

Comprehensive study of photoluminescence and device properties in Cu₂Zn(Sn_{1-x}Gex)₄ monograins and monograin layer solar cells

Mengü, İdil; Muska, Katri; Pilvet, Maris; Mikli, Valdek; Dudutiene, Evelina; Kondrotas, Rokas; Krustok, Jüri; Kauk-Kuusik, Marit; Grossberg-Kuusk, Maarja Solar energy materials and solar cells 2024 / art. 113124 <https://doi.org/10.1016/j.solmat.2024.113124> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Corrigendum to “Screening and optimization of processing temperature for Sb₂Se₃ thin film growth protocol: Interrelation between grain structure, interface intermixing and solar cell performance” [Solar Energy Mater. Solar Cell. 225 (2021) 1–13 111045](S092702482100088X)(10.1016/j.solmat.2021.111045)

Spalatu, Nicolae; Krautmann, Robert; Katerski, Atanas; Kärber, Erki; Josepson, Raavo; Hiie, Jaan; Oja Acik, Ilona; Krunks, Malle Solar Energy Materials and Solar Cells 2021 / Art. 111098 <https://doi.org/10.1016/j.solmat.2021.111098> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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](#)

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

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 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>

Hybrid copper-indium disulfide polypyrrole/photovoltaic structures prepared by electrodeposition

Bereznev, Sergei; Konovalov, Igor; Öpik, Andres; Kois, Julia; Mellikov, Enn Solar energy materials and solar cells 2005 / p. 197-206 : 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-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](#)

Impact of the selenisation temperature on the structural and optical properties of CZTSe absorbers

Marquez-Prieto, J.; Yakushev, M.V.; Forbes, I.; Krustok, Jüri Solar energy materials and solar cells 2016 / p. 42-50 : ill <https://doi.org/10.1016/j.solmat.2016.03.018> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Influence of the copper content on the optical properties of CZTSe thin films

Yakushev, M. V.; Sulimov, M. A.; Marquez-Prieto, J.; Forbes, I.; Krustok, Jüri Solar energy materials and solar cells 2017 / p. 69-77 : ill <https://doi.org/10.1016/j.solmat.2017.04.022> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Low processing temperatures explored in Sb₂S₃ solar cells by close-spaced sublimation and analysis of bulk and interface related defects

Krautmann, Robert; Spalatu, Nicolae; Josepson, Raavo; Nedzinskas, Ramunas; Kondrotas, Rokas; Gržibovskis, R.; Vembris, Aivars; Krunks, Malle; Oja Acik, Ilona Solar energy materials and solar cells 2023 / art. 112139, 9 p. : ill <https://doi.org/10.1016/j.solmat.2022.112139> [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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Optimization of VTD Sb₂Se₃ absorber growth rate in CdS/Sb₂Se₃ thin film solar cells : A defect perspective on chloride vs non-chloride based devices

Gopi, Sajeesh Vadakkedath; Krautmann, Robert; Katerski, Atanas; Josepson, Raavo; Untila, Dumitru; Hiie, Jaan; Krunks, Malle; Oja Acik, Ilona; Spalatu, Nicolae Solar energy materials and solar cells 2025 / art. 113856
<https://doi.org/10.1016/j.solmat.2025.113856>

Optoelectronic properties of chlorine and oxygen doped CdTe thin films

Valdna, Vello Solar energy materials and solar cells 2005 / p. 369-373 : 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

Sb₂S₃ solar cells with TiO₂ electron transporting layers synthesized by ALD and USP methods

Dedova, Tatjana; Krautmann, Robert; Rusu, Marin; Katerski, Atanas; Krunks, Malle; Unold, Thomas; Spalatu, Nicolae; Mere, Arvo; Sydorenko, Jekaterina; Sibinski, Maciej; Oja Acik, Ilona Solar energy materials and solar cells 2025 / art. 113279
<https://doi.org/10.1016/j.solmat.2024.113279>

Screening and optimization of processing temperature for Sb₂Se₃ thin film growth protocol : interrelation between grain structure, interface intermixing and solar cell performance

Spalatu, Nicolae; Krautmann, Robert; Katerski, Atanas; Kärber, Erki; Josepson, Raavo; Hiie, Jaan; Oja Acik, Ilona; Krunks, Malle Solar energy materials and solar cells 2021 / art. 111045, 13 p. : ill <https://doi.org/10.1016/j.solmat.2021.111045> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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; Barvinschi, Paul Solar energy materials and solar cells 2009 / 1, p. 11-14 : ill <https://www.sciencedirect.com/science/article/pii/S0927024808000238>

To grind or not to grind? The influence of mechanical and thermal treatments on the Cu/Zn disorder in Cu₂ZnSn(SxSe_{1-x})₄ monograins

Gurieva, Galina; Rotaru, Victoria; Ernits, Kaia; Siminel, Nichita A.; Manjón-Sanz, Alicia; Kirkham, Melanie J.; Perez-Rodriguez, Alejandro; Guc, Maxim; Meissner, Dieter; Schorr, Susan Solar Energy Materials and Solar Cells 2022 / Art. 112009
<https://doi.org/10.1016/j.solmat.2022.112009> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Visible light-assisted instability of kesterite Cu₂ZnSnS₄ : what are the implications?

Kois, Julia; Polivtseva, Svetlana; Mamedov, Damir; Samieipour, Ali; Karazhanov, S. Zh. Solar energy materials and solar cells 2020 / art. 110384, 10 p <https://doi.org/10.1016/j.solmat.2019.110384> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

XPS study of OH impurity in solution processed CdS thin films

Maticiuc, Natalia; Katerski, Atanas; Danilson, Mati; Krunks, Malle; Hiie, Jaan Solar energy materials and solar cells 2017 / p. 211-216 : ill <https://doi.org/10.1016/j.solmat.2016.10.040> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)