Axel F Palmstrom

List of Publications by Year
in descending order

35 papers	6,064 citations	279798 23 h-index	477307 29 g-index
35 all docs	35 docs citations	35 times ranked	6682 citing authors

#	Article	IF	Citations
1	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. ACS Energy Letters, 2022, 7, 683-689.	17.4	5
2	Halide Organic Photovoltaics for Energy: Hybrid Perovskites for Solar Cells. , 2022, , 1-59.		0
3	Nanoscale Photoexcited Carrier Dynamics in Perovskites. Journal of Physical Chemistry Letters, 2022, 13, 2388-2395.	4.6	3
4	The Structural Origin of Chiroptical Properties in Perovskite Nanocrystals with Chiral Organic Ligands. Advanced Functional Materials, 2022, 32, .	14.9	43
5	Mixing Matters: Nanoscale Heterogeneity and Stability in Metal Halide Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 471-480.	17.4	23
6	Carrier control in Snâ€"Pb perovskites via 2D cation engineering for all-perovskite tandem solar cells with improved efficiency and stability. Nature Energy, 2022, 7, 642-651.	39.5	121
7	Reduced Self-Doping of Perovskites Induced by Short Annealing for Efficient Solar Modules. Joule, 2020, 4, 1949-1960.	24.0	72
8	Improving Low-Bandgap Tinâ€"Lead Perovskite Solar Cells via Contact Engineering and Gas Quench Processing. ACS Energy Letters, 2020, 5, 1215-1223.	17.4	78
9	Triple-halide wideâ€"band gap perovskites with suppressed phase segregation for efficient tandems. Science, 2020, 367, 1097-1104.	12.6	669
10	Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. Joule, 2020, 4, 1759-1775.	24.0	284
11	Surface-Activated Corrosion in Tinâ€"Lead Halide Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3344-3351.	17.4	55
12	Structural Stability of Tin-Lead Halide Perovskite Solar Cells. , 2020, , .		0
13	Mitigating Measurement Artifacts in TOF-SIMS Analysis of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 30911-30918.	8.0	44
14	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CIGS. Joule, 2019, 3, 1734-1745.	24.0	227
15	Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. Advanced Energy Materials, 2019, 9, 1902353.	19.5	47
16	Enabling Flexible All-Perovskite Tandem Solar Cells. Joule, 2019, 3, 2193-2204.	24.0	331
17	Carrier lifetimes of >1 Î¼s in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. Science, 2019, 364, 475-479.	12.6	781
18	Atomic layer deposition of vanadium oxide to reduce parasitic absorption and improve stability in nâ€"iâ€"p perovskite solar cells for tandems. Sustainable Energy and Fuels, 2019, 3, 1517-1525.	4.9	76

#	Article	IF	Citations
19	Stability of Tin-Lead Halide Perovskite Solar Cells. , 2019, , .		0
20	Understanding Measurement Artifacts Causing Inherent Cation Gradients in Depth Profiles of Perovskite Photovoltaics with TOF-SIMS. , 2019, , .		2
21	Design of low bandgap tinâ€"lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. Nature Energy, 2019, 4, 939-947.	39.5	235
22	Developing a Robust Recombination Contact to Realize Monolithic Perovskite Tandems With Industrially Common p-Type Silicon Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 1023-1028.	2.5	27
23	Optical and Compositional Engineering of Wide Band Gap Perovskites with Improved Stability to Photoinduced Phase Segregation for Efficient Monolithic Perovskite/Silicon Tandem Solar Cells. , 2018, , .		0
24	Interfacial Effects of Tin Oxide Atomic Layer Deposition in Metal Halide Perovskite Photovoltaics. Advanced Energy Materials, 2018, 8, 1800591.	19.5	62
25	Minimizing Current and Voltage Losses to Reach 25% Efficient Monolithic Two-Terminal Perovskiteâ€"Silicon Tandem Solar Cells. ACS Energy Letters, 2018, 3, 2173-2180.	17.4	194
26	Optical modeling of wide-bandgap perovskite and perovskite/silicon tandem solar cells using complex refractive indices for arbitrary-bandgap perovskite absorbers. Optics Express, 2018, 26, 27441.	3.4	102
27	23.6%-efficient monolithic perovskite/silicon tandem solar cells with improved stability. Nature Energy, 2017, 2, .	39.5	1,204
28	Improved light management in planar silicon and perovskite solar cells using PDMS scattering layer. Solar Energy Materials and Solar Cells, 2017, 173, 59-65.	6.2	82
29	Tailoring Mixed-Halide, Wide-Gap Perovskites via Multistep Conversion Process. ACS Applied Materials & Interfaces, 2016, 8, 14301-14306.	8.0	23
30	Molecular Ligands Control Superlattice Structure and Crystallite Orientation in Colloidal Quantum Dot Solids. Chemistry of Materials, 2016, 28, 7072-7081.	6.7	17
31	Impact of Conformality and Crystallinity for Ultrathin 4 nm Compact TiO₂ Layers in Perovskite Solar Cells. Advanced Materials Interfaces, 2016, 3, 1600580.	3.7	19
32	Perovskite-perovskite tandem photovoltaics with optimized band gaps. Science, 2016, 354, 861-865.	12.6	1,107
33	Improving Performance in Colloidal Quantum Dot Solar Cells by Tuning Band Alignment through Surface Dipole Moments. Journal of Physical Chemistry C, 2015, 119, 2996-3005.	3.1	58
34	Atomic layer deposition in nanostructured photovoltaics: tuning optical, electronic and surface properties. Nanoscale, 2015, 7, 12266-12283.	5.6	73
35	Designing Contact Layers and Surface Treatments to Overcome Performance Challenges for Perovskite Tandems. , 0, , .		0