

**Compositionally tunable structure and optical properties of  $\text{Cu}_{1.85}(\text{Cd}_x\text{Zn}_{1-x})_{1.1}\text{SnS}_{4.1}$  ( $0 \leq x \leq 1$ ) 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 <https://doi.org/10.1016/j.tsf.2014.10.091> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

**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; Brammertz, 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](#)

#### **Doping and alloying of kesterites**

Romanyuk, Yaroslav E.; Haass, Stefan G.; Giraldo, Sergio; Kauk-Kuusik, Marit Journal of Physics Energy 2019 / art. 044004, 22 p. : ill <https://doi.org/10.1088/2515-7655/ab23bc>

**Efficiency enhancement of  $\text{Cu}_2\text{ZnSnS}_4$  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  
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#### **Formation of $\text{Cu}_2\text{ZnSnS}_4$ absorber layers for solar cells by electrodeposition-annealing route**

Iljina, Julia; Zhang, R.; Ganchev, Maxim; Raadik, Taavi; Volobujeva, Olga; Altosaar, Mare; Traksmäa, 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](#)

#### **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 $\text{Cu}_2\text{S}$ , $\text{SnS}$ and $\text{Cu}_2\text{ZnSnSe}_4$ on optical properties of $\text{Cu}_2\text{ZnSnS}_4$**

Mamedov, D.; Klopov, Mihail; Karazhanov, S. Zh. Materials letters 2017 / p. 70-72 : ill <https://doi.org/10.1016/j.matlet.2017.05.069> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

#### **Influence of order-disorder in $\text{Cu}_2\text{ZnSnS}_4$ 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](#)

#### **Kesterite monograins for solar cells and water splitting applications**

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#### **Low temperature time resolved photoluminescence in ordered and disordered $\text{Cu}_2\text{ZnSnS}_4$ single crystals**

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#### **Photoluminescence study of defect clusters in $\text{Cu}_2\text{ZnSnS}_4$ polycrystals**

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#### **Photoluminescence study of disordering in the cation sublattice of $\text{Cu}_2\text{ZnSnS}_4$**

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#### **Photovoltaics based on semiconductor powders**

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#### **Physical routes for the synthesis of kesterite**

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#### **Rapid thermal processing of Kesterite thin films**

Ganchev, Maxim; Spasova, Stanka; Raadik, Taavi; Mere, Arvo; Altosaar, Mare; Mellikov, Enn Coatings 2023 / art. 1449

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**Spatially resolved opto-electrical performance investigations of Cu<sub>2</sub>ZnSnS<sub>3.2</sub>Se<sub>0.8</sub> photovoltaic devices**

**Neubauer, Christian; Samiepour, Ali; Oueslati, Souhaib;** Ernits, Kaia; Meissner, Dieter *Energy Science & Engineering* 2018 / p. 563-569 : ill <https://doi.org/10.1002/ese3.232> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**Stability, reliability, upscaling and possible technological applications of kesterite solar cells**

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**Study of structural and optoelectronic properties of Cu<sub>2</sub>Zn(Sn<sub>1-x</sub>Ge<sub>x</sub>)Se<sub>4</sub> (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](#)

**Temperature dependent electroreflectance study of Cu<sub>2</sub>ZnSnSe<sub>4</sub> 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](#)

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