Haiyuan Zhang

List of Publications by Year in Descending Order

96 papers	7,334 citations	39 h-index	85 g-index
100 ext. papers	8,304 ext. citations	10.2 avg, IF	5.68 L-index

#	Paper	IF	Citations
96	Property-activity relationship between physicochemical properties of PM and their activation of NLRP3 inflammasome.. *NanoImpact*, **2022**, 25, 100380	5.6	0
95	Core-shell nanomaterials engineered to reverse cancer multidrug resistance by immunotherapy and promote photo-responsive chemotherapy. *Chemical Engineering Journal*, **2022**, 429, 132329	14.7	1
94	Dermal Toxicity Influence of Gold Nanomaterials after Embedment in Cosmetics. *Toxics*, **2022**, 10, 276	4.7	1
93	Tumor microcalcification-mediated relay drug delivery for photodynamic immunotherapy of breast cancer.. *Acta Biomaterialia*, **2021**, 140, 518-518	10.8	2
92	Density functional theory, molecular docking and muscle relaxant, sedative, and analgesic studies of indanone derivatives isolated from. *Journal of Biomolecular Structure and Dynamics*, **2021**, 39, 6488-6499	3.6	1
91	Immunomodulation of Tumor Microenvironment by Arginine-Loaded Iron Oxide Nanoparticles for Gaseous Immunotherapy. *ACS Applied Materials & Interfaces*, **2021**, 13, 19825-19835	9.5	6
90	Combination of MAPK inhibition with photothermal therapy synergistically augments the anti-tumor efficacy of immune checkpoint blockade. *Journal of Controlled Release*, **2021**, 332, 194-209	11.7	10
89	Copper Phosphide Nanoparticles Used for Combined Photothermal and Photodynamic Tumor Therapy. *ACS Biomaterials Science and Engineering*, **2021**, 7, 2745-2754	5.5	3
88	Biodegradable Copper-Based Nanoparticles Augmented Chemodynamic Therapy through Deep Penetration and Suppressing Antioxidant Activity in Tumors. *Advanced Healthcare Materials*, **2021**, 10, e2100412	10.1	8
87	Plasmon-pyroelectric nanostructures used to produce a temperature-mediated reactive oxygen species for hypoxic tumor therapy. *Nano Today*, **2021**, 38, 101110	17.9	5
86	Particulate matter aggravates Alzheimer's disease by activating the NLRP3 inflammasome to release ASC specks. *Environmental Science: Nano*, **2021**, 8, 2177-2190	7.1	2
85	Regulation of Electronic Properties of Metal Oxide Nanoparticles to Reveal Their Toxicity Mechanism and Safe-by-Design Approach. *Advanced Biology*, **2021**, 5, 2000220		2
84	Thylakoid Membranes with Unique Photosystems Used to Simultaneously Produce Self-Supplying Oxygen and Singlet Oxygen for Hypoxic Tumor Therapy. *Advanced Healthcare Materials*, **2021**, 10, e2001666	10.1	10
83	Phyto-fabrication, purification, characterisation, optimisation, and biological competence of nano-silver. *IET Nanobiotechnology*, **2021**, 15, 1-18	2	10
82	Therapeutic strategies of iron-based nanomaterials for cancer therapy. *Biomedical Materials (Bristol)*, **2021**, 16, 032003	3.5	2
81	Electronic Band-Engineered Nanomaterials for Biosafety and Biomedical Application. *Accounts of Materials Research*, **2021**, 2, 764-779	7.5	3
80	Biotransformation of soluble-insoluble lanthanum species and its induced NLRP3 inflammasome activation and chronic fibrosis. *Environmental Pollution*, **2021**, 284, 117438	9.3	1

79	Energy transfer facilitated near infrared fluorescence imaging and photodynamic therapy of tumors. *Biomaterials Science*, **2021**, 9, 4662-4670	7.4	3
78	Neutrophil mediated postoperative photoimmunotherapy against melanoma skin cancer. *Nanoscale*, **2021**, 13, 14825-14836	7.7	0
77	Understanding Nanomaterial Biotransformation: An Unmet Challenge to Achieving Predictive Nanotoxicology. *Small*, **2020**, 16, e1907650	11	12
76	Safety-by-Design of Metal Oxide Nanoparticles Based on the Regulation of their Energy Edges. *Small*, **2020**, 16, e1907643	11	9
75	Redox Activity and Nano-Bio Interactions Determine the Skin Injury Potential of CoO-Based Metal Oxide Nanoparticles toward Zebrafish. *ACS Nano*, **2020**, 14, 4166-4177	16.7	6
74	Spatiotemporally Synchronous Oxygen Self-Supply and Reactive Oxygen Species Production on Z-Scheme Heterostructures for Hypoxic Tumor Therapy. *Advanced Materials*, **2020**, 32, e1908109	24	59
73	Sn complexation with sulfonated-carbon dots in pursuit of enhanced fluorescence and singlet oxygen quantum yield. *Dalton Transactions*, **2020**, 49, 6950-6956	4.3	7
72	LncRNA DLX6-AS1 increases the expression of HIF-1□and promotes the malignant phenotypes of nasopharyngeal carcinoma cells via targeting MiR-199a-5p. *Molecular Genetics & Genomic Medicine*, **2020**, 8, e1017	2.3	13
71	A biomimetic nanoenzyme for starvation therapy enhanced photothermal and chemodynamic tumor therapy. *Nanoscale*, **2020**, 12, 23159-23165	7.7	20
70	Nitric Oxide Stimulated Programmable Drug Release of Nanosystem for Multidrug Resistance Cancer Therapy. *Nano Letters*, **2019**, 19, 6800-6811	11.5	51
69	Hierarchical Acceleration of Wound Healing through Intelligent Nanosystem to Promote Multiple Stages. *ACS Applied Materials & Interfaces*, **2019**, 11, 33725-33733	9.5	20
68	Differential photothermal and photodynamic performance behaviors of gold nanorods, nanoshells and nanocages under identical energy conditions. *Biomaterials Science*, **2019**, 7, 1448-1462	7.4	17
67	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
66	Sunlight-Mediated Antibacterial Activity Enhancement of Gold Nanoclusters and Graphene Co-decorated Titanium Dioxide Nanocomposites. *Journal of Cluster Science*, **2019**, 30, 985-994	3	10
65	Intelligent Hollow Pt-CuS Janus Architecture for Synergistic Catalysis-Enhanced Sonodynamic and Photothermal Cancer Therapy. *Nano Letters*, **2019**, 19, 4134-4145	11.5	201
64	Long non-coding RNA 520 is a negative prognostic biomarker and exhibits pro-oncogenic function in nasopharyngeal carcinoma carcinogenesis through regulation of miR-26b-3p/USP39 axis. *Gene*, **2019**, 707, 44-52	3.8	15
63	Immunotherapy: MAPK-Targeted Drug Delivered by a pH-Sensitive MSNP Nanocarrier Synergizes with PD-1 Blockade in Melanoma without T-Cell Suppression (Adv. Funct. Mater. 12/2019). *Advanced Functional Materials*, **2019**, 29, 1970079	15.6	
62	Upshift of the d Band Center toward the Fermi Level for Promoting Silver Ion Release, Bacteria Inactivation, and Wound Healing of Alloy Silver Nanoparticles. *ACS Applied Materials & Interfaces*, **2019**, 11, 12224-12231	9.5	32

61	Anisotropic Plasmonic Metal Heterostructures as Theranostic Nanosystems for Near Infrared Light-Activated Fluorescence Amplification and Phototherapy. *Advanced Science*, **2019**, 6, 1900158	13.6	29
60	Novel Meta-iodobenzylguanidine-Based Copper Thiosemicarbazide-1-guanidinomethylbenzyl Anticancer Compounds Targeting Norepinephrine Transporter in Neuroblastoma. *Journal of Medicinal Chemistry*, **2019**, 62, 6985-6991	8.3	10
59	Hollow, Rough, and Nitric Oxide-Releasing Cerium Oxide Nanoparticles for Promoting Multiple Stages of Wound Healing. *Advanced Healthcare Materials*, **2019**, 8, e1900256	10.1	37
58	Time-staggered delivery of erlotinib and doxorubicin by gold nanocages with two smart polymers for reprogrammable release and synergistic with photothermal therapy. *Biomaterials*, **2019**, 217, 119327	15.6	33
57	Polydopamine and ammonium bicarbonate coated and doxorubicin loaded hollow cerium oxide nanoparticles for synergistic tumor therapy. *Nano Research*, **2019**, 12, 2947-2953	10	27
56	MAPK-Targeted Drug Delivered by a pH-Sensitive MSNP Nanocarrier Synergizes with PD-1 Blockade in Melanoma without T-Cell Suppression. *Advanced Functional Materials*, **2019**, 29, 1806916	15.6	23
55	Bismuth Sulfide Nanorods with Retractable Zinc Protoporphyrin Molecules for Suppressing Innate Antioxidant Defense System and Strengthening Phototherapeutic Effects. *Advanced Materials*, **2019**, 31, e1806808	24	57
54	Band Alignment-Driven Oxidative Injury to the Skin by Anatase/Rutile Mixed-Phase Titanium Dioxide Nanoparticles Under Sunlight Exposure. *Toxicological Sciences*, **2018**, 164, 300-312	4.4	5
53	Resonance Energy Transfer-Promoted Photothermal and Photodynamic Performance of Gold-Copper Sulfide Yolk-Shell Nanoparticles for Chemophototherapy of Cancer. *Nano Letters*, **2018**, 18, 886-897	11.5	123
52	NLRP3 inflammasome activation and lung fibrosis caused by airborne fine particulate matter. *Ecotoxicology and Environmental Safety*, **2018**, 163, 612-619	7	76
51	Novel Bismuth-Based Nanomaterials Used for Cancer Diagnosis and Therapy. *Chemistry - A European Journal*, **2018**, 24, 17405-17418	4.8	27
50	Deep-Level Defect Enhanced Photothermal Performance of Bismuth Sulfide–Gold Heterojunction Nanorods for Photothermal Therapy of Cancer Guided by Computed Tomography Imaging. *Angewandte Chemie*, **2018**, 130, 252-257	3.6	15
49	Deep-Level Defect Enhanced Photothermal Performance of Bismuth Sulfide-Gold Heterojunction Nanorods for Photothermal Therapy of Cancer Guided by Computed Tomography Imaging. *Angewandte Chemie - International Edition*, **2018**, 57, 246-251	16.4	174
48	Facile surface functionalization of upconversion nanoparticles with phosphoryl pillar[5]arenes for controlled cargo release and cell imaging. *Chemical Communications*, **2018**, 54, 12990-12993	5.8	28
47	Multifunctional Supramolecular Materials Constructed from Polypyrrole@UiO-66 Nanohybrids and Pillararene Nanovalves for Targeted Chemophotothermal Therapy. *ACS Applied Materials & Interfaces*, **2018**, 10, 34655-34663	9.5	72
46	Understanding the Property-Activity Relationships of Polyhedral Cuprous Oxide Nanocrystals in Terms of Reactive Crystallographic Facets. *Toxicological Sciences*, **2017**, 156, 480-491	4.4	13
45	{101}-{001} Surface Heterojunction-Enhanced Antibacterial Activity of Titanium Dioxide Nanocrystals Under Sunlight Irradiation. *ACS Applied Materials & Interfaces*, **2017**, 9, 5907-5915	9.5	60
44	Proteogenomic studies on cancer drug resistance: towards biomarker discovery and target identification. *Expert Review of Proteomics*, **2017**, 14, 351-362	4.2	9

43	Simulated Sunlight-Mediated Photodynamic Therapy for Melanoma Skin Cancer by Titanium-Dioxide-Nanoparticle-Gold-Nanocluster-Graphene Heterogeneous Nanocomposites. *Small* , **2017**, 13, 1603935	11	50
42	Achievement of safer palladium nanocrystals by enlargement of {100} crystallographic facets. *Nanotoxicology*, **2017**, 11, 907-922	5.3	9
41	Crystallographic Facet-Induced Toxicological Responses by Faceted Titanium Dioxide Nanocrystals. *ACS Nano*, **2016**, 10, 6062-73	16.7	45
40	Potential hazards of superfine particles to human bronchial epithelial cells through inducing oxidative stress. *NanoImpact*, **2016**, 2, 93-98	5.6	4
39	Crystallographic facet-dependent stress responses by polyhedral lead sulfide nanocrystals and the potential 'safe-by-design' approach. *Nano Research*, **2016**, 9, 3812-3827	10	11
38	Toxicity of metal oxide nanoparticles in Escherichia coli correlates with conduction band and hydration energies. *Environmental Science & Technology*, **2015**, 49, 1105-12	10.3	111
37	NADPH Oxidase-Dependent NLRP3 Inflammasome Activation and its Important Role in Lung Fibrosis by Multiwalled Carbon Nanotubes. *Small*, **2015**, 11, 2087-97	11	123
36	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
35	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, 3797-805	11	35
34	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
33	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
32	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
31	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
30	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
29	Nanomaterial toxicity testing in the 21st century: use of a predictive toxicological approach and high-throughput screening. *Accounts of Chemical Research*, **2013**, 46, 607-21	24.3	448
28	Two-wave nanotherapy to target the stroma and optimize gemcitabine delivery to a human pancreatic cancer model in mice. *ACS Nano*, **2013**, 7, 10048-65	16.7	131
27	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
26	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	16.7	456

25	Surface charge and cellular processing of covalently functionalized multiwall carbon nanotubes determine pulmonary toxicity. *ACS Nano*, **2013**, 7, 2352-68	16.7	232
24	Zebrafish high-throughput screening to study the impact of dissolvable metal oxide nanoparticles on the hatching enzyme, ZHE1. *Small*, **2013**, 9, 1776-85	11	97
23	Implementation of a multidisciplinary approach to solve complex nano EHS problems by the UC Center for the Environmental Implications of Nanotechnology. *Small*, **2013**, 9, 1428-43	11	29
22	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
21	Processing pathway dependence of amorphous silica nanoparticle toxicity: colloidal vs pyrolytic. *Journal of the American Chemical Society*, **2012**, 134, 15790-804	16.4	315
20	Use of metal oxide nanoparticle band gap to develop a predictive paradigm for oxidative stress and acute pulmonary inflammation. *ACS Nano*, **2012**, 6, 4349-68	16.7	631
19	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, 3745-59	16.7	279
18	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
17	Aspect ratio determines the quantity of mesoporous silica nanoparticle uptake by a small GTPase-dependent macropinocytosis mechanism. *ACS Nano*, **2011**, 5, 4434-47	16.7	287
16	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, 9772-87	16.7	159
15	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, 1805-17	16.7	280
14	High content screening in zebrafish speeds up hazard ranking of transition metal oxide nanoparticles. *ACS Nano*, **2011**, 5, 7284-95	16.7	154
13	Differential expression of syndecan-1 mediates cationic nanoparticle toxicity in undifferentiated versus differentiated normal human bronchial epithelial cells. *ACS Nano*, **2011**, 5, 2756-2769	16.7	76
12	Positron emission tomography of human hepatocellular carcinoma xenografts in mice using copper (II)-64 chloride as a tracer with copper (II)-64 chloride. *Academic Radiology*, **2011**, 18, 1561-8	4.3	27
11	Quantitative techniques for assessing and controlling the dispersion and biological effects of multiwalled carbon nanotubes in mammalian tissue culture cells. *ACS Nano*, **2010**, 4, 7241-52	16.7	142
10	Dispersion and stability optimization of TiO2 nanoparticles in cell culture media. *Environmental Science & Technology*, **2010**, 44, 7309-14	10.3	261
9	Potent anticancer activity of pyrrolidine dithiocarbamate-copper complex against cisplatin-resistant neuroblastoma cells. *Anti-Cancer Drugs*, **2008**, 19, 125-32	2.4	34
8	Synthesis and characterization of new copper thiosemicarbazone complexes with an ONNS quadridentate system: cell growth inhibition, S-phase cell cycle arrest and proapoptotic activities on cisplatin-resistant neuroblastoma cells. *Journal of Biological Inorganic Chemistry*, **2008**, 13, 47-55	3.7	49

7	Interactions of the human telomeric DNA with terbium-amino acid complexes. *Journal of Inorganic Biochemistry*, **2006**, 100, 1646-52	4.2	35
6	Reversible B/Z-DNA transition under the low salt condition and non-B-form polydApolydT selectivity by a cubane-like europium-L-aspartic acid complex. *Biophysical Journal*, **2006**, 90, 3203-7	2.9	39
5	PolydA and polyrA self-structured by a europium and amino acid complex. *FEBS Letters*, **2006**, 580, 3726-30	3.3	18
4	Effect of praseodymium(III) on zinc(II) species in human interstitial fluid. *Biological Trace Element Research*, **2005**, 107, 101-11	4.5	1
3	Computer simulation of Pr(III) speciation in human interstitial fluid. *Chemical Speciation and Bioavailability*, **2004**, 16, 153-158		2
2	Computer simulation for effect of Pr(III) on Ca(II) speciation in human interstitial fluid. *Biological Trace Element Research*, **2003**, 94, 131-40	4.5	2
1	Computer simulation for effect of Pr(III) on Ca(II) speciation in human interstitial fluid. *Biological Trace Element Research*, **2003**, 95, 39-48	4.5	2