Antonio Marti

List of Publications by Year
in descending order

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211	10,965	46	100
papers	citations	h-index (50170)	g-index (32761)
216	216	216	5028
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Increasing the Efficiency of Ideal Solar Cells by Photon Induced Transitions at Intermediate Levels. Physical Review Letters, 1997, 78, 5014-5017.	2.9	2,207
2	Understanding intermediate-band solar cells. Nature Photonics, 2012, 6, 146-152.	15.6	576
3	Production of Photocurrent due to Intermediate-to-Conduction-Band Transitions: A Demonstration of a Key Operating Principle of the Intermediate-Band Solar Cell. Physical Review Letters, 2006, 97, 247701.	2.9	498
4	Limiting efficiencies for photovoltaic energy conversion in multigap systems. Solar Energy Materials and Solar Cells, 1996, 43, 203-222.	3.0	406
5	The Intermediate Band Solar Cell: Progress Toward the Realization of an Attractive Concept. Advanced Materials, 2010, 22, 160-174.	11.1	297
6	Intermediate bands versus levels in non-radiative recombination. Physica B: Condensed Matter, 2006, 382, 320-327.	1.3	278
7	Absolute limiting efficiencies for photovoltaic energy conversion. Solar Energy Materials and Solar Cells, 1994, 33, 213-240.	3.0	277
8	A metallic intermediate band high efficiency solar cell. Progress in Photovoltaics: Research and Applications, 2001, 9, 73-86.	4.4	256
9	Solar Cells Based on Quantum Dots: Multiple Exciton Generation and Intermediate Bands. MRS Bulletin, 2007, 32, 236-241.	1.7	215
10	Emitter degradation in quantum dot intermediate band solar cells. Applied Physics Letters, 2007, 90, 233510.	1.5	210
11	Partial filling of a quantum dot intermediate band for solar cells. IEEE Transactions on Electron Devices, 2001, 48, 2394-2399.	1.6	201
12	General equivalent circuit for intermediate band devices: Potentials, currents and electroluminescence. Journal of Applied Physics, 2004, 96, 903-909.	1.1	199
13	Experimental analysis of the quasi-Fermi level split in quantum dot intermediate-band solar cells. Applied Physics Letters, 2005, 87, 083505.	1.5	189
14	Photon recycling and Shockleyâ€™s diode equation. Journal of Applied Physics, 1997, 82, 4067-4075.	1.1	186
15	Novel semiconductor solar cell structures: The quantum dot intermediate band solar cell. Thin Solid Films, 2006, 511-512, 638-644.	0.8	170
16	Reducing carrier escape in the InAs/GaAs quantum dot intermediate band solar cell. Journal of Applied Physics, 2010, 108, .	1.1	156
17	Quasi-drift diffusion model for the quantum dot intermediate band solar cell. IEEE Transactions on Electron Devices, 2002, 49, 1632-1639.	1.6	153
18	Thermophotovoltaic energy in space applications: Review and future potential. Solar Energy Materials and Solar Cells, 2017, 161, 285-296.	3.0	146

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19	Operation of the intermediate band solar cell under nonideal space charge region conditions and half filling of the intermediate band. Journal of Applied Physics, 2006, 99, 094503.	1.1	138
20	Lifetime recovery in ultrahighly titanium-doped silicon for the implementation of an intermediate band material. Applied Physics Letters, 2009, 94, .	1.5	119
21	Influence of the Overlap Between the Absorption Coefficients on the Efficiency of the Intermediate Band Solar Cell. IEEE Transactions on Electron Devices, 2004, 51, 1002-1007.	1.6	113
22	Elements of the design and analysis of quantum-dot intermediate band solar cells. Thin Solid Films, 2008, 516, 6716-6722.	0.8	106
23	Ultra high temperature latent heat energy storage and thermophotovoltaic energy conversion. Energy, 2016, 107, 542-549.	4.5	103
24	Evaluation of the efficiency potential of intermediate band solar cells based on thin-film chalcopyrite materials. Journal of Applied Physics, 2008, 103, .	1.1	96
25	Review of Experimental Results Related to the Operation of Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 736-748.	1.5	85
26	Thermodynamic consistency of sub-bandgap absorbing solar cell proposals. IEEE Transactions on Electron Devices, 2001, 48, 2118-2124.	1.6	83
27	Present status of intermediate band solar cell research. Thin Solid Films, 2004, 451-452, 593-599.	0.8	77
28	Voltage recovery in intermediate band solar cells. Solar Energy Materials and Solar Cells, 2012, 98, 240-244.	3.0	77
29	Plasmonic light enhancement in the near-field of metallic nanospheroids for application in intermediate band solar cells. Applied Physics Letters, 2009, 95, .	1.5	73
30	On the Partial Filling of the Intermediate Band in IB Solar Cells. IEEE Transactions on Electron Devices, 2010, 57, 1201-1207.	1.6	73
31	Design constraints of the quantum-dot intermediate band solar cell. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 150-157.	1.3	70
32	Towards the intermediate band. Nature Photonics, 2011, 5, 137-138.	15.6	69
33	Quantum dot intermediate band solar cell. , 0, , .		68
34	Intermediate Band Solar Cell with Extreme Broadband Spectrum Quantum Efficiency. Physical Review Letters, 2015, 114, 157701.	2.9	62
35	III-V compound semiconductor screening for implementing quantum dot intermediate band solar cells. Journal of Applied Physics, 2011, 109, 014313.	1.1	58
36	Impact-ionization-assisted intermediate band solar cell. IEEE Transactions on Electron Devices, 2003, 50, 447-454.	1.6	56

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37	Upper limits to absorption enhancement in thick solar cells using diffraction gratings. Progress in Photovoltaics: Research and Applications, 2011, 19, 676-687.	4.4	56
38	Electronâ€“phonon energy transfer in hot-carrier solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 287-296.	3.0	55
39	Self-organized colloidal quantum dots and metal nanoparticles for plasmon-enhanced intermediate-band solar cells. Nanotechnology, 2013, 24, 345402.	1.3	54
40	Light concentration in the near-field of dielectric spheroidal particles with mesoscopic sizes. Optics Express, 2011, 19, 16207.	1.7	53
41	Nanoimprinted diffraction gratings for crystalline silicon solar cells: implementation, characterization and simulation. Optics Express, 2013, 21, A295.	1.7	53
42	Limiting efficiency of coupled thermal and photovoltaic converters. Solar Energy Materials and Solar Cells, 1999, 58, 147-165.	3.0	52
43	A numerical study of Bi-periodic binary diffraction gratings for solar cell applications. Solar Energy Materials and Solar Cells, 2011, 95, 3527-3535.	3.0	51
44	Wide-Bandgap InAs/InGaP Quantum-Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 840-845.	1.5	51
45	Intermediate band mobility in heavily titanium-doped silicon layers. Solar Energy Materials and Solar Cells, 2009, 93, 1668-1673.	3.0	49
46	Entropy production in photovoltaic conversion. Physical Review B, 1997, 55, 6994-6999.	1.1	48
47	Light intensity enhancement by diffracting structures in solar cells. Journal of Applied Physics, 2008, 104, 034502.	1.1	47
48	Three-terminal heterojunction bipolar transistor solar cell for high-efficiency photovoltaic conversion. Nature Communications, 2015, 6, 6902.	5.8	47
49	Carrier recombination effects in strain compensated quantum dot stacks embedded in solar cells. Applied Physics Letters, 2008, 93, 123114.	1.5	46
50	Intraband absorption for normal illumination in quantum dot intermediate band solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 2032-2035.	3.0	46
51	Multiple levels in intermediate band solar cells. Applied Physics Letters, 2010, 96, .	1.5	46
52	New Hamiltonian for a better understanding of the quantum dot intermediate band solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 2095-2101.	3.0	45
53	Type II broken band heterostructure quantum dot to obtain a material for the intermediate band solar cell. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 162-165.	1.3	43
54	Experimental Analysis of the Operation of Quantum Dot Intermediate Band Solar Cells. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 319-322.	1.1	42

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55	The feasibility of high-efficiency InAs/GaAs quantum dot intermediate band solar cells. Solar Energy Materials and Solar Cells, 2014, 130, 225-233.	3.0	42
56	Understanding the operation of quantum dot intermediate band solar cells. Journal of Applied Physics, 2012, 111, 044502.	1.1	41
57	FULLSPECTRUM: a new PV wave making more efficient use of the solar spectrum. Solar Energy Materials and Solar Cells, 2005, 87, 467-479.	3.0	40
58	Detailed modelling of photon recycling: application to GaAs solar cells. Solar Energy Materials and Solar Cells, 2006, 90, 1068-1088.	3.0	40
59	Two-layer Hall effect model for intermediate band Ti-implanted silicon. Journal of Applied Physics, 2011, 109, .	1.1	40
60	Potential of Mn doped In1â^'xGaxN for implementing intermediate band solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 641-644.	3.0	39
61	Application of the photoreflectance technique to the characterization of quantum dot intermediate band materials for solar cells. Thin Solid Films, 2008, 516, 6943-6947.	0.8	38
62	Intermediate band solar cells: Present and future. Progress in Photovoltaics: Research and Applications, 2021, 29, 705-713.	4.4	38
63	Low temperature characterization of the photocurrent produced by two-photon transitions in a quantum dot intermediate band solar cell. Thin Solid Films, 2008, 516, 6919-6923.	0.8	36
64	Near-field scattering by dielectric spheroidal particles with sizes on the order of the illuminating wavelength. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1221.	0.9	36
65	Increasing the quantum efficiency of InAs/GaAs QD arrays for solar cells grown by MOVPE without using strainâ€balance technology. Progress in Photovoltaics: Research and Applications, 2016, 24, 1261-1271.	4.4	36
66	Photovoltaic Anodes for Enhanced Thermionic Energy Conversion. ACS Energy Letters, 2020, 5, 1364-1370.	8.8	35
67	Analysis of the intermediate-band absorption properties of type-II GaSb/GaAs quantum-dot photovoltaics. Physical Review B, 2017, 96, .	1.1	32
68	Light absorption in the near field around surface plasmon polaritons. Journal of Applied Physics, 2008, 104, .	1.1	31
69	Some advantages of intermediate band solar cells based on type II quantum dots. Applied Physics Letters, 2013, 103, .	1.5	30
70	Advances in quantum dot intermediate band solar cells. , 2010, , .		29
71	Radiative thermal escape in intermediate band solar cells. AIP Advances, 2011, 1, .	0.6	29
72	The influence of quantum dot size on the sub-bandgap intraband photocurrent in intermediate band solar cells. Applied Physics Letters, 2012, 101, 133909.	1.5	29

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73	AMADEUS: Next generation materials and solid state devices for ultra high temperature energy storage and conversion. AIP Conference Proceedings, 2018, , .	0.3	29
74	On inhibiting Auger intraband relaxation in InAs/GaAs quantum dot intermediate band solar cells. Applied Physics Letters, 2011, 99, .	1.5	28
75	Thermodynamics of solar energy conversion in novel structures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 107-114.	1.3	27
76	Thin-film intermediate band chalcopyrite solar cells. Thin Solid Films, 2009, 517, 2452-2454.	0.8	27
77	Analyses of the intermediate energy levels in ZnTe:O alloys. Applied Physics Letters, 2010, 96, .	1.5	27
78	Symmetry considerations in the empirical k.p Hamiltonian for the study of intermediate band solar cells. Solar Energy Materials and Solar Cells, 2012, 103, 171-183.	3.0	26
79	InAs/AlGaAs quantum dot intermediate band solar cells with enlarged sub-bandgaps. , 2012, , .		25
80	Demonstration of the operation principles of intermediate band solar cells at room temperature. Solar Energy Materials and Solar Cells, 2016, 149, 15-18.	3.0	25
81	Photoreflectance analysis of a GaInP/GaInAs/Ge multijunction solar cell. Applied Physics Letters, 2010, 97, .	1.5	24
82	Understanding experimental characterization of intermediate band solar cells. Journal of Materials Chemistry, 2012, 22, 22832.	6.7	24
83	The Quantum Dot Intermediate Band Solar Cell. Springer Series in Optical Sciences, 2012, , 251-275.	0.5	24
84	Interband absorption of photons by extended states in intermediate band solar cells. Solar Energy Materials and Solar Cells, 2013, 115, 138-144.	3.0	24
85	Numerical modeling of intermediate band solar cells. Semiconductor Science and Technology, 2011, 26, 014031.	1.0	23
86	Thinâ€film intermediate band photovoltaics: advanced concepts for chalcopyrite solar cells. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1021-1025.	0.8	22
87	Extreme voltage recovery in GaAs:Ti intermediate band solar cells. Solar Energy Materials and Solar Cells, 2013, 108, 175-179.	3.0	22
88	Intermediate Band Solar Cells (IBSC) Using Nanotechnology. , 2006, , 539-566.		21
89	Realistic Detailed Balance Study of the Quantum Efficiency of Quantum Dot Solar Cells. Advanced Functional Materials, 2014, 24, 339-345.	7.8	21
90	Three-Bandgap Absolute Quantum Efficiency in GaSb/GaAs Quantum Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 508-512.	1.5	21

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91	Molten silicon storage of concentrated solar power with integrated thermophotovoltaic energy conversion. AIP Conference Proceedings, 2018, , .	0.3	21
92	Six not-so-easy pieces in intermediate band solar cell research. Journal of Photonics for Energy, 2013, 3, 031299.	0.8	20
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109	Room temperature photo-response of titanium supersaturated silicon at energies over the bandgap. Journal Physics D: Applied Physics, 2016, 49, 055103.	1.3	14
110	Theoretical Limits of Photovoltaic Conversion. , 2005, , 113-151.		13
111	Interband optical absorption in quantum well solarcells. Solar Energy Materials and Solar Cells, 2013, 112, 20-26.	3.0	13
112	Quantum Dot Parameters Determination From Quantum-Efficiency Measurements. IEEE Journal of Photovoltaics, 2015, 5, 1074-1078.	1.5	13
113	Solar Driven Energy Conversion Applications Based on 3C-SiC. Materials Science Forum, 0, 858, 1028-1031.	0.3	13
114	Impact of the Spectrum in the Annual Energy Production of Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1479-1484.	1.5	13
115	Novel heterojunction bipolar transistor architectures for the practical implementation of high-efficiency three-terminal solar cells. Solar Energy Materials and Solar Cells, 2019, 194, 54-61.	3.0	12
116	Electroluminescence coupling in multiple quantum well diodes and solar cells. Applied Physics Letters, 1995, 66, 894-895.	1.5	11
117	Realistic performance prediction in nanostructured solar cells as a function of nanostructure dimensionality and density. Journal of Applied Physics, 2012, 112, 124518.	1.1	11
118	Electrochemical Potentials (Quasi-Fermi Levels) and the Operation of Hot-Carrier, Impact-Ionization, and Intermediate-Band Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 1298-1304.	1.5	11
119	Module interconnection for the three-terminal heterojunction bipolar transistor solar cell. AIP Conference Proceedings, 2018, , .	0.3	11
120	Demonstration of a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>G</mml:mtext><mml:mtext>aS</mml:mtext><mml:mtext>b</mml:mtext><mml:mo>/</mm Quantum Dot Intermediate Band Solar Cell Operating at Maximum Power Point. Physical Review Letters, 2020, 125, 247703.	2.9	11
121	Contribution to the Study of Sub-Bandgap Photon Absorption in Quantum Dot InAs/AlGaAs Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2021, 11, 420-428.	1.5	11
122	Hybrid thermionic-photovoltaic converter with an In0.53Ga0.47As anode. Solar Energy Materials and Solar Cells, 2022, 238, 111588.	3.0	11
123	Low-Temperature Concentrated Light Characterization Applied to Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 753-761.	1.5	10
124	A numerical study into the influence of quantum dot size on the sub-bandgap interband photocurrent in intermediate band solar cells. AIP Advances, 2013, 3, 022116.	0.6	10
125	Experimental analysis of GaAs-InGaAs MQW solar cells. , 0, , .		9
126	Six not so easy pieces in intermediate band solar cell research. , 2013, , .		9

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127	Two-photon photocurrent and voltage up-conversion in a quantum dot intermediate band solar cell. , 2014, , .		9
128	Experimental demonstration of the effect of field damping layers in quantum-dot intermediate band solar cells. Solar Energy Materials and Solar Cells, 2015, 140, 299-305.	3.0	9
129	The effect of band offsets in quantum dots. Solar Energy Materials and Solar Cells, 2016, 145, 180-184.	3.0	9
130	Diffusion of Zn into GaAs and AlGaAs from isothermal liquidâ€phase epitaxy solutions. Journal of Applied Physics, 1990, 68, 2723-2730.	1.1	8
131	Intermediate Band to Conduction Band Optical Absorption in ZnTeO. IEEE Journal of Photovoltaics, 2014, 4, 1091-1094.	1.5	8
132	Comparing the Luttingerâ€"Kohnâ€"Pikusâ€"Bir and the Empiric KÂ·P Hamiltonians in quantum dot intermediate band solar cells manufactured in zincblende semiconductors. Solar Energy Materials and Solar Cells, 2015, 141, 39-48.	3.0	8
133	Optically Triggered Infrared Photodetector. Nano Letters, 2015, 15, 224-228.	4.5	8
134	On the Potential of Silicon Intermediate Band Solar Cells. Energies, 2020, 13, 3044.	1.6	8
135	Backâ€contacted emitter GaAs solar cells. Applied Physics Letters, 1990, 56, 2633-2635.	1.5	7
136	Determination of the origin of the series resistance through electroluminescence measurements of GaAs and AlxGa1â^'xAs solar cells and LEDs. Solid-State Electronics, 1998, 42, 567-571.	0.8	7
137	Hot carrier solar cells: Challenges and recent progress. , 2010, , .		7
138	The effect of concentration on the performance of quantum dot intermediate-band solar cells. , 2012, , .		7
139	Interpretation of photovoltaic performance of n -ZnO:Al/ZnS:Cr/p-GaP solar cell. Solar Energy Materials and Solar Cells, 2017, 169, 56-60.	3.0	7
140	Demonstrating the GaInP/GaAs Three-Terminal Heterojunction Bipolar Transistor Solar Cell. , 2019, , .		7
141	Considerations for the Design of a Heterojunction Bipolar Transistor Solar Cell. IEEE Journal of Photovoltaics, 2020, 10, 2-7.	1.5	7
142	Perovskite-Si solar cell: a three-terminal heterojunction bipolar transistor architecture. , 2020, , .		7
143	Light management issues in intermediate band solar cells. Materials Research Society Symposia Proceedings, 2008, 1101, 1.	0.1	6
144	Ionization energy levels in Mn-doped InxGa1â^'xN alloys. Journal of Applied Physics, 2009, 105, 033704.	1.1	6

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145	Application of photoluminescence and electroluminescence techniques to the characterization of intermediate band solar cells. Energy Procedia, 2011, 10, 117-121.	1.8	6
146	The lead salt quantum dot intermediate band solar cell. , 2011, , .		6
147	Ultra-high temperature energy storage and conversion: A review of the AMADEUS project results. AIP Conference Proceedings, 2020, , .	0.3	6
148	Progress in threeâ€terminal heterojunction bipolar transistor solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 843-850.	4.4	6
149	Design of hemispherical cavities for LED-based illumination devices. Applied Physics B: Lasers and Optics, 2006, 82, 75-80.	1.1	5
150	IBPOWER: Intermediate band materials and solar cells for photovoltaics with high efficiency and reduced cost. , 2009, , .		5
151	Heterojunction Band Offset Limitations on Open-Circuit Voltage in <roman>p</roman>-Z<roman>n</roman>T <roman>e/n</roman>-Z<roman>n</roman>S<roman>e</roman> Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 874-877.	1.5	5
152	Empiric kÂ·p Hamiltonian calculation of the band-to-band photon absorption in semiconductors. Physica B: Condensed Matter, 2015, 456, 82-86.	1.3	5
153	Efficiency of silicon and GaAs concentrator solar cells operated inside integrating cavity receivers. Solar Cells, 1991, 31, 203-216.	0.6	4
154	Influence of size factors in the electroluminescent emission of large area GaAs IREDs. IEEE Transactions on Electron Devices, 1997, 44, 1174-1176.	1.6	4
155	Progress towards the practical implementation of the intermediate band solar cell. , 0, , .		4
156	Recent Progress in Intermediate Band Solar Cells. , 2006, , .		4
157	Limiting Efficiency of Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 1590-1595.	1.5	4
158	III-V-on-silicon triple-junction based on the heterojunction bipolar transistor solar cell concept. , 2020, , .		4
159	Inverted GaInP/GaAs Three-Terminal Heterojunction Bipolar Transistor Solar Cell. , 2020, , .		4
160	On the detailed balance limit of ideal multiple bandgap solar cells. , 0, , .		3
161	High efficiency photovoltaic conversion with spectrum splitting on GaAs and Si cells located in light confining cavities. , 0, , .		3
162	LPE-GaAs and LBSF-Si solar cells for tandem concentrator application. , 1994, , .		3

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163	FULLSPECTRUM: A new PV wave of more efficient use of the solar spectrum. Semiconductors, 2004, 38, 936-940.	0.2	3
164	Intermediate Band Solar Cells. Advances in Science and Technology, 0, , .	0.2	3
165	Thermophotovoltaic Efficiency Measurement: Design and Analysis of a Novel Experimental Method. , 2018, , .		3
166	Limiting efficiency of GaAs solar cells. , 1988, , .		2
167	Lateral absorption measurements of InAs/GaAs quantum dots stacks: Potential as intermediate band material for high efficiency solar cells. Energy Procedia, 2010, 2, 27-34.	1.8	2
168	Strain balanced quantum posts for intermediate band solar cells. , 2010, , .		2
169	Study of GaAs(Ti) thin films as candidates for IB solar cells manufacturing. , 2010, , .		2
170	Malignant conjunctival T cell lymphoma diagnosed by punch biopsy as a primary manifestation of systemic cancer. Clinical Ophthalmology, 2012, 6, 777.	0.9	2
171	Optical absorption of radio frequency sputtered GaAs(Ti) films. Journal of Materials Science: Materials in Electronics, 2013, 24, 993-998.	1.1	2
172	Intermediate band solar energy conversion in ZnTeO. , 2013, , .		2
173	A puzzling solar cell structure: An exercise to get insight on intermediate band solar cells. , 2013, , .		2
174	Four-band Hamiltonian for fast calculations in intermediate-band solar cells. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 76, 127-134.	1.3	2
175	Potential of the three-terminal heterojunction bipolar transistor solar cell for space applications. , 2019, , .		2
176	Modeling of three-terminal heterojunction bipolar transistor solar cells. , 2020, , .		2
177	Optical properties of quantum dot intermediate band solar cells. , 2011, , .		2
178	Intermediate-band solar cells. Series in Optics and Optoelectronics, 2003, , .	0.0	2
179	Back contacted emitter GaAs solar cells. , 0, , .		1
180	A Message by the Guest Editors. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 257-257.	1.1	1

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181	Comment on â€œThermodynamics limits of quantum photovoltaic cell efficiencyâ€•[Appl. Phys. Lett. 91, 223507 (2007)]. Applied Physics Letters, 2008, 92, 066101.	1.5	1
182	Intermediate band solar cells. , 2009, , .		1
183	Modelling of quantum dot solar cells for concentrator PV applications. , 2011, , .		1
184	Fundamentals of Intermediate Band Solar Cells. Springer Series in Optical Sciences, 2012, , 209-228.	0.5	1
185	Cubic and hexagonal InGaAsN dilute arsenides by unintentional homogeneous incorporation of As into InGaN. Scripta Materialia, 2012, 66, 351-354.	2.6	1
186	Intermediate Band Solar Cells. Advances in Chemical and Materials Engineering Book Series, 0, , 188-213.	0.2	1
187	Ultra-dense energy storage utilizing high melting point metallic alloys and photovoltaic cells. , 2015, , .		1
188	Impact of the spectrum, location and interconnection between solar cells in the annual production of photovoltaic energies in photovoltaic concentration systems. , 2016, , .		1
189	Optimum Single-Gap Solar Cells for Missions to Mercury. Journal of Spacecraft and Rockets, 2016, 53, 787-791.	1.3	1
190	A substrate removal processing method for IIIâ€“V solar cells compatible with low-temperature characterization. Materials Science in Semiconductor Processing, 2017, 63, 58-63.	1.9	1
191	Limiting Efficiencies of Novel Solar Cell Concepts in Space. E3S Web of Conferences, 2017, 16, 03004.	0.2	1
192	Analysis of the Thermodynamic Consistency of the Richardsonâ€“Duhmann Model for Thermionic Converters. Energies, 2020, 13, 1087.	1.6	1
193	Design study of a nanowire three-terminal heterojunction bipolar transistor solar cell. , 2021, , .		1
194	Compensated contacts for three-terminal transistor solar cells. , 2021, , .		1
195	Near-field light focusing by wavelength-sized dielectric spheroids for photovoltaic applications. , 2011, , .		1
196	Novel concepts of solar cells for ultra-high-efficiency: the Intermediate Band (IB) Solar cells and other approaches. , 2007, , .		0
197	Advances in the Research of the Intermediate Band (IB) Solar Cell. Materials Research Society Symposia Proceedings, 2007, 1031, 1.	0.1	0
198	Stress compensation by GaP monolayers for stacked InAs/GaAs quantum dots solar cells. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0

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199	Can Impurities be Beneficial to Photovoltaics?. Solid State Phenomena, 0, 156-158, 107-114.	0.3	0
200	Nano-imprinted rear-side diffraction gratings for absorption enhancement in solar cells. Proceedings of SPIE, 2012, , .	0.8	0
201	Intermediate Band Solar Cells. , 2012, , 619-639.		0
202	Intermediate band to conduction band optical absorption in ZnTe:O. , 2012, , .		0
203	Intermediate band to conduction band optical absorption in ZnTe:O. , 2013, , .		0
204	HIT intermediate-band solar cells with self-assembled colloidal quantum dots and metal nanoparticles. , 2015, , .		0
205	Notice of Removal Limiting efficiency of silicon intermediate band solar cells. , 2017, , .		0
206	Notice of Removal Three-bandgap absolute quantum efficiency in intermediate band solar cells. , 2017, , .		0
207	Non-conventional photovoltaic technology. Series in Optics and Optoelectronics, 2003, , .	0.0	0
208	Open Questions in the Implementation of the Intermediate Band (IB) Solar Cell. , 2008, , .		0
209	Analysis of the Diode Currents in Back Contacted Emitter GaAs Solar Cells. , 1991, , 794-797.		0
210	Practical implementation of open science in research projects. AIP Conference Proceedings, 2020, , .	0.3	0
211	The Intermediate Band Solar Cell. , 2021, , .		0