

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

Ag-ions play the main role in silver nanoparticles toxicity in the ciliate *Tetrahymena thermophila* [Online resource]

Juganson, Katre; Mortimer, Monika; Ivask, Angela Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märts 2017, Tartu : teesid] 2017 / [1] p <http://fmtdk.ut.ee/teesid/>

ALD applied to conformal rare-earth coating of ZnO nanoparticles for low temperature thermal imaging applications

Rauwel, Erwan; Galeckas, Augustinas; Rauwel, Protima ECS transactions 2014 / p. 23-31 : ill <http://dx.doi.org/10.1149/06409.0023ecst>

Analysis of photocatalytic performance of nanostructured pyrogenic titanium dioxide powders in view of their polydispersity and phase transition : critical anatase particle size as a factor for suppression of charge recombination

Moiseev, Anna; **Kritševskaja, Marina;** Qi, Fei; Weber, Alfred; Deubener, Joachim Chemical engineering journal 2013 / p. 614-621 : ill <https://doi.org/10.1016/j.cej.2013.05.038>

Antibacterial and antiviral effects of Ag, Cu and Zn metals, respective nanoparticles and filter materials thereof against coronavirus SARS-CoV-2 and influenza A virus

Kubo, Anna-Liisa; Rausalu, Kai; Savest, Natalja; Žusinaite, Eva; Vasiliev, Grigory; **Viirsalu, Mihkel; Plamus, Tiia; Krumme, Andres;** Merits, Andres; Bondarenko, Olesja Pharmaceutics 2022 / art. 2549 : 19 p. : ill <https://doi.org/10.3390/pharmaceutics14122549> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Antiviral efficacy of cerium oxide nanoparticles

Nefedova, Alexandra; Rausalu, Kai; Zusinaite, Eva; Vanetsev, Alexander; **Rosenberg, Merilin;** Koppel, Kairi; Lilla, Stevin; Visnapuu, Meeri; Smits, Krisjanis; Kisand, Vambola Scientific reports 2022 / art. 18746, 16 p. : ill <https://doi.org/10.1038/s41598-022-23465-6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Atomic layer deposition of high-k dielectrics on carbon nanoparticles

Tamm, Aile; **Koel, Mihkel; Peikolainen, Anna-Liisa** Thin solid films 2013 / p. 16-20 : ill

Au ja Ag nanoosakeste saamiseks kasutatavate lähteainete $\text{HAuCl}_4 \cdot 3\text{H}_2\text{O}$ ja AgNO_3 termilise lagunemise uurimine

Otto, Kairi; Oja Acik, Ilona; Krunk, Malle; Tõnsuaadu, Kaia XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / lk. 55

Bifunctional platinum-free mixed metal oxygen electrocatalysts based on naturally abundant peat

Teppor, Patrick; Jäger, Rutha; Härmas, Meelis; Aruväli, Jaan; **Volobujeva, Olga;** Koppel, Mirjam; Lust, Enn ECS Meeting Abstracts 2022 / p. 29-37 : ill <https://doi.org/10.1149/10807.0029ecst> [Journal metrics at Scopus](#) [Article at Scopus](#)

Biocidal properties study of silver nanoparticles used for application in green housing

Küünal, Siim; Kutti, Sander; Rauwel, Protima; Guha, Mithu; Wragg, David; **Rauwel, Erwan** International nano letters 2016 / p. 191-197 : ill <http://dx.doi.org/10.1007/s40089-016-0186-7>

Biofabrication of zinc oxide nanoparticles with syzygium aromaticum flower buds extract and finding its novel application in controlling the growth and mycotoxins of *Fusarium graminearum*

Lakshmeesha, Thimappa Ramachandrapa; Kalagatur, Naveen Kumar; Mudili, Venkataramana; Mohan, Chakrabhavi Dhananjaya; Rangappa, Shobith; Prasad, Bangari Daruka; Ashwini, Bagepalli Shivaram; Hashem, Abeer; Alqarawi, Abdulaziz A.; **Gupta, Vijai Kumar** Frontiers in microbiology 2019 / art. 1244, 13 p. : ill <https://doi.org/10.3389/fmicb.2019.01244> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biological nanofactories : using living forms for metal nanoparticle synthesis

Srivastava, Shilpi; **Usmani, Zeba;** Atanasov, Atanas G.; Singh, Vinod Kumar; Singh, Nagendra Pratap; Abdel-Azeem, Ahmed M. Mini-Reviews in Medicinal Chemistry 2021 / p. 245 - 265 <https://doi.org/10.2174/1389557520999201116163012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterization of thermally treated anatase TiO_2 supplemented by oxygen adsorption measurements

Kritševskaja, Marina; Moiseev, Anna; Weber, Alfred; Deubener, Joachim 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 124 https://photo-catalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf

CuInS₂ solar cell absorber plasmonically modified by gold nanoparticles

Repän, Taavi; Dolgov, Leonid; **Katerski, Atanas; Oja Acik, Ilona; Kärber, Erki; Mere, Arvo; Mikli, Valdek; Krunk, Malle;** Sildos, Ilmo Applied physics. A, Materials science & processing 2014 / p. 455-458 : ill

CuInS₂-Poly(3-(ethyl-4-butanoate)thiophene) nanocomposite solar cells : preparation by an in situ formation route, performance and stability issues

Maiera, Eugen; Ratha, Thomas; Haas, Wernfried; Werzer, Oliver; Saf, Robert; Hofer, Ferdinand; Meissner, Dieter; **Volobujeva, Olga;**

Bereznev, Sergei; Mellikov, Enn; Amenitsch, Heinz; Resel, Roland; Trimmel, Gregor Solar energy materials and solar cells 2011 / p. 1354–1361 : ill

Cytotoxicity of metal-based nanoparticles in epithelial barrier models

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

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/li/?794>

Differential susceptibility of catheter biomaterials to biofilm-associated infections and their remedy by drug-encapsulated eudragit RL100 nanoparticles

Pandey, Vivek Kumar; Srivastava, Kumar Rohit; Ajmal, Gufran; Thakur, Vijay Kumar; Gupta, Vijai Kumar; Upadhyay, Siddh Nath; Mishra, Pradeep Kumar International Journal of Molecular Sciences 2019 / Art. nr. 5110 <https://doi.org/10.3390/ijms20205110> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Doktoritöö: kahjurivabad ökomajad

Kõik ärikinnisvarast : [ajalehe Äripäev lisa] 2022 / Lk. 12-13 : ill https://www.ester.ee/record=b2050444*est

Doping engineering for controlled hydration and mechanical properties in Portland cement mortar with ultra-low ZnO concentration

Tamashiro, Jacqueline Roberta; de la Rubia, Miguel Angel; Rubio-Marcos, Fernando; Rojas-Hernandez, Rocio Estefania; Silva, Lucas Henrique Pereira; de Paiva, Fabio Friol Guedes; Kinoshita, Angela; Terrades, Amparo Moragues Journal of building engineering 2023 / art. 107748 <https://doi.org/10.1016/j.jobbe.2023.107748>

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>

Ecotoxicological evaluation of shale fuel oils, metal-based nanoparticles and glyphosate formulations = Põlevikivikütteõlide, metalliliste nanoosakeste ja glüfosaadipõhiste herbitsiidide ökotoksikoloogilised uuringud

Kanarbik, Liina 2017 <https://digi.lib.ttu.ee/li/?7180>

Eesti teadlaste loodud nanokangas tõrjub koroonaviirust [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 ["Eesti teadlaste loodud nanokangas tõrjub koroonaviirust"](https://novaator.err.ee/2022/03/01/eesti-teadlaste-loodud-nanokangas-torjub-koroonaviirust/)

Effect of alkali ions (Na⁺, K⁺, Cs⁺) on reaction mechanism of CZTS nano-particles synthesis

Kumar, Suresh; Altosaar, Mare; Grossberg, Maarja; Mikli, Valdek Superlattices and microstructures 2018 / p. 54-63 : ill <https://doi.org/10.1016/j.spmi.2018.02.019>

Effect of alkali ions (Na⁺, K⁺, Cs⁺) on reaction mechanism of CZTS nano-particles synthesis [Online resource]

Kumar, Suresh; Altosaar, Mare; Grossberg, Maarja; Mikli, Valdek 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://fmttk.ut.ee/teesid-2018/>

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://fmttk.ut.ee/teesid-2018/>

The effect of heat treatment on the morphology and mobility of Au nanoparticles

Oras, Sven; Vlassov, Sergei; Vigonski, Simon; Polyakov, Boris; Antsov, Mikk; Zadin, Vahur; Lõhmus, Rünno; Mougin, Karine Beilstein Journal of Nanotechnology 2020 / p. 61-67 <https://doi.org/10.3762/bjnano.11.6> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of nanoparticles on morphology and size of primary silicon and property of selective laser melted Al-high Si content alloys

Xi, Lixia; Guo, Shuang; Prashanth, Konda Gokuldoss; Sarac, Baran; Eckert, Jürgen Vacuum 2021 / art. 110405 <https://doi.org/10.1016/j.vacuum.2021.110405> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrocatalytic oxidation of hydroxide ions by Co₃O₄ and Co₃O₄@SiO₂ nanoparticles both at particle ensembles and at the single particle level

Xie, Ru-Chen; Volokhova, Maria; Boldin, Aleksei; Seinberg, Liis; Tsujimoto, Masahiko; Yang, Minjun; Rasche, Bertold; Compton, Richard G. ChemElectroChem 2020 / p. 1261– 1276 : ill <https://doi.org/10.1002/celec.202000230>

Electrochemical characterisation of Co@Co(OH)₂ core-shell nanoparticles and their aggregation in solution

Xie, Ruo-Chen; Batchelor-McAuley, Christopher; **Rauwel, Erwan**; Rauwel, Protima; Compton, Richard G. ChemElectroChem 2020 / p. 4259 - 4268 <https://doi.org/10.1002/celec.202001199> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrodeposition of CdSe nanofibers as photo-active matrix for polymer solar cells

Kois, Julia; Bereznev, Sergei; Gurevits, Jelena; Mellikov, Enn; **Öpik, Andres** Baltic Polymer Symposium 2013 : Trakai, Lithuania, September 18-21, 2013 : programme [and abstracts] 2013 / p. 122

Emerging trends in nanoparticle synthesis using plant extracts for biomedical applications

Rauwel, Protima; **Rauwel, Erwan** Global journal of nanomedicine 2017 / art. 555562, p. 1-3
<http://https://juniperpublishers.com/gjn/pdf/GJN.MS.ID.555562.pdf>

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

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

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 <http://dx.doi.org/10.1016/j.aquatox.2017.06.002>

Fibrous alumina-based Ni-CeO₂ catalyst : synthesis, structure and properties in propane pre-reforming

Potemkin, D. I.; **Aghayan, Marina**; **Kamboj, Nikhil Kumar**; **Hussainova, Irina** Materials letters 2018 / p. 35-37 : ill
<https://doi.org/10.1016/j.matlet.2017.12.039> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Growth of Co nanoparticles on a nanostructured [thetha]-Al₂O₃ film on CoAl(100)

Rose, V.; **Podgurski, Vitali**; David, Rudolf; Francy, R. Surface science 2007 / 3, p. 786-791 : ill

Hazard evaluation of metal-based nanoparticles and lanthanides with freshwater microcrustaceans = Metalliliste nanoosakeste ja lantaniidide kahjulikkuse hindamine magevee pisivähkidega

Muna, Marge 2019 <https://digi.lib.ttu.ee/i/?11634>

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](#)

Hybrid nanocomposites and ultrastable metal nanoparticles studied for the development of applications in nanomedicine, water purification and energy harvesting

Rauwel, Erwan; **Rauwel, Protima**; **Küünal, Siim**; Volobujeva, Olga; Ivask, Angela; Galeckas, Augustinas; Duqroquet, F.; Wragg, David EMN Meeting on Nanoparticles 2017 : May 9th to 13th, 2017 in San Sebastian, Spain 2017 / [1] p

Incorporation of plasmonic Au nanoparticles inside the CdTe thin film absorber

Maticiu, Natalia; **Spalatu, Nicolae**; **Katerski, Atanas**; Repan, T.; **Hiie, Jaan** NANOSMAT Conference, 22-25 September 2013, Granada, Spain : abstracts book 2013 / p. 341-342

Increased efficiency inside the CdTe solar cell absorber caused by plasmonic metal nanoparticles

Repän, Taavi; Pikker, Siim; Dolgov, Leonid; Loot, Ardi; **Hiie, Jaan**; **Krunks, Malle**; Sildos, Ilmo Energy procedia 2014 / p. 229-233 : ill

Influence of the interface on the photoluminescence properties in ZnO carbon-based nanohybrids

Rauwel, Erwan; Galeckas, Augustinas; Rosario Soares, M.; **Rauwel, Protima** Journal of physical chemistry C 2017 / p. 14879-14887 : ill <http://dx.doi.org/10.1021/acs.jpcc.7b03070>

In-situ deposition of gold nanoparticles onto different substrates by chemical spray pyrolysis

Oja Acik, Ilona; **Oyekoya, Gboyega Nathaniel**; **Mere, Arvo**; **Katerski, Atanas**; **Mikli, Valdek**; **Krunks, Malle** IOP conference series : materials science and engineering 2015 / p. 1-5 : ill

Interaction of CuCl₂ with poly(ethylene glycol) under microwave radiation

Tverjanovich, Andrey; Grevtsev, A. S.; **Bereznev, Sergei** Materials research express 2017 / art. 015006, p. 1-6 : ill

Investigations on new carbon-based nanohybrids combining carbon nanotubes and metal oxide nanoparticles

Rauwel, Protima; Galeckas, Augustinas; **Salumaa, Martin**; Ducroquet, Frederiquet; **Rauwel, Erwan** 4th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 3-7, 2016 : book of abstracts 2016 / p. 250 http://www.ic-cmtp4.eu/doc/book_of_abstract_iccmtp4.pdf

Investigations on new carbon-based nanohybrids combining carbon nanotubes, HfO₂ and ZnO nanoparticles

Rauwel, Protima; Galeckas, Augustinas; **Salumaa, Martin**; **Aasna, Andres**; Ducroquet, Frederiquet; **Rauwel, Erwan** IOP conference series : materials science and engineering 2017 / art. 012064, p. 1-5 : ill <http://dx.doi.org/10.1088/1757-899X/175/1/012064>

Low-cost plasmonic solar cells prepared by chemical spray pyrolysis

Kärber, Erki; **Katerski, Atanas**; **Oja Acik, Ilona**; **Mikli, Valdek**; **Mere, Arvo**; Sildos, Ilmo; **Krunks, Malle** The Beilstein journal of nanotechnology 2014 / p. 2398-2402 : ill

Magnetic nanomaterials synthesis and functionalization for biomedical applications = Magnetiliste nanomaterjalide sünteet ja funktsionaliseerimine biomeditsiiniliste rakenduste jaoks

Volokhova, Maria 2022 <https://doi.org/10.23658/taltech.39/2022> <https://digikogu.taltech.ee/et/Item/49b92f4b-d0cd-4544-8a64-83ca27bf2aa3> https://www.ester.ee/record=b5507318*est

Magnetic studies on spinel ferrite nanoparticles and bulk samples synthesized by citrate combustion route

Dimri, Mukesh C.; Khanduri, H.; Agarwal, P.; Garg, V.; **Mere, A.**; Stern R. DAE Solid State Physics symposium 2019, 18–22 December 2019, Jodhpur, India 2020 / art. 030517 <https://doi.org/10.1063/5.0016823> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Mechanism of a microwave-assisted polyol synthesis of nanosize CuInSe₂ particles and their optical and photoelectric properties

Grevtsev, A. S.; Goncharenko, I. Yu.; **Bereznev, Sergei** Russian journal of applied chemistry 2014 / p. 671-675 : ill

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; Orupöld, Kaja; Kahru, Anne Environmental pollution 2017 / p. 481-489 : ill <https://doi.org/10.1016/j.envpol.2017.03.013>

Metal oxide nanoparticles embedded in rare-earth matrix for low temperature thermal imaging applications

Rauwel, Erwan; Galeckas, Augustinas; **Rauwel, Protima**; Hansen, P.-A.; Wragg, David; Nilsen, Ola; Fjellvag, H. Materials research express 2016 / p. 1-11 : ill <http://dx.doi.org/10.1088/2053-1591/3/5/055010>

Microstructure formation and mechanical performance of micro-nanoscale ceramic reinforced aluminum matrix composites manufactured by laser powder bed fusion

Xi, Lixia; Feng, Lili; Gu, Dongdong; **Prashanth, Konda Gokuldoss**; Kaban, Ivan; Wang, Ruiqi; Xiong, Ke; Sarac, Baran; Eckert, Jürgen Journal of alloys and compounds 2023 / art. 168803 <https://doi.org/10.1016/j.jallcom.2023.168803>

Modification of light absorption in thin CuInS₂ films by sprayed Au nanoparticles

Katerski, Atanas; **Kärber, Erki**; **Oja Acik, Ilona**; Dolgov, Leonid; **Mere, Arvo**; Sildos, Ilmo; **Mikli, Valdek**; **Krunks, Malle** Nanoscale research letters 2014 / p. 1-6 : ill

Modification of light absorption in thin CuInS₂ films by sprayed gold nanoparticles

Mere, Arvo; **Katerski, Atanas**; **Oja Acik, Ilona**; Dolgov, Leonid; Sildos, Ilmo; **Krunks, Malle** NANOSMAT Conference, 22-25 September 2013, Granada, Spain : abstracts book 2013

Nanomaterial synthesis and study for biomedicine and cancer treatment

Rauwel, Erwan International Conference and Exhibition on Nanomedicine and Drug Delivery : May 29-31, 2017, Osaka, Japan 2017 / [1] p

Nanomaterial synthesis and study for biomedicine and cancer treatment

Rauwel, Erwan Journal of pharmaceuticals & drug delivery research 2017 / p. 55 <http://dx.doi.org/10.4172/2325-9604-C1-020>

Natural water as the test medium for Ag and CuO nanoparticle hazard evaluation : an interlaboratory case study

Heinlaan, Margit; **Muna, Marge**; Knöbel, Melanie Environmental pollution 2016 / p. 689-699 : ill <https://doi.org/10.1016/j.envpol.2016.06.033>

New methodology for the antifungal testing of surfactant-free silver metal nanoparticles for applications in green housing

Küüna, Siim; **Kutti, Sander**; **Rauwel, Protima**; Wragg, David; **Hussainova, Irina**; **Rauwel, Erwan** Engineering materials and tribology : selected, peer reviewed papers from the 24th International Baltic Conference on Engineering Materials & Tribology (BALMATTRIB & IFHTSE 2015), November 5-6, 2015, Tallinn, Estonia 2016 / p. 133-138 : ill

NiO and WO₃ coreduction by combined reducers Mg/C and preparation of W-Ni alloy [Online resource]

Zakaryan, Marieta; **Aydinyan, Sofiya**; Kharatyan, Suren Abstracts : 14th International Ceramics Congress 2018 / CB-10.2:L03
http://2018.cimtec-congress.org/abstracts_focused_session_cb-10

Noble metal nanoparticles for improvement of fluorescent and photovoltaic materials

Dolgov, Leonid; **Oja Acik, Ilona; Mere, Arvo; Krunks, Malle; Mikli, Valdek** The international summer school "Nanotechnology: from fundamental research to innovations" and International research and practice conference "Nanotechnology and nanomaterials" (NANO-2013), 25 August-1 September, 2013, Bukovel, Ukraine : book of abstracts 2013 / p. 352

A novel high-strength Al-based nanocomposite reinforced with Ti-based metallic glass nanoparticles produced by powder metallurgy

Zhang, W.W.; Hu, Y.; **Prashanth, Konda Gokuldoss** Materials science and engineering : A 2018 / p. 34-41 . ill
<https://doi.org/10.1016/j.msea.2018.07.082>

Oil shale phenol-derived aerogels as supports for palladium nanoparticles

Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Uibu, Mai; Herbert, M.; Galindo, A.; Montilla, F.; **Koel, Mihkel** Oil shale 2009 / 1, p. 28-39 : ill

One step synthesis of pure cubic and monoclinic HfO₂ nanoparticles : effects of temperature and ambient on the photoluminescent properties

Rauwel, Protima; Galeckas, Augustinas; **Rauwel, Erwan** ECS transactions 2015 / p. 19-28

Optimisation of plant mediated synthesis of silver nanoparticles by common weed Plantago major and their antimicrobial properties

Küüna, Siim; Visnapuu, Meeri; **Volobujeva, Olga**; Soares Rosario, Maria; **Rauwel, Protima; Rauwel, Erwan** IOP Conference Series : Materials Science and Engineering 2019 / art. 012003 <https://doi.org/10.1088/1757-899X/613/1/012003> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Oxygen electroreduction on platinum nanoparticles activated electrodes deposited onto D-glucose derived carbon support in 0.1 M KOH

Taleb, Masoud; Nerut, Jaak; Tooming, Tauno; Thomberg, Thomas; Lust, Enn Journal of The Electrochemical Society 2016 / p. F1251-F1257 <http://dx.doi.org/10.1149/2.1051610jes>

Oxygen reduction on silver nanoparticles supported on carbide-derived carbons

Linge, Jonas Mart; Erikson, Heiki; Merisalu, Maido; **Kaljuvee, Tiit** Journal of the electrochemical society 2018 / p. F1199–F1205
<https://doi.org/10.1149/2.0711814jes> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photocatalytic activity of quenched flame-synthesized titania nanoparticles

Klauson, Deniss; Hauser, G. I.; **Kritševskaja, Marina**; Moiseev, Anna; Weber, Alfred; Deubener, Joachim 5th European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP5) : book of abstracts 2017 / p. 199
https://photo-catalysis.org/events/901/photo/book_of_proceedings_eaaop5_prague.pdf

Plant extract mediated synthesis of nanoparticles : chapter 14

Küüna, Siim; Rauwel, Protima; Rauwel, Erwan Emerging applications of nanoparticles and architecture nanostructures : current prospects and future trends 2018 / p. 411–446 <https://doi.org/10.1016/B978-0-323-51254-1.00014-2>

Plant mediated syntheses of silver nanoparticles using common weed (Plantago Major L.)

Küüna, Siim; Volobujeva, Olga; Rauwel, Protima; Rauwel, Erwan 10th International Conference on Biosystems Engineering 2019 : book of abstracts : May 8-10 2019 Tartu, Estonia 2019 / p. 172
http://dspace.emu.ee/xmlui/bitstream/handle/10492/4955/ABS_2019_Book_VV.pdf?sequence=1&isAllowed=y

Plant mediated synthesis of silver-based nanoparticles and their use as antimicrobial agent in environmentally-friendly applications = Taime ekstrakti abil sünteesitud hõbedal põhinevad nanoosakesed ning nende kasutus antimikroobse vahendina keskkonnasõbralikes rakendustes

Küüna, Siim 2022 <https://doi.org/10.23658/taltech.2/2022> <https://digikogu.taltech.ee/et/Item/c3a53dca-9a76-4356-810f-2d51e44cdbc5>
https://www.ester.ee/record=b5492124*est

Plasmon resonance effect caused by gold nanoparticles formed on titanium oxide films

Tamm, Aile; **Oja Acik, Ilona; Krunks, Malle; Mere, Arvo** Thin solid films 2016 / p. 449-455 : ill <https://doi.org/10.1016/j.tsf.2016.08.059>

Plasmon-enhanced photocurrent by gold nanoparticles on extremely thin solar cells by chemical spray pyrolysis

Kärber, Erki; Katerski, Atanas; Oja Acik, Ilona; Mere, Arvo; Krunks, Malle Nanotechnology for Next Generation High Efficiency Photovoltaics : Spring International School & Workshop, Mao, Menorca, Balearic Islands (Spain), April 20-24, 2015 : book of abstracts 2015 / [1] p

Plasmonic effect of spray-deposited Au nanoparticles on the performance of CSS CdS/CdTe solar cells

Spalatu, Nicolae; Hiie, Jaan; Maticiuc, Natalia; Krunks, Malle; Katerski, Atanas; Mikli, Valdek; Sildos, Ilmo Applied surface science 2015 / p. 69-73 : ill <http://dx.doi.org/10.1016/j.apsusc.2015.04.065>

Plasmonic modification of CdTe thin films by gold nanoparticles : methods, difficulties and solutions

Maticiuc, Natalia; Spalatu, Nicolae; Katerski, Atanas; Hiie, Jaan; Mikli, Valdek; Krunks, Malle; Dolgov, Leonid; Sildos, Ilmo Microelectronic engineering 2014 / p. 173-178 : ill

Plasmonic TiO₂:Au composite layers deposited in situ by chemical spray pyrolysis

Oja Acik, Ilona; Oyekoya, Gboyega Nathaniel; Mere, Arvo; Loot, Ardi; Dolgov, Leonid; Mikli, Valdek; Krunks, Malle; Sildos, Ilmo Surface and coatings technology 2015 / p. 27-31 : ill <http://dx.doi.org/10.1016/j.surfcoat.2015.01.036>

Preparation of metal-doped carbon aerogels from oil shale processing by-products

Kreek, Kristiina; Kulp, Maria; Uibu, Mai; Mere, Arvo; Koel, Mihkel Oil shale 2014 / p. 185-194 : ill
https://artiklid.elnet.ee/record=b2673721*est

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>

Recent advances in essential oils-based metal nanoparticles : a review on recent developments and biopharmaceutical applications

Sana, Siva Sankar; Li, Huizhen; Zhang, Zhijun; Sharma, Minaxi; Usmani, Zeba; Hou, Tianyu; Netala, Vasudeva Reddy; Wang, Xin; Gupta, Vijai Kumar Journal of Molecular Liquids 2021 / Art. nr. 115951 <https://doi.org/10.1016/j.molliq.2021.115951> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Recent advances in nanoparticles applied to water remediation and biomedical applications

Rauwel, Erwan 5th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 8-12, 2018 : book of abstracts 2018 / p. 47 https://www.ic-cmtp5.eu/doc/book_of_abstract_iccmtp5.pdf

A review on the green synthesis of silver nanoparticles and their morphologies studied via TEM

Rauwel, Protima; Küünal, Siim; Ferdov, Stanislav; Rauwel, Erwan Advances in materials science and engineering 2015 / p. 1-9 : ill
<http://doi.org/10.1155/2015/682749>

Selective photocurrent generation in HfO₂ and carbon nanotube hybrid nanocomposites under Ultra-Violet and visible photoexcitations

Rauwel, Protima; Galeckas, Augustinas; Ducroquet, Frédérique; Rauwel, Erwan Materials Letters 2019 / p. 45 - 48
<https://doi.org/10.1016/j.matlet.2019.03.030> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Silver metal nanoparticles study for biomedical and green house applications

Rauwel, Erwan; Simon-Gracia, Lorena; Guha, Mithu; Rauwel, Protima; Küünal, Siim; Wragg, David IOP conference series : materials science and engineering 2017 / art. 012011, p. 1-5 : ill <http://dx.doi.org/10.1088/1757-899X/175/1/012011>

Silver nanoparticles : synthesis, properties, and applications

Rauwel, Protima; Rauwel, Erwan; Ferdov, Stanislav; Singh, Mangala P. Advances in materials science and engineering 2015 / p. 1-2 <http://dx.doi.org/10.1155/2015/624394>

Silver nanoparticles study for application in green housing

Küünal, Siim; Kutti, Sander; Guha, Mithu; Rauwel, Protima; Wragg, David; Nurk, Gunnar; Rauwel, Erwan ECS transactions 2015 / p. 15-24 <http://10.0.4.125/06447.0015ecst>

Stabilization of higher symmetry HfO₂ polymorphs as thin films and nanoparticles

Rauwel, Protima; Rauwel, Erwan Hafnium : chemical characteristics, production and applications 2014 / p. 77-112 : ill

Stable metal nanoparticles study for biomedical and green houses applications

Küünal, Siim; Rauwel, Erwan; Rauwel, Protima; Gracia, Lorena; Guha, Mithu; Wragg, David 4th International Conference on Competitive Materials and Technology Processes : Miskolc-Lillafüred, Hungary, October 3-7, 2016 : book of abstracts 2016 / p. 48
http://www.ic-cmtp4.eu/doc/book_of_abstract_iccmtp4.pdf

Sunlight-driven photocatalytic degradation of methylene blue with facile one-step synthesized Cu-Cu₂O-Cu₃N nanoparticle mixtures

Paredes, Patricio; Rauwel, Erwan; Wragg, David S.; Rapenne, Laetitia; Estephan, Elias; Volobujeva, Olga; Rauwel, Protima Nanomaterials 2023 / art. 1311 <https://doi.org/10.3390/nano13081311>

Surface plasmon resonance caused by gold nanoparticles formed on sprayed TiO₂ films

Oja Acik, Ilona; Dolgov, Leonid; **Krunks, Malle; Mere, Arvo; Mikli, Valdek**; Pikker, Siim; Loot, Ardi; Sildos, Ilmo Thin solid films 2014 / p. 144-147 : ill

Surface plasmon resonance in ZnO nanorod arrays caused by gold nanoparticles for solar cell application

Gromõko, Inga; Oja Acik, Ilona; Krunks, Malle; Dedova, Tatjana; Katerski, Atanas; Mere, Arvo; Mikli, Valdek; Vessart, Risto

Physica status solidi (c) 2015 / p. 1338-1343 : ill <http://dx.doi.org/10.1002/pssc.201510103>

Sünteeetiliste 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>

Synergistic mechanisms and toxicity profiles of silver and copper nanoparticles for the development of novel antimicrobial materials = Vase ja hõbeda nanoosakeste sünergilise koosmõju mehhanismid ja rakendamine uute antimikroobsete materjalide arendamiseks

Vasiliev, Grigory 2023 <https://doi.org/10.23658/taltech.28/2023> <https://digikogu.taltech.ee/et/Item/50c08f30-1077-456a-8e2b-c9f43447d616>
https://www.ester.ee/record=b5568720*est

Synthesis of Ni@SiO₂ and Co@SiO₂ nanomagnets after formation of NiO and Co₂O₃ nanoparticles at low temperatures using CaH₂

Volokhova, Maria; Boldin, Aleksei; Link, Joosep; Tsujimoto, Masahiko; Stern, Raivo; Seinberg, Liis Journal of materials research and technology 2022 / p. 988-992 : ill <https://doi.org/10.1016/j.jmrt.2021.12.042> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis of zwitterionic dopamine sulfonate coated cubic core@Fe@SiO₂ nanoparticles and their magnetic properties analysis

Volokhova, Maria; Boldin, Aleksei; Link, Joosep; Shugai, Anna; Pehk, Tõnis; Stern, Raivo; Seinberg, Liis Materials 2023 / 6 p. : ill

ZnO nanorods grown electrochemically on different metal oxide underlays

Gromõko, Inga; Dedova, Tatjana; Krunks, Malle; Sõritski, Vitali; Mere, Arvo; Mikli, Valdek; Unt, Tarmo; Oja Acik, Ilona IOP conference series : materials science and engineering 2015 / p. 1-5 : ill <http://dx.doi.org/10.1088/1757-899X/77/1/012012>

The activity of nanomaterials in photocatalysis

Krichevskaya, Marina Proceedings 2023 / art. 23 <https://doi.org/10.3390/proceedings2023092023>

The effect of nano-TiC addition on sintered Nd-Fe-B permanent magnets

Mural, Zorjana; Kollo, Lauri; Xia, Manlong; **Veinthal, Renno** Journal of magnetism and magnetic materials 2017 / p. 23-28 : ill <https://doi.org/10.1016/j.jmmm.2016.12.115>

The effect of surface charge and pH on the physiological behaviour of cobalt, copper, manganese, antimony, zinc and titanium oxide nanoparticles in vitro

Titma, Tiina Toxicology in vitro 2018 / p. 11-21 : ill <https://doi.org/10.1016/j.tiv.2018.02.010> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 toimele

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

The template-assisted wet-combustion synthesis of fibrous nickel-based catalyst for carbon dioxide methanation and methane steam reform

Aghayan, Marina; Potemkin, D. I.; Rubio-Marcos, Fernando; **Hussainova, Irina** ECerS 2017 : 15th Conference & Exhibition of the European Ceramic Society, July 9–13, 2017, Budapest, Hungary : Book of abstracts 2017 / p. 419 : ill <https://static.akcongress.com/downloads/ecers/ecers2017-abstract-book.pdf>

The template-assisted wet-combustion synthesis of fibrous nickel-based catalyst for carbon dioxide methanation and methane steam reforming

Aghayan, Marina; Potemkin, D. I.; Rubio-Marcos, Fernando; Uskov, S. I.; Snytnikov, N.; **Hussainova, Irina** ACS applied materials and interfaces ACS applied materials & interfaces 2017 / p. 43553-43562 : ill <http://dx.doi.org/10.1021/acsami.7b08129>

Thermal decomposition study of HAuCl₄·3H₂O and AgNO₃ as precursors for plasmonic metal nanoparticles

Otto, Kairi; Krunks, Malle; Oja Acik, Ilona; Tõnsuaadu, Kaia Book of abstracts : 2nd Central and Eastern European Conference

Thermal decomposition study of $\text{HAuCl}_4 \cdot 3\text{H}_2\text{O}$ and AgNO_3 as precursors for plasmonic metal nanoparticles

Otto, Kairi; Oja Acik, Ilona; Krunk, Malle; Tõnsuaadu, Kaia; Mere, Arvo Journal of thermal analysis and calorimetry 2014 / p. 1065-1072 : ill

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://fmdk.ut.ee/teesid-2018/>

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 <http://dx.doi.org/10.1007/s10616-016-0032-9>

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 <http://dx.doi.org/10.3390/ma10070754>

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/i/?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/i/?10627>

Using nano-additives to increase the oxygen barrier of polymers [Online resource]

Paara, Tõnis; Lange, Sven; **Krumme, Andres** 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/>

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

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