Laurie J Phillips

List of Publications by Year
in descending order

37 papers	1,829 citations	257450 24 h-index	395702 33 g-index
38 all docs	38 docs citations	38 times ranked	2522 citing authors

#	Article	IF	Citations
1	Surface restoration of polycrystalline Sb2Se3 thin films by conjugated molecules enabling high-performance photocathodes for photoelectrochemical water splitting. Applied Catalysis B: Environmental, 2021, 286, 119890.	20.2	31
2	Band alignment of Sb2O3 and Sb2Se3. Journal of Applied Physics, 2021, 129, .	2.5	15
3	Identification of lead vacancy defects in lead halide perovskites. Nature Communications, 2021, 12, 5566.	12.8	51
4	Solar water splitting exceeding 10% efficiencyvialow-cost Sb₂Se₃photocathodes coupled with semitransparent perovskite photovoltaics. Energy and Environmental Science, 2020, 13, 4362-4370.	30.8	47
5	How Oxygen Exposure Improves the Back Contact and Performance of Antimony Selenide Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 52595-52602.	8.0	29
6	Natural Band Alignments and Band Offsets of Sb₂Se₃ Solar Cells. ACS Applied Energy Materials, 2020, 3, 11617-11626.	5.1	40
7	Vacancy-Ordered Double Perovskite Cs₂TeI₆ Thin Films for Optoelectronics. Chemistry of Materials, 2020, 32, 6676-6684.	6.7	41
8	Defect properties of Sb2Se3 thin film solar cells and bulk crystals. Applied Physics Letters, 2020, 116, .	3.3	29
9	Isotype Heterojunction Solar Cells Using n-Type Sb₂Se₃ Thin Films. Chemistry of Materials, 2020, 32, 2621-2630.	6.7	83
10	Evidence for Self-healing Benign Grain Boundaries and a Highly Defective Sb₂Se₃â€“CdS Interfacial Layer in Sb₂Se₃ Thin-Film Photovoltaics. ACS Applied Materials & Interfaces, 2020, 12, 21730-21738.	8.0	57
11	Benchmark performance of low-cost Sb2Se3 photocathodes for unassisted solar overall water splitting. Nature Communications, 2020, 11, 861.	12.8	135
12	Chemical etching of Sb₂Se₃ solar cells: surface chemistry and back contact behaviour. JPhys Energy, 2019, 1, 045001.	5.3	17
13	Current Enhancement via a TiO2 Window Layer for CSS Sb2Se3 Solar Cells: Performance Limits and High V _{oc}. IEEE Journal of Photovoltaics, 2019, 9, 544-551.	2.5	65
14	Stability and Performance of CsPbI₂Br Thin Films and Solar Cell Devices. ACS Applied Materials & Interfaces, 2018, 10, 3750-3760.	8.0	123
15	A comparison of organic back contact materials for CdTe solar cells. , 2018, , .		1
16	CSS Antimony Selenide Film Morphology and High Efficiency PV Devices. , 2018, , .		10
17	6.6% efficient antimony selenide solar cells using grain structure control and an organic contact layer. Solar Energy Materials and Solar Cells, 2018, 188, 177-181.	6.2	101
18	Band gap temperature-dependence of close-space sublimation grown Sb2Se3 by photo-reflectance. APL Materials, 2018, 6, 084901.	5.1	70

#	Article	IF	Citations
19	Schottky Diodes on ZnO Thin Films Grown by Plasma-Enhanced Atomic Layer Deposition. IEEE Transactions on Electron Devices, 2017, 64, 1225-1230.	3.0	8
20	Close-Spaced Sublimation for Sb2Se3Solar Cells. , 2017, , .		5
21	Progression of metalorganic chemical vapourâ€deposited CdTe thinâ€film PV devices towards modules. Progress in Photovoltaics: Research and Applications, 2016, 24, 283-291.	8.1	31
22	In-depth analysis of chloride treatments for thin-film CdTe solar cells. Nature Communications, 2016, 7, 13231.	12.8	74
23	Maximizing the optical performance of planar CH3NH3PbI3 hybrid perovskite heterojunction stacks. Solar Energy Materials and Solar Cells, 2016, 147, 327-333.	6.2	67
24	Modification of electron states in CdTe absorber due to a buffer layer in CdTe/CdS solar cells. Journal of Applied Physics, 2015, 118, .	2.5	10
25	Dispersion relation data for methylammonium lead triiodide perovskite deposited on a (100) silicon wafer using a two-step vapour-phase reaction process. Data in Brief, 2015, 5, 926-928.	1.0	72
26	NH<inline-formula><tex-math>$_{f 4}$</tex-math></inline-formula>Cl Alternative to the CdCl <inline-formula><tex-math>$_{f 2}$</tex-math></inline-formula> Treatment Step for CdTe Thin-Film Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 386-389.	2.5	21
27	Improved electrical mobility in highly epitaxial La:BaSnO3 films on SmScO3(110) substrates. Applied Physics Letters, 2014, 105, .	3.3	87
28	A combinatorial approach to the optimisation of Cd<inf>(1−x)</inf>Zn<inf>x</inf>S layers for CdTe solar cells. , 2014, , .		1
29	A low-cost non-toxic post-growth activation step for CdTe solar cells. Nature, 2014, 511, 334-337.	27.8	247
30	Non-parabolicity and band gap re-normalisation in Si doped ZnO. Journal of Applied Physics, 2014, 115, 063505.	2.5	8
31	Growth, disorder, and physical properties of ZnSnN2. Applied Physics Letters, 2013, 103, .	3.3	111
32	Self-Assembly of Aminoâ^'Thiols via Goldâ^'Nitrogen Links and Consequence for in situ Elongation of Molecular Wires on Surface-Modified Electrodes. Journal of Physical Chemistry C, 2011, 115, 4200-4208.	3.1	33
33	Synthesis of Covalently Linked Molecular Bridges between Silicon Electrodes in CMOSâ€Based Arrays of Vertical Si/SiO₂/Si Nanogaps. Angewandte Chemie - International Edition, 2011, 50, 8722-8726.	13.8	15
34	In Situ Stepwise Synthesis of Functional Multijunction Molecular Wires on Gold Electrodes and Gold Nanoparticles. Angewandte Chemie - International Edition, 2010, 49, 3508-3512.	13.8	27
35	Molecular Bridging of Silicon Nanogaps. ACS Nano, 2010, 4, 7401-7406.	14.6	37
36	Functional molecular wires. Physical Chemistry Chemical Physics, 2008, 10, 1859.	2.8	23

#	Article	IF	Citations
37	GeSe photovoltaics: doping, interfacial layer and devices. Faraday Discussions, 0, 239, 250-262.	3.2	6