Sean P Dunfield

List of Publications by Citations

23 papers	1,625 citations	16 h-index	29 g-index
29 ext. papers	2,199 ext. citations	19.9 avg, IF	4.6 L-index

#	Paper	IF	Citations
23	Carrier lifetimes of >1 µs in Sn-Pb perovskites enable efficient all-perovskite tandem solar cells. *Science*, **2019**, 364, 475-479	33.3	496
22	Efficient, stable silicon tandem cells enabled by anion-engineered wide-bandgap perovskites. *Science*, **2020**, 368, 155-160	33.3	240
21	Enabling Flexible All-Perovskite Tandem Solar Cells. *Joule*, **2019**, 3, 2193-2204	27.8	211
20	Design of low bandgap tin–lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. *Nature Energy*, **2019**, 4, 939-947	62.3	152
19	From Defects to Degradation: A Mechanistic Understanding of Degradation in Perovskite Solar Cell Devices and Modules. *Advanced Energy Materials*, **2020**, 10, 1904054	21.8	119
18	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. *Science*, **2022**, 375, 71-76	33.3	51
17	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Two-Dimensional Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2019**, 58, 11737-11741	16.4	48
16	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. *APL Materials*, **2019**, 7, 041103	5.7	47
15	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. *Solar Rrl*, **2020**, 4, 2000082	7.1	46
14	The Role of Dimethylammonium in Bandgap Modulation for Stable Halide Perovskites. *ACS Energy Letters*, **2020**, 5, 1856-1864	20.1	39
13	The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 2349-2360	20.1	31
12	Surface-Activated Corrosion in Tin–Lead Halide Perovskite Solar Cells. *ACS Energy Letters*, **2020**, 5, 3344-3351	20.1	31
11	Surface lattice engineering through three-dimensional lead iodide perovskitoid for high-performance perovskite solar cells. *CheM*, **2021**, 7, 774-785	16.2	18
10	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. *ACS Energy Letters*, **2018**, 3, 1192-1197	20.1	17
9	Enhanced Charge Transport by Incorporating Formamidinium and Cesium Cations into Two-Dimensional Perovskite Solar Cells. *Angewandte Chemie*, **2019**, 131, 11863-11867	3.6	16
8	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. *Chemistry of Materials*, **2021**, 33, 5035-5044	9.6	13
7	Beyond Strain: Controlling the Surface Chemistry of $CsPbI_3$ Nanocrystal Films for Improved Stability against Ambient Reactive Oxygen Species. *Chemistry of Materials*, **2020**, 32, 7850-7860	9.6	11

List of Publications

6	Complementary interface formation toward high-efficiency all-back-contact perovskite solar cells. *Cell Reports Physical Science*, **2021**, 2, 100363	6.1	10
5	Metastable Dion-Jacobson 2D structure enables efficient and stable perovskite solar cells. *Science*, **2021**, eabj2637	33.3	2
4	Enhancing Charge Transport of 2D Perovskite Passivation Agent for Wide-Bandgap Perovskite Solar Cells Beyond 21%. *Solar Rrl*, **2020**, 4, 2070065	7.1	1
3	Electrochemical Screening of Contact Layers for Metal Halide Perovskites. *ACS Energy Letters*, **2022**, 7, 683-689	20.1	1
2	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	6.1	1
1	Digital alloy contact layers for perovskite solar cells. *Synthetic Metals*, **2020**, 266, 116412	3.6	