Alke Petri-Fink

List of Publications by Year
in descending order

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204 papers	10,453 citations	53939 47 h-index	43601 95 g-index
216 all docs	216 docs citations	216 times ranked	17995 citing authors

#	Article	IF	Citations
1	Nanoparticle colloidal stability in cell culture media and impact on cellular interactions. Chemical Society Reviews, 2015, 44, 6287-6305.	18.7	771
2	Emergence of Nanoplastic in the Environment and Possible Impact on Human Health. Environmental Science & Technology, 2019, 53, 1748-1765.	4.6	709
3	Assessing the In Vitro and In Vivo Toxicity of Superparamagnetic Iron Oxide Nanoparticles. Chemical Reviews, 2012, 112, 2323-2338.	23.0	513
4	Form Follows Function: Nanoparticle Shape and Its Implications for Nanomedicine. Chemical Reviews, 2017, 117, 11476-11521.	23.0	464
5	Understanding nanoparticle endocytosis to improve targeting strategies in nanomedicine. Chemical Society Reviews, 2021, 50, 5397-5434.	18.7	398
6	Different endocytotic uptake mechanisms for nanoparticles in epithelial cells and macrophages. Beilstein Journal of Nanotechnology, 2014, 5, 1625-1636.	1.5	386
7	Engineering an in vitro air-blood barrier by 3D bioprinting. Scientific Reports, 2015, 5, 7974.	1.6	281
8	Biodistribution, Clearance, and Longâ€Term Fate of Clinically Relevant Nanomaterials. Advanced Materials, 2018, 30, e1704307.	11.1	276
9	Bioavailability of silver nanoparticles and ions: from a chemical and biochemical perspective. Journal of the Royal Society Interface, 2013, 10, 20130396.	1.5	273
10	Effect of cell media on polymer coated superparamagnetic iron oxide nanoparticles (SPIONs): Colloidal stability, cytotoxicity, and cellular uptake studies. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 68, 129-137.	2.0	225
11	Diesel exhaust: current knowledge of adverse effects and underlying cellular mechanisms. Archives of Toxicology, 2016, 90, 1541-1553.	1.9	213
12	Silica nanoparticles enhance disease resistance in Arabidopsis plants. Nature Nanotechnology, 2021, 16, 344-353.	15.6	172
13	In vitro approaches to assess the hazard of nanomaterials. NanoImpact, 2017, 8, 99-116.	2.4	171
14	Interaction of Functionalized Superparamagnetic Iron Oxide Nanoparticles with Brain Structures. Journal of Pharmacology and Experimental Therapeutics, 2006, 318, 108-116.	1.3	168
15	Avoiding drying-artifacts in transmission electron microscopy: Characterizing the size and colloidal state of nanoparticles. Scientific Reports, 2015, 5, 9793.	1.6	163
16	Particle Size Distribution Measurements of Manganese-Doped ZnS Nanoparticles. Analytical Chemistry, 2009, 81, 3889-3895.	3.2	150
17	The in vivo performance of magnetic particle-loaded injectable, in situ gelling, carriers for the delivery of local hyperthermia. Biomaterials, 2010, 31, 691-705.	5.7	127
18	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

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19	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
20	Enhancement of the efficiency of non-viral gene delivery by application of pulsed magnetic field. Nucleic Acids Research, 2006, 34, e40-e40.	6.5	106
21	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
22	Nanoparticleâ€“Cell Interaction: A Cell Mechanics Perspective. Advanced Materials, 2018, 30, e1704463.	11.1	94
23	An in vitro testing strategy towards mimicking the inhalation of high aspect ratio nanoparticles. Particle and Fibre Toxicology, 2014, 11, 40.	2.8	91
24	Characterization of PEI-coated superparamagnetic iron oxide nanoparticles for transfection: Size distribution, colloidal properties and DNA interaction. Journal of Magnetism and Magnetic Materials, 2007, 311, 300-305.	1.0	90
25	Dexamethasone-containing biodegradable superparamagnetic microparticles for intra-articular administration: Physicochemical and magnetic properties, in vitro and in vivo drug release. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 72, 529-538.	2.0	88
26	Biomedical nanoparticles modulate specific CD4⁺T cell stimulation by inhibition of antigen processing in dendritic cells. Nanotoxicology, 2011, 5, 606-621.	1.6	88
27	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
28	Insertion of Nanoparticle Clusters into Vesicle Bilayers. ACS Nano, 2014, 8, 3451-3460.	7.3	82
29	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
30	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
31	Management of nanomaterials safety in research environment. Particle and Fibre Toxicology, 2010, 7, 40.	2.8	77
32	Superparamagnetic Iron Oxide Nanoparticles (SPIONs): From Synthesis to In Vivo Studiesâ€”A Summary of the Synthesis, Characterization, In Vitro, and In Vivo Investigations of SPIONs With Particular Focus on Surface and Colloidal Properties. IEEE Transactions on Nanobioscience, 2007, 6, 289-297.	2.2	70
33	Preparation and characterization of functional silica hybrid magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2014, 362, 72-79.	1.0	66
34	Quantification of gold nanoparticle cell uptake under controlled biological conditions and adequate resolution. Nanomedicine, 2014, 9, 607-621.	1.7	66
35	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
36	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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37	Nanoparticle administration method in cell culture alters particle-cell interaction. Scientific Reports, 2019, 9, 900.	1.6	65
38	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
39	Quantifying nanoparticle cellular uptake: which method is best?. Nanomedicine, 2017, 12, 1095-1099.	1.7	61
40	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
41	Use of EpiAlveolar Lung Model to Predict Fibrotic Potential of Multiwalled Carbon Nanotubes. ACS Nano, 2020, 14, 3941-3956.	7.3	60
42	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
43	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
44	From Bioinspired Glue to Medicine: Polydopamine as a Biomedical Material. Materials, 2020, 13, 1730.	1.3	55
45	Fluorescenceâ€Encoded Gold Nanoparticles: Library Design and Modulation of Cellular Uptake into Dendritic Cells. Small, 2014, 10, 1341-1350.	5.2	54
46	The micro-, submicron-, and nanoplastic hunt: A review of detection methods for plastic particles. Chemosphere, 2022, 293, 133514.	4.2	54
47	Hybrid Lipid/Polymer Nanoparticles for Pulmonary Delivery of siRNA: Development and Fate Upon In Vitro Deposition on the Human Epithelial Airway Barrier. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2018, 31, 170-181.	0.7	52
48	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
49	Filling Polymersomes with Polymers by Peroxidase-Catalyzed Atom Transfer Radical Polymerization. Macromolecular Rapid Communications, 2015, 36, 507-514.	2.0	50
50	Optical properties of annealed Mn2+-doped ZnS nanoparticles. Journal of Luminescence, 2008, 128, 92-98.	1.5	48
51	Magnetoliposomes: opportunities and challenges. European Journal of Nanomedicine, 2014, 6, .	0.6	48
52	Elucidating the Potential Biological Impact of Cellulose Nanocrystals. Fibers, 2016, 4, 21.	1.8	47
53	Cellulose Nanocrystals with Tethered Polymer Chains: Chemically Patchy versus Uniform Decoration. ACS Macro Letters, 2017, 6, 892-897.	2.3	47
54	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

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55	Interaction of biomedical nanoparticles with the pulmonary immune system. Journal of Nanobiotechnology, 2017, 15, 6.	4.2	45
56	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
57	Pulmonary delivery of cationic gold nanoparticles boost antigen-specific CD4 + T Cell Proliferation. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1815-1826.	1.7	42
58	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
59	Reduction of Nanoparticle Load in Cells by Mitosis but Not Exocytosis. ACS Nano, 2019, 13, 7759-7770.	7.3	42
60	A mixture of ferritin and magnetite nanoparticles mimics the magnetic properties of human brain tissue. Physical Review B, 2006, 73, .	1.1	41
61	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
62	Magnetic and in vitro heating properties of implants formed in situ from injectable formulations and containing superparamagnetic iron oxide nanoparticles (SPIONs) embedded in silica microparticles for magnetically induced local hyperthermia. Journal of Magnetism and Magnetic Materials, 2011, 323, 1054-1063.	1.0	38
63	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
64	Superparamagnetic Nanoparticles as a Powerful Systems Biology Characterization Tool in the Physiological Context. Angewandte Chemie - International Edition, 2008, 47, 7857-7860.	7.2	37
65	In vivo labelling of resting monocytes in the reticuloendothelial system with fluorescent iron oxide nanoparticles prior to injury reveals that they are mobilized to infarcted myocardium. European Heart Journal, 2010, 31, 1410-1420.	1.0	37
66	Assessing meso- and microplastic pollution in the Ligurian and Tyrrhenian Seas. Marine Pollution Bulletin, 2019, 149, 110572.	2.3	37
67	Plasmonic nanoparticles and their characterization in physiological fluids. Colloids and Surfaces B: Biointerfaces, 2016, 137, 39-49.	2.5	35
68	Co-encapsulation of dexamethasone 21-acetate and SPIONs into biodegradable polymeric microparticles designed for intra-articular delivery. Journal of Microencapsulation, 2008, 25, 339-350.	1.2	34
69	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
70	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
71	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
72	Cellular Shuttles: Monocytes/Macrophages Exhibit Transendothelial Transport of Nanoparticles under Physiological Flow. ACS Applied Materials & Interfaces, 2017, 9, 18501-18511.	4.0	33

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73	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
74	Current in vitro approaches to assess nanoparticle interactions with lung cells. Nanomedicine, 2016, 11, 2457-2469.	1.7	31
75	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
76	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
77	Local moderate magnetically induced hyperthermia using an implant formed in situ in a mouse tumor model. International Journal of Hyperthermia, 2009, 25, 229-239.	1.1	30
78	Nanoparticle Polydispersity Can Strongly Affect In Vitro Dose. Particle and Particle Systems Characterization, 2015, 32, 321-333.	1.2	30
79	Solder doped polycaprolactone scaffold enables reproducible laser tissue soldering. Lasers in Surgery and Medicine, 2008, 40, 716-725.	1.1	29
80	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
81	Uptake and Biocompatibility of Functionalized Poly(vinylalcohol) Coated Superparamagnetic Maghemite Nanoparticles by Synoviocytes In Vitro. Journal of Nanoscience and Nanotechnology, 2006, 6, 2829-2840.	0.9	29
82	A hydrofluoric acid-free method to dissolve and quantify silica nanoparticles in aqueous and solid matrices. Scientific Reports, 2019, 9, 7938.	1.6	28
83	Biocompatible thermo- and magneto-responsive shape-memory polyurethane bionanocomposites. Materials Science and Engineering C, 2019, 97, 658-668.	3.8	28
84	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
85	Engineered nanomaterials: toward effective safety management in research laboratories. Journal of Nanobiotechnology, 2016, 14, 21.	4.2	26
86	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
87	Inter-laboratory variability of A549 epithelial cells grown under submerged and air-liquid interface conditions. Toxicology in Vitro, 2021, 75, 105178.	1.1	26
88	Polyvinyl Alcohol as a Biocompatible Alternative for the Passivation of Gold Nanorods. Angewandte Chemie - International Edition, 2014, 53, 12613-12617.	7.2	24
89	Polymer-Coated Gold Nanospheres Do Not Impair the Innate Immune Function of Human B Lymphocytes in Vitro. ACS Nano, 2019, 13, 6790-6800.	7.3	23
90	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

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91	Fixed Bed Reactor for Solid-Phase Surface Derivatization of Superparamagnetic Nanoparticles. Bioconjugate Chemistry, 2007, 18, 1684-1690.	1.8	22
92	Application of pulsed-magnetic field enhances non-viral gene delivery in primary cells from different origins. Journal of Magnetism and Magnetic Materials, 2008, 320, 1517-1527.	1.0	22
93	Human epithelial cells in vitro â€“ Are they an advantageous tool to help understand the nanomaterial-biological barrier interaction?. EURO-NanoTox-Letters, 2012, 4, 1-19.	1.0	22
94	In vitro-ex vivo model systems for nanosafety assessment. European Journal of Nanomedicine, 2015, 7, .	0.6	22
95	A new angle on dynamic depolarized light scattering: number-averaged size distribution of nanoparticles in focus. Nanoscale, 2016, 8, 15813-15821.	2.8	22
96	Assessing the Stability of Fluorescently Encoded Nanoparticles in Lysosomes by Using Complementary Methods. Angewandte Chemie - International Edition, 2017, 56, 13382-13386.	7.2	22
97	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
98	Cellulose Nanocrystals: Surface Modification, Applications and Opportunities at Interfaces. Chimia, 2017, 71, 376.	0.3	22
99	Polydopamine/Transferrin Hybrid Nanoparticles for Targeted Cell-Killing. Nanomaterials, 2018, 8, 1065.	1.9	22
100	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
101	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
102	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
103	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
104	Effects of an iron-based fuel-borne catalyst and a diesel particle filter on exhaust toxicity in lung cells in vitro. Analytical and Bioanalytical Chemistry, 2015, 407, 5977-5986.	1.9	20
105	Taylor dispersion of nanoparticles. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	20
106	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
107	When plants and plastic interact. Nature Nanotechnology, 2020, 15, 729-730.	15.6	20
108	Systemic Distribution and Elimination of Plain and with Cy3.5 Functionalized Poly(vinyl alcohol) Coated Superparamagnetic Maghemite Nanoparticles After Intraarticular Injection in Sheep In Vivo. Journal of Nanoscience and Nanotechnology, 2006, 6, 3261-3268.	0.9	20

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109	Modeling Nanoparticleâ€“Alveolar Epithelial Cell Interactions under Breathing Conditions Using Captive Bubble Surfactometry. Langmuir, 2014, 30, 4924-4932.	1.6	19
110	Fluorescent plastic nanoparticles to track their interaction and fate in physiological environments. Environmental Science: Nano, 2021, 8, 502-513.	2.2	19
111	Biokinetics of Aerosolized Liposomal Ciclosporin A in Human Lung Cells In Vitro Using an Air-Liquid Cell Interface Exposure System. Journal of Aerosol Medicine and Pulmonary Drug Delivery, 2017, 30, 411-424.	0.7	18
112	Involvement of two uptake mechanisms of gold and iron oxide nanoparticles in a co-exposure scenario using mouse macrophages. Beilstein Journal of Nanotechnology, 2017, 8, 2396-2409.	1.5	18
113	A novel technique to determine the cell type specific response within an in vitro co-culture model via multi-colour flow cytometry. Scientific Reports, 2017, 7, 434.	1.6	17
114	Exposure to silver nanoparticles affects viability and function of natural killer cells, mostly via the release of ions. Cell Biology and Toxicology, 2018, 34, 167-176.	2.4	17
115	Biological Effects in Lung Cells In Vitro of Exhaust Aerosols from a Gasoline Passenger Car With and Without Particle Filter. Emission Control Science and Technology, 2015, 1, 237-246.	0.8	16
116	A rapid screening method to evaluate the impact of nanoparticles on macrophages. Nanoscale, 2017, 9, 2492-2504.	2.8	16
117	The crux of positive controls - Pro-inflammatory responses in lung cell models. Toxicology in Vitro, 2019, 54, 189-193.	1.1	16
118	Control of morphology and nanostructure of copper and cobalt oxalates: Effect of complexing ions, polymeric additives and molecular weight. Nanoscale, 2010, 2, 2470.	2.8	15
119	Amino covalent binding approach on iron oxide nanoparticle surface: Toward biological applications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 415, 98-104.	2.3	15
120	Advanced humanin vitromodels to assess metal oxide nanoparticle-cell interactions. MRS Bulletin, 2014, 39, 984-989.	1.7	15
121	Measuring the heating power of magnetic nanoparticles: an overview of currently used methods. Materials Today: Proceedings, 2017, 4, S107-S117.	0.9	15
122	Lock-In Thermography as an Analytical Tool for Magnetic Nanoparticles: Measuring Heating Power and Magnetic Fields. Journal of Physical Chemistry C, 2017, 121, 27164-27175.	1.5	15
123	Beyond Global Charge: Role of Amine Bulkiness and Protein Fingerprint on Nanoparticleâ€“Cell Interaction. Small, 2018, 14, e1802088.	5.2	15
124	Acute effects of multi-walled carbon nanotubes on primary bronchial epithelial cells from COPD patients. Nanotoxicology, 2018, 12, 699-711.	1.6	15
125	Heating behavior of magnetic iron oxide nanoparticles at clinically relevant concentration. Journal of Magnetism and Magnetic Materials, 2019, 474, 637-642.	1.0	15
126	Lipid nanoparticles biocompatibility and cellular uptake in a 3D human lung model. Nanomedicine, 2020, 15, 259-271.	1.7	15

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127	Speckle-Visibility Spectroscopy of Depolarized Dynamic Light Scattering. Journal of Physical Chemistry B, 2017, 121, 7999-8007.	1.2	13
128	Simple and fast evaluation of relaxation parameters of magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2020, 499, 166176.	1.0	13
129	Increased Uptake of Silica Nanoparticles in Inflamed Macrophages but Not upon Co-Exposure to Micron-Sized Particles. Cells, 2020, 9, 2099.	1.8	13
130	Understanding the Development, Standardization, and Validation Process of Alternative In Vitro Test Methods for Regulatory Approval from a Researcher Perspective. Small, 2021, 17, e2006027.	5.2	13
131	A versatile living polymerization method for aromatic amides. Nature Chemistry, 2021, 13, 705-713.	6.6	13
132	A comparative study of silver nanoparticle dissolution under physiological conditions. Nanoscale Advances, 2020, 2, 5760-5768.	2.2	13
133	Bis-TEGylated Poly(p-benzamide)s: Combining Organosolubility with Shape Persistence. Macromolecules, 2013, 46, 5520-5530.	2.2	12
134	Ultrathin Ceramic Membranes as Scaffolds for Functional Cell Coculture Models on a Biomimetic Scale. BioResearch Open Access, 2015, 4, 457-468.	2.6	12
135	Assessment of the potential for in-plume sulphur dioxide gas-ash interactions to influence the respiratory toxicity of volcanic ash. Environmental Research, 2019, 179, 108798.	3.7	12
136	Artificial Lysosomal Platform to Study Nanoparticle Long-term Stability. Chimia, 2019, 73, 55.	0.3	12
137	An Inflamed Human Alveolar Model for Testing the Efficiency of Anti-inflammatory Drugs in vitro. Frontiers in Bioengineering and Biotechnology, 2020, 8, 987.	2.0	12
138	Distribution of polymer-coated gold nanoparticles in a 3D lung model and indication of apoptosis after repeated exposure. Nanomedicine, 2018, 13, 1169-1185.	1.7	11
139	Quantification of Carbon Nanotube Doses in Adherent Cell Culture Assays Using UV-VIS-NIR Spectroscopy. Nanomaterials, 2019, 9, 1765.	1.9	11
140	Nanoparticles and Taylor Dispersion as a Linear Time-Invariant System. Analytical Chemistry, 2019, 91, 1217-1221.	3.2	11
141	Influence of Serum Supplemented Cell Culture Medium on Colloidal Stability of Polymer Coated Iron Oxide and Polystyrene Nanoparticles With Impact on Cell Interactions In Vitro. IEEE Transactions on Magnetics, 2013, 49, 402-407.	1.2	10
142	Catechol-derivatized poly(vinyl alcohol) as a coating molecule for magnetic nanoclusters. Journal of Magnetism and Magnetic Materials, 2015, 380, 157-162.	1.0	10
143	Cellular uptake and cell-to-cell transfer of polyelectrolyte microcapsules within a triple co-culture system representing parts of the respiratory tract. Science and Technology of Advanced Materials, 2015, 16, 034608.	2.8	10
144	Revealing the Role of Epithelial Mechanics and Macrophage Clearance during Pulmonary Epithelial Injury Recovery in the Presence of Carbon Nanotubes. Advanced Materials, 2018, 30, e1806181.	11.1	10

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145	Preparation of metallosupramolecular single-chain polymeric nanoparticles and their characterization by Taylor dispersion. Polymer Chemistry, 2020, 11, 586-592.	1.9	10
146	Cellular Uptake of Silica and Gold Nanoparticles Induces Early Activation of Nuclear Receptor NR4A1. Nanomaterials, 2022, 12, 690.	1.9	10
147	Test-Methods on the Test-Bench: A Comparison of Complete Exhaust and Exhaust Particle Extracts for Genotoxicity/Mutagenicity Assessment. Environmental Science & Technology, 2014, 48, 5237-5244.	4.6	9
148	Lock-in thermography as a rapid and reproducible thermal characterization method for magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2017, 427, 206-211.	1.0	9
149	Precision of Taylor Dispersion. Analytical Chemistry, 2019, 91, 9946-9951.	3.2	9
150	A biological perspective toward the interaction of theranostic nanoparticles with the bloodstream Â¢â‚¬Å“ what needs to be considered?. Frontiers in Chemistry, 2015, 3, 7.	1.8	8
151	Hypothesis Test of the Photon Count Distribution for Dust Discrimination in Dynamic Light Scattering. Analytical Chemistry, 2018, 90, 3656-3660.	3.2	8
152	Lockâ€In Thermography to Analyze Plasmonic Nanoparticle Dispersions. Particle and Particle Systems Characterization, 2019, 36, 1900224.	1.2	8
153	Nanoparticle Behaviour in Complex Media: Methods for Characterizing Physicochemical Properties, Evaluating Protein Corona Formation, and Implications for Biological Studies. Nanoscience and Technology, 2019, , 101-150.	1.5	8
154	Particle Stiffness and Surface Topography Determine Macrophageâ€Mediated Removal of Surface Adsorbed Particles. Advanced Healthcare Materials, 2021, 10, e2001667.	3.9	8
155	Bioprinting for Human Respiratory and Gastrointestinal In Vitro Models. Methods in Molecular Biology, 2020, 2140, 199-215.	0.4	8
156	A guide to investigating colloidal nanoparticles by cryogenic transmission electron microscopy: pitfalls and benefits. AIMS Biophysics, 2015, 2, 245-258.	0.3	8
157	Multi-Functional Magnetic Photoluminescent Photocatalytic Polystyrene-Based Micro- and Nano-Fibers Obtained by Electrospinning. Fibers, 2014, 2, 75-91.	1.8	7
158	A realistic in vitro exposure revealed seasonal differences in (pro-)inflammatory effects from ambient air in Fribourg, Switzerland. Inhalation Toxicology, 2018, 30, 40-48.	0.8	7
159	Probing nano-scale viscoelastic response in air and in liquid with dynamic atomic force microscopy. Soft Matter, 2018, 14, 3998-4006.	1.2	7
160	Carbon nanodots: Opportunities and limitations to study their biodistribution at the human lung epithelial tissue barrier. Biointerphases, 2018, 13, 06D404.	0.6	7
161	Characterization of the Shape Anisotropy of Superparamagnetic Iron Oxide Nanoparticles during Thermal Decomposition. Materials, 2020, 13, 2018.	1.3	7
162	Multicellular Human Alveolar Model Composed of Epithelial Cells and Primary Immune Cells for Hazard Assessment. Journal of Visualized Experiments, 2020, , .	0.2	7

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163	Spatial SPION Localization in Liposome Membranes. IEEE Transactions on Magnetics, 2013, 49, 166-171.	1.2	6
164	Assumption-free morphological quantification of single anisotropic nanoparticles and aggregates. Nanoscale, 2017, 9, 4918-4927.	2.8	6
165	A rational and iterative process for targeted nanoparticle design and validation. Colloids and Surfaces B: Biointerfaces, 2018, 171, 579-589.	2.5	6
166	Nanoparticle-Cell Interactions: Overview of Uptake, Intracellular Fate and Induction of Cell Responses. Nanoscience and Technology, 2019, , 153-170.	1.5	6
167	Investigating a Lock-In Thermal Imaging Setup for the Detection and Characterization of Magnetic Nanoparticles. Nanomaterials, 2020, 10, 1665.	1.9	6
168	Particle Surfaces to Study Macrophage Adherence, Migration, and Clearance. Advanced Functional Materials, 2020, 30, 2002630.	7.8	6
169	Aligned and Oriented Collagen Nanocomposite Fibers as Substrates to Activate Fibroblasts. ACS Applied Bio Materials, 2021, 4, 8316-8324.	2.3	6
170	Nanoparticles and Cells: An Interdisciplinary Approach. Chimia, 2012, 66, 104-109.	0.3	5
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