Christie M Sayes

List of Publications by Citations

105 papers	9,053 citations	33 h-index	95 g-index
115 ext. papers	9,746 ext. citations	5.6 avg, IF	5.99 L-index

#	Paper	IF	Citations
105	The Differential Cytotoxicity of Water-Soluble Fullerenes. *Nano Letters*, **2004**, 4, 1881-1887	11.5	892
104	Functionalization density dependence of single-walled carbon nanotubes cytotoxicity in vitro. *Toxicology Letters*, **2006**, 161, 135-42	4.4	740
103	Correlating nanoscale titania structure with toxicity: a cytotoxicity and inflammatory response study with human dermal fibroblasts and human lung epithelial cells. *Toxicological Sciences*, **2006**, 92, 174-85	4.4	688
102	Assessing toxicity of fine and nanoparticles: comparing in vitro measurements to in vivo pulmonary toxicity profiles. *Toxicological Sciences*, **2007**, 97, 163-80	4.4	610
101	Nano-C60 cytotoxicity is due to lipid peroxidation. *Biomaterials*, **2005**, 26, 7587-95	15.6	592
100	C60 in water: nanocrystal formation and microbial response. *Environmental Science & Technology*, **2005**, 39, 4307-16	10.3	574
99	Pulmonary toxicity study in rats with three forms of ultrafine-TiO2 particles: differential responses related to surface properties. *Toxicology*, **2007**, 230, 90-104	4.4	527
98	Forming biocompatible and nonaggregated nanocrystals in water using amphiphilic polymers. *Journal of the American Chemical Society*, **2007**, 129, 2871-9	16.4	452
97	Pulmonary instillation studies with nanoscale TiO2 rods and dots in rats: toxicity is not dependent upon particle size and surface area. *Toxicological Sciences*, **2006**, 91, 227-36	4.4	430
96	Development of a base set of toxicity tests using ultrafine TiO2 particles as a component of nanoparticle risk management. *Toxicology Letters*, **2007**, 171, 99-110	4.4	417
95	Pulmonary bioassay studies with nanoscale and fine-quartz particles in rats: toxicity is not dependent upon particle size but on surface characteristics. *Toxicological Sciences*, **2007**, 95, 270-80	4.4	245
94	Comparative pulmonary toxicity assessments of C60 water suspensions in rats: few differences in fullerene toxicity in vivo in contrast to in vitro profiles. *Nano Letters*, **2007**, 7, 2399-406	11.5	237
93	Bacterial cell association and antimicrobial activity of a C60 water suspension. *Environmental Toxicology and Chemistry*, **2005**, 24, 2757-62	3.8	227
92	The relationship between pH and zeta potential of ~ 30 nm metal oxide nanoparticle suspensions relevant to in vitro toxicological evaluations. *Nanotoxicology*, **2009**, 3, 276-283	5.3	223
91	Health effects related to nanoparticle exposures: environmental, health and safety considerations for assessing hazards and risks **2008**, 120, 35-42		205
90	Aqueous dispersion of monodisperse magnetic iron oxide nanocrystals through phase transfer. *Nanotechnology*, **2006**, 17, 4483-4487	3.4	183
89	Characterization of nanomaterials for toxicity assessment. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, **2009**, 1, 660-70	9.2	124

88	Nanoscale and fine zinc oxide particles: can in vitro assays accurately forecast lung hazards following inhalation exposures?. *Environmental Science & Technology*, **2009**, 43, 7939-45	10.3	116
87	Application of fullerenes in nanomedicine: an update. *Nanomedicine*, **2013**, 8, 1191-208	5.6	107
86	The potential exposure and hazards of copper nanoparticles: A review. *Environmental Toxicology and Pharmacology*, **2019**, 71, 103220	5.8	101
85	Comparative study of predictive computational models for nanoparticle-induced cytotoxicity. *Risk Analysis*, **2010**, 30, 1723-34	3.9	90
84	Interactions between silver nanoparticles and other metal nanoparticles under environmentally relevant conditions: A review. *Science of the Total Environment*, **2019**, 653, 1042-1051	10.2	66
83	Synergistic effect of co-exposure to carbon black and Fe2O3 nanoparticles on oxidative stress in cultured lung epithelial cells. *Particle and Fibre Toxicology*, **2009**, 6, 4	8.4	63
82	Terahertz Vibrational Modes of Inverse Micelles. *Journal of Physical Chemistry B*, **2002**, 106, 6346-6353	3.4	62
81	Changing the dose metric for inhalation toxicity studies: short-term study in rats with engineered aerosolized amorphous silica nanoparticles. *Inhalation Toxicology*, **2010**, 22, 348-54	2.7	57
80	Impact of metal ions, metal oxides, and nanoparticles on the formation of disinfection byproducts during chlorination. *Chemical Engineering Journal*, **2017**, 317, 777-792	14.7	53
79	Quantum dots trigger immunomodulation of the NFB pathway in human skin cells. *Molecular Immunology*, **2011**, 48, 1349-59	4.3	48
78	A role for nanoparticle surface reactivity in facilitating pulmonary toxicity and development of a base set of hazard assays as a component of nanoparticle risk management. *Inhalation Toxicology*, **2009**, 21 Suppl 1, 61-7	2.7	48
77	Perspectives on the design of safer nanomaterials and manufacturing processes. *Journal of Nanoparticle Research*, **2015**, 17, 366	2.3	41
76	Expert consensus on an in vitro approach to assess pulmonary fibrogenic potential of aerosolized nanomaterials. *Archives of Toxicology*, **2016**, 90, 1769-83	5.8	41
75	Asymmetrical, water-soluble phthalocyanine dyes for covalent labeling of oligonucleotides. *Bioconjugate Chemistry*, **2002**, 13, 1244-52	6.3	39
74	Comparative cytological responses of lung epithelial and pleural mesothelial cells following in vitro exposure to nanoscale SiO2. *Toxicology in Vitro*, **2013**, 27, 24-33	3.6	38
73	Internalization of carbon black and maghemite iron oxide nanoparticle mixtures leads to oxidant production. *Chemical Research in Toxicology*, **2010**, 23, 1874-82	4	33
72	Aerosol generation and characterization of multi-walled carbon nanotubes exposed to cells cultured at the air-liquid interface. *Particle and Fibre Toxicology*, **2016**, 13, 20	8.4	32
71	Mitigation of quantum dot cytotoxicity by microencapsulation. *PLoS ONE*, **2011**, 6, e22079	3.7	32

70	Surface functionalization of silver nanoparticles: novel applications for insect vector control. *ACS Applied Materials & Interfaces*, **2011**, 3, 3779-87	9.5	31
69	Pulmonary exposures to Sepiolite nanoclay particulates in rats: resolution following multinucleate giant cell formation. *Toxicology Letters*, **2010**, 192, 286-93	4.4	29
68	Synthesis and characterization of nanometer-sized liposomes for encapsulation and microRNA transfer to breast cancer cells. *International Journal of Nanomedicine*, **2019**, 14, 5159-5173	7.3	28
67	Surface plasmon resonance: a label-free tool for cellular analysis. *Nanomedicine*, **2015**, 10, 1833-46	5.6	27
66	Can in vitro assays substitute for in vivo studies in assessing the pulmonary hazards of fine and nanoscale materials?. *Journal of Nanoparticle Research*, **2009**, 11, 421-431	2.3	26
65	Synthesis and self-organization of soluble monodisperse palladium nanoclusters. *Journal of Colloid and Interface Science*, **2005**, 287, 146-51	9.3	26
64	A framework for grouping nanoparticles based on their measurable characteristics. *International Journal of Nanomedicine*, **2013**, 8 Suppl 1, 45-56	7.3	25
63	An in vitro investigation of the differential cytotoxic responses of human and rat lung epithelial cell lines using TiO2 nanoparticles. *International Journal of Nanotechnology*, **2008**, 5, 15	1.5	24
62	Ferrate(VI) pretreatment before disinfection: An effective approach to controlling unsaturated and aromatic halo-disinfection byproducts in chlorinated and chloraminated drinking waters. *Environment International*, **2020**, 138, 105641	12.9	24
61	A role for surface reactivity in TiO2 and quartz-related nanoparticle pulmonary toxicity. *Nanotoxicology*, **2009**, 3, 181-187	5.3	20
60	Summary report of PQRI Workshop on Nanomaterial in Drug Products: current experience and management of potential risks. *AAPS Journal*, **2015**, 17, 44-64	3.7	19
59	Cytotoxicological pathways induced after nanoparticle exposure: studies of oxidative stress at the 'nano-bio' interface. *Toxicology Research*, **2017**, 6, 580-594	2.6	19
58	UV light induces Ag nanoparticle formation: roles of natural organic matter, iron, and oxygen. *Environmental Chemistry Letters*, **2016**, 14, 353-357	13.3	19
57	A 90-day dietary study with fibrillated cellulose in Sprague-Dawley rats. *Toxicology Reports*, **2020**, 7, 174-182	4.8	18
56	Copper, silver, and titania nanoparticles do not release ions under anoxic conditions and release only minute ion levels under oxic conditions in water: Evidence for the low toxicity of nanoparticles. *Environmental Chemistry Letters*, **2020**, 18, 1319-1328	13.3	17
55	Cilostazol blocks pregnancy in naturally cycling mice. *Contraception*, **2013**, 87, 443-8	2.5	17
54	Particle uptake efficiency is significantly affected by type of capping agent and cell line. *Journal of Applied Toxicology*, **2015**, 35, 1114-21	4.1	17
53	The Relationships among Structure, Activity, and Toxicity of Engineered Nanoparticles. *KONA Powder and Particle Journal*, **2014**, 31, 10-21	3.4	15

52	Distinct immunomodulatory effects of a panel of nanomaterials in human dermal fibroblasts. *Toxicology Letters*, **2012**, 210, 293-301	4.4	15
51	Nanomaterial Drug Products: Manufacturing and Analytical Perspectives. *AAPS Journal*, **2017**, 19, 18-25	3.7	13
50	In vitro effects of cilostazol, a phosphodiesterase 3A inhibitor, on mouse oocyte maturation and morphology. *Clinical and Experimental Pharmacology and Physiology*, **2014**, 41, 147-53	3	13
49	Effects of ascorbate and carbonate on the conversion and developmental toxicity of halogenated disinfection byproducts during boiling of tap water. *Chemosphere*, **2020**, 254, 126890	8.4	12
48	Nanoparticle toxicology: measurements of pulmonary hazard effects following exposures to nanoparticles. *Methods in Molecular Biology*, **2011**, 726, 313-24	1.4	12
47	Refining In Vitro Toxicity Models: Comparing Baseline Characteristics of Lung Cell Types. *Toxicological Sciences*, **2019**, 168, 302-314	4.4	11
46	Cilostazol administered to female mice induces ovulation of immature oocytes: a contraceptive animal model. *Life Sciences*, **2014**, 96, 46-52	6.8	11
45	Fifteen years of nanoEHS research advances science and fosters a vibrant community. *Nature Nanotechnology*, **2019**, 14, 996-998	28.7	10
44	Ferrate(VI) pretreatment of water containing natural organic matter, bromide, and iodide: A potential strategy to control soluble lead release from PbO(s). *Chemosphere*, **2021**, 263, 128035	8.4	10
43	Addition of lemon before boiling chlorinated tap water: A strategy to control halogenated disinfection byproducts. *Chemosphere*, **2021**, 263, 127954	8.4	9
42	Differences among Unique Nanoparticle Protein Corona Constructs: A Case Study Using Data Analytics and Multi-Variant Visualization to Describe Physicochemical Characteristics. *Applied Sciences (Switzerland)*, **2018**, 8, 2669	2.6	9
41	Physical, chemical, and toxicological characterization of fibrillated forms of cellulose using an gastrointestinal digestion and co-culture model. *Toxicology Research*, **2020**, 9, 290-301	2.6	8
40	Routes of Exposure to Nanoparticles: Hazard Tests Related to Portal Entries **2015**, 41-54		7
39	Silver Nanoparticles Agglomerate Intracellularly Depending on the Stabilizing Agent: Implications for Nanomedicine Efficacy. *Nanomaterials*, **2020**, 10,	5.4	7
38	Engineered Nanoparticles Induce DNA Damage in Primary Human Skin Cells, Even at Low Doses. *Nano LIFE*, **2014**, 04, 1440001	0.9	6
37	Physical, chemical, and toxicological characterization of sulfated cellulose nanocrystals for food-related applications using and strategies. *Toxicology Research*, **2020**, 9, 808-822	2.6	6
36	A physiologically relevant approach to characterize the microbial response to colloidal particles in food matrices within a simulated gastrointestinal tract. *Food and Chemical Toxicology*, **2012**, 50, 2971-7	4.7	5
35	Toxicological Studies with Nanoscale Materials **2010**, 3-47		5

34	Fluorescently Labeled Cellulose Nanofibers for Environmental Health and Safety Studies. *Nanomaterials*, **2021**, 11,	5.4	5
33	Are Honey Bees at Risk from Microplastics?. *Toxics*, **2021**, 9,	4.7	5
32	Scale of health: indices of safety and efficacy in the evolving environment of large biological datasets. *Pharmaceutical Research*, **2014**, 31, 2256-65	4.5	4
31	Nanotoxicology: Developing a Responsible Technology. *Women in Engineering and Science*, **2020**, 43-55	0.5	4
30	Determining the Biological Mechanisms of Action for Environmental Exposures: Applying CRISPR/Cas9 to Toxicological Assessments. *Toxicological Sciences*, **2020**, 175, 5-18	4.4	3
29	Nanotoxicology: Determining Nano-Bio Interactions and Evaluating Toxicity Using In vitro Models **2015**, 85-110		3
28	PM1 particles at coal- and gas-fired power plant work areas. *Annals of Occupational Hygiene*, **2012**, 56, 182-93		3
27	Physicochemical Characteristics of Two Prototypical Home-Use Consumer Products Containing Engineered Nanomaterials **2015**, 05,		2
26	Nanoarray Bionanotechnology **2016**, 619-648		2
25	Characterization of a Human In Vitro Intestinal Model for the Hazard Assessment of Nanomaterials Used in Cancer Immunotherapy. *Applied Sciences (Switzerland)*, **2021**, 11, 2113	2.6	2
24	The Role of Oxidative Stress in Nanotoxicology		2
23	Data dialogues: critical connections for designing and implementing future nanomaterial research. *Environment Systems and Decisions*, **2015**, 35, 76-87	4.1	1
22	Consumer Products Containing Nanomaterials **2018**, 351-387		1
21	An Adverse Outcome Pathway Linking Organohalogen Exposure to Mitochondrial Disease. *Journal of Toxicology*, **2019**, 2019, 9246495	3.1	1
20	Characterizing the Nano-Bio Interface Using Microscopic Techniques: Imaging the Cell System is Just as Important as Imaging the Nanoparticle System. *Current Protocols in Chemical Biology*, **2017**, 9, 213-231	1.8	1
19	5. Certification: Validating Workers□Competence in Nano-safety **2017**, 108-120		1
18	Effects of a novel pesticide-particle conjugate on viability and reactive oxygen species generation in neuronal (PC12) cells. *Drug and Chemical Toxicology*, **2015**, 38, 205-11	2.3	1
17	Nanotoxicology **2010**, 707-715		1

List of Publications

16	Pseudosymmetry withZ' = 4 in 1,3-propanesultone at 100K. *Acta Crystallographica Section C: Crystal Structure Communications*, **1999**, 55, 2126-2129		1
15	Models for Testing the Pulmonary Toxicity of Particles **2006**, 317-330		1
14	Safe Handling of Engineered Nanomaterials: Turning Knowledge Into Practice		1
13	Differential Cytotoxicity of Haloaromatic Disinfection Byproducts and Lead Co-exposures against Human Intestinal and Neuronal Cells. *Chemical Research in Toxicology*, **2020**, 33, 2401-2407	4	1
12	The link between delivered aerosol dose and inflammatory responses: Exposing a lung Cell Co-Culture system to selected Allergens and irritants. *Journal of Aerosol Science*, **2021**, 151, 105677	4.3	1
11	Optimizing a Test Bed System to Assess Human Respiratory Safety After Exposure to Chemical and Particle Aerosolization. *Applied in Vitro Toxicology*, **2018**, 4, 193-201	1.3	1
10	Nanoliposomal Delivery of MicroRNA-203 Suppresses Migration of Triple-Negative Breast Cancer through Distinct Target Suppression. *Non-coding RNA*, **2021**, 7,	7.1	1
9	Nasal Dry Powder Vaccine Delivery Technology **2014**, 717-726		0
8	Engineered aluminum nanoparticle induces mitochondrial deformation and is predicated on cell phenotype.. *Nanotoxicology*, **2022**, 1-18	5.3	0
7	Synergistic cytotoxicity of bromoacetic acid and three emerging bromophenolic disinfection byproducts against human intestinal and neuronal cells. *Chemosphere*, **2022**, 287, 131794	8.4	0
6	Toxicological Issues to Consider When Evaluating the Safety of Consumer Products Containing Nanomaterials **2014**, 77-115		
5	Developing Bioassay Methods for Evaluating Pulmonary Hazards from Nanoscale or Fine Quartz/Titanium Dioxide Particulate Materials161-170		
4	Criteria and Implementation of Physical and Chemical Characteristics of Nanomaterials for Human Health Effects and Ecological Toxicity Studies29-39		
3	Nano-Exposure Science: How Does Exposure to Engineered Nanomaterials Happen?343-362		
2	Sample preparation utilizing sputter coating increases contrast of cellulose nanocrystals in the transmission electron microscope. *Microscopy (Oxford, England)*, **2019**, 68, 471-474	1.3	
1	Perspectives for Characterizing Drug Component of Theranostic Products Containing Nanomaterials. *Bioanalysis*, **2019**, 301-316	0.5	