David L Young

List of Publications by Year in descending order

39 papers	2,195 citations	331670 21 h-index	377865 34 g-index
39 all docs	39 docs citations	39 times ranked	2568 citing authors

#	Article	IF	Citations
1	Performance of IIIâ€“V Solar Cells Grown on Reformed Mesoporous Ge Templates. IEEE Journal of Photovoltaics, 2022, 12, 337-343.	2.5	5
2	Accelerated reliability tests of n+ and p+ poly-Si passivated contacts. Solar Energy Materials and Solar Cells, 2022, 236, 111469.	6.2	3
3	Measurement of poly-Si film thickness on textured surfaces by X-ray diffraction in poly-Si/SiO passivating contacts for monocrystalline Si solar cells. Solar Energy Materials and Solar Cells, 2022, 236, 111510.	6.2	9
4	Self-Aligned Selective Area Front Contacts on Poly-Si/SiO _x Passivating Contact c-Si Solar Cells. IEEE Journal of Photovoltaics, 2022, 12, 678-689.	2.5	10
5	Atomic structure of light-induced efficiency-degrading defects in boron-doped Czochralski silicon solar cells. Energy and Environmental Science, 2021, 14, 5416-5422.	30.8	6
6	Effective Dielectric Passivation Scheme in Area-Selective Front/Back Poly-Si/SiOx Passivating Contact Solar Cells. , 2021, , .		0
7	Trap-Assisted Dopant Compensation Prevents Shunting in Poly-Si Passivating Interdigitated Back Contact Silicon Solar Cells. ACS Applied Energy Materials, 2021, 4, 10774-10782.	5.1	8
8	Changes in hydrogen concentration and defect state density at the poly-Si/SiOx/c-Si interface due to firing. Solar Energy Materials and Solar Cells, 2021, 231, 111297.	6.2	19
9	Isolating p- and n-Doped Fingers With Intrinsic Poly-Si in Passivated Interdigitated Back Contact Silicon Solar Cells. IEEE Journal of Photovoltaics, 2020, 10, 1574-1581.	2.5	12
10	On the hydrogenation of Poly-Si passivating contacts by Al2O3 and SiN thin films. Solar Energy Materials and Solar Cells, 2020, 215, 110592.	6.2	53
11	Effect of Crystallographic Orientation and Nanoscale Surface Morphology on Poly-Si/SiO_x Contacts for Silicon Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 42021-42031.	8.0	29
12	Critical interface: Poly-silicon to tunneling SiO2 for passivated contact performance. AIP Conference Proceedings, 2019, , .	0.4	2
13	Modifications of Textured Silicon Surface Morphology and Its Effect on Poly-Si/SiO _x Contact Passivation for Silicon Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 1513-1521.	2.5	13
14	III-V-Based Optoelectronics with Low-Cost Dynamic Hydride Vapor Phase Epitaxy. Crystals, 2019, 9, 3.	2.2	42
15	Understanding the charge transport mechanisms through ultrathin SiOx layers in passivated contacts for high-efficiency silicon solar cells. Applied Physics Letters, 2019, 114, .	3.3	41
16	Tunable Bandgap GaInAsP Solar Cells With 18.7% Photoconversion Efficiency Synthesized by Low-Cost and High-Growth Rate Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2018, 8, 1577-1583.	2.5	13
17	Hydrogen passivation of poly-Si/SiOx contacts for Si solar cells using Al2O3 studied with deuterium. Applied Physics Letters, 2018, 112, .	3.3	80
18	Effect of silicon oxide thickness on polysilicon based passivated contacts for high-efficiency crystalline silicon solar cells. Solar Energy Materials and Solar Cells, 2018, 185, 270-276.	6.2	60

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19	Effect of the SiO2 interlayer properties with solid-source hydrogenation on passivated contact performance and surface passivation. Energy Procedia, 2017, 124, 295-301.	1.8	24
20	Raising the one-sun conversion efficiency of IIIâ€“V/Si solar cells to 32.8% for two junctions andÂ35.9% for three junctions. Nature Energy, 2017, 2, .	39.5	424
21	Gallium-Doped Poly-Si:Ga/SiO2 Passivated Emitters to n-Cz Wafers With iV oc >730 mV. IEEE Journal of Photovoltaics, 2017, 7, 1640-1645.	2.5	31
22	Plasma immersion ion implantation for interdigitated back passivated contact (IBPC) solar cells. , 2016, , .		1
23	Polycrystalline silicon passivated tunneling contacts for high efficiency silicon solar cells. Journal of Materials Research, 2016, 31, 671-681.	2.6	133
24	Realization of GaInP/Si Dual-Junction Solar Cells With 29.8% 1-Sun Efficiency. IEEE Journal of Photovoltaics, 2016, 6, 1012-1019.	2.5	114
25	Low-cost plasma immersion ion implantation doping for Interdigitated back passivated contact (IBPC) solar cells. Solar Energy Materials and Solar Cells, 2016, 158, 68-76.	6.2	37
26	Interdigitated Back Passivated Contact (IBPC) Solar Cells Formed by Ion Implantation. IEEE Journal of Photovoltaics, 2016, 6, 41-47.	2.5	36
27	Development of highly-efficient GaInP/Si Tandem Solar Cells. , 2015, , .		8
28	Progress Towards a 30% Efficient GaInP/Si Tandem Solar Cell. Energy Procedia, 2015, 77, 464-469.	1.8	87
29	Modeling, Characterization, and Properties of Transparent Conducting Oxides. , 2011, , 51-110.		6
30	Capacitance study of inversion at the amorphous-crystalline interface of n-type silicon heterojunction solar cells. Journal of Applied Physics, 2011, 110, .	2.5	25
31	Effects of hydrogen content in sputtering ambient on ZnO:Al electrical properties. Journal of Non-Crystalline Solids, 2008, 354, 2787-2790.	3.1	31
32	Electronic Defects and Device Performance in CuGaSe2 Solar Cells. Materials Research Society Symposia Proceedings, 2007, 1012, 1.	0.1	0
33	Photoacoustic and Optical Properties of Zinc-Stannate Thin Films. Materials Science Forum, 2006, 518, 465-470.	0.3	4
34	Electronic Properties of Modified CuGaSe2 Solar Cells. Materials Research Society Symposia Proceedings, 2005, 865, 1121.	0.1	2
35	A simple method for the preparation of transparent p-type Ca-doped CuInO2 films: Pulsed-laser deposition from air-sintered Ca-doped Cu2In2O5 targets. Applied Physics Letters, 2004, 85, 3789-3791.	3.3	49
36	Critical issues in the design of polycrystalline, thin-film tandem solar cells. Progress in Photovoltaics: Research and Applications, 2003, 11, 359-375.	8.1	123

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37	Improved performance in ZnO/CdS/CuGaSe2 thin-film solar cells. Progress in Photovoltaics: Research and Applications, 2003, 11, 535-541.	8.1	110
38	Growth and characterization of radio frequency magnetron sputter-deposited zinc stannate, Zn2SnO4, thin films. Journal of Applied Physics, 2002, 92, 310-319.	2.5	194
39	Characterization of Transparent Conducting Oxides. MRS Bulletin, 2000, 25, 58-65.	3.5	351