

### **Cu<sub>2</sub>ZnSnSe<sub>4</sub> formation and reaction enthalpies in molten NaI starting from binary chalcogenides**

Leinemann, Inga; Zhang, Weihao; Kaljuvee, Tiit; Tõnsuaadu, Kaia; Traksmaa, 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

### **Defect studies in Cu<sub>2</sub>ZnSnSe<sub>4</sub> and Cu<sub>2</sub>ZnSn(S<sub>e</sub>0.75S<sub>0.25</sub>)<sub>4</sub> by admittance and photoluminescence spectroscopy**

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

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### **Influence of Cu<sub>2</sub>S, SnS and Cu<sub>2</sub>ZnSnSe<sub>4</sub> on optical properties of Cu<sub>2</sub>ZnSnS<sub>4</sub>**

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### **A luminescence study of Cu<sub>2</sub>ZnSnSe<sub>4</sub>/Mo/glass films and solar cells with near stoichiometric copper content**

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### **Optical spectroscopy studies of Cu<sub>2</sub>ZnSnSe<sub>4</sub> 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>

### **Phase composition of selenized Cu<sub>2</sub>ZnSnSe<sub>4</sub> 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 Cu<sub>2</sub>ZnSn(S<sub>e</sub>S<sub>1-x</sub>)<sub>4</sub> monograins for photovoltaic applications**

Grossberg, Maarja; Krustok, Jüri; Raudoja, Jaan; Timmo, Kristi; Altosaar, Mare; Raadik, Taavi Thin solid films 2011 / p. 7403-7406 : ill

### **A PL and PLE study of high Cu content Cu<sub>2</sub>ZnSnSe<sub>4</sub> films on Mo/Glass and solar cells**

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### **Post-growth annealing effect on the performance of Cu<sub>2</sub>ZnSnSe<sub>4</sub> 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

### **Radiative recombination in Cu<sub>2</sub>ZnSnSe<sub>4</sub> thin films with Cu deficiency and Zn excess**

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### **Radiative recombination pathways in ordered and disordered CZTSe microcrystals**

Mengü, Idil; Krustok, Jüri; Kaupmees, Reelika; Mikli, Valdek; Kauk-Kuusik, Marit; Grossberg-Kuusik, Maarja Materials chemistry and physics 2023 / art. 127685 <https://doi.org/10.1016/j.matchemphys.2023.127685> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

### **Reaction enthalpies of Cu<sub>2</sub>ZnSnSe<sub>4</sub> synthesis in KI**

Leinemann, Inga; Timmo, Kristi; Grossberg, Maarja; Kaljuvee, Tiit; Tõnsuaadu, Kaia; Traksmaa, Rainer; Altosaar, Mare; Meissner, Dieter Journal of thermal analysis and calorimetry 2015 / p. 1555-1564 : ill <http://dx.doi.org/10.1007/s10973-014-4339-5>

### **Reaction pathway to CZTSe formation in CdI<sub>2</sub> : Part 2: Chemical reactions and enthalpies in mixtures of CdI<sub>2</sub>-CuSe-SnSe and CdI<sub>2</sub>-CuSe-SnSe-ZnSe**

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**Selenisation of sequentially electrodeposited Cu-Zn and Sn precursor layers**

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

**Study of Cu<sub>2</sub>ZnSnSe<sub>4</sub> monograin formation in molten KI starting from binary chalcogenides**

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

**Synthesis and characterisation of Cu<sub>2</sub>ZnSnSe<sub>4</sub> 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](#)

**Temperature dependent electrical characterization of thin film Cu<sub>2</sub>ZnSnSe<sub>4</sub> solar cells**

**Kask, Erkki; Krustok, Jüri;** Giraldo, Sergio; Neuschitzer, Markus; Lopez-Marino, Simon; Saucedo, E.M. Journal of Physics D: Applied Physics 2016 / art. 085101 <https://doi.org/10.1088/0022-3727/49/8/085101> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)