

**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

**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

**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](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  
<http://dx.doi.org/10.1016/j.matchemphys.2015.01.017>

**Combustion synthesis and consolidation of Ni-W nanocomposite material**

Zakaryan, Marieta; Ahdinyan, 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

**Design optimization of graphene laminates for maximum fundamental frequency**

Majak, Jüri; Kirs, Maarjus; 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](https://artiklid.elnet.ee/record=b2830810*est)

**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](https://www.ester.ee/record=b5054961*est)

**Development of sprayed CuInS<sub>2</sub> 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\\_CuInS<sub>2</sub>\\_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](#)

**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>

**Effect of SiO<sub>2</sub> 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

**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

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

Kois, Julia; Bereznev, Sergei; Gurevičš, Jelena; Volobujeva, Olga Materials letters 2013 / p. 110-113 : ill

**Electrodeposited CDSE nanomatrix for hybrid polymer solar cells**

Gurevičš, 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](http://www.ester.ee/record=b4747305*est) <https://digi.lib.ttu.ee/?9117>

**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](https://www.balticpolymer.com/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](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 SiO<sub>x</sub>Ny/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>

**Fracture mechanism of Al-Al<sub>4</sub>C<sub>3</sub> nanomaterials studied by "in-situ tensile test in SEM"**

Besterci, Michal; Velgosova, Oksana; Ivan, Jozef; Hvizdoš, Pavol; Kvackaj, Tibor; Kulu, Prit 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]-Al<sub>2</sub>O<sub>3</sub> 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 SnO<sub>2</sub> 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

### **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

### **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; Traksmaa, Rainer; Sondor, Jozef; Lümekemann, 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/Al<sub>2</sub>O<sub>3</sub> 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://artiklid.elnet.ee/record=b2768216*est)

### **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>

### **Introduction to nanomaterials and nanotechnology**

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

**Magneso-carbothermal reduction of CuWo<sub>4</sub>/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](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. Baltattrib - 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>

**Microwave assisted synthesis of CuInSe<sub>2</sub> nanopowder**

Gertsin, A.; Muradova, Galina; Shoka, A.; Kim, Dongsoo; **Bereznev, Sergei; Tverjanovich, Andrey; Kois, Julia; Öpik, 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, Nanostructured 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, Nanostructured Materials and Coatings : Network for Nanostructured Materials of ACC : March 17, 2005, Tallinn, Estonia : book of abstracts 2005 / p. 8

**Nanopowders, Nanostructured 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](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

### **Nanostructured copper manufacturing features and mechanical/physical properties forming**

**Kommel, Lembit** Nanopowders, Nanostructured 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.ijrmhm.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; Krunks, 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; Krunks, 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**

**Krunks, 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**

**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. 57

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

2011 [https://www.ester.ee/record=b2707940\\*est](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](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](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](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](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](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=b4483533\\*est](http://www.ester.ee/record=b4483533*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](http://www.ester.ee/record=b4457416*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](http://www.ester.ee/record=b4531230*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

### **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.]

### **Reactive sintering - a new method for producing Cr<sub>3</sub>C<sub>2</sub>-Ni cermets**

**Viljus, Mart**; **Pirso, Jüri**; **Letunovičs, 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

### **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 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>

### **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 $\gamma$ -Al<sub>2</sub>O<sub>3</sub>/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](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 <http://dx.doi.org/10.1002/crat.201400172>

### **Spray pyrolysis deposition of nanostructured zinc oxide 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>

### **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 <http://dx.doi.org/10.1016/j.mssp.2014.12.012>

### **Synthesis of Cu<sub>2</sub>ZnSnS<sub>4</sub> nano-powders and nano-structured thin films = Cu<sub>2</sub>ZnSnS<sub>4</sub> nano-pulbrite ja nano-struktuursete kilede süntees**

**Kumar, Suresh** 2018 <https://digi.lib.ttu.ee/i/?10626> [https://www.ester.ee/record=b5151482\\*est](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 : kasvamine, pinnaomadused, fotokatalüütiline võimekus**

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

### **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 characteristics of micro- and nano-composites Cu-Al<sub>2</sub>O<sub>3</sub> at room and elevated temperatures**

**Hvizdoš, Pavol**; Besterci, 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