Jean FranÃ§ois F Guillemoles

List of Publications by Year
in descending order

291 papers	7,819 citations	57758 44 h-index	60623 81 g-index
299 all docs	299 docs citations	299 times ranked	7654 citing authors

#	Article	IF	Citations
1	The influence of relative humidity upon Cu(In,Ga)Se2 thin-film surface chemistry: An X-ray photoelectron spectroscopy study. Applied Surface Science, 2022, 576, 151898.	6.1	8
2	In-Depth Chemical and Optoelectronic Analysis of Triple-Cation Perovskite Thin Films by Combining XPS Profiling and PL Imaging. ACS Applied Materials & Interfaces, 2022, 14, 34228-34237.	8.0	13
3	Review of the mechanisms for the phonon bottleneck effect in IIIâ€“V semiconductors and their application for efficient hot carrier solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 581-596.	8.1	16
4	Importance of atmospheric aerosol pollutants on the degradation of Al₂O₃ encapsulated Alâ€doped zinc oxide window layers in solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 552-566.	8.1	2
5	Hot-carrier multi-junction solar cells: A synergistic approach. Applied Physics Letters, 2022, 120, .	3.3	4
6	Imaging and quantifying non-radiative losses at 23% efficient inverted perovskite solar cells interfaces. Nature Communications, 2022, 13, .	12.8	58
7	Hot-carrier multijunction solar cells: sensitivity and resilience to nonidealities. Journal of Photonics for Energy, 2022, 12, .	1.3	0
8	Impact of excitation energy on hot carrier properties in InGaAs multiâ€quantum well structure. Progress in Photovoltaics: Research and Applications, 2022, 30, 1354-1362.	8.1	5
9	A Bayesian approach to luminescent down-conversion. Journal of Chemical Physics, 2021, 154, 014201.	3.0	2
10	Reply to â€˜Ideal solar cell efficienciesâ€™. Nature Photonics, 2021, 15, 165-166.	31.4	7
11	From Mono- to Polynuclear Coordination Complexes with a 2,2â€²-Bipyrimidine-4,4â€²-dicarboxylate Ligand. Inorganic Chemistry, 2021, 60, 8304-8314.	4.0	5
12	Hot carrier relaxation and inhibited thermalization in superlattice heterostructures: The potential for phonon management. Applied Physics Letters, 2021, 118, .	3.3	19
13	Hot carriers and thermalization properties of type-II In As/AlAsSb MQW and superlattice solar cells. , 2021, , .		0
14	Impact of the excitation wavelength on the properties of photo-generated hot carriers in InGaAs MQW. , 2021, , .		0
15	Coupled time resolved and high frequency modulated photoluminescence probing surface passivation of highly doped n-type InP samples. Journal of Applied Physics, 2021, 129, .	2.5	3
16	Mapping Transport Properties of Halide Perovskites via Short-Time-Dynamics Scaling Laws and Subnanosecond-Time-Resolution Imaging. Physical Review Applied, 2021, 16, .	3.8	4
17	Identification of surface and volume hot-carrier thermalization mechanisms in ultrathin GaAs layers. Journal of Applied Physics, 2020, 128, 193102.	2.5	17
18	Evolution of Cu(In,Ga)Se₂ surfaces under water immersion monitored by Xâ€ray photoelectron spectroscopy. Surface and Interface Analysis, 2020, 52, 975-979.	1.8	2

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19	Investigation of the spatial distribution of hot carriers in quantum-well structures via hyperspectral luminescence imaging. Journal of Applied Physics, 2020, 128, .	2.5	11
20	Imaging Electron, Hole, and Ion Transport in Halide Perovskite. Journal of Physical Chemistry C, 2020, 124, 11741-11748.	3.1	9
21	Optimized Operation of Quantum-Dot Intermediate-Band Solar Cells Deduced from Electronic Transport Modeling. Physical Review Applied, 2020, 13, .	3.8	2
22	Fabrication and optical characterization of ultrathin III-V transferred heterostructures for hot-carrier absorbers. , 2020, , .		2
23	Advanced analysis for hot-carriers photoluminescence spectrum. , 2020, , .		3
24	Backside light management of 4-terminal bifacial perovskite/silicon tandem PV modules evaluated under realistic conditions. Optics Express, 2020, 28, 37487.	3.4	9
25	Physics of the inter-subband transition in quantum-dot intermediate-band solar cell. , 2020, , .		1
26	Quasi-Fermi level splitting in InAs quantum-dot solar cells from photoluminescence measurements. , 2020, , .		2
27	Guide for the perplexed to the Shockleyâ€“Queisser model for solar cells. Nature Photonics, 2019, 13, 501-505.	31.4	153
28	Cu depletion on Cu(In,Ga)Se2 surfaces investigated by chemical engineering: An x-ray photoelectron spectroscopy approach. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	7
29	Current transport efficiency analysis of multijunction solar cells by luminescence imaging. Progress in Photovoltaics: Research and Applications, 2019, 27, 835-843.	8.1	4
30	A hot-carrier assisted InAs/AlGaAs quantum-dot intermediate-band solar cell. Semiconductor Science and Technology, 2019, 34, 084001.	2.0	4
31	Hot-Carrier Solar Cells: Modeling Carrier Transport. , 2019, , 53-92.		4
32	Detailed balance calculations for hot-carrier solar cells: coupling high absorptivity with low thermalization through light trapping. EPJ Photovoltaics, 2019, 10, 1.	1.6	4
33	Generalized Reciprocity Relations in Solar Cells with Voltage-Dependent Carrier Collection: Application to p - i - n Junction Devices. Physical Review Applied, 2019, 11, .	3.8	15
34	Epitaxial Lift-Off of Ultrathin Heterostructures for Hot-Carrier Solar Cell Applications. , 2019, , .		0
35	Quantitative optical assessment of electronic and photonic properties. , 2019, , .		0
36	Impact of Electronâ€“Phonon Scattering on Optical Properties of CH₃NH₃PbI₃ Hybrid Perovskite Material. ACS Omega, 2019, 4, 21487-21493.	3.5	12

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37	Defects characterization in thin films photovoltaics materials by correlated high-frequency modulated and time resolved photoluminescence: An application to Cu(In,Ga)Se2. Thin Solid Films, 2019, 669, 520-524.	1.8	18
38	Light absorption enhancement in ultra-thin layers for hot-carrier solar cells: first developments towards the experimental demonstration of an enhanced hot-carrier effect with light trapping. , 2019, , .		0
39	Experimental investigation of performances enhancement in hot carrier solar cells: improvements and perspectives (Conference Presentation). , 2019, , .		0
40	Multi-dimensional luminescence imaging: accessing transport properties. , 2019, , .		0
41	Quantitative experimental assessment of hot carrier-enhanced solar cells at room temperature. Nature Energy, 2018, 3, 236-242.	39.5	86
42	Material challenges for solar cells in the twenty-first century: directions in emerging technologies. Science and Technology of Advanced Materials, 2018, 19, 336-369.	6.1	162
43	Reduction of V<inf>oc</inf> induced by the electron-phonon scattering in GaAs and CH <inf>3</inf> NH <inf>3</inf> PbI <inf>3</inf>. , 2018, , .		0
44	Transport efficiency imaging in multi-junction solar cells by luminescence analysis. , 2018, , .		4
45	Hot Carrier Extraction Using Energy Selective Contacts and Feedback On The Remaining Distribution. , 2018, , .		2
46	Loss analysis in luminescent sheet concentrators: from ideal to real system. EPJ Photovoltaics, 2018, 9, 12.	1.6	2
47	Surface reactivity of CIGS absorber on soda-lime and flexible substrates studied by XPS: a global approach of deoxidation, ageing and alkali elements distribution. , 2018, , .		1
48	Beneficial impact of a thin tunnel barrier in quantum well intermediate-band solar cell. EPJ Photovoltaics, 2018, 9, 11.	1.6	2
49	Advanced Light Trapping for Hot-Carrier Solar Cells. , 2018, , .		3
50	Spatial Inhomogeneity Analysis of Cesium-Rich Wrinkles in Triple-Cation Perovskite. Journal of Physical Chemistry C, 2018, 122, 23345-23351.	3.1	24
51	Multiscale in modelling and validation for solar photovoltaics. EPJ Photovoltaics, 2018, 9, 10.	1.6	6
52	An Electronic Ratchet Is Required in Nanostructured Intermediate-Band Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 1553-1559.	2.5	6
53	Ultrathin mono-resonant nano photovoltaic device for broadband solar conversion. Optics Express, 2018, 26, A806.	3.4	6
54	Analytical optimization of intermediate band systems: Achieving the best of two worlds. Progress in Photovoltaics: Research and Applications, 2018, 26, 800-807.	8.1	6

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55	Reply to â€œComment on â€˜Optical Imaging of Light-Induced Thermopower in Semiconductorsâ€™â€‰â€• Physical Review Applied, 2018, 9, .	3.8	1
56	Enhancement of photocurrent in epitaxial lift-off thin-film GaInNAsSb solar cells due to light-confinement structure. Applied Physics Express, 2018, 11, 072301.	2.4	4
57	Non-ideal nanostructured intermediate band solar cells with an electronic ratchet. , 2018, , .		3
58	Quantitative analysis of InAs quantum dot solar cells by photoluminescence spectroscopy. , 2018, , .		0
59	Electrical characteristics and hot carrier effects in quantum well solar cells. Proceedings of SPIE, 2017, , .	0.8	3
60	Characterisation of multi-junction solar cells by mapping of the carrier transport efficiency using luminescence emission. , 2017, , .		0
61	Optical contactless measurement of semiconductor thermoelectric transport properties (Conference Presentation). , 2017, , .		0
62	Minibands modeling in strain-balanced InGaAs/GaAs/GaAsP cells. , 2017, , .		1
63	Accurate radiation temperature and chemical potential from quantitative photoluminescence analysis of hot carrier populations. Journal of Physics Condensed Matter, 2017, 29, 06LT02.	1.8	21
64	Electroluminescence-based quality characterization of quantum wells for solar cell applications. Journal of Crystal Growth, 2017, 464, 94-99.	1.5	8
65	EuIII -Based Nanolayers as Highly Efficient Downshifters for CIGS Solar Cells. European Journal of Inorganic Chemistry, 2017, 2017, 5318-5326.	2.0	10
66	Influence of Hot-Carrier Extraction from a Photovoltaic Absorber: An Evaporative Approach. Physical Review Applied, 2017, 8, .	3.8	10
67	Determination of n-Type Doping Level in Single GaAs Nanowires by Cathodoluminescence. Nano Letters, 2017, 17, 6667-6675.	9.1	35
68	Light Trapping in Ultrathin CIGS Solar Cells with Nanostructured Back Mirrors. IEEE Journal of Photovoltaics, 2017, 7, 1433-1441.	2.5	54
69	Cathodoluminescence mapping for the determination of n-type doping in single GaAs nanowires. , 2017, , .		0
70	Progress towards double-junction InGaN solar cell. , 2017, , .		0
71	200nm-thick GaAs solar cells with a nanostructured silver mirror. , 2017, , .		0
72	Demand response for the promotion of photovoltaic penetration. , 2017, , .		3

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73	Photovoltaic Array Differential Backside Exposure Conditions: Backsheet Degradation and Site Design. , 2017, , .		2
74	Quantitative optoelectronic measurements of carrier thermodynamics properties in quantum well hot carrier solar cell. , 2017, , .		0
75	Predicting Power Loss Due to Module Mismatch in Utility-Scale Photovoltaic Systems. , 2017, , .		0
76	Application of Mapping Spectroscopic Ellipsometry for CdSe/CdTe Solar Cells: Optimization of Low-Temperature Processed Devices with All-Sputtered Semiconductors. , 2017, , .		0
77	Tuning the chemical properties of europium complexes as downshifting agents for copper indium gallium selenide solar cells. Journal of Materials Chemistry A, 2017, 5, 14031-14040.	10.3	39
78	Absorption coefficient and non-equilibrium generalized Planck's law for improved hot carrier photoluminescence spectroscopy. , 2017, , .		0
79	200nm-Thick GaAs solar cells with a nanostructured silver mirror. , 2016, , .		6
80	Optical analysis of the photon recycling effect in InGaAs/GaAsP multiple quantum well solar cell with light trapping structure. , 2016, , .		3
81	New insights into the Mo/Cu(In,Ga)Se2 interface in thin film solar cells: Formation and properties of the MoSe2 interfacial layer. Journal of Chemical Physics, 2016, 145, 154702.	3.0	28
82	Multi-resonant light trapping in ultrathin CIGS solar cells. , 2016, , .		1
83	On the origin of the spatial inhomogeneity of photoluminescence in thin-film CIGS solar devices. Applied Physics Letters, 2016, 109, .	3.3	10
84	Absorption coefficient and non-equilibrium generalized Planck's law for improved hot carrier photoluminescence spectroscopy. , 2016, , .		1
85	All optical IBSC characterization method. , 2016, , .		0
86	Influence of different electron and holes effective masses, temperatures and electrochemical potentials on the hot carrier solar cell efficiency. , 2016, , .		0
87	Micrometric mapping of absolute trapping defects density using quantitative luminescence imaging. , 2016, , .		0
88	Quasi-Fermi level splitting evaluation based on electroluminescence analysis in multiple quantum-well solar cells for investigating cell performance under concentrated light. Proceedings of SPIE, 2016, , .	0.8	4
89	Design and fabrication of a micro CPV system based on Cu(In,Ga)Se2microcells array. , 2016, , .		0
90	Quantification of spatial inhomogeneity in perovskite solar cells by hyperspectral luminescence imaging. Energy and Environmental Science, 2016, 9, 2286-2294.	30.8	102

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91	Study of a micro-concentrated photovoltaic system based on Cu(In,Ga)Se_2 microcells array. Applied Optics, 2016, 55, 6656.	2.1	18
92	Enhancement of Copper Indium Gallium Selenide Solar Cells Using Europium Complex as Photon Downshifter. Advanced Optical Materials, 2016, 4, 1846-1853.	7.3	17
93	Optical Imaging of Light-Induced Thermopower in Semiconductors. Physical Review Applied, 2016, 5, .	3.8	14
94	Insights on energy selective contacts for thermal energy harvesting using double resonant tunneling contacts and numerical modeling. Superlattices and Microstructures, 2016, 100, 749-756.	3.1	6
95	Two carrier temperatures non-equilibrium generalized Planck law for semiconductors. Physica B: Condensed Matter, 2016, 498, 7-14.	2.7	20
96	Experimental Demonstration of Optically Determined Solar Cell Current Transport Efficiency Map. IEEE Journal of Photovoltaics, 2016, 6, 528-531.	2.5	12
97	Correlations between electrical and optical properties in lattice-matched GaAsPN/GaP solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 53-60.	6.2	25
98	Contactless characterization of metastable defects in Cu(In,Ga)Se 2 solar cells using time-resolved photoluminescence. Solar Energy Materials and Solar Cells, 2016, 145, 462-467.	6.2	8
99	Local transport properties investigation by correlating hyperspectral and confocal luminescence images. Proceedings of SPIE, 2016, , .	0.8	0
100	Third generation hot carrier solar cells: paths towards innovative energy contacts structures. , 2016, , .		3
101	How does energy filtering improve quantum-dot based photovoltaic devices. , 2015, , .		0
102	Wurtzite silicon as a potential absorber in photovoltaics: Tailoring the optical absorption by applying strain. Physical Review B, 2015, 92, .	3.2	54
103	Micro solar concentrators: Design and fabrication for microcells arrays. AIP Conference Proceedings, 2015, , .	0.4	5
104	Quantitative luminescence mapping of Cu(In, Ga)Se₂ thinâ€film solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1305-1312.	8.1	35
105	Impact of oxygen concentration during the deposition of window layers on lowering the metastability effects in Cu(In,Ga)Se₂/CBD Zn(S,O) based solar cell. Progress in Photovoltaics: Research and Applications, 2015, 23, 1820-1827.	8.1	37
106	Depolarization effect in rareâ€earth doped Y₂O₃ films in blue and UV spectral range. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 600-604.	0.8	0
107	Micro solar concentrators: Design and fabrication for microcells arrays. , 2015, , .		2
108	Multi-resonant light trapping: New paradigm, new limits. , 2015, , .		1

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109	Ultrathin GaAs solar cells with a nanostructured back mirror. , 2015, , .		4
110	Ultrathin GaAs Solar Cells With a Silver Back Mirror. IEEE Journal of Photovoltaics, 2015, 5, 565-570.	2.5	74
111	Cu(In,Ga)Se 2 mesa diodes for the study of edge recombination. Thin Solid Films, 2015, 582, 258-262.	1.8	15
112	Optical absorption and thermal conductivity of GaAsPN absorbers grown on GaP in view of their use in multijunction solar cells. Solar Energy Materials and Solar Cells, 2015, 141, 291-298.	6.2	23
113	Experimental evidence of hot carriers solar cell operation in multi-quantum wells heterostructures. Applied Physics Letters, 2015, 106, .	3.3	55
114	Investigation of carrier collection in multi-quantum well solar cells by luminescence spectra analysis. , 2015, , .		1
115	Multijunction photovoltavics: integrating IIIâ€“V semiconductor heterostructures on silicon. SPIE Newsroom, 2015, , .	0.1	3
116	Intermediate band solar cells: Recent progress and future directions. Applied Physics Reviews, 2015, 2, 021302.	11.3	314
117	Optoelectronic characterization of polycrystalline solar cells using time-resolved biased luminescence techniques. , 2015, , .		0
118	Structured InP-based nanoantenna for photovoltaics applications. Journal of Photonics for Energy, 2015, 5, 053098.	1.3	1
119	Absorption enhancement through Fabry-PÃ©rot resonant modes in a 430â€‰nm thick InGaAs/GaAsP multiple quantum wells solar cell. Applied Physics Letters, 2015, 106, .	3.3	33
120	Quantitative optical measurement of chemical potentials in intermediate band solar cells. Journal of Photonics for Energy, 2015, 5, 053092.	1.3	7
121	GaAsPN-based PIN solar cells MBE-grown on GaP substrates: toward the III-V/Si tandem solar cell. Proceedings of SPIE, 2015, , .	0.8	6
122	Adaptation of the surface-near Ga content in co-evaporated Cu(In,Ga)Se 2 for CdS versus Zn(S,O)-based buffer layers. Thin Solid Films, 2015, 582, 295-299.	1.8	7
123	Characterization of Cu(In,Ga)Se$_{2}$ Electrodeposited and Co-Evaporated Devices by Means of Concentrated Illumination. IEEE Journal of Photovoltaics, 2014, 4, 693-696.	2.5	4
124	Hyperspectral Imaging of Photovoltaic Conversion â€“ ERRATUM. Materials Research Society Symposia Proceedings, 2014, 1670, 1.	0.1	0
125	Density Functional Theory Simulations of Semiconductors for Photovoltaic Applications: Hybrid Organic-Inorganic Perovskites and III/V Heterostructures. International Journal of Photoenergy, 2014, 2014, 1-11.	2.5	23
126	Four-fold MQWs absorption enhancement in a 430 nm thick InGaAs/GaAsP MQWs solar cell. , 2014, , .		0

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127	Theoretical study of optical properties of anti phase domains in GaP. Journal of Applied Physics, 2014, 115, .	2.5	17
128	Accurate measurement of temperature and electrochemical potential of InGaAsP/InP heterostructures: A first indication of hot carriers solar cell operation. , 2014, , .		1
129	Direct imaging of quasi Fermi level splitting in photovoltaic absorbers. , 2014, , .		2
130	Quantitative imaging of thin films solar cells properties using CuInGaSe<inf>2</inf> microcells. , 2014, , .		1
131	An innovative concentrator system based on Cu(In,Ga)Se<inf>2</inf> microcells. , 2014, , .		0
132	Monolithic Integration of Diluted-Nitride IIIâ€“V-N Compounds on Silicon Substrates: Toward the IIIâ€“V/Si Concentrated Photovoltaics. Energy Harvesting and Systems, 2014, 1, .	2.7	9
133	InP-based nano solar cells. , 2014, , .		2
134	Optical phonon decay in cubic semiconductors: a hot carrier solar cell picture. Proceedings of SPIE, 2014, , .	0.8	1
135	Hyperspectral Imaging of Photovoltaic Conversion. Materials Research Society Symposia Proceedings, 2014, 1670, 57.	0.1	1
136	Modeling and Fabrication of Luminescent Solar Concentrators towards Photovoltaic Devices. Energy Procedia, 2014, 60, 173-180.	1.8	10
137	Characterization of Photovoltaic Absorbers for High Throughput Processing. Materials Research Society Symposia Proceedings, 2014, 1709, 24.	0.1	0
138	Dielectric function of zinc oxide thin films in a broad spectral range. Thin Solid Films, 2014, 571, 593-596.	1.8	15
139	GaSe Formation at the Cu(In,Ga)Se₂/Mo Interfaceâ€“A Novel Approach for Flexible Solar Cells by Easy Mechanical Liftâ€Off. Advanced Materials Interfaces, 2014, 1, 1400044.	3.7	19
140	Ga gradients in Cu(In,Ga)Se2: Formation, characterization, and consequences. Journal of Renewable and Sustainable Energy, 2014, 6, .	2.0	24
141	Revisiting the interpretation of biased luminescence: Effects on Cu(In,Ga)Se2 photovoltaic heterostructures. Journal of Applied Physics, 2014, 116, 064504.	2.5	11
142	Multi-stage co-evaporation process for active Ga gradient control in CIGS solar cells. , 2014, , .		1
143	Micrometric investigation of external quantum efficiency in microcrystalline CuInGa(S,Se)2 solar cells. Thin Solid Films, 2014, 565, 32-36.	1.8	4
144	Phonon lifetime in SiSn and its suitability for hot-carrier solar cells. Applied Physics Letters, 2014, 104, .	3.3	12

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145	Design of a lattice-matched IIIâ€“Vâ€“N/Si photovoltaic tandem cell monolithically integrated on silicon substrate. Optical and Quantum Electronics, 2014, 46, 1397-1403.	3.3	26
146	Metal Nanogrid for Broadband Multiresonant Light-Harvesting in Ultrathin GaAs Layers. ACS Photonics, 2014, 1, 878-884.	6.6	90
147	Differential in-depth characterization of co-evaporated Cu(In,Ga)Se2 thin films for solar cell applications. Thin Solid Films, 2014, 558, 47-53.	1.8	19
148	Front Matter: Volume 8981. , 2014, , .		0
149	Cu(In,Ga)Se2mesa microdiodes: study of edge recombination and behaviour under concentrated sunlight. , 2014, , .		0
150	Solar Cells solar cell : Very High Efficiencies Approaches solar cell very high efficiencies approaches. , 2013, , 358-377.		0
151	Erbium-doped yttria thin films prepared by metal organic decomposition for up-conversion. Thin Solid Films, 2013, 537, 42-48.	1.8	11
152	Cu(In, Ga)Se2 microcells: High efficiency and low material consumption. Journal of Renewable and Sustainable Energy, 2013, 5, .	2.0	31
153	Impact of the deposition conditions of window layers on lowering the metastability effects in Cu(In,Ga)Se2/CBD ZnS-based solar cell. Materials Research Society Symposia Proceedings, 2013, 1538, 145-149.	0.1	3
154	Evaluation of micrometer scale lateral fluctuations of transport properties in CIGS solar cells. Proceedings of SPIE, 2013, , .	0.8	4
155	Structural and optical properties of (In,Ga)As/GaP quantum dots and (GaAsPN/GaPN) diluted-nitride nanolayers coherently grown onto GaP and Si substrates for photonics and photovoltaics applications. , 2013, , .		0
156	Broadband light-trapping in ultra-thin nano-structured solar cells. Proceedings of SPIE, 2013, , .	0.8	9
157	Thin film microcells for concentrated applications. , 2013, , .		0
158	Using radiative transfer equation to model absorption by thin Cu(In,Ga)Se_2 solar cells with Lambertian back reflector. Optics Express, 2013, 21, 2563.	3.4	14
159	Front Matter Volume 8620. , 2013, , .		0
160	Lambertian back reflector in Cu(InGa)Se2solar cell: optical modeling and characterization. , 2013, , .		1
161	Physics of Cu(In,Ga)Se₂microcells under ultrahigh illumination intensities. Proceedings of SPIE, 2013, , .	0.8	1
162	Characterization of solar cells using electroluminescence and photoluminescence hyperspectral images. Journal of Photonics for Energy, 2012, 2, 027004.	1.3	42

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163	InGaAs/GaAsP quantum wells for hot carrier solar cells. Proceedings of SPIE, 2012, , .	0.8	25
164	Optical approaches to improve the photocurrent generation in Cu(In,Ga)Se2 solar cells with absorber thicknesses down to 0.5â€‰Î¼m. Journal of Applied Physics, 2012, 112, .	2.5	37
165	Contactless mapping of saturation currents of solar cells by photoluminescence. Applied Physics Letters, 2012, 100, .	3.3	72
166	Front Matter: Volume 8256. , 2012, , .		1
167	Trackfree planar solar concentrator system. Proceedings of SPIE, 2012, , .	0.8	3
168	Cu(In,Ga)Se2 photovoltaic microcells for high efficiency with reduced material usage. Proceedings of SPIE, 2012, , .	0.8	2
169	Characterization of solar cells using electroluminescence and photoluminescence hyperspectral images. Proceedings of SPIE, 2012, , .	0.8	6
170	Hot Carrier Solar Cells: Controlling Thermalization in Ultrathin Devices. IEEE Journal of Photovoltaics, 2012, 2, 506-511.	2.5	19
171	Thermalisation rate study of GaSb-based heterostructures by continuous wave photoluminescence and their potential as hot carrier solar cell absorbers. Energy and Environmental Science, 2012, 5, 6225.	30.8	94
172	Mo/Cu(In, Ga)Se2 back interface chemical and optical properties for ultrathin CIGSe solar cells. Applied Surface Science, 2012, 258, 3058-3061.	6.1	21
173	Toward high efficiency ultra-thin CIGSe based solar cells using light management techniques. , 2012, , .		4
174	Hot Carrier cells: an example of Third Generation photovoltaics. Proceedings of SPIE, 2012, , .	0.8	4
175	Plasmonic enhancement of up-conversion in ultrathin layers. Proceedings of SPIE, 2012, , .	0.8	3
176	Insights on the influence of surface roughness on photovoltaic properties of state of the art copper indium gallium diselenide thin films solar cells. Journal of Applied Physics, 2012, 111, .	2.5	38
177	Towards ultrathin copper indium gallium diselenide solar cells: proof of concept study by chemical etching and gold back contact engineering. Progress in Photovoltaics: Research and Applications, 2012, 20, 582-587.	8.1	71
178	Solar Cells solar cell : Very High Efficiencies Approaches solar cell very high efficiencies approaches. , 2012, , 9412-9431.		0
179	Resistive and thermal scale effects for Cu(In, Ga)Se2 polycrystalline thin film microcells under concentration. Energy and Environmental Science, 2011, 4, 4972.	30.8	41
180	Physics of Cu(In, Ga)Se<inf>2</inf> solar cells in high injection regime. , 2011, , .		1

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181	Microscale solar cells for high concentration on polycrystalline Cu(In,Ga)Se2 thin films. Applied Physics Letters, 2011, 98, .	3.3	41
182	Ultrathin Cu(In, Ga)Se<inf>2</inf> solar cells. , 2011, , .		0
183	Hot carrier dynamics in InGaAs/GaAsP quantum well solar cells. , 2011, , .		16
184	Upconversion of 1.54Î¼m radiation in Er³⁺doped fluoride-based materials for c-Si solar cell with improved efficiency. EPJ Photovoltaics, 2011, 2, 20601.	1.6	17
185	Investigation of the metastability behavior of CIGS based solar cells with ZnMgOâ€“Zn(S,O,OH) window-buffer layers. Thin Solid Films, 2011, 519, 7606-7610.	1.8	24
186	Measuring sheet resistance of CIGS solar cell's window layer by spatially resolved electroluminescence imaging. Thin Solid Films, 2011, 519, 7493-7496.	1.8	27
187	Thinning of CIGS solar cells: Part I: Chemical processing in acidic bromine solutions. Thin Solid Films, 2011, 519, 7207-7211.	1.8	57
188	Thinning of CIGS solar cells: Part II: Cell characterizations. Thin Solid Films, 2011, 519, 7212-7215.	1.8	75
189	Chemical deposition methods for Cd-free buffer layers in CI(G)S solar cells: Role of window layers. Thin Solid Films, 2011, 519, 7600-7605.	1.8	32
190	Hot carrier solar cells: Controlling thermalization in ultra thin devices. , 2011, , .		0
191	Hot carrier solar cells: The device that did not exist (but should). , 2011, , .		1
192	The quest for very high efficiency in Photovoltaic energy conversion. Europhysics News, 2010, 41, 19-22.	0.3	2
193	Hot carrier solar cells: Challenges and recent progress. , 2010, , .		7
194	Modelling of hot carrier solar cell absorbers. Solar Energy Materials and Solar Cells, 2010, 94, 1516-1521.	6.2	73
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