

A PL study of deep bands in CuIn_{1-x}Ga_xSe₂

Krustok, Jüri; Raudoja, Jaan; Yakushev, M.V.; Pilkington, R.D.; Hill, A.E.; Collan, Heikki Twelfth International Conference on Ternary and Multinary Compounds : March 13-17, 2000 : National Tsing Hua University, Hsinchu, Taiwan : abstract[s] 2000 / p. P2-61

Analysis of the edge emission of highly conductive CuGaTe₂

Krustok, Jüri; Grossberg, Maarja; Jagomägi, Andri; Danilson, Mati; Raudoja, Jaan Thin solid films 2007 / 15, p. 6192-6195
<https://www.sciencedirect.com/science/article/abs/pii/S0040609006016117>

Anion effect of zinc source to chemically deposited ZnS(O,OH) films

Ernits, Kaia; Muska, Katri; Danilson, Mati; Raudoja, Jaan; Varema, Tiit; Volobujeva, Olga; Altosaar, Mare Advances in material science and engineering 2009 / [5] p. : ill

Annealing effect for SnS thin films prepared by high-vacuum evaporation

Revathi, Naidu; Bereznev, Sergei; Looits, Mihkel; Raudoja, Jaan; Lehner, Julia; Gurevits, Jelena; Traksmäa, Rainer; Mikli, Valdek; Mellikov, Enn; Volobujeva, Olga Journal of vacuum science & technology A 2014 / p. 061506-1 - 061506-6 : ill
<https://doi.org/10.1116/1.4896334> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Characterization of Cu₂ZnSnSe₄ monograin layer solar cells

Altosaar, Mare; Timmo, Kristi; Danilson, Mati; Raudoja, Jaan; Mellikov, Enn Proceedings of the International Conference on Solar Cells : IC-SOLACE 2008 : January 21-23, 2008, Cochin, India 2008 / p. 103-105 : ill

Chemical bath deposition of ZnS films using different Zn-salts

Ernits, Kaia; Muska, Katri; Kauk, Marit; Danilson, Mati; Raudoja, Jaan; Varema, Tiit; Volobujeva, Olga; Altosaar, Mare Physics procedia : EMRS-2009 Spring Meeting, Strasbourg, France, 8-12 of June 2009 2009 / p. BP4-10

Chemical etching of Cu₂ZnSn(S,Se)₄ monograin powder

Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan; Grossberg, Maarja; Danilson, Mati; Volobujeva, Olga; Mellikov, Enn 35th IEEE Photovoltaic Specialists Conference : Honolulu, HI, June 20-25, 2010 : conference proceedings 2010 / p. 1982-1985 : ill

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](#)

Comparison of CdS films deposited from chemical baths containing different doping impurities

Altosaar, Mare; Ernits, Kaia; Krustok, Jüri; Varema, Tiit; Raudoja, Jaan; Mellikov, Enn Thin solid films 2005 / p. 147-150 : ill

Comparison of copper zinc tin selenide formation in molten potassium iodide and sodium iodide as flux materials

Leinemann, Inga; Raudoja, Jaan; Grossberg, Maarja; Traksmäa, Rainer; Kaljuvee, Tiit; Altosaar, Mare; Meissner, Dieter Conference proceedings of the Conference of Young Scientists on Energy Issues : Kaunas, Lithuania, 27-28 May, 2010 2011 / [8] p
https://www.researchgate.net/publication/284715158_COMPARISON_OF_COPPER_ZINC_TIN_SELENIDE_FORMATION_IN_MOLTEN_POTASSIUM_IODIDE_AND_SODIUM_IODIDE_AS_FLUX_MATERIALS

Crystal quality studies of CuInS₂ films prepared by spray pyrolysis

Oja, Ilona; Nanu, M.; Katerski, Atanas; Krunks, Malle; Mere, Arvo; Raudoja, Jaan; Goossens, A. Thin solid films 2005 / p. 82-86 : 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 monograin powders and thin films

Mellikov, Enn; Meissner, Dieter; Altosaar, Mare; Kauk, Marit; Krustok, Jüri; Öpik, Andres; Volobujeva, Olga; Iljina, Julia; Timmo, Kristi; Klavina, J.; Raudoja, Jaan; Grossberg, Maarja; Varema, Tiit; Muska, Katri; Ganchev, Maxim; Bereznev, Sergei; Danilson, Mati Advanced materials research 2011 / p. 8-13

Cu₂Zn_{1-x}Cd_xSn(Se_{1-y}Sy)₄ solid solutions as absorber materials for solar cells

Altosaar, Mare; Raudoja, Jaan; Timmo, Kristi; Danilson, Mati; Grossberg, Maarja; Krustok, Jüri; Mellikov, Enn Physica status solidi (a) : applications and materials science 2008 / 1, p. 167-170 : ill <https://colab.ws/articles/10.1002%2Fpssa.200776839>

Cu₂ZnSnSe₄ films by selenization of Sn-Zn-Cu sequential films

Volobujeva, Olga; Raudoja, Jaan; Mellikov, Enn; Grossberg, Maarja; Bereznev, Sergei; Traksmäa, Rainer Journal of physics and chemistry of solids 2009 / p. 567-570 : ill

Cu₂ZnSnSe₄ formation and reaction enthalpies in molten NaI starting from binary chalcogenides

Leinemann, Inga; Zhang, Weihao; Kaljuvee, Tiit; Tõnsuaadu, Kaia; Traksmäa, Rainer; Raudoja, Jaan; Grossberg, Maarja;

Altosaar, Mare; Meissner, Dieter Journal of thermal analysis and calorimetry 2014 / p. 1313-1321 : ill <https://doi.org/10.1007/s10973-014-4102-y> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

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]

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

Cu₂(Zn_xSn_{2-x})(SySe_{1-y})₄ monograin materials for photovoltaics

Mellikov, Enn; Altosaar, Mare; Raudoja, Jaan; Timmo, Kristi; Volobujeva, Olga; Kauk, Marit; Krustok, Jüri; Varema, Tiit; Grossberg, Maarja; Danilson, Mati; Muska, Katri; Ernits, Kaia; Lehner, Franz; Meissner, Dieter 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. 137-142 : ill

Cu-In and Cu-Zn-Sn films as precursors for production of CuInSe₂ and Cu₂ZnSnSe₄ thin films

Volobujeva, Olga; Mellikov, Enn; Raudoja, Jaan; Bereznev, Sergei; Pilvet, Maris Thin-film compound semiconductor photovoltaics - 2009 2009 / p. M05-40

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

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

CuInSe₂ monograin growth in the liquid phase of potassium iodide

Timmo, Kristi; Altosaar, Mare; Kauk, Marit; Raudoja, Jaan; Mellikov, Enn Thin solid films 2007 / 15, p. 5884-5886 <https://www.sciencedirect.com/science/article/pii/S0040609006016385>

Deep and edge photoluminescence emission of CuInTe₂

Jagomägi, Andri; Krustok, Jüri; Raudoja, Jaan; Grossberg, Maarja; Danilson, Mati Physica status solidi (b) 2003 / 2, p. R3-R5

Deep defect related photoluminescence in heavily doped CuGaTe₂

Jagomägi, Andri; Krustok, Jüri; Grossberg, Maarja; Danilson, Mati; Raudoja, Jaan Physica status solidi (a) 2006 / 5, p. 949-955 : ill <http://deepzone3.ttu.ee/~juri.krustok/PDF-s/Deep%20defect%20related%20photoluminescence%20in%20heavily%20doped.pdf>

Defects in Cl and Na doped CdTe monograin powders

Altosaar, Mare; Kuk, Peeter-Enn; Raudoja, Jaan; Mellikov, Enn E-MRS Spring Meeting : Strasbourg, 1999 : abstracts 1999 / p. O-32 <https://www.sciencedirect.com/science/article/abs/pii/S0040609099008135>

Device characteristics of CuInSe₂ based solar cells

Krustok, Jüri; Danilson, Mati; Jagomägi, Andri; Grossberg, Maarja; Raudoja, Jaan The Fourth International Conference on Advanced Optical Materials and Devices : (AOMD-4) : Tartu, Estonia, July 6-9, 2004 : abstracts 2004 / p. 45

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

Effects of sulphur and tin disulphide vapour treatments of Cu₂ZnSnS(Se)₄ absorber materials for monograin solar cells

Kauk, Marit; Muska, Katri; Altosaar, Mare; Raudoja, Jaan; Pilvet, Maris; Varema, Tiit; Timmo, Kristi; Volobujeva, Olga Energy procedia 2011 / p. 197-202 <https://www.sciencedirect.com/science/article/pii/S1876610211020030>

Formation of Cu₂ZnSnSe₄ thin films by selenization of electrodeposited stacked binary alloy layers

Ganchev, Maxim; Kaupmees, Liina; Iljina, Julia; Raudoja, Jaan; Altosaar, Mare; Volobujeva, Olga; Mellikov, Enn; Varema, Tiit; Dikov, H. Proceedings of EMRS, Strasbourg, June 2009 2009 / ? p https://www.researchgate.net/publication/248608013_Formation_of_Cu2ZnSnSe4_thin_films_by_selenization_of_electrodeposited_stacked_binar

Formation of Cu₂ZnSnSe₄ thin films by selenization of electrodeposited stacked binary alloy layers

Ganchev, Maxim; Kaupmees, Liina; Iljina, Julia; Raudoja, Jaan; Volobujeva, Olga; Dikov, H.; Altosaar, Mare; Mellikov, Enn; Varema, Tiit Energy procedia 2010 / 1, p. 65-70 : ill
[https://www.researchgate.net/publication/248608013_Formation_of_Cu₂ZnSnSe₄_thin_films_by_selenization_of_electrodeposited_stacked_binary_alloy_layers](https://www.researchgate.net/publication/248608013_Formation_of_Cu2ZnSnSe4_thin_films_by_selenization_of_electrodeposited_stacked_binary_alloy_layers)

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

Glass/ITO/In(O,S)/CuIn(S,Se)₂ solar cell with conductive polymer window

Kois, Julia; Bereznev, Sergei; Raudoja, Jaan; Mellikov, Enn; Öpik, Andres The Fourth International Conference on Advanced Optical Materials and Devices : (AOMD-4) : Tartu, Estonia, July 6-9, 2004 : abstracts 2004 / p. 44
<https://www.sciencedirect.com/science/article/abs/pii/S0927024804003836>

Glass/ITO/In(O,S)/CuIn(S,Se)₂ solar cell with conductive polymer window layer

Kois, Julia; Bereznev, Sergei; Raudoja, Jaan; Mellikov, Enn; Öpik, Andres Solar energy materials and solar cells 2005 / p. 657-665 : ill <https://www.sciencedirect.com/science/article/abs/pii/S0927024804003836>

High efficient photovoltaics in Estonia

Altosaar, Mare; Bereznev, Sergei; Kauk, Marit; Krunks, Malle; Krustok, Jüri; Mellikov, Enn; Raudoja, Jaan; Varema, Tiit Proc. 3rd Workshop held at JRC Ispra, 2-3 Oct. 2003 2004 / p. 179-190

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

Impact of growth-synthesis conditions on Cu₂Zn_{1-x}Cd_xSnS₄ monograin material properties

Nkwusi, Godswill; Leinemann, Inga; Raudoja, Jaan; Mikli, Valdek; Karba, E.; Altosaar, Mare Superlattices and microstructures 2016 / p. 400-405 : ill <http://doi.org/10.1016/j.spmi.2016.09.006>

Impact of vacuum and nitrogen annealing on HVE SnS photoabsorber films

Revathi, Naidu; Loorits, Mihkel; Kärber, Erki; Volobujeva, Olga; Raudoja, Jaan; Maticiu, Natalia; Bereznev, Sergei; Mellikov, Enn Materials science in semiconductor processing 2017 / p. 252-257 : ill <https://doi.org/10.1016/j.mssp.2017.08.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of compositional deviations on the properties of Cu₂ZnSnSe₄ monograin powders

Muska, Katri; Kauk, Marit; Grossberg, Maarja; Altosaar, Mare; Raudoja, Jaan; Volobujeva, Olga Energy procedia 2011 / p. 323-327

Influence of Na doping on opto-electrical properties of CdTe:Cl

Altosaar, Mare; Kukk, Peeter-Enn; Raudoja, Jaan; Krustok, Jüri; Krunks, Malle; Mellikov, Enn; Raudoja, Jaan vt.ka Mäddasson, Jaan 11th International Photovoltaic Science and Engineering Conference : Sept. 20-24/1999, Hokkaido, Japan : technical digest 1999 / p. 457-458: ill

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](#)

Microphotoluminescence study of Cu₂ZnSnS₄ polycrystals

Grossberg, Maarja; Salu, Pille; Raudoja, Jaan; Krustok, Jüri Journal of photonics for energy 2013 / p. 030599-1 - 030599-6 : ill

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.jafastro.directory/event/IAC-2020/paper/56905/](https://dl.jafastro.directory/event/IAC-2020/paper/56905/) [Conference proceeding at Scopus](#) [Article at Scopus](#)

Monograin layer solar cells

Altosaar, Mare; Jagomägi, Andri; Kauk, Marit; Krunks, Malle; Krustok, Jüri; Mellikov, Enn; Raudoja, Jaan; Varema, Tiit E-MRS Spring Meeting 2002 : June 18-21, 2002. Symposium B, Thin Film Chalcogenide Photovoltaic Materials 2002 / p. B-29

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

Naatriumiga legerimise 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

Nature of the native deep localized defect recombination centers in the chalcopyrite and orthorhombic AgInS₂

Krustok, Jüri; Raudoja, Jaan; Krunks, Malle; Mändar, H.; Collan, Heikki Journal of applied physics 2000 / 1, p. 205-209 : ill
<https://pubs.aip.org/aip/jap/article/88/1/205/486608/Nature-of-the-native-deep-localized-defect>

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

On the shape of the close-to-band-edge photoluminescent emission spectrum in compensated CuGaSe₂

Krustok, Jüri; Raudoja, Jaan; Yakushev, M.; Pilkington, R.D.; Collan, Heikki Physica status solidi (a) 1999 / p. 483-490
<https://onlinelibrary.wiley.com/doi/abs/10.1002/%28SICI%291521-396X%28199906%29173%3A2%3C483%3A%3AAID-PSSA483%3E3.0.CO%3B2-A>

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 spectroscopy of polycrystalline AgInTe₂

Jagomägi, Andri; Krustok, Jüri; Raudoja, Jaan; Grossberg, Maarja; Oja, Ilona; Krunks, Malle; Danilson, Mati Thin solid films 2005 / p. 246-249 : ill

Photoluminescence and Raman spectroscopy of polycrystalline AgInTe₂

Jagomägi, Andri; Krustok, Jüri; Raudoja, Jaan; Grossberg, Maarja; Oja, Ilona; Krunks, Malle; Danilson, Mati Thin solid films 2005 / p. 246-249 : 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 and tetragonal distortion in CuInSe₂

Krustok, Jüri; Raudoja, Jaan; Collan, Heikki Abstracts E-MRS-IUMRS 2000 / p. N-22

Photoluminescence and the tetragonal disortion in CuInS₂

Krustok, Jüri; Raudoja, Jaan; Collan, Heikki Thin solid films 2001 / p. 195-197

Photoluminescence of deep defect pairs in chalcopyrite ternaries

Krustok, Jüri; Raudoja, Jaan; Schön, J.H.; Yakushev, M.; Collan, Heikki Proceedings of the 16th European Photovoltaic Solar Energy Conference. 1 2001 / p. 887-890 <https://tiedejatutkimus.fi/fi/results/publication/0353121300>

Photoluminescence properties of Ge-implanted CuGaSe₂ crystals

Krustok, Jüri; Raudoja, Jaan; Schön, J.H. Physica status solidi (a) 2000 / p. 805-809 : ill

Photoluminescence properties of polycrystalline AgGaTe₂

Krustok, Jüri; Jagomägi, Andri; Grossberg, Maarja; Raudoja, Jaan; Danilson, Mati Solar energy materials and solar cells 2006 / 13, p. 1973-1982 : ill https://www.researchgate.net/publication/240431559_Photoluminescence_properties_of_polycrystalline_AgGaTe_2

Photoluminescence properties of stoichiometric CuInSe₂ crystals

Krustok, Jüri; Jagomägi, Andri; Raudoja, Jaan; Altosaar, Mare Solar energy materials and solar cells 2003 / p. 401-408 : ill

Photoluminescence study of deep levels in CuGaTe₂ crystals

Krustok, Jüri; Raudoja, Jaan; Yakushev, M.; Pilkington, R.D.; Collan, Heikki Journal of applied physics 1999 / 9, p. 5305-5307: ill

Photoluminescence study of defect clusters in Cu₂ZnSnS₄ polycrystals

Grossberg, Maarja; Raadik, Taavi; Raudoja, Jaan; Krustok, Jüri Current applied physics 2014 / p. 447-450 : ill

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

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 <https://doi.org/10.1016/j.tsf.2012.11.075> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Päikeseenergeetika materjalid

Mellikov, Enn; Altosaar, Mare; Bereznev, Sergei; Kauk, Marit; Krunks, Malle; Krustok, Jüri; Mere, Arvo; Raudoja, Jaan; Varema, Tiit; Öpik, Andres Teaduse uued suunad : materjaliteadus : Eesti Teaduste Akadeemia seminari materjalid : 23.10.2003 2004 / lk. 11-21 : ill

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

Selenisation of sequentially electrodeposited Cu-Zn and Sn precursor layers

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

Selenization of co-sputtered Cu-In alloy films

Volobujeva, Olga; Abou-Ras, Daniel; Grossberg, Maarja; Raudoja, Jaan; Mellikov, Enn; Traksmäa, Rainer Conference records of the 33rd IEEE Photovoltaic Specialists Conference : San Diego, U.S.A., May 12-16, 2008 2008 / ? p <https://doi.org/10.1109/PVSC.2008.4922549>

SEM analysis and selenization of Cu-In alloy films produced by co-sputtering of metals

Volobujeva, Olga; Altosaar, Mare; Raudoja, Jaan; Mellikov, Enn; Grossberg, Maarja; Kaupmees, Liina; Barvinski, Paul Solar energy materials and solar cells 2009 / 1, p. 11-14 : ill <https://www.sciencedirect.com/science/article/pii/S0927024808000238>

SEM analysis and selenization of Cu-Zn-Sn sequential films produced by evaporation of metals

Volobujeva, Olga; Mellikov, Enn; Raudoja, Jaan; Grossberg, Maarja; Bereznev, Sergei; Altosaar, Mare; Traksmäa, Rainer Conference on Optoelectronic and Microelectronic Materials and Devices (COMMAD 2008) : Sydney, 18.07-1.08.2008 : proceedings 2009 / p. 257-260 <https://ieeexplore.ieee.org/document/4802140/similar#similar>

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

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

Lehner, Julia; Looits, 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

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 Cu₂ZnSnSe₄ monograin formation in molten KI starting from binary chalcogenides

Klavina, Inga; Kaljuvee, Tiit; Timmo, Kristi; Raudoja, Jaan; Traksmäa, Rainer; Altosaar, Mare; Meissner, Dieter Thin solid films 2011 / p. 7399-7402 <https://www.sciencedirect.com/science/article/pii/S0040609011004305>

SuInSe₂ 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

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
<https://doi.org/10.1016/j.tsf.2012.12.080> [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
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://fntdk.ut.ee/teesid-2019/>

Synthesis of Cu₂(ZnCd)SnS₄ absorber material for monograin membrane applications

Nkwusi, Godswill; Leinemann, Inga; Raudoja, Jaan; Mikli, Valdek; Kauk-Kuusik, Marit; Altosaar, Mare; Mellikov, Enn Materials Research Society symposium proceedings 2014 / 6 p. : ill <https://doi.org/10.1557/opl.2014.245> [Conference proceedings at Scopus](#) [Article at Scopus](#)

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

Kumar, Suresh; Kasubosula, Bharath; Looirts, 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> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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

Temperature dependence of very deep emission from an exciton bound to an isoelectronic defect in polycrystalline CuInS₂

Krustok, Jüri; Raudoja, Jaan; Jaaniso, Raivo Applied physics letters 2006 / 5, p. 051905 ([3] p.) : ill
https://staff.ttu.ee/~juri.krustok/PDF-s/Krustok_%20Raudoja_%20Jaaniso_APL.pdf

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 sodium doping to CuInSe₂ monograin powder properties

Timmo, Kristi; Altosaar, Mare; Raudoja, Jaan; Mellikov, Enn; Varema, Tiit; Danilson, Mati; Grossberg, Maarja Thin solid films 2007 / 15, p. 5887-5890

The influence of doping with donor type impurities on the properties of CuInSe₂

Kauk, Marit; Altosaar, Mare; Raudoja, Jaan; Timmo, Kristi; Varema, Tiit; Danilson, Mati; Grossberg, Maarja; Mellikov, Enn Physica status solidi (c) 2008 / 2, p. 609-611 : ill <https://onlinelibrary.wiley.com/doi/abs/10.1002/pssc.200776831>

The performance of CuInSe₂ monograin layer solar cells with variable indium content

Kauk, Marit; Altosaar, Mare; Raudoja, Jaan; Jagomägi, Andri; Danilson, Mati; Varema, Tiit Thin solid films 2007 / 15, p. 5880-5883

The role of deep donor-deep acceptor complexes in Cis-related compounds

Krustok, Jüri; Raudoja, Jaan; Schön, J.H.; Yakushev, M.; Collan, Heikki Thin solid films 2000 / p. 406-410 : ill
<https://www.sciencedirect.com/science/article/abs/pii/S0040609099007567>

The role of deep donor-deep acceptor complexes in CIS-related compounds

Krustok, Jüri; Raudoja, Jaan; Schön, J.H.; Yakushev, M.; Collan, Heikki E-MRS Spring Meeting : Strasbourg, 1999 : abstracts 1999 / p. O <https://deepzone4.ttu.ee/~juri.krustok/PDF-s/TSF-406.pdf>

The role of structural properties on deep defect states in Cu₂ZnSnS₄ 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>

XPS study of CZTSSe monograin powders

