Laura Ding

List of Publications by Year
in descending order

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46 papers	2,185 citations	516561 16 h-index	526166 27 g-index
46 all docs	46 docs citations	46 times ranked	3864 citing authors

#	Article	IF	Citations
1	Fully textured monolithic perovskite/silicon tandem solar cells with 25.2% power conversion efficiency. Nature Materials, 2018, 17, 820-826.	13.3	1,046
2	Nanoimprint Lithography for High-Efficiency Thin-Film Silicon Solar Cells. Nano Letters, 2011, 11, 661-665.	4.5	171
3	Environmental Changes in MoTe₂ Excitonic Dynamics by Defects-Activated Molecular Interaction. ACS Nano, 2015, 9, 5326-5332.	7.3	166
4	Geometric light trapping for high efficiency thin film silicon solar cells. Solar Energy Materials and Solar Cells, 2012, 98, 185-190.	3.0	94
5	Low-Temperature Screen-Printed Metallization for the Scale-Up of Two-Terminal Perovskiteâ€“Silicon Tandems. ACS Applied Energy Materials, 2019, 2, 3815-3821.	2.5	78
6	Instability of pâ€“iâ€“n perovskite solar cells under reverse bias. Journal of Materials Chemistry A, 2020, 8, 242-250.	5.2	76
7	Relaxing the Conductivity/Transparency Tradeâ€Off in MOCVD ZnO Thin Films by Hydrogen Plasma. Advanced Functional Materials, 2013, 23, 5177-5182.	7.8	60
8	On the photocatalytic degradation of phenol and dichloroacetate by BiVO4: The need of a sacrificial electron acceptor. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 216, 221-227.	2.0	56
9	Micromorph thin-film silicon solar cells with transparent high-mobility hydrogenated indium oxide front electrodes. Journal of Applied Physics, 2011, 109, .	1.1	43
10	Optimization of ZnO Front Electrodes for High-Efficiency Micromorph Thin-Film Si Solar Cells. IEEE Journal of Photovoltaics, 2012, 2, 229-235.	1.5	42
11	c-texture versus a-texture low pressure metalorganic chemical vapor deposition ZnO films: Lower resistivity despite smaller grain size. Thin Solid Films, 2014, 565, 1-6.	0.8	35
12	The development of high performance SnO2:F as TCOs for thin film silicon solar cells. Surface and Coatings Technology, 2012, 213, 167-174.	2.2	34
13	On the Interplay Between Microstructure and Interfaces in High-Efficiency Microcrystalline Silicon Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 11-16.	1.5	29
14	New progress in the fabrication of nâ€“iâ€“p micromorph solar cells for opaque substrates. Solar Energy Materials and Solar Cells, 2013, 114, 147-155.	3.0	29
15	Silicon Minority-carrier Lifetime Degradation During Molecular Beam Heteroepitaxial III-V Material Growth. Energy Procedia, 2016, 92, 617-623.	1.8	29
16	Nanometer- and Micrometer-Scale Texturing for High-Efficiency Micromorph Thin-Film Silicon Solar Cells. IEEE Journal of Photovoltaics, 2012, 2, 83-87.	1.5	25
17	Gallium nitride grown by molecular beam epitaxy at low temperatures. Thin Solid Films, 2017, 642, 25-30.	0.8	17
18	Latest Developments of High-Efficiency Micromorph Tandem Silicon Solar Cells Implementing Innovative Substrate Materials and Improved Cell Design. IEEE Journal of Photovoltaics, 2012, 2, 236-240.	1.5	15

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19	Low-Temperature Drop-on-Demand Reactive Silver Inks for Solar Cell Front-Grid Metallization. IEEE Journal of Photovoltaics, 2017, 7, 37-43.	1.5	15
20	Carrier scattering mechanisms limiting mobility in hydrogen-doped indium oxide. Journal of Applied Physics, 2018, 123, .	1.1	15
21	Hetero-emitter GaP/Si solar cells with high Si bulk lifetime. , 2016, , .		14
22	Quantitative Mapping of Deflection and Stress on Encapsulated Silicon Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 189-195.	1.5	12
23	New Generation Transparent LPCVD ZnO Electrodes for Enhanced Photocurrent in Micromorph Solar Cells and Modules. IEEE Journal of Photovoltaics, 2012, 2, 88-93.	1.5	11
24	High-performance tandem silicon solar cells on F:SnO2. Surface and Coatings Technology, 2013, 230, 228-233.	2.2	11
25	Thin-film silicon solar cells applying optically decoupled back reflectors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 645-650.	1.7	11
26	Evaluation of metal oxides prepared by reactive sputtering as carrier-selective contacts for crystalline silicon solar cells. , 2015, , .		9
27	On the source of silicon minority-carrier lifetime degradation during molecular beam heteroepitaxial growth of III-V materials. , 2016, , .		9
28	Optimization of the Asymmetric Intermediate Reflector Morphology for High Stabilized Efficiency Thin n-i-p Micromorph Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 41-45.	1.5	7
29	Silicon Nitride Barrier Layers Mitigate Minority-Carrier Lifetime Degradation in Silicon Wafers During Simulated MBE Growth of IIIâ€“V Layers. IEEE Journal of Photovoltaics, 2019, 9, 431-436.	1.5	6
30	Ethanol-enriched low-pressure chemical vapor deposition ZnO bilayers: Properties and growthâ€”A potential electrode for thin film solar cells. Journal of Applied Physics, 2013, 113, 024908.	1.1	4
31	Characterization of encapsulated solar cells by x-ray topography. , 2016, , .		4
32	Structural and optical investigations of GaN-Si interface for a heterojunction solar cell. , 2014, , .		3
33	Light harvesting schemes for high efficiency thin film silicon solar cells. , 2012, , .		2
34	Operando XPS characterization of selective contacts: The case of molybdenum oxide for crystalline silicon heterojunction solar cells. , 2016, , .		2
35	Hybrid sequential deposition process for fully textured perovskite/silicon tandem solar cells. , 2018, , .		2
36	Innovative Methods for Low-Temperature Contact Formation For Photovoltaics Applications. , 2015, , .		1

#	Article	IF	Citations
37	Unraveling of bulk and surface behavior in high-quality c-Si material via TIDLS. , 2016, , .		1
38	Engineering of Thin-Film Silicon Materials for High Efficiency Crystalline Silicon Solar Cells. , 2018, , .		1
39	Optimization of the asymmetric intermediate reflector morphology for high stabilized efficiency thin n-i-p micromorph solar cells. , 2012, , .		0
40	On the interplay between microstructure and interfaces in high-efficiency microcrystalline silicon solar cells. , 2012, , .		0
41	Optimization of the asymmetric intermediate reflector morphology for high stabilized efficiency thin n-i-p micromorph solar cells. , 2013, , .		0
42	On the interplay between microstructure and interfaces in high-efficiency microcrystalline silicon solar cells. , 2013, , .		0
43	Post-deposition treatment of microcrystalline silicon solar cells for improved performance on rough superstrates. Journal of Applied Physics, 2014, 116, 244504.	1.1	0
44	Reactive silver ink as front contacts for high efficiency silicon heterojunction solar cells. , 2016, , .		0
45	Operando XPS characterization of selective contacts: The case of molybdenum oxide for crystalline silicon heterojunction solar cells. , 2017, , .		0
46	What Limits Mobility in Hydrogenated Indium Oxide?. , 2018, , .		0