Antonio Marti

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	Progress in threeâ€terminal heterojunction bipolar transistor solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 843-850.	4.4	6
2	Hybrid thermionic-photovoltaic converter with an In0.53Ga0.47As anode. Solar Energy Materials and Solar Cells, 2022, 238, 111588.	3.0	11
3	A Threeâ€Terminal Hybrid Thermionicâ€Photovoltaic Energy Converter. Advanced Energy Materials, 2022, 12, .	10.2	17
4	Intermediate band solar cells: Present and future. Progress in Photovoltaics: Research and Applications, 2021, 29, 705-713.	4.4	38
5	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
6	Design study of a nanowire three-terminal heterojunction bipolar transistor solar cell. , 2021, , .		1
7	Compensated contacts for three-terminal transistor solar cells. , 2021, , .		1
8	The Intermediate Band Solar Cell. , 2021, , .		0
9	Considerations for the Design of a Heterojunction Bipolar Transistor Solar Cell. IEEE Journal of Photovoltaics, 2020, 10, 2-7.	1.5	7
10	Modeling of three-terminal heterojunction bipolar transistor solar cells. , 2020, , .		2
11	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>/</m Quantum Dot Intermediate Band Solar Cell Operating at Maximum Power Point. Physical Review Letters, 2020, 125, 247703.	2.9	11
12	On the Potential of Silicon Intermediate Band Solar Cells. Energies, 2020, 13, 3044.	1.6	8
13	Photovoltaic Anodes for Enhanced Thermionic Energy Conversion. ACS Energy Letters, 2020, 5, 1364-1370.	8.8	35
14	Analysis of the Thermodynamic Consistency of the Richardsonâ€“Duhmann Model for Thermionic Converters. Energies, 2020, 13, 1087.	1.6	1
15	Design of an indium arsenide cell for near-field thermophotovoltaic devices. Journal of Photonics for Energy, 2020, 10, 1.	0.8	16
16	Ultra-high temperature energy storage and conversion: A review of the AMADEUS project results. AIP Conference Proceedings, 2020, , .	0.3	6
17	Perovskite-Si solar cell: a three-terminal heterojunction bipolar transistor architecture. , 2020, , .		7
18	III-V-on-silicon triple-junction based on the heterojunction bipolar transistor solar cell concept. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
19	Practical implementation of open science in research projects. AIP Conference Proceedings, 2020, , .	0.3	0
20	Inverted GaInP/GaAs Three-Terminal Heterojunction Bipolar Transistor Solar Cell. , 2020, , .		4
21	Limiting Efficiency of Heterojunction Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 1590-1595.	1.5	4
22	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
23	Demonstrating the GaInP/GaAs Three-Terminal Heterojunction Bipolar Transistor Solar Cell. , 2019, , .		7
24	Potential of the three-terminal heterojunction bipolar transistor solar cell for space applications. , 2019, , .		2
25	AMADEUS: Next generation materials and solid state devices for ultra high temperature energy storage and conversion. AIP Conference Proceedings, 2018, , .	0.3	29
26	Molten silicon storage of concentrated solar power with integrated thermophotovoltaic energy conversion. AIP Conference Proceedings, 2018, , .	0.3	21
27	Thermophotovoltaic Efficiency Measurement: Design and Analysis of a Novel Experimental Method. , 2018, , .		3
28	Module interconnection for the three-terminal heterojunction bipolar transistor solar cell. AIP Conference Proceedings, 2018, , .	0.3	11
29	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
30	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
31	Limiting Efficiencies of Novel Solar Cell Concepts in Space. E3S Web of Conferences, 2017, 16, 03004.	0.2	1
32	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
33	Thermophotovoltaic energy in space applications: Review and future potential. Solar Energy Materials and Solar Cells, 2017, 161, 285-296.	3.0	146
34	Analysis of the intermediate-band absorption properties of type-II GaSb/GaAs quantum-dot photovoltaics. Physical Review B, 2017, 96, .	1.1	32
35	Impact of the Spectrum in the Annual Energy Production of Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1479-1484.	1.5	13
36	Notice of Removal Limiting efficiency of silicon intermediate band solar cells. , 2017, , .		0

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37	Notice of Removal Three-bandgap absolute quantum efficiency in intermediate band solar cells. , 2017, , .		0
38	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
39	Impact of the spectrum, location and interconnection between solar cells in the annual production of photovoltaic energies in photovoltaic concentration systems. , 2016, , .		1
40	Ultra high temperature latent heat energy storage and thermophotovoltaic energy conversion. Energy, 2016, 107, 542-549.	4.5	103
41	Optimum Single-Gap Solar Cells for Missions to Mercury. Journal of Spacecraft and Rockets, 2016, 53, 787-791.	1.3	1
42	Room temperature photo-response of titanium supersaturated silicon at energies over the bandgap. Journal Physics D: Applied Physics, 2016, 49, 055103.	1.3	14
43	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
44	The effect of band offsets in quantum dots. Solar Energy Materials and Solar Cells, 2016, 145, 180-184.	3.0	9
45	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
46	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
47	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
48	HIT intermediate-band solar cells with self-assembled colloidal quantum dots and metal nanoparticles. , 2015, , .		0
49	Ultra-dense energy storage utilizing high melting point metallic alloys and photovoltaic cells. , 2015, , .		1
50	Optically Triggered Infrared Photodetector. Nano Letters, 2015, 15, 224-228.	4.5	8
51	Wide-Bandgap InAs/InGaP Quantum-Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 840-845.	1.5	51
52	Intermediate Band Solar Cell with Extreme Broadband Spectrum Quantum Efficiency. Physical Review Letters, 2015, 114, 157701.	2.9	62
53	Three-terminal heterojunction bipolar transistor solar cell for high-efficiency photovoltaic conversion. Nature Communications, 2015, 6, 6902.	5.8	47
54	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

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55	Light-trapping in photon enhanced thermionic emitters. Optics Express, 2015, 23, A1220.	1.7	14
56	Quantum Dot Parameters Determination From Quantum-Efficiency Measurements. IEEE Journal of Photovoltaics, 2015, 5, 1074-1078.	1.5	13
57	Voltage limitation analysis in strain-balanced InAs/GaAsN quantum dot solar cells applied to the intermediate band concept. Solar Energy Materials and Solar Cells, 2015, 132, 178-182.	3.0	19
58	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
59	Intermediate Band to Conduction Band Optical Absorption in ZnTeO. IEEE Journal of Photovoltaics, 2014, 4, 1091-1094.	1.5	8
60	Two-photon photocurrent and voltage up-conversion in a quantum dot intermediate band solar cell. , 2014, , .		9
61	Realistic Detailed Balance Study of the Quantum Efficiency of Quantum Dot Solar Cells. Advanced Functional Materials, 2014, 24, 339-345.	7.8	21
62	Review of Experimental Results Related to the Operation of Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 736-748.	1.5	85
63	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
64	Absorption coefficient for the intraband transitions in quantum dot materials. Progress in Photovoltaics: Research and Applications, 2013, 21, 658-667.	4.4	19
65	Optical absorption of radio frequency sputtered GaAs(Ti) films. Journal of Materials Science: Materials in Electronics, 2013, 24, 993-998.	1.1	2
66	Self-organized colloidal quantum dots and metal nanoparticles for plasmon-enhanced intermediate-band solar cells. Nanotechnology, 2013, 24, 345402.	1.3	54
67	Low-Temperature Concentrated Light Characterization Applied to Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 753-761.	1.5	10
68	Interband optical absorption in quantum well solarcells. Solar Energy Materials and Solar Cells, 2013, 112, 20-26.	3.0	13
69	Virtual-bound, filamentary and layered states in a box-shaped quantum dot of square potential form the exact numerical solution of the effective mass SchrÃ¶dinger equation. Physica B: Condensed Matter, 2013, 413, 73-81.	1.3	14
70	Some advantages of intermediate band solar cells based on type II quantum dots. Applied Physics Letters, 2013, 103, .	1.5	30
71	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
72	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

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73	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
74	Application of photoreflectance to advanced multilayer structures for photovoltaics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 599-608.	1.7	16
75	Extreme voltage recovery in GaAs:Ti intermediate band solar cells. Solar Energy Materials and Solar Cells, 2013, 108, 175-179.	3.0	22
76	Intermediate band solar energy conversion in ZnTeO. , 2013, , .		2
77	Six not so easy pieces in intermediate band solar cell research. , 2013, , .		9
78	Nanoimprinted diffraction gratings for crystalline silicon solar cells: implementation, characterization and simulation. Optics Express, 2013, 21, A295.	1.7	53
79	Six not-so-easy pieces in intermediate band solar cell research. Journal of Photonics for Energy, 2013, 3, 031299.	0.8	20
80	Sub-Bandgap External Quantum Efficiency in Ti Implanted Si Heterojunction with Intrinsic Thin Layer Cells. Japanese Journal of Applied Physics, 2013, 52, 122302.	0.8	16
81	A puzzling solar cell structure: An exercise to get insight on intermediate band solar cells. , 2013, , .		2
82	Intermediate band to conduction band optical absorption in ZnTe:O. , 2013, , .		0
83	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
84	The effect of concentration on the performance of quantum dot intermediate-band solar cells. , 2012, , .		7
85	Nano-imprinted rear-side diffraction gratings for absorption enhancement in solar cells. Proceedings of SPIE, 2012, , .	0.8	0
86	Understanding experimental characterization of intermediate band solar cells. Journal of Materials Chemistry, 2012, 22, 22832.	6.7	24
87	Intermediate Band Solar Cells. , 2012, , 619-639.		0
88	InAs/AlGaAs quantum dot intermediate band solar cells with enlarged sub-bandgaps. , 2012, , .		25
89	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
90	Intermediate band to conduction band optical absorption in ZnTe:O. , 2012, , .		0

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91	Understanding the operation of quantum dot intermediate band solar cells. Journal of Applied Physics, 2012, 111, 044502.	1.1	41
92	Malignant conjunctival T cell lymphoma diagnosed by punch biopsy as a primary manifestation of systemic cancer. Clinical Ophthalmology, 2012, 6, 777.	0.9	2
93	Understanding intermediate-band solar cells. Nature Photonics, 2012, 6, 146-152.	15.6	576
94	Fundamentals of Intermediate Band Solar Cells. Springer Series in Optical Sciences, 2012, , 209-228.	0.5	1
95	The Quantum Dot Intermediate Band Solar Cell. Springer Series in Optical Sciences, 2012, , 251-275.	0.5	24
96	Cubic and hexagonal InGaAsN dilute arsenides by unintentional homogeneous incorporation of As into InGaN. Scripta Materialia, 2012, 66, 351-354.	2.6	1
97	Voltage recovery in intermediate band solar cells. Solar Energy Materials and Solar Cells, 2012, 98, 240-244.	3.0	77
98	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
99	On inhibiting Auger intraband relaxation in InAs/GaAs quantum dot intermediate band solar cells. Applied Physics Letters, 2011, 99, .	1.5	28
100	Numerical modeling of intermediate band solar cells. Semiconductor Science and Technology, 2011, 26, 014031.	1.0	23
101	III-V compound semiconductor screening for implementing quantum dot intermediate band solar cells. Journal of Applied Physics, 2011, 109, 014313.	1.1	58
102	Modelling of quantum dot solar cells for concentrator PV applications. , 2011, , .		1
103	Application of photoluminescence and electroluminescence techniques to the characterization of intermediate band solar cells. Energy Procedia, 2011, 10, 117-121.	1.8	6
104	Light concentration in the near-field of dielectric spheroidal particles with mesoscopic sizes. Optics Express, 2011, 19, 16207.	1.7	53
105	Radiative thermal escape in intermediate band solar cells. AIP Advances, 2011, 1, .	0.6	29
106	Towards the intermediate band. Nature Photonics, 2011, 5, 137-138.	15.6	69
107	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
108	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

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109	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
110	Two-layer Hall effect model for intermediate band Ti-implanted silicon. Journal of Applied Physics, 2011, 109, .	1.1	40
111	The lead salt quantum dot intermediate band solar cell. , 2011, , .		6
112	Near-field light focusing by wavelength-sized dielectric spheroids for photovoltaic applications. , 2011, , .		1
113	Optical properties of quantum dot intermediate band solar cells. , 2011, , .		2
114	Hot carrier solar cells: Challenges and recent progress. , 2010, , .		7
115	On the Partial Filling of the Intermediate Band in IB Solar Cells. IEEE Transactions on Electron Devices, 2010, 57, 1201-1207.	1.6	73
116	The Intermediate Band Solar Cell: Progress Toward the Realization of an Attractive Concept. Advanced Materials, 2010, 22, 160-174.	11.1	297
117	Electronâ€“phonon energy transfer in hot-carrier solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 287-296.	3.0	55
118	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
119	Optoelectronic evaluation of the nanostructuring approach to chalcopyrite-based intermediate band materials. Solar Energy Materials and Solar Cells, 2010, 94, 1912-1918.	3.0	14
120	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
121	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle		

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127	Photoreflectance analysis of a GaInP/GaInAs/Ge multijunction solar cell. Applied Physics Letters, 2010, 97, .	1.5	24
128	Strain balanced quantum posts for intermediate band solar cells. , 2010, , .		2
129	Study of GaAs(Ti) thin films as candidates for IB solar cells manufacturing. , 2010, , .		2
130	Intermediate band solar cells. , 2009, , .		1
131	IBPOWER: Intermediate band materials and solar cells for photovoltaics with high efficiency and reduced cost. , 2009, , .		5
132	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
133	Thin-film intermediate band chalcopyrite solar cells. Thin Solid Films, 2009, 517, 2452-2454.	0.8	27
134	Potential of Mn doped In1âˆ’xGaxN for implementing intermediate band solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 641-644.	3.0	39
135	Intermediate band mobility in heavily titanium-doped silicon layers. Solar Energy Materials and Solar Cells, 2009, 93, 1668-1673.	3.0	49
136	Lifetime recovery in ultrahighly titanium-doped silicon for the implementation of an intermediate band material. Applied Physics Letters, 2009, 94, .	1.5	119
137	Ionization energy levels in Mn-doped InxGa1âˆ’xN alloys. Journal of Applied Physics, 2009, 105, 033704.	1.1	6
138	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
139	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
140	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
141	Elements of the design and analysis of quantum-dot intermediate band solar cells. Thin Solid Films, 2008, 516, 6716-6722.	0.8	106
142	Carrier recombination effects in strain compensated quantum dot stacks embedded in solar cells. Applied Physics Letters, 2008, 93, 123114.	1.5	46
143	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
144	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

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145	Ultra-high efficiency solar cells: the path for mass penetration of solar electricity. Electronics Letters, 2008, 44, 943.	0.5	15
146	Light management issues in intermediate band solar cells. Materials Research Society Symposia Proceedings, 2008, 1101, 1.	0.1	6
147	Optimum nitride concentration in multiband III-Nâ€"V alloys for high efficiency ideal solar cells. Applied Physics Letters, 2008, 93, 174109.	1.5	18
148	Light absorption in the near field around surface plasmon polaritons. Journal of Applied Physics, 2008, 104, .	1.1	31
149	Light intensity enhancement by diffracting structures in solar cells. Journal of Applied Physics, 2008, 104, 034502.	1.1	47
150	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
151	Open Questions in the Implementation of the Intermediate Band (IB) Solar Cell. , 2008, , .		0
152	Novel concepts of solar cells for ultra-high-efficiency: the Intermediate Band (IB) Solar cells and other approaches. , 2007, , .		0
153	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
154	Advances in the Research of the Intermediate Band (IB) Solar Cell. Materials Research Society Symposia Proceedings, 2007, 1031, 1.	0.1	0
155	Emitter degradation in quantum dot intermediate band solar cells. Applied Physics Letters, 2007, 90, 233510.	1.5	210
156	Solar Cells Based on Quantum Dots: Multiple Exciton Generation and Intermediate Bands. MRS Bulletin, 2007, 32, 236-241.	1.7	215
157	A Message by the Guest Editors. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 257-257.	1.1	1
158	Intermediate Band Solar Cells (IBSC) Using Nanotechnology. , 2006, , 539-566.		21
159	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
160	Recent Progress in Intermediate Band Solar Cells. , 2006, , .		4
161	Intermediate bands versus levels in non-radiative recombination. Physica B: Condensed Matter, 2006, 382, 320-327.	1.3	278
162	Detailed modelling of photon recycling: application to GaAs solar cells. Solar Energy Materials and Solar Cells, 2006, 90, 1068-1088.	3.0	40

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163	Novel semiconductor solar cell structures: The quantum dot intermediate band solar cell. Thin Solid Films, 2006, 511-512, 638-644.	0.8	170
164	Design of hemispherical cavities for LED-based illumination devices. Applied Physics B: Lasers and Optics, 2006, 82, 75-80.	1.1	5
165	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
166	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
167	Theoretical Limits of Photovoltaic Conversion. , 2005, , 113-151.		13
168	Experimental analysis of the quasi-Fermi level split in quantum dot intermediate-band solar cells. Applied Physics Letters, 2005, 87, 083505.	1.5	189
169	FULLSPECTRUM: A new PV wave of more efficient use of the solar spectrum. Semiconductors, 2004, 38, 936-940.	0.2	3
170	Intermediate band solar cells: Comparison with shockley-read-hall recombination. Semiconductors, 2004, 38, 946-949.	0.2	18
171	Present status of intermediate band solar cell research. Thin Solid Films, 2004, 451-452, 593-599.	0.8	77
172	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
173	General equivalent circuit for intermediate band devices: Potentials, currents and electroluminescence. Journal of Applied Physics, 2004, 96, 903-909.	1.1	199
174	Impact-ionization-assisted intermediate band solar cell. IEEE Transactions on Electron Devices, 2003, 50, 447-454.	1.6	56
175	Non-conventional photovoltaic technology. Series in Optics and Optoelectronics, 2003, , .	0.0	0
176	Intermediate-band solar cells. Series in Optics and Optoelectronics, 2003, , .	0.0	2
177	Quasi-drift diffusion model for the quantum dot intermediate band solar cell. IEEE Transactions on Electron Devices, 2002, 49, 1632-1639.	1.6	153
178	Thermodynamics of solar energy conversion in novel structures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 107-114.	1.3	27
179	Design constraints of the quantum-dot intermediate band solar cell. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 150-157.	1.3	70
180	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

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181	A metallic intermediate band high efficiency solar cell. Progress in Photovoltaics: Research and Applications, 2001, 9, 73-86.	4.4	256
182	Thermodynamic consistency of sub-bandgap absorbing solar cell proposals. IEEE Transactions on Electron Devices, 2001, 48, 2118-2124.	1.6	83
183	Partial filling of a quantum dot intermediate band for solar cells. IEEE Transactions on Electron Devices, 2001, 48, 2394-2399.	1.6	201
184	Limiting efficiency of coupled thermal and photovoltaic converters. Solar Energy Materials and Solar Cells, 1999, 58, 147-165.	3.0	52
185	Determination of the origin of the series resistance through electroluminescence measurements of GaAs and AlxGa1âˆ’xAs solar cells and LEDs. Solid-State Electronics, 1998, 42, 567-571.	0.8	7
186	Entropy production in photovoltaic conversion. Physical Review B, 1997, 55, 6994-6999.	1.1	48
187	Photon recycling and Shockleyâ€™s diode equation. Journal of Applied Physics, 1997, 82, 4067-4075.	1.1	186
188	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
189	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
190	Experimental analysis of the efficiency of heterostructure GaAsî—¸AlGaAs solar cells. Solar Energy Materials and Solar Cells, 1996, 40, 5-21.	3.0	14
191	Limiting efficiencies for photovoltaic energy conversion in multigap systems. Solar Energy Materials and Solar Cells, 1996, 43, 203-222.	3.0	406
192	Electroluminescence coupling in multiple quantum well diodes and solar cells. Applied Physics Letters, 1995, 66, 894-895.	1.5	11
193	LPE-GaAs and LBSF-Si solar cells for tandem concentrator application. , 1994, , .		3
194	Absolute limiting efficiencies for photovoltaic energy conversion. Solar Energy Materials and Solar Cells, 1994, 33, 213-240.	3.0	277
195	Efficiency of silicon and GaAs concentrator solar cells operated inside integrating cavity receivers. Solar Cells, 1991, 31, 203-216.	0.6	4
196	Analysis of the Diode Currents in Back Contacted Emitter GaAs Solar Cells. , 1991, , 794-797.		0
197	Limiting efficiencies of GaAs solar cells. IEEE Transactions on Electron Devices, 1990, 37, 1402-1405.	1.6	17
198	Diffusion of Zn into GaAs and AlGaAs from isothermal liquidâ€phase epitaxy solutions. Journal of Applied Physics, 1990, 68, 2723-2730.	1.1	8

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199	Backâ€contacted emitter GaAs solar cells. Applied Physics Letters, 1990, 56, 2633-2635.	1.5	7
200	Limiting efficiency of GaAs solar cells. , 1988, , .		2
201	Back contacted emitter GaAs solar cells. , 0, , .		1
202	On the detailed balance limit of ideal multiple bandgap solar cells. , 0, , .		3
203	High efficiency photovoltaic conversion with spectrum splitting on GaAs and Si cells located in light confining cavities. , 0, , .		3
204	Experimental analysis of GaAs-InGaAs MQW solar cells. , 0, , .		9
205	Quantum dot intermediate band solar cell. , 0, , .		68
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