

Aatomid on nüüd nähtavamad : [TTÜ materjaliuuringute teaduskeskuses 9. veebr. alustatud materjalide nanostruktuuri uurimisseadme (aatomjõumikroskoobi AFM) seadistamisest]

Vähi, Kersti Õpetajate Leht 2006 / 10. märts, lk. 16

Al-SiC nanocomposites produced by high-energy milling and hot pressing

Kollo, Lauri; Bradbury, Christopher R.; Leparoux, Marc 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 25 : ill

Aluminate-based nanostructured luminescent materials : design of processing and functional properties

Rojas Hernandez, Rocio Estefania; Rubio-Marcos, Fernando; Fernandez, Jose Francisco; Hussainova, Irina Materials 2021 / art. 4591 <https://doi.org/10.3390/ma14164591> [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 <https://doi.org/10.1016/j.tsf.2012.09.071> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cationic substitution effects in sol-gel derived Ca-phosphate bioceramics materials

Bogdanoviciene, Irma; Ezerskyte-Miseviciene, Akvile; Traksmaa, Rainer; Tõnsuaadu, Kaia; Kareiva, Aivaras Chemistry and Chemical Technology 2015 : International Conference of Lithuanian Chemical Society : dedicated to Professor Vitas Daukšas on his 80th birth anniversary : Vilnius, Lithuania, January 23, 2015 : programme and proceedings of the international conference 2015 / p. 66-69 : ill

CdSe nanofiber and nanohorn structures on ITO substrates fabricated by electrochemical deposition

Kois, Julia; Gurevičs, Jelena; Bereznev, Sergei; Volobujeva, Olga; Õpik, Andres; Mellikov, Enn Applied surface science 2013 / p. 982-985 : ill <https://doi.org/10.1016/j.apsusc.2013.07.056> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chemical composition of sprayed copper indium disulfide films for nanostructured solar cells = Pihustatud vaskindiumdisulfiid-kilede keemiline koostis ja rakendus nanostruktuursetes päikesepatareides

Katerski, Atanas 2011 <https://digi.lib.ttu.ee/i/?524>

Chemical spray deposition of zinc oxide nanostructured layers from zinc acetate solutions

Dedova, Tatjana; Klauson, Jelena; Badre, C.; Pauporte, Th.; Nisumaa, Reet; Mere, Arvo; Volobujeva, Olga; Krunks, Malle Physica status solidi (a) : applications and materials science 2008 / 10, p. 2355-2359 : ill <https://onlinelibrary.wiley.com/doi/abs/10.1002/pssa.200779440>

Chemical spray pyrolysis deposition of zinc sulfide thin films and zinc oxide nanostructured layers = Tsinksulfiidi õhukesed kiled ning tsinkoksiidi nanostruktuurset kihid keemilise pihustuspürolüüsi meetodil

Dedova, Tatjana 2007 <https://digi.lib.ttu.ee/i/?155> https://www.ester.ee/record=b2324660*est

Combined sol-gel and carbothermal synthesis of ZrC-TiC powders for composites

Umalas, Madis; Hussainova, Irina; Reedo, Valter; Yung, Der-Liang Materials chemistry and physics 2015 / p. 301-306 : ill <https://doi.org/10.1016/j.matchemphys.2015.01.017> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Combustion synthesis and consolidation of Ni-W nanocomposite material

Zakaryan, Marieta; Aydinyan, Sofiya; Kharatyan, Suren Ceramics in modern technologies 2019 / p. 67-74 <https://doi.org/10.29272/cmt.2018.0007>

Comparative study of nanostructured CdS thin films prepared by CBD and spray pyrolysis : annealing effect

Hiie, Jaan; Dedova, Tatjana; Valdna, Vello; Muska, Katri Thin solid films 2006 / p. 443-447 : ill

Competitive binding of natural amphiphiles with graphene derivatives

Radic, Slaven; Geitner, Nicholas K.; Podila, Ramakrishna; Käkinen, Aleksandr; Chen, Pengyu; Ke, Pu Chun; Ding, Feng Scientific reports 2013 / art. 2273 <https://doi.org/10.1038/srep02273> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Corrigendum to "Fabrication of novel SiOxNy/SWCNT laminate-type composite protective coating using low-temperature approach" [Ceram. Int. 50 (2024) 34312–34320, (S0272884224026634), (10.1016/j.ceramint.2024.06.250)]

Shmagina, Elizaveta; Volobujeva, Olga; Nasibulin, Albert; Bereznev, Sergei Ceramics international 2025 / art. 48887

<https://doi.org/10.1016/j.ceramint.2024.09.158> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design optimization of graphene laminates for maximum fundamental frequency

Majak, Jüri; Kirs, Maarjuss; Eerme, Martin; Tungel, Ernst; Lepikult, Toomas Proceedings of the Estonian Academy of Sciences 2017 / p. 354-362 : ill <https://doi.org/10.3176/proc.2017.4.08> https://artiklid.elnet.ee/record=b2830810*est [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development of aspen bleached chemithermomechanical pulp towards nanostructure = Haava pleegitatud keemilis-termilise puitmassi töötlemine nanostruktuuride saamiseks

Kärner, Kärt 2018 <https://digi.lib.ttu.ee/i/?9947> https://www.ester.ee/record=b5054961*est

Development of sprayed CuInS₂ thin film absorber for nanostructured solar cell

Katerski, Atanas; Kärber, Erki; Krunks, Malle; Mikli, Valdek; Mere, Arvo Materials Research Society symposium proceedings 2012 [https://www.researchgate.net/publication/271903084_Development_of_sprayed_CuInS₂ thin film absorber for nanostructured solar cell](https://www.researchgate.net/publication/271903084_Development_of_sprayed_CuInS2_thin_film_absorber_for_nanostructured_solar_cell)

Development of ZNO nanorods and NIO film based photocatalysts by solution methods for degradation of dyes in aqueous solution

Chen, Zengjun; Dedova, Tatjana; Krunks, Malle Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 13 p [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Droop control with incorporated dead zone for indirect energy management in DC nanogrids

Roasto, Indrek; Blinov, Andrei; Vinnikov, Dmitri 2024 IEEE 21st International Power Electronics and Motion Control Conference (PEMC) 2024 / 6 p <https://doi.org/10.1109/PEMC61721.2024.10726394>

Effect of graphene nanoplatelet content on mechanical and elevated-temperature tribological performance of self-lubricating ZE10 magnesium alloy nanocomposites

Kandemir, Sinan; Yöyler, Sibel; Kumar, Rahul, 1993-; Antonov, Maksim; Dieringa, Hajo Lubricants 2024 / art. 52 <https://doi.org/10.3390/lubricants12020052> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of SiO₂ and PTFE additives on dry sliding of NiP electroless coating

Gutsev, D.; Antonov, Maksim; Hussainova, Irina; Grigoriev, A.Y. Tribology international 2013 / p. 295-302 : ill <https://doi.org/10.1016/j.triboint.2012.12.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Elaboration of method for preparation of IVB group metal carbides nanocomposites

Umalas, Madis; Reedo, Valter; Lõhmus, Ants; Hussainova, Irina Functional Materials & Nanotechnologies : Riga, 5-8 April 2011 2011 / [1] p

Electrical characterization of all-layers-sprayed solar cell based on ZnO nanorods and extremely thin CIS absorber

Kärber, Erki; Katerski, Atanas; Krunks, Malle Solar energy 2013 / p. 48-58 : ill <https://doi.org/10.1016/j.solener.2013.01.020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrical characterization of nanostructured CIS solar cell prepared by chemical spray pyrolysis

Kärber, Erki; Abass, Aimi; Khelifi, Samira; Burgelman, Marc; Mere, Arvo; Katerski, Atanas; Krunks, Malle NEXTGEN NANO PV : book of abstracts 2013 / p. 80-81

Electrochemically deposited ZnO nanostructure on ZnO:V seeding layer

Lovchinov, Konstantin; Petrov, Miroslav; Mikli, Valdek; Dimova-Malinovska, Doriana INERA Workshop: Transition Metal Oxide Thin Films-functional Layers in "Smart windows" and Water Splitting Devices. Parallel session of the 18th International School on Condensed Matter Physics 4–6 September 2014, Varna, Bulgaria 2014 / art. 012020, 4 p. : ill <https://doi.org/10.1088/1742-6596/559/1/012020> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Electrochemically synthesised CdSe nanofibers and pearl-chain nanostructures for photovoltaic applications

Kois, Julia; Bereznev, Sergei; Gurevič, Jelena; Volobujeva, Olga Materials letters 2013 / p. 110-113 : ill <https://doi.org/10.1016/j.matlet.2012.11.122> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrodeposited CDSE nanomatrix for hybrid polymer solar cells

Gurevič, Jelena; Bereznev, Sergei; Mikli, Valdek; Naidu, Revathi; Öpik, Andres; Mellikov, Enn; Kois, Julia Baltic Polymer Symposium 2015 : Sigulda, Latvia, September 16-18 : programme and proceedings 2015 / p. 96 : ill

Electrodeposition of cadmium chalcogenide films for hybrid solar cells = Kaadmiumkalkogeniidkilede elektrokeemiline sadestamine kasutamiseks hübriid-päikesepatareides

Maricheva, Jelena 2017 http://www.ester.ee/record=b4747305*est <https://digi.lib.ttu.ee/i/?9117>

Electrospinning polyvinyl alcohol reinforced with chitin: The effect of the degree of acetylation

Krumme, Andres; Mendez, James D. Polymers 2024 / art. 1955 <https://doi.org/10.3390/polym16141955> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Electrospun materials in triboelectric series

Savest, Natalja; Krasnou, Illia; Krumme, Andres; Dobryden, I.; Hakansson, K.; Edberg, J. Baltic Polymer Symposium, BPS2023 : programme and abstracts 2023 / p. 72 [Baltic Polymer Symposium, BPS2023 : programme and abstracts](#)

Elimination und Rückgewinnung von Phosphor aus Abwasser mit Hilfe wiederverwendbarer Nanokomposit-

Magnetpartike

Ivanova Drenkova-Tuhtan, Asya Wasser 2019 : Jahrestagung der Wasserchemischen Gesellschaft, 27.-29. Mai 2019, Erfurt 2019 / S. 29–34 : ill <http://d-nb.info/1187972673>

Elimination und Rückgewinnung von Phosphor aus Abwasser mithilfe wiederverwendbarer Nanokomposit-Magnetpartikel

Ivanova Drenkova-Tuhtan, Asya Vom Wasser 2019 / S. 37–40 : ill <http://www.wasserchemische-gesellschaft.de/de/vom-wasser-das-journal/seiten/vom-wasser>
https://www.researchgate.net/publication/333641738_Elimination_und_Ruckgewinnung_von_Phosphor_aus_Abwasser_mithilfe_wiederverwendbarer_Nanokomposit-Magnetpartikel

Extremely thin absorber layer nanostructured solar cell by chemical spray pyrolysis

Mere, Arvo; Katerski, Atanas; Dedova, Tatjana; Oja Acik, Ilona; Krunks, Malle Proceedings 23rd European Photovoltaic Solar Energy Conference : 1-5 September, 2008, Valencia, Spain 2008 / p. 2147-2150

Fabrication of Cu-W nanocomposites by integration of self-propagating high-temperature synthesis and hot explosive consolidation technologies

Aydinyan, Sofiya; Kirakosyan, Hasmik; Zakaryan, Marieta Eurasian chemico-technological journal 2018 / p. 301-309 : ill <https://doi.org/10.18321/ectj763>

Fabrication of novel SiOxNy/SWCNT laminate-type composite protective coating using low-temperature approach

Shmagina, Elizaveta; Volobujeva, Olga; Nasibulin, Albert; Bereznev, Sergei Ceramics international 2024 / p. 34312-34320
<https://doi.org/10.1016/j.ceramint.2024.06.250> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Fracture mechanism of Al-Al4C3 nanomaterials studied by "in-situ tensile test in SEM"

Besterci, Michal; Velgosova, Oksana; Ivan, Jozef; Hvizdoš, Pavol; Kvackaj, Tibor; Kulu, Priit Kovove materialy = Metallic materials 2009 / 4, p. 221-225

Graphene coated alumina nanofibers as zirconia reinforcement

Ivanov, Roman; Hussainova, Irina; Aghayan, Marina; Petrov, Mihhail Proceedings of the 9th International Conference of DAAAM Baltic Industrial Engineering, 24-26th April 2014, Tallinn, Estonia 2014 / p. 348-353 : ill

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

Growth of zinc oxide nanostructured layers on SnO2 electrodes by spray pyrolysis

Dedova, Tatjana; Volobujeva, Olga; Gromõko, Inga; Mikli, Valdek; Mere, Arvo; Krunks, Malle TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" 2013 / [1] p

Growth of ZnO rods on FTO electrodes by spray pyrolysis

Dedova, Tatjana; Volobujeva, Olga; Krunks, Malle; Mikli, Valdek; Gromõko, Inga; Katerski, Atanas; Mere, Arvo IOP conference series : materials science and engineering 2013 / [4] p. : ill <https://doi.org/10.1088/1757-899X/49/1/012001> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Hierarchical nanostructures of ZnO obtained by spray pyrolysis

Dedova, Tatjana; Krunks, Malle; Oja Acik, Ilona; Klauson, Deniss; Volobujeva, Olga; Mere, Arvo Materials chemistry and physics 2013 / p. 69-75 : ill <https://doi.org/10.1016/j.matchemphys.2013.04.026> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High temperature tribological performance of adaptive hard nanocomposite coatings deposited on a WC-Co substrate

Alamgir, Asad; Bogatov, Andrei; Yashin, Maxim; Viljus, Mart; Sondor, J.; Podgurski, Vitali GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 12 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

High-temperature tribological performance of hard multilayer TiN-AlTiN/nACo-CrN/AlCrN-AlCrO-AlTiCrN coating deposited on WC-Co substrate

Alamgir, Asad; Yashin, Maxim; Bogatov, Andrei; Viljus, Mart; Traksmäa, Rainer; Sondor, Jozef; Lümkmann, Andreas; Sergejev, Fjodor; Podgurski, Vitali Coatings 2020 / art. 909, 10 p. : ill <https://doi.org/10.3390/coatings10090909> [Journal metrics at WOS](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Hot and cold regions during accumulative roll bonding of Al/Al2O3 nanofibre composites

Pramono, Agus; Kollo, Lauri; Veinthal, Renno Proceedings of the Estonian Academy of Sciences 2016 / p. 132-137 : ill https://artiklid.elnet.ee/record=b2768216*est <https://doi.org/10.3176/proc.2016.2.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Implications of the negative capacitance observed at forward bias in nanocomposite and polycrystalline solar cells

Mora-Sero, Ivan; Bisquert, Juan; Oja Acik, Ilona Nano letters 2006 / 4, p. 640-650 <https://pubs.acs.org/doi/10.1021/nl052295q>

Influence of drag finishing to dry sliding wear behaviour of PVD nanocomposite nACo coating during running-in
Surženkov, Andrei; Podgurski, Vitali; Viljus, Mart; Adoberg, Eron; Nanits, Mats-Maidu; Kulu, Priit; Veinthal, Renno Materials engineering & Baltrib 2010 : materials of the XIX-th International Baltic Conference : October 28-29, 2010, Riga, Latvia 2010 / p. 26

Influence of SPD on structure and properties of copper

Kommel, Lembit; Kenk, Kalju; Veinthal, Renno Proceedings of the 3rd International Conference Industrial Engineering - New Challenges to SME : 25-27 April 2002, Tallinn, Estonia 2002 / p. 161-164 : ill

The influence of synthesis parameters and thermal treatment on the optical and structural properties of zinc oxide-based nanomaterials

Paltusheva, Zhaniya; Kedruk, Yevgeniya; Gritsenko, Lesya; Tulegenova, Madina; **Sõritski, Vitali**; Abdullin, Khabibulla Physical sciences and technology 2024 / Lk. 49-57 <https://doi.org/10.26577/phst2024v11i1a6> [Journal metrics at Journal](#) [Article at Scopus](#)

Introduction to nanomaterials and nanotechnology

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

Investigation of cost-effective carbon nanofiber/carbon fiber and silicone polymer composite material for wearable bioimpedance device

Kõiv, Hip; Pesti, Ksenija; Min, Mart; Land, Raul 2019 IEEE Sensors Applications Symposium (SAS 2019), Sophia Antipolis, France, 11-13 March, 2019 : proceedings 2019 / 6 p <https://doi.org/10.1109/SAS.2019.8706026>

Investigation of nanostructured and conventional alumina–titania coatings prepared by air plasma spray process

Ibrahim, Alsayed; Abdel Hamid, Z.; **Abdel Aal, Alsayed** Materials science and engineering : A - structural materials: properties, microstructure and processing 2010 / 3, p. 663-668 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0921509309009848>

Investigation of nickel and copper microfoils defect formation under the stress

Leinberg, Silver; Lõhmus, Rünno; **Hussainova, Irina; Nisumaa, Reet** 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 42-43 : ill

Low-temperature synthesis of ZnO layers assisted by chemical processes

Polivtseva, Svetlana; Dedova, Tatjana; Bereznev, Sergei; Kois, Julia; Tõnsuaadu, Kaia; Volobujeva, Olga; Juma, Albert Owino 12th European Symposium on Thermal Analysis and Calorimetry ESTAC 12 : 27-30 August 2018, Brasov, Romania : book of abstracts 2018 / PS1.016, p. 200 <http://estac12.org/download.php?f=../download/BoA%20ESTAC12.pdf>

Magnesio-carbothermal reduction of CuWo₄/MeO nanostructured precursors & synthesis of W/Cu composite materials

Zakaryan, Marieta; Kirakosyan, Hasmik; Abovyan, L.; **Aydinyan, Sofiya**; Kharatyan, Suren Chemical Journal of Armenia 2017 / p. 450-461 <http://chemistry.asj-oa.am/id/eprint/7826>

Mechanical and tribological properties of 100-nm thick alumina films prepared by atomic layer deposition on Si(100) substrates

Alamgir, Asad; Bogatov, Andrei; Yashin, Maxim; Podgurski, Vitali Proceedings of the Estonian Academy of Sciences 2019 / p. 126-130 : ill <https://doi.org/10.3176/proc.2019.2.01> http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-126-130.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Mechanical behaviour of nanostructured copper produced by SPD method

Hussainova, Irina; Kommel, Lembit; Lõhmus, Rünno; Lõhmus, Ants Proceedings of International Conference on Modern Materials Science > September 26-30, 2005, Kiev, Ukraine 2005 / ? p

Mechanical properties and fracture developed in nanocopper by severe plastic deformations

Besterci, Michal; Kvackaj, Tibor; Kovac, Ladislav; Sülleiova, Katarina; **Kulu, Priit** 15th International Baltic Conference "Engineering Materials & Tribology. Baltmattrib - 2006" : October 5-6, 2006, Tallinn, Estonia : abstracts 2006 / p. 22

Mechanical properties and fracture of nanocopper by severe plastic deformations

Besterci, Michal; Kvackaj, Tibor; Kovac, Ladislav; Sülleiova, Katarina; **Kulu, Priit** Proceedings of the Estonian Academy of Sciences. Engineering 2006 / 4, p. 340-348 : ill

Mechanically activated synthesis of ZrC nanopowders to produce composites with TiC and Mo additives

Yung, Der-Liang; **Kollo, Lauri; Hussainova, Irina; Zikin, Arkadi** ECOTRIB 2011 : 3rd European Conference on Tribology and 4th Vienna International Conference on Nano-Technology : June 7-9, 2011, Vienna, Austria. 2 2011 / p. 793-796

Microscopic characterization of surface morphology of nanostructured copper

Hussainova, Irina; Kommel, Lembit; Lõhmus, Rünno; **Volobujeva, Olga** Reviews on advanced materials science 2005 / p. 266-271 : ill

Microstructural evolution and mechanical properties of nanostructured copper

Kommel, Lembit; Hussainova, Irina; Volobujeva, Olga; Lõhmus, Rünno Proceedings of the Estonian Academy of Sciences. Engineering 2005 / 3, p. 187-197 : ill

Microstructure and mechanical properties of near net shaped aluminium/alumina nanocomposites fabricated by powder metallurgy

Kallip, Kaspar; Babu, N. Kishore; AlOgab, Khaled A.; **Kollo, Lauri;** Maeder, Xavier; Arroyo, Yadira; Leparoux, Marc Journal of alloys and compounds 2017 / p. 133-143 : ill <https://doi.org/10.1016/j.jallcom.2017.04.233> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Microwave assisted synthesis of CuInSe₂ nanopowder

Gertsin, A.; Muradova, Galina; Shoka, A.; Kim, Dongsoo; **Bereznev, Sergei;** Tverjanovich, Andrey; **Kois, Julia; Õpik, Andres;** Tveryanovich, Yuri S. Hybrid and Organic Photovoltaic Conference (HOPV09) : 10-13 May 2009, Benidorm, Spain : book of abstracts 2009 / p. 79

Multifunctional, multilayered and nanostructured hard coatings

Podgurski, Vitali Nanopowders, Nanostuctured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 25-26

Multi-type dislocation substructure evolution in a high-strength and ductile duplex high-entropy nanocomposites

Mua, Yongkun; **Liu, Le;** Shia, Jinqiang; Sun, Tongtong; Hua, Kai; Jia, Yuefei; Song, Kaikai; Jia, Yandong; Wang, Qing; Wang, Gang Composites Part B : Engineering 2022 / art. 110322 <https://doi.org/10.1016/j.compositesb.2022.110322> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nanopowders and nanostructured coatings

Kulu, Priit; Zimakov, Sergei; Podgurski, Vitali; Peetsalu, Priidu; Tarbe, Riho Nanopowders, Nanostuctured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 8

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

Nano-silicon carbide reinforced aluminium produced by high-energy milling and hot consolidation

Kollo, Lauri; Bradbury, Christopher R.; **Veinthal, Renno;** Jäggi, Christian; Carreno-Morelli, Efrain; Leparoux, Marc Materials science and engineering : A 2011 / p. 6606-6615 : ill

Nanosructured copper manufacturing features and mechanical/physical properties forming

Kommel, Lembit Nanopowders, Nanostuctured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 22-24 : ill

Nanostructure and properties study of advanced high purity rare metals

Kommel, Lembit; Saarna, Mart; Laev, Natalja 18th International Baltic Conference : Engineering Materials & Tribology : BALTMATTRIB-2009 : October 22-23, 2009, Tallinn, Estonia : abstracts 2009 / p. 43

Nanostructure development in refractory metals : ECAP processing of Niobium and Tantalum using indirect-extrusion technique

Omranpour Shahreza, Babak; Kommel, Lembit; Mikli, Valdek; Garcia, Edgar; Huot, Jacques International journal of refractory metals and hard materials 2019 / p. 1-9 : ill <https://doi.org/10.1016/j.jrmhm.2018.10.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nanostructured layers of ZnS obtained by spray pyrolysis

Dedova, Tatjana; Gromõko, Inga; Mikli, Valdek; Volobujeva, Olga; Utt, Kathriin; Sildos, Ilmo; **Mere, Arvo; Krunk, Malle** E-MRS 2013 Spring Meeting. Symposium P, Functional nanowires : synthesis, characterization and applications : poster session II 2013 / p. 15

Nanostructured solar cell by spray pyrolysis : effect of titania barrier layer on the cell performance

Oja Acik, Ilona; Katerski, Atanas; Mere, Arvo; Aarik, Jaan; Aidla, Aleks; **Dedova, Tatjana; Krunk, Malle** Thin solid films 2009 / p. 2443-2447 : ill <https://doi.org/10.1016/j.tsf.2008.11.018>

Nanostructured solar cells on ZnO nanorods by chemical spray

Krunk, Malle Book of Abstracts of 2nd Semiconductor Sensitized Solar Cells Conference : September 18th-20th, 2011, Mallorca, Spain 2011 / p. A2.4

Nanostructured thin films by wet chemical methods

Krunk, Malle International Conference : Advances in Nanostructured Materials, Processing - Microstructure - Properties : NANOVED 2006 - NENAMAT : May 14-17, 2006, Stara Lesna, Slovak Republic : book of abstracts 2006 / p. 57

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 80004-1:2015)

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

Nanotehnoloogiad [Võrguteavik] : sõnastik. Osa 2, Nanoobjektid = Nanotechnologies : vocabulary. Part 2, Nano-objects (ISO/TS 80004-2:2015)

2017 https://www.ester.ee/record=b4697338*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 4, Nanostruktuur-materjalid = Nanotechnologies : vocabulary. Part 4, Nanostructured materials (ISO/TS 80004-4:2011)

2013 https://www.ester.ee/record=b4459478*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, Nanootmisprotsessid = Nanotechnologies : vocabulary. Part 8, Nanomanufacturing processes (ISO/TS 80004-8:2013)

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

New advanced technologies for nanocrystalline metals manufacturing

Kommel, Lembit Proceedings of the 4th International Conference Industrial Engineering - New Challenges to SME : 29-30 April 2004, Tallinn, Estonia 2004 / p. 195-198 : ill

A new synthesis pathway for molybdenum carbide nanopowder by solution combustion

Kirakosyan, Hasmik; Nazaretyan, Khachik; **Aydinyan, Sofiya**; Tumanyan, Manvel; Kharatyan, Suren The International Conference Dedicated to the 50th Anniversary of Self-Propagating High Temperature Synthesis (SHS-50) : proceedings = Международная конференция СВС-50, приуроченная к 50-летию юбилею научного открытия Явление волновой локализации автотормозящихся твердофазных реакций... : сборник материалов 2017 / p. 35-36 : ill <http://www.ism.ac.ru/events/SHS-50/abstracts.pdf>

Optical and photoelectric properties of nanolamellar structures obtained by thermal annealing of InSe plates in Zn vapours

Untila, Dumitru; Evtodiev, Igor; Caraman, Iuliana; **Spalatu, Nicolae**; Dmitroglu, Liliana; Caraman, Mihail Physica status solidi (a) : applications and materials science 2018 / art. 1700434, p. 1-7 : ill <https://doi.org/10.1002/pssa.201700434> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of mechanical strength of titania fibers fabricated by direct drawing

Hanschmid, Kelli; Tätte, Tanel; **Hussainova, Irina** Applied physics. A, Materials science & processing 2013 / p. 663-671 : ill <https://doi.org/10.1007/s00339-013-7601-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Phosphorus elimination and recovery from wastewater and process water with reusable nanocomposite magnetic

particles

Ivanova Drenkova-Tuhtan, Asya 3rd European Sustainable Phosphorus Conference 2018 : (ESPC3), Helsinki, Finlandia Hall, 11-13 June 2018 : posters 2018 / 1 p.: ill <https://phosphorusplatform.eu/images/Conference/ESPC3/ESPC3-Final-programme-2018-06-08.pdf>

Preparation of nanostructured carbon materials

Perez-Caballero, Fernando; Peikolainen, Anna-Liisa; Koel, Mihkel Proceedings of the Estonian Academy of Sciences 2008 / 1, p. 48-53 : ill

Preparation of shape and size-controlled zinc oxide nanostructures by chemical spray pyrolysis technique

Dedova, Tatjana; Krunks, Malle; Mere, Arvo; Klauson, Jelena; Volobujeva, Olga Materials Research Society symposium proceedings 2007 / p. 0957-K10-26 [7 p.]

A promising approach to solid-state hydrogen storage : mechanical nanostructuring synthesis of magnesium by high pressure torsion extrusion

Omranpour Shahreza, Babak; Sergejev, Fjodor; Ivanisenko, Julia; Huot, Jacques Advances in science and technology (volume 134). Materials Engineering and Modern Manufacturing, MeMM 2023 : Selected peer-reviewed extended articles based on abstracts presented at the 30th International Baltic Conference "Materials Engineering and Modern Manufacturing 2023", MeMM 2023. Materials science forum 2023 / p. 43-51 <https://doi.org/10.4028/p-4ccBoQ>

Reactive sintering - a new method for producing Cr₃C₂-Ni cermets

Viljus, Mart; Pirso, Jüri; Letunovitš, Sergei Engineering Materials & Tribology : BALTMATTRIB - 2003 : 12th International Baltic Conference : October 2-3, 2003, Tallinn, Estonia : abstracts 2003 / p. 29

Rippling on wear scar surfaces of nanocrystalline diamond films after reciprocating sliding against ceramic balls

Podgurski, Vitali; Hantschel, Thomas; **Bogatov, Andrei; Kimmari, Eduard; Antonov, Maksim; Viljus, Mart; Mikli, Valdek; Raadik, Taavi; Kulu, Priit** Tribology letters 2014 / p. 493-501 : ill <https://doi.org/10.1007/s11249-014-0379-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selective laser melting of nanostructured Al-Y-Ni-Co alloy

Wang, Zhi; Scudino, Sergio; Eckert, Jürgen; **Prashanth, Konda Gokuldoss** Manufacturing letters 2020 / p. 21-25 <https://doi.org/10.1016/j.mfglet.2020.06.005> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Severe plastic deformation for producing superfunctional ultrafine-grained and heterostructured materials: An interdisciplinary review

Edalati, Kaveh; Ahmed, Anwar Q.; Akrami, Saeid; Ameyama, Kei; Aptukov, Valery; Asfandiyarov, Rashid N.; Ashida, Maki; Astanin, Vasily; Bachmaier, Andrea; **Kommel, Lembit** Journal of alloys and compounds 2024 / art. 174667, 150 p. : ill <https://doi.org/10.1016/j.jallcom.2024.174667> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Severe plastic deformation of metals by using high pressure torsion extrusion = Metallide süvoplastne deformeerimine kõrgsurve-väändeekstrusiooni meetodil

Omranpour Shahreza, Babak 2019 <https://digikogu.taltech.ee/et/Item/e74f8a8e-4021-4cd2-b1f0-cb91d05b9a56>

Solar cell on nanostructured ZnO by spray pyrolysis deposition

Katerski, Atanas; Dedova, Tatjana; Oja Acik, Ilona; Mere, Arvo; Krunks, Malle 2-nd International Conference on surfaces, Coatings and Nanostructured Materials (NANOSMAT 2007) : 9-11 July 2007, Alvor, Algarve, Portugal : abstracts book 2007 / p. 256

Sol-Gel approach to the calcium phosphate nanocomposites

Beganskiene, Aldona; Stankeviciute, Zivile; Malakauskaite, Milda; **Bogdanoviciene, Irma; Mikli, Valdek; Tõnsuaadu, Kaia;** Kareiva, Aivaras Nanostructured materials and nanotechnology VII : a collection of papers presented at the 37th International Conference on Advanced Ceramics and Composites, January 27-February 1, 2013, Daytona Beach, Florida 2014 / p. 3-14 : ill <https://doi.org/10.1002/9781118807828.ch1> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Sol-Gel Approach to the Calcium Phosphate Nanocomposites : (ICACC-S7-P091-2013)

Beganskiene, Aldona; **Bogdanoviciene, Irma; Tõnsuaadu, Kaia** 37th International Conference and Exposition on Advanced Ceramics and Composites : abstracts book : January 27-February 1, 2013, Daytona Beach, Florida 2013 / p. 102

Sol-gel approach to the calcium phosphate nanocomposites [Electronic resource]

Beganskiene, Aldona; **Bogdanoviciene, Irma; Mikli, Valdek; Tõnsuaadu, Kaia** Proceedings of the 37th International Conference on Advanced Ceramics and Composites : January 27-February 1, 2013, Hilton Daytona Beach Resort and Ocean Center, Daytona Beach, Florida, USA 2013 / [10] p. : ill [CD-ROM]

Spark plasma sintering of layered γ-Al₂O₃/graphene reinforced nanocomposites

Saffarshamshirgar, Ali; Ivanov, Roman; Hussainova, Irina Proceedings of the Estonian Academy of Sciences 2019 / p. 140-144 : ill <https://doi.org/10.3176/proc.2019.2.04> http://www.kirj.ee/public/proceedings_pdf/2019/issue_2/proc-2019-2-140-144.pdf [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Spray pyrolysis deposition and characterization of highly c-axis oriented hexagonal ZnS nanorod crystals

Dedova, Tatjana; Gromõko, Inga; Krunks, Malle; Mikli, Valdek; Grossberg, Maarja; Sildos, Ilmo; Utt, Kathriin; Vessart, Risto; Unt, Tarmo Crystal research and technology 2015 / p. 85-92 : ill <https://doi.org/10.1002/crat.201400172> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)

Spray pyrolysis deposition of nanostructured zincoxide films

Krunks, Malle; Dedova, Tatjana; Oja, Ilona International Conference on Metallurgical Coatings and Thin Films : San Diego, California, May 1-5, 2006 : program and abstracts 2006 / p. 37

Spray pyrolysis deposition of zinc oxide nanostructured layers

Krunks, Malle; Dedova, Tatjana; Oja Acik, Ilona Thin solid films 2006 / 3, p. 1157-1160 : ill <https://www.sciencedirect.com/science/article/pii/S0040609006009540>

Structural and optical properties of electrochemically deposited ZnO films in electrolyte containing Al₂(SO₄)₃

Lovchinov, Konstantin; Ganchev, Maxim; Petrov, Miroslav; Nichev, Hristo; Rachkova, Avgustina; Angelov, Orlin; **Mikli, Valdek; Dimova-Malinovska, Doriana** Physica Status Solidi (A) Applications and Materials Science 2013 / p. 743 - 747 <https://doi.org/10.1002/pssa.201200558> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural, mechanical, and optical properties of laminate-type thin film SWCNT/SiO_xNy composites

Shmagina, Elizaveta; Antonov, Maksim; Kasikov, Aarne; Volobujeva, Olga; Khabushev, Eldar M.; Kallio, Tanja; Bereznev, Sergei Nanomaterials 2024 / art. 1806 <https://doi.org/10.3390/nano14221806> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structure evolution of submicrocrystalline copper during cyclic deformation

Kommel, Lembit; Dobatkin, S.; Straumal, B.; Kommel, Igor; Kuznetsov, A. Bulk Nanostructured Materials : from Fundamentals to Innovations 2009 / p. 237-238

Study on photocatalytic activity of ZnO nanoneedles, nanorods, pyramids and hierarchical structures obtained by spray pyrolysis method

Klauson, Deniss; Gromõko, Inga; Dedova, Tatjana; Pronina, Natalja; Kritševskaja, Marina; Budarnaja, Olga; Oja Acik, Ilona; Volobujeva, Olga; Sildos, Ilmo; Utt, Kathriin Materials science in semiconductor processing 2015 / p. 315-324 : ill <https://doi.org/10.1016/j.mssp.2014.12.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 of Cu₂ZnSnS₄ nano-powders and nano-structured thin films = Cu₂ZnSnS₄ nano-pulbrite ja nano-struktuursete kilede süntees

Kumar, Suresh 2018 <https://digi.lib.ttu.ee/i/?10626> https://www.ester.ee/record=b5151482*est

Zinc oxide nanorods grown by spray pyrolysis

Krunks, Malle; Dedova, Tatjana; Mere, Arvo; Aparina, Jelena; Grossberg, Maarja The 4th International Workshop on ZnO and Related Materials : University of Gissen, Germany, Oct.3-6, 2006 2006 / p. 170

Zinc oxide nanostructured layers by chemical spray pyrolysis

Dedova, Tatjana; Aparina, Jelena; Mere, Arvo; Volobujeva, Olga; Grossberg, Maarja; Krunks, Malle International Conference : Advances in Nanostructured Materials, Processing - Microstructure - Properties : NANOVED 2006 - NENAMAT : May 14-17, 2006, Stara Lesna, Slovak Republic : book of abstracts 2006 / p. 105

ZnO nanostructured layers by wet chemical deposition methods : growth, surface properties, photocatalytic capability = ZnO nanostruktuursed kihid vedeliksadestuse meetoditel : kasvatamine, pinnaomadused, fotokatalüütiline võimekus

Gromõko, Inga 2018 <https://digi.lib.ttu.ee/i/?9962> https://www.ester.ee/record=b5141465*est

ZnO nanostructures by chemical spray for next generation solar cells

Krunks, Malle; Dedova, Tatjana; Oja Acik, Ilona; Kriisa, Merike; Mikli, Valdek; Katerski, Atanas; Kärber, Erki; Mere, Arvo NEXTGEN NANO PV : book of abstracts 2013 / p. 31-32

ZnO nanostruktuursed kihid keemilise pihustuspürolüüsi meetodil

Dedova, Tatjana; Annert, Katre; Volobujeva, Olga; Grossberg, Maarja; Oja Acik, Ilona; Krunks, Malle XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 25

ZnO/TiO₂/Sb₂S₃ core-shell nanowire heterostructure for extremely thin absorber solar cells

Parize, Romain; **Katerski, Atanas; Gromõko, Inga; Rapenne, Laetitia; Roussel, Hervé; Kärber, Erki; Appert, Estelle; Krunks,**

Malle; Consonni, Vincent Journal of physical chemistry C 2017 / p. 9672-9680 : ill <https://doi.org/10.1021/acs.jpcc.7b00178> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

ZnS thin films and nanostructured layers by chemical spray pyrolysis

Dedova, Tatjana; Krunks, Malle; Gromõko, Inga; Mikli, Valdek; Sildos, Ilmo; Utt, Kathriin; Unt, Tarmo XXXIII Eesti Keemiapäevad : teaduskonverentsi teesid 2013 / p. 13

Thermal transport and thermoelectric effect in composites of alumina and graphene-augmented alumina nanofibers

Saffarshamshirgar, Ali; Belmonte, Manuel; Tewari, Girish C.; Rojas Hernandez, Rocio Estefania; Seitsonen, Jani; Ivanov, Roman; Karppinen, Maarit; Miranzo, Pilar; Hussainova, Irina Materials 2021 / art. 2242 <https://doi.org/10.3390/ma14092242> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [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

Tribological behavior of carbon nanofibers deposited on hard nanocomposite (nc-Ti1-xAlxN)/(a-Si3N4) coating

Kimmari, Eduard; Podgurski, Vitali; Simunin, M.; Adoberg, Eron; Surženkov, Andrei; Viljus, Mart; Hartelt, M.; Wäsche, R.; Sildos, Ilmo; Kulu, Priit Surface & coatings technology 2013 / p. 21-25 : ill <https://doi.org/10.1016/j.surfcoat.2013.03.011>
<https://www.sciencedirect.com/science/article/pii/S0257897213002636?via%3Dihub> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tribological characteristics of micro- and nano-composites Cu-Al2O3 at room and elevated temperatures

Hvizdoš, Pavol; Besterici, Michal; Kulu, Priit High temperature materials and processes 2011 / p. 573-577

Tribological characteristics of nanostructured copper

Hussainova, Irina; Lõhmus, Rünno Book of abstracts : Nano Tribo Workshop : France, 2005 2005 / p. 34