Bingbing Sun

List of Publications by Year in Descending Order

64 papers	4,128 citations	33 h-index	64 g-index
69 ext. papers	4,834 ext. citations	10.6 avg, IF	5.27 L-index

#	Paper	IF	Citations
64	Investigation of mouse hepatitis virus strain A59 inactivation under both ambient and cold environments reveals the mechanisms of infectivity reduction following UVC exposure.. *Journal of Environmental Chemical Engineering*, **2022**, 10, 107206	6.8	0
63	Mechanistic understanding of the aspect ratio-dependent adjuvanticity of engineered aluminum oxyhydroxide nanorods in prophylactic vaccines.. *Nano Today*, **2022**, 43, 101445	17.9	6
62	Design of a Quencher-Free Fluorescent Aptasensor for Ochratoxin A Detection in Red Wine Based on the Guanine-Quenching Ability. *Biosensors*, **2022**, 12, 297	5.9	0
61	Mechanistic Elucidation of Freezing-Induced Surface Decomposition of Aluminum Oxyhydroxide Adjuvant. *IScience*, **2022**, 104456	6.1	0
60	Engineering the hydroxyl content on aluminum oxyhydroxide nanorod for elucidating the antigen adsorption behavior. *Npj Vaccines*, **2022**, 7,	9.5	1
59	Using MoS2/Fe3O4 as Ion-Electron Transduction Layer to Manufacture All-Solid-State Ion-Selective Electrode for Determination of Serum Potassium. *Chemosensors*, **2021**, 9, 155	4	1
58	Electronic cigarette aerosols induce oxidative stress-dependent cell death and NF-Ƀ mediated acute lung inflammation in mice. *Archives of Toxicology*, **2021**, 95, 195-205	5.8	7
57	Engineering aluminum hydroxyphosphate nanoparticles with well-controlled surface property to enhance humoral immune responses as vaccine adjuvants. *Biomaterials*, **2021**, 275, 120960	15.6	9
56	Engineered Hydroxyapatite Nanoadjuvants with Controlled Shape and Aspect Ratios Reveal Their Immunomodulatory Potentials.. *ACS Applied Materials & Interfaces*, **2021**, 13, 59662-59672	9.5	1
55	Response to comment on: Vaccine adjuvants: Understanding the structure and mechanism of adjuvanticity. *Vaccine*, **2020**, 38, 2759	4.1	1
54	Adjuvants for Coronavirus Vaccines. *Frontiers in Immunology*, **2020**, 11, 589833	8.4	56
53	Electron Compensation Effect Suppressed Silver Ion Release and Contributed Safety of Au@Ag Core-Shell Nanoparticles. *Nano Letters*, **2019**, 19, 4478-4489	11.5	33
52	Vaccine adjuvants: Understanding the structure and mechanism of adjuvanticity. *Vaccine*, **2019**, 37, 3167-3178	4.1	124
51	The neurotoxicity induced by engineered nanomaterials. *International Journal of Nanomedicine*, **2019**, 14, 4167-4186	7.3	24
50	Assessment of neurotoxicity induced by different-sized StƁer silica nanoparticles: induction of pyroptosis in microglia. *Nanoscale*, **2019**, 11, 12965-12972	7.7	19
49	Surface Modification of StƁer Silica Nanoparticles with Controlled Moiety Densities Determines Their Cytotoxicity Profiles in Macrophages. *Langmuir*, **2019**, 35, 14688-14695	4	13
48	Predictive Metabolomic Signatures for Safety Assessment of Metal Oxide Nanoparticles. *ACS Nano*, **2019**, 13, 13065-13082	16.7	28

47	New Strategy for Functionalization of Silica Materials via Catalytic Oxa-Michael Reaction of Surface Silanol Groups with Vinyl Sulfones. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9112-9120	8.3	6
46	E-cigarette aerosols induce unfolded protein response in normal human oral keratinocytes. *Journal of Cancer*, **2019**, 10, 6915-6924	4.5	6
45	Mechanistic Understanding of the Engineered Nanomaterial-Induced Toxicity on Kidney. *Journal of Nanomaterials*, **2019**, 2019, 1-12	3.2	5
44	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	16.7	154
43	Toxicological Profiling of Metal Oxide Nanoparticles in Liver Context Reveals Pyroptosis in Kupffer Cells and Macrophages versus Apoptosis in Hepatocytes. *ACS Nano*, **2018**, 12, 3836-3852	16.7	91
42	Safety Concerns of Industrial Engineered Nanomaterials **2018**, 1063-1072		
41	Activation of resin with controllable ligand density via catalytic oxa-Michael addition and application in antibody purification. *Journal of Chromatography A*, **2018**, 1570, 1-9	4.5	10
40	Two-Dimensional Nanomaterials for Cancer Nanotheranostics. *Small*, **2017**, 13, 1603446	11	97
39	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	16.7	13
38	Facilitating Translational Nanomedicine via Predictive Safety Assessment. *Molecular Therapy*, **2017**, 25, 1522-1530	11.7	25
37	Enhanced Immune Adjuvant Activity of Aluminum Oxyhydroxide Nanorods through Cationic Surface Functionalization. *ACS Applied Materials & Interfaces*, **2017**, 9, 21697-21705	9.5	37
36	Nano-enabled pancreas cancer immunotherapy using immunogenic cell death and reversing immunosuppression. *Nature Communications*, **2017**, 8, 1811	17.4	259
35	Structure Activity Relationships of Engineered Nanomaterials in inducing NLRP3 Inflammasome Activation and Chronic Lung Fibrosis. *NanoImpact*, **2017**, 6, 99-108	5.6	33
34	Nanomaterial-Based Vaccine Adjuvants. *Journal of Materials Chemistry B*, **2016**, 4, 5496-5509	7.3	61
33	Nerve Growth Factor-Conjugated Mesoporous Silica Nanoparticles Promote Neuron-Like PC12 Cell Proliferation and Neurite Growth. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 2390-3	1.3	12
32	Characterization of Electronic Cigarette Aerosol and Its Induction of Oxidative Stress Response in Oral Keratinocytes. *PLoS ONE*, **2016**, 11, e0154447	3.7	38
31	Hepcidin: A Promising Therapeutic Target for Iron Disorders: A Systematic Review. *Medicine (United States)*, **2016**, 95, e3150	1.8	55
30	Toxicological Profiling of Highly Purified Metallic and Semiconducting Single-Walled Carbon Nanotubes in the Rodent Lung and E. coli. *ACS Nano*, **2016**, 10, 6008-19	16.7	40

29	Repetitive Dosing of Fumed Silica Leads to Profibrogenic Effects through Unique Structure-Activity Relationships and Biopersistence in the Lung. *ACS Nano*, **2016**, 10, 8054-66	16.7	40
28	NADPH Oxidase-Dependent NLRP3 Inflammasome Activation and its Important Role in Lung Fibrosis by Multiwalled Carbon Nanotubes. *Small*, **2015**, 11, 2087-97	11	123
27	Enhancing the imaging and biosafety of upconversion nanoparticles through phosphonate coating. *ACS Nano*, **2015**, 9, 3293-306	16.7	113
26	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, 9357-72	16.7	86
25	Correlation of the composition of biominerals with their ability of stimulating intracellular DNA sensors and inflammatory cytokines. *Biomaterials*, **2015**, 54, 106-15	15.6	5
24	A naturally derived dextran peptide vector for microRNA antagomir delivery. *RSC Advances*, **2015**, 5, 28019-28022	3.7	7
23	Implications of the Differential Toxicological Effects of III-V Ionic and Particulate Materials for Hazard Assessment of Semiconductor Slurries. *ACS Nano*, **2015**, 9, 12011-25	16.7	13
22	Differences in the Toxicological Potential of 2D versus Aggregated Molybdenum Disulfide in the Lung. *Small*, **2015**, 11, 5079-87	11	76
21	Controlling Surface-Induced Nanocomposites by Lipoplexes for Enhanced Gene Transfer. *Journal of Nanomaterials*, **2015**, 2015, 1-13	3.2	
20	Use of a pro-fibrogenic mechanism-based predictive toxicological approach for tiered testing and decision analysis of carbonaceous nanomaterials. *ACS Nano*, **2015**, 9, 3032-43	16.7	90
19	Use of coated silver nanoparticles to understand the relationship of particle dissolution and bioavailability to cell and lung toxicological potential. *Small*, **2014**, 10, 385-98	11	207
18	PdO doping tunes band-gap energy levels as well as oxidative stress responses to a Co□□ p-type semiconductor in cells and the lung. *Journal of the American Chemical Society*, **2014**, 136, 6406-20	16.4	114
17	Surface interactions with compartmentalized cellular phosphates explain rare earth oxide nanoparticle hazard and provide opportunities for safer design. *ACS Nano*, **2014**, 8, 1771-83	16.7	177
16	Zwitteration of dextran: a facile route to integrate antifouling, switchability and optical transparency into natural polymers. *Chemical Communications*, **2014**, 50, 3234-7	5.8	57
15	Interference in autophagosome fusion by rare earth nanoparticles disrupts autophagic flux and regulation of an interleukin-1 producing inflammasome. *ACS Nano*, **2014**, 8, 10280-92	16.7	123
14	Dextran-peptide hybrid for efficient gene delivery. *Langmuir*, **2014**, 30, 5202-8	4	32
13	Engineering an effective immune adjuvant by designed control of shape and crystallinity of aluminum oxyhydroxide nanoparticles. *ACS Nano*, **2013**, 7, 10834-49	16.7	153
12	Surface charge and cellular processing of covalently functionalized multiwall carbon nanotubes determine pulmonary toxicity. *ACS Nano*, **2013**, 7, 2352-68	16.7	232

11	NLRP3 inflammasome activation induced by engineered nanomaterials. *Small*, **2013**, 9, 1595-607	11	140
10	Graphene oxide induces toll-like receptor 4 (TLR4)-dependent necrosis in macrophages. *ACS Nano*, **2013**, 7, 5732-45	16.7	203
9	Predictive toxicological paradigm and high throughput approach for toxicity screening of engineered nanomaterials. *International Journal of Biomedical Nanoscience and Nanotechnology*, **2013**, 3, 4	0.2	8
8	Activation of inflammasomes by tumor cell death mediated by gold nanoshells. *Biomaterials*, **2012**, 33, 2197-205	15.6	29
7	Pluronic F108 coating decreases the lung fibrosis potential of multiwall carbon nanotubes by reducing lysosomal injury. *Nano Letters*, **2012**, 12, 3050-61	11.5	142
6	Processing pathway dependence of amorphous silica nanoparticle toxicity: colloidal vs pyrolytic. *Journal of the American Chemical Society*, **2012**, 134, 15790-804	16.4	315
5	Designed synthesis of CeO2 nanorods and nanowires for studying toxicological effects of high aspect ratio nanomaterials. *ACS Nano*, **2012**, 6, 5366-80	16.7	275
4	Effect of surface chemistry on gene transfer efficiency mediated by surface-induced DNA-doped nanocomposites. *Acta Biomaterialia*, **2012**, 8, 1109-16	10.8	9
3	Effects of particle size on toll-like receptor 9-mediated cytokine profiles. *Biomaterials*, **2011**, 32, 1731-7	15.6	36
2	A microfluidic manipulator for enrichment and alignment of moving cells and particles. *Journal of Biomechanical Engineering*, **2009**, 131, 074505	2.1	6
1	Enabling customization of non-viral gene delivery systems for individual cell types by surface-induced mineralization. *Biomaterials*, **2009**, 30, 6386-93	15.6	39