

# Shigeru Niki

## List of Publications by Year in descending order

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307  
papers

8,802  
citations

47409

49  
h-index

68831

81  
g-index

308  
all docs

308  
docs citations

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times ranked

7773  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impacts of KF Post-Deposition Treatment on the Band Alignment of Epitaxial Cu(In,Ga)Se <sub>2</sub> Heterojunctions. ACS Applied Materials & Interfaces, 2022, 14, 16780-16790.	4.0	3
2	Optical and Structural Properties of High-Efficiency Epitaxial Cu(In,Ga)Se <sub>2</sub> Grown on GaAs. ACS Applied Materials & Interfaces, 2020, 12, 3150-3160.	4.0	11
3	Characterization of Surface and Heterointerface of Cu <sub>2</sub> ZnSn <sub>1-x</sub> Ge <sub>x</sub> Se <sub>4</sub> for Solar Cell Applications. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900708.	1.2	7
4	Current status of transparent conducting oxide layers with high electron mobility and their application in Cu(In,Ga)Se <sub>2</sub> mini-modules. Thin Solid Films, 2019, 673, 26-33.	0.8	4
5	Terawatt-scale photovoltaics: Transform global energy. Science, 2019, 364, 836-838.	6.0	320
6	Improving the Open Circuit Voltage through Surface Oxygen Plasma Treatment and 11.7% Efficient Cu <sub>2</sub> ZnSnSe <sub>4</sub> Solar Cell. ACS Applied Materials & Interfaces, 2019, 11, 13319-13325.	4.0	36
7	Improved efficiency of Cu(In,Ga)Se <sub>2</sub> mini-module via high-mobility In <sub>2</sub> O <sub>3</sub> :W,H transparent conducting oxide layer. Progress in Photovoltaics: Research and Applications, 2019, 27, 491-500.	4.4	16
8	Band Alignment of the Heterointerface and Electronic Properties at the Cu <sub>2</sub> Zn(Sn <sub>1-x</sub> Ge <sub>x</sub> )Se <sub>4</sub> Surface: $x = 0, 0.2, \text{ and } 0.4$ . ACS Applied Materials & Interfaces, 2019, 11, 4637-4648.	4.0	23
9	Depth Profile of Impurity Phase in Wide-Bandgap Cu(In <sub>1-x</sub> Ga <sub>x</sub> )Se <sub>2</sub> Film Fabricated by Three-Stage Process. Journal of Electronic Materials, 2018, 47, 4944-4949.	1.0	6
10	Reduced recombination in a surface-sulfurized Cu(InGa)Se <sub>2</sub> thin-film solar cell. Japanese Journal of Applied Physics, 2018, 57, 055701.	0.8	9
11	Evaluation of femtosecond laser-scribed Cu(In,Ga)Se <sub>2</sub> solar cells using scanning spreading resistance microscopy. Applied Physics Express, 2018, 11, 032301.	1.1	10
12	Effect of thermal annealing on the redistribution of alkali metals in Cu(In,Ga)Se <sub>2</sub> solar cells on glass substrate. Journal of Applied Physics, 2018, 123, 093101.	1.1	14
13	Lithographic fabrication of point contact with Al <sub>2</sub> O <sub>3</sub> rear-surface-passivated and ultra-thin Cu(In,Ga)Se <sub>2</sub> solar cells. Thin Solid Films, 2018, 665, 91-95.	0.8	16
14	Effect of Combined Alkali (KF+CsF) Post-Deposition Treatment on Cu(InGa)Se <sub>2</sub> Solar Cells. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800372.	1.2	17
15	Single-crystal Cu(In,Ga)Se <sub>2</sub> solar cells grown on GaAs substrates. Applied Physics Express, 2018, 11, 082302.	1.1	30
16	Impact of front contact layers on performance of Cu(In,Ga)Se <sub>2</sub> solar cells in relaxed and metastable states. Progress in Photovoltaics: Research and Applications, 2018, 26, 789-799.	4.4	11
17	Significance of metastable acceptors in Cu(In,Ga)Se <sub>2</sub> solar cells in accelerated lifetime testing. Japanese Journal of Applied Physics, 2018, 57, 092301.	0.8	7
18	Deep level emission in polycrystalline CuGaSe <sub>2</sub> thin-films observed by micro-photoluminescence. Japanese Journal of Applied Physics, 2018, 57, 08RC02.	0.8	2

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19	Ultrafast laser scribing of transparent conductive oxides in Cu(In,Ga)Se <sub>2</sub> solar cells via laser lift-off process: the control of laser-induced damage. Proceedings of SPIE, 2017, .	0.8	2
20	Terawatt-scale photovoltaics: Trajectories and challenges. Science, 2017, 356, 141-143.	6.0	303
21	Band Alignment of CdS/Cu <sub>2</sub> ZnSnSe <sub>4</sub> Heterointerface and Solar Cell Performances. MRS Advances, 2017, 2, 3157-3162.	0.5	3
22	Electronic structures of Cu <sub>2</sub> ZnSnSe <sub>4</sub> surface and CdS/Cu <sub>2</sub> ZnSnSe <sub>4</sub> heterointerface. Japanese Journal of Applied Physics, 2017, 56, 065701.	0.8	7
23	Improved performance in Cu <sub>2</sub> ZnSnSe <sub>4</sub> solar cells using a sandwich-structured ZnSe/Cu <sub>2</sub> SnSe <sub>3</sub> /ZnSe precursor. Current Applied Physics, 2017, 17, 366-369.	1.1	5
24	Cu(In,Ga)Se <sub>2</sub> Solar Cells with Amorphous In <sub>2</sub> O <sub>3</sub> -Based Front Contact Layers. ACS Applied Materials & Interfaces, 2017, 9, 29677-29686.	4.0	14
25	Improvement of minority carrier lifetime and conversion efficiency by Na incorporation in Cu <sub>2</sub> ZnSnSe <sub>4</sub> solar cells. Journal of Applied Physics, 2017, 122, .	1.1	37
26	Effects of long-term heat-light soaking on Cu(In,Ga)Se <sub>2</sub> solar cells with KF postdeposition treatment. Applied Physics Express, 2017, 10, 092301.	1.1	51
27	Electronic structure of Cu <sub>2</sub> ZnSn(S <sub>x</sub> ) <sub>4</sub> surface and CdS/Cu <sub>2</sub> ZnSn(S <sub>x</sub> ) <sub>4</sub> interface. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, .	0.8	9
28	Degradation mechanism of Cu(In,Ga)Se <sub>2</sub> solar cells induced by exposure to air. Japanese Journal of Applied Physics, 2016, 55, 072301.	0.8	10
29	Quantitative determination of optical and recombination losses in thin-film photovoltaic devices based on external quantum efficiency analysis. Journal of Applied Physics, 2016, 120, .	1.1	105
30	A comparative study on charge carrier recombination across the junction region of Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> and Cu(In,Ga)Se <sub>2</sub> thin film solar cells. AIP Advances, 2016, 6, .	0.6	10
31	Effect of pre-annealing on Cu <sub>2</sub> ZnSnSe <sub>4</sub> thin-film solar cells prepared from stacked Zn/Cu/Sn metal precursors. Materials Letters, 2016, 176, 78-82.	1.3	7
32	Improvement of voltage deficit of Ge-incorporated kesterite solar cell with 12.3% conversion efficiency. Applied Physics Express, 2016, 9, 102301.	1.1	129
33	Structure of chemically deposited Zn(S,O,OH) buffer layer and the effects on the performance of Cu(In,Ga)Se <sub>2</sub> solar cell. Progress in Photovoltaics: Research and Applications, 2016, 24, 397-404.	4.4	8
34	Comparison of ZnO:B and ZnO:Al layers for Cu(In,Ga)Se <sub>2</sub> submodules. Thin Solid Films, 2016, 614, 79-83.	0.8	18
35	Effects of Mo surface oxidation on Cu(In,Ga)Se <sub>2</sub> solar cells fabricated by three-stage process with KF postdeposition treatment. Japanese Journal of Applied Physics, 2016, 55, 022304.	0.8	15
36	Ge-incorporated Cu <sub>2</sub> ZnSnSe <sub>4</sub> thin-film solar cells with efficiency greater than 10%. Solar Energy Materials and Solar Cells, 2016, 144, 488-492.	3.0	95

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37	Femtosecond Laser Scribing of Cu(In,Ga)Se <sub>2</sub> Thin-Film Solar Cell. Journal of Laser Micro Nanoengineering, 2016, 11, 130-136.	0.4	4
38	Characterization of Electron-Induced Defects in Cu (In, Ga) Se <sub>2</sub> Thin Films by Photoluminescence. Materials Research Society Symposia Proceedings, 2015, 1771, 157-161.	0.1	0
39	Compositional dependence photoluminescence study of polycrystalline CuGaSe <sub>2</sub> thin films. , 2015, , .		1
40	Electrical performance of the InGaP solar cell irradiated with low energy electron beams. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 773-776.	0.8	4
41	Optical constants of Cu(In, Ga)Se <sub>2</sub> for arbitrary Cu and Ga compositions. Journal of Applied Physics, 2015, 117, .	1.1	53
42	Cu(In,Ga)Se <sub>2</sub> Solar Cells With Amorphous Oxide Semiconducting Buffer Layers. IEEE Journal of Photovoltaics, 2015, 5, 956-961.	1.5	26
43	Narrow-bandgap Cu <sub>2</sub> Sn <sub>1-x</sub> Ga <sub>x</sub> Se <sub>3</sub> thin film solar cells. Materials Letters, 2015, 158, 205-207.	1.3	21
44	Study of time-resolved photoluminescence in Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> thin films with different Cu/Sn ratio. Japanese Journal of Applied Physics, 2015, 54, 08KC15.	0.8	4
45	Wide-gap solar cells using a novel ZnCuGaSe <sub>2</sub> absorber. Japanese Journal of Applied Physics, 2015, 54, 08KC17.	0.8	0
46	Investigation of the properties of deep-level defect in Cu(In,Ga)Se <sub>2</sub> thin films by steady-state photocapacitance and time-resolved photoluminescence measurements. Japanese Journal of Applied Physics, 2015, 54, 04DR02.	0.8	5
47	Dielectric functions of Cu <sub>2</sub> ZnSnSe <sub>4</sub> and Cu <sub>2</sub> SnSe <sub>3</sub> semiconductors. Journal of Applied Physics, 2015, 117, 015702.	1.1	40
48	Potential-induced degradation of Cu(In,Ga)Se <sub>2</sub> photovoltaic modules. Japanese Journal of Applied Physics, 2015, 54, 08KC13.	0.8	64
49	Determination of deep-level defects in Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> thin-films using photocapacitance method. Applied Physics Letters, 2015, 106, .	1.5	20
50	Investigation of InGaP/(In)AlGaAs/GaAs triple-junction top cells for smart stacked multijunction solar cells grown using molecular beam epitaxy. Japanese Journal of Applied Physics, 2015, 54, 08KE02.	0.8	6
51	Study of Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> Thin Films for Solar Cell Application. Journal of Physics: Conference Series, 2015, 596, 012019.	0.3	2
52	Improvement of In <sub>2</sub> S <sub>3</sub> /ZnCuInS <sub>2</sub> interfaces for wide-gap solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 769-772.	0.8	1
53	Degradation of Cu(In, Ga)Se <sub>2</sub> thin-film solar cells due to the ionization effect of low-energy electrons. Thin Solid Films, 2015, 582, 91-94.	0.8	3
54	Individual identification of free hole and electron dynamics in CuIn <sub>1-x</sub> Ga <sub>x</sub> Se <sub>2</sub> thin films by simultaneous monitoring of two optical transitions. Applied Physics Letters, 2015, 106, .	1.5	4

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55	Cu <sub>2</sub> ZnSnSe <sub>4</sub> thin-film solar cells fabricated using Cu <sub>2</sub> SnSe <sub>3</sub> and ZnSe bilayers. Applied Physics Express, 2015, 8, 042301.	1.1	21
56	Effects of alkali-metal block layer to enhance Na diffusion into Cu(In,Ga)Se <sub>2</sub> absorber on flexible solar cells. Solar Energy Materials and Solar Cells, 2015, 133, 21-25.	3.0	12
57	Characterization of electronic structure of Cu <sub>2</sub> ZnSn(S-Se) <sub>4</sub> absorber layer and CdS/Cu <sub>2</sub> ZnSn(S) Tj ETQq1 1 0.784314 rgBT /Overl 2015, 582, 166-170.	0.8	31
58	Study of recombination process in Cu <sub>2</sub> ZnSnS <sub>4</sub> thin film using two-wavelength excited photoluminescence. , 2014, , .		2
59	Radiation response of the fill-factor for GaAs solar cells with InGaAs quantum dot layers. , 2014, , .		2
60	Characterization of electronic structure of oxysulfide buffers and band alignment at buffer/absorber interfaces in Cu(In,Ga)Se <sub>2</sub> -based solar cells. Japanese Journal of Applied Physics, 2014, 53, 05FW09.	0.8	9
61	Effects of the Morphology of Chemically Deposited Zn(O,S) Buffer Layers on the Performance Cu(In,Ga)Se <sub>2</sub> Solar Cell. Energy Procedia, 2014, 60, 43-47.	1.8	6
62	Influence of electron irradiation on electroluminescence of Cu(In,Ga)Se <sub>2</sub> solar cells. Japanese Journal of Applied Physics, 2014, 53, 05FW08.	0.8	9
63	Structural tuning of wide-gap chalcopyrite CuGaSe <sub>2</sub> thin films and highly efficient solar cells: differences from narrow-gap Cu(In,Ga)Se <sub>2</sub> . Progress in Photovoltaics: Research and Applications, 2014, 22, 821-829.	4.4	61
64	Buried p-n junction formation in CuGaSe <sub>2</sub> thin-film solar cells. Applied Physics Letters, 2014, 104, 031606.	1.5	27
65	Temperature induced phase transformation in coevaporated Cu <sub>2</sub> SnSe <sub>3</sub> thin films. Materials Letters, 2014, 116, 61-63.	1.3	12
66	Composition control of Cu <sub>2</sub> ZnSnSe <sub>4</sub> -based solar cells grown by coevaporation. Thin Solid Films, 2014, 551, 27-31.	0.8	21
67	MBE-grown InGaP/GaAs/InGaAsP triple junction solar cells fabricated by advanced bonding technique. , 2014, , .		2
68	Investigation of deep-level defects in Cu(In,Ga)Se <sub>2</sub> thin films by a steady-state photocapacitance method. Journal of Applied Physics, 2014, 116, 163703.	1.1	4
69	InGaP/GaAs tandem solar cells fabricated using solid-source molecular beam epitaxy. Japanese Journal of Applied Physics, 2014, 53, 05FV06.	0.8	17
70	Quantitative Assessment of Optical Gain and Loss in Submicron-Textured Physical Physical	1.5	67
71	Physical Physical	1.1	21
72	Interfacial Alkali Diffusion Control in Chalcopyrite Thin-Film Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 14123-14130.	4.0	23

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73	Investigation of the relative density of deep defects in Cu(In,Ga)Se <sub>2</sub> thin films dependent on Ga content by transient photocapacitance method. Japanese Journal of Applied Physics, 2014, 53, 068008.	0.8	12
74	Texture and morphology variations in (In,Ga) <sub>2</sub> Se <sub>3</sub> and Cu(In,Ga)Se <sub>2</sub> thin films grown with various Se source conditions. Progress in Photovoltaics: Research and Applications, 2013, 21, 544-553.	4.4	36
75	InGaAs quantum dot superlattice with vertically coupled states in InGaP matrix. Journal of Applied Physics, 2013, 114, .	1.1	17
76	Impact of Se flux on the defect formation in polycrystalline Cu(In,Ga)Se <sub>2</sub> thin films grown by three stage evaporation process. Journal of Applied Physics, 2013, 113, 064907.	1.1	15
77	Impact of a binary Ga <sub>2</sub> Se <sub>3</sub> precursor on ternary CuGaSe <sub>2</sub> thin-film and solar cell device properties. Applied Physics Letters, 2013, 103, .	1.5	24
78	In(Ga)As quantum dots on InGaP layers grown by solid-source molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 430-434.	0.7	17
79	Characterization of Cu(In,Ga)Se <sub>2</sub> grown by MBE by two-wavelength excited photoluminescence spectroscopy. Journal of Crystal Growth, 2013, 378, 162-164.	0.7	11
80	Investigation of deep-level defects in Cu(In,Ga)Se <sub>2</sub> thin films by two-wavelength excitation photo-capacitance spectroscopy. Applied Physics Letters, 2013, 103, 163905.	1.5	12
81	Growth and characterization of coevaporated Cu <sub>2</sub> SnSe <sub>3</sub> thin films for photovoltaic applications. Thin Solid Films, 2013, 536, 111-114.	0.8	49
82	Highly Efficient Cu(In,Ga)Se <sub>2</sub> Thin-Film Submodule Fabricated Using a Three-Stage Process. Applied Physics Express, 2013, 6, 112303.	1.1	15
83	Miniband formation in InGaAs quantum dot superlattice with InGaP matrix for application to intermediate-band solar cells. , 2013, , .		2
84	Influence of electrical performance on Cu-related defects generated by 250keV electron irradiation in Cu (In, Ga) Se <sub>2</sub> thin-film solar cells. Thin Solid Films, 2013, 535, 353-356.	0.8	21
85	Cu(In,Ga)Se <sub>2</sub> solar cells and mini-modules fabricated on thin soda-lime glass substrates. Solar Energy Materials and Solar Cells, 2013, 119, 163-168.	3.0	19
86	InGaP solar cells fabricated using solid-source molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 576-578.	0.7	27
87	Dielectric function of Cu(In, Ga)Se <sub>2</sub> -based polycrystalline materials. Journal of Applied Physics, 2013, 113, .	1.1	98
88	Change in the electrical performance of GaAs solar cells with InGaAs quantum dot layers by electron irradiation. Solar Energy Materials and Solar Cells, 2013, 108, 263-268.	3.0	14
89	Monolithically integrated flexible Cu(In,Ga)Se <sub>2</sub> solar cells and submodules using newly developed structure metal foil substrate with a dielectric layer. Solar Energy Materials and Solar Cells, 2013, 112, 106-111.	3.0	26
90	Over 20% Efficiency Mechanically Stacked Multi-Junction Solar Cells Fabricated by Advanced Bonding Using Conductive Nanoparticle Alignments. Materials Research Society Symposia Proceedings, 2013, 1538, 167-171.	0.1	10

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91	Characterization of Electron-Induced Defects in Cu (In, Ga) Se <sub>2</sub> Thin-Film Solar Cells using Electroluminescence. Materials Research Society Symposia Proceedings, 2013, 1538, 27-32.	0.1	1
92	Observation of Sodium Diffusion in CIGS Solar Cells with Mo/TCO/Mo Hybrid Back Contacts. Materials Research Society Symposia Proceedings, 2013, 1538, 61-66.	0.1	2
93	Electrical performance degradation of GaAs solar cells with InGaAs quantum dot layers due to proton irradiation. , 2013, , .		3
94	Correlation between Electrical Properties and Crystal c-Axis Orientation of Zinc Oxide Transparent Conducting Films. Japanese Journal of Applied Physics, 2012, 51, 10NC16.	0.8	2
95	Fabrication and Characterization of Wide-Gap ZnCuInS <sub>2</sub> Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NC06.	0.8	1
96	Fabrication and Characterization of Cu(In,Ga)(S,Se) <sub>2</sub> -Based Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NC04.	0.8	1
97	InGaP-based InGaAs quantum dot solar cells with GaAs spacer layer fabricated using solid-source molecular beam epitaxy. Applied Physics Letters, 2012, 101, .	1.5	32
98	High efficiency CIGS submodules. Progress in Photovoltaics: Research and Applications, 2012, 20, 595-599.	4.4	14
99	Ultra-high stacks of InGaAs/GaAs quantum dots for high efficiency solar cells. Energy and Environmental Science, 2012, 5, 6233.	15.6	75
100	Fabrication and Characterization of Cu(In,Ga)(S,Se) <sub>2</sub> -Based Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10NC04.	0.8	2
101	Impact of Cu/III ratio on the near-surface defects in polycrystalline CuGaSe <sub>2</sub> thin films. Applied Physics Letters, 2011, 98, 112105.	1.5	18
102	Monolithically integrated CIGS sub-modules fabricated on new-structured flexible substrates. , 2011, , .		4
103	Ultra-high stacks of InGaAs quantum dots for high efficiency solar cells. , 2011, , .		2
104	Local Structure around Dopant Site in Ga-Doped ZnO from Extended X-ray Absorption Fine Structure Measurements. Journal of the Physical Society of Japan, 2011, 80, 074602.	0.7	5
105	Tunnel current through a miniband in InGaAs quantum dot superlattice solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 2920-2923.	3.0	24
106	CIGS thin films, solar cells, and submodules fabricated using a rf-plasma cracked Se-radical beam source. Thin Solid Films, 2011, 519, 7216-7220.	0.8	15
107	Thickness study of Al:ZnO film for application as a window layer in Cu(In <sub>1-x</sub> Ga <sub>x</sub> )Se <sub>2</sub> thin film solar cell. Applied Surface Science, 2011, 257, 4026-4030.	3.1	67
108	Development of high-efficiency CIGS integrated submodules using in-line deposition technology. Solar Energy Materials and Solar Cells, 2011, 95, 254-256.	3.0	25

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109	Determination of Cu(In $_{1-x}$ Ga $_x$ ) $_2$ Se $_3$ defect phase in MBE grown Cu(In $_{1-x}$ Ga $_x$ )Se $_2$ thin film by Rietveld analysis. Solar Energy Materials and Solar Cells, 2011, 95, 231-234.	3.0	15
110	Dependence of Se beam pressure on defect states in CIGS-based solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 227-230.	3.0	34
111	Multi-stacked quantum dot solar cells fabricated by intermittent deposition of InGaAs. Solar Energy Materials and Solar Cells, 2011, 95, 163-166.	3.0	56
112	Cu-dependent phase transition in polycrystalline CuGaSe $_2$ thin films grown by three-stage process. Journal of Applied Physics, 2011, 110, 014903.	1.1	8
113	Time-Resolved Microphotoluminescence Study of Cu(In,Ga)Se $_2$ . Japanese Journal of Applied Physics, 2011, 50, 05FC01.	0.8	18
114	Time-Resolved Microphotoluminescence Study of Cu(In,Ga)Se $_2$ . Japanese Journal of Applied Physics, 2011, 50, 05FC01.	0.8	25
115	Recent Developments in Chalcopyrite Solar Cell and Module Technologies. Journal of the Vacuum Society of Japan, 2010, 53, 25-29.	0.3	0
116	Development of high-efficiency flexible Cu(In,Ga)Se $_2$ solar cells: A study of alkali doping effects on CIS, CIGS, and CGS using alkali-silicate glass thin layers. Current Applied Physics, 2010, 10, S154-S156.	1.1	53
117	Formation of ionic bonds between a fatty-acid Langmuir-Blodgett monolayer and a zinc oxide substrate. Journal of Colloid and Interface Science, 2010, 352, 299-302.	5.0	1
118	Characterization of Zn $_{1-x}$ Mg $_x$ O transparent conducting thin films fabricated by multi-cathode RF-magnetron sputtering. Thin Solid Films, 2010, 518, 2949-2952.	0.8	34
119	Monolithically integrated flexible Cu(In,Ga)Se $_2$ solar cell submodules. Solar Energy Materials and Solar Cells, 2010, 94, 2052-2056.	3.0	34
120	CIGS absorbers and processes. Progress in Photovoltaics: Research and Applications, 2010, 18, 453-466.	4.4	403
121	Two-dimensional polaron mass in ZnO quantum Hall systems. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1599-1601.	0.8	8
122	Highly stacked InGaAs quantum dot structures grown with two species of As. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2010, 28, C3C4-C3C8.	0.6	19
123	Characteristics of highly stacked quantum dot solar cells fabricated by intermittent deposition of InGaAs. , 2010, , .		3
124	Change in the electrical performance of InGaAs quantum dot solar cells due to irradiation. , 2010, , .		3
125	Highly Stacked and High-Quality Quantum Dots Fabricated by Intermittent Deposition of InGaAs. Japanese Journal of Applied Physics, 2010, 49, 030211.	0.8	24
126	Formation of Hexagonal Pyramids and Pits on V-/VI-Polar and III-/II-Polar GaN/ZnO Surfaces by Wet Etching. Journal of the Electrochemical Society, 2010, 157, D60.	1.3	46



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127	Miniband formation in InGaAs quantum dot superlattice. Applied Physics Letters, 2010, 97, .	1.5	41
128	Highly stacked and well-aligned In <sub>0.4</sub> Ga <sub>0.6</sub> As quantum dot solar cells with In <sub>0.2</sub> Ga <sub>0.8</sub> As cap layer. Applied Physics Letters, 2010, 97, 183104.	1.5	50
129	Monolithically integrated CIGS submodules fabricated on flexible substrates. , 2010, , .		2
130	Flexible Cu(In,Ga)Se <sub>2</sub> solar cells fabricated using alkali-silicate glass thin layers as an alkali source material. Journal of Renewable and Sustainable Energy, 2009, 1, 013102.	0.8	38
131	Optical dielectric constant inhomogeneity along the growth axis in ZnO-based transparent electrodes deposited on glass substrates. Journal of Applied Physics, 2009, 105, .	1.1	14
132	Temperature dependence of photocapacitance spectrum of CIGS thin-film solar cell. Thin Solid Films, 2009, 517, 2403-2406.	0.8	33
133	CIGS solar cell with CdS buffer layer deposited by ammonia-free process. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1072-1075.	0.8	10
134	Effects of Mo back contact thickness on the properties of CIGS solar cells. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1063-1066.	0.8	25
135	High sensitivity and wide bandwidth image sensor using CuIn <sub>1-x</sub> Ga <sub>x</sub> Se <sub>2</sub> thin films. Thin Solid Films, 2009, 517, 2392-2394.	0.8	7
136	Infrared reflection-absorption spectroscopy applied to a merocyanine dye J-aggregate deposited on transparent electrodes based on zinc oxide. Thin Solid Films, 2009, 518, 462-465.	0.8	6
137	Large grain Cu(In,Ga)Se <sub>2</sub> thin film growth using a Se-radical beam source. Solar Energy Materials and Solar Cells, 2009, 93, 792-796.	3.0	24
138	CIGS solar cell with MBE-grown ZnS buffer layer. Solar Energy Materials and Solar Cells, 2009, 93, 970-972.	3.0	130
139	Fabrication of homojunction GaInNAs solar cells by atomic hydrogen-assisted molecular beam epitaxy. Solar Energy Materials and Solar Cells, 2009, 93, 1120-1123.	3.0	10
140	Effect of Se/(Ga+In) ratio on MBE grown Cu(In,Ga)Se <sub>2</sub> thin film solar cell. Journal of Crystal Growth, 2009, 311, 2212-2214.	0.7	40
141	Zn <sub>1-x</sub> Mg <sub>x</sub> O/ZnO heterostructures studied by Kelvin probe force microscopy conjunction with probe characterizer. Applied Surface Science, 2009, 256, 1180-1183.	3.1	0
142	Band profiles of ZnMgO/ZnO heterostructures confirmed by Kelvin probe force microscopy. Applied Physics Letters, 2009, 94, .	1.5	32
143	Na-induced variations in the structural, optical, and electrical properties of Cu(In,Ga)Se <sub>2</sub> thin films. Journal of Applied Physics, 2009, 106, .	1.1	148
144	Efficiency enhancement of flexible CIGS solar cells using alkali-silicate glass thin layers as an alkali source material. , 2009, , .		3

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145	Effects of annealing under various atmospheres on electrical properties of Cu(In,Ga)Se <sub>2</sub> films and CdS/Cu(In,Ga)Se <sub>2</sub> heterostructures. Thin Solid Films, 2008, 516, 7036-7040.	0.8	24
146	Alkali incorporation control in Cu(In,Ga)Se <sub>2</sub> thin films using silicate thin layers and applications in enhancing flexible solar cell efficiency. Applied Physics Letters, 2008, 93, .	1.5	71
147	Polarization-induced two-dimensional electron gases in ZnMgO/ZnO heterostructures. Applied Physics Letters, 2008, 93, .	1.5	131
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