## Jean François F Guillemoles

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Nature of Photovoltaic Action in Dye-Sensitized Solar Cells. Journal of Physical Chemistry B, 2000, 104, 2053-2059.	2.6	688
2	Chalcopyrite thin film solar cells by electrodeposition. Solar Energy, 2004, 77, 725-737.	6.1	356
3	Intermediate band solar cells: Recent progress and future directions. Applied Physics Reviews, 2015, 2, 021302.	11.3	314
4	Stability Issues of Cu(In,Ga)Se2-Based Solar Cells. Journal of Physical Chemistry B, 2000, 104, 4849-4862.	2.6	235
5	Hot carrier solar cells: Principles, materials and design. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2862-2866.	2.7	192
6	Comparison of optical and electrochemical properties of anatase and brookite TiO2 synthesized by the sol–gel method. Thin Solid Films, 2002, 403-404, 312-319.	1.8	186
7	Oxygenation and air-annealing effects on the electronic properties of Cu(In,Ga)Se2 films and devices. Journal of Applied Physics, 1999, 86, 497-505.	2.5	174
8	A Theoretical Investigation of the Ground and Excited States of Selected Ru and Os Polypyridyl Molecular Dyes. Journal of Physical Chemistry A, 2002, 106, 11354-11360.	2.5	174
9	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
10	Guide for the perplexed to the Shockley–Queisser model for solar cells. Nature Photonics, 2019, 13, 501-505.	31.4	153
11	Electrochemical comparative study of titania (anatase, brookite and rutile) nanoparticles synthesized in aqueous medium. Thin Solid Films, 2004, 451-452, 86-92.	1.8	149
12	Slowing of carrier cooling in hot carrier solar cells. Thin Solid Films, 2008, 516, 6948-6953.	1.8	141
13	xmlns:mml= <sup>"</sup> http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mi>Culn</mml:mi> <mml:mo stretchy="false"&gt;(<mml:mi) (mathvariant="bold&lt;/td&gt;&lt;td&gt;" 0.784314="" 1="" 10="" 262="" 50="" etqq1="" overlock="" rgbt="" td="" tf="" tj="">S7.8</mml:mi)></mml:mo 	:mi> <mml:m 133</mml:m 	
14	Physical Review Letters, 2010, 104, 056401. One step electrodeposition of CuInSe2: Improved structural, electronic, and photovoltaic properties by annealing under high selenium pressure. Journal of Applied Physics, 1996, 79, 7293-7302.	2.5	118
15	Comparative investigation of solar cell thin film processing using nanosecond and femtosecond lasers. Journal Physics D: Applied Physics, 2006, 39, 453-460.	2.8	118
16	Hot carrier solar cells: Achievable efficiency accounting for heat losses in the absorber and through contacts. Applied Physics Letters, 2010, 97, .	3.3	117
17	High resolution XPS studies of Se chemistry of a Cu(In, Ga)Se2 surface. Applied Surface Science, 2002, 202, 8-14.	6.1	115
18	Progress on hot carrier cells. Solar Energy Materials and Solar Cells, 2009, 93, 713-719.	6.2	108

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19	Cu(In,Ga)Se2 Solar Cells: Device Stability Based on Chemical Flexibility. Advanced Materials, 1999, 11, 957-961.	21.0	103
20	Quantification of spatial inhomogeneity in perovskite solar cells by hyperspectral luminescence imaging. Energy and Environmental Science, 2016, 9, 2286-2294.	30.8	102
21	Interface redox engineering of Cu(In,Ga)Se 2 – based solar cells: oxygen, sodium, and chemical bath effects. Thin Solid Films, 2000, 361-362, 353-359.	1.8	96
22	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
23	Metal Nanogrid for Broadband Multiresonant Light-Harvesting in Ultrathin GaAs Layers. ACS Photonics, 2014, 1, 878-884.	6.6	90
24	Simultaneous Control of Surface Potential and Wetting of Solids with Chemisorbed Multifunctional Ligands. Journal of the American Chemical Society, 1997, 119, 5720-5728.	13.7	89
25	Cu(In,Ga)(S,Se)2 solar cells and modules by electrodeposition. Thin Solid Films, 2005, 480-481, 526-531.	1.8	89
26	Quantitative experimental assessment of hot carrier-enhanced solar cells at room temperature. Nature Energy, 2018, 3, 236-242.	39.5	86
27	Ab initio investigation of potential indium and gallium free chalcopyrite compounds for photovoltaic application. Journal of Physics and Chemistry of Solids, 2005, 66, 2019-2023.	4.0	85
28	One-step electrodeposited CuInSe2 thin films studied by Raman spectroscopy. Thin Solid Films, 2007, 515, 5909-5912.	1.8	79
29	Selective ablation of thin films with short and ultrashort laser pulses. Applied Surface Science, 2006, 252, 4814-4818.	6.1	77
30	Thinning of CIGS solar cells: Part II: Cell characterizations. Thin Solid Films, 2011, 519, 7212-7215.	1.8	75
31	Ultrathin GaAs Solar Cells With a Silver Back Mirror. IEEE Journal of Photovoltaics, 2015, 5, 565-570.	2.5	74
32	Modelling of hot carrier solar cell absorbers. Solar Energy Materials and Solar Cells, 2010, 94, 1516-1521.	6.2	73
33	Contactless mapping of saturation currents of solar cells by photoluminescence. Applied Physics Letters, 2012, 100, .	3.3	72
34	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
35	Defects in Cu(In, Ga) Se2 semiconductors and their role in the device performance of thin-film solar cells. Progress in Photovoltaics: Research and Applications, 1997, 5, 121-130.	8.1	69
36	Imaging and quantifying non-radiative losses at 23% efficient inverted perovskite solar cells interfaces. Nature Communications, 2022, 13, .	12.8	58

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37	Thinning of CIGS solar cells: Part I: Chemical processing in acidic bromine solutions. Thin Solid Films, 2011, 519, 7207-7211.	1.8	57
38	Experimental evidence of hot carriers solar cell operation in multi-quantum wells heterostructures. Applied Physics Letters, 2015, 106, .	3.3	55
39	Wurtzite silicon as a potential absorber in photovoltaics: Tailoring the optical absorption by applying strain. Physical Review B, 2015, 92, .	3.2	54
40	Light Trapping in Ultrathin CIGS Solar Cells with Nanostructured Back Mirrors. IEEE Journal of Photovoltaics, 2017, 7, 1433-1441.	2.5	54
41	Stability of Cu(In,Ga)Se 2 solar cells: a thermodynamic approach. Thin Solid Films, 2000, 361-362, 338-345.	1.8	53
42	Ab initio calculation of intrinsic point defects in CulnSe2. Journal of Physics and Chemistry of Solids, 2003, 64, 1657-1663.	4.0	52
43	The puzzle of Cu(In,Ga)Se2 (CIGS) solar cells stability. Thin Solid Films, 2002, 403-404, 405-409.	1.8	49
44	Ferromagnetic Compounds for High Efficiency Photovoltaic Conversion: The Case of AlP:Cr. Physical Review Letters, 2009, 102, 227204.	7.8	48
45	Toward microscale Cu(In,Ga)Se2 solar cells for efficient conversion and optimized material usage: Theoretical evaluation. Journal of Applied Physics, 2010, 108, 034907.	2.5	42
46	Characterization of solar cells using electroluminescence and photoluminescence hyperspectral images. Journal of Photonics for Energy, 2012, 2, 027004.	1.3	42
47	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
48	Microscale solar cells for high concentration on polycrystalline Cu(In,Ga)Se2 thin films. Applied Physics Letters, 2011, 98, .	3.3	41
49	Solar cells with improved efficiency based on electrodeposited copper indium diselenide thin films. Advanced Materials, 1994, 6, 379-381.	21.0	39
50	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
51	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
52	Recrystallization of electrodeposited copper indium diselenide thin films in an atmosphere of elemental selenium. Advanced Materials, 1994, 6, 376-379.	21.0	37
53	Chemical elaboration of well defined Cu(In,Ga)Se2 surfaces after aqueous oxidation etching. Journal of Physics and Chemistry of Solids, 2003, 64, 1791-1796.	4.0	37
54	Optical approaches to improve the photocurrent generation in Cu(In,Ga)Se2 solar cells with absorber thicknesses down to 0.5 <i>μ</i> m. Journal of Applied Physics, 2012, 112, .	2.5	37

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55	Impact of oxygen concentration during the deposition of window layers on lowering the metastability effects in Cu(In,Ga)Se <sub>2</sub> /CBD Zn(S,O) based solar cell. Progress in Photovoltaics: Research and Applications, 2015, 23, 1820-1827.	8.1	37
56	Quantitative luminescence mapping of Cu(In, Ga)Se <sub>2</sub> thinâ€film solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1305-1312.	8.1	35
57	Determination of n-Type Doping Level in Single GaAs Nanowires by Cathodoluminescence. Nano Letters, 2017, 17, 6667-6675.	9.1	35
58	Absorption enhancement through Fabry-Pérot resonant modes in a 430 nm thick InGaAs/GaAsP multiple quantum wells solar cell. Applied Physics Letters, 2015, 106, .	3.3	33
59	Wet treatment based interface engineering for high efficiency Cu(In,Ga)Se 2 solar cells. Thin Solid Films, 2000, 361-362, 187-192.	1.8	32
60	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
61	Cu(In, Ga)Se2 microcells: High efficiency and low material consumption. Journal of Renewable and Sustainable Energy, 2013, 5, .	2.0	31
62	Admittance spectroscopy of cadmium free CIGS solar cells heterointerfaces. Thin Solid Films, 2006, 511-512, 320-324.	1.8	30
63	First Stages of CuInSe[sub 2] Electrodeposition from Cu(II)-In(III)-Se(IV) Acidic Solutions on Polycrystalline Mo Films. Journal of the Electrochemical Society, 2008, 155, D141.	2.9	29
64	Copper diffusion in copper sulfide: a systematic study. Ionics, 1998, 4, 364-371.	2.4	28
65	Fe-dopedCuInSe2: Anab initiostudy of magnetic defects in a photovoltaic material. Physical Review B, 2005, 71, .	3.2	28
66	Impedance measurements of nanoporosity in electrodeposited ZnO films for DSSC. Electrochemistry Communications, 2010, 12, 697-699.	4.7	28
67	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
68	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
69	New insights in the electrodeposition mechanism of CuInSe2thin films for solar cell applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3445-3448.	0.8	26
70	Design of a lattice-matched III–V–N/Si photovoltaic tandem cell monolithically integrated on silicon substrate. Optical and Quantum Electronics, 2014, 46, 1397-1403.	3.3	26
71	InGaAs/GaAsP quantum wells for hot carrier solar cells. Proceedings of SPIE, 2012, , .	0.8	25
72	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

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73	Investigation of the metastability behavior of CIGS based solar cells with ZnMgO–Zn(S,O,OH) window-buffer layers. Thin Solid Films, 2011, 519, 7606-7610.	1.8	24
74	Ga gradients in Cu(In,Ga)Se2: Formation, characterization, and consequences. Journal of Renewable and Sustainable Energy, 2014, 6, .	2.0	24
75	Spatial Inhomogeneity Analysis of Cesium-Rich Wrinkles in Triple-Cation Perovskite. Journal of Physical Chemistry C, 2018, 122, 23345-23351.	3.1	24
76	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
77	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
78	Electrodeposition of Epitaxial ZnSe Films on InP and GaAs from an Aqueous Zinc Sulfate–Selenosulfate Solution. Advanced Materials, 2002, 14, 1286-1290.	21.0	21
79	Electrochemical Deposition of ZnSe from Dimethyl Sulfoxide Solution and Characterization of Epitaxial Growth. Journal of Physical Chemistry B, 2004, 108, 13191-13199.	2.6	21
80	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
81	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
82	Two carrier temperatures non-equilibrium generalized Planck law for semiconductors. Physica B: Condensed Matter, 2016, 498, 7-14.	2.7	20
83	Redox and solution chemistry of the SeSO32â^'–Zn–EDTA2â^' system and electrodeposition behavior of ZnSe from alkaline solutions. Journal of Electroanalytical Chemistry, 2003, 558, 9-17.	3.8	19
84	Hot Carrier Solar Cells: Controlling Thermalization in Ultrathin Devices. IEEE Journal of Photovoltaics, 2012, 2, 506-511.	2.5	19
85	GaSe Formation at the Cu(In,Ga)Se <sub>2</sub> /Mo Interface–A Novel Approach for Flexible Solar Cells by Easy Mechanical Liftâ€Off. Advanced Materials Interfaces, 2014, 1, 1400044.	3.7	19
86	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
87	Hot carrier relaxation and inhibited thermalization in superlattice heterostructures: The potential for phonon management. Applied Physics Letters, 2021, 118, .	3.3	19
88	Thermodynamic Stability of p/n Junctions. The Journal of Physical Chemistry, 1995, 99, 14486-14493.	2.9	18
89	Fast electrodeposition route for cadmium telluride solar cells. Thin Solid Films, 2000, 361-362, 118-122.	1.8	18
90	Study of a micro-concentrated photovoltaic system based on Cu(In,Ga)Se_2 microcells array. Applied Optics, 2016, 55, 6656.	2.1	18

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91	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
92	Upconversion of 1.54 <i>î¼</i> m radiation in Er <sup>3+</sup> doped fluoride-based materials for c-Si solar cell with improved efficiency. EPJ Photovoltaics, 2011, 2, 20601.	1.6	17
93	Theoretical study of optical properties of anti phase domains in GaP. Journal of Applied Physics, 2014, 115, .	2.5	17
94	Enhancement of Copper Indium Gallium Selenide Solar Cells Using Europium Complex as Photon Downshifter. Advanced Optical Materials, 2016, 4, 1846-1853.	7.3	17
95	Identification of surface and volume hot-carrier thermalization mechanisms in ultrathin GaAs layers. Journal of Applied Physics, 2020, 128, 193102.	2.5	17
96	Hot carrier dynamics in InGaAs/GaAsP quantum well solar cells. , 2011, , .		16
97	Review of the mechanisms for the phonon bottleneck effect in Ill–V semiconductors and their application for efficient hot carrier solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 581-596.	8.1	16
98	Indium-Based Interface Chemical Engineering by Electrochemistry and Atomic Layer Deposition for Copper Indium Diselenide Solar Cells. Japanese Journal of Applied Physics, 2001, 40, 6065-6068.	1.5	15
99	Studies of buried interfaces Cu(In,Ga)Se2/CdS XPS and electrical investigations. Thin Solid Films, 2003, 431-432, 289-295.	1.8	15
100	Dielectric function of zinc oxide thin films in a broad spectral range. Thin Solid Films, 2014, 571, 593-596.	1.8	15
101	Cu(In,Ga)Se 2 mesa diodes for the study of edge recombination. Thin Solid Films, 2015, 582, 258-262.	1.8	15
102	Generalized Reciprocity Relations in Solar Cells with Voltage-Dependent Carrier Collection: Application to <i>p</i> - <i>i</i> - <i>n</i> Junction Devices. Physical Review Applied, 2019, 11, .	3.8	15
103	XPS and electrical studies of buried interfaces in Cu(In,Ga)Se2 solar cells. Thin Solid Films, 2002, 403-404, 425-431.	1.8	14
104	Thermoelectric field effects in low-dimensional structure solar cells. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 101-106.	2.7	14
105	A theoretical investigation of the dye-redox mediator interaction in dye-sensitized photovoltaic cells. Chemical Physics Letters, 2003, 371, 378-385.	2.6	14
106	Towards Better Understanding of High Efficiency Cd-free CIGS Solar Cells Using Atomic Layer Deposited Indium Sulfide Buffer Layers. Materials Research Society Symposia Proceedings, 2003, 763, 991.	0.1	14
107	Electrochemical Cementation Phenomena on Polycrystalline Molybdenum Thin Films from Cu(II)–In(III)–Se(IV) Acidic Solutions. Journal of the Electrochemical Society, 2007, 154, D383.	2.9	14
108	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

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109	Optical Imaging of Light-Induced Thermopower in Semiconductors. Physical Review Applied, 2016, 5, .	3.8	14
110	Solvent Effect on ZnO Thin Films Prepared by Spray Pyrolysis. , 1991, , 609-612.		13
111	Influence of the Composition on the Copper Diffusion in Copper Sulfides Study by Impedance Spectroscopy. Journal of the Electrochemical Society, 1999, 146, 4666-4671.	2.9	13
112	NMR studies of CuInS2 and CuInSe2 crystals grown by the Bridgman method. Solid State Communications, 2000, 113, 527-532.	1.9	13
113	A Novel Approach for the Electrodeposition of Epitaxial Films of ZnSe on (111) and (100) InP Using Dimethylsulfoxide as a Solvent. Electrochemical and Solid-State Letters, 2004, 7, C75.	2.2	13
114	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
115	Electron spin resonance studies of Cu(In,Ga)Se2 thin films. Thin Solid Films, 2003, 431-432, 167-171.	1.8	12
116	Solution Processing Route to High Efficiency Culn(S,Se) <sub>2</sub> Solar Cells. Journal of Nano Research, 2009, 4, 79-89.	0.8	12
117	Phonon lifetime in SiSn and its suitability for hot-carrier solar cells. Applied Physics Letters, 2014, 104,	3.3	12
118	Experimental Demonstration of Optically Determined Solar Cell Current Transport Efficiency Map. IEEE Journal of Photovoltaics, 2016, 6, 528-531.	2.5	12
119	Impact of Electron–Phonon Scattering on Optical Properties of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Hybrid Perovskite Material. ACS Omega, 2019, 4, 21487-21493.	3.5	12
120	Erbium-doped yttria thin films prepared by metal organic decomposition for up-conversion. Thin Solid Films, 2013, 537, 42-48.	1.8	11
121	Revisiting the interpretation of biased luminescence: Effects on Cu(In,Ga)Se2 photovoltaic heterostructures. Journal of Applied Physics, 2014, 116, 064504.	2.5	11
122	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
123	Comparison of optical and electrical gap of electrodeposited CuIn(S,Se)2 determined by spectral photo response and l–V–T measurements. Thin Solid Films, 2007, 515, 6233-6237.	1.8	10
124	CHAPTER 12. Hot Carrier Solar Cells. RSC Energy and Environment Series, 0, , 379-424.	0.5	10
125	Modeling and Fabrication of Luminescent Solar Concentrators towards Photovoltaic Devices. Energy Procedia, 2014, 60, 173-180.	1.8	10
126	On the origin of the spatial inhomogeneity of photoluminescence in thin-film CIGS solar devices. Applied Physics Letters, 2016, 109, .	3.3	10

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127	EuIII -Based Nanolayers as Highly Efficient Downshifters for CIGS Solar Cells. European Journal of Inorganic Chemistry, 2017, 2017, 5318-5326.	2.0	10
128	Influence of Hot-Carrier Extraction from a Photovoltaic Absorber: An Evaporative Approach. Physical Review Applied, 2017, 8, .	3.8	10
129	Cu titration in CuInSe2: exploration of the ternary phase diagram along new tie-lines. Ionics, 1997, 3, 149-154.	2.4	9
130	Efficient Cu(In, Ga)Se <sub>2</sub> Based Solar Cells Prepared by Electrodeposition. Materials Research Society Symposia Proceedings, 2003, 763, 691.	0.1	9
131	Increasing solar cell efficiencies based on Cu(In,Ga)Se2 after a specific chemical and oxidant treatment. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2551-2554.	0.8	9
132	Interfacial chemistry control in thin film solar cells based on electrodeposited CuIn(S,Se)2. Thin Solid Films, 2007, 515, 6123-6126.	1.8	9
133	Two step wet surface treatment influence on the electronic properties of Cu(In,Ga)Se2 solar cells. Thin Solid Films, 2009, 517, 2550-2553.	1.8	9
134	Broadband light-trapping in ultra-thin nano-structured solar cells. Proceedings of SPIE, 2013, , .	0.8	9
135	Monolithic Integration of Diluted-Nitride III–V-N Compounds on Silicon Substrates: Toward the III–V/Si Concentrated Photovoltaics. Energy Harvesting and Systems, 2014, 1, .	2.7	9
136	Imaging Electron, Hole, and Ion Transport in Halide Perovskite. Journal of Physical Chemistry C, 2020, 124, 11741-11748.	3.1	9
137	Backside light management of 4-terminal bifacial perovskite/silicon tandem PV modules evaluated under realistic conditions. Optics Express, 2020, 28, 37487.	3.4	9
138	Ion Potential Diagrams for Electrochromic Devices. Journal of the Electrochemical Society, 1998, 145, 4212-4218.	2.9	8
139	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
140	Electroluminescence-based quality characterization of quantum wells for solar cell applications. Journal of Crystal Growth, 2017, 464, 94-99.	1.5	8
141	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
142	63Cu-NMR studies of crystalline and thin-film CuInSe2. Thin Solid Films, 2001, 387, 235-238.	1.8	7
143	Copper indium diselenide solar cells prepared by electrodeposition. , 0, , .		7
144	Cadmium sulfide/indium phosphide as a model system for understanding indium related chemical reactivity at CIGS/CdS interface: XPS and ex situ luminescence investigations. Thin Solid Films, 2005, 480-481, 230-235.	1.8	7

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145	Hot carrier solar cells: Challenges and recent progress. , 2010, , .		7
146	Quantitative optical measurement of chemical potentials in intermediate band solar cells. Journal of Photonics for Energy, 2015, 5, 053092.	1.3	7
147	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
148	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
149	Reply to â€~Ideal solar cell efficiencies'. Nature Photonics, 2021, 15, 165-166.	31.4	7
150	ESR and NMR studies of CulnSe2 crystals having controlled component activities. Journal of Physics and Chemistry of Solids, 2003, 64, 1633-1639.	4.0	6
151	Challenging the Electrodeposition of Multinary Semiconductor Compounds: Case of CulnSe2. ECS Transactions, 2007, 6, 577-585.	0.5	6
152	Towards improved photovoltaic conversion using dilute magnetic semiconductors (abstract only). Journal of Physics Condensed Matter, 2008, 20, 064226.	1.8	6
153	Characterization of solar cells using electroluminescence and photoluminescence hyperspectral images. Proceedings of SPIE, 2012, , .	0.8	6
154	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
155	200nm-Thick GaAs solar cells with a nanostructured silver mirror. , 2016, , .		6
156	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
157	Multiscale in modelling and validation for solar photovoltaics. EPJ Photovoltaics, 2018, 9, 10.	1.6	6
158	An Electronic Ratchet Is Required in Nanostructured Intermediate-Band Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 1553-1559.	2.5	6
159	Ultrathin mono-resonant nano photovoltaic device for broadband solar conversion. Optics Express, 2018, 26, A806.	3.4	6
160	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
161	Thin-film microcells: a new generation of photovoltaic devices. SPIE Newsroom, 0, , .	0.1	6
162	Physical Properties of Electrodeposited Copper Indium Diselenide Thin Films and Junction Realization. Solid State Phenomena, 1994, 37-38, 527-534.	0.3	5

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163	Qualitative modelling of mixed ionic/electronic devices with ion potential level diagrams. Ionics, 1996, 2, 143-154.	2.4	5
164	Evidence for thermodynamically stable p/n junction, formed by Ag doping of (Hg,Cd)Te. Journal of Crystal Growth, 1996, 161, 90-93.	1.5	5
165	Phase and Interface Stability Issues in Chalcopyrite-Based Thin Film Solar Cells. Materials Research Society Symposia Proceedings, 1997, 485, 127.	0.1	5
166	Micro solar concentrators: Design and fabrication for microcells arrays. AIP Conference Proceedings, 2015, , .	0.4	5
167	From Mono- to Polynuclear Coordination Complexes with a 2,2′-Bipyrimidine-4,4′-dicarboxylate Ligand. Inorganic Chemistry, 2021, 60, 8304-8314.	4.0	5
168	Dynamic temperature effects in perovskite solar cells and energy yield. Sustainable Energy and Fuels, 0, , .	4.9	5
169	Cu(In,Ga)Se2 Solar Cells: Device Stability Based on Chemical Flexibility. Advanced Materials, 1999, 11, 957-961.	21.0	5
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