Christian A Kaufmann

List of Publications by Year in Descending Order

155 papers	3,450 citations	33 h-index	52 g-index
168 ext. papers	4,006 ext. citations	5.7 avg, IF	4.99 L-index

#	Paper	IF	Citations
155	Perovskite/CIGS Tandem Solar Cells: From Certified 24.2% toward 30% and Beyond. *ACS Energy Letters*, **2022**, 7, 1298-1307	20.1	19
154	Realizing Double Graded CIGSe Absorbers With the R2R Hybrid-CIGSe-Process. *IEEE Journal of Photovoltaics*, **2021**, 11, 337-344	3.7	
153	Decay mechanisms in CdS-buffered Cu(In,Ga)Se2 thin-film solar cells after exposure to thermal stress: Understanding the role of Na. *Progress in Photovoltaics: Research and Applications*, **2021**, 29, 1034-1053	6.8	1
152	Elucidating the Effect of the Different Buffer Layers on the Thermal Stability of CIGSe Solar Cells. *IEEE Journal of Photovoltaics*, **2021**, 11, 648-657	3.7	0
151	A Device Model for Rb-Conditioned Chalcopyrite Solar Cells. *IEEE Journal of Photovoltaics*, **2021**, 11, 232-240	3.7	4
150	Electronic Structure of the CdS/Cu(In,Ga)Se Interface of KF- and RbF-Treated Samples by Kelvin Probe and Photoelectron Yield Spectroscopy. *ACS Applied Materials & Interfaces*, **2021**, 13, 7745-7755	9.5	2
149	Depth-resolved analysis of the effect of RbF post deposition treatment on CIGSe with two different Cu concentrations. *Solar Energy Materials and Solar Cells*, **2021**, 226, 111071	6.4	5
148	Phase development in RbInSe2 thin films □a temperature series. *Scripta Materialia*, **2021**, 202, 113999	5.6	
147	Impact of RbF post deposition treatment on CdS/CIGSe and Zn(O,S)/CIGSe interfaces □A comparative HAXPES study. *Renewable Energy*, **2021**, 180, 626-636	8.1	3
146	Electrostatic potential fluctuations and light-soaking effects in Cu(In,Ga)Se2 solar cells. *Progress in Photovoltaics: Research and Applications*, **2020**, 28, 919-934	6.8	6
145	Limitation of Current Transport across the Heterojunction in Cu(In,Ga)Se2 Solar Cells Prepared with Alkali Fluoride Postdeposition Treatment. *Solar Rrl*, **2020**, 4, 1900560	7.1	6
144	Proton Radiation Hardness of Perovskite Tandem Photovoltaics. *Joule*, **2020**, 4, 1054-1069	27.8	53
143	New approach for an industrial low-temperature roll-to-roll CI(G)Se hybrid sputter coevaporation deposition process. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 033201	2.9	5
142	Vibrational Properties of RbInSe2: Raman Scattering Spectroscopy and First-Principle Calculations. *Journal of Physical Chemistry C*, **2020**, 124, 1285-1291	3.8	2
141	Correlating facet orientation, defect-level density and dipole layer formation at the surface of polycrystalline CuInSe2 thin films. *Acta Materialia*, **2020**, 200, 463-470	8.4	6
140	Functional Data Analysis of Electrical Measurements on Thin-Film Photovoltaic Devices. *IEEE Journal of Photovoltaics*, **2019**, 9, 1436-1441	3.7	1
139	Effectiveness of an RbF Post Deposition Treatment of CIGS Solar Cells in Dependence on the Cu Content of the Absorber Layer. *IEEE Journal of Photovoltaics*, **2019**, 9, 1839-1845	3.7	24

138	21.6%-Efficient Monolithic Perovskite/Cu(In,Ga)Se2 Tandem Solar Cells with Thin Conformal Hole Transport Layers for Integration on Rough Bottom Cell Surfaces. *ACS Energy Letters*, **2019**, 4, 583-590	20.1	106
137	Stacking fault reduction during annealing in Cu-poor CuInSe2 thin film solar cell absorbers analyzed by in situ XRD and grain growth modeling. *Journal of Applied Physics*, **2019**, 125, 035303	2.5	5
136	Effects of KF and RbF post deposition treatments on the growth of the CdS buffer layer on CIGS thin films - a comparative study. *Solar Energy Materials and Solar Cells*, **2019**, 200, 109997	6.4	19
135	Glow discharge optical emission spectrometry for quantitative depth profiling of CIGS thin-films. *Journal of Analytical Atomic Spectrometry*, **2019**, 34, 1233-1241	3.7	17
134	In situ investigation of as grown Cu(In,Ga)Se2 thin films by means of photoemission spectroscopy. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 031510	2.9	3
133	Highly efficient monolithic perovskite/CIGSe tandem solar cells on rough bottom cell surfaces **2019** ,		1
132	Conformal monolayer contacts with lossless interfaces for perovskite single junction and monolithic tandem solar cells. *Energy and Environmental Science*, **2019**, 12, 3356-3369	35.4	229
131	Cu(In,Ga)Se2 surface treatment with Na and NaF: A combined photoelectron spectroscopy and surface photovoltage study in ultra-high vacuum. *Applied Surface Science*, **2018**, 444, 436-441	6.7	4
130	Elucidating the Mechanism of an RbF Post Deposition Treatment in CIGS Thin Film Solar Cells. *Solar Rrl*, **2018**, 2, 1800156	7.1	51
129	Reversible correlation between subnanoscale structure and Cu content in co-evaporated Cu(In,Ga)Se2 thin films. *Acta Materialia*, **2018**, 153, 8-14	8.4	5
128	Properties of Co-Evaporated RbInSe2 Thin Films. *Physica Status Solidi - Rapid Research Letters*, **2018**, 13, 1800564	2.5	6
127	Evaluation of recombination losses in thin film solar cells using an LED sun simulator the effect of RbF post-deposition on CIGS solar cells. *EPJ Photovoltaics*, **2018**, 9, 9	0.7	8
126	In vacuo XPS investigation of Cu(In,Ga)Se2 surface after RbF post-deposition treatment. *Thin Solid Films*, **2018**, 665, 143-147	2.2	22
125	Advanced characterization and in-situ growth monitoring of Cu(In,Ga)Se2 thin films and solar cells. *Solar Energy*, **2018**, 170, 102-112	6.8	7
124	Lateral phase separation in Cu-In-Ga precursor and Cu(In,Ga)Se2 absorber thin films. *Solar Energy Materials and Solar Cells*, **2017**, 162, 120-126	6.4	7
123	Amorphous oxides as electron transport layers in Cu(In,Ga)Se2 superstrate devices. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1600870	1.6	5
122	Adjusting the Ga grading during fast atmospheric processing of Cu(In,Ga)Se2 solar cell absorber layers using elemental selenium vapor. *Progress in Photovoltaics: Research and Applications*, **2017**, 25, 341-357	6.8	25
121	Identifying the Real Minority Carrier Lifetime in Nonideal Semiconductors: A Case Study of Kesterite Materials. *Advanced Energy Materials*, **2017**, 7, 1700167	21.8	74

120	Investigating sulfur distribution and corresponding bandgap grading in Cu(In,Ga)(S,Se)2 absorber layers processed by fast atmospheric chalcogenization of metal precursors. *Journal of Alloys and Compounds*, **2017**, 703, 600-604	5.7	8
119	Time resolved photoluminescence on Cu(In, Ga)Se2 absorbers: Distinguishing degradation and trap states. *Applied Physics Letters*, **2017**, 110, 122104	3.4	24
118	Evolution of opto-electronic properties during film formation of complex semiconductors. *Scientific Reports*, **2017**, 7, 45463	4.9	35
117	Interface engineering of Cu(In,Ga)Se2and atomic layer deposited Zn(O,S) heterojunctions. *Japanese Journal of Applied Physics*, **2017**, 56, 08MC16	1.4	2
116	Laser-induced local phase transformation of CIGSe for monolithic serial interconnection: Analysis of the material properties. *Solar Energy Materials and Solar Cells*, **2016**, 157, 636-643	6.4	6
115	Accessing Elemental Distributions in Thin Films for Solar Cells **2016**, 523-567		
114	Well-Controlled Dielectric Nanomeshes by Colloidal Nanosphere Lithography for Optoelectronic Enhancement of Ultrathin Cu(In,Ga)Se Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 31646-31652	9.5	27
113	Advantageous light management in Cu(In,Ga)Se2 superstrate solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 150, 76-81	6.4	18
112	Annihilation of structural defects in chalcogenide absorber films for high-efficiency solar cells. *Energy and Environmental Science*, **2016**, 9, 1818-1827	35.4	32
111	Diffusion-induced grain boundary migration as mechanism for grain growth and defect annihilation in chalcopyrite thin films. *Acta Materialia*, **2016**, 111, 377-384	8.4	12
110	Investigation of the potassium fluoride post deposition treatment on the CIGSe/CdS interface using hard X-ray photoemission spectroscopy - a comparative study. *Physical Chemistry Chemical Physics*, **2016**, 18, 14129-38	3.6	23
109	The influence of sodium on the point defect characteristics in off stoichiometric CuInSe2. *Journal of Physics and Chemistry of Solids*, **2016**, 98, 309-315	3.9	9
108	Correlating the Local Defect-Level Density with the Macroscopic Composition and Energetics of Chalcopyrite Thin-Film Surfaces. *ACS Applied Materials & Interfaces*, **2015**, 7, 13062-72	9.5	18
107	Locally resolved investigation of wedged Cu(In,Ga)Se2 films prepared by physical vapor deposition using hard X-ray photoelectron and X-ray fluorescence spectroscopy. *Thin Solid Films*, **2015**, 582, 361-365	2.2	1
106	Towards the growth of Cu2ZnSn1−xGexS4 thin films by a single-stage process: Effect of substrate temperature and composition. *Solar Energy Materials and Solar Cells*, **2015**, 139, 1-9	6.4	27
105	Efficient and Stable TiO2:Pt□Cu(In,Ga)Se2 Composite Photoelectrodes for Visible Light Driven Hydrogen Evolution. *Advanced Energy Materials*, **2015**, 5, 1402148	21.8	24
104	Ion beam analysis of Cu(In,Ga)Se 2 thin film solar cells. *Applied Surface Science*, **2015**, 356, 631-638	6.7	15
103	Influence of Cu(In,Ga)(Se,S)2 surface treatments on the properties of 30×30cm2 large area modules with atomic layer deposited Zn(O,S) buffers. *Thin Solid Films*, **2015**, 574, 28-31	2.2	7

102	Thin-film silazane/alumina high emissivity double layer coatings for flexible Cu(In,Ga)Se2 solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 132, 296-302	6.4	15
101	Cu(In,Ga)Se2 superstrate solar cells: prospects and limitations. *Progress in Photovoltaics: Research and Applications*, **2015**, 23, 1228-1237	6.8	41
100	Investigation of Cu-poor and Cu-rich Cu(In,Ga)Se2/CdS interfaces using hard X-ray photoelectron spectroscopy. *Thin Solid Films*, **2015**, 582, 366-370	2.2	11
99	Sudden stress relaxation in compound semiconductor thin films triggered by secondary phase segregation. *Physical Review B*, **2015**, 92,	3.3	16
98	Effect of Na presence during CuInSe2 growth on stacking fault annihilation and electronic properties. *Applied Physics Letters*, **2015**, 107, 152103	3.4	20
97	Grain boundary assisted photocurrent collection in thin film solar cells. *EPJ Photovoltaics*, **2015**, 6, 60101	0.7	4
96	Bifacial Cu(In,Ga)Se2 solar cells with submicron absorber thickness: back-contact passivation and light management **2015**,		3
95	Electrical and structural functionality of CIGSe solar cells patterned with picosecond laser pulses of different wavelengths **2015**,		1
94	Controlling the thermal impact of ns laser pulses for the preparation of the P2 interconnect by local phase transformation in CIGSe **2015**,		3
93	Mesoporous silica nanocomposite antireflective coating for Cu(In,Ga)Se2 thin film solar cells. *Solar Energy Materials and Solar Cells*, **2015**, 134, 359-363	6.4	10
92	Composition-dependent nanostructure of Cu(In,Ga)Se 2 powders and thin films. *Thin Solid Films*, **2015**, 582, 356-360	2.2	5
91	Chalcopyrite Thin-Film Solar-Cell Devices. *Neutron Scattering Applications and Techniques*, **2015**, 83-107		1
90	The Importance of Sodium Control in CIGSe Superstrate Solar Cells. *IEEE Journal of Photovoltaics*, **2015**, 5, 378-381	3.7	11
89	An overview of technological aspects of Cu(In,Ga)Se2 solar cell architectures incorporating ZnO nanorod arrays. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 76-87	1.6	14
88	Impact of Na on MoSe2 formation at the CIGSe/Mo interface in thin-film solar cells on polyimide foil at low process temperatures. *Acta Materialia*, **2014**, 63, 54-62	8.4	32
87	Experimental indication for band gap widening of chalcopyrite solar cell absorbers after potassium fluoride treatment. *Applied Physics Letters*, **2014**, 105, 063901	3.4	89
86	In-depth elemental characterization of Cu(In,Ga)Se2 thin film solar cells by means of RBS and PIXE techniques. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 331, 93-95	1.2	7
85	Microscopic mobilities and cooling dynamics of photoexcited carriers in polycrystalline CuInSe2. *Physical Review B*, **2014**, 89,	3.3	11

84	Reliable wet-chemical cleaning of natively oxidized high-efficiency Cu(In,Ga)Se2 thin-film solar cell absorbers. *Journal of Applied Physics*, **2014**, 116, 233502	2.5	32
83	Charge carrier mobilities and dynamics in thin film compound semiconductor materials from transient Thz absorption **2014**,		3
82	Junction formation by Zn(O,S) sputtering yields CIGSe-based cells with efficiencies exceeding 18%. *Progress in Photovoltaics: Research and Applications*, **2014**, 22, 161-165	6.8	77
81	Heat Induced Passivation of CuInSe2 Surfaces: A Strategy to Optimize the Efficiency of Chalcopyrite Thin Film Solar Cells?. *Advanced Materials Interfaces*, **2014**, 1, 1300040	4.6	14
80	Sputtered Zn(O,S): a promising approach to dry inline fabrication of Cdfree CIGS modules **2014**,		2
79	Real-time observation of the phase transformations and microstructural changes during the incorporation of In into a thin Cu film at 770K. *Journal of Alloys and Compounds*, **2014**, 588, 644-647	5.7	1
78	High emissivity coatings based on polysilazanes for flexible Cu(In,Ga)Se2 thin-film solar cells. *Solar Energy Materials and Solar Cells*, **2014**, 123, 97-103	6.4	23
77	Investigation of Cu(In,Ga)Se2 thin-film formation during the multi-stage co-evaporation process. *Progress in Photovoltaics: Research and Applications*, **2013**, 21, 30-46	6.8	95
76	Recrystallization of Cu(In,Ga)Se2 thin films studied by X-ray diffraction. *Acta Materialia*, **2013**, 61, 4347-4353	3.4	36
75	Real-time study of Ga diffusion processes during the formation of Cu(In,Ga)Se2: The role of Cu and Na content. *Solar Energy Materials and Solar Cells*, **2013**, 116, 102-109	6.4	22
74	Buffer-free Cu(In,Ga)Se2-solar cells by near-surface ion implantation. *Solar Energy Materials and Solar Cells*, **2013**, 116, 43-48	6.4	7
73	Metastability of solar cells based on evaporated chalcopyrite absorber layers prepared with varying selenium flux. *Thin Solid Films*, **2013**, 535, 340-342	2.2	10
72	Generation-dependent charge carrier transport in Cu(In,Ga)Se2/CdS/ZnO thin-film solar-cells. *Journal of Applied Physics*, **2013**, 113, 044515	2.5	40
71	Grazing-incidence x-ray fluorescence analysis for non-destructive determination of In and Ga depth profiles in Cu(In,Ga)Se2 absorber films. *Applied Physics Letters*, **2013**, 103, 113904	3.4	14
70	Co-evaporation of Cu(In, Ga)Se2 at low temperatures: An In-Situ x-ray growth analysis **2013**,		2
69	Formation of CuInSe2 and CuGaSe2 Thin-Films Deposited by Three-Stage Thermal Co-Evaporation: A Real-Time X-Ray Diffraction and Fluorescence Study. *Advanced Energy Materials*, **2013**, 3, 1381-1387	21.8	31
68	Electronic properties of grain boundaries in Cu(In,Ga)Se2 thin films with various Ga-contents. *Solar Energy Materials and Solar Cells*, **2012**, 103, 86-92	6.4	21
67	Luminescence properties of Ga-graded Cu(In,Ga)Se2 thin films. *Thin Solid Films*, **2012**, 520, 3657-3662	2.2	5

66	Na incorporation into Cu(In,Ga)Se2 thin-film solar cell absorbers deposited on polyimide: Impact on the chemical and electronic surface structure. *Journal of Applied Physics*, **2012**, 111, 034903	2.5	25
65	Chalcopyrite Thin-Film Materials and Solar Cells **2012**, 399-422		11
64	Influence of iron on defect concentrations and device performance for Cu(In,Ga)Se2 solar cells on stainless steel substrates. *Progress in Photovoltaics: Research and Applications*, **2012**, 20, 568-574	6.8	44
63	Hard x-ray photoelectron spectroscopy of chalcopyrite solar cell components. *Applied Physics Letters*, **2012**, 100, 092108	3.4	4
62	Influence of Mo Back-Contact Oxidation on Properties of CIGSe$_{2}$ Thin Film Solar Cells on Glass Substrates. *Japanese Journal of Applied Physics*, **2012**, 51, 10NC02	1.4	4
61	Cationic point defects in CuGaSe2 from a structural perspective. *Applied Physics Letters*, **2012**, 101, 101907	3.4	14
60	Comprehensive comparison of various techniques for the analysis of elemental distributions in thin films. *Microscopy and Microanalysis*, **2011**, 17, 728-51	0.5	62
59	Characterization of metastabilities in Cu(In,Ga)Se2 thin-film solar cells by capacitance and current-voltage spectroscopy. *Journal of Applied Physics*, **2011**, 110, 094506	2.5	51
58	Application of PLD to the production of plasmonic structures containing Ag nanoparticles based on chalcopyrite solar cells. *Energy Procedia*, **2011**, 10, 38-42	2.3	6
57	Near-interface doping by ion implantation in Cu(In,Ga)Se2 solar cells. *Thin Solid Films*, **2011**, 519, 7276-7279	2.2	1
56	Raman scattering analysis of Cu-poor Cu(In,Ga)Se2 cells fabricated on polyimide substrates: Effect of Na content on microstructure and phase structure. *Thin Solid Films*, **2011**, 519, 7300-7303	2.2	27
55	The role of the spray pyrolysed Al2O3 barrier layer in achieving high efficiency solar cells on flexible steel substrates. *Applied Physics A: Materials Science and Processing*, **2011**, 104, 407-413	2.6	4
54	High efficiency low temperature grown Cu(In,Ga)Se2 thin film solar cells on flexible substrates using NaF precursor layers. *Progress in Photovoltaics: Research and Applications*, **2011**, 19, 547-551	6.8	50
53	Elemental Distribution Profiling of Thin Films for Solar Cells **2011**, 411-448		1
52	Evaluating different Na-incorporation methods for low temperature grown CIGSe thin film on polyimide foils **2011**,		1
51	Examination of growth kinetics of copper rich Cu(In,Ga)Se2-films using synchrotron energy dispersive X-ray diffractometry. *Solar Energy Materials and Solar Cells*, **2011**, 95, 250-253	6.4	10
50	Spray pyrolysis of barrier layers for flexible thin film solar cells on steel. *Solar Energy Materials and Solar Cells*, **2011**, 95, 504-509	6.4	13
49	Increased homogeneity and open-circuit voltage of Cu(In,Ga)Se2 solar cells due to higher deposition temperature. *Solar Energy Materials and Solar Cells*, **2011**, 95, 1028-1030	6.4	35

48	Nanoscale investigations of the electronic surface properties of Cu(In,Ga)Se2 thin films by scanning tunneling spectroscopy. *Solar Energy Materials and Solar Cells*, **2011**, 95, 1537-1543	6.4	16
47	Gallium gradients in chalcopyrite thin films: Depth profile analyses of films grown at different temperatures. *Journal of Applied Physics*, **2011**, 110, 093509	2.5	12
46	Direct evidence for a reduced density of deep level defects at grain boundaries of Cu(In,Ga)Se2 thin films. *Physical Review Letters*, **2010**, 105, 116802	7.4	59
45	Surface Cu-depletion of Cu(In,Ga)Se2 thin films: Further experimental evidence for a defect-induced surface reconstruction. *Journal of Applied Physics*, **2010**, 107, 113540	2.5	21
44	Interpretation of admittance, capacitance-voltage, and current-voltage signatures in Cu(In,Ga)Se2 thin film solar cells. *Journal of Applied Physics*, **2010**, 107, 034509	2.5	215
43	Latest results of the German joint project flexible CIGSe thin film solar cells for space applications **2010**,		1
42	Influence of Na on Cu(In,Ga)Se2 solar cells grown on polyimide substrates at low temperature: Impact on the Cu(In,Ga)Se2/Mo interface. *Applied Physics Letters*, **2010**, 96, 092104	3.4	61
41	Cu deficiency in multi-stage co-evaporated Cu(In,Ga)Se2 for solar cells applications: Microstructure and Ga in-depth alloying. *Acta Materialia*, **2010**, 58, 3468-3476	8.4	60
40	Elemental depth profiling of Cu(In,Ga)Se2 thin films by reference-free grazing incidence X-ray fluorescence analysis. *Nuclear Instruments & Methods in Physics Research B*, **2010**, 268, 277-281	1.2	12
39	Characterization of flexible thin film CIGSe solar cells grown on different metallic foil substrates. *Energy Procedia*, **2010**, 2, 109-117	2.3	18
38	New findings of the German joint project flexible CIGSe thin film solar cells for space flight **2009**,		1
37	Three-dimensional structure of the buffer/absorber interface in CdS/CuGaSe2 based thin film solar cells. *Applied Physics Letters*, **2009**, 95, 173502	3.4	23
36	Aspects for the optimization of CIGSe growth at low temperatures for application in thin film solar cells on polyimide foil **2009**,		3
35	Enhanced Efficiency of CIGS Thin Film Solar Cells on Polyimide Substrates. *Materials Research Society Symposia Proceedings*, **2009**, 1165, 1		7
34	Incorporation of Na in Low-Temperature Deposition of CIGS Flexible Solar Cells. *Materials Research Society Symposia Proceedings*, **2009**, 1210, 1		3
33	Grain-boundary types in chalcopyrite-type thin films and their correlations with film texture and electrical properties. *Thin Solid Films*, **2009**, 517, 2545-2549	2.2	45
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	1.6	49
31	Structural investigations of copper incorporation into In-Ga-Se precursor layers for Cu(In,Ga)Se2 thin films. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 1249-1252		2

30	The influence of Na on low temperature growth of CIGS thin film solar cells on polyimide substrates. *Thin Solid Films*, **2009**, 517, 2187-2190	2.2	106
29	Origin of defects in CuIn1−xGaxSe2 solar cells with varied Ga content. *Thin Solid Films*, **2009**, 517, 2244-2247	2.2	37
28	Depth profiling of Cu(In,Ga)Se2 thin films grown at low temperatures. *Solar Energy Materials and Solar Cells*, **2009**, 93, 859-863	6.4	76
27	Surface Cu depletion of Cu(In,Ga)Se2 films: An investigation by hard X-ray photoelectron spectroscopy. *Acta Materialia*, **2009**, 57, 3645-3651	8.4	60
26	Comparison of elemental distribution profiles across Cu(In, Ga)Se2 solar-cell absorbers acquired by various techniques. *Microscopy and Microanalysis*, **2008**, 14, 1134-1135	0.5	
25	Microscopic investigation of the CdS buffer layer growth on Cu(In,Ga)Se2 absorbers. *Journal of Vacuum Science & Technology B*, **2008**, 26, 901		4
24	Niobium-doped TiO2 films as window layer for chalcopyrite solar cells. *Physica Status Solidi (B): Basic Research*, **2008**, 245, 1849-1857	1.3	11
23	Controlled variation of the information depth by angle dependent soft X-ray emission spectroscopy: A study on polycrystalline Cu(In,Ga)Se2. *Applied Surface Science*, **2008**, 255, 2474-2477	6.7	6
22	Impact of the Ga concentration on the microstructure of CuIn1− Gax Se2. *Physica Status Solidi - Rapid Research Letters*, **2008**, 2, 135-137	2.5	48
21	Effect of Cu excess on three-stage CuGaSe2 thin films using in-situ process controls. *Thin Solid Films* , **2007**, 515, 5862-5866	2.2	17
20	Investigation of coevaporated Cu(In,Ga)Se2 thin films in highly efficient solar cell devices. *Thin Solid Films*, **2007**, 515, 6217-6221	2.2	30
19	Capacitance profiling in the CIGS solar cells. *Thin Solid Films*, **2007**, 515, 6229-6232	2.2	28
18	Characteristics of scattered laser light signals from Cu(In,Ga)Se2 films. *Thin Solid Films*, **2007**, 515, 6222-6225	2.2	3
17	CuGaSe2-Based Solar Cells with High Open Circuit Voltage. *Materials Research Society Symposia Proceedings*, **2007**, 1012, 1		5
16	Preferred Orientation, Grain Sizes and Grain Boundaries of Chalcopyrite-Type Thin Films. *Materials Research Society Symposia Proceedings*, **2007**, 1012, 1		2
15	A reliable optical method for in situ process control for deposition of Cu(In,Ga)Se 2 thin layers for photovoltaics **2007**,		3
14	CGS-Thin Films Solar Cells on Transparent Back Contact **2006**,		4
13	Analysis of defects in coevaporated high-efficiency Cu(In,Ga)Se2 solar cells **2006**,		1

12	Formation of the physical vapor deposited CdS□Cu(In,Ga)Se2 interface in highly efficient thin film solar cells. *Applied Physics Letters*, **2006**, 88, 143510	3.4	33
11	CuIn1□GaxSe2-based thin-film solar cells by the selenization of sequentially evaporated metallic layers. *Progress in Photovoltaics: Research and Applications*, **2006**, 14, 145-153	6.8	53
10	Structural changes of CIGS during deposition investigated by spectroscopic light scattering: A study on Ga concentration and Se pressure. *Solar Energy Materials and Solar Cells*, **2006**, 90, 3377-3384	6.4	6
9	Lift-off process and rear-side characterization of CuGaSe2 chalcopyrite thin films and solar cells. *Journal of Applied Physics*, **2005**, 97, 094915	2.5	37
8	Transfer of Cu(In,Ga)Se2 thin film solar cells to flexible substrates using an in situ process control. *Thin Solid Films*, **2005**, 480-481, 515-519	2.2	85
7	Solar cells based on CCSVT-grown CuGaSe2□bsorber and device properties. *Thin Solid Films*, **2005**, 480-481, 341-346	2.2	12
6	High-Efficient ZnO/PVD-CdS/Cu(In,Ga)Se2 Thin Film Solar Cells: Formation of the Buffer-Absorber Interface and Transport Properties. *Materials Research Society Symposia Proceedings*, **2005**, 865, 14251		7
5	Solar Cells prepared with Spray-ILGAR Indium Sulfide buffer layers on Cu(In,Ga)Se2 Absorbers. *Materials Research Society Symposia Proceedings*, **2005**, 865, 14231		
4	Design of a window layer for flexible Cu(In,Ga)Se2 thin film solar cell devices. *Materials Research Society Symposia Proceedings*, **2005**, 865, 751		4
3	Chemical Bath Deposition of Indium Oxyhydroxysulfide Thin Films: Effect of the Bath on Film Composition. *Journal of the Electrochemical Society*, **2002**, 149, C1	3.9	6
2	Properties of CuInS2 thin films grown by a two-step process without H2S. *Solar Energy Materials and Solar Cells*, **1997**, 49, 349-356	6.4	43
1	Growth analysis of chemical bath deposited In(OH)/sub x/S/sub y/ films as buffer layers for CuInS/sub 2/ thin film solar cells		2