Claudia S Schnohr

List of Publications by Year
in descending order

59	1,469	304743	330143
papers	citations	22 h-index	37 g-index

60	60	60	1612
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Atomic Scale Structure of (Ag,Cu)2ZnSnSe4 and Cu2Zn(Sn,Ge)Se4 Kesterite Thin Films. Frontiers in Energy Research, 2021, 9, .	2.3	4
2	Insights into interface and bulk defects in a high efficiency kesterite-based device. Energy and Environmental Science, 2021, 14, 507-523.	30.8	48
3	Point defects, compositional fluctuations, and secondary phases in non-stoichiometric kesterites. JPhys Energy, 2020, 2, 012002.	5.3	92
4	On the Germanium Incorporation in Cu₂ZnSnSe₄ Kesterite Solar Cells Boosting Their Efficiency. ACS Applied Energy Materials, 2020, 3, 558-564.	5.1	11
5	Interplay of Performanceâ€Limiting Nanoscale Features in Cu 2 ZnSn(S,Se) 4 Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000456.	1.8	3
6	In-Operando Nanoscale X-ray Analysis Revealing the Local Electrical Properties of Rubidium-Enriched Grain Boundaries in Cu(In,Ga)Se₂ Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 57117-57123.	8.0	7
7	Revealing the origin of the beneficial effect of cesium in highly efficient Cu(In,Ga)Se2 solar cells. Nano Energy, 2020, 71, 104622.	16.0	25
8	Atomic scale structure and its impact on the band gap energy for Cu₂Zn(Sn,Ge)Se₄ kesterite alloys. JPhys Energy, 2020, 2, 035004.	5.3	3
9	Bond-stretching force constants and vibrational frequencies in ternary zinc-blende alloys: A systematic comparison of (In,Ga)P, (In,Ga)As and Zn(Se,Te). Europhysics Letters, 2019, 126, 36002.	2.0	3
10	Short-range versus long-range structure in Cu(In,Ga)Se2, Cu(In,Ga)3Se5, and Cu(In,Ga)5Se8. Journal of Alloys and Compounds, 2019, 774, 803-812.	5.5	15
11	Overall Distribution of Rubidium in Highly Efficient Cu(In,Ga)Se₂ Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 40592-40598.	8.0	44
12	Bond-strength inversion in (In,Ga)As semiconductor alloys. Physical Review B, 2018, 97, .	3.2	4
13	Reversible correlation between subnanoscale structure and Cu content in co-evaporated Cu(In,Ga)Se2 thin films. Acta Materialia, 2018, 153, 8-14.	7.9	11
14	Discrepancy between integral and local composition in off-stoichiometric Cu2ZnSnSe4 kesterites: A pitfall for classification. Applied Physics Letters, 2017, 110, .	3.3	19
15	Rubidium segregation at random grain boundaries in Cu(In,Ga)Se2 absorbers. Nano Energy, 2017, 42, 307-313.	16.0	70
16	Ion-implantation-induced amorphization of InxGa1â^'xP alloys as functions of stoichiometry and temperature. Journal of Applied Physics, 2016, 119, .	2.5	2
17	Swift Heavy Ion Irradiation of Crystalline Semiconductors. Springer Series in Surface Sciences, 2016, , 365-402.	0.3	0
18	Composition-dependent nanostructure of Cu(In,Ga)Se 2 powders and thin films. Thin Solid Films, 2015, 582, 356-360.	1.8	8

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19	Compound semiconductor alloys: From atomic-scale structure to bandgap bowing. Applied Physics Reviews, 2015, 2, .	11.3	50
20	Improved Ga grading of sequentially produced Cu(In,Ga)Se2 solar cells studied by high resolution X-ray fluorescence. Applied Physics Letters, 2015, 106, .	3.3	20
21	X-Ray Absorption Spectroscopy of Semiconductors. Springer Series in Optical Sciences, 2015, , .	0.7	37
22	Binary and Ternary Random Alloys. Springer Series in Optical Sciences, 2015, , 29-47.	0.7	4
23	Nano-porosity in GaSb induced by swift heavy ion irradiation. Applied Physics Letters, 2014, 104, .	3.3	27
24	Local versus global electronic properties of chalcopyrite alloys: X-ray absorption spectroscopy and ab initio calculations. Journal of Applied Physics, 2014, 116, 093703.	2.5	12
25	Temperature-Dependent Second Shell Interference in the First Shell Analysis of Crystalline InP X-ray Absorption Spectroscopy Data. Journal of the Physical Society of Japan, 2014, 83, 094602.	1.6	4
26	Transparent CdTe solar cells with a ZnO:Al back contact. Thin Solid Films, 2013, 548, 627-631.	1.8	22
27	Lift-off protocols for thin films for use in EXAFS experiments. Journal of Synchrotron Radiation, 2013, 20, 426-432.	2.4	12
28	Atomic-scale structure, cation distribution, and bandgap bowing in Cu(In,Ga)S2 and Cu(In,Ga)Se2. Applied Physics Letters, 2013, 103, .	3.3	16
29	Structural and electronic contributions to the bandgap bowing of (In,Ga)P alloys. Journal of Physics Condensed Matter, 2012, 24, 325802.	1.8	9
30	Atomic-scale structure and band-gap bowing in Cu(In,Ga)Se<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2012, 85, .	3.2	36
31	Structural properties of embedded Ge nanoparticles modified by swift heavy-ion irradiation. Physical Review B, 2012, 85, .	3.2	17
32	Ion-beam-induced damage formation in CdTe at a temperature of 15K. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 338-341.	1.4	5
33	Damage evolution and amorphization in semiconductors under ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2012, 277, 58-69.	1.4	40
34	Void formation in amorphous germanium due to high electronic energy deposition. Physical Review B, 2011, 83, .	3.2	26
35	Influence of electronic energy deposition on the structural modification of swift heavy-ion-irradiated amorphous germanium layers. Physical Review B, 2011, 83, .	3.2	28
36	Swift heavy ion irradiation of Pt nanocrystals: II. Structural changes and H desorption. Journal Physics D: Applied Physics, 2011, 44, 155402.	2.8	3

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37	Swift heavy ion irradiation of Pt nanocrystals: I. shape transformation and dissolution. Journal Physics D: Applied Physics, 2011, 44, 155401.	2.8	5
38	Ion-beam-induced damage formation in CdTe. Journal of Applied Physics, 2011, 109, 113531.	2.5	17
39	Swift-heavy-ion-induced damage formation in III-V binary and ternary semiconductors. Physical Review B, 2010, 81, .	3.2	27
40	Temperature-dependent EXAFS measurements of InP. , 2009, , .		0
41	Rapid ion-implantation-induced amorphization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msu to InAs and GaAs. Physical Review B, 2009, 79, .	3.2	11
42	Energy dependent saturation width of swift heavy ion shaped embedded Au nanoparticles. Applied Physics Letters, 2009, 94, .	3.3	46
43	Anisotropic vibrations in crystalline and amorphous InP. Physical Review B, 2009, 79, .	3.2	39
44	fcc-hcp phase transformation in Co nanoparticles induced by swift heavy-ion irradiation. Physical Review B, 2009, 80, .	3.2	35
45	The influence of annealing conditions on the growth and structure of embedded Pt nanocrystals. Journal of Applied Physics, 2009, 105, 044303.	2.5	17
46	Changes in metal nanoparticle shape and size induced by swift heavy-ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 931-935.	1.4	51
47	Temperature-dependent EXAFS analysis of embedded Pt nanocrystals. Journal of Physics Condensed Matter, 2009, 21, 155302.	1.8	19
48	Structural modification of swift heavy ion irradiated amorphous Ge layers. Journal Physics D: Applied Physics, 2009, 42, 115402.	2.8	32
49	Swift Heavy Ion Irradiation of Cobalt Nanoparticles. , 2009, , .		0
50	Measurement of latent tracks in amorphous SiO2 using small angle X-ray scattering. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2994-2997.	1.4	45
51	Size-dependent characterization of embedded Ge nanocrystals: Structural and thermal properties. Physical Review B, 2008, 78, .	3.2	48
52	Fine Structure in Swift Heavy Ion Tracks in Amorphous<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>SiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2008, 101, 175503.	7.8	242
53	Comparison of the atomic structure of InP amorphized by electronic or nuclear ion energy-loss processes. Physical Review B, 2008, 77, .	3.2	23
54	Atomic-scale structure of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ga</mml:mtext></mml:mrow><mml:mrow><mml:mn measured with extended x-ray absorption fine structure spectroscopy. Physical Review B, 2008, 78, .	3.2	21

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55	Ion irradiation effects on metallic nanocrystals. Radiation Effects and Defects in Solids, 2007, 162, 501-513.	1.2	17
56	EXAFS study of the amorphous phase of InP after swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 293-296.	1.4	4
57	Room temperature annealing of low-temperature ion implanted sapphire. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 492-495.	1.4	0
58	Ion-beam induced effects at 15K in Î±-Al2O3 of different orientations. Journal of Applied Physics, 2006, 99, 123511.	2.5	15
59	Ion-beam induced effects in Î±-Al2O3 at 15K. Nuclear Instruments & Methods in Physics Research B, 2006, 250, 85-89.	1.4	3