

### Annealing of frozen-in defects in ZnO

**Nirk, Tiit; Lott, Kalju;** Seeman, Viktor; Türn, Leo; Viljus, Mart; Öpik, Andres *Physica status solidi (c)* 2016 / p. 590-593 : ill  
<http://dx.doi.org/10.1002/pssc.201510244>

### Bandgap fluctuations, hot carriers, and band-to-acceptor recombination in Cu<sub>2</sub>ZnSn(S,Se)<sub>4</sub> microcrystals

**Krustok, Jüri; Kaupmees, Reelika; Abbasi, Nafiseh; Muska, Katri; Mengü, Idil; Timmo, Kristi** *Physica status solidi - rapid research letters* 2023 / art. 2300077, 5 p. : ill <https://doi.org/10.1002/pssr.202300077> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Comparison of multifractal parameters of surface defects and non-defects

Martsepp, Merike; Laas, Tõnu; Tökke, Siim; Priimets, Jaanis; Mikli, Valdek *Proceedings of the Estonian Academy of Sciences* 2023 / p. 115-127 : ill <https://doi.org/10.3176/proc.2023.2.03> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Cu<sub>2</sub>ZnSnS<sub>4</sub> monograin layer solar cells for flexible photovoltaic applications

**Kauk-Kuusik, Marit; Timmo, Kristi; Pilvet, Maris; Muska, Katri; Danilson, Mati; Krustok, Jüri; Josepson, Raavo; Mikli, Valdek; Grossberg-Kuusk, Maarja** *Journal of materials chemistry A* 2023 / p. 23640-23652 <https://doi.org/10.1039/D3TA04541B>  
[Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Defect analysis of renovated facade walls with etics solutions in cold climate conditions

**Liisma, Eneli; Sepri, Raili; Raado, Lembi-Merike; Lill, Irene; Witt, Emlyn David Qivitoq; Sulakatko, Virgo; Põldaru, Mattias** *CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [book of abstracts]* 2016 / p. 65-66

### Defect analysis of renovated facade walls with etics solutions in cold climate conditions [Online resource]

**Liisma, Eneli; Sepri, Raili; Raado, Lembi-Merike; Lill, Irene; Witt, Emlyn David Qivitoq; Sulakatko, Virgo; Põldaru, Mattias** *CESB 16 - Central Europe Towards Sustainable Building 2016 : Innovations for Sustainable Future : [electronic proceedings]* 2016 / p. 174-181 : ill

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

**Kask, Erkki; Grossberg, Maarja; Josepson, Raavo; Salu, Pille; Timmo, Kristi; Krustok, Jüri** *Materials science in semiconductor processing* 2013 / p. 992-996 : ill

### A DFT scheme to improve coverage of hard-to-detect faults in FinFET SRAMs

Cardoso Medeiros, Guilherme; Gürsoy, Cemil Cem; Fieback, Moritz; Wu, Lizhou; Jenihhin, Maksim; Taouil, Mottaqiallah; Hamdioui, Said 2020 *Design, Automation & Test in Europe Conference & Exhibition (DATE)*, 9-13 March 2020, Grenoble, France : proceedings 2020 / p. 792-797 <https://doi.org/10.23919/DATE48585.2020.9116278>

### High temperature electrical conductivity in hydrothermally grown ZnO

**Lott, Kalju; Nirk, Tiit; Türn, Leo; Shinkarenko, Svetlana; Öpik, Andres** *Physica status solidi (c)* 2014 / p. 1481-1484 : ill

### 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>

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

Yakushev, M. V.; Sulimov, M. A.; Marquez-Prieto, J.; **Krustok, Jüri** *Journal of physics D : applied physics* 2019 / art. 055502, 10 p. : ill <https://doi.org/10.1088/1361-6463/aaefe3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### Modeling of self-localized vibrations and defect formation in solids

Hižnjakov, Vladimir; Haas, Mati; Pishtshev, Aleksandr; Šelkan, Aleksander; **Klopov, Mihhail** *Nuclear instruments and methods in physics research section B-beam interactions with materials and ato* 2013 / p. 91-94 : ill

### Numerical simulation of P-type Al<sub>4</sub>H-SiC Schottky barrier diodes [Online resource]

**Ziko, Mehadi Hasan; Koel, Ants; Rang, Toomas** *BEC 2018 : 2018 16th Biennial Baltic Electronics Conference (BEC) : proceedings of the 16th Biennial Baltic Electronics Conference, October 8-10, 2018* 2018 / 4 p. : ill <https://doi.org/10.1109/BEC.2018.8600976>

### 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>

### 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](#)

**Photoluminescence study of deep donor- deep acceptor pairs in Cu<sub>2</sub>ZnSnS<sub>4</sub>**

**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 Cu<sub>2</sub>ZnSnS<sub>4</sub> 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 Cu<sub>2</sub>ZnSnS<sub>4</sub>**

**Grossberg, Maarja; Krustok, Jüri; Raadik, Taavi; Kauk-Kuusik, Marit; Raudoja, Jaan** Current applied physics 2014 / p. 1424-1427 : ill

**Quantifying graphitic edge exposure in graphene-based materials and its role in oxygen reduction reactions**

**Stamatin, Serban; Hussainova, Irina; Ivanov, Roman; Colavita, Paula E.** ASC catalysis 2016 / p. 5215-5221 : ill <http://dx.doi.org/10.1021/acscatal.6b00945>

**Study of point defects in wide- bandgap Cu<sub>2</sub>CdGeS<sub>4</sub> 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](#)

**Tailoring of bound exciton photoluminescence emission in WS<sub>2</sub> monolayers**

**Kaupmees, Reelika; Grossberg, Maarja; Ney, Marcel; Krustok, Jüri** Physica status solidi - rapid research letters 2020 / art. 1900355, 6 p. : ill <https://doi.org/10.1002/pssr.201900355> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

**The electrical and optical properties of kesterites**

**Grossberg, Maarja; Krustok, Jüri; Hages, Charles J.; Bishop, Douglas M.** Journal of Physics : Energy 2019 / art. 044002, 16 p. : ill <https://doi.org/10.1088/2515-7655/ab29a0>

**Unusual defect-related room-temperature emission from WS<sub>2</sub> monolayers synthesized through a potassium-based precursor**

**Walke, Peter R.; Kaupmees, Reelika; Grossberg-Kuusik, Maarja; Krustok, Jüri** ACS omega 2023 / p. 37958-37970 <https://doi.org/10.1021/acsomega.3c03476> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)