

Ag-ions play the main role in silver nanoparticles toxicity in the ciliate *Tetrahymena thermophila*

Juganson, Katre; Mortimer, Monika; Ivask, Angela; Pucciarelli, Sandra; Miceli, Cristina; Orupõld, Kaja; Kahru, Anne NanoImpact Conference : program and abstract Book 2017 / p. 67

Aminocatalysts are more environmentally friendly than hydrogen-bonding catalysts

Sihtmäe, Mariliis; Silm, Estelle; Kriis, Kadri; Kahru, Anne; **Kanger, Tõnis** ChemSusChem 2022 / art. e202201045, 5 p. : ill <https://doi.org/10.1002/cssc.202201045> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis of sorption and bioavailability of different species of mercury on model soil components using XAS techniques and sensor bacteria

Bernaus, Anna; Gaona, Xavier; **Ivask, Angela;** **Kahru, Anne;** Valiente, Manuel Analytical and bioanalytical chemistry 2005 / 7, p. 1541-1548 : ill <https://pubmed.ncbi.nlm.nih.gov/15971043/>

Aniliinide ja fenoolide toksilisus vetikale *Pseudokirchneriella subcapitata* ja bakterile *Vibrio fischeri* : võrdlus kirjanduse andmete ja QSAR-idega

Aruoja, Villem; Sihtmäe, Mariliis; Kahru, Anne XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 14

Antibacterial activity of 24 L-phenylalanine derived surface-active ionic liquids (SAILs) towards two clinically relevant pathogens

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; Gathergood, Nicholas; Kahru, Anne Journal of international scientific publications : ecology & safety 2019 / p. 16-28 : ill <https://www.scientific-publications.net/en/article/1001856/>

Antibacterial activity of chitosan-silver nanocomposites

Kasemets, Kaja; Laanoja, Jüri; Kahru, Anne Debrecen Colloquium on Carbohydrates 2020 in 2022, August 24-27, 2022Debrecen, Hungary : program and abstracts 2022 / p. 47 https://konferencia.unideb.hu/sites/default/files/file_uploads/debcarb-abstract-elektronikus-2022-kesz_04-cor_0.pdf

Antibacterial activity of of L-Phenylalanine derived ionic liquids [Online resource]

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; Kapitanov, Illia; Karpichev, Yevgen; Gathergood, Nicholas; Kahru, Anne Tartu Ülikooli ASTRA projekt PER ASPERA : funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fntdk.ut.ee/teesid-2018/>

Antibacterial activity of positively and negatively charged hematite (α -Fe₂O₃) nanoparticles to *Escherichia coli*, *Staphylococcus aureus* and *Vibrio fischeri*

Vihodceva, Svetlana; Šutka, Andris; Sihtmäe, Mariliis; Rosenberg, Merilin; Otsus, Maarja; Kurvet, Imbi; Smits, Krisjanis; Bikse, Liga; Kahru, Anne; Kasemets, Kaja Nanomaterials 2021 / p. 1-26 <https://doi.org/10.3390/nano11030652> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Antibacterial and antifungal efficacy of novel chitosan-silver nanocomposites

Kasemets, Kairi; Laanoja, Jüri; Sihtmäe, Mariliis; Kurvet, I.; Otsus, Maarja; Vija, H.; Kahru, Anne (E-MRS) European Materials Research Society 2023 Spring Meeting : 40th Anniversary 2023 / art. 61_875 <https://www.dropbox.com/s/w8prtknkt2ekutr/SPRING%2023%20-%20Conference%20program.pdf?dl=0>

Application of ATP-method in rapid monitoring of plant hygiene of Estonian food manufacturers

Kurvet, Madis; Külm, I.; Kahru, Anne BIOBALT '96 : Biotechnology in Estonia, Latvia and Lithuania : International Workshop, 19-20 April, 1996, Tartu, Estonia : abstract book 1996 / p. 24

Assessment of the hazard of nine (doped) lanthanides-based ceramic oxides to four aquatic species

Blinova, Irina; Vija, Heiki; Lukjanova, Aljona; Muna, Marge; Syvertsen-Wiig, Guttorm; Kahru, Anne Science of the total environment 2018 / p. 1171-1176 : ill <https://doi.org/10.1016/j.scitotenv.2017.08.274> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Atomic layer deposition of titanium oxide films on As-synthesized magnetic Ni particles: magnetic and safety properties

Uudeküll, Peep; Kozlova, Jekaterina; Mändar, Hugo; Link, Joosep; Sihtmäe, Mariliis; Käosaar, Sandra; Blinova, Irina; Kasemets, Kaja; Kahru, Anne; Stern, Raivo Journal of magnetism and magnetic materials 2017 / p. 299-304 : ill <https://doi.org/10.1016/j.jmmm.2017.01.045> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

ATP-meetod mikroobse biomassi kiireks määramiseks ja selle kasutamine hügieeni testimisel toiduainetetööstuses

Kahru, Anne; Kurvet, Madis; Külm, I. EMS 96 teaduskonverents, 6.-7. juuni 1996, Tallinn = EMS 96 Scientific Conference, 6-7 June 1996, Tallinn 1996 / poster 17

Bacterial polysaccharide levan as stabilizing, non-toxic and functional coating material for microelement-nanoparticles

Bondarenko, Olesja; Ivask, Angela; Kahru, Anne; Titma, Tiina; Pudova, Ksenia; Adamberg, Signe Carbohydrate polymers 2015 / p. 710-720 : ill <https://doi.org/10.1016/j.carbpol.2015.09.093> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bioanalysis of heavy metals from soils and sediments using recombinant luminescent bacterial sensors
Ivask, Angela; Kahru, Anne; Kunttu, K.; Virta, Marko; Douay, Francis; Dubourguier, Henri-Charles Toxicology letters 2002 / p. S101

Biotestide kasutamise keskkonnaseisundi hindamisel

Blinova, Irina; Kahru, Anne Keskkonnatehnika 2001 / 3, lk. 39 https://artiklid.elnet.ee/record=b1006845*est

Biotests and biosensors in ecotoxicological risk assessment of field soils polluted with zinc, lead, and cadmium

Kahru, Anne; Ivask, Angela; Kasemets, Kaja; Põllumaa, Lee; Kurvet, Imbi; Francois, Matthieu; Dubourguier, Henri-Charles Environmental toxicology and chemistry 2005 / 11, p. 2973-2982

Chemical versus toxicological analysis in characterization of phenolic pollution : a test battery approach

Kahru, Anne; Põllumaa, Lee; Blinova, Irina; Reiman, R.; Rätsep, A. Toxicology letters 1998 / Supplement 1/95, p. 237

Chitosan-copper oxide nanocomposites : synthesis, antibacterial efficacy, and cytotoxicity

Laanoja, Jüri; Sihtmäe, Mariliis; Otsus, Maarja; Kasemets, Kaja; Kahru, Anne 2025 IEEE 15th International Conference

"Nanomaterials: Applications & Properties" : Abstract Book 2025 2025 / p. 464 https://ieeenap.org/data/Book_of_Abstracts_2025.pdf

Combined effects of test media and dietary algae on the toxicity of CuO and ZnO nanoparticles to freshwater microcrustaceans daphnia magna and heterocypris incongruens : food for thought

Muna, Marge; Blinova, Irina; Kahru, Anne; Vrček, Ivana Vinković; Pem, Barbara; Orupõld, Kaja; Heinlaan, Margit Nanomaterials 2019 / art. 23 <https://doi.org/10.3390/nano9010023> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Construction and use of specific luminescent recombinant bacterial sensors for the assessment of bioavailable fraction of cadmium, zinc, mercury and chromium in the soil

Ivask, Angela; Virta, Marko; **Kahru, Anne** Soil biology and biochemistry 2002 / p. 1439-1447

Cubic iron core-shell nanoparticles functionalized to obtain high-performance MRI contrast agents

Volokhova, Maria; Shugai, Anna; Tsujimoto, Masahiko; Kubo, Anna-Liisa; Telliskivi, Sven; Nigul, Mait; Uudeküll, Peep; Vija, Heiki; Bondarenko, Olesja; Adamson, Jasper; Kahru, Anne; Stern, Raivo; Seinberg, Liis Materials 2022 / art. 2228

<https://doi.org/10.3390/ma15062228> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cytotoxicity of metal-based nanoparticles in epithelial barrier models

Titma, Tiina 2017 http://www.ester.ee/record=b4662467*est

Determination of growth characteristics of sulfate reducing bacteria by microcalorimetry and ATP

Menert, Anne; Kahru, Anne; Blonskaja, Viktoria; Tarassova, J.; Vilu, Raivo ISBC XII : Calorimetry : Tool in Health and Environmental Studies : Santiago de Compostela, Espana, 7-11 September 2001 : book of abstracts / International Society for Biological Calorimetry 2001 / p. 49

Development of bacterial biosensors and human stem cell-based in vitro assays for the toxicological profiling of synthetic nanoparticles = Rekombinantsetel sensorbakteritel ja inimese tüvirakkudel põhinevate in vitro testide väljatöötamine sünteetiliste nanoosakeste toksikoloogiliseks uurimiseks

Bondarenko, Olesja 2012 <https://digi.lib.ttu.ee/ii/?794>

Dissolution of silver nanowires and nanospheres dictates their toxicity to escherichia coli

Visnapuu, Meeri; Joost, Urmas; **Juganson, Katre;** Künnis-Beres, Kai; Kahru, Anne; Kisand, Vambola; Ivask, Angela BioMed Research International 2013 / art. 819252 <https://doi.org/10.1155/2013/819252> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ecotoxicity of nanosized magnetite to crustacean Daphnia magna and duckweed Lemna minor

Blinova, Irina; Kanarbik, Liina; Irha, Natalja; Kahru, Anne Hydrobiologia 2017 / p. 141-149 : ill <https://doi.org/10.1007/s10750-015-2540-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ecotoxicity profiling of a library of 24 L-phenylalanine derived surface-active ionic liquids (SAILs)

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; Arooja, Villem; **Gathergood, Nicholas;** Kahru, Anne Sustainable chemistry and pharmacy 2021 / art. 100369, 10 p <https://doi.org/10.1016/j.scp.2020.100369> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

(Eco)toxicological and Antibacterial Effects of 24 L-Phenylalanine Derived Ionic Liquids against Marine and Clinically Relevant Bacteria

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; **Kapitanov, Illia; Karpichev, Yevgen;** Kahru, Anne; Gathergood, Nicholas IUPAC Postgraduate Summer School on Green Chemistry : 7-13 July 2018, Venice - Italy : book of abstracts 2018 / p. 74 https://www.unive.it/pag/fileadmin/user_upload/extra/SSGC/documenti/Book_of_abstracts_per_website_23_July.pdf

(Eco)toxicological information on REACH-relevant chemicals : contribution of alternative methods to in vivo approaches

Sihtmäe, Mariliis 2011 http://www.ester.ee/record=b2733161*est

Ecotoxicological profiling and antibacterial potency of a series of 24 L-phenylalanine based SAILs = 24 L-fenüülalaniini-põhise ioonvedeliku ökotoksikoloogiline ja antibakteriaalne iseloomustamine

Kusumahastuti, Dewi Kurnianingsih Arum 2021 <https://doi.org/10.23658/tallinn.30/2021> https://www.ester.ee/record=b5436547*est
<https://digikogu.taltech.ee/et/Item/bae0391e-b57c-476d-acda-6cd147ee55d0>

Eesti Toksikoloogia Selts taasloodud ja tegutseb

Kahru, Anne Eesti Rohuteadlane 1997 / 4, lk. 38-39

Effect of eutrophication on toxicity of metallic nanoparticles to daphnia magna [Online resource]

Muna, Marge; Heinlaan, Margit; Blinova, Irina; Kahru, Anne Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fmdk.ut.ee/teesid-2018/>

Enhanced visible and ultraviolet light-induced gas-phase photocatalytic activity of TiO₂ thin films modified by increased amount of acetylacetone in precursor solution for spray pyrolysis

Spiridonova, Jekaterina; Mere, Arvo; Krunk, Malle; Rosenberg, Merilin; Kahru, Anne; Danilson, Mati; Kritševskaja, Marina; Oja Acik, Ilona Catalysts 2020 / 21 p. : ill <https://doi.org/10.3390/catal10091011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Environmental effects of soil contamination by shale fuel oils

Kanarbik, Liina; Blinova, Irina; Sihtmäe, Mariliis; Künnis-Beres, Kai; Kahru, Anne Environmental science and pollution research 2014 / p. 11320-11330 : ill <https://doi.org/10.1007/s11356-014-3043-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Erratum to Toxicity of two types of silver nanoparticles to aquatic crustaceans Daphnia magna and Thamnocephalus platyurus (Environ Sci Pollut Res, 10.1007/s11356-012-1290-5)

Blinova, Irina; Niskanen, Jukka; Kajankari, Paula; Kanarbik, Liina; Käkinen, Aleksandr; Tenhu, Heikki; Penttinen, Olli-Pekka; Kahru, Anne Environmental Science and Pollution Research 2013 / p. 4293 <https://doi.org/10.1007/s11356-013-1734-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

E-SovTox : veebipõhine andmebaas venekeelses teaduskirjanduses publitseeritud kemikaalide (öko)toksikoloogia-alaste andmete kohta

Sihtmäe, Mariliis; Blinova, Irina; Aruoja, V.; Kahru, Anne XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 93

Evaluation of ecotoxicological effects related to oil shale industry

Põllumaa, Lee 2004 https://www.ester.ee/record=b1994276*est

Evaluation of the biological effects of engineered nanoparticles on unicellular pro- and eukaryotic organisms = Sünteetiliste nanoosakeste bioloogiliste efektide hindamine üherakulistel pro- ja eukarüootsetel organismidel

Mortimer, Monika 2011 https://www.ester.ee/record=b2709099*est

Evaluation of the effect of test medium on total Cu body burden of nano CuO-exposed Daphnia magna: A TXRF spectroscopy study

Muna, Marge; Heinlaan, Margit; Blinova, Irina; Vija, Heiki; Kahru, Anne Environmental pollution 2017 / p. 1488-1496 : ill <https://doi.org/10.1016/j.envpol.2017.07.083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluation of the potential hazard of lanthanides to freshwater microcrustaceans

Blinova, Irina; Lukjanova, Aljona; Muna, Marge; Vija, Heiki; Kahru, Anne Science of the total environment 2018 / p. 1100-1107 : ill <https://doi.org/10.1016/j.scitotenv.2018.06.155> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluation of the potential hazard of manufactured metal-based nanomaterials to health of aquatic ecosystems: state of the art

Blinova, Irina; Muna, Marge; Lukjanova, Aljona; Kahru, Anne Journal of international scientific publications : ecology & safety 2018 / p. 174-182 : ill <https://www.scientific-publications.net/en/article/1001659/>

Exposure of freshwater zooplankton to copper nanoparticles : toxicity and copper body burden

Muna, Marge; Heinlaan, Margit; Vija, Heiki; Blinova, Irina; Kahru, Anne 20th International Scientific Conference EcoBalt 2016 : Tartu, Estonia, October 9-12 : book of abstracts 2016 / p. 33 http://akki.ut.ee/wp-content/uploads/2015/01/Abstracts_Book_EcoBalt_2016.pdf

Exposure to sublethal concentrations of Co₃O₄ and Mn₂O₃ nanoparticles induced elevated metal body burden in Daphnia magna

Heinlaan, Margit; Muna, Marge; Juganson, Katre; Oriekhova, Olena; Stoll, Serge; Kahru, Anne; Slaveykova, Vera Aquatic toxicology 2017 / p. 123-133 : ill <https://doi.org/10.1016/j.aquatox.2017.06.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Extracellular conversion of silver ions into silver nanoparticles by protozoan Tetrahymena thermophila

Juganson, Katre; Mortimer, Monika; Ivask, Angela; Kasemets, Kaja; Kahru, Anne Environmental Sciences: Processes and Impacts 2013 / p. 244 - 250 <https://doi.org/10.1039/c2em30731f> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hazard evaluation of polystyrene nanoplastic with nine bioassays did not show particle-specific acute toxicity

Heinlaan, Margit; Kasemets, Kaja; Aruoja, Villem; Blinova, Irina; Bondarenko, Olesja; Lukjanova, Aljona; Khosrovyan, Alla; Kurvet, Imbi; Pullerits, Mirjam; Sihtmäe, Mariliis; **Vasiliev, Grigory**; Vija, Heiki; Kahru, Anne Science of the total environment 2020 / art. 136073, 7 p. : ill <https://doi.org/10.1016/j.scitotenv.2019.136073> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at Scopus](#) [Article at WOS](#)

Interaction of firefly luciferase and silver nanoparticles and its impact on enzyme activity

Käkinen, Aleksandr; Ding, Feng; Chen, Pengyu; Mortimer, Monika; Kahru, Anne; Ke, Pu Chun Nanotechnology 2013 / art. 345101 <https://doi.org/10.1088/0957-4484/24/34/345101> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Keskkonnaseisundi kompleksne hindamine keemiliste, toksikoloogiliste ja mikrobioloogiliste parameetrite alusel

Kahru, Anne; Põllumaa, Lee; **Maloverjan, Alla**; **Ivask, Angela**; Trapido, Marina XXVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 26th Estonian Chemistry Days : abstracts of scientific conference 2000 / lk. 45-46

Kiirmeetod paberi toksilisuse määramiseks, milles testorganismidena kasutatakse fotobaktereid

Kahru, Anne; Põllumaa, Lee; **Külm, I.**; Kanger, K. EMS 96 teaduskonverents, 6.-7. juuni 1996, Tallinn = EMS 96 Scientific Conference, 6-7 June 1996, Tallinn 1996 / poster 18

Laboratory study of bioremediation of rocket fuel-polluted groundwater

Rožkov, Aleksei; Vassiljeva, Irina; **Kurvet, Madis**; **Kahru, Anne**; **Preis, Sergei**; **Hartšenko, Anna**; **Kritševskaja, Marina**; **Liiv, Milana**; **Käard, Arvo**; **Vilu, Raivo** Water research 1999 / no. 5, [12] p.: ill

Lonidamiini fotodünaamiliste ja antineoplastiliste omaduste uurimine

Tšekulajev, Vladimir; Ševtšuk, Igor; Tšekulajeva, Ludmilla; **Kahru, Anne** XVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 16th Estonian chemistry days : abstracts of scientific conference 1995 / lk. 139-141 https://www.ester.ee/record=b1067568*est

Luminescent recombinant sensor bacteria for the analysis of bioavailable heavy metals

Ivask, Angela 2006 https://www.ester.ee/record=b2158067*est

Luminestseeruvad bakteriaalsed biosensorid raskemetallide määramiseks

Ivask, Angela; Karp, M.; **Kahru, Anne**; Virta, Marko Eesti Mikrobioloogide Ühenduse konverents : 12.05.2000, Tartu = Conference of the Estonian Society for Microbiology : 12.05.2000, Tartu 2000 / l. 16

Mechanisms of toxic action of Ag, ZnO and CuO nanoparticles to selected ecotoxicological test organisms and mammalian cells in vitro: A comparative review

Ivask, Angela; **Juganson, Katre**; Bondarenko, Olesja; Mortimer, Monika; Aruoja, Villem; Kasemets, Kaja; Blinova, Irina; Heinlaan, Margit; Slaveykova, Vera; Kahru, Anne Nanotoxicology 2014 / p. 57-71 : ill <https://doi.org/10.3109/17435390.2013.855831> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mechanisms of toxic action of silver nanoparticles in the protozoan Tetrahymena thermophila : from gene expression to phenotypic events

Juganson, Katre; Mortimer, Monika; Ivask, Angela; Pucciarelli, Sandra; Miceli, Cristina; Orupõld, Kaja; Kahru, Anne Environmental pollution 2017 / p. 481-489 : ill <https://doi.org/10.1016/j.envpol.2017.03.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mikroobsete biotestide kasutamine tuhamägede vee toksilisuse uurimisel

Kahru, Anne; **Kurvet, Madis**; **Külm, I.** EMS 96 teaduskonverents, 6.-7. juuni 1996, Tallinn = EMS 96 Scientific Conference, 6-7 June 1996, Tallinn 1996 / [1] p

Nano(eco)toxicology : science at the interfaces

Kahru, Anne; **Ivask, Angela**; **Blinova, Irina**; **Kasemets, Kaja**; Bondarenko, Olesja; Mortimer, Monika; **Heinlaan, Margit**; **Käkinen, Aleksandr**; **Aruoja, Villem** SustainChem2011 : International Conference on Materials and Technologies for Green Chemistry jointly with Workshop of COST Action CM0903 (UBIOCHEM-II) : September 5-9, 2011, Tallinn, Estonia : abstract book and program 2011 / p. 22

NanoE-Tox: new and in-depth database concerning ecotoxicity of nanomaterials

Juganson, Katre; Ivask, Angela; Blinova, Irina; Mortimer, Monika; Kahru, Anne Beilstein Journal of Nanotechnology 2015 / p. 1788 - 1804 <https://doi.org/10.3762/bjnano.6.183> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Narva elektrijaamade tuhaheitmete keskkonnamõjud : kombineeritud geokeemiline ja ökotoksikoloogiline uuring

Käkinen, Aleksandr; Blinova, Irina; Ivask, Angela; Kasemets, K.; **Bitjukova, Liidia**; Aruoja, V.; Kurvet, Imbi; Mortimer, Monika;

A novel method for comparison of biocidal properties of nanomaterials to bacteria, yeasts and algae

Suppi, Sandra; Kasemets, Kaja; Ivask, Angela; Künnis-Beres, Kai; Sihtmäe, Mariliis; Kurvet, Imbi; Aruoja, Villem; Kahru, Anne Journal of Hazardous Materials 2015 / p. 75 - 84 <https://doi.org/10.1016/j.jhazmat.2014.12.027> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the mechanism of cytotoxic action of UVA radiation towards mammalian cells

Ševtšuk, Igor; Tšekulajev, Vladimir; Tšekulajeva, Ludmilla; Kahru, Anne Joint Conference of Scandinavian Society of Cell Toxicology and Estonian Society of Toxicology : (SSCT & ETS 98) : Tallinn, October 23-26, 1998 : program and abstracts 1998 / l. 83

Particle-cell contact enhances antibacterial activity of silver nanoparticles

Bondarenko, Olesja; Ivask, Angela; **Käkinen, Aleksandr;** Kurvet, Imbi; Kahru, Anne PLoS ONE 2013 / art. e64060 <https://doi.org/10.1371/journal.pone.0064060> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pestitsiidide toksilisuse uurimine kasutades bakteriaalseid testsüsteeme : luminesseeruvad bakterid Photobacterium phosphoreum

Kahru, Anne; Tomson, K.; Pall, T.; Külm, I. XVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 16th Estonian chemistry days : abstracts of scientific conference 1995 / lk. 32-34

Photobacteria as whole-cell biosensors in environmental toxicology

Kahru, Anne; Kurvet, Madis; Külm, I. XIII Scandinavian Workshop on In Vitro Toxicology, Tampere, Finland, 21-24.9.1995 : abstracts 1995 / p. 73

Photocatalytic antibacterial activity of nano-TiO₂ (anatase)-based thin films : effects on Escherichia coli cells and fatty acids

Joost, Urmas; **Juganson, Katre;** Visnapuu, Meeri; Mortimer, Monika; Kahru, Anne; Nõmmiste, Ergo; Joost, Urmeli; Kisand, Vambola; Ivask, Angela Journal of photochemistry and photobiology B : biology 2015 / p. 178-185 : ill <https://doi.org/10.1016/j.jphotobiol.2014.12.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Potential ecotoxicological effects of antimicrobial surface coatings : a literature survey backed up by analysis of market reports

Rosenberg, Merilin; Ilic, Krunoslav; Juganson, Katre; Ivask, Angela; Ahonen, Merja; Vrcek, Ivana; Kahru, Anne PeerJ 2019 / art. e6315 ; 34 p <https://doi.org/10.7717/peerj.6315> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Predictability of the toxicity of the oil-shale industry wastewaters by their phenolic composition

Kahru, Anne; Põllumaa, Lee; Reiman, R.; Rätsep, A. Joint Conference of Scandinavian Society of Cell Toxicology and Estonian Society of Toxicology : (SSCT & ETS 98) : Tallinn, October 23-26, 1998 : program and abstracts 1998 / l. 31 <https://pubmed.ncbi.nlm.nih.gov/25470674/>

Prediction of toxicity of (phenolic) wastewater to activated sludge using luminescent bacteria Photobacterium phosphoreum

Kahru, Anne; Kurvet, Madis; Külm, I. 2nd IAWQ Specialized Conference on Hazard Assessment and Control of Environmental Contaminants in Water - The Interface Between Environmental Engineering and Environmental Science, Technical University of Denmark, Copenhagen, 29-30. June 1995 : book of abstracts 1995 / p. 56a

Profiling of the toxicity mechanisms of coated and uncoated silver nanoparticles to yeast Saccharomyces cerevisiae BY4741 using a set of its 9 single-gene deletion mutants defective in oxidative stress response, cell wall or membrane integrity and endocytosis

Käosaar, Sandra; Kahru, Anne; Mantecca, Paride; Kasemets, Kaja Toxicology in vitro 2016 / p. 149-162 : ill <https://doi.org/10.1016/j.tiv.2016.05.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Rapid in situ assessment of Cu-ion mediated effects and antibacterial efficacy of copper surfaces

Rosenberg, Merilin; Vilja, Heiki; Kahru, Anne; Keevil, William; Ivask, Angela Scientific reports 2018 / art. 8172, 8 p. : ill <https://doi.org/10.1038/s41598-018-26391-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Recombinant luminescent bacterial sensors for the measurement of bioavailability of cadmium and lead in soils polluted by metal smelters

Ivask, Angela; Francois, Matthieu; **Kahru, Anne;** Dubourguier, Henri-Charles; Virta, Marko; Douay, Francis Chemosphere 2004 / 2, p. 147-156 <https://www.sciencedirect.com/science/article/pii/S0045653503010804>

Reostatud pinnase suhtelise toksilisuse määramine fotobakteritestidega

Reiman, Rain; Kahru, Anne; Põllumaa, Lee; Meriste, T. Eesti Mikrobioloogide Ühenduse konverents : 12.05.2000, Tartu = Conference of the Estonian Society for Microbiology : 12.05.2000, Tartu 2000 / l. 14

Saastatud muldade dehüdrogenaase aktiivsuse ja ATP sisalduse määramine

Maloverjan, Alla; Laht, Mailis; Põllumaa, Lee; Kahru, Anne Eesti Mikrobioloogide Ühenduse konverents : 12.05.2000, Tartu = Conference of the Estonian Society for Microbiology : 12.05.2000, Tartu 2000 / I. 17

Saastatud muldade toksikoloogiline ja mikrobioloogiline kirjeldamine

Kahru, Anne; Põllumaa, Lee; Maloverjan, Alla; Reiman, Rain; Laht, Mailis; Trapido, Marina Eesti Mikrobioloogide Ühenduse konverents : 12.05.2000, Tartu = Conference of the Estonian Society for Microbiology : 12.05.2000, Tartu 2000 / I. 15

Silver–chitosan nanocomposites for biomedical application : design, synthesis and antimicrobial efficiency

Kasemets, Kaja; Laanoja, Jüri; Sihtmäe, Mariliis; Vija, Heiki; Kurvet, Imbi; Otsus, Maarja; Kahru, Anne International Conference EcoBalt 2023 "Chemicals&Environment" 2023 / 2 p. <https://doi.org/10.3390/proceedings2023092040>

Study of the development of bacterial resistance to silver-chitosan nanocomposites and cross-resistance to common antibiotics

Sihtmäe, Mariliis; Laanoja, Jüri; Otsus, Maarja; Kahru, Anne; **Kasemets, Kaja** (E-MRS) European Materials Research Society 2023 Spring Meeting : 40th Anniversary 2023 / art. 01914 <https://www.european-mrs.com/meetings/archives/2023/2023-spring-meeting>

Study of the environmental hazard caused by the oil shale industry solid waste

Põllumaa, Lee; **Maloverjan, Alla; Trapido, Marina; Sillak, H.; Kahru, Anne** ATLA 2001 / p. 259-267

Study of the toxic effect of the short- and medium-chain monocarboxylic acids on the growth of *Saccharomyces cerevisiae* using the CO₂-auxo-accelerostat fermentation system

Kasemets, Kaja; Kahru, Anne; Laht, Tiit-Maie; Paalme, Toomas International journal of food microbiology 2006 / 3, p. 206-215 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0168160506002960>

Study of the toxicological impact of different components of ash-heap water (sulphur rich phenolic leachate) using luminescent bacteria as test organisms

Kahru, Anne; Kurvet, M.; Kurvet, Imbi Oil shale 1997 / 4, Special, p. 469-475

Study of toxicity of pesticides using luminescent bacteria *Photobacterium phosphoreum*

Kahru, Anne; Tomson, Katrin; Pall, T.; Külm, I. Water science and technology 1996 / 6, p. 147-154

Study of toxicity of pesticides using luminescent bacteria *Photobacterium phosphoreum*

Kahru, Anne; Tomson, K.; Pall, T.; Külm, I. 2nd IAWQ Specialized Conference on Hazard Assessment and Control of Environmental Contaminants in Water - the Interface Between Environmental Engineering and Environmental Science, Technical University of Denmark, Copenhagen, 29-30. June 1995 : book of abstracts 1995 / p. 148
<https://www.sciencedirect.com/science/article/abs/pii/0273122396002922>

Surface carboxylation or PEGylation decreases CuO nanoparticles' cytotoxicity to human cells in vitro without compromising their antibacterial properties

Kubo, Anna-Liisa; **Vasiliev, Grigory; Vija, Heiki; Krištal, Jekaterina; Tõugu, Vello; Visnapuu, Meeri; Kisand, Vambola; Kahru, Anne; Bondarenko, Olesja** Archives of toxicology 2020 / p. 1561-1573 : ill <https://doi.org/10.1007/s00204-020-02720-7>

Süntetiliste nanoosakeste toksilisus in vitro

Mortimer, Monika; Kasemets, Kaja; Heinlaan, Margit; Vodovik, Maša; Marinšek Logar, Romana; Kahru, Anne XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 17

Synergistic antibacterial effect of copper and silver nanoparticles and their mechanism of action

Vasiliev, Grigory; Kubo, Anna-Liisa; Vija, Heiki; Kahru, Anne; Bondar, Denys; Karpichev, Yevgen; Bondarenko, Olesja Scientific reports 2023 / art. 9202, 15 p. : ill <https://doi.org/10.1038/s41598-023-36460-2> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis and antibacterial efficiency of chitosan–copper oxide nanocomposites

Laanoja, Jüri; Sihtmäe, Mariliis; Otsus, Maarja; Kahru, Anne; Kasemets, Kaja International Conference EcoBalt 2023 "Chemicals&Environment" 2023 / 2 p. <https://doi.org/10.3390/proceedings2023092035>

Synthesis and antimicrobial activity profiling of library of L-Phenylalanine derived ionic liquids

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; Kapitanov, Illia; Karpichev, Yevgen; Gathergood, Nicholas; Kahru, Anne Encountering global challenges through innovation on science, technology, engineering, and mathematics (STEM), and education 2017 / p. 142 <http://fmipa.undiksha.ac.id/iconmns2017/files/confbookiconmns17.pdf>

Synthesis and characterization of synergically acting antifungal silver-chitosan nanocomposites for biomedical applications

Kaarma, Laura; Kahru, Anne; Kasemets, Kaja Toxicology Letters 2025 / P22-04 ; p. S269-S270
<https://doi.org/10.1016/j.toxlet.2025.07.634>

Synthesis and synergistic antibacterial efficiency of chitosan-copper oxide nanocomposites

Laanoja, Jüri; Sihtmäe, Mariliis; Vihodceva, Svetlana; Iesalnieks, Mairis; Otsus, Maarja; Kurvet, Imbi; Kahru, Anne; Kasemets, Kaja Heliyon 2024 / art. e35588 <https://doi.org/10.1016/j.heliyon.2024.e35588> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Techniques used for analyzing microplastics, antimicrobial resistance and microbial community composition : a mini-review

Bartkova, Simona; Kahru, Anne; Heinlaan, Margit; Scheler, Ott Frontiers in microbiology 2021 / art. 603967 <https://doi.org/10.3389/fmicb.2021.603967> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tetrahymena thermophila : a good model for nanoecotoxicity studies

Juganson, Katre; Mortimer, Monika; Ivask, Angela; **Käkinen, Aleksandr**; Visnapuu, Meeri; Kahru, Anne Ciliates as model systems to study genome evolution, mechanisms of non-Mendelian inheritance and environmental adaptation : Tallinn, Estonia : 12-16 May, 2013 : book of abstracts 2013 / p. 60

The growth rate control in Escherichia coli at near to maximum growth rates : the A-stat approach

Paalme, Toomas; Elken, R.; **Kahru, Anne**; **Vanatalu, Kalju**; **Vilu, Raivo** Antonie van Leeuwenhoek journal of microbiology 1997 / p. 217-230: ill

The role of physico-chemical properties and test environment on biological effects of copper and silver nanoparticles = Vase ja hõbeda nanoosakeste füüsikalise-keemiliste omaduste ja testikeskkonna mõju nende bioloogilisele toimel

Käkinen, Aleksandr 2014 https://www.ester.ee/record=b3078755*est

The toxicity of brewed coffee according to the ecotoxicological tests

Ivask, Angela; **Reiman, Rain**; **Rätsep, Annely**; **Maloverjan, Alla**; **Laht, Mailis**; **Kahru, Anne** Microbiological Safety of Food : joint conference organized by Society for Applied Microbiology (UK), World Health Organization and Estonian Society for Microbiology : 10-11 May 2000, Tartu, Estonia 2000 / I. 54

Toxicity mechanisms of AG and CuO nanoparticles to the yeast Saccharomyces cerevisiae [Online resource]

Käosaar, Sandra; Kahru, Anne; Kasemets, Kaja Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p <http://fntdk.ut.ee/teesid-2018/>

Toxicity of 39 MEIC chemicals to bioluminescent Photobacteria (the Biotox™ test) : correlation with other test systems

Kahru, Anne; Borchardt, Barbara ATLA 1994 / p. 147-160

Toxicity of Ag, CuO and ZnO nanoparticles to selected environmentally relevant test organisms and mammalian cells in vitro : a critical review

Bondarenko, Olesja; **Juganson, Katre**; Ivask, Angela; Kasemets, Kaja; Mortimer, Monika; Kahru, Anne Archives of Toxicology 2013 / p. 1181 - 1200 <https://doi.org/10.1007/s00204-013-1079-4> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicity of antimony, copper, cobalt, manganese, titanium and zinc oxide nanoparticles for the alveolar and intestinal epithelial barrier cells in vitro

Titma, Tiina; Shimmo, Ruth; Siigur, Jüri; Kahru, Anne Cytotechnology 2016 / p. 2363-2377 : ill <https://doi.org/10.1007/s10616-016-0032-9> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicity of benzoate and sorbate to different organisms

Maloverjan, Alla; Põllumaa, Lee; **Kahru, Anne** Microbiological Safety of Food : joint conference organized by Society for Applied Microbiology (UK), World Health Organization and Estonian Society for Microbiology : 10-11 May 2000, Tartu, Estonia 2000 / I. 60

Toxicity of CuO nanoparticles to yeast saccharomyces cerevisiae BY4741 wild-type and its nine isogenic single-gene deletion mutants

Kasemets, Kaja; **Suppi, Sandra**; Künnis-Beres, Kai; Kahru, Anne Chemical Research in Toxicology 2013 / p. 356 - 367 <https://doi.org/10.1021/tx300467d> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicity of nanoscale cationic polymers in vitro and in vivo

Kahru, Anne; Drews, Monika; Põllumaa, Lee; Kasemets, Kaja; Veidebaum, Toomas; **Kogerman, Priit** ALTEX 2005 / p. 302

Toxicity of nine (doped) rare Earth metal oxides and respective individual metals to aquatic microorganisms Vibrio fischeri and Tetrahymena thermophila

Kurvet, Imbi; **Juganson, Katre**; Vija, Heiki; Sihtmäe, Mariliis; Blinova, Irina; Syvertsen-Wiig, Guttorm; Kahru, Anne Materials 2017 / art. 754, p. 1-18 : ill <https://doi.org/10.3390/ma10070754> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicity of phenolic wastewater to luminescent bacteria Photobacterium phosphoreum and activated sludges

Toxicity of silver–chitosan nanocomposites to aquatic microcrustaceans *Daphnia magna* and *Thamnocephalus platyurus* and naturally luminescent bacteria *Vibrio fischeri*

Sihtmäe, Mariliis; Laanoja, Jüri; Blinova, Irina; Kahru, Anne; Kasemets, Kaja Nanomaterials 2024 / art. 1193

<https://doi.org/10.3390/nano14141193> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicity of water accommodated fractions of Estonian shale fuel oils to aquatic organisms

Blinova, Irina; Kanarbik, Liina; Sihtmäe, Mariliis; Kahru, Anne Archives of Environmental Contamination and Toxicology 2016 / p. 383 - 391 <https://doi.org/10.1007/s00244-015-0242-8> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicity profiling of 24 L-phenylalanine derived ionic liquids based on pyridinium, imidazolium and cholinium cations and varying alkyl chains using rapid screening *Vibrio fischeri* bioassay

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; Kapitanov, Illia; Karpichev, Yevgen; Gathergood, Nicholas; Kahru, Anne Ecotoxicology and environmental safety 2019 / p. 556-565 : ill <https://doi.org/10.1016/j.ecoenv.2018.12.076> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Toxicological effects of 24 L-Phenylalanine derived ionic liquids against marine and clinically relevant bacteria

Kusumahastuti, Dewi Kurnianingsih Arum; Sihtmäe, Mariliis; Kapitanov, Illia; Karpichev, Yevgen; Gathergood, Nicholas; Kahru, Anne 8th IUPAC International Conference of Green Chemistry : Shangri-La Hotel, Bangkok, Thailand, 9-14 Sept 2018 : poster presentation abstracts 2018 / p. 13
http://www.greeniupac2018.com/download/8th%20IUPAC%20ICGC%202018_Program%20&%20Abstract%20Book_Poster%20Abstract.pdf

Toxicological profiling of copper oxide and silver nanoparticles and polyoxometalate ionic liquids with medically relevant bacteria and mammalian cells in vitro = Vaskoksiidi ja hõbeda nanoosakeste ning polüoksometalaat-ioonvedelike toksilisuse uuringud meditsiiniliselt oluliste bakterite ja imetajarakkudega in vitro

Kubo, Anna-Liisa 2019 <https://digi.lib.ttu.ee/ii/?12073>

Toxicological profiling of silver and copper oxide nanoparticles on *Saccharomyces cerevisiae* BY4741 wild-type and its single-gene deletion mutants = Hõbeda ja vaskoksiidi nanoosakeste toksilisuse iseloomustamine pärmis *Saccharomyces cerevisiae* BY4741 metsiktüvele ning geenikatkestus-mutantidele

Käosaar, Sandra 2018 <https://digi.lib.ttu.ee/ii/?10627> https://www.ester.ee/record=b5151210*est

Toxicological study of Lithuanian and Estonian wastewaters using a battery of microbiotests

Balkelyte, L.; Blinova, Irina; Kahru, Anne Joint Conference of Scandinavian Society of Cell Toxicology and Estonian Society of Toxicology : (SSCT & ETS 98) : Tallinn, October 23-26, 1998 : program and abstracts 1998 / I. 71

Use of luminescent bacteria in toxicity testing

Kahru, Anne Biobalt'92 : Biotechnology in Estonia, Latvia and Lithuania : Tallinn, November 1992 : conference abstracts 1992 / p. 33

UVA-induced antimicrobial activity of ZnO/Ag nanocomposite covered surfaces

Visnapuu, Meeri; Rosenberg, Merilin; Truska, Egle; Nõmmiste, Ergo; Šutka, Andris; Kahru, Anne; Rähn, Mihkel; Vija, Heiki; Orupõld, Kaja; Kisand, Vambola; Ivask, Angela Colloids and Surfaces B: Biointerfaces 2018 / p. 222-232
<https://doi.org/10.1016/j.colsurfb.2018.05.009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)