

Jerónimo Buencuerpo

List of Publications by Year in descending order

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papers

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368
citing authors

#	ARTICLE	IF	CITATIONS
1	High Efficiency Inverted GaAs and GaInP/GaAs Solar Cells With Strain-Balanced GaInAs/GaAsP Quantum Wells. <i>Advanced Energy Materials</i> , 2021, 11, 2002874.	19.5	55
2	Solar cell designs by maximizing energy production based on machine learning clustering of spectral variations. <i>Nature Communications</i> , 2018, 9, 5126.	12.8	28
3	Femtosecond laser fabrication of LIPSS-based waveplates on metallic surfaces. <i>Applied Surface Science</i> , 2020, 520, 146328.	6.1	28
4	Optical absorption enhancement in a hybrid system photonic crystal "thin substrate for photovoltaic applications. <i>Optics Express</i> , 2012, 20, A452.	3.4	25
5	Optically-thick 300 nm GaAs solar cells using adjacent photonic crystals. <i>Optics Express</i> , 2020, 28, 13845.	3.4	20
6	Nano-cones for broadband light coupling to high index substrates. <i>Scientific Reports</i> , 2016, 6, 38682.	3.3	17
7	Broadband antireflective nano-cones for tandem solar cells. <i>Optics Express</i> , 2015, 23, A322.	3.4	16
8	Light-trapping in photon enhanced thermionic emitters. <i>Optics Express</i> , 2015, 23, A1220.	3.4	14
9	Absorption features of the zero frequency mode in an ultra-thin slab. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	13
10	Optimization of four terminal rear heterojunction GaAs on Si interdigitated back contact tandem solar cells. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	13
11	Efficient light-trapping in ultrathin GaAs solar cells using quasi-random photonic crystals. <i>Nano Energy</i> , 2022, 96, 107080.	16.0	13
12	Homogenous Voltage-Matched Strings Using Three-Terminal Tandem Solar Cells: Fundamentals and End Losses. <i>IEEE Journal of Photovoltaics</i> , 2021, 11, 1078-1086.	2.5	12
13	Engineering the reciprocal space for ultrathin GaAs solar cells. <i>Optics and Laser Technology</i> , 2021, 142, 107224.	4.6	11
14	Cloaking of solar cell contacts at the onset of Rayleigh scattering. <i>Scientific Reports</i> , 2016, 6, 28669.	3.3	10
15	Graded buffer Bragg reflectors with high reflectivity and transparency for metamorphic optoelectronics. <i>Journal of Applied Physics</i> , 2021, 129, 173102.	2.5	9
16	Characterization of multiterminal tandem photovoltaic devices and their subcell coupling. <i>Cell Reports Physical Science</i> , 2021, 2, 100677.	5.6	8
17	Photon management with nanostructures on concentrator solar cells. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	7
18	High transmission nanowire contact arrays with subwavelength spacing. <i>Physica Status Solidi - Rapid Research Letters</i> , 2016, 10, 164-167.	2.4	5

#	ARTICLE	IF	CITATIONS
19	Fabrication, Measurement, and Modeling of GaInP/GaAs Three-Terminal Cells and Strings. , 2021, , .		4
20	Enabling ultrathin III-V solar cells using dual photonic crystals. , 2019, , .		3
21	Antireflective nanostructures for CPV. AIP Conference Proceedings, 2017, , .	0.4	2
22	Far-field diffraction of linear chirped gratings. Optics and Laser Technology, 2018, 107, 337-343.	4.6	2
23	Light absorption enhancement and radiation hardening for triple junction solar cell through bioinspired nanostructures. Bioinspiration and Biomimetics, 2021, 16, 056010.	2.9	2
24	Optical absorption enhancement in a hybrid system photonic crystal — Thin film for photovoltaic applications. , 2012, , .		1
25	Amplification of the Zeroth Order Mode in Ultra-thin Layers. Journal of Green Engineering (discontinued), 2016, 5, 71-82.	0.7	1
26	Optimum Single-Gap Solar Cells for Missions to Mercury. Journal of Spacecraft and Rockets, 2016, 53, 787-791.	1.9	1
27	Rear Heterojunction GaAs Solar Cells With Strain-Balanced GaInAs/GaAsP Quantum Wells. , 2019, , .		1
28	Trapezoidal grid fingers to reduce shadowing loss and improve short circuit current. Solar Energy Materials and Solar Cells, 2021, 231, 111294.	6.2	1
29	Polarization conversion on nanostructured metallic surfaces fabricated by LIPSS. , 2019, , .		1
30	3D-FDTD Analysis of Absorption Enhancement in Nanostructured Thin Film Solar Cells. , 2011, , .		0
31	Fabrication of Thin III-V Solar Cells on Ni Films using Electroless Ni Deposition. , 2019, , .		0
32	Dependence of Multijunction Optimal Gaps on Spectral Variability and Other Environmental and Device Parameters. , 2019, , .		0
33	Development of Solar Cells with Trapezoidal Grid Fingers. , 2019, , .		0
34	Rigorous Coupled Wave Analysis of GaAs Thermophotovoltaic Devices with a Patterned Dielectric Back Contact. , 2021, , .		0