Dane W Dequilettes

List of Publications by Year
in descending order

22	6,327	394421 19	677142 22
papers	citations	h-index	g-index

22	22	22	8865
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of microstructure on local carrier lifetime in perovskite solar cells. Science, 2015, 348, 683-686.	12.6	1,833
2	Photo-induced halide redistribution in organicâ€“inorganic perovskite films. Nature Communications, 2016, 7, 11683.	12.8	778
3	Enhanced optoelectronic quality of perovskite thin films with hypophosphorous acid for planar heterojunction solar cells. Nature Communications, 2015, 6, 10030.	12.8	620
4	Polymer-modified halide perovskite films for efficient and stable planar heterojunction solar cells. Science Advances, 2017, 3, e1700106.	10.3	588
5	Photoluminescence Lifetimes Exceeding 8 Î¼s and Quantum Yields Exceeding 30% in Hybrid Perovskite Thin Films by Ligand Passivation. ACS Energy Letters, 2016, 1, 438-444.	17.4	452
6	The Importance of Moisture in Hybrid Lead Halide Perovskite Thin Film Fabrication. ACS Nano, 2015, 9, 9380-9393.	14.6	451
7	Hybrid perovskite films approaching the radiative limit with over 90% photoluminescence quantum efficiency. Nature Photonics, 2018, 12, 355-361.	31.4	408
8	Efficient perovskite solar cells by metal ion doping. Energy and Environmental Science, 2016, 9, 2892-2901.	30.8	372
9	Charge-Carrier Recombination in Halide Perovskites. Chemical Reviews, 2019, 119, 11007-11019.	47.7	197
10	A General Route to Enhance Polymer Solar Cell Performance using Plasmonic Nanoprisms. Advanced Energy Materials, 2014, 4, 1400206.	19.5	118
11	Zr Incorporation into TiO₂ Electrodes Reduces Hysteresis and Improves Performance in Hybrid Perovskite Solar Cells while Increasing Carrier Lifetimes. Journal of Physical Chemistry Letters, 2015, 6, 669-675.	4.6	106
12	Tracking Photoexcited Carriers in Hybrid Perovskite Semiconductors: Trap-Dominated Spatial Heterogeneity and Diffusion. ACS Nano, 2017, 11, 11488-11496.	14.6	105
13	The Role of Excitation Energy in Photobrightening and Photodegradation of Halide Perovskite Thin Films. Journal of Physical Chemistry Letters, 2018, 9, 2062-2069.	4.6	74
14	Benefit from Photon Recycling at the Maximum-Power Point of State-of-the-Art Perovskite Solar Cells. Physical Review Applied, 2019, 12, .	3.8	50
15	Design rules for the broad application of fast (<1 s) methylamine vapor based, hybrid perovskite post deposition treatments. RSC Advances, 2016, 6, 27475-27484.	3.6	41
16	M13 Virusâ€Based Framework for High Fluorescence Enhancement. Small, 2019, 15, e1901233.	10.0	30
17	Bulk recrystallization for efficient mixed-cation mixed-halide perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 25511-25520.	10.3	27
18	Hot Hole Transfer Increasing Polaron Yields in Hybrid Conjugated Polymer/PbS Blends. Journal of Physical Chemistry Letters, 2014, 5, 208-211.	4.6	22

#	Article	IF	Citations
19	Electrical Detection of Quantum Dot Hot Electrons Generated via a Mn²⁺-Enhanced Auger Process. Journal of Physical Chemistry Letters, 2017, 8, 126-130.	4.6	20
20	Direct Measurement of Acceptor Group Localization on Donorâ€“Acceptor Polymers Using Resonant Auger Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 5570-5578.	3.1	13
21	Impact of Photon Recycling, Grain Boundaries, and Nonlinear Recombination on Energy Transport in Semiconductors. ACS Photonics, 2022, 9, 110-122.	6.6	13
22	Maximizing the external radiative efficiency of hybrid perovskite solar cells. Pure and Applied Chemistry, 2020, 92, 697-706.	1.9	9