for Intelligent Delivery Systems. Small, 2015, 11, 6467-6479.	5.2	70
54	The role of silver nanoparticles on silver modified titanosilicate ETS-10 in visible light photocatalysis. Applied Catalysis B: Environmental, 2011, 102, 323-333.	10.8	66

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55	Evaluation of Toxicity Ranking for Metal Oxide Nanoparticles via an in Vitro Dosimetry Model. ACS Nano, 2015, 9, 9303-9313.	7.3	65
56	Stability, metal leaching, photoactivity and toxicity in freshwater systems of commercial single wall carbon nanotubes. Water Research, 2013, 47, 4074-4085.	5.3	63
57	Reduction of pulmonary toxicity of metal oxide nanoparticles by phosphonate-based surface passivation. Particle and Fibre Toxicology, 2017, 14, 13.	2.8	61
58	Multi-hierarchical profiling the structure-activity relationships of engineered nanomaterials at nano-bio interfaces. Nature Communications, 2018, 9, 4416.	5.8	61
59	Hierarchical Nanohybrids of Gold Nanorods and PGMAâ€Based Polycations for Multifunctional Theranostics. Advanced Functional Materials, 2016, 26, 5848-5861.	7.8	58
60	Repetitive Dosing of Fumed Silica Leads to Profibrogenic Effects through Unique Structureâ€“Activity Relationships and Biopersistence in the Lung. ACS Nano, 2016, 10, 8054-8066.	7.3	58
61	Genome-Wide Bacterial Toxicity Screening Uncovers the Mechanisms of Toxicity of a Cationic Polystyrene Nanomaterial. Environmental Science & Technology, 2012, 46, 2398-2405.	4.6	54
62	Understanding the Transformation, Speciation, and Hazard Potential of Copper Particles in a Model Septic Tank System Using Zebrafish to Monitor the Effluent. ACS Nano, 2015, 9, 2038-2048.	7.3	54
63	Toxicological Profiling of Highly Purified Metallic and Semiconducting Single-Walled Carbon Nanotubes in the Rodent Lung and E. coli. ACS Nano, 2016, 10, 6008-6019.	7.3	49
64	Enhanced Immune Adjuvant Activity of Aluminum Oxyhydroxide Nanorods through Cationic Surface Functionalization. ACS Applied Materials & Interfaces, 2017, 9, 21697-21705.	4.0	46
65	Lanthanide Hydroxide Nanoparticles Induce Angiogenesis via ROSâ€Sensitive Signaling. Small, 2016, 12, 4404-4411.	5.2	43
66	Mammalian Cells Exhibit a Range of Sensitivities to Silver Nanoparticles that are Partially Explicable by Variations in Antioxidant Defense and Metallothionein Expression. Small, 2015, 11, 3797-3805.	5.2	42
67	Multiwalled Carbon Nanotube Functionalization with High Molecular Weight Hyaluronan Significantly Reduces Pulmonary Injury. ACS Nano, 2016, 10, 7675-7688.	7.3	41
68	Hydrothermal synthesis of titanosilicate ETS-10 using Ti(SO4)2. Microporous and Mesoporous Materials, 2005, 81, 1-10.	2.2	38
69	Implementation of a Multidisciplinary Approach to Solve Complex Nano EHS Problems by the UC Center for the Environmental Implications of Nanotechnology. Small, 2013, 9, 1428-1443.	5.2	32
70	Nrf2 protects the lung against inflammation induced by titanium dioxide nanoparticles: A positive regulator role of Nrf2 on cytokine release. Environmental Toxicology, 2015, 30, 782-792.	2.1	28
71	Differential pulmonary effects of CoO and La2O3 metal oxide nanoparticle responses during aerosolized inhalation in mice. Particle and Fibre Toxicology, 2015, 13, 42.	2.8	26
72	Nanoparticle dispersion in environmentally relevant culture media: a TiO2 case study and considerations for a general approach. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	24

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73	First unseeded hydrothermal synthesis of microporous vanadosilicate AM-6. Microporous and Mesoporous Materials, 2009, 120, 454-459.	2.2	21
74	Pro-Inflammatory and Pro-Fibrogenic Effects of Ionic and Particulate Arsenide and Indium-Containing Semiconductor Materials in the Murine Lung. ACS Nano, 2017, 11, 1869-1883.	7.3	19
75	Synthesis and morphological control of large titanosilicate ETS-10 crystals. Microporous and Mesoporous Materials, 2008, 109, 1-11.	2.2	17
76	Competitive nucleation and growth in seeded batch crystallization of titanosilicate ETS-10 using Ti(SO4)2. Microporous and Mesoporous Materials, 2005, 81, 201-210.	2.2	15
77	Implications of the Differential Toxicological Effects of IIIâ€“V Ionic and Particulate Materials for Hazard Assessment of Semiconductor Slurries. ACS Nano, 2015, 9, 12011-12025.	7.3	15
78	Semiconductor Electronic Label-Free Assay for Predictive Toxicology. Scientific Reports, 2016, 6, 24982.	1.6	15
79	Assembly of titanosilicate ETS-10 crystals on organosilane-functionalized gallium nitride surfaces. Microporous and Mesoporous Materials, 2009, 118, 245-250.	2.2	14
80	A Bayesian regression tree approach to identify the effect of nanoparticlesâ€™ properties on toxicity profiles. Annals of Applied Statistics, 2015, 9, .	0.5	14
81	Transition metal ion substitution in titanosilicate ETS-10 for enhanced UV light photodegradation of methylene blue. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 221, 77-83.	2.0	12
82	Use of compositional and combinatorial nanomaterial libraries for biological studies. Science Bulletin, 2016, 61, 755-771.	4.3	12
83	Differential effect of micron- versus nanoscale IIIâ€“V particulates and ionic species on the zebrafish gut. Environmental Science: Nano, 2017, 4, 1350-1364.	2.2	11
84	Titanosilicate ETS-10 thin film preparation on fused silica optical fibers. Microporous and Mesoporous Materials, 2007, 101, 279-287.	2.2	5
85	Aluminum-Based Nano-adjuvants. , 2014, , 1-6.		0