

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

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

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](#)

Characterization of FeS₂ pyrite microcrystals synthesized in different flux media

Kristmann, Katriin; Raadik, Taavi; Altosaar, Mare; Danilson, Mati; Krustok, Jüri; Paaver, Peeter; Butenko, Yuriy Materials advances 2023 / p. 1565 - 1575 <https://doi.org/10.1039/D3MA00697b> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Chlorine doping of cadmium sulfide on the example of CBD CdS

Hiie, Jaan; Quinci, Frederico; Lughi, Vanni; Sergo, Valter; Valdna, Vello; Mikli, Valdek; Kärber, Erki; Raadik, Taavi Thin-film compound semiconductor photovoltaics - 2009 2009 / p. M08-17 <https://www.cambridge.org/core/journals/mrs-online-proceedings-library-archive/article/abs/chlorine-doping-of-cadmium-sulfide-on-the-example-of-cbd-cds/070F0DAEB40CD83B771895FED27CBEA1>

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 <https://doi.org/10.1002/pssc.201510082> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

A comparative study of the growth dynamics and tribological properties of nanocrystalline diamondfilms deposited on the (110) single crystal diamond and Si(100) substrates

Podgurski, Vitali; Bogatov, Andrei; Yashin, Maxim; Viljus, Mart; Volobujeva, Olga; Mere, Arvo; Raadik, Taavi Diamond and related materials 2019 / p. 159-167 : ill <https://doi.org/10.1016/j.diamond.2018.12.024> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cu₂ZnSnSe₄ thin films by selenization of stacked binaries

Volobujeva, Olga; Mellikov, Enn; Bereznev, Sergei; Raudoja, Jaan; Otto, Kairi; Pilvet, Maris; Raadik, Taavi E-MRS Spring Meeting 2012 - Symposium B : Strasbourg, France, May 14-18, 2012 : program and abstract book 2012 / p. 20

Cu₂ZnSnSe₄ thin films produced by selenization of Cu-Zn-Sn composition precursor films

Volobujeva, Olga; Mellikov, Enn; Bereznev, Sergei; Raudoja, Jaan; Öpik, Andres; Raadik, Taavi Materials Challenges in Alternative and Renewable Energy: a collection of papers presented at the Materials Challenges in Alternative and Renewable Energy Conference February 21-24, 2010, Cocoa Beach, Florida 2011 / p. 257-263

Deep defects in Cu₂ZnSnS₄ monograin solar cells

Kask, Erkki; Raadik, Taavi; Grossberg, Maarja; Josepson, Raavo; Krustok, Jüri Energy procedia 2011 / p. 261-265

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Eesti teadlased aitavad Kuu peal elektrit toota

tehnika.postimees.ee 2022 [Eesti teadlased aitavad...](#)

Eesti teadlased sillutavad teed Kuul päikeseenergia tootmiseks

postimees.ee 2025 <https://teadus.postimees.ee/8196384/eesti-teadlased-sillutavad-teed-kuul-paikeseenergia-tootmiseks>

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; Maticiu, Natalia; Raadik, Taavi; Caraman, Mihail Thin solid films 2015 / p. 128-133 : ill <http://dx.doi.org/10.1016/j.tsf.2014.11.066> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The effect of temperature and sliding speed on friction and wear of Si₃N₄, Al₂O₃, and ZrO₂ balls tested against AlCrN PVD coating

Antonov, Maksim; Afshari, Hossein; Baroninš, Janis; Adoberg, Eron; Raadik, Taavi; Hussainova, Irina Tribology international 2018 / p. 500-514 : ill <https://doi.org/10.1016/j.triboint.2017.05.035> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 <https://doi.org/10.1016/j.tsf.2014.04.057>
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluation of high performance aluminum for microwave filters

Martin-Iglesias, P.; Raadik, Taavi; Teberio, F.; Percasz, J.M.; Martin-Iglesias, S.; Pambaguian, L.; Arregui, I.; Laso, M.A.G. 2019 IEEE MTT-S International Microwave Symposium (IMS), Boston, Massachusetts, 2-7 June 2019 : proceedings 2019 / p. 1183-1186
<https://doi.org/10.1109/MWSYM.2019.8700938> [Conference proceeding at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Formation of Cu₂ZnSnS₄ absorber layers for solar cells by electrodeposition-annealing route

Ilijina, Julia; Zhang, R.; Ganchev, Maxim; Raadik, Taavi; Volobujeva, Olga; Altosaar, Mare; Traksmaa, Rainer; Mellikov, Enn Thin Solid Films 2013 / p. 85 - 89 <https://doi.org/10.1016/j.tsf.2013.04.038> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Growth of Cu-rich/poor CuInS₂ thin films by the sequential modulated flux deposition technique

Bollero, Alberto; Grossberg, Maarja; Raadik, Taavi; Trigo, Juan Francisco; Herrero, Jose; Gutierrez, Ma Teresa Thin-film compound semiconductor photovoltaics - 2009 2009 / p. M02-06

High vacuum evaporation of n-CuIn₃Se₅ photoabsorber films for hybrid PV structures with conductive polymers

Adhikari, Nirmal; Bereznev, Sergei; Laes, Kristjan; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Öpik, Andres; Traksmaa, Rainer; Tverjanovich, Andrey Baltic Polymer Symposium 2010 : Palanga, September 8-11, 2010 : programme and abstracts 2010 / p. 124 https://www.researchgate.net/publication/257710082_High-Vacuum_Evaporation_of_n-CuIn3Se5_Photoabsorber_Films_for_Hybrid_PV_Structures

High-temperature oxidation resistance and tribological properties of Al₂O₃/ta-C coating

Alamgir, Asad; Bogatov, Andrei; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Kübarsepp, Jakob; Sergejev, Fjodor; Lümekemann, Andreas; Kluson, Jan; Podgurski, Vitali Coatings 2022 / art. 547 <https://doi.org/10.3390/coatings12040547> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Podgurski, Vitali; Alamgir, Asad; Yashin, Maxim; Jõgiaas, Taivo; Viljus, Mart; Raadik, Taavi; Danilson, Mati; Sergejev, Fjodor; Lümekemann, Andreas; Kluson, Jan; Sondor, Jozef; Bogatov, Andrei Coatings 2021 / art. 495, 15 p. : ill <https://doi.org/10.3390/coatings11050495> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

High-vacuum evaporation of n-CuIn₃Se₅ photoabsorber films for hybrid PV structures

Adhikari, Nirmal; Bereznev, Sergei; Laes, Kristjan; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Tverjanovich, Andrey; Öpik, Andres; Mellikov, Enn Journal of electronic materials 2011 / p. 2374-2381 : ill

Hübriidsetes fototundlikes struktuurides rakendatavate n-CuIn₃Se₅ fotoabsorberkilede valmistamine kõrgvaakumaurustamise meetodil

Bereznev, Sergei; Adhikari, Nirmal; Kois, Julia; Volobujeva, Olga; Laes, Kristjan; Traksmaa, Rainer; Raadik, Taavi; Öpik, Andres XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 15

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-Kuusk, 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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of order-disorder in Cu₂ZnSnS₄ powders on the performance of monograin layer solar cells

Timmo, Kristi; Kauk-Kuusik, Marit; Pilvet, Maris; Raadik, Taavi; Altosaar, Mare; Danilson, Mati; Grossberg, Maarja; Raudoja, Jaan; Ernits, Kaia Thin solid films 2017 / p. 122-126 : ill <https://doi.org/10.1016/j.tsf.2016.10.017> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Investigation of morphology changes on nanocrystalline diamond film surfaces during reciprocating sliding against Si₃N₄ balls

Bogatov, Andrei; Podgurski, Vitali; Raadik, Taavi; Kamjula, A. R.; Hantschel, Thomas; Tsigkourakos, M.; Kulu, Priit Engineering materials & tribology XXII 2014 / p. 126-129 <https://doi.org/10.4028/www.scientific.net/KEM.604.126> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 <https://doi.org/10.1016/j.egypro.2014.12.359> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Isothermal and two-temperature zone selenization of Mo layers

Kaupmees, Liina; Altosaar, Mare; Volobujeva, Olga; Raadik, Taavi; Grossberg, Maarja; Danilson, Mati; Mellikov, Enn; Barvinski, Paul Advances in materials science and engineering 2012 / Article ID 345762. [11] p. : ill

Keemiliselt sadestatud kaadmiumsulfiidi kilede lõõmutamisel toimuvad struktuursed muutused

Põldme, Nils; Hiie, Jaan; Mikli, Valdek; Raadik, Taavi; Valdna, Vello; Mere, Arvo; Gavrilov, Aleksei; Maticiuc, Natalia; Potlog, Tamara; Quinci, Frederico; Lughi, Vanni; Sergo, Valter XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 65

Kuidas valida oma kodule sobivad päikesepaneelid? [Võrguväljaanne]

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

Low temperature time resolved photoluminescence in ordered and disordered Cu₂ZnSnS₄ single crystals

Raadik, Taavi; Krustok, Jüri; Kauk-Kuusik, Marit; Timmo, Kristi; Grossberg, Maarja; Ernits, Kaia; Bleuse, J. Physica B : condensed matter 2017 / p. 47-50 : ill <https://doi.org/10.1016/j.physb.2016.12.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Lugeja küsib: miks katavad päikesepargid autoparklate asemel põllumaid?

novaator.err.ee 2024 [Lugeja küsib: miks katavad päikesepargid autoparklate asemel põllumaid?](#)

Modification of the optoelectronic properties of Cu₂CdSnS₄ through low-temperature annealing

Pilvet, Maris; Kauk-Kuusik, Marit; Grossberg, Maarja; Raadik, Taavi; Mikli, Valdek; Traksmäa, Rainer; Raudoja, Jaan; Timmo, Kristi; Krustok, Jüri Journal of alloys and compounds 2017 / p. 820-825 : ill <https://doi.org/10.1016/j.jallcom.2017.06.307> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Monograin layer solar cell for future lunar outpost

Kristmann, Katriin; Altosaar, Mare; Raudoja, Jaan; Grossberg, Maarja; Krustok, Jüri; Raadik, Taavi IAC 2020 congress proceedings Proceedings of the International Astronautical Congress, IAC 2020 / 7 p. : ill [Monograin layer solar cell for future lunar outpost](#) <https://dl.iafastro.directory/event/IAC-2020/paper/56905/> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Multiphysic Analysis of High Power Microwave Filter Using High Performance Aluminium Alloy

Martin-Iglesias, P.; Laso, M.A.G.; **Raadik, Taavi;** Teberio, F.; Percas, J.M.; Martin-Iglesias, S.; Pambaguian, L.; Lopetegui, T. 2019 IEEE MTT-S International Microwave Workshop Series on Advanced Materials and Processes for RF and THz Applications, July 16-18, 2019 Bochum, Germany : proceedings 2019 / p 58-60 <https://doi.org/10.1109/IMWS-AMP.2019.8880080>

Nanocrystalline diamond films deformation observed during sliding tests against Si₃N₄ balls as a possible cause for ripple formation on wear scars surface

Bogatov, Andrei; Viljus, Mart; Raadik, Taavi; Hantschel, Thomas; **Podgurski, Vitali** Medžiagotyra = Materials science 2015 / p. 349-352 : ill <https://doi.org/10.5755/j01.ms.21.3.7232> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Observation of band gap fluctuations and carrier localization in Cu₂CdGeSe₄

Krustok, Jüri; Raadik, Taavi; Kaupmees, Reelika; Grossberg, Maarja; Kauk-Kuusik, Marit; Timmo, Kristi; Mere, Arvo Journal of physics D : applied physics 2019 / art. 285102 , 7 p. : ill <https://doi.org/10.1088/1361-6463/ab1afd> [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 <https://doi.org/10.1016/j.solener.2013.04.027> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 studies of Cu₃BiS₃ thin films

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

Optical study of local strain related disordering in CVD-grown MoSe₂ monolayers

Krustok, Jüri; Raadik, Taavi; Jaaniso, Raivo; Kiisk, Valter Applied physics letters 2016 / p. 253106-1 - 253106-5 : ill <https://doi.org/10.1063/1.4972782> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Origin of photoluminescence from antimony selenide

Grossberg, Maarja; Volobujeva, Olga; Penežko, Aleksei; Kaupmees, Reelika; Raadik, Taavi; Krustok, Jüri Journal of alloys and compounds 2020 / art. 152716, 5 p. : ill <https://doi.org/10.1016/j.jallcom.2019.152716> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Phase composition of selenized Cu₂ZnSnSe₄ thin films determined by X-ray diffraction and Raman spectroscopy
Ganchev, Maxim; Iljina, Julia; Kaupmees, Liina; Raadik, Taavi; Volobujeva, Olga; Mere, Arvo; Altosaar, Mare; Raudoja, Jaan; Mellikov, Enn Thin solid films 2011 / p. 7394-7398 : ill

Photoluminescence and Raman study of Cu₂ZnSn(SexS_{1-x})₄ monograins for photovoltaic applications
Grossberg, Maarja; Krustok, Jüri; Raudoja, Jaan; Timmo, Kristi; Altosaar, Mare; Raadik, Taavi Thin solid films 2011 / p. 7403-7406 : ill

Photoluminescence of spray pyrolysis deposited ZnO nanorods
Kärber, Erki; Raadik, Taavi; Dedova, Tatjana; Krustok, Jüri; Mere, Arvo; Mikli, Valdek; Krunks, Malle Nanoscale research letters 2011 / [7] p.: ill

Photoluminescence study of deep donor- deep acceptor pairs in Cu₂ZnSnS₄
Krustok, Jüri; Raadik, Taavi; Grossberg, Maarja; Kauk-Kuusik, Marit; Trifiletti, V.; Binetti, S. Materials science in semiconductor processing 2018 / p. 52-55 : ill <https://doi.org/10.1016/j.mssp.2018.02.025> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photoluminescence study of defect clusters in Cu₂ZnSnS₄ polycrystals
Grossberg, Maarja; Raadik, Taavi; Raudoja, Jaan; Krustok, Jüri Current applied physics 2014 / p. 447-450 : ill
<https://doi.org/10.1016/j.cap.2013.12.029> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 <https://doi.org/10.1016/j.cap.2014.08.013> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Photoreflectance study of AgGaTe₂ single crystals
Raadik, Taavi; Krustok, Jüri; Yakushev, M.V. Physica B : condensed matter 2011 / p. 418-420 : 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

Producing pyrite based solar panels for the future lunar habitat
Kristmann, Katriin; Raadik, Taavi; Heemskerk, Marc Vincent; Woods, Arthur; Vogel, Andreas; Collins, Patrick; Gasperovics, Dimitrijis; Makaya, Advenit IAF Space Power Symposium : held at the 75th International Astronautical Congress (IAC 2024) : Milan, Italy, 14-18 October 2024 2024 / p. 312 - 317 <https://doi.org/10.52202/078370-0035> [Conference proceedings at Scopus](#) [Article at Scopus](#)

PVD of highly photosensitive n-CuIn₅Se₈ films for hybrid PV structures
Adhikari, Nirmal; Bereznev, Sergei; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Öpik, Andres Progress in Applied Surface, Interface and Thin Film Science 2012 : Florence, Italy, June 14-19, 2012 : program and book of abstracts 2012 / p. 83

PVD of N-CuIn₃Se₅ photoabsorber films
Adhikari, Nirmal; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Tverjanovich, Andrey; Öpik, Andres Materials and applications for sensors and transducers 2012 / p. 339-342
https://www.researchgate.net/publication/272070024_PVD_OF_n-CuIn3Se5_photoabsorber_films

PVD of n-CuIn₅Se₈ photoabsorber films for hybrid solar cells
Adhikari, Nirmal; Bereznev, Sergei; Kois, Julia; Volobujeva, Olga; Raadik, Taavi; Traksmaa, Rainer; Dahal, R.K.; Tverjanovich, Andrey; Öpik, Andres Baltic Polymer Symposium 2012 : Liepaja, Latvia, September 19-22 : programme and proceedings 2012 / p. 29

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

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

Pyrite as promising monograin layer solar cell absorber material for in-situ solar cell fabrication on the Moon
Kristmann, Katriin; Raadik, 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 absorber material for monograin layer solar cell

Kristmann, Katriin; Altosaar, Mare; Raudoja, Jaan; Krustok, Jüri; Pilvet, Maris; Mikli, Valdek; Grossberg, Maarja; Danilson, Mati; Raadik, Taavi Thin Solid Films 2022 / art. 139068 : ill <https://doi.org/10.1016/j.tsf.2021.139068> [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; Raadik, 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

Raadik, 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 <https://iafastro.directory/iac/paper/id/79277/abstract-pdf/IAC-23.D3.2B.6.x79277.brief.pdf?2023-03-30.12:16:44> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Pyrite FeS₂ solar cells fabrication for lunar base energy production

Kristmann, Katriin; Raadik, Taavi; Altosaar, Mare; Grossberg-Kuusik, 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](#)

Raman spectroscopy for reliability assessment of multilayered AlCrN coating in tribo-corrosive conditions [Online resource]

Baroninš, Janis; Antonov, Maksim; Bereznev, Sergei; Raadik, Taavi; Hussainova, Irina Coatings 2018 / art. 229, 12 p. : ill <https://doi.org/10.3390/coatings8070229> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Raman spectroscopy of multilayered AlCrN coating under high temperature sliding/oxidation

Baroninš, Janis; Antonov, Maksim; Bereznev, Sergei; Raadik, Taavi; Hussainova, Irina Modern Materials and Manufacturing 2019 : 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATRIB 2019. Selected, peer reviewed papers from the conference Modern Materials and Manufacturing 2019 (MMM 2019), April 24-26, 2019, Tallinn, Estonia 2019 / p. 9-14 <https://www.scientific.net/KEM.799.9> https://www.ester.ee/record=b5235278*est <https://doi.org/10.4028/www.scientific.net/KEM.799.9> [Conference proceeding at Scopus](#) [Article at Scopus](#)

Rapid thermal processing of Kesterite thin films

Ganchev, Maxim; Spasova, Stanka; Raadik, Taavi; Mere, Arvo; Altosaar, Mare; Mellikov, Enn Coatings 2023 / art. 1449 <https://doi.org/10.3390/coatings13081449> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

The role of Cl in the chemical bath on the properties of CdS thin films

Maticiu, Natalia; Hiie, Jaan; Raadik, Taavi; Graf, Aleksandr; Gavrilov, Aleksei Thin solid films 2013 / p. 184-187 : ill <https://doi.org/10.1016/j.tsf.2012.11.107> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Selenisation of sequentially electrodeposited Cu-Zn and Sn precursor layers

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

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

Lehner, Julia; Loorits, Mihkel; Revathi, Naidu; Raadik, Taavi; Raudoja, Jaan; Grossberg, Maarja; Mellikov, Enn; Volobujeva, Olga; Ganchev, Maxim Journal of crystal growth 2013 / p. 236-240 : ill <https://doi.org/10.1016/j.jcrysgro.2013.06.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural changes in chemically deposited CdS : effect of thermal annealing

Maticiu, Natalia; Potlog, Tamara; Hiie, Jaan; Mikli, Valdek; Pöldme, Meeme; Raadik, Taavi; Valdna, Vello; Mere, Arvo; Gavrilov, Aleksei; Sergo, V.; Quinci, Frederico; Lugh, Vanni Moldavian journal of the physical sciences 2010 / 3/4, p. 275-279 https://www.researchgate.net/publication/281997353_Structural_changes_in_chemically_deposited_CdS_Effect_of_thermal_annealing

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 point defects in wide- bandgap Cu₂CdGeS₄ microcrystals by temperature and laser power dependent

photoluminescence spectroscopy

Krustok, Jüri; Raadik, Taavi; Li, Xiaofeng; Kauk-Kuusik, Marit; Timmo, Kristi; Oueslati, Souhaib; Grossberg, Maarja Journal of physics D : applied physics 2020 / 10 p. : ill <https://doi.org/10.1088/1361-6463/ab83c1> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of structural and optoelectronic properties of $\text{Cu}_2\text{Zn}(\text{Sn}_{1-x}\text{Ge}_x)\text{Se}_4$ (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 <https://doi.org/10.1016/j.tsf.2014.10.055> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Süvenev energiakriis annab kosmose-päikeseelektrijaamadele uue hingamise

Raadik, Taavi novaator.err.ee 2024 [Süvenev energiakriis annab kosmose-päikeseelektrijaamadele uue hingamise](#)

Synthesis and characterization of pyrite FeS_2 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](#)

ZnCdSeTe semiconductor compounds : preparation and properties

Valdna, Vello; Grossberg, Maarja; Hiie, Jaan; Kallavus, Urve; Mikli, Valdek; Raadik, Taavi; Traksmäa, Rainer; Viljus, Mart MRS proceedings 2011 / p. u07-15 <https://www.cambridge.org/core/journals/mrs-online-proceedings-library-archive/article/abs/zncdsete-semiconductor-compounds-preparation-and-properties/49279438DA7FE99A846F54C38F77A46D>

Tallinna Tehnikaülikooli korvpalliklubi Kapa 1951-2026

2025 https://www.ester.ee/record=b5752833*est

TalTech teel Kuule Päikest võtma

Vaaks, Eveliis; Raadik, Taavi Trialoog 2025 <https://trialoog.taltech.ee/tehnikaulikool-teel-kuule-paikest-votma/>

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 <https://doi.org/10.1016/j.tsf.2012.12.083> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 <https://doi.org/10.1016/j.mssp.2015.04.055> [Journal metrics at Scopus](#) [Article at Scopus](#) [Article at WOS](#) [Article at WOS](#)

Temperature dependent optical and electrical characterization of SnS/CdS solar cell

Raadik, Taavi; Spalatu, Nicolae; Krustok, Jüri; Josepson, Raavo; Grossberg, Maarja Thin Solid Films 2022 / art. 139069 <https://doi.org/10.1016/j.tsf.2021.139069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Temperature dependent photorefectance study of Cu_2SnS_3 thin films produced by pulsed laser deposition

Raadik, Taavi; Grossberg, Maarja; Krustok, Jüri; Kauk-Kuusik, Marit Applied physics letters 2017 / p. 261105-1 - 261105-4 : ill <https://doi.org/10.1063/1.4990657> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Temperature-dependent photorefectance of SnS crystals

Raadik, Taavi; Grossberg, Maarja; Raudoja, Jaan; Traksmäa, Rainer; Krustok, Jüri Journal of physics and chemistry of solids 2013 / p. 1683-1685 : ill <https://doi.org/10.1016/j.jpcs.2013.06.002> [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 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://fmdtk.ut.ee/wp-content/uploads/2020/01/GSFMT2020.pdf>

The impedance spectroscopy of CuIn_3S_5 photoabsorber films prepared by high vacuum evaporation technique

Laes, Kristjan; Bereznev, Sergei; Land, Raul; Tverjanovich, Andrey; Volobujeva, Olga; Traksmäa, Rainer; Raadik, Taavi; Öpik, Andres Energy procedia 2010 / 1, p. 119-131 : ill

The role of structural properties on deep defect states in $\text{Cu}_2\text{ZnSnS}_4$ studied by photoluminescence spectroscopy

Grossberg, Maarja; Krustok, Jüri; Raudoja, Jaan; Raadik, Taavi Applied physics letters 2012 / p. 102102-1 - 102102-4 : ill <https://pubs.aip.org/aip/apl/article/101/10/102102/126713/The-role-of-structural-properties-on-deep-defect>

Tribological properties of nanocrystalline diamond coating at high temperature sliding conduction [Online resource]
Yashin, Maxim; Baroninš, Janis; Menezes, Pradeep; Viljus, Mart; Raadik, Taavi; Bogatov, Andrei; Antonov, Maksim; Podgurski, Vitali Tartu Ülikooli ASTRA projekt PER ASPERA : Funktsionaalsed materjalid ja tehnoloogiad : [7-8 märtsil 2018, Tallinn : teesid] GSFMT Scientific Conference 2018 : Tallinn, March 7-8, 2018 : abstracts 2018 / 1 p. : ill <http://fmttk.ut.ee/teesid-2018/>

Wear rate of nanocrystalline diamond coating under high temperature sliding conditions
Yashin, Maxim; Baroninš, Janis; Menezes, Pradeep; Viljus, Mart; Raadik, Taavi; Bogatov, Andrei; Antonov, Maksim; Podgurski, Vitali Materials Engineering 2017 : selected, peer reviewed papers from the 26th International Baltic Conference on Materials Engineering 2017, October 26-27, Kaunas, Lithuania 2017 / p. 219-223 : ill <https://doi.org/10.4028/www.scientific.net/SSP.267.219> [Conference proceedings at Scopus](#) [Article at Scopus](#)

Выгодно ли устанавливать солнечные батареи дома?
Raadik, Taavi delfi.ee 2024 [Выгодно ли устанавливать солнечные батареи дома?](#)

Ученый отвечает: почему солнечные панели ставят на полях, а не на парковках
Raadik, Taavi rus.err.ee 2024 [Ученый отвечает: почему солнечные панели ставят на полях, а не на парковках](#)