Antonio Luque

List of Publications by Year
in descending order

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319	12,044	38660	32761
papers	citations	50 h-index	100 g-index

330	330	330	5751
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Intermediate Band Solar Cell. , 2021, , .		0
2	On the Potential of Silicon Intermediate Band Solar Cells. Energies, 2020, 13, 3044.	1.6	8
3	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
4	Analysis of the intermediate-band absorption properties of type-II GaSb/GaAs quantum-dot photovoltaics. Physical Review B, 2017, 96, .	1.1	32
5	Notice of Removal Limiting efficiency of silicon intermediate band solar cells. , 2017, , .		0
6	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
7	Ultra high temperature latent heat energy storage and thermophotovoltaic energy conversion. Energy, 2016, 107, 542-549.	4.5	103
8	â€œIn-fieldâ€•cell temperature evaluation in solar modules through time-dependent open circuit voltage measurements. Progress in Photovoltaics: Research and Applications, 2016, 24, 211-218.	4.4	3
9	Room temperature photo-response of titanium supersaturated silicon at energies over the bandgap. Journal Physics D: Applied Physics, 2016, 49, 055103.	1.3	14
10	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
11	The effect of band offsets in quantum dots. Solar Energy Materials and Solar Cells, 2016, 145, 180-184.	3.0	9
12	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
13	Photon Absorption Models in Nanostructured Semiconductor Solar Cells and Devices. SpringerBriefs in Applied Sciences and Technology, 2015, , .	0.2	14
14	Single Band Effective Mass Equation and Envolvent Functions. SpringerBriefs in Applied Sciences and Technology, 2015, , 17-63.	0.2	0
15	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
16	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
17	The Segmental Approximation in Multijunction Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 1229-1236.	1.5	22
18	HIT intermediate-band solar cells with self-assembled colloidal quantum dots and metal nanoparticles. , 2015, , .		0

#	Article	IF	Citations
19	Summary of Europe-Japan Collaborative Research on Concentrator Photovoltaics. , 2015, , .		0
20	Microfluidic capacitive tilt sensor using PCB-MEMS. , 2015, , .		5
21	Ultra-dense energy storage utilizing high melting point metallic alloys and photovoltaic cells. , 2015, , .		1
22	Optically Triggered Infrared Photodetector. Nano Letters, 2015, 15, 224-228.	4.5	8
23	Wide-Bandgap InAs/InGaP Quantum-Dot Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 840-845.	1.5	51
24	Intermediate Band Solar Cell with Extreme Broadband Spectrum Quantum Efficiency. Physical Review Letters, 2015, 114, 157701.	2.9	62
25	Three-terminal heterojunction bipolar transistor solar cell for high-efficiency photovoltaic conversion. Nature Communications, 2015, 6, 6902.	5.8	47
26	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
27	Quantum Dot Parameters Determination From Quantum-Efficiency Measurements. IEEE Journal of Photovoltaics, 2015, 5, 1074-1078.	1.5	13
28	Evaluation of the PV Cell Operation Temperature in the Process of Fast Switching to Open-Circuit Mode. IEEE Journal of Photovoltaics, 2015, 5, 1715-1721.	1.5	16
29	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
30	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
31	Interband Optical Absorption in Homogeneous Semiconductors. SpringerBriefs in Applied Sciences and Technology, 2015, , 163-170.	0.2	0
32	Detailed Balance Analysis. SpringerBriefs in Applied Sciences and Technology, 2015, , 111-148.	0.2	0
33	Comparing the Eight-Band Luttinger-Kohn-Pikus-Bir-Hamiltonian with the Four-Band Empiric kÂ·p Hamiltonian. SpringerBriefs in Applied Sciences and Technology, 2015, , 171-202.	0.2	0
34	Interband Optical Absorption in Quantum Well Solar Cells. SpringerBriefs in Applied Sciences and Technology, 2015, , 149-161.	0.2	0
35	A Four Band Approximation: The Empiric kÂ·p Hamiltonian. SpringerBriefs in Applied Sciences and Technology, 2015, , 65-110.	0.2	0
36	CONCENTRATOR SYSTEMS. Series on Photoconversion of Solar Energy, 2014, , 491-570.	0.2	0

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37	Characterization of the Manufacturing Processes to Grow Triple-Junction Solar Cells. International Journal of Photoenergy, 2014, 2014, 1-10.	1.4	13
38	AlGaAs/GaAs photovoltaic converters for high power narrowband radiation. AIP Conference Proceedings, 2014, , .	0.3	20
39	High intensity low temperature (HILT) performance of space concentrator GaInP/GaInAs/Ge MJ SCs. , 2014, , .		5
40	Temperature of solar cells with regard to photoactive and non-photoactive light absorption in concentrator PV modules. , 2014, , .		4
41	Intermediate Band to Conduction Band Optical Absorption in ZnTeO. IEEE Journal of Photovoltaics, 2014, 4, 1091-1094.	1.5	8
42	Two-photon photocurrent and voltage up-conversion in a quantum dot intermediate band solar cell. , 2014, , .		9
43	New-generation concentrator modules based on cascade solar cells: Design and optical and thermal properties. Technical Physics, 2014, 59, 1650-1657.	0.2	7
44	Realistic Detailed Balance Study of the Quantum Efficiency of Quantum Dot Solar Cells. Advanced Functional Materials, 2014, 24, 339-345.	7.8	21
45	Review of Experimental Results Related to the Operation of Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 736-748.	1.5	85
46	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
47	Heat losses in a CVD reactor for polysilicon production: Comprehensive model and experimental validation. Journal of Crystal Growth, 2014, 402, 138-146.	0.7	17
48	Absorption coefficient for the intraband transitions in quantum dot materials. Progress in Photovoltaics: Research and Applications, 2013, 21, 658-667.	4.4	19
49	Optical absorption of radio frequency sputtered GaAs(Ti) films. Journal of Materials Science: Materials in Electronics, 2013, 24, 993-998.	1.1	2
50	Self-organized colloidal quantum dots and metal nanoparticles for plasmon-enhanced intermediate-band solar cells. Nanotechnology, 2013, 24, 345402.	1.3	54
51	Radiation heat savings in polysilicon production: Validation of results through a CVD laboratory prototype. Journal of Crystal Growth, 2013, 374, 5-10.	0.7	23
52	Low-Temperature Concentrated Light Characterization Applied to Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 753-761.	1.5	10
53	Interband optical absorption in quantum well solarcells. Solar Energy Materials and Solar Cells, 2013, 112, 20-26.	3.0	13
54	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

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55	Some advantages of intermediate band solar cells based on type II quantum dots. Applied Physics Letters, 2013, 103, .	1.5	30
56	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
57	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
58	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
59	Recent Results of Europe-Japan Collaborative Research on Concentrator Photovoltaics. Energy Procedia, 2013, 33, 173-178.	1.8	1
60	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
61	Extreme voltage recovery in GaAs:Ti intermediate band solar cells. Solar Energy Materials and Solar Cells, 2013, 108, 175-179.	3.0	22
62	Intermediate band solar energy conversion in ZnTeO. , 2013, , .		2
63	Six not so easy pieces in intermediate band solar cell research. , 2013, , .		9
64	Nanoimprinted diffraction gratings for crystalline silicon solar cells: implementation, characterization and simulation. Optics Express, 2013, 21, A295.	1.7	53
65	Six not-so-easy pieces in intermediate band solar cell research. Journal of Photonics for Energy, 2013, 3, 031299.	0.8	20
66	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
67	A puzzling solar cell structure: An exercise to get insight on intermediate band solar cells. , 2013, , .		2
68	Outline of Europe-Japan Collaborative Research on Concentrator Photovoltaics. , 2013, , .		3
69	Intermediate band to conduction band optical absorption in ZnTe:O. , 2013, , .		0
70	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
71	The effect of concentration on the performance of quantum dot intermediate-band solar cells. , 2012, , .		7
72	Nano-imprinted rear-side diffraction gratings for absorption enhancement in solar cells. Proceedings of SPIE, 2012, , .	0.8	0

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73	Understanding experimental characterization of intermediate band solar cells. Journal of Materials Chemistry, 2012, 22, 22832.	6.7	24
74	Intermediate Band Solar Cells. , 2012, , 619-639.		0
75	InAs/AlGaAs quantum dot intermediate band solar cells with enlarged sub-bandgaps. , 2012, , .		25
76	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
77	Intermediate band to conduction band optical absorption in ZnTe:O. , 2012, , .		0
78	Exploring polysilicon deposition conditions through a laboratory CVD prototype. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 2164-2168.	0.8	8
79	Understanding the operation of quantum dot intermediate band solar cells. Journal of Applied Physics, 2012, 111, 044502.	1.1	41
80	Understanding intermediate-band solar cells. Nature Photonics, 2012, 6, 146-152.	15.6	576
81	Fundamentals of Intermediate Band Solar Cells. Springer Series in Optical Sciences, 2012, , 209-228.	0.5	1
82	The Quantum Dot Intermediate Band Solar Cell. Springer Series in Optical Sciences, 2012, , 251-275.	0.5	24
83	Cubic and hexagonal InGaAsN dilute arsenides by unintentional homogeneous incorporation of As into InGaN. Scripta Materialia, 2012, 66, 351-354.	2.6	1
84	Voltage recovery in intermediate band solar cells. Solar Energy Materials and Solar Cells, 2012, 98, 240-244.	3.0	77
85	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
86	Expectations on the very high concentration photovoltaics performance. , 2011, , .		0
87	On inhibiting Auger intraband relaxation in InAs/GaAs quantum dot intermediate band solar cells. Applied Physics Letters, 2011, 99, .	1.5	28
88	Numerical modeling of intermediate band solar cells. Semiconductor Science and Technology, 2011, 26, 014031.	1.0	23
89	III-V compound semiconductor screening for implementing quantum dot intermediate band solar cells. Journal of Applied Physics, 2011, 109, 014313.	1.1	58
90	Modelling of quantum dot solar cells for concentrator PV applications. , 2011, , .		1

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91	Application of photoluminescence and electroluminescence techniques to the characterization of intermediate band solar cells. Energy Procedia, 2011, 10, 117-121.	1.8	6
92	Light concentration in the near-field of dielectric spheroidal particles with mesoscopic sizes. Optics Express, 2011, 19, 16207.	1.7	53
93	Will we exceed 50% efficiency in photovoltaics?. Journal of Applied Physics, 2011, 110, .	1.1	184
94	Radiative thermal escape in intermediate band solar cells. AIP Advances, 2011, 1, .	0.6	29
95	Towards the intermediate band. Nature Photonics, 2011, 5, 137-138.	15.6	69
96	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
97	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
98	Enhanced iron gettering by short, optimized low-temperature annealing after phosphorus emitter diffusion for industrial silicon solar cell processing. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 759-762.	0.8	8
99	Radiative energy loss in a polysilicon CVD reactor. Solar Energy Materials and Solar Cells, 2011, 95, 1042-1049.	3.0	27
100	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
101	Two-layer Hall effect model for intermediate band Ti-implanted silicon. Journal of Applied Physics, 2011, 109, .	1.1	40
102	The lead salt quantum dot intermediate band solar cell. , 2011, , .		6
103	Capacitive pressure sensor fabricated using printed circuit board techniques. , 2011, , .		3
104	Near-field light focusing by wavelength-sized dielectric spheroids for photovoltaic applications. , 2011, , .		1
105	Optical properties of quantum dot intermediate band solar cells. , 2011, , .		2
106	Hot carrier solar cells: Challenges and recent progress. , 2010, , .		7
107	On the Partial Filling of the Intermediate Band in IB Solar Cells. IEEE Transactions on Electron Devices, 2010, 57, 1201-1207.	1.6	73
108	The Intermediate Band Solar Cell: Progress Toward the Realization of an Attractive Concept. Advanced Materials, 2010, 22, 160-174.	11.1	297

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109	Electronâ€“phonon energy transfer in hot-carrier solar cells. Solar Energy Materials and Solar Cells, 2010, 94, 287-296.	3.0	55
110	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
111	Enhancement of up-conversion efficiency by combining rare earth-doped phosphors with PbS quantum dots. Solar Energy Materials and Solar Cells, 2010, 94, 1923-1926.	3.0	55
112	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
113	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
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127	Thin-film intermediate band chalcopyrite solar cells. Thin Solid Films, 2009, 517, 2452-2454.	0.8	27
128	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
129	Intermediate band mobility in heavily titanium-doped silicon layers. Solar Energy Materials and Solar Cells, 2009, 93, 1668-1673.	3.0	49
130	Acceptable contamination levels in solar grade silicon: From feedstock to solar cell. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 299-304.	1.7	70
131	Characterization of up-converter layers on bifacial silicon solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 212-215.	1.7	16
132	Lifetime recovery in ultrahighly titanium-doped silicon for the implementation of an intermediate band material. Applied Physics Letters, 2009, 94, .	1.5	119
133	Ionization energy levels in Mn-doped InxGa1âˆ'xN alloys. Journal of Applied Physics, 2009, 105, 033704.	1.1	6
134	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
135	Quantum Efficiency measurement setup for the near-infrared range. , 2009, , .		1
136	Solar Grade Silicon production through trichlorosilane decomposition. , 2009, , .		0
137	Improvement of multi-crystalline silicon wafer quality during solar cell fabrication process. , 2009, , .		1
138	Implementation of a Monte Carlo method to model photon conversion for solar cells. Thin Solid Films, 2008, 516, 6757-6762.	0.8	12
139	Photonics in photovoltaic systems. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2757-2765.	0.8	18
140	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
141	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
142	Elements of the design and analysis of quantum-dot intermediate band solar cells. Thin Solid Films, 2008, 516, 6716-6722.	0.8	106
143	Carrier recombination effects in strain compensated quantum dot stacks embedded in solar cells. Applied Physics Letters, 2008, 93, 123114.	1.5	46
144	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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145	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
146	Chemical Vapor Deposition Model of Polysilicon in a Trichlorosilane and Hydrogen System. Journal of the Electrochemical Society, 2008, 155, D485.	1.3	39
147	Ultra-high efficiency solar cells: the path for mass penetration of solar electricity. Electronics Letters, 2008, 44, 943.	0.5	15
148	Light management issues in intermediate band solar cells. Materials Research Society Symposia Proceedings, 2008, 1101, 1.	0.1	6
149	Optimum nitride concentration in multiband III-Nâ€“V alloys for high efficiency ideal solar cells. Applied Physics Letters, 2008, 93, 174109.	1.5	18
150	Light absorption in the near field around surface plasmon polaritons. Journal of Applied Physics, 2008, 104, .	1.1	31
151	Light intensity enhancement by diffracting structures in solar cells. Journal of Applied Physics, 2008, 104, 034502.	1.1	47
152	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
153	Novel concepts of solar cells for ultra-high-efficiency: the Intermediate Band (IB) Solar cells and other approaches. , 2007, , .		0
154	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
155	Increase on Siemens Reactor Throughput by Tailoring Temperature Profile of Polysilicon Rods. , 2007, , .		2
156	Advances in the Research of the Intermediate Band (IB) Solar Cell. Materials Research Society Symposia Proceedings, 2007, 1031, 1.	0.1	0
157	Solar Thermophotovoltaics: Combining Solar Thermal and Photovoltaics. AIP Conference Proceedings, 2007, , .	0.3	12
158	Optimisation of SiNx:H anti-reflection coatings for silicon solar cells. , 2007, , .		11
159	Emitter degradation in quantum dot intermediate band solar cells. Applied Physics Letters, 2007, 90, 233510.	1.5	210
160	Solar Cells Based on Quantum Dots: Multiple Exciton Generation and Intermediate Bands. MRS Bulletin, 2007, 32, 236-241.	1.7	215
161	Reduction of thermal load in the fabrication process of bifacial silicon solar cells. , 2007, , .		0
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163	The Effect of RF and MW Power on the SiNx Films Grown by PECVD. , 2007, , .		0
164	A Message by the Guest Editors. Journal of Solar Energy Engineering, Transactions of the ASME, 2007, 129, 257-257.	1.1	1
165	Temperature homogeneity of polysilicon rods in a Siemens reactor. Journal of Crystal Growth, 2007, 299, 165-170.	0.7	28
166	Intermediate Band Solar Cells (IBSC) Using Nanotechnology. , 2006, , 539-566.		21
167	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
168	Recent Progress in Intermediate Band Solar Cells. , 2006, , .		4
169	Capacitive pressure microsensor fabricated by bulk micromachining and sacrificial layer etching. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	3
170	Photovoltaic concentration at the onset of its commercial deployment. Progress in Photovoltaics: Research and Applications, 2006, 14, 413-428.	4.4	92
171	Intermediate bands versus levels in non-radiative recombination. Physica B: Condensed Matter, 2006, 382, 320-327.	1.3	278
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173	The European Photovoltaic Technology Platform. , 2006, , .		5
174	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
175	Epitaxial Solar Cells Over Upgraded Metallurgical Silicon Substrates: The Epimetsi Project. , 2006, , .		3
176	Gas recycling in a stacked susceptor epitaxial reactor. Journal of Crystal Growth, 2005, 283, 198-207.	0.7	4
177	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
178	Adaptation of monocrystalline solar cell process to multicrystalline materials. Solar Energy Materials and Solar Cells, 2005, 87, 411-421.	3.0	16
179	Influence of P gettering thermal step on light-induced degradation in Cz Si. Solar Energy Materials and Solar Cells, 2005, 88, 247-256.	3.0	16
180	Measurement of bulk and rear recombination components and application to solar cells with an Al back layer. Solid-State Electronics, 2005, 49, 49-55.	0.8	10

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181	Solar Grade Silicon Feedstock. , 2005, , 153-204.		10
182	Photovoltaic Concentrators. , 2005, , 449-503.		15
183	Theoretical Limits of Photovoltaic Conversion. , 2005, , 113-151.		13
184	Status, Trends, Challenges and the Bright Future of Solar Electricity from Photovoltaics. , 2005, , 1-43.		21
185	Experimental analysis of the quasi-Fermi level split in quantum dot intermediate-band solar cells. Applied Physics Letters, 2005, 87, 083505.	1.5	189
186	FULLSPECTRUM: A new PV wave of more efficient use of the solar spectrum. Semiconductors, 2004, 38, 936-940.	0.2	3
187	Intermediate band solar cells: Comparison with shockley-read-hall recombination. Semiconductors, 2004, 38, 946-949.	0.2	18
188	Present status of intermediate band solar cell research. Thin Solid Films, 2004, 451-452, 593-599.	0.8	77
189	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
190	Two-dimensional modeling of front contact silicon solar cells. Progress in Photovoltaics: Research and Applications, 2004, 12, 503-516.	4.4	6
191	Performance of front contact silicon solar cells under concentration. Progress in Photovoltaics: Research and Applications, 2004, 12, 517-528.	4.4	9
192	Reconfigurable Distributed Network Control System for Industrial Plant Automation. IEEE Transactions on Industrial Electronics, 2004, 51, 1168-1180.	5.2	45
193	General equivalent circuit for intermediate band devices: Potentials, currents and electroluminescence. Journal of Applied Physics, 2004, 96, 903-909.	1.1	199
194	Impact-ionization-assisted intermediate band solar cell. IEEE Transactions on Electron Devices, 2003, 50, 447-454.	1.6	56
195	Non-conventional photovoltaic technology. Series in Optics and Optoelectronics, 2003, , .	0.0	0
196	Intermediate-band solar cells. Series in Optics and Optoelectronics, 2003, , .	0.0	2
197	Influence of Depth-Inhomogeneity of Lifetime in Silicon Solar Cells. Journal of the Electrochemical Society, 2002, 149, G522.	1.3	4
198	Quasi-drift diffusion model for the quantum dot intermediate band solar cell. IEEE Transactions on Electron Devices, 2002, 49, 1632-1639.	1.6	153

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199	Ideal efficiency and potential of solar thermophotonic converters under optically and thermally concentrated power flux. IEEE Transactions on Electron Devices, 2002, 49, 2024-2030.	1.6	27
200	Thermodynamics of solar energy conversion in novel structures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 107-114.	1.3	27
201	Design constraints of the quantum-dot intermediate band solar cell. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 150-157.	1.3	70
202	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
203	Ideal efficiency of monolithic, series-connected multijunction solar cells. Progress in Photovoltaics: Research and Applications, 2002, 10, 323-329.	4.4	67
204	Lifetime Measurements by Photoconductance Techniques in Wafers Immersed in a Passivating Liquid. Journal of the Electrochemical Society, 2001, 148, G200.	1.3	17
205	A metallic intermediate band high efficiency solar cell. Progress in Photovoltaics: Research and Applications, 2001, 9, 73-86.	4.4	256
206	Photovoltaic market and costs forecast based on a demand elasticity model. Progress in Photovoltaics: Research and Applications, 2001, 9, 303-312.	4.4	37
207	Analysis of a technology for CZ bifacial solar cells. IEEE Transactions on Electron Devices, 2001, 48, 2337-2341.	1.6	10
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209	Partial filling of a quantum dot intermediate band for solar cells. IEEE Transactions on Electron Devices, 2001, 48, 2394-2399.	1.6	201
210	A Comprehensive Model for the Gettering of Lifetime-Killing Impurities in Silicon. Journal of the Electrochemical Society, 2000, 147, 2685.	1.3	32
211	Cz bifacial solar cells. IEEE Electron Device Letters, 2000, 21, 179-180.	2.2	7
212	Limiting efficiency of coupled thermal and photovoltaic converters. Solar Energy Materials and Solar Cells, 1999, 58, 147-165.	3.0	52
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