

### **Band gap engineering by cationic substitution in Sn(Zr<sub>1-x</sub>Ti<sub>x</sub>)Se<sub>3</sub> alloy for bottom sub-cell application in solar cells**

Kondrotas, Rokas; Pakstas, Vidas; Franckevicius, Marius; Suchodolskis, Arturas; Tumenas, Saulius; Jasinskas, Vidmantas; Juskenas, Remigijus; Krotkus, Arunas; **Muska, Katri; Kauk-Kuusik, Marit** Journal of materials chemistry A 2023 / p. 26488–26498 : ill <https://doi.org/10.1039/D3TA05550G> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Comprehensive study of photoluminescence and device properties in Cu<sub>2</sub>Zn(Sn<sub>1-x</sub>Gex)S<sub>4</sub> monograins and monograin layer solar cells**

Mengü, Idil; **Muska, Katri; Pilvet, Maris; Mikli, Valdek**; Dudutiene, Evelina; Kondrotas, Rokas; **Krustok, Jüri; Kauk-Kuusik, Marit; Grossberg-Kuusik, Maarja** Solar energy materials and solar cells 2024 / art. 113124 <https://doi.org/10.1016/j.solmat.2024.113124>

### **Identification of excitons and biexcitons in Sb<sub>2</sub>Se<sub>3</sub> under high photoluminescence excitation density**

**Krustok, Jüri**; Kondrotas, Rokas; Nedzinskas, Ramunas; **Timmo, Kristi; Kaupmees, Reelika; Mikli, Valdek; Grossberg, Maarja** Advanced optical materials 2021 / 8 p. : ill <https://doi.org/10.1002/adom.202100107> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Low processing temperatures explored in Sb<sub>2</sub>S<sub>3</sub> 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](#)

### **Photoreflectance and photoluminescence study of antimony selenide crystals**

Kondrotas, Rokas; Nedzinskas, Ramunas; **Krustok, Jüri; Grossberg-Kuusik, Maarja**; Talaikis, Martynas; Tumenas, Saulius; Suchodolskis, Arturas; Žaltauskas, Raimundas; Sereika, Raimundas ACS Applied Energy Materials 2022 / p. 14769-14778 <https://doi.org/10.1021/acsaem.2c02131> [Journal metrics at Scopus](#) [Article at scopus](#) [Journal metrics at WOS](#) [Article at Scopus](#)

### **Radiative recombination model for BiSeI microcrystals : unveiling deep defects through photoluminescence**

**Dolcet Sadurni, Marc; Krustok, Jüri; Timmo, Kristi; Mikli, Valdek**; Kondrotas, Rokas; **Grossberg-Kuusik, Maarja; Kauk-Kuusik, Marit** Journal of Physics : Energy 2024 / art. 045004 <https://doi.org/10.1088/2515-7655/ad8377>

### **Study of the optical properties of Sb<sub>2</sub>(Se<sub>1-x</sub>S<sub>x</sub>)<sub>3</sub> (x = 0-1) solid solutions**

Uslu, Mehmet Ender; Kondrotas, Rokas; Nedzinskas, Ramunas; **Volobujeva, Olga; Timmo, Kristi; Kauk-Kuusik, Marit; Krustok, Jüri; Grossberg, Maarja** Materials science in semiconductor processing 2022 / art. 106571 <https://doi.org/10.1016/j.mssp.2022.106571> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

### **Synthesis and physical characteristics of narrow bandgap chalcogenide SnZrSe<sub>3</sub> : [version 2; peer review: 2 approved]**

Kondrotas, Rokas; Juškenas, Remigijus; Krotkus, Arunas; Pakštas, Vidas; Suchodolskis, Arturas; Mekys, Algirdas; Franckevičius, Marius; Talaikis, Martynas; **Muska, Katri; Li, Xiaofeng; Kauk-Kuusik, Marit**; Kravtsov, Victor Open Research Europe 2023 / art. 138 <https://doi.org/10.12688/openreseurope.15168.2> <https://open-research-europe.ec.europa.eu/articles/2-138> <https://doi.org/10.5281/zenodo.7867349> [Journal metrics at Scopus](#) [Article at Scopus](#)