

# Susan Schorr

## List of Publications by Year in descending order

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205  
papers

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81900

39  
h-index

88630

70  
g-index

213  
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213  
docs citations

213  
times ranked

4483  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Kesteritesâ€™ a challenging material for solar cells. Progress in Photovoltaics: Research and Applications, 2012, 20, 512-519.   | 8.1 | 532       |
| 2  | The crystal structure of kesterite type compounds: A neutron and X-ray diffraction study. Solar Energy Materials and Solar Cells, 2011, 95, 1482-1488.                                       | 6.2 | 377       |
| 3  | A neutron diffraction study of the stannite-kesterite solid solution series. European Journal of Mineralogy, 2007, 19, 65-73.  | 1.3 | 289       |
| 4  | Cu <sub>2</sub> ZnSnS <sub>4</sub> thin film solar cells by fast coevaporation. Progress in Photovoltaics: Research and Applications, 2011, 19, 93-96.                                       | 8.1 | 270       |
| 5  | Vibrational properties of stannite and kesterite type compounds: Raman scattering analysis of Cu <sub>2</sub> (Fe,Zn)SnS <sub>4</sub> . Journal of Alloys and Compounds, 2012, 539, 190-194. | 5.5 | 201       |
| 6  | Structural aspects of adamantine like multinary chalcogenides. Thin Solid Films, 2007, 515, 5985-5991.   | 1.8 | 155       |
| 7  | Multi-stage evaporation of Cu <sub>2</sub> ZnSnS <sub>4</sub> thin films. Thin Solid Films, 2009, 517, 2524-2526.  | 1.8 | 142       |
| 8  | Raman scattering and disorder effect in Cu <sub>2</sub> ZnSnS <sub>4</sub> . Physica Status Solidi - Rapid Research Letters, 2013, 7, 258-261.   | 2.4 | 136       |
| 9  | Determination of secondary phases in kesterite Cu <sub>2</sub> ZnSnS <sub>4</sub> thin films by x-ray absorption near edge structure analysis. Applied Physics Letters, 2011, 99, .          | 3.3 | 109       |
| 10 | Discrimination and detection limits of secondary phases in Cu <sub>2</sub> ZnSnS <sub>4</sub> using X-ray diffraction and Raman spectroscopy. Thin Solid Films, 2014, 569, 113-123.          | 1.8 | 98        |
| 11 | Free-to-bound recombination in near stoichiometric Cu <sub>2</sub> ZnSnS <sub>4</sub> single crystals. Physical Review B, 2012, 86, .  | 3.2 | 97        |
| 12 | Point defects, compositional fluctuations, and secondary phases in non-stoichiometric kesterites. JPhys Energy, 2020, 2, 012002.   | 5.3 | 92        |
| 13 | Existence of off-stoichiometric single phase kesterite. Journal of Alloys and Compounds, 2016, 657, 408-413.   | 5.5 | 88        |
| 14 | Depth profiling of Cu(In,Ga)Se <sub>2</sub> thin films grown at low temperatures. Solar Energy Materials and Solar Cells, 2009, 93, 859-863.   | 6.2 | 81        |
| 15 | Secondary phases and their influence on the composition of the kesterite phase in CZTS and CZTSe thin films. Physical Chemistry Chemical Physics, 2016, 18, 15988-15994.                     | 2.8 | 77        |
| 16 | The phase diagram of a mixed halide (Br, I) hybrid perovskite obtained by synchrotron X-ray diffraction. RSC Advances, 2019, 9, 11151-11159.   | 3.6 | 76        |
| 17 | Inâ€™situ investigation of the structural phase transition in kesterite. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1054-1058.                                 | 1.8 | 73        |
| 18 | Comprehensive Comparison of Various Techniques for the Analysis of Elemental Distributions in Thin Films. Microscopy and Microanalysis, 2011, 17, 728-751.                                   | 0.4 | 72        |

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|----|---|------|-----------|
| 19 | Structure reinvestigation of $\hat{1}^{\pm}$ , $\hat{1}^2$ - and $\hat{1}^3$ - $\text{In}_{2\text{S}_3}$ . Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2016, 72, 410-415.          | 1.1  | 72        |
| 20 | Raman scattering quantitative analysis of the anion chemical composition in kesterite $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})_4$ solid solutions. Journal of Alloys and Compounds, 2015, 628, 464-470.               | 5.5  | 69        |
| 21 | Optically induced structural transformation in disordered kesterite $\text{Cu}_2\text{ZnSnS}_4$ . JETP Letters, 2013, 98, 255-258.  | 1.4  | 66        |
| 22 | In-situ XRD on formation reactions of $\text{Cu}_2\text{ZnSnS}_4$ thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1245-1248.   | 0.8  | 65        |
| 23 | Multiwavelength excitation Raman scattering of $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})_4$ polycrystalline thin films: Vibrational properties of sulfoselenide solid solutions. Applied Physics Letters, 2014, 105, . | 3.3  | 64        |
| 24 | Grain-size distributions and grain boundaries of chalcopyrite-type thin films. Journal of Applied Crystallography, 2007, 40, 841-848.   | 4.5  | 62        |
| 25 | Systematic compositional changes and their influence on lattice and optoelectronic properties of $\text{Cu}_2\text{ZnSnSe}_4$ kesterite solar cells. Solar Energy Materials and Solar Cells, 2016, 144, 579-585.                | 6.2  | 62        |
| 26 | Infrared Spectroscopic Study of Vibrational Modes across the Orthorhombic-Tetragonal Phase Transition in Methylammonium Lead Halide Single Crystals. Journal of Physical Chemistry C, 2018, 122, 5227-5237.                     | 3.1  | 61        |
| 27 | Optical constants of $\text{Cu}_2\text{ZnGeS}_4$ bulk crystals. Journal of Applied Physics, 2010, 108, .  | 2.5  | 60        |
| 28 | The Role of Bulk and Interface Recombination in High-Efficiency Low-Dimensional Perovskite Solar Cells. Advanced Materials, 2019, 31, e1901090.   | 21.0 | 59        |
| 29 | In-situ investigation of the kesterite formation from binary and ternary sulphides. Thin Solid Films, 2009, 517, 2461-2464.   | 1.8  | 57        |
| 30 | Comprehensive insights into point defect and defect cluster formation in $\text{CuInSe}_2$ . Applied Physics Letters, 2011, 98, .   | 3.3  | 56        |
| 31 | Impact of the Ga concentration on the microstructure of $\text{CuIn}_{1-x}\text{Ga}_x\text{Se}_2$ . Physica Status Solidi - Rapid Research Letters, 2008, 2, 135-137.   | 2.4  | 53        |
| 32 | The effect of NaF precursors on low temperature growth of CIGS thin film solar cells on polyimide substrates. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1049-1053.                               | 1.8  | 53        |
| 33 | Quality and stability of compound indium sulphide as source material for buffer layers in $\text{Cu}(\text{In,Ga})\text{Se}_2$ solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 148-152.                          | 6.2  | 50        |
| 34 | $\text{BaZrS}_3$ Chalcogenide Perovskite Thin Films by $\text{H}_2\text{S}$ Sulfurization of Oxide Precursors. Journal of Physical Chemistry Letters, 2021, 12, 2148-2153.  | 4.6  | 46        |
| 35 | What Defines a Perovskite?. Advanced Energy Materials, 2018, 8, 1802366.  | 19.5 | 44        |
| 36 | Spectroscopic ellipsometry study of $\text{Cu}_2\text{ZnGeSe}_4$ and $\text{Cu}_2\text{ZnSiSe}_4$ poly-crystals. Materials Chemistry and Physics, 2013, 141, 58-62.   | 4.0  | 43        |

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|----|---|------|-----------|
| 37 | Role of S and Se atoms on the microstructural properties of kesterite $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})_4$ thin film solar cells. Physical Chemistry Chemical Physics, 2016, 18, 8692-8700.          | 2.8  | 43        |
| 38 | Structure and phase relations of the $\text{Zn}_2\text{x}(\text{CuIn})_{1-x}\text{S}_2$ solid solution series. Journal of Alloys and Compounds, 2005, 396, 202-207.   | 5.5  | 42        |
| 39 | Electronic band gap of $\text{Zn}_2\text{x}(\text{CuIn})_{1-x}\text{S}_2$ solid solution series (X=S, Se, Te). Journal of Alloys and Compounds, 2006, 414, 26-30.   | 5.5  | 42        |
| 40 | Synthesis of $\text{Cu}_2\text{Zn}_x\text{Sn}_y\text{Se}_{1+x+2y}$ nanocrystals with wurtzite-derived structure. RSC Advances, 2012, 2, 9894.   | 3.6  | 40        |
| 41 | Temperature dependency of Cu/Zn ordering in CZTSe kesterites determined by anomalous diffraction. Physica Status Solidi (B): Basic Research, 2016, 253, 1890-1897.  | 1.5  | 39        |
| 42 | Intrinsic point defects in off-stoichiometric $\text{Cu}_2\text{ZnSnSe}_4$ : A neutron diffraction study. Journal of Applied Physics, 2018, 123, .  | 2.5  | 39        |
| 43 | A mechanochemical route to single phase $\text{Cu}_2\text{ZnSnS}_4$ powder. Journal of Alloys and Compounds, 2016, 670, 289-296.  | 5.5  | 37        |
| 44 | Role of the Iodide-Methylammonium Interaction in the Ferroelectricity of $\text{CH}_3\text{NH}_3\text{PbI}_3$ . Angewandte Chemie - International Edition, 2020, 59, 424-428.   | 13.8 | 37        |
| 45 | Atomic-scale structure and band-gap bowing in $\text{Cu}(\text{In,Ga})\text{Se}_2$ . Physical Review B, 2012, 85, .   | 3.2  | 36        |
| 46 | Cu-Zn disorder in $\text{Cu}_2\text{ZnGeSe}_4$ : A complementary neutron diffraction and Raman spectroscopy study. Journal of Physics and Chemistry of Solids, 2016, 99, 100-104.                                     | 4.0  | 33        |
| 47 | $\text{Cu}_2\text{ZnSnS}_4$ thin film solar cells grown by fast thermal evaporation and thermal treatment. Solar Energy, 2017, 141, 236-241.  | 6.1  | 32        |
| 48 | Cu in $\text{In}_2\text{S}_3$ : interdiffusion phenomena analysed by high kinetic energy X-ray photoelectron spectroscopy. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1059-1062.        | 1.8  | 31        |
| 49 | Crystal structure of $\text{Cu}_2\text{ZnSnS}_4$ probed by soft x-ray emission and absorption spectroscopy. Physical Review B, 2011, 84, .  | 3.2  | 31        |
| 50 | Analysis of grain orientation and defects in $\text{Sb}_2\text{Se}_3$ solar cells fabricated by close-spaced sublimation. Solar Energy, 2021, 225, 494-500.   | 6.1  | 31        |
| 51 | Phonon confinement and strain in $\text{CuInS}_2$ . Applied Physics Letters, 2008, 92, 101922.  | 3.3  | 30        |
| 52 | Structural characterization of off-stoichiometric kesterite-type $\text{Cu}_2\text{ZnGeSe}_4$ compound semiconductors: from cation distribution to intrinsic point defect density. CrystEngComm, 2018, 20, 1491-1498. | 2.6  | 30        |
| 53 | Structural and chemical analyses of sputtered In S buffer layers in $\text{Cu}(\text{In,Ga})\text{Se}_2$ thin-film solar cells. Thin Solid Films, 2009, 517, 2792-2798.   | 1.8  | 29        |
| 54 | Feedback mechanism for the stability of the band gap of $\text{CuInSe}_2$ . Physical Review B, 2012, 86, .  | 3.2  | 29        |

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|----|--|-----|-----------|
| 55 | In-situ investigation of the temperature dependent structural phase transition in $\text{CuInSe}_2$ by synchrotron radiation. <i>Crystal Research and Technology</i> , 2006, 41, 450-457.  | 1.3 | 27        |
| 56 | Facile Bulk Synthesis of $\sqrt{3}$ -Cubic $\text{SnS}$ . <i>Inorganic Chemistry</i> , 2017, 56, 11455-11457.  | 4.0 | 27        |
| 57 | Spectroscopic ellipsometry study of $\text{Cu}_2\text{ZnSnSe}_4$ bulk crystals. <i>Applied Physics Letters</i> , 2014, 105, 061909.  | 3.3 | 26        |
| 58 | Crystal structure and cation distribution in the solid solution series $2(\text{ZnX})\text{CuInX}_2$ ( $\text{X}=\text{S}, \text{Se}, \text{Te}$ ). <i>Journal of Physics and Chemistry of Solids</i> , 2005, 66, 1961-1965.   | 4.0 | 24        |
| 59 | Structure and phase relations in the $2(\text{CuInS}_2)\text{Cu}_2\text{ZnSnS}_4$ solid solution system. <i>Thin Solid Films</i> , 2009, 517, 2508-2510.   | 1.8 | 24        |
| 60 | Properties of $\text{Cu}(\text{In,Ga})(\text{S,Se})_2$ thin films prepared by selenization/sulfurization of metallic alloys. <i>Thin Solid Films</i> , 2007, 515, 5848-5851.   | 1.8 | 23        |
| 61 | $\text{Cu}_2\text{ZnSnS}_4$ thin films grown by spray pyrolysis: characterization by Raman spectroscopy and X-ray diffraction. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 1082-1085.  | 0.8 | 23        |
| 62 | Off-stoichiometric CZTS: Neutron scattering investigations on mechanochemically synthesized powders. <i>Journal of Alloys and Compounds</i> , 2016, 689, 271-277.  | 5.5 | 23        |
| 63 | The two-phase region in $2(\text{ZnSe})_x(\text{CuInSe}_2)_{1-x}$ alloys and structural relation between the tetragonal and cubic phases. <i>Journal of Solid State Chemistry</i> , 2005, 178, 3631-3638.  | 2.9 | 21        |
| 64 | Energy spectrum of near-edge holes and conduction mechanisms in $\text{Cu}_2\text{ZnSiSe}_4$ single crystals. <i>Journal of Alloys and Compounds</i> , 2013, 580, 481-486.   | 5.5 | 21        |
| 65 | Raman spectra of wurtzstannite quaternary compounds. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013, 10, 1075-1078.  | 0.8 | 20        |
| 66 | Influence of Chloride Substitution on the Rotational Dynamics of Methylammonium in $\text{MAPb}_{3-x}\text{Cl}_x$ Perovskites. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11436-11446.  | 3.1 | 20        |
| 67 | The influence of deuteration on the crystal structure of hybrid halide perovskites: a temperature-dependent neutron diffraction study of $\text{FAPbBr}_3$ . <i>Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials</i> , 2020, 76, 267-274. | 1.1 | 20        |
| 68 | The multiwavelength cold neutron time-of-flight spectrometer project IN500 at LANSCE. <i>Physica B: Condensed Matter</i> , 2000, 276-278, 128-129.   | 2.7 | 19        |
| 69 | Phase relationships in the pseudo-binary $2(\text{ZnTe})\text{-CuInTe}_2$ system. <i>Journal of Solid State Chemistry</i> , 2005, 178, 3476-3484.  | 2.9 | 19        |
| 70 | Some are different from others: high temperature structural phase transitions in ternary chalcopyrites. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 2610-2613.  | 0.8 | 19        |
| 71 | Single crystal X-ray structure investigation of $\text{Cu}_2\text{ZnSnSe}_4$ . <i>Surface Engineering and Applied Electrochemistry</i> , 2013, 49, 423-426.  | 0.8 | 19        |
| 72 | Structural characterisation of $\text{Cu}_{2.04}\text{Zn}_{0.91}\text{Sn}_{1.05}\text{S}_{2.08}\text{Se}_{1.92}$ . <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2015, 12, 588-591.  | 0.8 | 19        |

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|----|--|-----|-----------|
| 73 | Discrepancy between integral and local composition in off-stoichiometric Cu <sub>2</sub> ZnSnSe <sub>4</sub> kesterites: A pitfall for classification. Applied Physics Letters, 2017, 110, .                               | 3.3 | 19        |
| 74 | Mechanochemical synthesis of the lead-free double perovskite Cs <sub>2</sub> [AgIn]Br <sub>6</sub> and its optical properties. JPhys Energy, 2019, 1, 025003.  | 5.3 | 19        |
| 75 | Long-range structure of Cu(In <sub>x</sub> Ga <sub>1-x</sub> ) <sub>3</sub> Se <sub>5</sub> : A complementary neutron and anomalous x-ray diffraction study. Journal of Applied Physics, 2011, 109, 013518.                | 2.5 | 18        |
| 76 | Local structure in Cu <sub>2</sub> ZnSnS <sub>4</sub> studied by the XAFS method. Solid State Communications, 2014, 177, 54-56.  | 1.9 | 18        |
| 77 | Interaction between cation orientation, octahedra tilting and hydrogen bonding in methylammonium lead triiodide. Crystal Research and Technology, 2016, 51, 534-540.   | 1.3 | 17        |
| 78 | Twinning in MAPbI <sub>3</sub> at room temperature uncovered through Laue neutron diffraction. Scientific Reports, 2020, 10, 16613.  | 3.3 | 17        |
| 79 | Extension of the two-phase field in the system 2(ZnS) <sub>x</sub> (CuInS <sub>2</sub> ) <sub>1-x</sub> and structural relationship between the tetragonal and cubic phase. Journal of Crystal Growth, 2005, 283, 356-366. | 1.5 | 16        |
| 80 | XAFS study of kesterite, kuramite and stannite type alloys. Journal of Alloys and Compounds, 2010, 492, 35-38.   | 5.5 | 16        |
| 81 | Shocked quartz in Sahara fulgurite. European Journal of Mineralogy, 2012, 24, 499-507.   | 1.3 | 16        |
| 82 | Cationic point defects in CuGaSe <sub>2</sub> from a structural perspective. Applied Physics Letters, 2012, 101, 101907.   | 3.3 | 16        |
| 83 | Atomic-scale structure, cation distribution, and bandgap bowing in Cu(In,Ga)S <sub>2</sub> and Cu(In,Ga)Se <sub>2</sub> . Applied Physics Letters, 2013, 103, .  | 3.3 | 16        |
| 84 | Temperature dependent transient surface photovoltage spectroscopy of a Cu <sub>1.95</sub> Zn <sub>1.1</sub> Sn <sub>0.96</sub> Se <sub>4</sub> kesterite single phase powder. Applied Physics Letters, 2017, 110, .        | 3.3 | 15        |
| 85 | Synthesis, theoretical and experimental characterisation of thin film Cu <sub>2</sub> Sn <sub>1-x</sub> Ge <sub>x</sub> ternary alloys (x=) Tj ETQq1 1 0,784314 rgBT /Ov 7,9 15  | 7.9 | 15        |
| 86 | Short-range versus long-range structure in Cu(In,Ga)Se <sub>2</sub> , Cu(In,Ga) <sub>3</sub> Se <sub>5</sub> , and Cu(In,Ga) <sub>5</sub> Se <sub>8</sub> . Journal of Alloys and Compounds, 2019, 774, 803-812.           | 5.5 | 15        |
| 87 | Hybrid Perovskite at Full Tilt: Structure and Symmetry Relations of the Incommensurately Modulated Phase of Methylammonium Lead Bromide, MAPbBr <sub>3</sub> . Journal of Physical Chemistry Letters, 2021, 12, 2358-2362. | 4.6 | 15        |
| 88 | Investigation of structural anomaly and metal ordering in the solid solution 2ZnS <sub>2</sub> CuInS <sub>2</sub> by neutron diffraction. Physica B: Condensed Matter, 2004, 350, E411-E414.                               | 2.7 | 14        |
| 89 | Photoluminescence characterization of Cu <sub>2</sub> ZnGeS <sub>4</sub> single crystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1079-1081.   | 0.8 | 14        |
| 90 | X-ray diffraction investigation on Cu <sub>2</sub> ZnSiSe <sub>4</sub> single and polycrystalline crystals. Zeitschrift Fur Kristallographie - Crystalline Materials, 2015, 230, 507-511.                                  | 0.8 | 14        |

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|-----|---|------|-----------|
| 91  | Formation of Cu <sub>2</sub> ZnSnS <sub>4</sub> and Cu <sub>2</sub> ZnSnS <sub>4</sub> -CuInS <sub>2</sub> Thin Films Investigated by In-Situ Energy Dispersive X-Ray Diffraction. Materials Research Society Symposia Proceedings, 2007, 1012, 1.                      | 0.1  | 13        |
| 92  | Exciton spectra and energy band structure of Cu <sub>2</sub> ZnSiSe <sub>4</sub> . Journal of Alloys and Compounds, 2014, 587, 393-397.   | 5.5  | 12        |
| 93  | Microstrain distribution mapping on CuInSe <sub>2</sub> thin films by means of electron backscatter diffraction, X-ray diffraction, and Raman microspectroscopy. Ultramicroscopy, 2016, 169, 89-97.   | 1.9  | 12        |
| 94  | Structural characterization of Cu <sub>2</sub> SnS <sub>3</sub> and Cu <sub>2</sub> (Sn,Ge)S <sub>3</sub> compounds. Journal of Alloys and Compounds, 2016, 682, 489-494.   | 5.5  | 12        |
| 95  | Effect of Ag incorporation on structure and optoelectronic properties of (Ag <sub>1-x</sub> Cu <sub>x</sub> ) <sub>2</sub> ZnSnSe <sub>4</sub> solid solutions. Physical Review Materials, 2020, 4, .   | 2.4  | 12        |
| 96  | Crystal growth of argyrodite-type phases Cu <sub>8</sub> Ge <sub>6</sub> S <sub>16</sub> and Cu <sub>8</sub> Ge <sub>6</sub> Se <sub>6</sub> (0.5x0.8). Journal of Crystal Growth, 2008, 310, 2215-2221.  | 1.5  | 11        |
| 97  | A structural study on the CuGaSe <sub>2</sub> -related copper-poor materials CuGa <sub>3</sub> Se <sub>5</sub> and CuGa <sub>5</sub> Se <sub>8</sub> : thin film vs. bulk material. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1009-1012. | 1.8  | 11        |
| 98  | Growth of magnesio-aluminate spinel in thin-film geometry: in situ monitoring using synchrotron X-ray diffraction and thermodynamic model. Physics and Chemistry of Minerals, 2014, 41, 681-693.  | 0.8  | 11        |
| 99  | Mechanisms of conductivity and energy spectrum of near-edge holes in Cu <sub>2</sub> ZnSnS <sub>4</sub> powder samples. Journal of Alloys and Compounds, 2017, 703, 315-320.  | 5.5  | 11        |
| 100 | Crystal structure and anti-site boundary defect characterisation of Cu <sub>2</sub> ZnSnSe <sub>4</sub> . Journal of Materials Chemistry A, 2018, 6, 189-197.   | 10.3 | 11        |
| 101 | Determination of the miscibility gap in the solid solutions series of methylammonium lead iodide/chloride. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2018, 74, 445-449.  | 1.1  | 11        |
| 102 | Advanced characterization and in-situ growth monitoring of Cu(In,Ga)Se <sub>2</sub> thin films and solar cells. Solar Energy, 2018, 170, 102-112.   | 6.1  | 11        |
| 103 | On the Germanium Incorporation in Cu <sub>2</sub> ZnSnSe <sub>4</sub> Kesterite Solar Cells Boosting Their Efficiency. ACS Applied Energy Materials, 2020, 3, 558-564.  | 5.1  | 11        |
| 104 | Phonon Spectra of Chain TlSe and TlInSe <sub>2</sub> : Density Functional Theory Based Study. Japanese Journal of Applied Physics, 2008, 47, 8193.  | 1.5  | 10        |
| 105 | CdTe thin film solar cells prepared by a low-temperature deposition method. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 730-733.   | 1.8  | 10        |
| 106 | Phases in copper-gallium-metal-sulfide films (metal=titanium, iron, or tin). Thin Solid Films, 2011, 519, 7284-7287.  | 1.8  | 10        |
| 107 | The complex material properties of chalcopyrite and kesterite thin film solar cell absorbers tackled by synchrotron-based analytics. Progress in Photovoltaics: Research and Applications, 2012, 20, 557-567.   | 8.1  | 10        |
| 108 | The influence of sodium on the point defect characteristics in off stoichiometric CuInSe <sub>2</sub> . Journal of Physics and Chemistry of Solids, 2016, 98, 309-315.  | 4.0  | 10        |

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|-----|---|-----|-----------|
| 109 | Quantitative anomalous powder diffraction analysis of cation disorder in kesterite semiconductors. Powder Diffraction, 2016, 31, 168-175.   | 0.2 | 10        |
| 110 | On the Nitridation of $Zn_2GeO_4$ . Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800885.   | 1.8 | 10        |
| 111 | Cu/Zn disorder in stoichiometric $Cu_2ZnSn(S_{1-x}Se_x)_4$ semiconductors: A complementary neutron and anomalous X-ray diffraction study. Journal of Alloys and Compounds, 2020, 846, 156304.                       | 5.5 | 10        |
| 112 | Symmetry relations in wurtzite nitrides and oxide nitrides and the curious case of $Pmc_1$ . Acta Crystallographica Section A: Foundations and Advances, 2021, 77, 208-216.   | 0.1 | 10        |
| 113 | Optical absorption and photoluminescence of $CuAlTe_2$ . Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2626-2629.  | 0.8 | 9         |
| 114 | Pentary chalcopyrite compounds without tetragonal deformation in the heptary system $Cu(Al,Ga,In)(S,Se,Te)_2$ . Solar Energy Materials and Solar Cells, 2007, 91, 44-46.  | 6.2 | 9         |
| 115 | Local structure in $(MnS)_2(CuInS_2)_{1-x}$ alloys. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2746-2750.   | 1.8 | 8         |
| 116 | $AgGaSe_2$ thin films grown by chemical close-spaced vapor transport for photovoltaic applications: structural, compositional and optical properties. Journal of Physics Condensed Matter, 2012, 24, 175801.        | 1.8 | 8         |
| 117 | Structure refinements of members in the brownmillerite solid solution series $Ca_2Al_x(Fe_{0.5}Mn_{0.5})_{2-x}O_5$ with $1/2 \leq x \leq 4/3$ . Journal of Solid State Chemistry, 2013, 197, 420-428.               | 2.9 | 8         |
| 118 | Composition-dependent nanostructure of $Cu(In,Ga)Se_2$ powders and thin films. Thin Solid Films, 2015, 582, 356-360.  | 1.8 | 8         |
| 119 | Thickness-dependent structural parameters of kesterite $Cu_2ZnSnSe_4$ thin films for solar cell absorbers. Materials Letters, 2018, 225, 82-84.   | 2.6 | 8         |
| 120 | An in-depth investigation on the grain growth and the formation of secondary phases of ultrasonic-sprayed $Cu_2ZnSnS_4$ based thin films assisted by Na crystallization catalyst. Solar Energy, 2018, 176, 277-286. | 6.1 | 8         |
| 121 | Thin films of $(Ag_xCu_{1-x})_2ZnSn(S,Se)_4$ ( $x = 0.05-0.20$ ) prepared by spray pyrolysis. Thin Solid Films, 2019, 690, 137532.  | 1.8 | 8         |
| 122 | Local structure of Mn dopants in $CuAlS_2$ and $CuGaS_2$ . Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2428-2436.  | 1.8 | 7         |
| 123 | The HZB neutron Laue diffractometer: From E11 to FALCON. Neutron News, 2014, 25, 27-29.   | 0.2 | 7         |
| 124 | Magnetic properties investigations of Mn substituted $ABX_2$ chalcopyrites. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 2783-2787.   | 1.8 | 6         |
| 125 | Where the atoms are: Cation disorder and anion displacement in $IIIV_2VI_2$ semiconductors. Physica B: Condensed Matter, 2006, 385-386, 571-573.  | 2.7 | 6         |
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