Angela Ivask

List of Publications by Year
in descending order

75 papers	8,868 citations	40 h-index	76 g-index
88 all docs	88 docs citations	88 times ranked	11839 citing authors

76196

71532

#	Article	IF	Citations
1	Toxicity of nanosized and bulk ZnO, CuO and TiO2 to bacteria Vibrio fischeri and crustaceans Daphnia magna and Thamnocephalus platyurus. Chemosphere, 2008, 71, 1308-1316.	4.2	1,303
2	Toxicity of Ag, CuO and ZnO nanoparticles to selected environmentally relevant test organisms and mammalian cells in vitro: a critical review. Archives of Toxicology, 2013, 87, 1181-1200.	1.9	1,016
3	Toxicity of nanoparticles of ZnO, CuO and TiO2 to yeast Saccharomyces cerevisiae. Toxicology in Vitro, 2009, 23, 1116-1122.	1.1	531
4	Size-Dependent Toxicity of Silver Nanoparticles to Bacteria, Yeast, Algae, Crustaceans and Mammalian Cells In Vitro. PLoS ONE, 2014, 9, e102108.	1.1	465
5	Toxicity Mechanisms in Escherichia coli Vary for Silver Nanoparticles and Differ from Ionic Silver. ACS Nano, 2014, 8, 374-386.	7.3	458
6	Ecotoxicity of nanoparticles of CuO and ZnO in natural water. Environmental Pollution, 2010, 158, 41-47.	3.7	384
7	Mechanisms of toxic action of Ag, ZnO and CuO nanoparticles to selected ecotoxicological test organisms and mammalian cells <i>in vitro</i>: A comparative review. Nanotoxicology, 2014, 8, 57-71.	1.6	297
8	Particle-Cell Contact Enhances Antibacterial Activity of Silver Nanoparticles. PLoS ONE, 2013, 8, e64060.	1.1	208
9	Propidium iodide staining underestimates viability of adherent bacterial cells. Scientific Reports, 2019, 9, 6483.	1.6	203
10	Biotests and Biosensors for Ecotoxicology of Metal Oxide Nanoparticles: A Minireview. Sensors, 2008, 8, 5153-5170.	2.1	193
11	Toxicity of 11 Metal Oxide Nanoparticles to Three Mammalian Cell Types <i>In V.itro</i>. Current Topics in Medicinal Chemistry, 2015, 15, 1914-1929.	1.0	190
12	Photocatalytic antibacterial activity of nano-TiO2 (anatase)-based thin films: Effects on Escherichia coli cells and fatty acids. Journal of Photochemistry and Photobiology B: Biology, 2015, 142, 178-185.	1.7	190
13	Sub-toxic effects of CuO nanoparticles on bacteria: Kinetics, role of Cu ions and possible mechanisms of action. Environmental Pollution, 2012, 169, 81-89.	3.7	180
14	Profiling of the reactive oxygen species-related ecotoxicity of CuO, ZnO, TiO2, silver and fullerene nanoparticles using a set of recombinant luminescent Escherichia coli strains: differentiating the impact of particles and solubilised metals. Analytical and Bioanalytical Chemistry, 2010, 398, 701-716.	1.9	175
15	A suite of recombinant luminescent bacterial strains for the quantification of bioavailable heavy metals and toxicity testing. BMC Biotechnology, 2009, 9, 41.	1.7	164
16	Mapping the Dawn of Nanoecotoxicological Research. Accounts of Chemical Research, 2013, 46, 823-833.	7.6	143
17	Construction and use of specific luminescent recombinant bacterial sensors for the assessment of bioavailable fraction of cadmium, zinc, mercury and chromium in the soil. Soil Biology and Biochemistry, 2002, 34, 1439-1447.	4.2	138
18	Detection of bioavailable heavy metals in EILATox-Oregon samples using whole-cell luminescent bacterial sensors in suspension or immobilized onto fibre-optic tips. Journal of Applied Toxicology, 2004, 24, 333-342.	1.4	131

#	Article	IF	Citations
19	Toxicity of Metal Oxide Nanoparticles in <i>Escherichia coli</i> Correlates with Conduction Band and Hydration Energies. Environmental Science & Technology, 2015, 49, 1105-1112.	4.6	127
20	Cu Nanoparticles Have Different Impacts in <i>Escherichia coli</i> and <i>Lactobacillus brevis</i> than Their Microsized and Ionic Analogues. ACS Nano, 2015, 9, 7215-7225.	7.3	120
21	NanoE-Tox: New and in-depth database concerning ecotoxicity of nanomaterials. Beilstein Journal of Nanotechnology, 2015, 6, 1788-1804.	1.5	116
22	Interplay of Different Transporters in the Mediation of Divalent Heavy Metal Resistance in <i>Pseudomonas putida</i> KT2440. Journal of Bacteriology, 2008, 190, 2680-2689.	1.0	105
23	Fibre-optic bacterial biosensors and their application for the analysis of bioavailable Hg and As in soils and sediments from Aznalcollar mining area in Spain. Biosensors and Bioelectronics, 2007, 22, 1396-1402.	5.3	96
24	A novel method for comparison of biocidal properties of nanomaterials to bacteria, yeasts and algae. Journal of Hazardous Materials, 2015, 286, 75-84.	6.5	94
25	Recombinant luminescent bacterial sensors for the measurement of bioavailability of cadmium and lead in soils polluted by metal smelters. Chemosphere, 2004, 55, 147-156.	4.2	93
26	Detection of Organomercurials with Sensor Bacteria. Analytical Chemistry, 2001, 73, 5168-5171.	3.2	88
27	Multilaboratory evaluation of 15 bioassays for (eco)toxicity screening and hazard ranking of engineered nanomaterials: FP7 project NANOVALID. Nanotoxicology, 2016, 10, 1229-1242.	1.6	78
28	DNA Melting and Genotoxicity Induced by Silver Nanoparticles and Graphene. Chemical Research in Toxicology, 2015, 28, 1023-1035.	1.7	73
29	Analysis of bioavailable phenols from natural samples by recombinant luminescent bacterial sensors. Chemosphere, 2006, 64, 1910-1919.	4.2	65
30	Antimicrobial potency of differently coated 10 and 50â€¯nm silver nanoparticles against clinically relevant bacteria Escherichia coli and Staphylococcus aureus. Colloids and Surfaces B: Biointerfaces, 2018, 170, 401-410.	2.5	64
31	Cellular binding, uptake and biotransformation of silver nanoparticles in human T lymphocytes. Nature Nanotechnology, 2021, 16, 926-932.	15.6	62
32	Proactive Approach for Safe Use of Antimicrobial Coatings in Healthcare Settings: Opinion of the COST Action Network AMiCI. International Journal of Environmental Research and Public Health, 2017, 14, 366.	1.2	58
33	BIOTESTS AND BIOSENSORS IN ECOTOXICOLOGICAL RISK ASSESSMENT OF FIELD SOILS POLLUTED WITH ZINC, LEAD, AND CADMIUM. Environmental Toxicology and Chemistry, 2005, 24, 2973.	2.2	56
34	LuxCDABEâ€"Transformed Constitutively Bioluminescent Escherichia coli for Toxicity Screening: Comparison with Naturally Luminous Vibrio fischeri. Sensors, 2011, 11, 7865-7878.	2.1	54
35	Genome-Wide Bacterial Toxicity Screening Uncovers the Mechanisms of Toxicity of a Cationic Polystyrene Nanomaterial. Environmental Science & Technology, 2012, 46, 2398-2405.	4.6	54
36	Bioavailability of Cd, Zn and Hg in Soil to Nine Recombinant Luminescent Metal Sensor Bacteria. Sensors, 2008, 8, 6899-6923.	2.1	53

#	ARTICLE	IF	CITATIONS
37	Bacterial polysaccharide levan as stabilizing, non-toxic and functional coating material for microelement-nanoparticles. Carbohydrate Polymers, 2016, 136, 710-720.	5.1	53
38	Rapid in situ assessment of Cu-ion mediated effects and antibacterial efficacy of copper surfaces. Scientific Reports, 2018, 8, 8172.	1.6	48
39	Selection of resistance by antimicrobial coatings in the healthcare setting. Journal of Hospital Infection, 2020, 106, 115-125.	1.4	48
40	The Effect of Composition of Different Ecotoxicological Test Media on Free and Bioavailable Copper from CuSO4 and CuO Nanoparticles: Comparative Evidence from a Cu-Selective Electrode and a Cu-Biosensor. Sensors, 2011, 11, 10502-10521.	2.1	45
41	Potential ecotoxicological effects of antimicrobial surface coatings: a literature survey backed up by analysis of market reports. PeerJ, 2019, 7, e6315.	0.9	42
42	Mechanisms of toxic action of silver nanoparticles in the protozoan Tetrahymena thermophila : From gene expression to phenotypic events. Environmental Pollution, 2017, 225, 481-489.	3.7	41
43	Dissolution of Silver Nanowires and Nanospheres Dictates Their Toxicity to<i>Escherichia coli</i>. BioMed Research International, 2013, 2013, 1-9.	0.9	40
44	Environmental hazard of oil shale combustion fly ash. Journal of Hazardous Materials, 2012, 229-230, 192-200.	6.5	38
45	UVA-induced antimicrobial activity of ZnO/Ag nanocomposite covered surfaces. Colloids and Surfaces B: Biointerfaces, 2018, 169, 222-232.	2.5	37
46	Effects of Rhamnolipids from Pseudomonas aeruginosa DS10-129 on Luminescent Bacteria: Toxicity and Modulation of Cadmium Bioavailability. Microbial Ecology, 2010, 59, 588-600.	1.4	36
47	Methodologies and approaches for the analysis of cellâ€"nanoparticle interactions. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2018, 10, e1486.	3.3	36
48	Uptake and transcytosis of functionalized superparamagnetic iron oxide nanoparticles in an <i>in vitro</i> blood brain barrier model. Biomaterials Science, 2018, 6, 314-323.	2.6	36
49	Lead and Cu in contaminated urban soils: Extraction with chemical reagents and bioluminescent bacteria and yeast. Science of the Total Environment, 2005, 350, 194-203.	3.9	35
50	Pan-European inter-laboratory studies on a panel of in vitro cytotoxicity and pro-inflammation assays for nanoparticles. Archives of Toxicology, 2017, 91, 2315-2330.	1.9	35
51	Selective antibiofilm properties and biocompatibility of nano-ZnO and nano-ZnO/Ag coated surfaces. Scientific Reports, 2020, 10, 13478.	1.6	35
52	Gold Nanocluster-Mediated Cellular Death under Electromagnetic Radiation. ACS Applied Materials & Interfaces, 2017, 9, 41159-41167.	4.0	33
53	Synthesis and in vitro properties of iron oxide nanoparticles grafted with brushed phosphorylcholine and polyethylene glycol. Polymer Chemistry, 2016, 7, 1931-1944.	1.9	32
54	Bioavailability of Cd in 110 polluted topsoils to recombinant bioluminescent sensor bacteria: effect of soil particulate matter. Journal of Soils and Sediments, 2011, 11, 231-237.	1.5	31

#	Article	IF	Citations
55	Dualâ€Action Cancer Therapy with Targeted Porous Silicon Nanovectors. Small, 2017, 13, 1701201.	5.2	31
56	Single Cell Level Quantification of Nanoparticleâ€"Cell Interactions Using Mass Cytometry. Analytical Chemistry, 2017, 89, 8228-8232.	3.2	30
57	A Molecular Probe for the Detection of Polar Lipids in Live Cells. PLoS ONE, 2016, 11, e0161557.	1.1	29
58	Extracellular conversion of silver ions into silver nanoparticles by protozoan Tetrahymena thermophila. Environmental Sciences: Processes and Impacts, 2013, 15, 244-250.	1.7	26
59	Comparison of Mechanical and Antibacterial Properties of TiO2/Ag Ceramics and Ti6Al4V-TiO2/Ag Composite Materials Using Combined SLM-SPS Techniques. Metals, 2019, 9, 874.	1.0	24
60	Complete transformation of ZnO and CuO nanoparticles in culture medium and lymphocyte cells during toxicity testing. Nanotoxicology, 2017, 11, 150-156.	1.6	23
61	The Use of Microfluidics in Cytotoxicity and Nanotoxicity Experiments. Micromachines, 2017, 8, 124.	1.4	22
62	Quantitative multimodal analyses of silver nanoparticle-cell interactions: Implications for cytotoxicity. NanoImpact, 2016, 1, 29-38.	2.4	21
63	Sorption of silver nanoparticles to laboratory plastic during (eco)toxicological testing. Nanotoxicology, 2016, 10, 385-390.	1.6	20
64	Crossed flow microfluidics for high throughput screening of bioactive chemicalâ€"cell interactions. Lab on A Chip, 2017, 17, 501-510.	3.1	20
65	Metal-Containing Nano-Antimicrobials: Differentiating the Impact of Solubilized Metals and Particles. , 2012, , 253-290.		19
66	Microfluidic Cell Microarray Platform for High Throughput Analysis of Particleâ€"Cell Interactions. Analytical Chemistry, 2018, 90, 4338-4347.	3.2	19
67	Analysis of sorption and bioavailability of different species of mercury on model soil components using XAS techniques and sensor bacteria. Analytical and Bioanalytical Chemistry, 2005, 382, 1541-1548.	1.9	17
68	Optimization of binding B-lymphocytes in a microfluidic channel: surface modification, stasis time and shear response. Biofabrication, 2018, 10, 014101.	3.7	11
69	Preparation and Characterization of Photocatalytically Active Antibacterial Surfaces Covered with Acrylic Matrix Embedded Nano-ZnO and Nano-ZnO/Ag. Nanomaterials, 2021, 11, 3384.	1.9	6
70	Antimicrobial Activity of Commercial Photocatalytic SaniTiseâ„¢ Window Glass. Catalysts, 2022, 12, 197.	1.6	5
71	Ligand-Doped Copper Oxo-hydroxide Nanoparticles are Effective Antimicrobials. Nanoscale Research Letters, 2018, 13, 111.	3.1	4
72	Quantitative Measurement of Cell-Nanoparticle Interactions Using Mass Cytometry. Methods in Molecular Biology, 2019, 1989, 227-241.	0.4	4

#	Article	IF	Citations
73	Bioavailability and toxicity of copper oxide and silver nanoparticles to bacteria, yeasts, crustaceans and protozoa. Toxicology Letters, 2011, 205, S284-S285.	0.4	1
74	New C-type lectin-like protein and 5â€²-nucleotidase from Vipera lebetina snake venom. Toxicology Letters, 2014, 229, S234.	0.4	0
75	â€œSafe-by-designâ€•and â€œtoxic-by designâ€¿ two approaches for design of novel functional nanomaterials. Toxicology Letters, 2014, 229, S11-S12.	0.4	0