John Moseley

List of Publications by Year
in descending order

53 papers	1,018 citations	516710 16 h-index	434195 31 g-index
53 all docs	53 docs citations	53 times ranked	853 citing authors

#	Article	IF	Citations
1	Voltage Loss Comparison in CdSe/CdTe Solar Cells and Polycrystalline CdSeTe Heterostructures. IEEE Journal of Photovoltaics, 2022, 12, 6-10.	2.5	8
2	Colossal grain growth in Cd(Se,Te) thin films and their subsequent use in CdTe epitaxy by close-spaced sublimation. JPhys Energy, 2021, 3, 024003.	5.3	8
3	Identification of Recombination Losses in CdSe/CdTe Solar Cells from Spectroscopic and Microscopic Timeâ€Resolved Photoluminescence. Solar Rrl, 2021, 5, 2000775.	5.8	17
4	Identification of Recombination Losses in CdSe/CdTe Solar Cells from Spectroscopic and Microscopic Timeâ€Resolved Photoluminescence. Solar Rrl, 2021, 5, 2170042.	5.8	2
5	Mechanisms for long carrier lifetime in Cd(Se)Te double heterostructures. Applied Physics Letters, 2021, 118, .	3.3	12
6	Exceeding 200â€‰ns Lifetimes in Polycrystalline CdTe Solar Cells. Solar Rrl, 2021, 5, 2100173.	5.8	10
7	Imaging <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">CdCl</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> defect passivation and formation in polycrystalline CdTe films by cathodoluminescence. Physical Review Materials, 2021, 5, .	2.4	5
8	Simulation App for Time-Resolved Photoluminescence in Thin-Film Solar Cells. , 2021, , .		1
9	Diverse simulations of time-resolved photoluminescence in thin-film solar cells: A SnO2/CdSeyTe1â^'y case study. Journal of Applied Physics, 2021, 130, .	2.5	11
10	Radiative Efficiency and Chargeâ€Carrier Lifetimes and Diffusion Length in Polycrystalline CdSeTe Heterostructures. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900606.	2.4	26
11	Roles of bandgrading, lifetime, band alignment, and carrier concentration in high-efficiency CdSeTe solar cells. Journal of Applied Physics, 2020, 128, .	2.5	22
12	Impact of dopant-induced optoelectronic tails on open-circuit voltage in arsenic-doped Cd(Se)Te solar cells. Journal of Applied Physics, 2020, 128, .	2.5	25
13	A Review and Perspective on Cathodoluminescence Analysis of Halide Perovskites. Advanced Energy Materials, 2020, 10, 1903840.	19.5	26
14	Thin-Film Solar Cells with 19% Efficiency by Thermal Evaporation of CdSe and CdTe. ACS Energy Letters, 2020, 5, 892-896.	17.4	105
15	Imaging hole-density inhomogeneity in arsenic-doped CdTe thin films by scanning capacitance microscopy. Solar Energy Materials and Solar Cells, 2020, 209, 110468.	6.2	8
16	Evidence of Buried Junction in CdSeTe Absorbers. , 2020, , .		0
17	High Efficiency Evaporated CdSeTe/CdTe Solar Cells with and without MgZnO Buffer Layer. , 2020, , .		0
18	Correlative nm-Scale Nonuniformity of Active Charge Carriers and Electrical Potential along both the Plane-View and Depth Directions in Group-V-Doped CdTe Thin Films. , 2020, , .		0

#	Article	IF	Citations
19	Exceeding 20% efficiency with in situ group V doping in polycrystalline CdTe solar cells. Nature Energy, 2019, 4, 837-845.	39.5	243
20	Characterization and modeling of reverseâ€bias breakdown in Cu(In,Ga)Se₂ photovoltaic devices. Progress in Photovoltaics: Research and Applications, 2019, 27, 812-823.	8.1	8
21	Recombination and bandgap engineering in CdSeTe/CdTe solar cells. APL Materials, 2019, 7, .	5.1	70
22	Carrier-Transport Study of Gallium Arsenide Hillock Defects. Microscopy and Microanalysis, 2019, 25, 1160-1166.	0.4	4
23	Enhanced p-Type Doping in Polycrystalline CdTe Films: Deposition and Activation. IEEE Journal of Photovoltaics, 2019, 9, 912-917.	2.5	23
24	Numerical simulations of cathodoluminescence measurements in thin-film solar cells. , 2019, , .		0
25	Synthesis of CdSeCdSe_xTe_{1-x}/CdTe for graded solar cells. , 2019, , .		0
26	Investigating PID shunting in polycrystalline silicon modules via multiscale, multitechnique characterization. Progress in Photovoltaics: Research and Applications, 2018, 26, 377-384.	8.1	26
27	Obtaining Large Columnar CdTe Grains and Long Lifetime on Nanocrystalline CdSe, MgZnO, or CdS Layers. Advanced Energy Materials, 2018, 8, 1702666.	19.5	49
28	Understanding arsenic incorporation in CdTe with atom probe tomography. Solar Energy Materials and Solar Cells, 2018, 182, 68-75.	6.2	17
29	Carrier-Transport Imaging of Cadmium Telluride Intra- and Inter-Grains. , 2018, , .		0
30	Artifact-Free Coring Procedures for Removing Samples from Photovoltaic Modules for Microscopic Analysis. , 2018, , .		8
31	Luminescence methodology to determine grain-boundary, grain-interior, and surface recombination in thin-film solar cells. Journal of Applied Physics, 2018, 124, .	2.5	25
32	Overcoming Carrier Concentration Limits in Polycrystalline CdTe Thin Films with In Situ Doping. Scientific Reports, 2018, 8, 14519.	3.3	84
33	Recombination velocity less than 100â€‰cm/s at polycrystalline Al2O3/CdSeTe interfaces. Applied Physics Letters, 2018, 112, .	3.3	47
34	Spatial luminescence imaging of dopant incorporation in CdTe Films. Journal of Applied Physics, 2017, 121, 045304.	2.5	5
35	Near-field transport imaging application of photovoltaic materials. , 2017, , .		0
36	Numerical Simulation of EBIC for Analysis of Extended Defects. , 2017, , .		1

#	Article	IF	Citations
37	Analytical (S)TEM Studies of Defects Associated with PID in Stressed Si PV Modules. , 2017, , .		1
38	Enhancing P-Type Doping in Polycrystalline CdTe Films. , 2017, , .		0
39	Investigating PID Shunting in Polycrystalline Silicon Modules via Multi-Scale, Multi-Technique Characterization. , 2017, , .		3
40	Long carrier lifetimes in large-grain polycrystalline CdTe without CdCl2. Applied Physics Letters, 2016, 108, .	3.3	30
41	Module degradation mechanisms studied by a multi-scale approach. , 2016, , .		7
42	Spatial distribution of dopant incorporation in CdTe. , 2016, , .		0
43	Spectrum-per-pixel cathodoluminescence imaging of CdTe thin-film bevels. , 2016, , .		1
44	Quantitative determination of grain boundary recombination velocity in CdTe by combination of cathodoluminescence measurements and numerical simulations. , 2015, , .		2
45	Opto-electronic characterization of CdTe solar cells from TCO to back contact with nano-scale CL probe. , 2015, , .		1
46	Quantitative Determination of Grain-Boundary Recombination Velocity in CdTe by Cathodoluminescence Measurements and Numerical Simulations. IEEE Journal of Photovoltaics, 2015, 5, 1722-1726.	2.5	27
47	Cathodoluminescence Analysis of Grain Boundaries and Grain Interiors in Thin-Film CdTe. IEEE Journal of Photovoltaics, 2014, 4, 1671-1679.	2.5	25
48	Cathodoluminescence study of carrier transport across grain boundaries in CdTe. , 2014, , .		0
49	Structural and Electro-Optical Properties of CdTe Films Used in CdTe/CdS Solar Cells Grown with Substrate Configuration. Materials Research Society Symposia Proceedings, 2013, 1493, 183-188.	0.1	0
50	Development of CdTe on Si Heteroepilayers for Controlled PV Material and Device Studies. Materials Research Society Symposia Proceedings, 2013, 1538, 243-248.	0.1	3
51	Explanation of red spectral shifts at CdTe grain boundaries. Applied Physics Letters, 2013, 103, .	3.3	13
52	Grain boundary character and recombination properties in CdTe thin films. , 2013, , .		9
53	Electron microscopy study of individual grain boundaries in Cu<inf>2</inf>ZnSnSe<inf>4</inf> thin films. , 2013, , .		0