

Advanced nanomaterials and their applications in renewable energy, Jingbo Louise Liu and Sajid Bashir : Elsevier 2015, 436 pages, print and e-book \$144.50, ISBN 9780128015285 : [book review]

Rauwel, Protima MRS bulletin 2016 / p. 494 <https://doi.org/10.1557/mrs.2016.127>

Analysis and improvement of resilience for long short-term memory neural networks

Ahmadilivani, Mohammad Hasan; Raik, Jaan; Daneshtalab, Masoud; Kuusik, Alar 2023 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) 2023 / 4 p <https://doi.org/10.1109/DFT59622.2023.10313559>

Antibacterial activity of chitosan-silver nanocomposites

Kasemets, Kaja; **Laanoja, Jüri**; Kahru, Anne Debrecen Colloquium on Carbohydrates 2020 in 2022, August 24-27, 2022 Debrecen, 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 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>

Beneficial effects of bio-fabricated selenium nanoparticles as seed nanoprimer agent on seed germination in rice (Oryza sativa L.)

Setty, Jyotsna; Samant, Sanjib Bal; **Yadav, Mayank Kumar**; Manjubala, Muthusamy; Pandurangam, Vijai Scientific Reports 2023 / art. 22349 <https://doi.org/10.1038/s41598-023-49621-0> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Beneficial effects of stoichiometry and nanostructure for a LiBH₄-MgH₂ hydrogen storage system

Hu, Jianjiang; **Witter, Raiker**; Shao, Huaiyu; Felderhoff, Michael; Fichtner, Maximilian Journal of materials chemistry A 2014 / p. 66-72 : ill <https://doi.org/10.1039/C3TA13775A> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Biobased natural deep eutectic system as versatile solvents : structure, interaction and advanced applications

Usmani, Zeba; Sharma, Minaxi; Tripathi, Manikant; **Lukk, Tiit**; **Karpichev, Yevgen**; Gathergood, Nicholas; Singh, Brahma N.; Thakur, Vijay Kumar; Tabatabaei, Meisam; Gupta, Vijai Kumar Science of the total environment 2023 / art. 163002
<https://doi.org/10.1016/j.scitotenv.2023.163002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Book review : Nanomaterials for wastewater remediation, Ravindra Kumar Gautam and Mahesh Chandra

Chattopadhyaya: Butterworth-Heinemann, 2016, 366 pages

Rauwel, Protima MRS bulletin 2017 / p. 885-886 <https://doi.org/10.1557/mrs.2017.203>

Characterization of microstructure and mechanical properties of cermets at micro- and nanoscales

Hussainova, Irina; Antonov, Maksim; Jasiuk, Iwona; Du, Xiangdong International journal of materials & product technology 2011 / p. 58-74 : ill

Conventional nanoindentation in self-assembled monolayers deposited on gold and silver substrates

Costelle, Leila; **Lind, Liina** Journal of nanomaterials 2012 / 5 p. : ill <https://onlinelibrary.wiley.com/doi/10.1155/2012/585123>

Crack formation during post-treatment of nano- and microfibres prepared by sol-gel technique

Tätte, Tanel; Kolesnikova, Anna; **Hussainov, Medhat**; Talviste, R.; Lõhmus, Rünno; Romanov, Alexey; **Hussainova, Irina**; Part, Marko; Lõhmus, Ants Journal of nanoscience and nanotechnology 2010 / 9, p. 6009-6016 <https://pubmed.ncbi.nlm.nih.gov/21133140/>

Creative destruction management : meeting the challenges of the techno-economic paradigm shift

Kalvet, Tarmo; **Kattel, Rainer** 2006 https://www.ester.ee/record=b2186269*est

Determination of mechanical properties of thin hard coatings using nanoindentation

Yaldiz, Can Emrah; **Veinthal, Renno; Gregor, Andre**; Georgiadis, Kyriakos 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 48

Development of automated detection and wireless reporting for a handheld point-of-care test

Pardy, Tamas; Filograno, Leonardo; Baumann, Cindy; **Rang, Toomas** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2021 / 4 p. : ill <https://doi.org/10.1109/BEC49624.2020.9276773>

Eestilt Euroopale : [Euroopa nanotehnika foorumil osales Eestist Raamprogrammi FP7 projekt DIAMOND, mida juhib TTÜ arvutitehnika instituudi professor Jaan Raik]

Ubar, Raimund-Johannes Mente et Manu 2012 / lk. 8 : fot https://www.ester.ee/record=b1242496*est

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/celc.202001199> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Governance in and of techno-economic paradigm shifts : considerations for and from the nanotechnology surge
Drechsler, Wolfgang Techno-economic paradigms : essays in honour of Carlota Perez 2009 / p. 95-104

Heatujuliselt maailmalõpule vastu

Polis, Einar Eesti Ekspress 2005 / 17. nov., Homme, lk. 29 https://artiklid.elnet.ee/record=b1299790*est

High precision parabolic quantum wells grown using pulsed analog alloy grading technique: Photoluminescence probing and fractional-dimensional space approach

Karaliunas, Mindaugas; Dudutiene, Evelina; Čerškus, Aurimas; Pagalys, Justas; Pūkiene, Simona; **Udal, Andres**; Butkute, Renata; Valušis, Gintaras Journal of luminescence 2021 / art. 118321, 9 p <https://doi.org/10.1016/j.jlumin.2021.118321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-temperature tribological performance of Al₂O₃/a-C:H:Si coating in ambient air

Podgurski, Vitali; Alamgir, Asad; Yashin, Maxim; Jõgiaas, Taivo; **Viljus, Mart**; Raadik, Taavi; Danilson, Mati; Sergejev, Fjodor; Lümkmann, Andreas; Kluson, Jan; Sondor, Jozef; **Bogatov, Andrei** Coatings 2021 / art. 495, 15 p. : ill

<https://doi.org/10.3390/coatings11050495> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

History of the Scientific School of Z. A. Mansurov at the Institute of Combustion Problems in Almaty

Usenov, Galymzhan; Suleimenov, Pirimbek; **Mürsepp, Peeter** Acta Baltica historiae et philosophiae scientiarum 2022 / p. 104-125 : fot <https://doi.org/10.11590/abhps.2022.1.06> https://www.ester.ee/record=b2941458*est [Journal metrics at Scopus](#) [Article at Scopus](#)

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

Rauwel, Erwan; Rauwel, Protima; Küüna, 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

Introduction to nanomaterials and nanotechnology

Pokropivny, Vladimir; Lõhmus, Rünno; **Hussainova, Irina**; Pokropivny, Alex; Vlassov, Sergei 2007 https://www.ester.ee/record=b2310170*est

Keemiliste nanoninade tulek

Aav, Riina Horisont 2020 / lk. 20-25 : fot https://www.ester.ee/record=b1072243*est

3 küsimust nanotehnoloogias : [vastab TÜ Füüsika Instituudi direktor Kristjan Haller]

Haller, Kristjan Mente et Manu 2001 / 27. veebr., lk. 6 https://www.ester.ee/record=b1242496*est

Microbial interactions with inanimate solid surfaces : a methodological approach = Mikroobide interaktsioonid tahkete eluta pindadega : metoodiline käsitus

Rosenberg, Merilin 2022 <https://doi.org/10.23658/taltech.6/2022> <https://digikogu.taltech.ee/et/Item/ae0fc64d-c7bf-46e9-bc65-85342787a8cb> https://www.ester.ee/record=b5491623*est

Mida millestki teha saaks : [ka TTÜ materjalitehnika instituudi uurimistöödest]

Lõhmus, Ants; **Kübarsepp, Jakob** Horisont 2005 / 6, lk. 10-15 : ill https://artiklid.elnet.ee/record=b2038782*est

Mikro- ja nanotehnoloogiliste uurimismeetodite arendamine tööstuslike materjalide väljatöötamiseks : kommentaar Eesti Vabariigi teaduse aastapreemia pälvunud tööde tsüklile

Kübarsepp, Jakob; Lõhmus, Ants; **Hussainova, Irina**; Lõhmus, Rünno Tallinna Tehnikaülikooli aastaraamat 2005 2006 / lk. 269-284

Moore'i seadus ja meie tulevik

Võhandu, Leo Director 2006 / 1, lk. 44-48 https://artiklid.elnet.ee/record=b2027138*est

Multi-nodal nano-actuator pacemaker for energy-efficient stimulation of cardiomyocytes

Lu, Pengfei; Veletic, Mladen; **Laasmaa, Martin**; **Vendelin, Marko** Nano Communication Networks 2019 / art. 100270, 11 p. : ill <https://doi.org/10.1016/j.nancom.2019.100270> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nano tungib ellu. Kuidas nanotehnoloogia muudab meditsiini ja tulevikubioloogiat

Engelbrecht, Jüri Horisont 2023 / lk. 58 https://www.ester.ee/record=b1072243*est

Nanodevices expectations in construction engineering

Aruväli, Tanel 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 289-294 : ill

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

NanoGov - Nanotechnologie, Innovation, Governance und Verwaltung aus der Perspektive der techno-ökonomischen Paradigmen

Drechsler, Wolfgang Nanotechnologie : Grundlagen, Anwendungen, Risiken, Regulierung 2008 / p. 307-326

Nanoindentation analysis and micromechanical modeling of chromium carbide based composites

Hussainova, Irina; Hamed, Elham; Jasiuk, Iwona Nanomeasure 2010 : June 3-4, 2010, Krakow, Poland : abstract book 2010

Nanopowders, Nanostuctured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts

2005 http://www.ester.ee/record=b2038086*est

Nanoscale dissipation of radiation energy in solid target

Hussainova, Irina; Saal, K.; Löhmus, Ants; Kink, I. Abstracts of 1st ESF Nanotribology Workshop : Turkey, 2003 2003 / p. 30

Nanotechnology in military development

Pedai, Andrus; Astrov, Igor World Academy of Science, Engineering and Technology. International journal of chemical, nuclear, materials and metallurgical engineering 2014 / p. 1121-1125 : ill

Nanotechnology, governance and public management : a techno-economic paradigms perspective

Drechsler, Wolfgang The NISPAcee journal of public administration and policy 2010 / 2, p. 69-85

Nanotehnoloogia : hirmud, müüdid ja võimalused

Udal, Andres Tallinna Tehnikaülikooli aastaraamat 2011 2012 / lk. 18-33 : ill

Nanotehnoloogiad : sõnastik. Osa 1, Tuumik-sõnavara = Nanotechnologies : vocabulary. Part 1, Core terms

2011 https://www.ester.ee/record=b2707940*est

Nanotehnoloogiad : sõnastik. Osa 3, Süsinik-nanoobjektid = Nanotechnologies : vocabulary. Part 3, Carbon nano-objects

2011 https://www.ester.ee/record=b2707947*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 1, Tuumik-sõnavara = Nanotechnologies : vocabulary. Part 1, Core terms (ISO/TS 80004-1:2010)

2015 http://www.ester.ee/record=b4454097*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 1, Tuumik-sõnavara = Nanotechnologies : vocabulary. Part 1, Core terms (ISO/TS 80004-1:2015)

2016 http://www.ester.ee/record=b4601747*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 3, Süsinik-nanoobjektid = Nanotechnologies : vocabulary. Part 3, Carbon nano-objects (ISO/TS 80004-3:2010)

2015 http://www.ester.ee/record=b4454176*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 4, Nanostruktuur-materjalid = Nanotechnologies : vocabulary. Part 4, Nanostructured materials (ISO/TS 80004-4:2011)

2015 http://www.ester.ee/record=b4454176*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 6, Nanoobjektide karakteriseerimine = Nanotechnologies : vocabulary. Part 6, Nano-object characterization (ISO/TS 80004-6:2013)

2015 http://www.ester.ee/record=b4457416*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 6, Nanoobjektide karakteriseerimine = Nanotechnologies : vocabulary. Part 6, Nano-object characterization (ISO/TS 80004-6:2013)

2015 http://www.ester.ee/record=b4483533*est

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 8, Nanootootmisprotsessid = Nanotechnologies : vocabulary. Part 8, Nanomanufacturing processes (ISO/TS 80004-8:2013)

2015 http://www.ester.ee/record=b4531230*est

Phase, microstructure, and wear behavior of Al₂O₃-reinforced Fe–Si alloy-based metal matrix nanocomposites

Saxena, Akash; **Singh, Neera**; Singh, Bhupendra; Kumar, Devendra; Sadasivuni, Kishor Kumar; Gupta, Pallav; Kumar, Devendra
Proceedings of the institution of mechanical engineers part L Journal of Materials Design and Applications Journal of materials
design and applications 2020 / art. 146442071989338, p. 467-480 <https://doi.org/10.1177/1464420719893387> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Phases properties of SC superalloy measured by nanoindentation

Kommel, Lembit; Kimmari, Eduard; Viljus, Mart Materials engineering & Baltrib 2010 : materials of the XIX-th International Baltic
Conference : October 28-29, 2010, Riga, Latvia 2010 / p. 22

Polymer nanofiber deposition in lab-on-a-chip devices by electrospinning

Pardy, Tamas; Jõemaa, Rauno; Ender, Ferenc; **Rang, Toomas**; Hegedus, Kristof; Balogh-Weiser, Diana 2020 17th Biennial
Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p. : ill
<https://doi.org/10.1109/BEC49624.2020.9277494>

Puine vool

Strandberg, Marek Inseneeria 2015 / lk. 10 : fot

Red algal galactans: nature-reserving isolation, analysis and possible applications in nanotechnology

Tuvikene, Rando; Truus, Kalle; **Kallavus, Urve; Vaher, Merike; Pehk, Tõnis** Conference on Knowledge-based Materials and
Technologies for Sustainable Chemistry : 1-5 June 2005, Tallinn, Estonia : abstract book 2005 / p. 120 : ill

Seemnerakkude ralli

Strandberg, Marek Inseneeria 2016 / lk. 8 : ill https://artiklid.elnet.ee/record=b2760096*est

Silicon carbide - new challenge for power semiconductor devices

Rang, Toomas; Rang, Galina 2nd International Symposium "Topical Problems of Education in the Field of Electrical and Power
Engineering" : Kuressaare, Estonia, January 17-22, 2005 2005 / p. 36-42 : ill

Solution based processing for nanocarbitides

Umalas, Madis; Reedo, Valter; Lõhmus, A.; **Hussainova, Irina** Proceedings of the 8th International Conference of DAAAM Baltic
Industrial Engineering, 19-21st April 2012, Tallinn, Estonia. 2 2012 / p. 753-758 : ill

Structural, optical and electrical properties of zno thin films doped with al, v and nb, deposited by r.f. magnetron sputtering

Lovchinov, Konstantin; Petrov, Miroslav; Angelov, Orlin; Nichev, Hristo; **Mikli, Valdek; Dimova-Malinovska, Doriana** Nanoscience
advances in CBRN agents detection, information and energy security : Proceedings of the NATO Advanced Study Institute on
Nanoscience Advances in CBRN Agents Detection, Information and Energy Security, Sozopol, Bulgaria, 29 May 2014 –6 June 2014
2015 / p. 289-301 https://doi.org/10.1007/978-94-017-9697-2_29 [Conference proceedings at Scopus](#) [Article at Scopus](#)

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>

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 of bioactive silver nanoparticles by a Pseudomonas strain associated with the Antarctic Psychrophilic Protozoon Euplotes focardii

John, Maria Sindhura; Nagoth, Joseph Amruthraj; **Ramasamy, Kesava Priyan**; Mancini, Alessio Marine drugs 2020 / art. 38, 13 p. :
ill <https://doi.org/10.3390/md18010038>

TiO₂ thin films by ultrasonic spray pyrolysis

Chen, Zengjun; Dündar, Ibrahim; Oja Acik, Ilona; Mere, Arvo IOP conference series : materials science and engineering 2019 /
art. 012006, 7 p. : ill <https://doi.org/10.1088/1757-899X/503/1/012006> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Towards nanotechnology through structural research

Kallavus, Urve Environmental education, communication and sustainability "Integrative Approaches Towards Sustainability in the
Baltic Sea Region" 2004 / p. 111-115

Towards nanotechnology through the structural research

Kallavus, Urve International conference "Integrative approaches towards sustainability" Baltic Sea Region Taking the Lead : Riga, Jumala, 2003 2003 / p. 70-72

Transformations of gold nanocontacts studied by molecular dynamics simulations

Pokropivny, A.V.; Lõhmus, Rünno; Erts, D.; **Hussainova, Irina**; Olin, H.; Lõhmus, Ants Proceedings of International Conference on Nanotechnology NANOTECH 2004 : January 8-12, 2004, Boston, USA 2004 / p. ?

Uued perspektiivid tüvi- ja vähirakkude uurimisel

Hussainova, Irina; Vähi, Kersti Mente et Manu 2016 / lk. 24-25 : fot http://www.ttu.ee/public/u/ulikool/Tutvustus/ajaleht-mente-et-manu/MM_2016_05/index.html https://artiklid.elnet.ee/record=b2797135*est

50 000 eurot võitis UTRINIA meeskond : [toetuse abil luuakse nanotehnoloogial põhinev meetod haiguste ja dopingujuhtude kiiremaks ja odavamaks tuvastamiseks]

Lindmaa, Rasmus Mente et Manu 2014 / lk. 15 : fot https://artiklid.elnet.ee/record=b2686651*est