Scott C. Brown

List of Publications by Year
in descending order

83 papers	8,358 citations	117625 34 h-index	82547 72 g-index
88 all docs	88 docs citations	88 times ranked	10172 citing authors

#	Article	IF	Citations
1	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, 174-185.	3.1	757
2	Nanoparticles for bioimaging. Advances in Colloid and Interface Science, 2006, 123-126, 471-485.	14.7	644
3	Pulmonary toxicity study in rats with three forms of ultrafine-TiO2 particles: Differential responses related to surface properties. Toxicology, 2007, 230, 90-104.	4.2	580
4	Pulmonary Responses of Mice, Rats, and Hamsters to Subchronic Inhalation of Ultrafine Titanium Dioxide Particles. Toxicological Sciences, 2004, 77, 347-357.	3.1	548
5	Research Strategies for Safety Evaluation of Nanomaterials. Part VI. Characterization of Nanoscale Particles for Toxicological Evaluation. Toxicological Sciences, 2006, 90, 296-303.	3.1	540
6	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, 227-236.	3.1	469
7	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.	0.8	459
8	Nanoparticles as contrast agents for in-vivo bioimaging: current status and future perspectives. Analytical and Bioanalytical Chemistry, 2011, 399, 3-27.	3.7	442
9	Research Strategies for Safety Evaluation of Nanomaterials, Part IV: Risk Assessment of Nanoparticles. Toxicological Sciences, 2006, 89, 42-50.	3.1	421
10	How Meaningful are the Results of Nanotoxicity Studies in the Absence of Adequate Material Characterization?. Toxicological Sciences, 2008, 101, 183-185.	3.1	388
11	Comparative Pulmonary Toxicity Assessments of C₆₀ Water Suspensions in Rats:â€‰Few Differences in Fullerene Toxicity in Vivo in Contrast to in Vitro Profiles. Nano Letters, 2007, 7, 2399-2406.	9.1	261
12	Long-Term Pulmonary Responses of Three Laboratory Rodent Species to Subchronic Inhalation of Pigmentary Titanium Dioxide Particles. Toxicological Sciences, 2002, 70, 86-97.	3.1	251
13	Health effects related to nanoparticle exposures: Environmental, health and safety considerations for assessing hazards and risks. , 2008, 120, 35-42.		244
14	Characterization of nanomaterials for toxicity assessment. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 660-670.	6.1	137
15	Nanomaterial Categorization for Assessing Risk Potential To Facilitate Regulatory Decision-Making. ACS Nano, 2015, 9, 3409-3417.	14.6	129
16	Particle size distributions by transmission electron microscopy: an interlaboratory comparison case study. Metrologia, 2013, 50, 663-678.	1.2	118
17	Penetration of Living Cell Membranes with Fortified Carbon Nanotube Tips. Langmuir, 2007, 23, 10893-10896.	3.5	110
18	Development of a short-term inhalation bioassay to assess pulmonary toxicity of inhaled particles: Comparisons of pulmonary responses to carbonyl iron and silica. Toxicology and Applied Pharmacology, 1991, 107, 350-368.	2.8	100

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19	Risk assessment strategies for nanoscale and fine-sized titanium dioxide particles: Recognizing hazard and exposure issues. Food and Chemical Toxicology, 2015, 85, 138-147.	3.6	83
20	Ultralow wear fluoropolymer composites: Nanoscale functionality from microscale fillers. Tribology International, 2016, 95, 245-255.	5.9	79
21	Gold-Speckled Multimodal Nanoparticles for Noninvasive Bioimaging. Chemistry of Materials, 2008, 20, 6087-6094.	6.7	74
22	At the Crossroads of Nanotoxicologyin vitro: Past Achievements and Current Challenges. Toxicological Sciences, 2015, 147, 5-16.	3.1	74
23	Acute and subchronic oral toxicity studies in rats with nanoscale and pigment grade titanium dioxide particles. Food and Chemical Toxicology, 2015, 84, 208-224.	3.6	73
24	Debunking Some Misconceptions about Nanotoxicology. Nano Letters, 2010, 10, 4777-4782.	9.1	70
25	Lateral Force Microscopy Investigation of Surfactant-Mediated Lubrication from Aqueous Solution. Langmuir, 2004, 20, 1724-1731.	3.5	68
26	Influence of shape, adhension and simulated lung mechanics on amorphous silica nanoparticle toxicity. Advanced Powder Technology, 2007, 18, 69-79.	4.1	67
27	Changing the dose metric for inhalation toxicity studies: Short-term study in rats with engineered aerosolized amorphous silica nanoparticles. Inhalation Toxicology, 2010, 22, 348-354.	1.6	67
28	Gd nanoparticulates: from magnetic resonance imaging to neutron capture therapy. Advanced Powder Technology, 2007, 18, 663-698.	4.1	61
29	Talc mediates angiostasis in malignant pleural effusions via endostatin induction. European Respiratory Journal, 2007, 29, 761-769.	6.7	58
30	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, 61-67.	1.6	52
31	How to measure hazards/risks following exposures to nanoscale or pigment-grade titanium dioxide particles. Toxicology Letters, 2013, 220, 193-204.	0.8	51
32	Multi-dye theranostic nanoparticle platform for bioimaging and cancer therapy. International Journal of Nanomedicine, 2012, 7, 2739.	6.7	45
33	Mechanical and thermodynamic properties of surfactant aggregates at the solidâ€“liquid interface. Journal of Colloid and Interface Science, 2004, 270, 29-36.	9.4	41
34	Kinetics of Liquid Annulus Formation and Capillary Forces. Langmuir, 2011, 27, 13514-13523.	3.5	40
35	Toward Advancing Nano-Object Count Metrology: A Best Practice Framework. Environmental Health Perspectives, 2013, 121, 1282-1291.	6.0	36
36	What is the impact of surface modifications and particle size on commercial titanium dioxide particle samples? â€“ A review of in vivo pulmonary and oral toxicity studies â€“ Revised 11-6-2018. Toxicology Letters, 2019, 302, 42-59.	0.8	35

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37	TIME COURSE OF QUARTZ AND TiO 2 PARTICLE-INDUCED PULMONARY INFLAMMATION AND NEUTROPHIL APOPTOTIC RESPONSES IN RATS. Experimental Lung Research, 2002, 28, 641-670.	1.2	34
38	Pulmonary exposures to Sepiolite nanoclay particulates in rats: Resolution following multinucleate giant cell formation. Toxicology Letters, 2010, 192, 286-293.	0.8	33
39	The significance of electrokinetic characterization for interpreting interfacial phenomena at planar, macroscopic interfaces. Physical Chemistry Chemical Physics, 2005, 7, 678.	2.8	32
40	Applied Nanotoxicology. International Journal of Toxicology, 2016, 35, 5-16.	1.2	32
41	Harmonizing across environmental nanomaterial testing media for increased comparability of nanomaterial datasets. Environmental Science: Nano, 2020, 7, 13-36.	4.3	32
42	Multimodal Nanoparticulate Bioimaging Contrast Agents. Methods in Molecular Biology, 2010, 624, 67-81.	0.9	31
43	Nanoparticle Characterization for Cancer Nanotechnology and Other Biological Applications. Methods in Molecular Biology, 2010, 624, 39-65.	0.9	29
44	Near-infrared absorbing and luminescent gold speckled silica nanoparticles for photothermal therapy. Journal of Materials Chemistry, 2010, 20, 5182.	6.7	29
45	The promise of nanotechnology for solving clinical problems in breast cancer. Journal of Surgical Oncology, 2011, 103, 317-325.	1.7	28
46	Toxicity testing of poorly soluble particles, lung overload and lung cancer. Regulatory Toxicology and Pharmacology, 2018, 100, 80-91.	2.7	27
47	Long-term Inhalation Toxicity Studies with Multiwalled Carbon Nanotubes: Closing the Gaps or Initiating the Debate?. Toxicological Sciences, 2009, 112, 273-275.	3.1	25
48	A role for surface reactivity in TiO₂and quartz-related nanoparticle pulmonary toxicity. Nanotoxicology, 2009, 3, 181-187.	3.0	25
49	An in vitro investigation of the differential cytotoxic responses of human and rat lung epithelial cell lines using TiO<SUB align=right>2 nanoparticles. International Journal of Nanotechnology, 2008, 5, 15.	0.2	24
50	How meaningful are risk determinations in the absence of a complete dataset? Making the case for publishing standardized test guideline and â€˜no effectâ€™ studies for evaluating the safety of nanoparticulates versus spurious â€˜high effectâ€™ results from single investigative studies. Science and Technology of Advanced Materials, 2015, 16, 034603.	6.1	24
51	Characterization and Reclassification of Titanium Dioxide-Related Pulmonary Lesions. Journal of Occupational and Environmental Medicine, 2006, 48, 1308-1313.	1.7	23
52	Accumulation of MRI contrast agents in malignant fibrous histiocytoma for gadolinium neutron capture therapy. Applied Radiation and Isotopes, 2009, 67, S355-S358.	1.5	23
53	Size and shape distributions of primary crystallites in titania aggregates. Advanced Powder Technology, 2017, 28, 1647-1659.	4.1	23
54	Experimental test of a frictional contact model for shear thickening in concentrated colloidal suspensions. Journal of Rheology, 2020, 64, 267-282.	2.6	23

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55	Microstructure and rheology of shear-thickening colloidal suspensions with varying interparticle friction: Comparison of experiment with theory and simulation models. Physics of Fluids, 2021, 33, .	4.0	23
56	Man-Made Respirable-Sized Organic Fibers: What Do We Know about Their Toxicological Profiles?. Industrial Health, 2001, 39, 119-125.	1.0	20
57	Strategies for Optimal Chemical Mechanical Polishing (CMP) Slurry Design. Journal of Dispersion Science and Technology, 2003, 24, 499-515.	2.4	19
58	Fractionated photothermal antitumor therapy with multidye nanoparticles. International Journal of Nanomedicine, 2012, 7, 351.	6.7	17
59	Nanoparticleâ€"terminated scanning probe microscopy tips and surface samples. Advanced Powder Technology, 2007, 18, 605-614.	4.1	14
60	Tailoring Silica Nanotribology for CMP Slurry Optimization: Ca²⁺ Cation Competition in C₁₂TAB Mediated Lubrication. ACS Applied Materials & Interfaces, 2010, 2, 1228-1235.	8.0	13
61	Nanoparticle Toxicology: Measurements of Pulmonary Hazard Effects Following Exposures to Nanoparticles. Methods in Molecular Biology, 2011, 726, 313-324.	0.9	13
62	Assessing health risks of inhaled nanomaterials: development of pulmonary bioassay hazard studies. Analytical and Bioanalytical Chemistry, 2010, 398, 607-612.	3.7	11
63	Targeted Delivery of Amikacin into Granuloma. American Journal of Respiratory and Critical Care Medicine, 2010, 182, 1546-1553.	5.6	10
64	Embracing a Weight-of-Evidence Approach for Establishing NOAELs for Nanoparticle Inhalation Toxicity Studies. Toxicologic Pathology, 2013, 41, 387-394.	1.8	10
65	Luminescent and Magnetic Nanoparticulates as Biomarkers. KONA Powder and Particle Journal, 2010, 28, 20-37.	1.7	6
66	Surfactant-Mediated Fabrication of Optical Nanoprobes. Advances in Polymer Science, 2008, , 189-233.	0.8	4
67	A Oneâ€Step Approach to the Synthesis of High Aspect Ratio Titania Nanoflakes. Global Challenges, 2017, 1, 1700060.	3.6	4
68	Grouping of Poorly Soluble Low (Cyto)Toxic Particles: Example with 15 Selected Nanoparticles and A549 Human Lung Cells. Nanomaterials, 2019, 9, 704.	4.1	4
69	One-step, in situ jamming point measurements by immobilization cell rheometry. Rheologica Acta, 2020, 59, 209-225.	2.4	4
70	Microstructure of continuous shear thickening colloidal suspensions determined by rheo-VSANS and rheo-USANS. Soft Matter, 2022, 18, 4325-4337.	2.7	4
71	Pulmonary Bioassay Methods for Evaluating Hazards Following Exposures to Nanoscale or Fine Particulate Materials. , 2011, , 99-108.		2
72	Talc pleuradesis: a particulate analysis. Advanced Powder Technology, 2007, 18, 739-750.	4.1	1

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73	The â€˜Gatorâ€™ Mouse Suit for early bioluminescent metastatic breast cancer detection and nanomaterial signal enhancement during live animal imaging. Luminescence, 2011, 26, 390-396.	2.9	1
74	A Trojan Horse Strategy to Deliver Amikacin to Mycobacterial Granulomas. American Journal of Respiratory and Critical Care Medicine, 2011, 184, 860-861.	5.6	1
75	Dendritic Cell Based Delivery of Nanoparticles into Granuloma in Non-Tuberculous Mycobacterial Infection.. , 2009, , .		0
76	Developing Bioassay Methods for Evaluating Pulmonary Hazards from Nanoscale or Fine Quartz/Titanium Dioxide Particulate Materials. , 0, , 161-170.		0
77	Criteria and Implementation of Physical and Chemical Characteristics of Nanomaterials for Human Health Effects and Ecological Toxicity Studies. , 0, , 29-39.		0
78	63: Novel Gold Speckled Silica Nanoparticles as Mediators of in Vivo Tumor Imaging and Photothermal Ablation. Journal of Surgical Research, 2009, 151, 199-200.	1.6	0
79	Heme Oxygenase-1 Induction In Human Bronchial Airway Epithelial Cells Exposed To Different Types Of Platinum Nanoparticles. , 2010, , .		0
80	Pulmonary bioassay studies with brake lining components - Nonfibrous potassium octatitanate - Terracess JS particles in rats. Food and Chemical Toxicology, 2021, 153, 112292.	3.6	0
81	Afm. , 2008, , 153-167.		0
82	Evaluation of the Mechanical and Tribological Properties of Self-Assembled Surfactant Nanostructures Using Atomic Force Microscopy. Surfactant Science, 2010, , 1057-1070.	0.0	0
83	Lung Bioassay Methodologies for Assessing Hazards After Exposures to Nanoscale or Fine Particulates. , 2016, , 83-90.		0