Pablo Garcia-Linares

List of Publications by Year
in descending order

67 papers	1,850 citations	331538 21 h-index	276775 41 g-index
69 all docs	69 docs citations	69 times ranked	1264 citing authors

#	Article	IF	Citations
1	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
2	Reducing carrier escape in the InAs/GaAs quantum dot intermediate band solar cell. Journal of Applied Physics, 2010, 108, .	1.1	156
3	Elements of the design and analysis of quantum-dot intermediate band solar cells. Thin Solid Films, 2008, 516, 6716-6722.	0.8	106
4	Voltage recovery in intermediate band solar cells. Solar Energy Materials and Solar Cells, 2012, 98, 240-244.	3.0	77
5	III-V compound semiconductor screening for implementing quantum dot intermediate band solar cells. Journal of Applied Physics, 2011, 109, 014313.	1.1	58
6	Self-organized colloidal quantum dots and metal nanoparticles for plasmon-enhanced intermediate-band solar cells. Nanotechnology, 2013, 24, 345402.	1.3	54
7	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
8	Multiple levels in intermediate band solar cells. Applied Physics Letters, 2010, 96, .	1.5	46
9	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
10	Understanding the operation of quantum dot intermediate band solar cells. Journal of Applied Physics, 2012, 111, 044502.	1.1	41
11	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
12	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
13	Photovoltaic Anodes for Enhanced Thermionic Energy Conversion. ACS Energy Letters, 2020, 5, 1364-1370.	8.8	35
14	High open-circuit voltage in transition metal dichalcogenide solar cells. Nano Energy, 2021, 79, 105427.	8.2	31
15	Some advantages of intermediate band solar cells based on type II quantum dots. Applied Physics Letters, 2013, 103, .	1.5	30
16	Advances in quantum dot intermediate band solar cells. , 2010, , .		29
17	Radiative thermal escape in intermediate band solar cells. AIP Advances, 2011, 1, .	0.6	29
18	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

#	Article	IF	Citations
19	InAs/AlGaAs quantum dot intermediate band solar cells with enlarged sub-bandgaps. , 2012, , .		25
20	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
21	Monolithic interconnected modules (MIM) for high irradiance photovoltaic energy conversion: A comprehensive review. Renewable and Sustainable Energy Reviews, 2017, 73, 477-495.	8.2	25
22	Understanding experimental characterization of intermediate band solar cells. Journal of Materials Chemistry, 2012, 22, 22832.	6.7	24
23	Extreme voltage recovery in GaAs:Ti intermediate band solar cells. Solar Energy Materials and Solar Cells, 2013, 108, 175-179.	3.0	22
24	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
25	Six not-so-easy pieces in intermediate band solar cell research. Journal of Photonics for Energy, 2013, 3, 031299.	0.8	20
26	<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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37	Low-Temperature Concentrated Light Characterization Applied to Intermediate Band Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 753-761.	1.5	10
38	Manufacturing and Characterization of III-V on Silicon Multijunction Solar Cells. Energy Procedia, 2016, 92, 242-247.	1.8	10
39	Spectrally-resolved measurement of concentrated light distributions for Fresnel lens concentrators. Optics Express, 2016, 24, A397.	1.7	10
40	Six not so easy pieces in intermediate band solar cell research. , 2013, , .		9
41	Two-photon photocurrent and voltage up-conversion in a quantum dot intermediate band solar cell. , 2014, , .		9
42	Hot carrier solar cells: Challenges and recent progress. , 2010, , .		7
43	The effect of concentration on the performance of quantum dot intermediate-band solar cells. , 2012, , .		7
44	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
45	Demonstrating the GaInP/GaAs Three-Terminal Heterojunction Bipolar Transistor Solar Cell. , 2019, , .		7
46	Considerations for the Design of a Heterojunction Bipolar Transistor Solar Cell. IEEE Journal of Photovoltaics, 2020, 10, 2-7.	1.5	7
47	Application of photoluminescence and electroluminescence techniques to the characterization of intermediate band solar cells. Energy Procedia, 2011, 10, 117-121.	1.8	6
48	Effect of the encapsulant temperature on the angular and spectral response of multi-junction solar cells. , 2014, , .		6
49	Improving optical performance of concentrator cells by means of a deposited nanopattern layer. AIP Conference Proceedings, 2015, , .	0.3	6
50	Characterization of Multijunction Concentrator Solar Cells. Green Energy and Technology, 2015, , 39-84.	0.4	6
51	Progress in threeâ€terminal heterojunction bipolar transistor solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 843-850.	4.4	6
52	IBPOWER: Intermediate band materials and solar cells for photovoltaics with high efficiency and reduced cost. , 2009, , .		5
53	Advances on multijunction solar cell characterization aimed at the optimization of real concentrator performance. , 2014, , .		5
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

#	Article	IF	Citations
55	III-V-on-silicon triple-junction based on the heterojunction bipolar transistor solar cell concept. , 2020, , .		4
56	Wafer-Bonded AlGaAs///Si Dual-Junction Solar Cells. , 2017, , .		3
57	A puzzling solar cell structure: An exercise to get insight on intermediate band solar cells. , 2013, , .		2
58	â€œMETHODâ€ A tool for mechanical, electrical, thermal, and optical characterization of single lens module design. AIP Conference Proceedings, 2015, , .	0.3	2
59	Potential of the three-terminal heterojunction bipolar transistor solar cell for space applications. , 2019, , .		2
60	Modelling of quantum dot solar cells for concentrator PV applications. , 2011, , .		1
61	Intermediate Band Solar Cells. Advances in Chemical and Materials Engineering Book Series, 0, , 188-213.	0.2	1
62	Developing a highly integrated receiverless low concentration module with III-V multijunction cells. AIP Conference Proceedings, 2016, , .	0.3	1
63	Characterization of the influence of temperature on achromatic mirrors by means of METHOD. AIP Conference Proceedings, 2016, , .	0.3	1
64	Reduction of front-metallization grid shading in concentrator cells through laser micro-grooved cover glass. AIP Conference Proceedings, 2015, , .	0.3	0
65	HIT intermediate-band solar cells with self-assembled colloidal quantum dots and metal nanoparticles. , 2015, , .		0
66	CURRICULAR EXPERIENTIAL LEARNING THROUGH A BLENDED COURSE OF COOPERATION FOR DEVELOPMENT IN WATER AND SANITATION. EDULEARN Proceedings, 2018, , .	0.0	0
67	High open-circuit voltage Mos2 homojunction - effect of Schottky barriers at the contacts. , 2020, , .		0