

Ageing of kesterite solar cells 1 : Degradation processes and their influence on solar cell parameters

Neubauer, Christian; Samiepour, Ali; Oueslati, Souhaib; Danilson, Mati; Meissner, Dieter Thin solid films 2019 / p. 595-599 : ill <https://doi.org/10.1016/j.tsf.2018.11.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ageing of kesterite solar cells 2 : Impact on photocurrent generation

Samiepour, Ali; Neubauer, Christian; Oueslati, Souhaib; Mikli, Valdek; Meissner, Dieter Thin solid films 2019 / p. 509-513 : ill <https://doi.org/10.1016/j.tsf.2018.11.044> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Ainult enda päikesepaneelidest jääb energiakindluse tagamiseks väheks

Raig, Tanel TööstusEST 2020 / lk. 50-53 : fot http://www.ester.ee/record=b4481084*est <https://toostusest.ee/uudis/2020/09/23/ainult-enda-paikesepaneelidest-jaab-energiakindluse-tagamiseks-vaheks/>

Akadeemik : tööstuses võiks olla rohkem doktorikraadiga juhte

Mihkelsaar, M. novaator.err.ee 2024 [Akadeemik: tööstuses võiks olla rohkem doktorikraadiga juhte](#)

Amorphous Zn(O,Se) buffer layer for Cu(In,Ga)Se₂ thin film solar cells

Abdalla, Akram; Danilson, Mati; Oueslati, Souhaib; Pilvet, Maris; Bereznev, Sergei Materials science in semiconductor processing 2021 / art. 105862 <https://doi.org/10.1016/j.mssp.2021.105862> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis of cost function composition based on the horizon time prediction of an indirect MPC current control in single-phase grid-connected PV inverters

Pimentel, Sergio Pires; Husev, Oleksandr; Vinnikov, Dmitri; Stepenko, Serhii 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 6 p. : ill <https://doi.org/10.1109/RTUCON48111.2019.8982377>

Analysis of grain orientation and defects in Sb₂Se₃ solar cells fabricated by close-spaced sublimation

Krautmann, Robert; Spalatu, Nicolae; Gunder, Rene; Abou-Ras, Daniel; Unold, Thomas; Schorr, Susan; Oja Acik, Ilona; Krunks, Malle GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 17 https://fntdk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

Analysis of grain orientation and defects in Sb₂Se₃ solar cells fabricated by close-spaced sublimation : [journal article]

Krautmann, Robert; Spalatu, Nicolae; Gunder, Rene; Abou-Ras, Daniel; Unold, Thomas; Schorr, Susan; Krunks, Malle; Oja Acik, Ilona Solar energy 2021 / p. 494-500 <https://doi.org/10.1016/j.solener.2021.07.022> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Application of modulation spectroscopy methods in photovoltaic materials research = Modulatsioonspektroskoopia meetodite rakendamine päikeseenergeetika materjalide uurimiseks

Raadik, Taavi 2015 <https://digi.lib.ttu.ee/i/?2521> https://www.ester.ee/record=b4482452*est

Asymmetric NDI electron transporting SAM materials for application in photovoltaic devices

Svirskaitė, Lauryna Monika; Mandati, Sreekanth; Spalatu, Nicolae; Malinauskiene, Vida; Karazhanov, Smagul; Getautis, Vytautas; Malinauskas, Tadas Synthetic metals 2022 / art. 117214 <https://doi.org/10.1016/j.synthmet.2022.117214> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Battery size optimization with customer PV installations and domestic load profile

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Jawad, Muhammad; Allik, Alo; Husev, Oleksandr IEEE Access 2022 / p. 13012-13025 : ill <https://doi.org/10.1109/ACCESS.2022.3147977> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Broad-band photoluminescence of donor-acceptor pairs in tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ microcrystals

Krustok, Jüri; Raadik, Taavi; Kaupmees, Reelika; Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Mikli, Valdek; Grossberg, Maarja Journal of physics D: applied physics 2021 / art. 105102, 7 p. : ill <https://doi.org/10.1088/1361-6463/abce29> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bulk and interface recombination in TiO₂/Sb₂Se₃ solar cells

Krautmann, Robert; Josepson, Raavo; Spalatu, Nicolae; Oja Acik, Ilona Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / p. 28 [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Carrier collection losses in interface passivated amorphous silicon thin-film solar cells

Neumüller, A.; Bereznev, Sergei; Ewert, M.; Volobujeva, Olga Applied physics letters 2016 / p. 043903-1 - 043903-4 : ill <http://dx.doi.org/10.1063/1.4959995>

Characterisation of ultrasonically sprayed InxSy buffer-layers for Cu(In,Ga)Se₂ solar cells

Ernits, Kaia; Bremaud, D.; Mellikov, Enn Thin solid films 2007 / 15, p. 6051-6054

Characterization of FeS₂ pyrite microcrystals synthesized in different flux media

Kristmann, Katrin; Raadik, Taavi; Altosaar, Mare; Danilson, Mati; Krustok, Jüri; Paaver, Peeter; Butenko, Yuriy Materials advances 2023 / 11 p <https://doi.org/10.1039/D3MA00697B>

Characterization of sprayed large grain CuInS₂ as absorbers for solar cells

Krunks, Malle; Mere, Arvo; Kijatkina, Olga; Rebane, Helen; Mikli, Valdek 20-th NSM : Tampere, 2003 2003

Characterization of ZnO-nanorod/In₂S₃/CuInS₂ solar cell, and properties of the constituent layers

Kärber, Erki TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Charge selective contact on ultra-thin In(OH)xSy/Pb(OH)xSy heterostructure prepared by SILAR

Gavrilov, S.; Oja Acik, Ilona; Lim, B. Physica status solidi (a) 2006 / 5, p. 1024-1029 : ill

<https://onlinelibrary.wiley.com/doi/pdf/10.1002/pssa.200521468>

Chemical bath deposition of SnS thin films on ZnS and CdS substrates

Safonova, Maria; Nair, Padmanabhan Pankajakshy Karunakaran; Mellikov, Enn; Garcia, A. R.; Kerm, Karin; Revathi, Naidu; Romann, Tavo; Mikli, Valdek; Volobujeva, Olga Journal of materials science : materials in electronics 2014 / p. 3160-3165 : ill

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

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

Chemical etching of tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin powder materials for solar cell applications

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Mikli, Valdek; Danilson, Mati; Grossberg, Maarja; Kauk-Kuusik, Marit

Materials science in semiconductor processing 2022 / art. 106291 <https://doi.org/10.1016/j.mssp.2021.106291> Journal metrics at

Scopus Article at Scopus Journal metrics at WOS Article at WOS

Chemical incorporation of copper into indium selenide thin-films for processing of CuInSe₂ solar cells

Hibberd, C.J.; Ernits, Kaia; Kaelin, M.; Mueller, U.; Tiwari, A.N. Progress in photovoltaics : research and applications 2008 / 7, p. 585-593 : ill

Chemical treatment of tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin powder

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020

/ p. 24 <http://fmdtk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Chemistry of CdCl₂:O₂ flux for CdTe solar cell technology

Hiie, Jaan; Valdna, Vello; Kois, Julia; Danilson, Mati; Mikli, Valdek Proceedings of the 19th EPVSECE conference 2004 / p. 927

Comparative study of siox layers deposition using thermal and uv-assisted curing of perhydropolysilazane

Shmagina, Elizaveta; Bereznev, Sergei GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / P 50

https://fmdtk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

Comparative study of SnS recrystallization in molten CdI₂, SnCl₂ and KI

Timmo, Kristi; Kauk-Kuusik, Marit; Pilvet, Maris; Mikli, Valdek; Kärber, Erki; Raadik, Taavi; Leinemann, Inga; Altosaar, Mare;

Raudoja, Jaan Physica status solidi (c) 2016 / p. 8-12 : ill <http://dx.doi.org/10.1002/pssc.201510082>

Comparative study of thin films prepared by different curing methods of perhydropolysilazane

Shmagina, Elizaveta; Danilson, Mati; Mikli, Valdek; Bereznev, Sergei Graduate School of Functional Materials and Technology

(GSFMT) Scientific Conference : abstracts 2022 / art. 54 [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](https://fmdtk.ut.ee/wp-content/uploads/2022/06/GSFMT_abstractbook_2022.pdf)

Comparison of performance of phase-shift and asymmetrical pulse width modulation techniques for the novel galvanically isolated buck-boost dc-dc converter for photovoltaic applications

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; Zakis, Janis; Liivik, Elizaveta IEEE journal of emerging and selected topics in power electronics 2017 / p. 624-637 : ill <https://doi.org/10.1109/JESTPE.2016.2631628>

Compositionally tunable structure and optical properties of Cu_{1.85}(Cd_xZn_{1-x})_{1.1}SnS_{4.1} (0 ≤ x ≤ 1) monograin powders

Pilvet, Maris; Kauk-Kuusik, Marit; Altosaar, Mare; Grossberg, Maarja; Danilson, Mati; Timmo, Kristi; Mere, Arvo; Mikli,

Valdek Thin solid films 2015 / p. 180-183 : ill <http://dx.doi.org/10.1016/j.tsf.2014.10.091>

Conductive polymer back contact in CdTe based solar cell

Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Öpik, Andres EMRS-2009 Spring Meeting, Strasbourg, France, 8-12 of June 2009, Symposium A 2009 / p. 25

Control over MoSe₂ formation with vacuum-assisted selenization of one-step electrodeposited Cu-In-Ga-Se precursor layers

Mandati, Sreekanth; Misra, Prashant; Boosagulla, Divya; Tata, Narasinga Rao; Bulusu, Sarada V. Environmental science and pollution research 2021 / p. 15123-15129 : ill <https://doi.org/10.1007/s11356-020-11783-z>

Controlled annealing process for efficient CdTe thin film solar cells [Online resource]

Spalatu, Nicolae; Hiie, Jaan; Krunks, Malle [2018 E-MRS Spring Meeting and Exhibit : Materials for energy and environment : Thin film chalcogenide photovoltaic materials : program] 2018 / A.PII.29 <https://www.european-mrs.com/thin-film-chalcogenide-photovoltaic-materials-emrs> https://www.etis.ee/File/DownloadPublic/d661bb08-33fb-49cb-9ce9-8c6e1c3228ce?name=Fail_Abstracts%20EMRS%202018_SYMPOSIUM%20A_Thin%20film%20chalcogenide%20photovoltaic%20materials.pdf&type=application%2Fpdf

Copper chalcopyrites for solar energy applications

Mandati, Sreekanth; Misra, Prashant; Sarada, Bulusu V.; Rao, Tata Narasinga Transactions of the Indian Institute of Metals 2019 / p. 271–288 : ill <https://doi.org/10.1007/s12666-018-1455-0>

Cost-effective fluorene and thiophene containing hole conductors towards semi-transparent Sb₂S₃ absorber-based solar cells

Mandati, Sreekanth; Juneja, Nimish; Katerski, Atanas; Jegorove, Aiste; Daskeviciute-Geguziene, Sarune; Grzibovskis, Raitis; Vembris, Aivars; **Spalatu, Nicolae;** Magomedov, Artiom; Karazhanov, Smagul; Getautis, Vytautas; **Krunks, Malle; Oja Acik, Ilona** WCPEC-8 : 8th World Conference on Photovoltaic Energy Conversion 2022 / p. 470-473 <https://doi.org/10.4229/WCPEC-82022-2BV.2.70>

Cost-effective sprayed CuInS₂ films for solar cells

Krunks, Malle; Kijatkina, Olga; Blums, J.; **Oja, Ilona; Mere, Arvo; Mellikov, Enn** Seventeenth European Photovoltaic Solar Energy Conference : proceedings of the International Conference held in Munich, Germany, 22-26 October, 2001. Volume II 2002 / p. 1211-1214 : ill

CZTS (Cu₂ZnSnSe₄) crystal growth for use in monograin membrane solar cells

Klavina, Inga; Raudoja, Jaan; Altosaar, Mare; Mellikov, Enn; Meissner, Dieter; Kaljuvee, Tiit Conference proceedings of the Conference of Young Scientists on Energy Issues : Kaunas, Lithuania, 27-28 May, 2010 2010 / p. VII 345 - VII 353

CZTS (Kesterite) monograin membranes for photoelectrochemical water splitting (preparation and characterization)

Kouhiifahani, Elham; Samiepour, Ali; Meissner, Dieter TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogia" : 04.-05. märts 2014, Tartu 2014 / [1] p. : ill

Cu₂ZnSnS₄ monograin layer solar cells for flexible photovoltaic applications Check for updates

Kauk-Kuusik, Marit; Timmo, Kristi; Pilvet, Maris; Muska, Katri; Danilson, Mati; Krustok, Jüri; Josepson, Raavo; Mikli, Valdek; Grossberg-Kuusk, Maarja Journal of materials chemistry A 2023 / p. 23640-23652 <https://doi.org/10.1039/D3TA04541B>

Cu₂ZnSnSe₄ monograin powders for solar cell application [Electronic resource]

Altosaar, Mare; Raudoja, Jaan; Timmo, Kristi; Danilson, Mati; Grossberg, Maarja; Krunks, Malle; Varema, Tiit; Mellikov, Enn 2006 IEEE 4th World Conference on Photovoltaic Energy Conversion - WCPEC 2006 / [CD-ROM]

Cu(In,Ga)Se₂ monograin powders with different Ga content for solar cells

Timmo, Kristi; Kauk-Kuusik, Marit; Pilvet, Maris; Altosaar, Mare; Grossberg, Maarja; Danilson, Mati; Kaupmees, Reelika; Mikli, Valdek; Raudoja, Jaan; Varema, Tiit Solar energy 2018 / p. 648–655 : ill <https://doi.org/10.1016/j.solener.2018.10.078> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CuInS₂ solar cell absorber plasmonically modified by gold nanoparticles

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

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

Maiera, Eugen; Ratha, Thomas; Haas, Wernfried; Werzer, Oliver; Saf, Robert; Hofer, Ferdinand; Meissner, Dieter; **Volobujeva, Olga; Bereznev, Sergei; Mellikov, Enn;** Amenitsch, Heinz; Resel, Roland; Trimmel, Gregor Solar energy materials and solar cells 2011 / p. 1354–1361 : ill

CuInSe₂ koostise uurimine polarograafilisel meetodil

Kauk, Marit; Altosaar, Mare; Raudoja, Jaan XXVII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 27th Estonian Chemistry Days : abstracts of scientific conference 2001 / lk. 49-50

Current harmonic aggregation cases for contemporary loads

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman Energies 2022 / art. 437 <https://doi.org/10.3390/en15020437> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Design and implementation of flyback MPPT converter for PV-applications

Suskis, Pavels; **Zakis, Janis; Galkin, Ilja** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 291-296 : ill

Detailed insight into the CZTS/CdS interface modification by air annealing in monograin layer solar cells

Kauk-Kuusik, Marit; Timmo, Kristi; Muska, Katri; Pilvet, Maris; Krustok, Jüri; Josepson, Raavo; Brammert, Guy; Vermang, Bart; **Danilson, Mati; Grossberg, Maarja** ACS Applied Energy Materials 2021 / p. 12374–12382

<https://doi.org/10.1021/acsaem.1c02186> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Detailed photoluminescence study of Cu₂Ge(SSe)₃ microcrystals

Kuusik, Jüri; Kaupmees, Reelika; Li, Xiaofeng; Kauk-Kuusik, Marit; Grossberg, Maarja AIP advances 2021 / art. 085105

<https://doi.org/10.1063/5.0053928> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Development and application of energy producing solar pavement in Estonia

Jalakas, Tanel; Chub, Andrii; Vinnikov, Dmitri; Spalatu, Nicolae; Gudkova, Viktoria; Krunks, Malle; Mere, Arvo; Lahi, Allan 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / 5 p. : ill <https://doi.org/10.1109/RTUCON56726.2022.9978908>

Development of antimony sulfide thin-film solar cells for semitransparent applications

Beglyan, Robert; Katerski, Atanas; Oja Acik, Ilona; Krunks, Malle Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 9 I. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Development of band gap tuned CU₂ZN(SN₁–XGEX)S₄ monograin powders

Mengu, Idil; Grossberg-Kuusk, Maarja; Muska, Katri; Pilvet, Maris; Mikli, Valdek; Kaupmees, Reelika; Krustok, Jüri; Kauk-Kuusik, Marit Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 39 I.

[Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Development of Bi₂S₃ thin film solar cells by close-spaced sublimation and analysis of absorber bulk defects via in-depth photoluminescence analysis

Koltsov, Mykhailo; Gopi, Sajeesh Vadakkedath; Raadik, Taavi; Krustok, Jüri; Josepson, Raavo; Gržibovskis, Raitis; Vembris, Aivars; **Spalatu, Nicolae** Solar energy materials and solar cells 2023 / art. 112292 <https://doi.org/10.1016/j.solmat.2023.112292>

Development of Bi₂S₃ thin-film solar cells by close-spaced sublimation

Koltsov, Mykhailo; Krautmann, Robert; Gopi, Sajeesh Vadakkedath; Hiie, Jaan; Krunks, Malle; Oja Acik, Ilona; Spalatu, Nicolae Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 25 I. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Development of Sb₂Se₃ and Sb₂S₃ thin film solar cells by close-spaced sublimation = Sb₂Se₃ ja Sb₂S₃ õhukesekileliste päikesepatareide arendamine lähidistants-sublimatsiooni meetodil

Krautmann, Robert 2023 <https://doi.org/10.23658/taltech.41/2023> <https://digikogu.taltech.ee/et/Item/e7e64926-5d49-40ad-8b3a-e225ea034f7d> https://www.ester.ee/record=b5573313*est

Development organic back contact for thin-film CdS/CdTe solar cell

Khrpunov, G.; **Bereznev, Sergei;** Meriuts, A.; Kopach, G.; Kovtun, N.; Deyneko, N. Physics and chemistry of solid state 2010 / 1, p. 248-251 : ill

Device characteristics of CuInSe₂ based solar cells

Krustok, Jüri; Danilson, Mati; Jagomägi, Andri; Grossberg, Maarja; Raudoja, Jaan Proceedings of SPIE 2005 / Optical materials and applications, p. 236-242

Economic pulse electrodeposition for flexible CuInSe₂ solar cells

Mandati, Sreekanth; Misra, Prashant; Boosagulla, Divya; Rao, Tata Naransinga; Sarada, Bulusu V. Materials for renewable and sustainable energy 2020 / art. 19, 6 p. : ill <https://doi.org/10.1007/s40243-020-00177-3>

Eestlaste pöördeline teekate salvestab päikeseenergiat

Director. Inseneria 2017 / lk. 118-121 : fot http://www.ester.ee/record=b1519314*est

Effect of absorber surface modification on the optoelectronic properties of Cu₂CdGeSe₄ solar cells

Li, Xiaofeng; Pilvet, Maris; Timmo, Kristi; Grossberg, Maarja; Danilson, Mati; Mikli, Valdek; Kauk-Kuusik, Marit Thin solid films 2020 / art. 137822, 7 p. : ill <https://doi.org/10.1016/j.tsf.2020.137822> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effect of CdCl₂ annealing treatment on structural and optoelectronic properties of close spaced sublimation CdTe/CdS thin film solar cells vs deposition conditions

Spalatu, Nicolae; Hiie, Jaan; Mikli, Valdek; Krunks, Malle; Valdna, Vello; Maticiuc, Natalia; Raadik, Taavi; Caraman, Mihail

Thin solid films 2015 / p. 128-133 : ill <http://dx.doi.org/10.1016/j.tsf.2014.11.066>

Effect of CdCl₂ vapor phase pretreatment annealing on the properties of CSS CdS and CdTe/CdS thin film solar cells
Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Krunks, Malle; Caraman, Mihail; Mikli, Valdek; Maticiu, Natalia 2014 Spring Meeting Lille, France : May 26-30. Symposium A, Thin film chalcogenide photovoltaic materials 2014 / p. 17

Effect of the thickness on the electrical and optical properties of Zn(O,Se) layers prepared by PLD
Abdalla, Akram; Bereznev, Sergei GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 10
<http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Effect of the titanium isopropoxide : acetylacetone molar ratio on the photocatalytic activity of TiO₂ thin films
Spiridonova, Jekaterina; Katerski, Atanas; Danilson, Mati; Kritševskaja, Marina; Krunks, Malle; Oja Acik, Ilona Molecules 2019 / art. 4326, 14 p. : ill <https://doi.org/10.3390/molecules24234326> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effects of Ar⁺ etching of Cu₂ZnSnSe₄ thin films : An x-ray photoelectron spectroscopy and photoluminescence study
Yakushev, Michael V.; Sulimov, Mikhail A.; Skidchenko, Ekaterina; Krustok, Jüri Journal of Vacuum Science & Technology B 2018 / art. 061208, 8 p. : ill <https://doi.org/10.1116/1.5050243> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effects of irradiation of ZnO/CdS/Cu₂ZnSnSe₄/Mo/glass solar cells by 10 MeV electrons on photoluminescence spectra
Sulimov, M. A.; Sarychev, M.N.; Yakushev, Michael V.; Krustok, Jüri Materials science in semiconductor processing 2021 / art. 105301, 5 p. : ill <https://doi.org/10.1016/j.mssp.2020.105301> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Effects of selenisation temperature on photoluminescence and photoluminescence excitation spectra of ZnO/CdS/Cu₂ZnSnSe₄/Mo/glass
Sulimov, Mikhail A.; Yakushev, M. V.; Marquez-Prieto, J.; Krustok, Jüri Thin solid films 2019 / p. 146-151 : ill <https://doi.org/10.1016/j.tsf.2019.01.002> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Efficiency enhancement of Cu₂ZnSnS₄ monograin layer solar cells via absorber post-growth treatments
Timmo, Kristi; Dolcet Sadurni, Marc; Pilvet, Maris; Muska, Katri; Altosaar, Mare; Mikli, Valdek; Atlan, Fabien; Guc, Maxim; Izquierdo-Roca, Victor; Grossberg-Kuusk, Maarja; Kauk-Kuusik, Marit Solar energy materials and solar cells 2023 / art. 112090 <https://doi.org/10.1016/j.solmat.2022.112090>

E-katend kaitseb lii kluses kõige nõrgemaid
Mente et Manu 2021 / lk. 31 [Mente et Manu 2/2021](#)

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 annealed chemical-bath-deposited CdS films and their application in superstrate configuration CdTe/CdS solar cells
Graf, Aleksandr; Maticiu, Natalia; Spalatu, Nicolae; Mikli, Valdek; Mere, Arvo; Gavrilov, Aleksei; Hiie, Jaan Thin solid films 2015 / p. 351-355 : ill <http://dx.doi.org/10.1016/j.tsf.2014.11.003>

Electrical characterization of cadmium sulfide films, annealed in reducing, neutral and oxidizing ambients of H₂, N₂, and air
Graf, Aleksandr; Gavrilov, Aleksei; Hiie, Jaan TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

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

Electrochemical deposition of CuInSe₂ thin films for photovoltaic applications = CuInSe₂ õhukesed kiled elektrokeemilise sadestamise meetodil
Kois, Julia 2006

Electrochemically synthesised CdSe nanofibers and pearl-chain nanostructures for photovoltaic applications
Kois, Julia; Bereznev, Sergei; Gurevitš, Jelena; Volobujeva, Olga Materials letters 2013 / p. 110-113 : ill

Electrodeposited CDSE nanomatrix for hybrid polymer solar cells
Gurevitš, 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

Electrodeposited molybdenum oxide coatings for thin film chalcopyrite solar cells

Ganchev, Maxim; Dimitrov, Dimitar; Stankova, Stanka; **Katerski, Atanas**; Gadjev, Iliya; **Volobujeva, Olga**; **Mere, Arvo**; **Bereznev, Sergei**; **Krunks, Malle** 10th Jubilee Conference of the Balkan Physical Union 2019 / art. 140002 <https://doi.org/10.1063/1.5091317>
[Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Electrodeposition and characterization of CuInSe₂ for applications in thin film solar cells

Kois, Julia; **Bereznev, Sergei**; **Volobujeva, Olga**; **Mellikov, Enn** Conference on Knowledge-based Materials and Technologies for Sustainable Chemistry : 1-5 June 2005, Tallinn, Estonia : abstract book 2005 / p. 93

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

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

Electrodeposition of CdSe nanomatrix for hybrid solar cells

Bereznev, Sergei; **Gurevits, Jelena**; **Kois, Julia**; **Mellikov, Enn** 12th International Conference on Nanosciences & Nanotechnologies : 7-10 July 2015, Porto Palace Conference Centre & Hotel, Thessaloniki, Greece : book of abstracts 2015 / p. 166

Electronic and structural characterisation of Cu₃BiS₃ thin films for the absorber layer of sustainable photovoltaics

Yakushev, M.V.; Maiello, P.; **Raadik, Taavi**; **Krustok, Jüri** Thin solid films 2014 / p. 195-199 : ill

EMI-transparent SB2S3 solar cells with fluorene-based enamine as hole transport material

Juneja, Nimish; **Mandati, Sreekanth**; Daskeviciute-Geguziene, Sarune; Vembris, Aivars; Getautis, Vytautas; **Krunks, Malle**; **Oja Acik, Ilona** Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 21 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Employment of dopant-free fluorene-based enamines as innovative hole transport materials to boost the transparency and performance of Sb₂S₃ based solar cells

Juneja, Nimish; Daskeviciute-Geguziene, Sarune; **Spalatu, Nicolae**; **Mandati, Sreekanth**; **Katerski, Atanas**; Grzibovskis, Raitis; Vembris, Aivars; Karazhanov, Smagul; Getautis, Vytautas; **Krunks, Malle**; **Oja Acik, Ilona** Materials science in semiconductor processing 2024 / art. 107934 <https://doi.org/10.1016/j.mssp.2023.107934>

Energiat säästvatest liginullenergiamajadest tulevikus pääsu pole. Ehitamine läheb kallimaks.

Rand, Jana Maaleht 2018 / lk. 2-3

Energiat tootev teekatend nüüd ka Eestis

Jalakas, Tanel; **Chub, Andrii**; **Vinnikov, Dmitri**; **Spalatu, Nicolae**; Gudkova, Viktoria; **Krunks, Malle**; **Mere, Arvo**; **Lahi, Allan**; Lindvest, Andre Elektriala 2023 / lk. 14-16 : portr., fot https://www.ester.ee/record=b1240496*est

Energy efficient behavior modeling for demand side recommender system in solar microgrid applications using multi-agent reinforcement learning model

Onile, Abiodun Emmanuel; **Belikov, Juri**; Levron, Yoash; **Petlenkov, Eduard** Sustainable cities and society 2023 / art. 104392, 20 p. : ill <https://doi.org/10.1016/j.scs.2023.104392>

Energy harvesting technologies - potential application to wearable health-monitoring

Ahmed, Faisal; **Le Moullec, Yannick**; **Anus, Paul** The 10th International Conference on Bioelectromagnetism : proceedings 2015 / [4] p. : ill

Energy yield assessment methodology for photovoltaic microinverters

Chub, Andrii; **Kosenko, Roman**; **Korkh, Oleksandr**; **Vinnikov, Dmitri**; Kouro, Samir 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC 2019) Santos, Brazil, 1-4 December 2019 / p. 1178-1183 : ill <http://toc.proceedings.com/52923webtoc.pdf>

Enhanced efficiency of hybrid amorphous silicon solar cells based on single-walled carbon nanotubes and polymer composite thin film

Rajanna, Pramod M.; Gilshteyn, Evgenia P.; Yagafarov, Timur; Alekseeva, Alena A.; Anisimov, Anton S.; Neumüller, Alex; Sergeev, Oleg; **Bereznev, Sergei**; **Maricheva, Jelena**; Nasibulin, Albert Nanotechnology 2018 / 10 p. : ill <https://doi.org/10.1088/1361-6528/aaa647> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Enhanced photocatalytic activity of ZnO nanorods by surface treatment with H₂AuCl₄ : synergic effects through an electron scavenging, plasmon resonance and surface hydroxylation

Dedova, Tatjana; **Oja Acik, Ilona**; **Chen, Zengjun**; **Katerski, Atanas**; **Balmassov, Kirill**; **Gromoko, Inga**; Nagyne-Kovacs, T.; Szilagyi, I.M.; **Krunks, Malle** Materials chemistry and physics 2020 / art. 122767 <https://doi.org/10.1016/j.matchemphys.2020.122767>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Experimental evaluation and numerical modelling of the quality of photovoltaic modules

Tšukrejev, Pavel; **Karjust, Kristo**; **Majak, Jüri** Proceedings of the Estonian Academy of Sciences 2021 / p. 477-483 : ill

Experimental Investigation of high frequency 3L-NPC qZS inverter for photovoltaic application

Husev, Oleksandr; Stepenko, Serhii; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; Strzelecki, Ryszard Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5969-5974 : ill

Extremely thin absorber layer solar cells on zinc oxide nanorods by chemical spray

Krunk, Malle; Kärber, Erki; Katerski, Atanas; Otto, Kairi; Oja Acik, Ilona; Dedova, Tatjana; Mere, Arvo Solar energy materials & solar cells 2010 / p. 1191-1195

Fabrication of polydimethylsiloxane stamps

Dhoska, Klodian; Sinani, Uljan; Komina, Bledar 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 11-14 : ill http://www.ester.ee/record=b4650094*est

Fault analysis and field experiences of central inverter based 2 MW PV plant

Dumnic, Boris; **Liivik, Elizaveta;** Milicevic, Dragan 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 2281-2290 : ill <https://ieeexplore.ieee.org/document/8515423>

Fault-tolerant approach for photovoltaic module-level power electronic applications

Vinnikov, Dmitri; Chub, Andrii; Korkh, Oleksandr; Malinowski, Mariusz 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 438-444 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161599>

Feasibility investigation for residential battery sizing considering EV charging demand

Shabbir, Noman; Kütt, Lauri; Daniel, Kamran; Astapov, Victor; Raja, Hadi Ashraf; Iqbal, Muhammad Naveed; Husev, Oleksandr Sustainability 2022 / art. 1079 <https://doi.org/10.3390/su14031079> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Feasibility study of three-phase modular converter for dual-purpose application in DC and AC microgrids

Roncero-Clemente, Carlos; **Husev, Oleksandr; Matiushkin, Oleksandr;** Gutierrez-Escalona, Javier; Barrero-Gonzalez, Fermin; **Vinnikov, Dmitri;** Strzelecki, Ryszard IEEE journal of emerging and selected topics in power electronics 2024 / p. 1348-1358 <https://doi.org/10.1109/JESTPE.2023.3247960>

Flexible Cu(In,Ga)Se₂ on Al foils and the effects of Al during chemical bath deposition

Bremaud, D.; Rudmann, D.; Kaelin, M.; **Ernits, Kaia;** Bilger, G.; Döbeli, M.; Zogg, H.; Tiwari, A.N. Thin solid films 2007 / 15, p. 5857-5861 <https://www.sciencedirect.com/science/article/pii/S0040609006016087>

Flexible solar cells based on copper tape : hybrid organic-inorganic structures

Bereznev, Sergei; Kois, Julia; Mellikov, Enn; Öpik, Andres Proceedings of the IASTED International Conference Energy and Power Systems : March 29-31, 2006, Chiang Mai, Thailand 2006 / p. 161-164 : ill https://www.researchgate.net/publication/288789183_Flexible_solar_cells_based_on_copper_tape_Hybrid_organic-inorganic_structures

Formation and growth of Cu₁ZnSnS₄ monograin powder on molten Cd₁₁ = Cu₁ZnSnS₄ moodustumine ja monoterapulbri kasv Cd₁₁ sulafaasi keskkonnas

Nkwusi, Godswill 2017 <https://digi.lib.ttu.ee/i/?7690>

Formation of Cu₁ZnSnS₄ and Cu₁ZnSnSe₄ by chalcogenisation of electrochemically deposited precursor layers = Cu₁ZnSnSe₄ ja Cu₁ZnSnS₄ moodustumine elektrokeemiliselt sadestatud kihtide kalkogeniseerimisel

Lehner, Julia 2014 https://www.ester.ee/record=b3080859*est

Formation of properties of CuInSe₂ and Cu₂ZnSn(S,Se)₄ monograin powders synthesized in molten KI =

Kaaliumjodiidsulandaja keskkonnas kasvatatud monoterapulbrite CuInSe₂ ja Cu₁ZnSn(S,Se)₄ omaduste kujundamine **Timmo, Kristi** 2011

4.9 % efficient Sb₂S₃ solar cells from semi-transparent absorbers with fluorene-based thiophene terminated hole conductors

Mandati, Sreekanth; Juneja, Nimish; Katerski, Atanas; Jegorove, Aiste; Grzibovskis, Raitis; Vembris, Aivars; **Dedova, Tatjana; Spalatu, Nicolae;** Magomedov, Artiom; Karazhanov, Smagul; Getautis, Vytautas; **Krunk, Malle; Oja Acik, Ilona** ACS Applied Energy Materials 2023 / p. 3822–3833 <https://doi.org/10.1021/acsaeam.2c04097>

Further developments in CIS monograin layer solar cells technology

Altosaar, Mare; Danilson, Mati; Kauk, Marit; Krustok, Jüri; Mellikov, Enn; Raudoja, Jaan; Timmo, Kristi; Varema, Tiit Solar energy materials and solar cells 2005 / p. 25-32 : ill

Glassy GaS: transparent and unusually rigid thin films for visible to mid-IR memory applications

Tverjanovich, Andrey; Khomenko, Maksym; **Bereznev, Sergei**; Fontanari, Daniele; Sokolov, Anton; Usuki, Takeshi; Ohara, Koji; Le Coq, David; Masselin, Pascal; Bychkov, Eugene Physical chemistry chemical physics 2020 / p. 25560–25573

<https://doi.org/10.1039/D0CP04697C> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Global MPPT for interleaved buck-boost DC-DC converter

Matiushkin, Oleksandr; Husev, Oleksandr; Fesenko, Artem; **Vinnikov, Dmitri** 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 7 p. : ill <https://doi.org/10.1109/RTUCON51174.2020.9316589>

Grid-connected photovoltaic systems : an overview of recent research and emerging PV converter technology

Kouro, Samir; Leon, Jose I.; **Vinnikov, Dmitri**; Franquelo, Leopoldo G. IEEE industrial electronics magazine 2015 / p. 47-61 : ill

Growth and characterization of Cu₂Zn_{1-x}Fe_xSnS₄ thin films for photovoltaic applications

Trifiletti, Vanira; Tseberlidis, Giorgio; Colombo, Mario; Spinardi, Alberto; Luong, Sally; **Danilson, Mati**; **Grossberg, Maarja**; Fenwick, Oliver; Binetti, Simona Materials 2020 / art. 1471, 13 p. : ill <https://doi.org/10.3390/ma13061471> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Growth of CZTS-based monograins and their application to membrane solar cells

Mellikov, Enn; **Altosaar, Mare**; **Kauk-Kuusik, Marit**; **Timmo, Kristi**; **Meissner, Dieter**; **Grossberg, Maarja**; **Krustok, Jüri**; **Volobujeva, Olga** Copper zinc tin sulfide-based thin film solar cells 2015 / p. 289-309 : ill

Highly flexible single crystalline solar modules, the ideal solution for versatile building integrated photovoltaic

Meissner, Dieter TRATERMAT 2019 : XVI Congreso Internacional de Tratamientos Térmicos y de Superficie 2020 / p. 21-22 <https://dialnet.unirioja.es/servlet/articulo?codigo=7551145>

Hybrid solar cells based on CuInS₂ and organic buffer-sensitizer layers

Bereznev, Sergei; Koeppe, R.; Konovalov, Igor; **Kois, Julia**; **Günes, S.**; **Öpik, Andres**; **Mellikov, Enn**; Sariciftci, N.S. Thin solid films 2006 / 15, p. 5759-5762 : ill

Hybrid solar cells based on inorganic thin film structures and conjugated polymers

Kois, Julia; **Bereznev, Sergei**; **Raudoja, Jaan**; **Mellikov, Enn**; **Öpik, Andres** Proceedings of SPIE 2005 / Optical materials and applications, p. 59460V-1 - 59460V-6 : ill

Hydrogen states in mixed-cation CuIn(1-x)Ga_xSe₂ chalcopyrite alloys : a combined study by first-principles density-functional calculations and muon-spin spectroscopy

Marinopoulos, Apostolos G.; Vilao, Rui C.; Alberto, Helena V.; Ribeiro, E. F. M.; Gil, J. M.; Mengyan, P. W.; Goeks, M. R.; **Kauk-Kuusik, Marit**; Lord, J. S. Philosophical magazine 2021 / p. 2412-2434 <https://doi.org/10.1080/14786435.2021.1972178> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of CdS annealing atmosphere on the performance of CdS-CdTe solar cell

Maticiu, Natalia; **Spalatu, Nicolae**; **Mikli, Valdek**; **Hiie, Jaan** Applied surface science 2015 / p. 14-18 : ill <http://dx.doi.org/10.1016/j.apsusc.2015.01.172>

Impact of Cu₂ZnSn(SexS_{1-x})₄ (x=0.3) compositional ratios on the monograin powder properties and solar cells

Muska, Katri; **Kauk-Kuusik, Marit**; **Grossberg, Maarja**; **Altosaar, Mare**; **Pilvet, Maris**; **Varema, Tiit**; **Timmo, Kristi**; **Volobujeva, Olga**; **Mere, Arvo** Thin solid films 2013 / p. 35-38 : ill

Impact of Li and K co-doping on the optoelectronic properties of CZTS monograin powder

Muska, Katri; **Timmo, Kristi**; **Pilvet, Maris**; **Kaupmees, Reelika**; **Raadik, Taavi**; **Mikli, Valdek**; **Grossberg-Kuusik, Maarja**; **Krustok, Jüri**; **Josepson, Raavo**; **Lange, Sven**; **Kauk-Kuusik, Marit** Solar energy materials and solar cells 2023 / art. 112182 : ill <https://doi.org/10.1016/j.solmat.2023.112182>

Impact of post-deposition treatments on properties of SnS films and solar cells grown by close-spaced sublimation technique [Online resource]

Spalatu, Nicolae; **Hiie, Jaan**; **Krunks, Malle** [2018 E-MRS Spring Meeting and Exhibit : Materials for energy and environment : Thin film chalcogenide photovoltaic materials : program] 2018 / A.PV.27 <https://www.european-mrs.com/thin-film-chalcogenide-photovoltaic-materials-emrs>

Impact of transformer turns ratio on the power losses and efficiency of the wide range isolated buck-boost converter for photovoltaic applications

Mashinchi Maheri, Hamed; **Vinnikov, Dmitri**; **Chub, Andrii**; **Sidorov, Vadim**; **Liivik, Elizaveta** Energies 2020 / art. 5645, 21 p <https://doi.org/10.3390/en13215645> [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>

Improved amorphous silicon passivation layer for heterojunction solar cells with post-deposition plasma treatment

Neumüller, Alex; Sergeev, Oleg; Heise, Stephan J.; **Bereznev, Sergei; Volobujeva, Olga** Nano energy 2018 / p. 228-235 : ill
<https://doi.org/10.1016/j.nanoen.2017.11.053> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Increasing PV hosting capacity in LV distribution networks using congestion control techniques

Shabbir, Noman 21st International Symposium "Topical problems in the field of electrical and power engineering. Doctoral school of energy and geotechnology. III" : Pärnu, Estonia, June 15-18, 2022 2022 / p. 87-88 https://www.ester.ee/record=b5504019*est

An indirect model predictive current control (CCS-MPC) for grid-connected single-phase three-level NPC quasi-z-source PV inverter

Pires Pimentel, Sergio; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; Stepenko, Serhii 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659840>

Inexpensive fluorene-based hole transporting material with terminated thiophene unit for efficient semi-transparent Sb2S3 solar cells

Jegorove, Aiste; **Mandati, Sreekanth; Juneja, Nimish; Katerski, Atanas; Vembris, Aivars; Grzibovskis, Raitis; Getautis, Vytautas; Dedova, Tatjana**; Magomedov, Artiom; **Spalatu, Nicolae**; Karazhanov, Smagul; **Krunks, Malle; Oja Acik, Ilona** Proceedings of International Conference on Hybrid and Organic Photovoltaics (HOPV22), València, Spain, 2022 May 19th - 25th 2022
<https://www.nanoge.org/proceedings/HOPV22/62596b7159d9502382511011>

Influence of alkali iodide fluxes on Cu₂ZnSnS₄ monograin powder properties and performance of solar cells

Timmo, Kristi; Pilvet, Maris; Muska, Katri; Altosaar, Mare; Mikli, Valdek; Kaupmees, Reelika; Josepson, Raavo; Krustok, Jüri; Grossberg-Kuusk, Maarja; Kauk-Kuusik, Marit Materials advances 2023 / p. 4509-4519 : ill
<https://doi.org/10.1039/D3MA00444A>

Influence of conductive polymer deposition on photovoltaic properties of prospective inorganic photoabsorber CuInS₂ in solar cell

Bereznev, Sergei; Kois, Julia; Mellikov, Enn; Öpik, Andres; Verbitsky, Anatoly; Vertsimakha, Yaroslav Proceedings of the Third IASTED Asian Conference Power and Energy Systems : April 2-4, 2007, Phuket, Thailand 2007 / p. 232-235
https://www.researchgate.net/publication/288795301_Influence_of_conductive_polymer_deposition_on_photovoltaic_properties_of_prospective_inorganic_photoabsorber_CuInS2_in_solar_cell

Influence of PH on the hydroxide impurities in chemically deposited CDS thin film

Üürike, Marvin; Maticiu, Natalia; Volobujeva, Olga; Spalatu, Nicolae; Hiie, Jaan The 14th International Conference of Young Scientists on Energy Issues : Kaunas, Lithuania, May 25-26, 2017 2017 / p. X-316 - X-323 : ill
http://cyseni.com/archives/proceedings/Proceedings_of_CYSENI_2017.pdf

Influence of the secondary thermal annealing on the properties of CdTe/CdS:CdCl₂:O₂ structure

Yang, Wangjun; Spalatu, Nicolae; Maticiu, Natalia; Krunks, Malle; Hiie, Jaan Proceedings of 13th International Conference of Young Scientists on Energy Issues : CYSENI 2016 : May 26-27 2016, Kaunas, Lithuania 2016 / p. VII-220 - VII-225 : ill

Influence of vapour transport deposition conditions on properties of SB2SE3 thin film absorber and solar cells

Gopi, Sajeesh Vadakkedath; Spalatu, Nicolae; Katerski, Atanas; Krunks, Malle; Oja Acik, Ilona Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 18 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

In(OH)xSy thin films by chemical bath deposition

Dedova, Tatjana; Krunks, Malle Conference on Knowledge-based Materials and Technologies for Sustainable Chemistry : 1-5 June 2005, Tallinn, Estonia : abstract book 2005 / p. 82

In(OH)xSy õhukesed kiled keemilise vanni meetodil

Dedova, Tatjana; Krunks, Malle XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 8

Investigation of the structural, optical and electrical properties of Cu₃BiS₃ semiconducting thin films

Yakushev, M. V.; Maiello, P.; **Raadik, Taavi; Krustok, Jüri** Energy procedia 2014 / p. 166-172 : ill

Kahe fotoelektrilise päikeseenergia kasutamise süsteemi (PS) analüüs esimese töötamisaasta andemete alusel.

Rakenduslikud soovitused PS-i kasutamiseks

Saikovski, Valeri TEUK XVII : taastuvate energiaallikate uurimine ja kasutamine : seitsmeteistkümnenda konverentsi kogumik = Investigation and usage of renewable energy sources : seventeenth conference proceedings : [2015 : Tartu] 2015 / lk. 70-79 : ill

Kas päiksepaneelid on Eestis mõistlikud? [Võrguväljaanne]

postimees.ee 2022 [Kas päiksepaneelid on Eestis mõistlikud?](#)

Kassikuld võib osutuda elektroonikatööstuses kullast kallimaks

Kristmann, Katriin novaator.err.ee 2024 [Kassikuld võib osutuda elektroonikatööstuses kullast kallimaks](#)

Kesterite monograins for solar cells and water splitting applications

Oueslati, Souhaib; Pilvet, Maris; Grossberg, Maarja; Kauk-Kuusik, Marit; Krustok, Jüri; Meissner, Dieter Thin solid films 2021 / art. 138981 <https://doi.org/10.1016/j.tsf.2021.138981> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Kleenukesed päikeseelemendid aitaks vältida ränipaneele ootavat kriisi

Sibinski, Maciej novaator.err.ee 2024 [Kleenukesed päikeseelemendid aitaks vältida ränipaneele ootavat kriisi](#)

Kuidas valida oma kodule sobivad päiksepaneelid? [Võrguväljaanne]

Raadik, Taavi LõunaLeht 2022 / Lk. 15 <https://dea.digar.ee/article/lounaleht/2022/08/04/54>

Kuul saaks elektrit toota eestlaste päikeseplatatehnoloogiaga

Horisont 2020 / lk. 5 : fot http://www.ester.ee/record=b4708219*est

Kõnniteeplaadid toodavad pealinnas päikeseenergiat [Võrguväljaanne]

Mariste, Külli pealinn.ee 2021 ["Kõnniteeplaadid toodavad pealinnas päikeseenergiat "](#)

Kübeke hõbedat vase asemele päikesepeepuunisesse

Vill, Ants Director. Inseneria 2021 / lk. 50-57 : fot <https://director.ee/2021/02/03/kubeke-hobedat-vase-asemele-paikesepeepuunisesse/> http://www.ester.ee/record=b2336521*est

Large area bar coated TiO₂ electron transport layers for perovskite solar cells with excellent performance homogeneity

Mandati, Sreekanth; Dileep, K. Reshma; Veerappan, Ganapathy; Ramasamy, Easwaramoorthi Solar Energy 2022 / p. 258-268 <https://doi.org/10.1016/j.solener.2022.04.060>

LBIC characterisation of Cu₂ZnSn(S,Se)₄ monograin photovoltaic cells

Neubauer, Christian; Meissner, Dieter Photovoltaic Technical Conference From Advanced Materials and Processes to Innovative Applications : 2015 May 27-29, Aix-en-Provence 2015 / [2] p : ill

Low-cost plasmonic solar cells prepared by chemical spray pyrolysis

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

Low-power home PV systems with MPPT and PC control modes [Electronic resource]

Rosa, Carlos; Vinnikov, Dmitri; Romero-Cadaval, Enrique; Pires, Vitor; Martins, Joao CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 58-62 : ill [CD-ROM]

A luminescence study of Cu₂ZnSnSe₄/Mo/glass films and solar cells with near stoichiometric copper content

Yakushev, M. V.; Sulimov, M. A.; Marquez-Prieto, J.; Krustok, Jüri Journal of physics D : applied physics 2019 / art. 055502, 10 p. : ill <https://doi.org/10.1088/1361-6463/aaefe3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Manganese-substituted kesterite thin-films for earth-abundant photovoltaic applications

Trifiletti, Vanira; Frioni, Luigi; Tseberlidis, Giorgio; Vitiello, Elisa; Danilson, Mati; Grossberg, Maarja; Acciarri, Maurizio; Binetti, Simona; Marchionna, Stefano Solar energy materials and solar cells 2023 / art. 112247, 13 p. : ill <https://doi.org/10.1016/j.solmat.2023.112247>

Materials and technologies for photovoltaic applications from Estonia

Melikov, Enn; Altosaar, Mare; Kauk, Marit; Krustok, Jüri; Krunks, Malle; Varema, Tiit The Fourth International Conference on Advanced Optical Materials and Devices : (AOMD-4) : Tartu, Estonia, July 6-9, 2004 : abstracts 2004 / p. 45 https://www.researchgate.net/publication/252219854_Materials_and_technologies_for_photovoltaic_applications_from_Estonia

Maximizing energy harvest of the impedance source PV Microconverter under partial shading conditions

Vinnikov, Dmitri; Chub, Andrii; Liivik, Elizaveta; Blaabjerg, Frede; Kouro, Samir CPE-POWERENG 2018 : Conference program : 12th IEEE International Conference on Compatibility, Power Electronics and Power Engineering, 10-12 April, 2018, Doha, Qatar 2018 / 7 p.: ill <https://indd.adobe.com/view/bdbda104-4e24-4d7b-88b1-f84ccfd20748> <https://doi.org/10.1109/CPE.2018.8372556>

Milleks meie uued päiksepaneelitehnoloogiad?

Grossberg, Maarja Sirp 2020 / lk. 33-34 : fot <https://sirp.ee/s1-artiklid/c21-teadus/milleks-meie-ued-paiksepaneelitehnoloogiad/>

Millised kodumajale sobivad päikesepaneelid on kõige tootlikumad, kuidas neid paigaldada ja kust selleks raha leida?
rohe.geenius.ee 2022 [Millised kodumajale sobivad päikesepaneelid on kõige tootlikumad, kuidas neid paigaldada ja kust selleks raha leida?](#)

Millist päikesepaneeli valida? Vaatame, mida veebiturul pakutakse ja kui head need pakkumised on [Võrguväljaanne]
geenius.ee 2022 [Millist päikesepaneeli valida? Vaatame, mida veebiturul pakutakse ja kui head need pakkumised on](#)

Mission profile resolution impacts on the thermal stress and reliability of power devices in PV inverters
Sangwongwanich, Ariya; Zhou, D.; **Liivik, Elizaveta**; Blaabjerg, Frede Microelectronics reliability 2018 / p. 1003-1007
<https://doi.org/10.1016/j.microrel.2018.06.094>

Mission profile-based accelerated testing of DC-link capacitors in photovoltaic inverters
Sangwongwanich, Ariya; Shen, Yanfeng; **Chub, Andrii; Liivik, Elizaveta; Vinnikov, Dmitri**; Wang, Huai; Blaabjerg, Frede Thirty-Fourth Annual IEEE Applied Power Electronics Conference and Exposition, March 17 – 21, 2019, Anaheim, California 2019 / p. 2833-2840 : ill <https://doi.org/10.1109/APEC.2019.8721794> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Mo pinna eeltöötluste mõju MoSe₂ omadustele
Kaupmees, Liina; Pilvet, Maris; Altosaar, Mare XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 36-37

Model predictive control of photovoltaic bidirectional dc-dc converter with coupled inductors
Khomenko, Maksym; Veligorskyi, Oleksandr; **Husev, Oleksandr**; Tytelmaier, Kostiantyn; Yershov, Roman 2017 IEEE First Ukraine Conference on Electrical and Computer Engineering (UKRCON) : May 29 - June 2, 2017, Kyiv, Ukraine : conference proceedings 2017 / p. 578-583 : ill <https://doi.org/10.1109/UKRCON.2017.8100308>

Modelling of Cu₂ZnSnSe₄-CdS-ZnO thin film solar cell
Ben Messaoud, Khaled; Brammertz, Guy; Buffière, Marie; **Oueslati, Souhaib** Materials research express 2017 / art. 116403, 13 p. : ill <http://dx.doi.org/10.1088/2053-1591/aa94f3>

Monograin layer solar cells
Altosaar, Mare; Jagomägi, Andri; Kauk, Marit; Krunks, Malle; Krustok, Jüri; Mellikov, Enn; Raudoja, Jaan; Varema, Tiit Thin solid films 2003 / p. 466-469 : ill

A multi-layer Cu:Ga/In sputtered precursor to improve structural properties of CIGS absorber layer
Misra, Prashant; **Mandati, Sreekanth**; Rao, Tata Naransinga; Sarada, Bulusu V. Materials today: proceedings 2021 / p. 2037-2041 : ill <https://doi.org/10.1016/j.matpr.2020.09.545>

Naatriumiga legeerimise mõju monoterapulbrilise CuInSe₂ omadustele
Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan; Danilson, Mati; Grossberg, Maarja XXIX Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 29th Estonian Chemistry Days : abstracts of scientific conference 2005 / lk. 111-112

Nano-scale sulfurization of the Cu₂ZnSnSe₄ crystal surface for photovoltaic applications
Kauk-Kuusik, Marit; Li, Xiaofeng; Pilvet, Maris; Timmo, Kristi; Mikli, Valdek; Kaupmees, Reelika; Danilson, Mati; Grossberg, Maarja Journal of materials chemistry A 2019 / p. 24884-24890 : ill <https://doi.org/10.1039/C9TA08020A> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Nanostructured solar cell based on spray pyrolysis deposited ZnO nanorod array
Krunks, Malle; Katerski, Atanas; Dedova, Tatjana; Oja Acik, Ilona; Mere, Arvo Solar energy materials & solar cells 2008 / p. 1016-1019 : ill <https://www.sciencedirect.com/science/article/pii/S0927024808000871>

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

A non-vacuum dip coated SiO₂ interface layer for fabricating CIGS solar cells on stainless steel foil substrates
Misra, Prashant; Atchuta, S. R.; **Mandati, Sreekanth**; Sarada, Bulusu V.; Rao, Tata Naransinga; Sakthivel, S. Solar energy 2021 / p. 471-477 : ill <https://doi.org/10.1016/j.solener.2020.12.007>

Novel approach immune to partial shading for photovoltaic energy harvesting from building integrated PV (BIPV) solar roofs
Chub, Andrii; Korkh, Oleksandr; Kosenko, Roman; Vinnikov, Dmitri 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 2243-2252 : ill <https://ieeexplore.ieee.org/document/8515623>

Novel Cu₂CdSnS₄ and Cu₂ZnGeSe₄ absorber materials for monograin layer solar cell application
Timmo, Kristi; Kauk-Kuusik, Marit; Altosaar, Mare; Raudoja, Jaan; Raadik, Taavi; Grossberg, Maarja; Varema, Tiit; Pilvet, Maris; Leinemann, Inga; Volobujeva, Olga; Mellikov, Enn EU PVSEC proceedings 2013 / p. 2385-2388 : ill

A novel hysteresis power point optimizer for distributed solar power generation

Veligorskiy, Oleksandr; Husev, Oleksandr; Kosenko, Roman; Vinnikov, Dmitri Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2018 / p. 12-22 : ill <https://doi.org/10.2478/ecce-2018-0002>

Novel materials for future PV technologies [Online resource]

Krunk, Malle International Conference "Functional Materials and Nanotechnologies 2017" : Tartu, Estonia in April, 24-27, 2017 : book of abstracts 2017 / p. 36 http://www.ester.ee/record=b4668793*est

Novel SiOxNy protective coatings with aligned carbon nanotubes network

Shmagina, Elizaveta; Volobujeva, Olga; Mikli, Valdek; Bereznev, Sergei Symposium E : Carbon- and/or nitrogen-containing thin films and nanomaterials : 40th Anniversary 2023 / art. 00680 <https://srv3.key4events.com/key4register/AbstractList.aspx?e=31&preview=1&ig=-1&i=1968>

A novel thermochemical metal halide treatment to high-performance Sb2Se3 photocathode

Polivtseva, Svetlana; Adegite Olanrewaju, Joseph; Kois, Julia; Mamedov, Damir; Zh. Karazhanov, Smagul; Maricheva, Jelena; Volobujeva, Olga Nanomaterials 2021 / art. 52, 14 p <https://doi.org/10.3390/nano11010052> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Novel universal power electronic interface for integration of pv modules and battery energy storages in residential dc microgrids

Sidorov, Vadim; Chub, Andrii; Vinnikov, Dmitri; Lindvest, Andre IEEE Access 2023 / p. 30845-30858 <https://doi.org/10.1109/ACCESS.2023.3260640>

Nutikas teekatend teeb liikluse jalakäijatele ohutumaks

Mente et Manu 2019 / lk. 28 : fot https://www.ttu.ee/public/m/mente-et-manu/MM_05_2019/mobile/index.html https://www.ester.ee/record=b1242496*est

Nutikas teekatend võib jõuda peagi tänavale

Ehitaja 2021 / lk. 26

Nutikast teekattest lõikab enim kasu kergliikleja

Lahi, Allan; Kendra, Ain Teeleht 2021 / lk. 22-25 : fot https://www.mnt.ee/sites/default/files/road_paper_pdf/teeleht_kevad_2021_veeb.pdf https://www.ester.ee/record=b1073043*est

Observation of photoluminescence edge emission in CuSbSe2 absorber material for photovoltaic applications

Penežko, Aleksei; Kauk-Kuusik, Marit; Volobujeva, Olga; Traksmäa, Rainer; Grossberg, Maarja Applied physics letters 2019 / art. 092101, 4 p. : ill <https://doi.org/10.1063/1.5114893> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

One-source PVD of n-CuIn5Se8 photoabsorber films for hybrid solar cells

Bereznev, Sergei; Adhikari, Nirmal; Kois, Julia; Raadik, Taavi; Traksmäa, Rainer; Volobujeva, Olga; Kouhiisfahani, Elham; Öpik, Andres Solar energy 2013 / p. 202-208 : ill

Optical and structural properties of orthorhombic and tetragonal polymorphs of Cu2CdGeSe4

Grossberg, Maarja; Raadik, Taavi; Krustok, Jüri; Kauk-Kuusik, Marit; Timmo, Kristi; Kaupmees, Reelika; Mikli, Valdek; Mere, Arvo Thin solid films 2018 / p. 44-47 <https://doi.org/10.1016/j.tsf.2018.09.031> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Optical spectroscopy studies of Cu2ZnSnSe4 thin films

Yakushev, M. V.; Forbes, I.; Mudryi, A. V.; Grossberg, Maarja; Krustok, Jüri; Beattie, N. S.; Moynihan, M.; Rockett, A.; Martin, R. W. Thin solid films 2015 / p. 154-157 : ill <http://dx.doi.org/10.1016/j.tsf.2014.09.010>

Optimization of the Sb2S3 shell thickness in ZnO nanowire-based extremely thin absorber solar cells

Hector, Guislain; Eensalu, Jako Siim; Katerski, Atanas; Oja Acik, Ilona; Kärber, Erki Nanomaterials 2022 / art. 198 <https://doi.org/10.3390/nano12020198> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Output voltage regulation of isolated PV-vonected boost converters with variable loads using converted hysteresis sliding mode controller

Zolfaghari, Mahdi; Zolfaghari, A.; Gharehpetian, Gevork B.; Ahmadihangar, Roya; Rosin, Argo 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 7 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227386>

Partii päikesepaneele võib hukka minna ka paari liigse soojakraadiga

Harrik, Airika novaator.err.ee 2023 [Partii päikesepaneele võib hukka minna ka paari liigse soojakraadiga](#)

Performance of a building integrated semitransparent photovoltaic facade on a residential house in Northern Europe
Jagomägi, Andri; Wimmer, Andreas; **Thalfeldt, Martin** EU PVSEC 2017 : 33rd European Photovoltaic Solar Energy Conference and Exhibition : 25-29 September 2017, Amsterdam, The Netherlands 2017 / p. 2537-2547
<http://dx.doi.org/10.4229/EUPVSEC20172017-6BV.3.46>

Photo-assisted electrodeposition of polypyrrole back contact to CdS/CdTe solar cell structures
Jarkov, Aleksandr; Bereznev, Sergei; Volobujeva, Olga; Traksmas, Rainer; Tverjanovich, Andrey; **Õpik, Andres; Mellikov, Enn** Thin solid films 2013 / p. 198-201 : ill

Photo-assisted electrodeposition of polypyrrole back contact to CdS/CdTe solar cell structures
Jarkov, Aleksandr; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Õpik, Andres E-MRS Spring Meeting 2012 - Symposium B : Strasbourg, France, May 14-18, 2012 : program and abstract book 2012 / p. 8

Photoelectrical properties of In(OH)xSy/PbS(O) structures deposited by SILAR on TiO₂
Oja Acik, Ilona; Belaidi, A.; Dolczik, L. Semiconductor science and technology 2006 / 4, p. 520-526 : ill
<https://iopscience.iop.org/article/10.1088/0268-1242/21/4/018>

Photoelectrochemical properties and band positions of Cd-substituted tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin materials grown in molten CdI₂ and LiI
Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Oueslati, Souhaib; **Pilvet, Maris; Kauk-Kuusik, Marit** Thin Solid Films 2022 / art. 139030 <https://doi.org/10.1016/j.tsf.2021.139030> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photoluminescence and AFM study of WS₂ monolayers
Kaupmees, Reelika; Madauß, Lukas; Pollmann, Erik; **Grossberg, Maarja; Krustok, Jüri** GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 41 <http://fmt.dk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Photoluminescence study of disordering in the cation sublattice of Cu₂ZnSnS₄
Grossberg, Maarja; Krustok, Jüri; Raadik, Taavi; Kauk-Kuusik, Marit; Raudoja, Jaan Current applied physics 2014 / p. 1424-1427 : ill

Photoluminescence study of some solar cell materials
Hjelt, Kari; Collan, Heikki; **Krustok, Jüri; Mädasson, Jaan** XXIX Annual Conference of the Finnish Physical Society : proceedings 1995 / p. 7.33

Photorefectance and photoluminescence study of antimony selenide crystals
Kondrotas, Rokas; Nedzinskas, Ramunas; **Krustok, Jüri; Grossberg-Kuusik, Maarja;** Talaikis, Martynas; Tumėnas, Saulius; Suchodolskis, Arturas; Žaltauskas, Raimundas; Sereika, Raimundas ACS Applied Energy Materials 2022 / p. 14769-14778
<https://doi.org/10.1021/acsaem.2c02131> [Journal metrics at Scopus](#) [Article at scopus](#) [Journal metrics at WOS](#) [Article at Scopus](#)

Photovoltaic energy yield improvement in two-stage solar microinverters
Chub, Andrii; Vinnikov, Dmitri; Stepenko, Serhii; Liivik, Elizaveta; Blaabjerg, Frede Energies 2019 / art. 3774, 17 p. : ill
<https://doi.org/10.3390/en12193774> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photovoltaic module characteristic influence on reliability of micro-inverters
Sangwongwanich, Ariya; **Liivik, Elizaveta; Blaabjerg, Frede** 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 478-483 : ill
<https://doi.org/10.1109/CPE.2018.8372565>

Photovoltaic structures formed by thermal annealing of electrodeposited CuInSe₂ in H₂S
Kois, Julia; Bereznev, Sergei; Mellikov, Enn; Õpik, Andres Proceedings of the Estonian Academy of Sciences. Chemistry 2003 / 2, p. 51-58 : ill

Photovoltaics based on semiconductor powders
Meissner, Dieter The Proceedings of the 1st International Porous and Powder Materials Symposium and Exhibition PPM 2013 : 3-6 September 2013 Çeşme Izmir-TURKEY 2013 / p. 405-416 : ill

Photovoltaics based on semiconductor powders
Meissner, Dieter Materials and processes for energy : communicating current research and technological developments [E-book] 2013 / p. 114-125 : ill <http://www.formatex.info/energymaterialsbook/chapters.html>

Physical routes for the synthesis of kesterite
Ratz, T.; Brammertz, Guy; Caballero, R.; **Timmo, Kristi** Journal of Physics : Energy 2019 / art. 042003, 23 p. : ill
<https://doi.org/10.1088/2515-7655/ab281c>

Pihustuspürolüüsi meetodil vaserikastest lahustest valmistatud CuInS₂ kilede omadused

Rebane, Helen; Kijatkina, Olga; Mikli, Valdek; Leomar, Hedi; **Krunks, Malle** XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 111

A PL and PLE study of high Cu content Cu₂ZnSnSe₄ films on Mo/Glass and solar cells

Sulimov, Mikhail A.; Yakushev, Michael V.; Forbes, I.; Prieto, J.M.; **Krustok, Jüri**; Edwards, P. R.; Martin, R.W. Physics of the solid state 2019 / p. 908-917 <https://doi.org/10.1134/S1063783419050214> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

Plasmonic control of light in thin film solar cell absorbers

Repän, Taavi; **Katerski, Atanas; Oja Acik, Ilona; Kärber, Erki; Mere, Arvo; Mikli, Valdek; Krunks, Malle;** Dolgov, Leonid; Sildos, Ilmo The International Summer School "Nanotechnology : from fundamental research to innovations" and International research and practice conference "Nanotechnology and nanomaterials" (NANO-2014), 23-30 August, 2014, Yaremche-Lviv, Ukraine : book of abstracts 2014 / p. 494

Plasmonic effect of Au NPs on CSS CdS/CdTe solar cell characteristics

Spalatu, Nicolae; Maticiu, Natalia; Katerski, Atanas; Krunks, Malle; Mikli, Valdek; Hiie, Jaan Science and Applications of Thin Films, SATF 2014 : Cesme, Izmir, Turkey, September 15-19 : abstract book 2014 / p. 371

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

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

Plasmonic enhancement of light absorption in CuInS₂ layer doped by gold nanoparticles

Repän, Taavi; **Katerski, Atanas; Oja Acik, Ilona; Kärber, Erki; Mere, Arvo; Mikli, Valdek; Krunks, Malle;** Dolgov, Leonid; Sildos, Ilmo META'14 - Singapore : The 5th International Conference on Metamaterials, Photonic Crystals and Plasmonics : book of abstracts 2014

p-n junction improvements of Cu₂ZnSnS₄/CdS monograin layer solar cells

Kauk-Kuusik, Marit; Timmo, Kristi; Danilson, Mati; Altosaar, Mare; Grossberg, Maarja; Ernits, Kaia Applied surface science 2015 / p. 795-798 : ill <http://dx.doi.org/10.1016/j.apsusc.2015.09.094>

Polypyrrole back contact to CDS/CDTE solar cell structures by photo-assisted electrodeposition technique

Jarkov, Aleksandr; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Öpik, Andres Baltic Polymer Symposium 2012 : Liepaja, Latvia, September 19-22 : programme and proceedings 2012 / p. 42

Polypyrrole back-contact to CdS/CdTe solar cell

Bereznev, Sergei; Jarkov, Aleksandr; Kois, Julia; Volobujeva, Olga; Mellikov, Enn; Öpik, Andres 11th International Symposium on Functional π -electron systems (F π -11) : June 2-7, 2013, Arcachon, France : book of abstracts 2013 / p. 164

Post deposition annealing effect on properties of CdS films and its impact on CdS/Sb₂Se₃ solar cells performance

Gopi, Sajeesh Vadakkedath; Spalatu, Nicolae; Basnayaka, Madhawa; Krautmann, Robert; Katerski, Atanas; Josepson, Raavo; Grzibovskis, Raitis; Vembris, Aivars; **Krunks, Malle; Oja Acik, Ilona** Frontiers in Energy Research 2023 / art. 1162576, 12 p <https://doi.org/10.3389/fenrg.2023.1162576>

Post-deposition processing for tuning the properties of Sb₂Se₃ thin films absorber layer grown by close-spaced sublimation

Krautmann, Robert; Spalatu, Nicolae; Hiie, Jaan; Katerski, Atanas; Oja Acik, Ilona; Krunks, Malle GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 47 <http://fmt.dk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Postdeposition processing of SnS thin films and solar cells : prospective strategy to obtain large, sintered, and doped SnS grains by recrystallization in the presence of a metal halide flux

Spalatu, Nicolae; Hiie, Jaan; Kaupmees, Reelika; Volobujeva, Olga; Krustok, Jüri; Oja Acik, Ilona; Krunks, Malle ACS applied materials & interfaces 2019 / p. 17539-17554 : ill <https://doi.org/10.1021/acsami.9b03213> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Post-growth annealing effect on the performance of Cu₂ZnSnSe₄ monograin layer solar cells

Kauk-Kuusik, Marit; Altosaar, Mare; Muska, Katri; Pilvet, Maris; Raudoja, Jaan; Timmo, Kristi; Varema, Tiit; Grossberg, Maarja; Mellikov, Enn; Volobujeva, Olga Thin solid films 2013 / p. 18-21 : ill

Potential fluctuations in Cu₂ZnSnSe₄ solar cells studied by temperature dependence of quantum efficiency curves

Krustok, Jüri; Josepson, Raavo; Raadik, Taavi; Danilson, Mati Physica B : condensed matter 2010 / 15, p. 3186-3189 : ill

Powder materials and technologies for solar cells

Mellikov, Enn; Hiie, Jaan; Altosaar, Mare International journal of materials & product technology 2007 / 3/4, p. 291-311 : ill

Power supply system based on photovoltaic panels and three-level NPC inverter

Shults, Tatiana Doctoral School of Energy and Geotechnology II : closing conference of the project : Pärnu, Estonia, January 12-17, 2015 2015 / p. 154-157 : ill

Preparation and impedance spectroscopy of hybrid structures based on CuIn_{1-x}Se photoabsorber = Hübriidsete CuIn_{1-x}Se fotoabsorberstruktuuride valmistamine ja impedantsispektroskoopia

Laes, Kristjan 2010 https://www.ester.ee/record=b2580322*est

Preparation of CuInSe₂ thin films by using various methods : (a short review)

Soonmin, Ho; Mandati, Sreekanth; Chandran, Ramkumar; Mallik, Archana; Bhuiyan, M. A. S.; Deepa, K. G. Oriental journal of chemistry 2019 / p. 01-13 : ill http://eprints.intimal.edu.my/1267/1/CuInSe2%20thin%20films%20by%20using%20various%20methods_Ho.pdf

Production monitoring system development for manufacturing processes of photovoltaic modules

Tšukrejev, Pavel; Kruuser, Kaarel; Karjust, Kristo Proceedings of the Estonian Academy of Sciences 2019 / p. 401-406 : ill
<https://doi.org/10.3176/proc.2019.4.09> http://www.kirj.ee/32721/?tpl=1061&c_tpl=1064 [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Professor Maarja Grossberg-Kuusk : teaduses on salapära [Võrguväljaanne]

Kütt, Kadri director.ee 2022 [Professor Maarja Grossberg-Kuusk: teaduses on salapära](#)

Properties of Cu-Sb-Se thin films deposited by magnetron co-sputtering for solar cell applications

Penežko, Aleksei; Kauk-Kuusik, Marit; Volobujeva, Olga; Grossberg, Maarja Thin solid films 2021 / art. 139004
<https://doi.org/10.1016/j.tsf.2021.139004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Properties of NiO thin film deposited spray pyrolysis

Chen, Zengjun; Dedova, Tatjana; Oja Acik, Ilona; Krunks, Malle GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 18 <http://fmttk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

Properties of the CdCl₂ air-annealed CSS CdTe thin films

Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Caraman, Mihail; **Maticiu, Natalia; Mikli, Valdek; Potlog, Tamara; Krunks, Malle;** Lugh, Vanni Energy procedia 2014 / p. 85-95 : ill

Properties of the CdCl₂ air-annealed CSS CdTe thin films

Spalatu, Nicolae; Hiie, Jaan; Valdna, Vello; Maticiu, Natalia; Krunks, Malle; Mikli, Valdek TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Pulse electrodeposited zinc sulfide as an eco-friendly buffer layer for the cadmium-free thin-film solar cells

Boosagulla, Divya; Mandati, Sreekanth; Misra, Prashant; Allikayala, Ramachandraiah; Sarada, Bulusu V. Superlattices and microstructures 2021 / art. 107060 <https://doi.org/10.1016/j.spmi.2021.107060>

Pulsed laser deposition of Zn(O,Se) layers for optoelectronic application

Polivtseva, Svetlana; Spalatu, Nicolae; Abdalla, Akram; Volobujeva, Olga; Hiie, Jaan; Bereznev, Sergei ACS Applied Energy Materials 2018 / p. 6505-6512 : ill <http://dx.doi.org/10.1021/acsaem.8b01431>

Pulsed laser deposition of Zn(O,Se) layers for optoelectronic applications

Ibrahim, Akram Abdalla Mohammed; Bereznev, Sergei GSFMT Scientific Conference 2021 : Tartu, June 14-15, 2021 : abstracts 2021 / O 13 https://fmttk.ut.ee/wp-content/uploads/2021/06/GSFMT_abstractbook_2021.pdf

Pulsed laser deposition of Zn(O,Se) layers for optoelectronic applications = Impulsslaser-sadestatud Zn(O,Se) kiled optoelektronseteks rakendusteks

Ibrahim, Akram Abdalla Mohammed 2021 <https://digikogu.taltech.ee/et/Item/0d07be7f-3737-4350-9de4-80f32df036de>
https://www.ester.ee/record=b5470705*est <https://doi.org/10.23658/taltech.57/2021>

Pulsed laser deposition of Zn(O,Se) layers in nitrogen background pressure

Abdalla, Akram; Bereznev, Sergei; Spalatu, Nicolae; Volobujeva, Olga; Sleptšuk, Natalja; Danilson, Mati Scientific reports 2019 / art. 17443, 10 p. : ill <https://doi.org/10.1038/s41598-019-54008-1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

PVD of n-CuIn₅Se₈ photoabsorber films for hybrid solar cells

Adhikari, Nirmal; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmäa, Rainer; Dahal, R.K.; Tverjanovich, Andrey; Öpik, Andres Baltic Polymer Symposium 2012 : Liepāja, Latvia, September 19-22 : programme and proceedings 2012 / p. 29

Päikeseelemendid H₂S atmosfääris kuumutamiseks modifitseeritud elektrokeemiliselt sadestatud CuInSe₂ kilede baasil
Kois, Julia; Bereznev, Sergei; Mellikov, Enn; Öpik, Andres XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 59

Päikeseelementide uued materjalid ja konstruktsioonid : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsüklile

Mellikov, Enn; Altosaar, Mare; Bereznev, Sergei; Öpik, Andres Tallinna Tehnikaülikooli aastaraamat 2006 2007 / lk. 262-267 : ill

Päikeseenergeetika tulevikku kujundavad kilpinnad ja tandempaneelid

Piir, Rait novaator.err.ee 2023 [Päikeseenergeetika tulevikku kujundavad kilpinnad ja tandempaneelid](#)

Päikeseenergeetika väljakutse : mis saab päikesepaneelidest elukaare lõpus?

Grossberg-Kuusk, Maarja postimees.ee 2024 [Päikeseenergeetika väljakutse: mis saab päikesepaneelidest elukaare lõpus?](#)

Päikesega saab kütta tuba ja vett, ilma paneele võrku ühendamata

Raamets, Heli maakodu.delfi.ee 2023 [Päikesega saab kütta tuba ja vett, ilma paneele võrku ühendamata](#)

Päikesepaneelid ja korteriühistud: müüdid vs. tegelikkus [Võrguväljaanne]

Raadi, Taavi kinnisvarauudised.ee 2022 [Päikesepaneelid ja korteriühistud: müüdid vs. tegelikkus](#)

Päikesepaneelid muutuvad järjest populaarsemaks ja põhjusega

Maaleht 2023 / Lk. 28 : fot <https://dea.digar.ee/article/maaleht/2023/01/12/57>

Päikesepaneelid sobivad ka kortermajale

Raadi, Taavi Võrumaa Teataja 2022 / Lk. 2 [Päikesepaneelid sobivad ka kortermajale](#)

Päikesepaneelide hind langeb ja kasutamine kasvab

Olup, Nele-Mai; **Jagomägi, Andri** Postimees 2015 / lk. 5 <https://www.postimees.ee/3435269/paikesepaneelide-hind-langeb-ja-kasutamine-eestis-kasvab>

Päikesepaneelidest tee : [Maanteeameti, TTÜ ja Tallinna Tehnikakõrgkooli koostöös väljatöötatud päikesepaneelidega varustatud teekatendist]

Aastaraamat / Maanteeamet 2017 / lk. 26 : ill http://www.ester.ee/record=b1293342*est

Päikeseplatereisid täiustav teadlane Atanas Katerski : teadustöö võtab 24/7, aga paneb ikkagi silma särava

Alvela, Ain teadus.postimees.ee 2023 [Päikeseplatereisid täiustav teadlane Atanas Katerski: teadustöö võtab 24/7, aga paneb ikkagi silma särava](#)

Pyrite as promising monograin layer solar cell absorber material for in-situ solar cell fabrication on the Moon

Kristmann, Katriin; Raadi, Taavi; Altosaar, Mare; Grossberg-Kuusk, Maarja; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Kauk-Kuusik, Marit; Makaya, Advenit Acta Astronautica 2022 / P. 420-424 <https://doi.org/10.1016/j.actaastro.2022.07.043> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pyrite as prospective monograin layer solar cell absorber material for in-situ solar cell fabrication on the Moon

Kristmann, Katriin; Raadi, Taavi; Altosaar, Mare; Grossberg, Maarja; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Kauk-Kuusik, Marit IAC 2021 congress proceedings 2021 / p. 1-6 : ill <https://deepzone3.ttu.ee/~juri.krustok/PDF-s/IAC-21.C3.4.7.x64087.pdf>
[Conference Proceedings at Scopus](#) [Article at Scopus](#)

Pyrite based solar panel in-situ production on the Moon for space-based solar power

Raadi, Taavi; Kristmann, Katriin; Ciazela, J.; Jozefowicz, M.; Kowalinski, M.; Sniadkowski, A.; Bakala, J.; Steslicki, M.; Zalewska, N.; Pieterek, B.; Ciazela, M.; Marciniak, D. IAC 2023 congress proceedings 2023 / 9 p. : ill

Pyrite FeS₂ solar cells fabrication for lunar base energy production

Kristmann, Katriin; Raadi, Taavi; Altosaar, Mare; Grossberg-Kuusk, Maarja; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Kauk-Kuusik, Marit; Makaya, Advenit IAC 2022 congress proceedings 2022 / art. 190266 [Pyrite FeS₂ solar cells fabrication for lunar base energy production](#) [Conference proceedings at Scopus](#) [Article at Scopus](#)

Radiative recombination in Cu₂ZnSnSe₄ thin films with Cu deficiency and Zn excess

Yakushev, M. V.; Marquez-Prieto, J.; Forbes, I.; Edwards, P. R.; Zhivulko, V. D.; Mudryi, A. V.; **Krustok, Jüri**; Martin, R. W. Journal of physics D : applied physics 2015 / p. 1-7 : ill <http://dx.doi.org/10.1088/0022-3727/48/47/475109>

Rapid assessment of photovoltaic activity of perovskite solar cells by photoluminescence spectroscopy

Dileep, K. Reshma; **Mandati, Sreekanth; Ramasamy, Easwaramoorthi; Mallick, S;** Rao, Tata Naransinga; **Veerappan, Ganapathy** Materials letters 2021 / art. 130056, 4 p. : ill <https://doi.org/10.1016/j.matlet.2021.130056>

Rational design of highly efficient flexible and transparent p-type composite electrode based on single-walled carbon nanotubes

Rajanna, Pramod M.; Meddeb, Hosni; **Bereznev, Sergei; Volobujeva, Olga; Danilson, Mati** Nano energy 2020 / art. 104183, 9 p. : ill <https://doi.org/10.1016/j.nanoen.2019.104183> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Real-time monitoring of solar modules manufacturing

Tšukrejev, Pavel; Kruuser, Kaarel; Gorbachev, Georgy; Karjust, Kristo; Majak, Jüri International journal of engineering research in Africa 2020 / p. 9-13 <https://doi.org/10.4028/www.scientific.net/JERA.51.9> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reduced recombination through the CZTS/CdS interface engineering in monograin layer solar cells

Kauk-Kuusik, Marit; Timmo, Kristi; Muska, Katri; Pilvet, Maris; Krustok, Jüri; Danilson, Mati; Mikli, Valdek; Josepson, Raavo; Grossberg, Maarja JPhys Energy 2022 / art. 024007 <https://doi.org/10.1088/2515-7655/ac618d> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reliability analysis of micro-inverters considering PV module variations and degradation rates

Liivik, Elizaveta; Sangwongwanich, Ariya; Blaabjerg, Frede 2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe) : Riga, Latvia, 17-21 September 2018 2018 / p. 1475-1482 : ill <https://ieeexplore.ieee.org/document/8515325>

Reliability evaluation of an impedance-source PV microconverter

Shen, Yanfeng; **Liivik, Elizaveta;** Blaabjerg, Frede; **Vinnikov, Dmitri;** Wang, Huai; **Chub, Andrii** 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 108-110 : ill http://ise.elnet.ee/record=b2950026~S2*est

Reliability study of input side capacitors in impedance-source PV microconverters

Liivik, Elizaveta; Vinnikov, Dmitri; Chub, Andrii; Shen, Yanfeng IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 5026-5032 : ill <https://doi.org/10.1109/IECON.2019.8927173> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Revolutsioon päikesepaneelide tootmises : [päikesepatareide tehnoloogiliste lahenduste arendustöödest TTÜs]

Tehnoloogia : TTÜ noorteajakiri 2013 / lk. 28 : ill

Routes to develop a [S]/([S]+[Se]) gradient in wide band-gap Cu₂ZnGe(S,Se)₄ thin-film solar cells

Ruiz-Perona, Andrea; Gurieva, Galina; Sun, Michael; Kodalle, Tim; Sanchez, Yudania; **Grossberg, Maarja;** Merino, Jose Manuel; Schorr, Susan; Leon, Maximo; Caballero, Raquel Journal of alloys and compounds 2021 / art. 159253, 9 p. : ill <https://doi.org/10.1016/j.jallcom.2021.159253> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sammhaaval üha paremate päikesepatareide poole

Grossberg-Kuusk, Maarja Horisont 2024 / lk. 16-22 : fot https://www.ester.ee/record=b1072243*est

Sb₂S₃ grown by ultrasonic spray pyrolysis and its application in a hybrid solar cell

Kärber, Erki; Katerski, Atanas; Oja Acik, Ilona; Mere, Arvo; Mikli, Valdek; Krunks, Malle Beilstein journal of nanotechnology 2016 / p. 1662-1673 : ill <http://dx.doi.org/10.3762/bjnano.7.158>

Sb₂S₃ solar cells with a cost-effective and dopant-free fluorene-based enamine as a hole transport material

Juneja, Nimish; Mandati, Sreekanth; Katerski, Atanas; Spalatu, Nicolae; Daskeviciute-Geguziene, Sarune; Vembris, Aivars; Karazhanov, Smagul; Getautis, Vytautas; **Krunks, Malle; Oja Acik, Ilona** Sustainable Energy & Fuels 2022 / p. 3220-3229 <https://doi.org/10.1039/D2SE00356B> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sb₂S₃ thin films by ultrasonic spray pyrolysis of antimony ethyl xanthate

Eensalu, Jako Siim; Tõnsuaadu, Kaia; Oja Acik, Ilona; Krunks, Malle Materials science in semiconductor processing 2022 / art. 106209 : ill <https://doi.org/10.1016/j.mssp.2021.106209> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sb₂S₃ thin-film solar cells fabricated from an antimony ethyl xanthate based precursor in air

Eensalu, Jako Siim; Mandati, Sreekanth; Don, Christopher H.; Finch, Harry; Dhanak, Vinod R.; Major, Jonathan D.; Grzibovskis, Raitis; Tamm, Aile; Ritslaid, Peeter; **Josepson, Raavo;** Käämbre, Tanel; Vembris, Aivars; **Spalatu, Nicolae; Krunks, Malle; Oja Acik, Ilona** ACS applied materials & interfaces 2023 / p. 42622-42636 <https://doi.org/10.1021/acsami.3c08547>

Sb₂S₃ õhukesed absorberkihid pool-läbipaistvatele päikesepatareidele

Oja Acik, Ilona; Eensalu, Jako Siim; Katerski, Atanas; Krunks, Malle XXXIV Eesti keemiapäevad : 100. aastapäeva teaduskonverentsi teesid 2019 / lk. 32 https://www.ester.ee/record=b1580289*est

Seal, kus lõpeb asfalt, algab nutitee

Kendra, Ain Sirp 2017 / lk. 30-31 : fot <http://www.sirp.ee/s1-artiklid/arhitektuur/seal-kus-lopeb-asfalt-algab-nutitee/>

Selenisation of sequentially electrodeposited Cu-Zn and Sn precursor layers

Ilijina, Julia; Volobujeva, Olga; Raadik, Taavi; Revathi, Naidu; Raudoja, Jaan; Loorits, Mihkel; Traksmäa, Rainer; Mellikov, Enn Thin solid films 2013 / p. 14-17 : ill

A self-rechargeable and flexible polymer solar battery

Dennler, G.; Bereznev, Sergei; Meissner, Dieter; Mellikov, Enn; Öpik, Andres Solar energy 2007 / 8, p. 947-957
<https://www.sciencedirect.com/science/article/pii/S0038092X07000424>

Semitransparent Sb₂S₃ thin film solar cells by ultrasonic spray pyrolysis for use in solar windows

Eensalu, Jako Siim; Katerski, Atanas; Kärber, Erki; Weinhardt, Lothar; Blum, Monika; Heske, Clemens; Oja Acik, Ilona; Krunks, Malle Beilstein journal of nanotechnology 2019 / p. 2396–2409 <https://doi.org/10.3762/bjnano.10.230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Single-phase qZS-based PV inverter with integrated battery storage for distributed energy generation

Husev, Oleksandr; Makovenko, Elena; Vinnikov, Dmitri; Jalakas, Tanel 2018 IEEE 12th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG 2018) : Doha, Qatar, 10-12 April 2018 2018 / p. 508-513 : ill <https://doi.org/10.1109/CPE.2018.8372570>

Single-switch impedance-source galvanically isolated DC-DC converter with combined energy transfer

Chub, Andrii; Vinnikov, Dmitri; Babaei, Ebrahim; Liivik, Elizaveta; Korkh, Oleksandr; Kouro, Samir 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTU CON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTU CON.2018.8659851>

Small signal modeling of interleaved quasi-z-source inverter with active power decoupling circuit

Stepenko, Serhii; Husev, Oleksandr; Pires Pimentel, Sergio; Makovenko, Elena; Vinnikov, Dmitri 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTU CON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTU CON.2018.8659903>

SnS thin films deposition by chemical solution method and characterization = SnS õhukeste kilede sadestamine keemilisest lahusest ja saadud kilede iseloomustamine

Safonova, Maria 2016

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

Solar cell structures based on sprayed CuInS₂ absorber layer

Mere, Arvo; Krunks, Malle; Kijatkina, Olga Proceedings of the 20th Nordic Semiconductor Meeting : Optoelectronics Research Center, Tampere University of Technology, Tampere, Finland, August 25-27, 2003 2004

Solar cell structures by non-vacuum techniques based on sprayed CuInS₂ absorber layers

Mere, Arvo; Katerski, M.; Kijatkina, Olga; Krunks, Malle 19th European Photovoltaic Solar Energy Conference : 7-11 June 2004, Paris, France 2004 / p. 1973-1976 : ill

Solar energy harvesting through photovoltaic and photoelectrochemical means from appositely prepared CuInGaSe₂ absorbers on flexible substrates by a low-cost and industrially benign pulse electrodeposition technique

Mandati, Sreekanth; Misra, Prashant; Boosagulla, Divya; Tata, Narasinga Rao; Bulusu, Sarada V. Industrial and engineering chemistry research 2021 / p. 2197–2205 <https://doi.org/10.1021/acs.iecr.0c05934>

Solar optiverter - a novel hybrid approach to the photovoltaic module level power electronics

Vinnikov, Dmitri; Chub, Andrii; Kosenko, Roman; Korkh, Oleksandr IEEE transactions on industrial electronics 2019 / p. 3869-3880 <https://doi.org/10.1109/TIE.2018.2850036> [Tehnikaülikooli seade muudab päikesepaneelid märgatavalt tootlikumaks](#) [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Sol-gel derived phosphors for optical applications : chapter 11

Rojas Hernandez, Rocio Estefania; Santos, Luis F.; Almeida, Rui M. Sol-gel derived optical and photonic materials 2020 / p. 253-270 : ill <https://doi.org/10.1016/B978-0-12-818019-8.00011-9>

Solubility of CuInSe₂ in potassium iodide

Kauk, Marit; Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan Conference on Knowledge-based Materials and Technologies for Sustainable Chemistry : 1-5 June 2005, Tallinn, Estonia : abstract book 2005 / p. 90

Spin - coating of SnO₂ thin films

Ganchev, Maxim; Katerski, Atanas; Stankova, Stanka; Eensalu, Jako Siim; Terziyska, Penka Journal of physics : conference series 2019 / art. 012027, 7 p. : ill <https://doi.org/10.1088/1742-6596/1186/1/012027> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Sprayed CuInS₂ films grown under Cu-rich conditions as absorbers for solar cells

Krunks, Malle; Kijatkina, Olga; Mere, Arvo; Varema, Tiit; Oja, Ilona; Mikli, Valdek Solar energy materials & solar cells 2005 / p. 207-214 : ill

State coordinated voltage control in an active distribution network with on-load tap changers and photovoltaic systems

Singh, Praveen Prakash; Palu, Ivo Global Energy Interconnection 2021 / 9 p. : ill <https://doi.org/10.1016/j.gloe.2021.05.005> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Step-up current-source partial power converter for PV systems

Abdel-Rahim, Omar; Chub, Andrii; Blinov, Andrei; Vinnikov, Dmitri; Hassanpour, Naser IEEE 13th International Symposium on Power Electronics for Distributed Generation Systems (PEDG) 2022 / 6 l. <https://doi.org/10.1109/PEDG54999.2022.9923250>

Structural and compositional properties of CZTS thin films formed by rapid thermal annealing of electrodeposited layers

Lehner, Julia; Looorits, Mihkel; Revathi, Naidu; Raadik, Taavi; Raudoja, Jaan; Grossberg, Maarja; Mellikov, Enn; Volobujeva, Olga; Ganchev, Maxim Journal of crystal growth 2013 / p. 236-240 : ill

Structural and mechanical properties of laminate-type thin film SWCNT/SiOXNY composites

Shmagina, Elizaveta; Volobujeva, Olga; Antonov, Maksim; Bereznev, Sergei SICT 2024, PLASMA TECH 2024 and TRIBOLOGY 2024 : JOINT international conferences : book of abstracts 2024 / p. 142 <https://www.setcor.org/conferences/tribology-2024/conference-program>

Structural and optoelectronic properties of CdCl₂ activated CdTe thin films modified by multiple thermal annealing

Spalatu, Nicolae; Krunks, Malle; Hiie, Jaan Thin solid films 2017 / p. 106-111 : ill <http://dx.doi.org/10.1016/j.tsf.2016.09.042>

Study of composition and thermal treatments of quaternary compounds for monograin layer solar cells =

Päikesepatareides kasutatavate monoterapulbriliste nelikühendite koostise ja termotötluste uurimine

Muska, Katri 2012 https://www.ester.ee/record=b2882895*est

Study of CZTS nano-powder synthesis by hot injection method by variation of Cu and Zn concentrations

Kumar, Suresh; Kumar, Vikash; Mikli, Valdek; Varema, Tiit; Altosaar, Mare; Grossberg, Maarja Energy procedia 2016 / p. 136-143 : ill <https://doi.org/10.1016/j.egypro.2016.11.328>

Study of Cu₂CdGeSe₄ monograin powders synthesized by molten salt method for photovoltaic applications

Kauk-Kuusik, Marit; Li, Xiaofeng; Pilvet, Maris; Timmo, Kristi; Grossberg, Maarja; Raadik, Taavi; Danilson, Mati; Mikli, Valdek; Altosaar, Mare; Krustok, Jüri; Raudoja, Jaan Thin solid films 2018 / p. 15-19 <https://doi.org/10.1016/j.tsf.2018.09.025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of spray-CVD deposited Zn(O,S) films on Mo substrates and application in Cu(In, Ga)(S, Se)₂ solar cells as buffer layers

Kriisa, Merike; Fischer, Christian-Herbert; Krunks, Malle TÜ ja TTÜ doktorikool "Funktsionaalsed materjalid ja tehnoloogiad" : 04.-05. märts 2014, Tartu 2014 / [1] p

Study of spray-deposited CuInS₂ in ETA solar cells

Lenzmann, F.; Dlodczik, L.; Grasso, C.; Kijatkina, Olga; Mahrov, B.; Rühle, S. EMRS 2002, France. B/P111 2002 / p. 35

Study of structural and optoelectronic properties of Cu₂Zn(Sn_{1-x}Ge_x)Se₄ (x = 0 to 1) alloy compounds

Grossberg, Maarja; Timmo, Kristi; Raadik, Taavi; Kärber, Erki; Mikli, Valdek; Krustok, Jüri Thin solid films 2015 / p. 176-179 : ill <http://dx.doi.org/10.1016/j.tsf.2014.10.055>

Study of Zn(O,S) films grown by aerosol assisted chemical vapour deposition and their application as buffer layers in Cu(In,Ga)(S,Se)₂ solar cells

Kriisa, Merike; Saez-Araoz, Rodrigo; Kärber, Erki; Krunks, Malle Solar energy 2015 / p. 562-568 : ill <http://dx.doi.org/10.1016/j.solener.2015.02.046>

Study of the optical properties of Sb₂(Se_{1-x}S_x)₃ (x = 0-1) solid solutions

Uslu, Mehmet Ender; Kondrotas, Rokas; Nedzinskas, Ramunas; Volobujeva, Olga; Timmo, Kristi; Kauk-Kuusik, Marit; Krustok, Jüri; Grossberg, Maarja Materials science in semiconductor processing 2022 / art. 106571 <https://doi.org/10.1016/j.mssp.2022.106571> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of the properties of TiO₂ thin films deposited by ultrasonic spray pyrolysis [Online resource]

Chen, Z.; Oja Acik, Ilona; DüNDAR, Ibrahim; Mere, Arvo Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p <http://fmdtk.ut.ee/teesid-2019/>

Study of the structure and optoelectronic properties of Cu₂Ge(SexS_{1-x})₃ microcrystalline powders

Li, Xiaofeng; Timmo, Kristi; Grossberg, Maarja; Pilvet, Maris; Kaupmees, Reelika; Krustok, Jüri; Muska, Katri; Mikli, Valdek; Kauk-Kuusik, Marit Thin solid films 2022 / art. 139053, 6 p. : ill <https://doi.org/10.1016/j.tsf.2021.139053> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study on power losses of the full soft-switching current-fed DC/DC converter with Si and GaN devices

Chub, Andrii; Rabkowski, Jacek; Blinov, Andrei; Vinnikov, Dmitri IECON 2015 - Yokohama : 41st Annual Conference of the IEEE Industrial Electronics Society : November 9-12, 2015, Pacifico Yokohama, Yokohama, Japan 2015 / p. 13-18

Study on the properties of TiO₂ thin films deposited by ultrasonic spray pyrolysis

Chen, Zengjun; Oja Acik, Ilona; Dünder, Ibrahim; Mere, Arvo The 15th International Conference of Young Scientists on Energy Issues (CYSENI 2018) : 23-25 May 2018, Kaunas, Lithuania 2018 / p. X-416 - X-423 : ill http://cyseni.com/archives/proceedings/Proceedings_of_CYSENI_2018.pdf

SulnSe₂ pinna keemiline söövitamine

Kauk, Marit; Tsarjova, Tatjana; Altosaar, Mare; Raudoja, Jaan XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 52-53

Sulfur-containing Cu₂ZnSnSe₄ monograin powders for solar cells

Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan; Muska, Katri; Pilvet, Maris; Kauk, Marit; Varema, Tiit; Danilson, Mati; Volobujeva, Olga; Mellikov, Enn Solar energy materials & solar cells 2010 / 11, p. 1889-1892 : ill

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

Gromöko, Inga; Oja Acik, Ilona; Krunks, Malle; Dedova, Tatjana; Katerski, Atanas; Mere, Arvo; Mikli, Valdek; Vessart, Risto Physica status solidi (c) 2015 / p. 1338-1343 : ill <http://dx.doi.org/10.1002/pssc.201510103>

Suur lugu: Kuum ja pilvitu ilm vähendab märgatavalt päikesepaneelide tootlikkust. Mida paneele ostes tähele panna?

Soopan, Ivar rohe.geenius.ee 2023 [Suur lugu: Kuum ja pilvitu ilm vähendab märgatavalt päikesepaneelide tootlikkust. Mida paneele ostes tähele panna?](#)

Synthesis and characterisation of Cu₂ZnSnSe₄ thin films prepared via a vacuum evaporation-based route

Volobujeva, Olga; Bereznev, Sergei; Raudoja, Jaan; Otto, Kairi; Pilvet, Maris; Mellikov, Enn Thin solid films 2013 / p. 48-51 : ill

Synthesis and characterization of pyrite FeS₂ solar cell absorber crystals and modifying their surface

Kristmann, Katriin; Raadik, Taavi; Altosaar, Mare; Mikli, Valdek; Danilson, Mati Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 29 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Synthesis and characterization of tetrahedrite absorber materials for photovoltaic application

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare Graduate School of Functional Materials and Technology (GSFMT) Scientific Conference : abstracts 2022 / 17 l. [Graduate School of Functional Materials and Technology \(GSFMT\) Scientific Conference 2022](#)

Synthesis and characterization of tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin material for photovoltaic application

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan; Mikli, Valdek; Pilvet, Maris; Kauk-Kuusik, Marit; Grossberg, Maarja Materials science in semiconductor processing 2020 / art. 104973 <https://doi.org/10.1016/j.mssp.2020.104973> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis and characterization of tetrahedrite Cu₁₀Cd₂Sb₄S₁₃ monograin material for photovoltaic application [Online resource]

Ghisani, Fairouz; Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p <http://fmdtk.ut.ee/teesid-2019/>

Synthesis and optical properties of Ga₂O₃ nanowires grown on GaS substrate

Leontie, Liviu; Sprincean, Veaceslav; Untila, Dumitru; Spalatu, Nicolae Thin solid films 2019 / art. 137502, 6 p. : ill <https://doi.org/10.1016/j.tsf.2019.137502> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Synthesis of Cu₂ZnSnS₄ solar cell absorber material by sol-gel method

Kumar, Suresh; Kasubosula, Bharath; Loorits, Mihkel; Raudoja, Jaan; Mikli, Valdek; Altosaar, Mare; Grossberg, Maarja Energy procedia 2016 / p. 102-109 : ill <https://doi.org/10.1016/j.egypro.2016.11.324>

System-level condition monitoring approach for fault detection in photovoltaic systems

Zahraoui, Younes; Alhamrouni, Ibrahim; Hayes, Barry P.; Mekhilef, Saad; Korötko, Tarmo Fault analysis and its impact on grid-connected photovoltaic systems performance 2022 <https://doi.org/10.1002/9781119873785.ch7>

Zinc oxide rods on different TCO substrates and seed layers by electrochemical deposition

Gromöko, Inga; Dedova, Tatjana; Krunks, Malle; Mikli, Valdek; Unt, Tarmo; Oja Acik, Ilona; Mere, Arvo Proceedings of the

Zinc oxide thin films by spray pyrolysis method for solar cells

Krunks, Malle; Varema, Tiit; Meissner, Dieter Tallinna Tehnikaülikooli Toimetised 1994 / lk. 101-113: ill

Zinc oxide thin films by the spray pyrolysis method

Krunks, Malle; Mellikov, Enn Thin solid films 1995 / p. 33-36: ill

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 nanowires for solar cells : a comprehensive review

Consonni, Vincent; Briscoe, Joe; **Kärber, Erki** Nanotechnology 2019 / art. 362001, 41 p : ill <https://doi.org/10.1088/1361-6528/ab1f2e>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Zn(O,Se) as a novel buffer layer for thin film solar cells

Abdalla, Akram; Polivtseva, Svetlana; Spalatu, Nicolae; Volobujeva, Olga; Hiie, Jaan; Bereznev, Sergei Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 <http://fntdk.ut.ee/teesid-2019/>

ZnS buffer layer for Cu₂ZnSn(SSe)₄ monograin layer solar cell

Nguyen, Mai; Ernits, Kaia; **Meissner, Dieter** Solar energy 2015 / p. 344-349 : ill <http://dx.doi.org/10.1016/j.solener.2014.11.006>

Tailoring composition and properties of CuInSe₂ materials for solar cell application

Kauk, Marit; Timmo, Kristi; Kaupmees, Liina; Altosaar, Mare; Raudoja, Jaan The Fourth International Conference on Advanced Optical Materials and Devices : (AOMD-4) : Tartu, Estonia, July 6-9, 2004 : abstracts 2004 / p. 44

Tailoring the composition and properties of CuInSe₂ materials for solar cell application

Kauk, Marit; Altosaar, Mare; Raudoja, Jaan; Timmo, Kristi; Grossberg, Maarja; Varema, Tiit; Ernits, Kaia Proceedings of SPIE 2005 / Optical materials and applications, p. 224

Tallinna Tehnikaülikool tunnustab : iseliikuv robotsõiduk Boxbot ja päikeseelektrit tootev teekatend

Elektrala 2021 / lk. 8 : fot https://www.ester.ee/record=b1240496*est

Tallinnas alustatakse energiakriisi lahendamist: päikesepaneelid põldudel ja ehitistel saavad kergemaks ning tõhusamaks

postimees.ee 2023 [Tallinnas alustatakse energiakriisi lahendamist: päikesepaneelid põldudel ja ehitistel saavad kergemaks ning tõhusamaks](#)

TalTech toob päikeselise tuleviku

Ehitaja 2023 / lk. 34-35 : fot https://www.ester.ee/record=b1072123*est https://artiklid.elnet.ee/record=b2904074*est

TalTech toob päikeselise tuleviku

digi.geenius.ee 2023 [TalTech toob päikeselise tuleviku](#)

TalTech toob päikeselise tuleviku

digi.geenius.ee 2023 [TalTech toob päikeselise tuleviku](#)

TalTechi teadlased otsivad parimat päikesepaneelimaterjali

Imeline Teadus 2021 / lk. 22-23 : fot https://www.ester.ee/record=b2747925*est

TalTechi teadlased: viie aastaga laieneb päikeseenergeetika lahenduste valik märgatavalt

Acik, Ilona Oja digi.geenius.ee 2023 [TalTechi teadlased: viie aastaga laieneb päikeseenergeetika lahenduste valik märgatavalt](#)

TalTechi teadlaste seade tõustab päikesepaneele

Imeline Teadus 2019 / lk. 21 : fot https://www.ester.ee/record=b2747925*est

TalTechi teadur tahab viia elektrikulud nulli lähedale

arileht.delfi.ee 2023 [TalTechi teadur tahab viia elektrikulud nulli lähedale](#)

Teadlane dilemma ees - kas teha teadust või siseneda ärimaailma

Grossberg-Kuusk, Maarja TööstusEST 2024 / lk. 10-13 : portr., skeem https://www.ester.ee/record=b4481084*est

Teadlased nuputavad, kuidas ehitada kliimaneutraalset ja taskukohast maja

Leis, Tiit Postimees 2021 / Lk. 6-7 <https://dea.digar.ee/publication/postimees> https://www.ester.ee/record=b1072778*est

Teadlased nuputavad, kuidas ehitada kliimaneutraalset ja taskukohast maja [Võrguväljaanne]

Leis, Tiit postimees.ee 2021 ["Teadlased nuputavad, kuidas ehitada kliimaneutraalset ja taskukohast maja"](https://www.ester.ee/record=b1072778*est)

Teadus nõuab detektiivimõtteviisi

Eesti Naine 2023 / lk. 62-63 : fot https://www.ester.ee/record=b1072072*est

Tee toodabki elektrit

Teeleht 2017 / lk. 6 : fot http://www.ester.ee/record=b1073043*est

Temperature dependent current transport properties in $\text{Cu}_2\text{ZnSnS}_4$ solar cells

Danilson, Mati; Kask, Erkki; Pokharel, Nikhil; Grossberg, Maarja; Kauk-Kuusik, Marit; Varema, Tiit; Krustok, Jüri Thin solid films 2015 / p. 162-165 : ill <http://dx.doi.org/10.1016/j.tsf.2014.10.069>

Temperature dependent electroreflectance study of CdTe solar cells

Raadik, Taavi; Krustok, Jüri; Josepson, Raavo; Hiie, Jaan; Potlog, Tamara; Spalatu, Nicolae Thin solid films 2013 / p. 279-282 : ill

Temperature dependent electroreflectance study of $\text{Cu}_2\text{ZnSnSe}_4$ solar cells

Krustok, Jüri; Raadik, Taavi; Grossberg, Maarja; Giraldo, Sergio; Neuschitzer, Markus; Lopez-Marino, Simon; Saucedo, Edgardo Materials science in semiconductor processing 2015 / p. 251-254 : ill <http://dx.doi.org/10.1016/j.mssp.2015.04.055>

Temperature-dependent photoreflectance of SnS crystals

Raadik, Taavi; Grossberg, Maarja; Raudoja, Jaan; Traksmaa, Rainer; Krustok, Jüri Journal of physics and chemistry of solids 2013 / p. 1683-1685 : ill

The band structure of CuInTe_2 studied by optical reflectivity

Yakushev, Michael V.; Mudrov, Andrej; Kärber, Erki Applied physics letters 2019 / art. 062103, 4 p. : ill <https://doi.org/10.1063/1.5079971> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The cost-effective deposition of ultra-thin titanium(IV) oxide passivating layers for improving photoelectrochemical activity of SnS electrodes

Kois, Julia; Polivtseva, Svetlana; Bereznev, Sergei Thin solid films 2019 / p. 152-156 : ill <https://doi.org/10.1016/j.tsf.2018.12.047> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of Ag alloying of $\text{Cu}_2(\text{Zn,Cd})\text{SnS}_4$ on the monograin powder properties and solar cell performance

Timmo, Kristi; Altosaar, Mare; Pilvet, Maris; Mikli, Valdek; Grossberg, Maarja; Danilson, Mati; Raadik, Taavi; Josepson, Raavo; Krustok, Jüri; Kauk-Kuusik, Marit Journal of materials chemistry A 2019 / p. 24281-24291 : ill <https://doi.org/10.1039/C9TA07768E> TTÜ teadlased tõstsid uue põlvkonna päikesepaneelide tõhusust [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of laser fluences on the structural and optoelectronic properties of $\text{Zn}(\text{O,Se})$ films

Abdalla, Akram; Kärber, Erki; Mikli, Valdek; Bereznev, Sergei Materials science in semiconductor processing 2021 / art. 105429, 5 p. : ill <https://doi.org/10.1016/j.mssp.2020.105429> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of S/SE ratio on the properties of $\text{Cu}_2\text{CdGe}(\text{SxSe}_{1-x})_4$ monograin powders for photovoltaic applications

Li, Xiaofeng; Kauk-Kuusik, Marit; Timmo, Kristi; Pilvet, Maris; Grossberg, Maarja; Raadik, Taavi; Danilson, Mati; Mikli, Valdek GSFMT Scientific Conference 2020 : Tallinn, February 4-5, 2020 : abstracts 2020 / p. 52 <http://fntdk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

The electrical and optical properties of kesterites

Grossberg, Maarja; Krustok, Jüri; Hages, Charles J.; Bishop, Douglas M. Journal of Physics : Energy 2019 / art. 044002, 16 p. : ill <https://doi.org/10.1088/2515-7655/ab29a0>

The processes and enthalpies in synthesis of $\text{Cu}_2\text{ZnSnS}_4$ in molten CdI_2

Nkwusi, Godswill; Leinemann, Inga; Altosaar, Mare International advanced research journal in science, engineering and technology 2016 / p. 113-119 : ill <http://dx.doi.org/10.17148/IARJSET.2016.3524>

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

Otto, Kairi; Krunks, Malle; Oja Acik, Ilona; Tõnsuaadu, Kaia Book of abstracts : 2nd Central and Eastern European Conference on Thermal Analysis and Calorimetry, 27-30 August 2013, Vilnius, Lithuania 2013 / p. 298

Thin tin monosulfide films deposited with the HVE method for photovoltaic applications = Tanka plast hve kositrovega monosulfida za uporabo v fotovoltaiiki

Naidu, Revathi; Bereznev, Sergei; Lehner, Julia; Traksmaa, Rainer; Safonova, Maria; Mellikov, Enn; Volobujeva, Olga Materials and technology 2015 / p. 149-152 : ill <http://mit.imt.si/Revija/izvodi/mit151/revathi.pdf>

Three-mode reconfigurable rectifier for DC-DC converters with wide input voltage range

Chub, Andrii; Vinnikov, Dmitri; Kouro, Samir; Malinowski, Mariusz IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 4429-4435 <https://doi.org/10.1109/IECON.2019.8926994> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Tin dioxide thin films deposited by sol - gel technique

Ganchev, Maxim; **Katerski, Atanas;** Stankova, Stanka; Eensalu, Jako Siim; Terziyska, Penka AIP conference proceedings 2019 / art. 140001, 8 p <https://doi.org/10.1063/1.5091316> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Tunneling-enhanced interface recombination and current loss curves in kesterite solar cells

Krustok, Jüri; Timmo, Kristi; Kauk-Kuusik, Marit; Grossberg-Kuusk, Maarja Applied physics letters 2023 / art. 242102 <https://doi.org/10.1063/5.0175082>

Two-dimensional CuIn1-xGaxSe2 nano-flakes by pulse electrodeposition for photovoltaic applications

Mandati, Sreekanth; Dey, Suhash R.; Joshi, Shrikant V.; Sarada, Bulusu V. Solar energy 2019 / p. 396-404 <https://doi.org/10.1016/j.solener.2019.02.022>

Ultra thin TiO2 films with gold nanoparticles by the chemical spray pyrolysis method

Oja Acik, Ilona; Oyekoya, G.; Dedova, Tatjana; Mikli, Valdek; Mere, Arvo; Krunks, Malle; Dolgov, Leonid; Sildos, Ilmo Joint 12th Russia/CIS/Baltic/Japan Symposium on Ferroelectricity and 9th International Conference Functional Materials and Nanotechnologies : Institute of Solid State Physics, University of Latvia, September 29-October 2, Riga, Latvia : book of abstracts 2014 / p. 296

Ultrasonically sprayed In2S3 films for Cu(In,Ga)Se2 solar cells

Ernits, Kaia; Kaelin, M.; Bremaud, D. Proceedings of 21st European Photovoltaic Solar Energy Conference and Exhibition : Dresden, Germany, 4-8 September 2006 2006 / p. 1853-1856

Ultrawide voltage gain range microconverter for integration of silicon and thin-film photovoltaic modules in DC microgrids

Chub, Andrii; Vinnikov, Dmitri; Korkh, Oleksandr; Malinowski, Mariusz; Kouro, Samir IEEE transactions on power electronics 2021 / p. 13763-13778 <https://doi.org/10.1109/TPEL.2021.3084918> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uniform Sb2S3 optical coatings by chemical spray method

Eensalu, Jako Siim; Katerski, Atanas; Kärber, Erki; Oja Acik, Ilona; Mere, Arvo; Krunks, Malle Beilstein journal of nanotechnology 2019 / p. 198-210 : ill <https://doi.org/10.3762/bjnano.10.18> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Uniform Sb2S3 optical coatings by chemical spray method : [conference paper]

Eensalu, Jako Siim; Katerski, Atanas; Kärber, Erki; Oja Acik, Ilona; Mere, Arvo; Krunks, Malle Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [4.-5. veebr. 2019, Tartu : teesid] 2019 / 1 p <http://fntdk.ut.ee/teesid-2019/>

Uudne tehnoloogia päikeseenergiahoonetele

Chub, Andrii Ehitaja 2022 / lk. 22-23 : fot https://www.ester.ee/record=b1072123*est <https://taltech.ee/uudised/jouelektroonika-teadustoo-viljad-edendavad-paikeseenergia-tehnoloogiat>

Uudse päikesepaneeli leiutajad soovivad rajada miljarditehase : [teemat tutvustab Andres Öpik]

Öpik, Andres; Pinn, Mariliis Äripäev 2007 / 3. mai, lk. 11 <https://www.aripaev.ee/uudised/2007/05/02/uudse-paikesepaneeli-leiutajad-soovivad-rajada-miljarditehase>

Uue ajastu talupidaja tõestab päikeseenergia tasuvust

Alas, Taavi; **Loorits, Mihkel** Maaleht 2016 / Maa Elu, lk. 6-7 [Uue ajastu talupidaja tõestab päikeseenergia tasuvust](#)

Uus materjal suurendab päikesepaneelide tõhusust

Imeline Teadus 2020 / lk. 20 : fot https://www.ester.ee/record=b2747925*est

Vastloodud TalTechi õppekava võimaldab paremasse tulevikku panustada [Võrguväljaanne]

forte.delfi.ee 2022 ["Vastloodud TalTechi õppekava võimaldab paremasse tulevikku panustada"](#)

Voltage control tuning of a single-phase grid-Connected 3L qZS-based inverter for PV application

Pires Pimentel, Sergio; Husev, Oleksandr; Vinnikov, Dmitri; Roncero-Clemente, Carlos; **Makovenko, Elena** 2018 IEEE 38th International Conference on Electronics and Nanotechnology (ELNANO 2018) : Kyiv, Ukraine, 24-26 April 2018 2018 / p. 692-698 : ill <https://doi.org/10.1109/ELNANO.2018.8477438>

Üliõhuke päikesepaneel avab energia tootmisele uued ukse

Alvela, Ain; **Krautmann, Robert** novaator.err.ee 2023 [Üliõhuke päikesepaneel avab energia tootmisele uued ukse](https://digikogu.taltech.ee/et/Item/e7e64926-5d49-40ad-8b3a-e225ea034f7d)

<https://digikogu.taltech.ee/et/Item/e7e64926-5d49-40ad-8b3a-e225ea034f7d> Ученый из Эстонии разрабатывает солнечные панели, которые изменят мир

Как правильно выбрать солнечные панели для своего дома? Рассказывает эксперт [Online resource]

delfi.ee 2022 [Как правильно выбрать солнечные панели для своего дома? Рассказывает эксперт](#)

Сравнительный анализ повышающих преобразователей для интеграции фотоэлектрических панелей в сеть

Husev, Oleksandr; **Vinnikov, Dmitri**; Veligorsky, O. Энергосбережение, энергетика, энергоаудит = Energy saving, power engineering, energy audit 2013 / с. 28-34 : ил

Сравнительный анализ повышающих преобразователей для интеграции фотоэлектрических панелей в сеть [Компют. файл]

Husev, Oleksandr; Vinnikov, Dmitri; Veligorsky, O. Международная Научно-Техническая Конференция "Силовая Электроника и Энергоэффективность" : 23-27.IX 2013, Алушта, Крым 2013 / [2] с. : ил [CD-ROM]

Умная эстонка разрабатывает солнечные батареи, которые можно интегрировать в одежду

limon.ee 2023 [Умная эстонка разрабатывает солнечные батареи, которые можно интегрировать в одежду](#)

Эксперт : как правильно выбрать солнечные панели для своего дома [Online resources]

rus.postimees.ee 2022 [Эксперт : как правильно выбрать солнечные панели для своего дома](#)

Электроосаждение полипиррола в качестве тыльного контакта для солнечного элемента CdS/CdTe

Bereznev, Sergei; Kois, Julia; Jarkov, Aleksandr; Öpik, Andres; Mellikov, Enn Шестая Всероссийская Каргинская конференция "Полимеры - 2014". Том I, Программа конференции и сборник тезисов пленарных, приглашённых, и устных докладов 2014 / с. 165