Hanna L Karlsson

List of Publications by Year
in descending order

52 papers	6,221 citations	172457 29 h-index	189892 50 g-index
52 all docs	52 docs citations	52 times ranked	8825 citing authors

#	Article	IF	Citations
1	Copper Oxide Nanoparticles Are Highly Toxic: A Comparison between Metal Oxide Nanoparticles and Carbon Nanotubes. Chemical Research in Toxicology, 2008, 21, 1726-1732.	3.3	1,239
2	Size-dependent cytotoxicity of silver nanoparticles in human lung cells: the role of cellular uptake, agglomeration and Ag release. Particle and Fibre Toxicology, 2014, 11, 11.	6.2	871
3	Size-dependent toxicity of metal oxide particlesâ€"A comparison between nano- and micrometer size. Toxicology Letters, 2009, 188, 112-118.	0.8	823
4	Surface Characteristics, Copper Release, and Toxicity of Nanoâ€•and Micrometerâ€Sized Copper and Copper(II) Oxide Particles: A Crossâ€Disciplinary Study. Small, 2009, 5, 389-399.	10.0	353
5	Intracellular Uptake and Toxicity of Ag and CuO Nanoparticles: A Comparison Between Nanoparticles and their Corresponding Metal Ions. Small, 2013, 9, 970-982.	10.0	270
6	Subway Particles Are More Genotoxic than Street Particles and Induce Oxidative Stress in Cultured Human Lung Cells. Chemical Research in Toxicology, 2005, 18, 19-23.	3.3	268
7	Cell membrane damage and protein interaction induced by copper containing nanoparticlesâ€"Importance of the metal release process. Toxicology, 2013, 313, 59-69.	4.2	222
8	The comet assay in nanotoxicology research. Analytical and Bioanalytical Chemistry, 2010, 398, 651-666.	3.7	210
9	Comparison of genotoxic and inflammatory effects of particles generated by wood combustion, a road simulator and collected from street and subway. Toxicology Letters, 2006, 165, 203-211.	0.8	126
10	Mechanisms Related to the Genotoxicity of Particles in the Subway and from Other Sources. Chemical Research in Toxicology, 2008, 21, 726-731.	3.3	125
11	Epigenetic effects of nano-sized materials. Toxicology, 2013, 313, 3-14.	4.2	112
12	Can the comet assay be used reliably to detect nanoparticleâ€induced genotoxicity?. Environmental and Molecular Mutagenesis, 2015, 56, 82-96.	2.2	110
13	Nickel Release, ROS Generation and Toxicity of Ni and NiO Micro- and Nanoparticles. PLoS ONE, 2016, 11, e0159684.	2.5	109
14	Microsomal Glutathione Transferase 1 Protects Against Toxicity Induced by Silica Nanoparticles but Not by Zinc Oxide Nanoparticles. ACS Nano, 2012, 6, 1925-1938.	14.6	100
15	Genotoxicity of TiO₂nanoparticles assessed by mini-gel comet assay and micronucleus scoring with flow cytometry. Mutagenesis, 2017, 32, 127-137.	2.6	92
16	Mechanism-based genotoxicity screening of metal oxide nanoparticles using the ToxTracker panel of reporter cell lines. Particle and Fibre Toxicology, 2014, 11, 41.	6.2	86
17	Next-Generation Sequencing Reveals Low-Dose Effects of Cationic Dendrimers in Primary Human Bronchial Epithelial Cells. ACS Nano, 2015, 9, 146-163.	14.6	73
18	Bioaccessibility, bioavailability and toxicity of commercially relevant iron- and chromium-based particles: in vitro studies with an inhalation perspective. Particle and Fibre Toxicology, 2010, 7, 23.	6.2	70

#	Article	IF	Citations
19	Calcium-dependent cyto- and genotoxicity of nickel metal and nickel oxide nanoparticles in human lung cells. Particle and Fibre Toxicology, 2018, 15, 32.	6.2	70
20	RNA-sequencing reveals long-term effects of silver nanoparticles on human lung cells. Scientific Reports, 2018, 8, 6668.	3.3	68
21	Cerium oxide nanoparticles inhibit differentiation of neural stem cells. Scientific Reports, 2017, 7, 9284.	3.3	65
22	Size-dependent genotoxicity of silver, gold and platinum nanoparticles studied using the mini-gel comet assay and micronucleus scoring with flow cytometry. Mutagenesis, 2018, 33, 77-85.	2.6	65
23	Genotoxic and mutagenic properties of Ni and NiO nanoparticles investigated by comet assay, Î³â€H2AX staining, <i>Hprt</i> mutation assay and ToxTracker reporter cell lines. Environmental and Molecular Mutagenesis, 2018, 59, 211-222.	2.2	64
24	Genotoxicity of airborne particulate matter: the role of cellâ€“particle interaction and of substances with adduct-forming and oxidizing capacity. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2004, 565, 1-10.	1.7	59
25	Effect of sonication and serum proteins on copper release from copper nanoparticles and the toxicity towards lung epithelial cells. Nanotoxicology, 2011, 5, 269-281.	3.0	53
26	Mechanistic insight into reactivity and (geno)toxicity of well-characterized nanoparticles of cobalt metal and oxides. Nanotoxicology, 2018, 12, 602-620.	3.0	46
27	Emerging metrology for high-throughput nanomaterial genotoxicology. Mutagenesis, 2017, 32, 215-232.	2.6	43
28	The importance of extracellular speciation and corrosion of copper nanoparticles on lung cell membrane integrity. Colloids and Surfaces B: Biointerfaces, 2016, 141, 291-300.	5.0	37
29	Toxicity of Metal and Metal Oxide Nanoparticles. , 2015, , 75-112.		33
30	Inflammation and (secondary) genotoxicity of Ni and NiO nanoparticles. Nanotoxicology, 2019, 13, 1060-1072.	3.0	32
31	Macrophage-Assisted Dissolution of Gold Nanoparticles. ACS Applied Bio Materials, 2019, 2, 1006-1016.	4.6	28
32	High variability in toxicity of welding fume nanoparticles from stainless steel in lung cells and reporter cell lines: the role of particle reactivity and solubility. Nanotoxicology, 2019, 13, 1293-1309.	3.0	27
33	Dry Generation of CeO2 Nanoparticles and Deposition onto a Co-Culture of A549 and THP-1 Cells in Air-Liquid Interfaceâ€”Dosimetry Considerations and Comparison to Submerged Exposure. Nanomaterials, 2020, 10, 618.	4.1	27
34	Effects on human bronchial epithelial cells following low-dose chronic exposure to nanomaterials: A 6-month transformation study. Toxicology in Vitro, 2017, 44, 230-240.	2.4	22
35	Adverse Outcome Pathway Development for Assessment of Lung Carcinogenicity by Nanoparticles. Frontiers in Toxicology, 2021, 3, 653386.	3.1	22
36	Optimization of an airâ€“liquid interface exposure system for assessing toxicity of airborne nanoparticles. Journal of Applied Toxicology, 2016, 36, 1294-1301.	2.8	20

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37	In vitro genotoxicity of airborne Niâ€NP in airâ€"liquid interface. Journal of Applied Toxicology, 2017, 37, 1420-1427.	2.8	18
38	ToxTracker Reporter Cell Lines as a Tool for Mechanism-Based (Geno)Toxicity Screening of Nanoparticlesâ€"Metals, Oxides and Quantum Dots. Nanomaterials, 2020, 10, 110.	4.1	18
39	Silver nanoparticles modulate lipopolysaccharide-triggered Toll-like receptor signaling in immune-competent human cell lines. Nanoscale Advances, 2020, 2, 648-658.	4.6	18
40	Transcriptome Profiling and Toxicity Following Long-Term, Low Dose Exposure of Human Lung Cells to Ni and NiO Nanoparticlesâ€"Comparison with NiCl2. Nanomaterials, 2020, 10, 649.	4.1	18
41	Surface passivity largely governs the bioaccessibility of nickel-based powder particles at human exposure conditions. Regulatory Toxicology and Pharmacology, 2016, 81, 162-170.	2.7	16
42	Silver Nanoparticles Alter Cell Viability Ex Vivo and in Vitro and Induce Proinflammatory Effects in Human Lung Fibroblasts. Nanomaterials, 2020, 10, 1868.	4.1	14
43	Adsorption of Horseradish Peroxidase on Metallic Nanoparticles: Effects on Reactive Oxygen Species Detection Using 2â€²,7â€²-Dichlorofluorescin Diacetate. Chemical Research in Toxicology, 2021, 34, 1481-1495.	3.3	14
44	Toxicity evaluation of particles formed during 3D-printing: Cytotoxic, genotoxic, and inflammatory response in lung and macrophage models. Toxicology, 2022, 467, 153100.	4.2	13
45	<i>In vivo</i> micronucleus screening in zebrafish by flow cytometry. Mutagenesis, 2016, 31, 643-653.	2.6	12
46	Genotoxicity and inflammatory potential of stainless steel welding fume particles: an in vitro study on standard vs Cr(VI)-reduced flux-cored wires and the role of released metals. Archives of Toxicology, 2021, 95, 2961-2975.	4.2	11
47	Gold Nanoparticles Dissolve Extracellularly in the Presence of Human Macrophages. International Journal of Nanomedicine, 2021, Volume 16, 5895-5908.	6.7	7
48	Bioaccessibility and reactivity of alloy powders used in powder bed fusion additive manufacturing. Materialia, 2021, 19, 101196.	2.7	7
49	Impact of mono-culture vs. Co-culture of keratinocytes and monocytes on cytokine responses induced by important skin sensitizers. Journal of Immunotoxicology, 2021, 18, 74-84.	1.7	5
50	Toxicity of metal and metal oxide nanoparticles. , 2022, , 87-126.		5
51	Primary and Secondary Genotoxicity of Nanoparticles: Establishing a Co-Culture Protocol for Assessing Micronucleus Using Flow Cytometry. Frontiers in Toxicology, 2022, 4, 845987.	3.1	3
52	Modelled lung deposition and retention of welding fume particles in occupational scenarios: a comparison to doses used in vitro. Archives of Toxicology, 2022, 96, 969-985.	4.2	2