Sean P Dunfield

List of Publications by Year
in descending order

29 papers	2,937 citations	430442 18 h-index	610482 24 g-index
29 all docs	29 docs citations	29 times ranked	3555 citing authors

#	Article	IF	Citations
1	Carrier lifetimes of >1 Î¼s in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. Science, 2019, 364, 475-479.	6.0	781
2	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. Science, 2020, 368, 155-160.	6.0	420
3	Enabling Flexible All-Perovskite Tandem Solar Cells. Joule, 2019, 3, 2193-2204.	11.7	331
4	From Defects to Degradation: A Mechanistic Understanding of Degradation in Perovskite Solar Cell Devices and Modules. Advanced Energy Materials, 2020, 10, 1904054.	10.2	256
5	Design of low bandgap tinâ€“lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. Nature Energy, 2019, 4, 939-947.	19.8	235
6	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. Science, 2022, 375, 71-76.	6.0	216
7	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.	19.8	121
8	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wideâ€Bandgap Perovskite Solar Cells Beyond 21%. Solar Rrl, 2020, 4, 2000082.	3.1	79
9	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. APL Materials, 2019, 7, .	2.2	74
10	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Twoâ€Dimensional Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 11737-11741.	7.2	67
11	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. ACS Energy Letters, 2020, 5, 1856-1864.	8.8	65
12	Surface-Activated Corrosion in Tinâ€“Lead Halide Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3344-3351.	8.8	55
13	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2349-2360.	8.8	49
14	Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. CheM, 2021, 7, 774-785.	5.8	37
15	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. ACS Energy Letters, 2018, 3, 1192-1197.	8.8	33
16	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. Chemistry of Materials, 2021, 33, 5035-5044.	3.2	33
17	Beyond Strain: Controlling the Surface Chemistry of CsPbI₃ Nanocrystal Films for Improved Stability against Ambient Reactive Oxygen Species. Chemistry of Materials, 2020, 32, 7850-7860.	3.2	23
18	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Twoâ€Dimensional Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 11863-11867.	1.6	22

#	Article	IF	Citations
19	Complementary interface formation toward high-efficiency all-back-contact perovskite solar cells. Cell Reports Physical Science, 2021, 2, 100363.	2.8	17
20	Carrier gradients and the role of charge selective contacts in lateral heterojunction all back contact perovskite solar cells. Cell Reports Physical Science, 2021, 2, 100520.	2.8	12
21	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. ACS Energy Letters, 2022, 7, 683-689.	8.8	5
22	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wideâ€Bandgap Perovskite Solar Cells Beyond 21%. Solar Rrl, 2020, 4, 2070065.	3.1	2
23	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. Science, 2021, , eabj2637.	6.0	2
24	On the equilibrium electrostatic potential and lightâ€induced charge redistribution in halide perovskite structures. Progress in Photovoltaics: Research and Applications, 2022, 30, 994-1002.	4.4	2
25	Stability of Tin-Lead Halide Perovskite Solar Cells. , 2019, , .		0
26	Digital alloy contact layers for perovskite solar cells. Synthetic Metals, 2020, 266, 116412.	2.1	0
27	Substrate-Controlled Electronic Properties of Perovskite Layer in Lateral Heterojunction Configuration. , 2021, , .		0
28	Investigating the effect of lamination on FAMACs: toward a new phase space of perovskite solar cell fabrication. , 2019, , .		0
29	Approaching the Limits of Optoelectronic Performance in Mixed Cation Mixed Halide Perovskites by Controlling Surface Recombination. , 2020, , .		0