Barbara Rothen-Rutishauser

List of Publications by Year
in descending order

267 papers	18,296 citations	13827 67 h-index	15218 126 g-index
276 all docs	276 docs citations	276 times ranked	23941 citing authors

#	Article	IF	Citations
1	Ultrafine Particles Cross Cellular Membranes by Nonphagocytic Mechanisms in Lungs and in Cultured Cells. Environmental Health Perspectives, 2005, 113, 1555-1560.	2.8	1,155
2	Nanoparticle colloidal stability in cell culture media and impact on cellular interactions. Chemical Society Reviews, 2015, 44, 6287-6305.	18.7	771
3	Emergence of Nanoplastic in the Environment and Possible Impact on Human Health. Environmental Science & Technology, 2019, 53, 1748-1765.	4.6	709
4	Assessing the In Vitro and In Vivo Toxicity of Superparamagnetic Iron Oxide Nanoparticles. Chemical Reviews, 2012, 112, 2323-2338.	23.0	513
5	Form Follows Function: Nanoparticle Shape and Its Implications for Nanomedicine. Chemical Reviews, 2017, 117, 11476-11521.	23.0	464
6	Translocation and potential neurological effects of fine and ultrafine particles a critical update. Particle and Fibre Toxicology, 2006, 3, 13.	2.8	454
7	Understanding nanoparticle endocytosis to improve targeting strategies in nanomedicine. Chemical Society Reviews, 2021, 50, 5397-5434.	18.7	398
8	Different endocytotic uptake mechanisms for nanoparticles in epithelial cells and macrophages. Beilstein Journal of Nanotechnology, 2014, 5, 1625-1636.	1.5	386
9	Quantitative Evaluation of Cellular Uptake and Trafficking of Plain and Polyethylene Glycolâ€Coated Gold Nanoparticles. Small, 2010, 6, 1669-1678.	5.2	313
10	The impact of different nanoparticle surface chemistry and size on uptake and toxicity in a murine macrophage cell line. Toxicology and Applied Pharmacology, 2008, 232, 418-427.	1.3	311
11	Engineering an in vitro air-blood barrier by 3D bioprinting. Scientific Reports, 2015, 5, 7974.	1.6	281
12	Biodistribution, Clearance, and Longâ€Term Fate of Clinically Relevant Nanomaterials. Advanced Materials, 2018, 30, e1704307.	11.1	276
13	Bioavailability of silver nanoparticles and ions: from a chemical and biochemical perspective. Journal of the Royal Society Interface, 2013, 10, 20130396.	1.5	273
14	In-vitro cell exposure studies for the assessment of nanoparticle toxicity in the lungâ€"A dialog between aerosol science and biology. Journal of Aerosol Science, 2011, 42, 668-692.	1.8	264
15	Evaluation of particle uptake in human blood monocyte-derived cells in vitro. Does phagocytosis activity of dendritic cells measure up with macrophages?. Journal of Controlled Release, 2001, 76, 59-71.	4.8	250
16	Articular cartilage: from formation to tissue engineering. Biomaterials Science, 2016, 4, 734-767.	2.6	231
17	Diesel exhaust: current knowledge of adverse effects and underlying cellular mechanisms. Archives of Toxicology, 2016, 90, 1541-1553.	1.9	213
18	A dose-controlled system for air-liquid interface cell exposure and application to zinc oxide nanoparticles. Particle and Fibre Toxicology, 2009, 6, 32.	2.8	199

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19	Major to trace element analysis of melt inclusions by laser-ablation ICP-MS: methods of quantification. Chemical Geology, 2002, 183, 63-86.	1.4	190
20	A critical review of the current knowledge regarding the biological impact of nanocellulose. Journal of Nanobiotechnology, 2016, 14, 78.	4.2	184
21	Interactions of nanoparticles with pulmonary structures and cellular responses. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2008, 294, L817-L829.	1.3	183
22	Investigating the Interaction of Cellulose Nanofibers Derived from Cotton with a Sophisticated 3D Human Lung Cell Coculture. Biomacromolecules, 2011, 12, 3666-3673.	2.6	183
23	Translocation of particles and inflammatory responses after exposure to fine particles and nanoparticles in an epithelial airway model. Particle and Fibre Toxicology, 2007, 4, 9.	2.8	176
24	Silica nanoparticles enhance disease resistance in Arabidopsis plants. Nature Nanotechnology, 2021, 16, 344-353.	15.6	172
25	<i>In vitro</i>models of the human epithelial airway barrier to study the toxic potential of particulate matter. Expert Opinion on Drug Metabolism and Toxicology, 2008, 4, 1075-1089.	1.5	171
26	In vitro approaches to assess the hazard of nanomaterials. NanoImpact, 2017, 8, 99-116.	2.4	171
27	Dendritic Cells and Macrophages Form a Transepithelial Network against Foreign Particulate Antigens. American Journal of Respiratory Cell and Molecular Biology, 2007, 36, 669-677.	1.4	170
28	Effects and uptake of gold nanoparticles deposited at the airâ€“liquid interface of a human epithelial airway model. Toxicology and Applied Pharmacology, 2010, 242, 56-65.	1.3	167
29	State-of-the-art of 3D cultures (organs-on-a-chip) in safety testing and pathophysiology. ALTEX: Alternatives To Animal Experimentation, 2014, 31, 441-477.	0.9	166
30	Avoiding drying-artifacts in transmission electron microscopy: Characterizing the size and colloidal state of nanoparticles. Scientific Reports, 2015, 5, 9793.	1.6	163
31	On the issue of transparency and reproducibility in nanomedicine. Nature Nanotechnology, 2019, 14, 629-635.	15.6	149
32	Cytotoxicity and Genotoxicity of Size-Fractionated Iron Oxide (Magnetite) in A549 Human Lung Epithelial Cells: Role of ROS, JNK, and NF-ÎºB. Chemical Research in Toxicology, 2011, 24, 1460-1475.	1.7	145
33	A comparison of acute and long-term effects of industrial multiwalled carbon nanotubes on human lung and immune cells in vitro. Toxicology Letters, 2011, 200, 176-186.	0.4	143
34	Cell â€œvisionâ€ complementary factor of protein corona in nanotoxicology. Nanoscale, 2012, 4, 5461.	2.8	143
35	Toxic effects of brake wear particles on epithelial lung cells in vitro. Particle and Fibre Toxicology, 2009, 6, 30.	2.8	139
36	Airâ€“Liquid Interface<i>In Vitro</i>Models for Respiratory Toxicology Research: Consensus Workshop and Recommendations. Applied in Vitro Toxicology, 2018, 4, 91-106.	0.6	138

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37	Oxidative stress and inflammation response after nanoparticle exposure: differences between human lung cell monocultures and an advanced three-dimensional model of the human epithelial airways. Journal of the Royal Society Interface, 2010, 7, S27-40.	1.5	137
38	Cell cultures as tools in biopharmacy. European Journal of Pharmaceutical Sciences, 2000, 11, S51-S60.	1.9	131
39	Surface charge of polymer coated SPIONs influences the serum protein adsorption, colloidal stability and subsequent cell interaction in vitro. Nanoscale, 2013, 5, 3723.	2.8	127
40	PVP-coated, negatively charged silver nanoparticles: A multi-center study of their physicochemical characteristics, cell culture and in vivo experiments. Beilstein Journal of Nanotechnology, 2014, 5, 1944-1965.	1.5	119
41	Exposure of silver-nanoparticles and silver-ions to lung cells in vitro at the air-liquid interface. Particle and Fibre Toxicology, 2013, 10, 11.	2.8	118
42	Nanotoxicology: a perspective and discussion of whether or not in vitro testing is a valid alternative. Archives of Toxicology, 2011, 85, 723-731.	1.9	116
43	Visualization and quantitative analysis of nanoparticles in the respiratory tract by transmission electron microscopy. Particle and Fibre Toxicology, 2007, 4, 11.	2.8	114
44	Directed cell growth in multi-zonal scaffolds for cartilage tissue engineering. Biomaterials, 2016, 74, 42-52.	5.7	113
45	PHENOTYPIC CHARACTERIZATION OF HUMAN UMBILICAL VEIN ENDOTHELIAL (ECV304) AND URINARY CARCINOMA (T24) CELLS: ENDOTHELIAL VERSUS EPITHELIAL FEATURES. In Vitro Cellular and Developmental Biology - Animal, 2001, 37, 505.	0.7	107
46	Dynamics of Tight and Adherens Junctions Under EGTA Treatment. Journal of Membrane Biology, 2002, 188, 151-162.	1.0	107
47	Size-Dependent Uptake of Particles by Pulmonary Antigen-Presenting Cell Populations and Trafficking to Regional Lymph Nodes. American Journal of Respiratory Cell and Molecular Biology, 2013, 49, 67-77.	1.4	105
48	Novel Peptide Conjugates for Tumor-Specific ChemotherapyÂ§. Journal of Medicinal Chemistry, 2001, 44, 1341-1348.	2.9	96
49	Active Uptake of Dendritic Cell-Derived Exovesicles by Epithelial Cells Induces the Release of Inflammatory Mediators through a TNF-Î±-Mediated Pathway. American Journal of Pathology, 2009, 175, 696-705.	1.9	95
50	Exovesicles from Human Activated Dendritic Cells Fuse with Resting Dendritic Cells, Allowing Them to Present Alloantigens. American Journal of Pathology, 2006, 169, 2127-2136.	1.9	94
51	Nanoparticleâ€“Cell Interaction: A Cell Mechanics Perspective. Advanced Materials, 2018, 30, e1704463.	11.1	94
52	Impact of airborne particulate matter on skin: a systematic review from epidemiology to in vitro studies. Particle and Fibre Toxicology, 2020, 17, 35.	2.8	93
53	Fluorescentâ€“Magnetic Hybrid Nanoparticles Induce a Doseâ€Dependent Increase in Proinflammatory Response in Lung Cells in vitro Correlated with Intracellular Localization. Small, 2010, 6, 753-762.	5.2	91
54	An in vitro testing strategy towards mimicking the inhalation of high aspect ratio nanoparticles. Particle and Fibre Toxicology, 2014, 11, 40.	2.8	91

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55	The adsorption of biomolecules to multi-walled carbon nanotubes is influenced by both pulmonary surfactant lipids and surface chemistry. Journal of Nanobiotechnology, 2010, 8, 31.	4.2	90
56	Transfer of lipophilic markers from PLGA and polystyrene nanoparticles to caco-2 monolayers mimics particle uptake. Pharmaceutical Research, 2002, 19, 595-601.	1.7	88
57	Biomedical nanoparticles modulate specific CD4⁺T cell stimulation by inhibition of antigen processing in dendritic cells. Nanotoxicology, 2011, 5, 606-621.	1.6	88
58	Gold Nanorods: Controlling Their Surface Chemistry and Complete Detoxification by a Twoâ€Step Place Exchange. Angewandte Chemie - International Edition, 2013, 52, 1934-1938.	7.2	87
59	Translocation of Human Calcitonin in Respiratory Nasal Epithelium Is Associated with Self-Assembly in Lipid Membrane. Biochemistry, 1998, 37, 16582-16590.	1.2	82
60	Insertion of Nanoparticle Clusters into Vesicle Bilayers. ACS Nano, 2014, 8, 3451-3460.	7.3	82
61	Translocation of gold nanoparticles across the lung epithelial tissue barrier: Combining in vitro and in silico methods to substitute in vivo experiments. Particle and Fibre Toxicology, 2015, 12, 18.	2.8	82
62	Uptake efficiency of surface modified gold nanoparticles does not correlate with functional changes and cytokine secretion in human dendritic cells in vitro. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 633-644.	1.7	78
63	Spinal Muscular Atrophy: SMN2 Pre-mRNA Splicing Corrected by a U7 snRNA Derivative Carrying a Splicing Enhancer Sequence. Molecular Therapy, 2007, 15, 1479-1486.	3.7	76
64	Pulmonary surfactant coating of multi-walled carbon nanotubes (MWCNTs) influences their oxidative and pro-inflammatory potential in vitro. Particle and Fibre Toxicology, 2012, 9, 17.	2.8	76
65	Characterizing nanoparticles in complex biological media and physiological fluids with depolarized dynamic light scattering. Nanoscale, 2015, 7, 5991-5997.	2.8	75
66	Intracellular imaging of nanoparticles: Is it an elemental mistake to believe what you see?. Particle and Fibre Toxicology, 2010, 7, 15.	2.8	71
67	Direct Combination of Nanoparticle Fabrication and Exposure to Lung Cell Cultures in a Closed Setup as a Method To Simulate Accidental Nanoparticle Exposure of Humans. Environmental Science & Technology, 2009, 43, 2634-2640.	4.6	67
68	The uptake and intracellular fate of a series of different surface coated quantum dots in vitro. Toxicology, 2011, 286, 58-68.	2.0	67
69	Preparation and characterization of functional silica hybrid magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2014, 362, 72-79.	1.0	66
70	Quantification of gold nanoparticle cell uptake under controlled biological conditions and adequate resolution. Nanomedicine, 2014, 9, 607-621.	1.7	66
71	A Comparative Study of Different In Vitro Lung Cell Culture Systems to Assess the Most Beneficial Tool for Screening the Potential Adverse Effects of Carbon Nanotubes. Toxicological Sciences, 2014, 137, 55-64.	1.4	65
72	Fate of Cellulose Nanocrystal Aerosols Deposited on the Lung Cell Surface In Vitro. Biomacromolecules, 2015, 16, 1267-1275.	2.6	65

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73	Nanoparticle administration method in cell culture alters particle-cell interaction. Scientific Reports, 2019, 9, 900.	1.6	65
74	Re-evaluation of pulmonary titanium dioxide nanoparticle distribution using the "relative deposition index": Evidence for clearance through microvasculature. Particle and Fibre Toxicology, 2007, 4, 7.	2.8	64
75	Connexin43 ablation in foetal atrial myocytes decreases electrical coupling, partner connexins, and sodium current. Cardiovascular Research, 2012, 94, 58-65.	1.8	64
76	Effects of combustion-derived ultrafine particles and manufactured nanoparticles on heart cells in vitro. Toxicology, 2008, 253, 70-78.	2.0	63
77	Quantum dot cytotoxicity<i>in vitro</i>: An investigation into the cytotoxic effects of a series of different surface chemistries and their core/shell materials. Nanotoxicology, 2011, 5, 664-674.	1.6	61
78	Comparison of the toxicity of diesel exhaust produced by bio- and fossil diesel combustion in human lung cells inÂvitro. Atmospheric Environment, 2013, 81, 380-388.	1.9	61
79	Quantifying nanoparticle cellular uptake: which method is best?. Nanomedicine, 2017, 12, 1095-1099.	1.7	61
80	MDCK cell cultures as an epithelial in vitro model: cytoskeleton and tight junctions as indicators for the definition of age-related stages by confocal microscopy. Pharmaceutical Research, 1998, 15, 964-971.	1.7	60
81	Quantification of nanoparticles at the single-cell level: an overview about state-of-the-art techniques and their limitations. Nanomedicine, 2014, 9, 1885-1900.	1.7	60
82	Use of EpiAlveolar Lung Model to Predict Fibrotic Potential of Multiwalled Carbon Nanotubes. ACS Nano, 2020, 14, 3941-3956.	7.3	60
83	A newly developed in vitro model of the human epithelial airway barrier to study the toxic potential of nanoparticles. ALTEX: Alternatives To Animal Experimentation, 2008, 25, 191-196.	0.9	60
84	Differences in the intracellular distribution of acid-sensitive doxorubicin-protein conjugates in comparison to free and liposomal formulated doxorubicin as shown by confocal microscopy. Pharmaceutical Research, 2001, 18, 29-38.	1.7	59
85	Comparison of manganese oxide nanoparticles and manganese sulfate with regard to oxidative stress, uptake and apoptosis in alveolar epithelial cells. Toxicology Letters, 2011, 205, 163-172.	0.4	59
86	A ZO1-GFP fusion protein to study the dynamics of tight junctions in living cells. Histochemistry and Cell Biology, 2002, 117, 307-315.	0.8	58
87	Cell-to-cell coupling in engineered pairs of rat ventricular cardiomyocytes: relation between Cx43 immunofluorescence and intercellular electrical conductance. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H443-H450.	1.5	58
88	Mimicking exposures to acute and lifetime concentrations of inhaled silver nanoparticles by two different in vitro approaches. Beilstein Journal of Nanotechnology, 2014, 5, 1357-1370.	1.5	55
89	Aerosol Delivery of Functionalized Gold Nanoparticles Target and Activate Dendritic Cells in a 3D Lung Cellular Model. ACS Nano, 2017, 11, 375-383.	7.3	55
90	From Bioinspired Glue to Medicine: Polydopamine as a Biomedical Material. Materials, 2020, 13, 1730.	1.3	55

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91	Fluorescenceâ€Encoded Gold Nanoparticles: Library Design and Modulation of Cellular Uptake into Dendritic Cells. Small, 2014, 10, 1341-1350.	5.2	54
92	The micro-, submicron-, and nanoplastic hunt: A review of detection methods for plastic particles. Chemosphere, 2022, 293, 133514.	4.2	54
93	Biomechanical effects of environmental and engineered particles on human airway smooth muscle cells. Journal of the Royal Society Interface, 2010, 7, S331-40.	1.5	52
94	Relating the physicochemical characteristics and dispersion of multiwalled carbon nanotubes in different suspension media to their oxidative reactivity<i>in vitro</i>and inflammation<i>in vivo</i>. Nanotoxicology, 2010, 4, 331-342.	1.6	52
95	Expert consensus on an in vitro approach to assess pulmonary fibrogenic potential of aerosolized nanomaterials. Archives of Toxicology, 2016, 90, 1769-1783.	1.9	52
96	Hybrid Lipid/Polymer Nanoparticles for Pulmonary Delivery of siRNA: Development and Fate Upon <i>In Vitro</i> Deposition on the Human Epithelial Airway Barrier. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2018, 31, 170-181.	0.7	52
97	The influence of pulmonary surfactant on nanoparticulate drug delivery systems. European Journal of Pharmaceutics and Biopharmaceutics, 2011, 77, 350-352.	2.0	51
98	Size-dependent accumulation of particles in lysosomes modulates dendritic cell function through impaired antigen degradation. International Journal of Nanomedicine, 2014, 9, 3885.	3.3	50
99	New Exposure System To Evaluate the Toxicity of (Scooter) Exhaust Emissions in Lung Cells in Vitro. Environmental Science & Technology, 2010, 44, 2632-2638.	4.6	48
100	Magnetoliposomes: opportunities and challenges. European Journal of Nanomedicine, 2014, 6, .	0.6	48
101	Monitoring of the internalization of neuropeptideâ€ƒY on neuroblastoma cell line SK-N-MC. FEBS Journal, 2000, 267, 5631-5637.	0.2	47
102	A Novel Quantitative Method for Analyzing the Distributions of Nanoparticles Between Different Tissue and Intracellular Compartments. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2007, 20, 395-407.	1.2	47
103	Microfluidic platforms for advanced risk assessments of nanomaterials. Nanotoxicology, 2015, 9, 381-395.	1.6	47
104	Elucidating the Potential Biological Impact of Cellulose Nanocrystals. Fibers, 2016, 4, 21.	1.8	47
105	Repeated exposure to carbon nanotube-based aerosols does not affect the functional properties of a 3D human epithelial airway model. Nanotoxicology, 2015, 9, 983-993.	1.6	46
106	Effects of flame made zinc oxide particles in human lung cells - a comparison of aerosol and suspension exposures. Particle and Fibre Toxicology, 2012, 9, 33.	2.8	45
107	Interaction of biomedical nanoparticles with the pulmonary immune system. Journal of Nanobiotechnology, 2017, 15, 6.	4.2	45
108	Innovative preclinical models for pulmonary drug delivery research. Expert Opinion on Drug Delivery, 2020, 17, 463-478.	2.4	45

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109	Mechanisms of nanoparticle-mediated photomechanical cell damage. Biomedical Optics Express, 2012, 3, 435.	1.5	44
110	Cerium dioxide nanoparticles can interfere with the associated cellular mechanistic response to diesel exhaust exposure. Toxicology Letters, 2012, 214, 218-225.	0.4	43
111	Predicting pulmonary fibrosis in humans after exposure to multi-walled carbon nanotubes (MWCNTs). Archives of Toxicology, 2016, 90, 1605-1622.	1.9	43
112	Detection of Sub-Micro- and Nanoplastic Particles on Gold Nanoparticle-Based Substrates through Surface-Enhanced Raman Scattering (SERS) Spectroscopy. Nanomaterials, 2021, 11, 1149.	1.9	43
113	Human Asthmatic Bronchial Cells Are More Susceptible to Subchronic Repeated Exposures of Aerosolized Carbon Nanotubes At Occupationally Relevant Doses Than Healthy Cells. ACS Nano, 2017, 11, 7615-7625.	7.3	42
114	Reduction of Nanoparticle Load in Cells by Mitosis but Not Exocytosis. ACS Nano, 2019, 13, 7759-7770.	7.3	42
115	A novel cell compatible impingement system to study in vitro drug absorption from dry powder aerosol formulations. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 72, 350-357.	2.0	41
116	Permeation and Pathways of Human Calcitonin (hCT) Across Excised Bovine Nasal Mucosa. Peptides, 1998, 19, 599-607.	1.2	40
117	Can the Ames test provide an insight into nano-object mutagenicity? Investigating the interaction between nano-objects and bacteria. Nanotoxicology, 2013, 7, 1373-1385.	1.6	40
118	Slow-targeted release of a ruthenium anticancer agent from vitamin B₁₂ functionalized marine diatom microalgae. Dalton Transactions, 2018, 47, 17221-17232.	1.6	40
119	Biodistribution of single and aggregated gold nanoparticles exposed to the human lung epithelial tissue barrier at the air-liquid interface. Particle and Fibre Toxicology, 2017, 14, 49.	2.8	38
120	A Brief Summary of Carbon Nanotubes Science and Technology: A Health and Safety Perspective. ChemSusChem, 2011, 4, 905-911.	3.6	37
121	Assessing meso- and microplastic pollution in the Ligurian and Tyrrhenian Seas. Marine Pollution Bulletin, 2019, 149, 110572.	2.3	37
122	Plasmonic nanoparticles and their characterization in physiological fluids. Colloids and Surfaces B: Biointerfaces, 2016, 137, 39-49.	2.5	35
123	Structure-Permeation Relations of Met-enkephalin Peptide Analogues on Absorption and Secretion Mechanisms in Caco-2 Monolayers. Journal of Pharmaceutical Sciences, 1997, 86, 846-853.	1.6	34
124	Formation of multilayers in the caco-2 cell culture model: a confocal laser scanning microscopy study. Pharmaceutical Research, 2000, 17, 460-465.	1.7	34
125	Cerium oxide nanoparticle uptake kinetics from the gas-phase into lung cells in vitro is transport limited. European Journal of Pharmaceutics and Biopharmaceutics, 2011, 77, 368-375.	2.0	34
126	Combined exposure of diesel exhaust particles and respirable SoufriÃ¨re Hills volcanic ash causes a (pro-)inflammatory response in an in vitro multicellular epithelial tissue barrier model. Particle and Fibre Toxicology, 2016, 13, 67.	2.8	34

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127	An In Vitro Lung System to Assess the Proinflammatory Hazard of Carbon Nanotube Aerosols. International Journal of Molecular Sciences, 2020, 21, 5335.	1.8	34
128	In vitro dosimetry of agglomerates. Nanoscale, 2014, 6, 7325-7331.	2.8	33
129	Dynamic Depolarized Light Scattering of Small Round Plasmonic Nanoparticles: When Imperfection is Only Perfect. Journal of Physical Chemistry C, 2014, 118, 17968-17974.	1.5	33
130	Investigating the role of shape on the biological impact of gold nanoparticles <i>in vitro</i>. Nanomedicine, 2015, 10, 2643-2657.	1.7	33
131	Cellular Shuttles: Monocytes/Macrophages Exhibit Transendothelial Transport of Nanoparticles under Physiological Flow. ACS Applied Materials & Interfaces, 2017, 9, 18501-18511.	4.0	33
132	Assessment of lung cell toxicity of various gasoline engine exhausts using a versatile inÂvitro exposure system. Environmental Pollution, 2018, 235, 263-271.	3.7	33
133	Current <i>in vitro</i> approaches to assess nanoparticle interactions with lung cells. Nanomedicine, 2016, 11, 2457-2469.	1.7	31
134	Taylor Dispersion of Inorganic Nanoparticles and Comparison to Dynamic Light Scattering and Transmission Electron Microscopy. Colloids and Interface Science Communications, 2018, 22, 29-33.	2.0	31
135	Single exposure to aerosolized graphene oxide and graphene nanoplatelets did not initiate an acute biological response in a 3D human lung model. Carbon, 2018, 137, 125-135.	5.4	31
136	Realistic Exposure Methods for Investigating the Interaction of Nanoparticles with the Lung at the Air-Liquid Interface In Vitro. Insciences Journal, 0, , 30-64.	0.7	31
137	Recent Advances into Understanding Some Aspects of the Structure and Function of Mammalian and Avian Lungs. Physiological and Biochemical Zoology, 2010, 83, 792-807.	0.6	30
138	Nanoparticle Polydispersity Can Strongly Affect In Vitro Dose. Particle and Particle Systems Characterization, 2015, 32, 321-333.	1.2	30
139	Assessment of a panel of interleukin-8 reporter lung epithelial cell lines to monitor the pro-inflammatory response following zinc oxide nanoparticle exposure under different cell culture conditions. Particle and Fibre Toxicology, 2015, 12, 29.	2.8	29
140	A hydrofluoric acid-free method to dissolve and quantify silica nanoparticles in aqueous and solid matrices. Scientific Reports, 2019, 9, 7938.	1.6	28
141	Nonâ€Animal Strategies for Toxicity Assessment of Nanoscale Materials: Role of Adverse Outcome Pathways in the Selection of Endpoints. Small, 2021, 17, e2007628.	5.2	27
142	Integrating silver compounds and nanoparticles into ceria nanocontainers for antimicrobial applications. Journal of Materials Chemistry B, 2015, 3, 1760-1768.	2.9	26
143	Hazard identification of exhausts from gasoline-ethanol fuel blends using a multi-cellular human lung model. Environmental Research, 2016, 151, 789-796.	3.7	26
144	Engineered nanomaterials: toward effective safety management in research laboratories. Journal of Nanobiotechnology, 2016, 14, 21.	4.2	26

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145	Organometallic cobalamin anticancer derivatives for targeted prodrug delivery via transcobalamin-mediated uptake. Dalton Transactions, 2017, 46, 2159-2164.	1.6	26
146	Biological response of an in vitro human 3D lung cell model exposed to brake wear debris varies based on brake pad formulation. Archives of Toxicology, 2018, 92, 2339-2351.	1.9	26
147	Inter-laboratory variability of A549 epithelial cells grown under submerged and air-liquid interface conditions. Toxicology in Vitro, 2021, 75, 105178.	1.1	26
148	Macroscopic to microscopic scales of particle dosimetry: from source to fate in the body. Air Quality, Atmosphere and Health, 2012, 5, 169-187.	1.5	25
149	Differential effects of long and short carbon nanotubes on the gas-exchange region of the mouse lung. Nanotoxicology, 2012, 6, 867-879.	1.6	24
150	Polyvinyl Alcohol as a Biocompatible Alternative for the Passivation of Gold Nanorods. Angewandte Chemie - International Edition, 2014, 53, 12613-12617.	7.2	24
151	Coupling of Mutated Met Variants to DNA Repair via Abl and Rad51. Cancer Research, 2008, 68, 5769-5777.	0.4	23
152	Decoupling the shape parameter to assess gold nanorod uptake by mammalian cells. Nanoscale, 2016, 8, 16416-16426.	2.8	23
153	Profibrotic Activity of Multiwalled Carbon Nanotubes Upon Prolonged Exposures in Different Human Lung Cell Types. Applied in Vitro Toxicology, 2019, 5, 47-61.	0.6	23
154	In vitro-ex vivo model systems for nanosafety assessment. European Journal of Nanomedicine, 2015, 7, .	0.6	22
155	Assessing the Stability of Fluorescently Encoded Nanoparticles in Lysosomes by Using Complementary Methods. Angewandte Chemie - International Edition, 2017, 56, 13382-13386.	7.2	22
156	Dynamic and biocompatible thermo-responsive magnetic hydrogels that respond to an alternating magnetic field. Journal of Magnetism and Magnetic Materials, 2017, 427, 212-219.	1.0	22
157	Polydopamine/Transferrin Hybrid Nanoparticles for Targeted Cell-Killing. Nanomaterials, 2018, 8, 1065.	1.9	22
158	Mimicking the Chemistry of Natural Eumelanin Synthesis: The KE Sequence in Polypeptides and in Proteins Allows for a Specific Control of Nanosized Functional Polydopamine Formation. Biomacromolecules, 2018, 19, 3693-3704.	2.6	22
159	Particles induce apical plasma membrane enlargement in epithelial lung cell line depending on particle surface area dose. Respiratory Research, 2009, 10, 22.	1.4	21
160	Synthesis, characterization, antibacterial activity and cytotoxicity of hollow TiO₂-coated CeO₂nanocontainers encapsulating silver nanoparticles for controlled silver release. Journal of Materials Chemistry B, 2016, 4, 1166-1174.	2.9	21
161	Respiratory hazard assessment of combined exposure to complete gasoline exhaust and respirable volcanic ash in a multicellular human lung model at the air-liquid interface. Environmental Pollution, 2018, 238, 977-987.	3.7	21
162	Nanomaterials and the human lung: what is known and what must be deciphered to realise their potential advantages?. Swiss Medical Weekly, 2013, 143, w13758.	0.8	21

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163	Reduction in (pro-)inflammatory responses of lung cells exposed inÂvitro to diesel exhaust treated with a non-catalyzed diesel particle filter. Atmospheric Environment, 2013, 81, 117-124.	1.9	20
164	Taylor dispersion of nanoparticles. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	20
165	Phase Transformation of Superparamagnetic Iron Oxide Nanoparticles via Thermal Annealing: Implications for Hyperthermia Applications. ACS Applied Nano Materials, 2019, 2, 4462-4470.	2.4	20
166	Leveraging proteomics to compare submerged versus air-liquid interface carbon nanotube exposure to a 3D lung cell model. Toxicology in Vitro, 2019, 54, 58-66.	1.1	20
167	When plants and plastic interact. Nature Nanotechnology, 2020, 15, 729-730.	15.6	20
168	Role of dendritic cells in the lung:<i>in vitro</i>models, animal models and human studies. Expert Review of Respiratory Medicine, 2008, 2, 215-233.	1.0	19
169	Modeling Nanoparticleâ€"Alveolar Epithelial Cell Interactions under Breathing Conditions Using Captive Bubble Surfactometry. Langmuir, 2014, 30, 4924-4932.	1.6	19
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