Alke Petri-Fink

List of Publications by Year in Descending Order

200 papers	7,448 citations	42 h-index	80 g-index
216 ext. papers	8,942 ext. citations	7.3 avg, IF	6.31 L-index

#	Paper	IF	Citations
200	Impurities in polyvinylpyrrolidone: the key factor in the synthesis of gold nanostars.. *Nanoscale Advances*, **2022**, 4, 387-392	5.1	0
199	The micro-, submicron-, and nanoplastic hunt: A review of detection methods for plastic particles.. *Chemosphere*, **2022**, 133514	8.4	7
198	High-Throughput Manufacturing of Antibacterial Nanofibers by Melt Coextrusion and Post-Processing Surface-Initiated Atom Transfer Radical Polymerization. *ACS Applied Polymer Materials*, **2022**, 4, 260-269	4.3	2
197	Intracellular gold nanoparticles influence light scattering and facilitate amplified spontaneous emission generation.. *Journal of Colloid and Interface Science*, **2022**, 622, 914-923	9.3	1
196	Aligned and Oriented Collagen Nanocomposite Fibers as Substrates to Activate Fibroblasts.. *ACS Applied Bio Materials*, **2021**, 4, 8316-8324	4.1	2
195	Factors Affecting Nanoparticle DoseExposure and Cell Response. *Molecular and Integrative Toxicology*, **2021**, 129-140	0.5	
194	Experimental and Theoretical Validation of Plasmonic Nanoparticle Heat Generation by Using Lock-In Thermography. *Journal of Physical Chemistry C*, **2021**, 125, 5890-5896	3.8	0
193	Detection of Sub-Micro- and Nanoplastic Particles on Gold Nanoparticle-Based Substrates through Surface-Enhanced Raman Scattering (SERS) Spectroscopy. *Nanomaterials*, **2021**, 11,	5.4	12
192	A versatile living polymerization method for aromatic amides. *Nature Chemistry*, **2021**, 13, 705-713	17.6	2
191	Silica nanoparticles enhance disease resistance in Arabidopsis plants. *Nature Nanotechnology*, **2021**, 16, 344-353	28.7	58
190	Understanding nanoparticle endocytosis to improve targeting strategies in nanomedicine. *Chemical Society Reviews*, **2021**, 50, 5397-5434	58.5	89
189	Particle Stiffness and Surface Topography Determine Macrophage-Mediated Removal of Surface Adsorbed Particles. *Advanced Healthcare Materials*, **2021**, 10, e2001667	10.1	3
188	Understanding the Development, Standardization, and Validation Process of Alternative In Vitro Test Methods for Regulatory Approval from a Researcher Perspective. *Small*, **2021**, 17, e2006027	11	3
187	Design of Perfused PTFE Vessel-Like Constructs for In Vitro Applications. *Macromolecular Bioscience*, **2021**, 21, e2100016	5.5	0
186	Inter-laboratory variability of A549 epithelial cells grown under submerged and air-liquid interface conditions. *Toxicology in Vitro*, **2021**, 75, 105178	3.6	8
185	Fluorescent plastic nanoparticles to track their interaction and fate in physiological environments. *Environmental Science: Nano*, **2021**, 8, 502-513	7.1	4
184	Understanding selectivity of metabolic labelling and click-targeting in multicellular environments as a route to tissue selective drug delivery. *Journal of Materials Chemistry B*, **2021**, 9, 5365-5373	7.3	0

183	Characterization of the Shape Anisotropy of Superparamagnetic Iron Oxide Nanoparticles during Thermal Decomposition. *Materials*, **2020**, 13,	3.5	2
182	Size and Surface Charge Dependent Impregnation of Nanoparticles in Soft- and Hardwood. *Chemistry*, **2020**, 2, 361-373	2.1	2
181	Use of EpiAlveolar Lung Model to Predict Fibrotic Potential of Multiwalled Carbon Nanotubes. *ACS Nano*, **2020**, 14, 3941-3956	16.7	34
180	Particle Surfaces to Study Macrophage Adherence, Migration, and Clearance. *Advanced Functional Materials*, **2020**, 30, 2002630	15.6	4
179	Versatile Macroscale Concentration Gradients of Nanoparticles in Soft Nanocomposites. *Small*, **2020**, 16, e1905192	11	2
178	Immunotoxicity Testing In Vitro Cell Culture Models. *Molecular and Integrative Toxicology*, **2020**, 197-215	0.5	
177	Multicellular Human Alveolar Model Composed of Epithelial Cells and Primary Immune Cells for Hazard Assessment. *Journal of Visualized Experiments*, **2020**,	1.6	3
176	Patient-derived and artificial ascites have minor effects on MeT-5A mesothelial cells and do not facilitate ovarian cancer cell adhesion. *PLoS ONE*, **2020**, 15, e0241500	3.7	0
175	A comparative study of silver nanoparticle dissolution under physiological conditions. *Nanoscale Advances*, **2020**, 2, 5760-5768	5.1	7
174	Preparation of metallosupramolecular single-chain polymeric nanoparticles and their characterization by Taylor dispersion. *Polymer Chemistry*, **2020**, 11, 586-592	4.9	6
173	Resolution Limit of Taylor Dispersion: An Exact Theoretical Study. *Analytical Chemistry*, **2020**, 92, 561-566	7.8	2
172	Polydopamine Nanoparticle Doped Nanofluid for Solar Thermal Energy Collector Efficiency Increase. *Advanced Sustainable Systems*, **2020**, 4, 1900101	5.9	3
171	Lipid nanoparticles biocompatibility and cellular uptake in a 3D human lung model. *Nanomedicine*, **2020**, 15, 259-271	5.6	8
170	Simple and fast evaluation of relaxation parameters of magnetic nanoparticles. *Journal of Magnetism and Magnetic Materials*, **2020**, 499, 166176	2.8	9
169	Holistic View on Cell Survival and DNA Damage: How Model-Based Data Analysis Supports Exploration of Dynamics in Biological Systems. *Computational and Mathematical Methods in Medicine*, **2020**, 2020, 5972594	2.8	0
168	An Inflamed Human Alveolar Model for Testing the Efficiency of Anti-inflammatory Drugs. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 987	5.8	4
167	An In Vitro Lung System to Assess the Proinflammatory Hazard of Carbon Nanotube Aerosols. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	13
166	Increased Uptake of Silica Nanoparticles in Inflamed Macrophages but Not upon Co-Exposure to Micron-Sized Particles. *Cells*, **2020**, 9,	7.9	4

165	Rapid and sensitive quantification of cell-associated multi-walled carbon nanotubes. *Nanoscale*, **2020**, 12, 17362-17372	7.7	4
164	Investigating a Lock-In Thermal Imaging Setup for the Detection and Characterization of Magnetic Nanoparticles. *Nanomaterials*, **2020**, 10,	5.4	4
163	When plants and plastic interact. *Nature Nanotechnology*, **2020**, 15, 729-730	28.7	4
162	From Bioinspired Glue to Medicine: Polydopamine as a Biomedical Material. *Materials*, **2020**, 13,	3.5	22
161	Bioprinting for Human Respiratory and Gastrointestinal In Vitro Models. *Methods in Molecular Biology*, **2020**, 2140, 199-215	1.4	3
160	Nanoparticle administration method in cell culture alters particle-cell interaction. *Scientific Reports*, **2019**, 9, 900	4.9	33
159	Precision of Taylor Dispersion. *Analytical Chemistry*, **2019**, 91, 9946-9951	7.8	6
158	A hydrofluoric acid-free method to dissolve and quantify silica nanoparticles in aqueous and solid matrices. *Scientific Reports*, **2019**, 9, 7938	4.9	14
157	Dynamic DNA Damage and Repair Modeling: Bridging the Gap Between Experimental Damage Readout and Model Structure. *Communications in Computer and Information Science*, **2019**, 127-137	0.3	1
156	Polymer-Coated Gold Nanospheres Do Not Impair the Innate Immune Function of Human B Lymphocytes in Vitro. *ACS Nano*, **2019**, 13, 6790-6800	16.7	13
155	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	0.6	7
154	Nanoparticle-Cell Interactions: Overview of Uptake, Intracellular Fate and Induction of Cell Responses. *Nanoscience and Technology*, **2019**, 153-170	0.6	5
153	Profibrotic Activity of Multiwalled Carbon Nanotubes Upon Prolonged Exposures in Different Human Lung Cell Types. *Applied in Vitro Toxicology*, **2019**, 5, 47-61	1.3	17
152	Artificial Lysosomal Platform to Study Nanoparticle Long-term Stability. *Chimia*, **2019**, 73, 55-58	1.3	4
151	A Bio-Inspired Amplification Cascade for the Detection of Rare Cancer Cells. *Chimia*, **2019**, 73, 63-68	1.3	2
150	Lock-In Thermography to Analyze Plasmonic Nanoparticle Dispersions. *Particle and Particle Systems Characterization*, **2019**, 36, 1900224	3.1	6
149	Phase Transformation of Superparamagnetic Iron Oxide Nanoparticles via Thermal Annealing: Implications for Hyperthermia Applications. *ACS Applied Nano Materials*, **2019**, 2, 4462-4470	5.6	8
148	Reduction of Nanoparticle Load in Cells by Mitosis but Not Exocytosis. *ACS Nano*, **2019**, 13, 7759-7770	16.7	19

147	Assessing meso- and microplastic pollution in the Ligurian and Tyrrhenian Seas. *Marine Pollution Bulletin*, **2019**, 149, 110572	6.7	20
146	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	7.9	7
145	Quantification of Carbon Nanotube Doses in Adherent Cell Culture Assays Using UV-VIS-NIR Spectroscopy. *Nanomaterials*, **2019**, 9,	5.4	7
144	Nanoparticles and Taylor Dispersion as a Linear Time-Invariant System. *Analytical Chemistry*, **2019**, 91, 1217-1221	7.8	8
143	Biocompatible thermo- and magneto-responsive shape-memory polyurethane bionanocomposites. *Materials Science and Engineering C*, **2019**, 97, 658-668	8.3	14
142	Emergence of Nanoplastic in the Environment and Possible Impact on Human Health. *Environmental Science & Technology*, **2019**, 53, 1748-1765	10.3	356
141	Heating behavior of magnetic iron oxide nanoparticles at clinically relevant concentration. *Journal of Magnetism and Magnetic Materials*, **2019**, 474, 637-642	2.8	14
140	The crux of positive controls - Pro-inflammatory responses in lung cell models. *Toxicology in Vitro*, **2019**, 54, 189-193	3.6	9
139	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	9.3	15
138	Hypothesis Test of the Photon Count Distribution for Dust Discrimination in Dynamic Light Scattering. *Analytical Chemistry*, **2018**, 90, 3656-3660	7.8	8
137	A realistic in vitro exposure revealed seasonal differences in (pro-)inflammatory effects from ambient air in Fribourg, Switzerland. *Inhalation Toxicology*, **2018**, 30, 40-48	2.7	6
136	Probing nano-scale viscoelastic response in air and in liquid with dynamic atomic force microscopy. *Soft Matter*, **2018**, 14, 3998-4006	3.6	6
135	Assessment of lung cell toxicity of various gasoline engine exhausts using a versatile in□vitro exposure system. *Environmental Pollution*, **2018**, 235, 263-271	9.3	19
134	Biodistribution, Clearance, and Long-Term Fate of Clinically Relevant Nanomaterials. *Advanced Materials*, **2018**, 30, e1704307	24	167
133	Taylor Dispersion of Inorganic Nanoparticles and Comparison to Dynamic Light Scattering and Transmission Electron Microscopy. *Colloids and Interface Science Communications*, **2018**, 22, 29-33	5.4	24
132	Nanoparticle-Cell Interaction: A Cell Mechanics Perspective. *Advanced Materials*, **2018**, 30, e1704463	24	60
131	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	7.4	17
130	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	3.8	33

129	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	6.9	18
128	A rational and iterative process for targeted nanoparticle design and validation. *Colloids and Surfaces B: Biointerfaces*, **2018**, 171, 579-589	6	3
127	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	5.8	13
126	Distribution of polymer-coated gold nanoparticles in a 3D lung model and indication of apoptosis after repeated exposure. *Nanomedicine*, **2018**, 13, 1169-1185	5.6	8
125	Polydopamine/Transferrin Hybrid Nanoparticles for Targeted Cell-Killing. *Nanomaterials*, **2018**, 8,	5.4	14
124	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	24	8
123	Carbon nanodots: Opportunities and limitations to study their biodistribution at the human lung epithelial tissue barrier. *Biointerphases*, **2018**, 13, 06D404	1.8	5
122	Beyond Global Charge: Role of Amine Bulkiness and Protein Fingerprint on Nanoparticle-Cell Interaction. *Small*, **2018**, 14, e1802088	11	11
121	Acute effects of multi-walled carbon nanotubes on primary bronchial epithelial cells from COPD patients. *Nanotoxicology*, **2018**, 12, 699-711	5.3	13
120	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	10.4	21
119	A rapid screening method to evaluate the impact of nanoparticles on macrophages. *Nanoscale*, **2017**, 9, 2492-2504	7.7	14
118	Interaction of biomedical nanoparticles with the pulmonary immune system. *Journal of Nanobiotechnology*, **2017**, 15, 6	9.4	28
117	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	4.9	13
116	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	16.7	32
115	Quantifying nanoparticle cellular uptake: which method is best?. *Nanomedicine*, **2017**, 12, 1095-1099	5.6	45
114	Cellular Shuttles: Monocytes/Macrophages Exhibit Transendothelial Transport of Nanoparticles under Physiological Flow. *ACS Applied Materials & Interfaces*, **2017**, 9, 18501-18511	9.5	24
113	Assumption-free morphological quantification of single anisotropic nanoparticles and aggregates. *Nanoscale*, **2017**, 9, 4918-4927	7.7	6
112	Aerosol Delivery of Functionalized Gold Nanoparticles Target and Activate Dendritic Cells in a 3D Lung Cellular Model. *ACS Nano*, **2017**, 11, 375-383	16.7	37

111	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	3	14
110	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	8.4	29
109	Form Follows Function: Nanoparticle Shape and Its Implications for Nanomedicine. *Chemical Reviews*, **2017**, 117, 11476-11521	68.1	300
108	In vitro approaches to assess the hazard of nanomaterials. *NanoImpact*, **2017**, 8, 99-116	5.6	126
107	Assessing the Stability of Fluorescently Encoded Nanoparticles in Lysosomes by Using Complementary Methods. *Angewandte Chemie*, **2017**, 129, 13567-13571	3.6	2
106	Assessing the Stability of Fluorescently Encoded Nanoparticles in Lysosomes by Using Complementary Methods. *Angewandte Chemie - International Edition*, **2017**, 56, 13382-13386	16.4	15
105	Cellulose Nanocrystals with Tethered Polymer Chains: Chemically Patchy versus Uniform Decoration. *ACS Macro Letters*, **2017**, 6, 892-897	6.6	34
104	Taylor dispersion of nanoparticles. *Journal of Nanoparticle Research*, **2017**, 19, 1	2.3	18
103	Measuring the heating power of magnetic nanoparticles: an overview of currently used methods. *Materials Today: Proceedings*, **2017**, 4, S107-S117	1.4	13
102	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	3.8	11
101	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	3.8	14
100	Speckle-Visibility Spectroscopy of Depolarized Dynamic Light Scattering. *Journal of Physical Chemistry B*, **2017**, 121, 7999-8007	3.4	10
99	Lock-in thermography as a rapid and reproducible thermal characterization method for magnetic nanoparticles. *Journal of Magnetism and Magnetic Materials*, **2017**, 427, 206-211	2.8	8
98	Dynamic and biocompatible thermo-responsive magnetic hydrogels that respond to an alternating magnetic field. *Journal of Magnetism and Magnetic Materials*, **2017**, 427, 212-219	2.8	20
97	Cellulose Nanocrystals: Surface Modification, Applications and Opportunities at Interfaces. *Chimia*, **2017**, 71, 376-383	1.3	18
96	Plasmonic nanoparticles and their characterization in physiological fluids. *Colloids and Surfaces B: Biointerfaces*, **2016**, 137, 39-49	6	29
95	Current in vitro approaches to assess nanoparticle interactions with lung cells. *Nanomedicine*, **2016**, 11, 2457-69	5.6	24
94	Combined exposure of diesel exhaust particles and respirable Soufrière Hills volcanic ash causes a (pro-)inflammatory response in an in vitro multicellular epithelial tissue barrier model. *Particle and Fibre Toxicology*, **2016**, 13, 67	8.4	27

93	Engineered nanomaterials: toward effective safety management in research laboratories. *Journal of Nanobiotechnology*, **2016**, 14, 21	9.4	17
92	Pulmonary delivery of cationic gold nanoparticles boost antigen-specific CD4 T Cell Proliferation. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2016**, 12, 1815-1826	6	33
91	Diesel exhaust: current knowledge of adverse effects and underlying cellular mechanisms. *Archives of Toxicology*, **2016**, 90, 1541-53	5.8	152
90	Hazard identification of exhausts from gasoline-ethanol fuel blends using a multi-cellular human lung model. *Environmental Research*, **2016**, 151, 789-796	7.9	20
89	A new angle on dynamic depolarized light scattering: number-averaged size distribution of nanoparticles in focus. *Nanoscale*, **2016**, 8, 15813-21	7.7	18
88	Fate of cellulose nanocrystal aerosols deposited on the lung cell surface in vitro. *Biomacromolecules*, **2015**, 16, 1267-75	6.9	57
87	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	2	14
86	Repeated exposure to carbon nanotube-based aerosols does not affect the functional properties of a 3D human epithelial airway model. *Nanotoxicology*, **2015**, 9, 983-93	5.3	41
85	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	8.4	61
84	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	7.1	10
83	Nanoparticle Polydispersity Can Strongly Affect In Vitro Dose. *Particle and Particle Systems Characterization*, **2015**, 32, 321-333	3.1	24
82	Uptake and Intracellular Fate of Peptide Surface-Functionalized Silica Hybrid Magnetic Nanoparticles In Vitro. *Particle and Particle Systems Characterization*, **2015**, 32, 188-196	3.1	2
81	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, 5977-86	4.4	17
80	In vitro-ex vivo model systems for nanosafety assessment. *European Journal of Nanomedicine*, **2015**, 7,		13
79	Ultrathin Ceramic Membranes as Scaffolds for Functional Cell Coculture Models on a Biomimetic Scale. *BioResearch Open Access*, **2015**, 4, 457-68	2.4	8
78	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	8.4	24
77	A Fast and Reliable Method for Screening of Exhaust Emission Toxicity in Lung Cells. *Chimia*, **2015**, 69, 68	1.3	
76	Macromol. Rapid Commun. 6/2015. *Macromolecular Rapid Communications*, **2015**, 36, 576-576	4.8	1

75	Filling polymersomes with polymers by peroxidase-catalyzed atom transfer radical polymerization. *Macromolecular Rapid Communications*, **2015**, 36, 507-14	4.8	42
74	A biological perspective toward the interaction of theranostic nanoparticles with the bloodstream - what needs to be considered?. *Frontiers in Chemistry*, **2015**, 3, 7	5	7
73	Nanoparticle colloidal stability in cell culture media and impact on cellular interactions. *Chemical Society Reviews*, **2015**, 44, 6287-305	58.5	576
72	Avoiding drying-artifacts in transmission electron microscopy: Characterizing the size and colloidal state of nanoparticles. *Scientific Reports*, **2015**, 5, 9793	4.9	123
71	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, 633-44	6	64
70	Catechol-derivatized poly(vinyl alcohol) as a coating molecule for magnetic nanoclusters. *Journal of Magnetism and Magnetic Materials*, **2015**, 380, 157-162	2.8	9
69	Engineering an in vitro air-blood barrier by 3D bioprinting. *Scientific Reports*, **2015**, 5, 7974	4.9	207
68	A guide to investigating colloidal nanoparticles by cryogenic transmission electron microscopy: pitfalls and benefits. *AIMS Biophysics*, **2015**, 2, 245-258	0.8	6
67	Encoded Particles: Fluorescence-Encoded Gold Nanoparticles: Library Design and Modulation of Cellular Uptake into Dendritic Cells (Small 7/2014). *Small*, **2014**, 10, 1440-1440	11	1
66	Thermally reversible self-assembly of nanoparticles via polymer crystallization. *Macromolecular Rapid Communications*, **2014**, 35, 2012-7	4.8	2
65	Dynamic Depolarized Light Scattering of Small Round Plasmonic Nanoparticles: When Imperfection is Only Perfect. *Journal of Physical Chemistry C*, **2014**, 118, 17968-17974	3.8	26
64	Test-methods on the test-bench: a comparison of complete exhaust and exhaust particle extracts for genotoxicity/mutagenicity assessment. *Environmental Science & Technology*, **2014**, 48, 5237-44	10.3	8
63	Modeling nanoparticle-alveolar epithelial cell interactions under breathing conditions using captive bubble surfactometry. *Langmuir*, **2014**, 30, 4924-32	4	15
62	Polyvinyl alcohol as a biocompatible alternative for the passivation of gold nanorods. *Angewandte Chemie - International Edition*, **2014**, 53, 12613-7	16.4	11
61	Insertion of nanoparticle clusters into vesicle bilayers. *ACS Nano*, **2014**, 8, 3451-60	16.7	71
60	Inhalation Pathway as a Promising Portal of Entry: What Has to Be Considered in Designing New Nanomaterials for Biomedical Application? **2014**, 205-222		7
59	Quantification of gold nanoparticle cell uptake under controlled biological conditions and adequate resolution. *Nanomedicine*, **2014**, 9, 607-21	5.6	59
58	The Role of the Protein Corona in Fiber Structure-Activity Relationships. *Fibers*, **2014**, 2, 187-210	3.7	3

57	Polyvinylalkohol als biokompatibles Polymer zur Passivierung von Goldnanostäbchen. *Angewandte Chemie*, **2014**, 126, 12821-12825	3.6	
56	Mimicking exposures to acute and lifetime concentrations of inhaled silver nanoparticles by two different in vitro approaches. *Beilstein Journal of Nanotechnology*, **2014**, 5, 1357-70	3	46
55	Multi-Functional Magnetic Photoluminescent Photocatalytic Polystyrene-Based Micro- and Nano-Fibers Obtained by Electrospinning. *Fibers*, **2014**, 2, 75-91	3.7	6
54	Different endocytotic uptake mechanisms for nanoparticles in epithelial cells and macrophages. *Beilstein Journal of Nanotechnology*, **2014**, 5, 1625-36	3	289
53	Size-dependent accumulation of particles in lysosomes modulates dendritic cell function through impaired antigen degradation. *International Journal of Nanomedicine*, **2014**, 9, 3885-902	7.3	37
52	Quantification of nanoparticles at the single-cell level: an overview about state-of-the-art techniques and their limitations. *Nanomedicine*, **2014**, 9, 1885-900	5.6	52
51	An in vitro testing strategy towards mimicking the inhalation of high aspect ratio nanoparticles. *Particle and Fibre Toxicology*, **2014**, 11, 40	8.4	77
50	Advanced human in vitro models to assess metal oxide nanoparticle-cell interactions. *MRS Bulletin*, **2014**, 39, 984-989	3.2	11
49	MULTIFUNCTIONALIZED SPIONs FOR NUCLEAR TARGETING: CELL UPTAKE AND GENE EXPRESSION. *Nano*, **2014**, 09, 1450009	1.1	2
48	Fluorescence-encoded gold nanoparticles: library design and modulation of cellular uptake into dendritic cells. *Small*, **2014**, 10, 1341-50	11	46
47	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	4.4	57
46	Magnetoliposomes: opportunities and challenges. *European Journal of Nanomedicine*, **2014**, 6,		42
45	Preparation and characterization of functional silica hybrid magnetic nanoparticles. *Journal of Magnetism and Magnetic Materials*, **2014**, 362, 72-79	2.8	50
44	Exposure of silver-nanoparticles and silver-ions to lung cells in vitro at the air-liquid interface. *Particle and Fibre Toxicology*, **2013**, 10, 11	8.4	103
43	Surface charge of polymer coated SPIONs influences the serum protein adsorption, colloidal stability and subsequent cell interaction in vitro. *Nanoscale*, **2013**, 5, 3723-32	7.7	113
42	Bioavailability of silver nanoparticles and ions: from a chemical and biochemical perspective. *Journal of the Royal Society Interface*, **2013**, 10, 20130396	4.1	234
41	Can the Ames test provide an insight into nano-object mutagenicity? Investigating the interaction between nano-objects and bacteria. *Nanotoxicology*, **2013**, 7, 1373-85	5.3	34
40	Gold nanorods: controlling their surface chemistry and complete detoxification by a two-step place exchange. *Angewandte Chemie - International Edition*, **2013**, 52, 1934-8	16.4	76

39	Reduction in (pro-)inflammatory responses of lung cells exposed in vitro to diesel exhaust treated with a non-catalyzed diesel particle filter. *Atmospheric Environment*, **2013**, 81, 117-124	5.3	18
38	Comparison of the toxicity of diesel exhaust produced by bio- and fossil diesel combustion in human lung cells in vitro. *Atmospheric Environment*, **2013**, 81, 380-388	5.3	50
37	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	2	8
36	Spatial SPION Localization in Liposome Membranes. *IEEE Transactions on Magnetics*, **2013**, 49, 166-171	2	4
35	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	5.7	79
34	Bis-TEGylated Poly(p-benzamide)s: Combining Organosolubility with Shape Persistence. *Macromolecules*, **2013**, 46, 5520-5530	5.5	11
33	Assessing the impact of the physical properties of industrially produced carbon nanotubes on their interaction with human primary macrophages in vitro. *BioNanoMaterials*, **2013**, 14,		4
32	Gold Nanorods: Controlling Their Surface Chemistry and Complete Detoxification by a Two-Step Place Exchange. *Angewandte Chemie*, **2013**, 125, 1988-1992	3.6	12
31	Nanomaterials and the human lung: what is known and what must be deciphered to realise their potential advantages?. *Swiss Medical Weekly*, **2013**, 143, w13758	3.1	18
30	Human epithelial cells in vitro Are they an advantageous tool to help understand the nanomaterial-biological barrier interaction? **2012**, 4, 1-19		20
29	Amino covalent binding approach on iron oxide nanoparticle surface: Toward biological applications. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2012**, 415, 98-104	5.1	14
28	Assessing the in vitro and in vivo toxicity of superparamagnetic iron oxide nanoparticles. *Chemical Reviews*, **2012**, 112, 2323-38	68.1	440
27	Nanoparticles and cells: an interdisciplinary approach. *Chimia*, **2012**, 66, 104-9	1.3	4
26	Biomedical nanoparticles modulate specific CD4+ T cell stimulation by inhibition of antigen processing in dendritic cells. *Nanotoxicology*, **2011**, 5, 606-21	5.3	81
25	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	2.8	33
24	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, 1410-20	9.5	32
23	Control of morphology and nanostructure of copper and cobalt oxalates: effect of complexing ions, polymeric additives and molecular weight. *Nanoscale*, **2010**, 2, 2470-7	7.7	12
22	The in vivo performance of magnetic particle-loaded injectable, in situ gelling, carriers for the delivery of local hyperthermia. *Biomaterials*, **2010**, 31, 691-705	15.6	110

21	Management of nanomaterials safety in research environment. *Particle and Fibre Toxicology*, **2010**, 7, 40	8.4	57
20	Particle size distribution measurements of manganese-doped ZnS nanoparticles. *Analytical Chemistry*, **2009**, 81, 3889-95	7.8	125
19	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, 529-38	5.7	79
18	Local moderate magnetically induced hyperthermia using an implant formed in situ in a mouse tumor model. *International Journal of Hyperthermia*, **2009**, 25, 229-39	3.7	23
17	Co-encapsulation of dexamethasone 21-acetate and SPIONs into biodegradable polymeric microparticles designed for intra-articular delivery. *Journal of Microencapsulation*, **2008**, 25, 339-50	3.4	29
16	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, 129-37	5.7	209
15	Solder doped polycaprolactone scaffold enables reproducible laser tissue soldering. *Lasers in Surgery and Medicine*, **2008**, 40, 716-25	3.6	25
14	Superparamagnetic nanoparticles as a powerful systems biology characterization tool in the physiological context. *Angewandte Chemie - International Edition*, **2008**, 47, 7857-60	16.4	34
13	Superparamagnetic Nanoparticles as a Powerful Systems Biology Characterization Tool in the Physiological Context. *Angewandte Chemie*, **2008**, 120, 7975-7978	3.6	1
12	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	2.8	17
11	Optical properties of annealed Mn2+-doped ZnS nanoparticles. *Journal of Luminescence*, **2008**, 128, 92-98	3.8	47
10	Fixed bed reactor for solid-phase surface derivatization of superparamagnetic nanoparticles. *Bioconjugate Chemistry*, **2007**, 18, 1684-90	6.3	22
9	Superparamagnetic iron oxide nanoparticles (SPIONs): from synthesis to in vivo studies--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, 289-97	3.4	61
8	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	2.8	74
7	PRODUCTION AND BIOFUNCTIONALIZATION OF MAGNETIC NANOBEADS FOR MAGNETIC SEPARATION OF MESSENGER RNA. *Biophysical Reviews and Letters*, **2007**, 02, 109-122	1.2	3
6	A mixture of ferritin and magnetite nanoparticles mimics the magnetic properties of human brain tissue. *Physical Review B*, **2006**, 73,	3.3	39
5	Interaction of functionalized superparamagnetic iron oxide nanoparticles with brain structures. *Journal of Pharmacology and Experimental Therapeutics*, **2006**, 318, 108-16	4.7	151
4	Enhancement of the efficiency of non-viral gene delivery by application of pulsed magnetic field. *Nucleic Acids Research*, **2006**, 34, e40	20.1	101

3	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, 3261-8	1.3	19
2	Uptake and biocompatibility of functionalized poly(vinylalcohol) coated superparamagnetic maghemite nanoparticles by synoviocytes in vitro. *Journal of Nanoscience and Nanotechnology*, **2006**, 6, 2829-40	1.3	28
1	Fluid Menisci and In Vitro Particle Dosimetry of Submerged Cells		1