Aryeh Gold-Parker

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/551110/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Band Gap Tuning via Lattice Contraction and Octahedral Tilting in Perovskite Materials for Photovoltaics. Journal of the American Chemical Society, 2017, 139, 11117-11124.	13.7	570
2	The Harvard Clean Energy Project: Large-Scale Computational Screening and Design of Organic Photovoltaics on the World Community Grid. Journal of Physical Chemistry Letters, 2011, 2, 2241-2251.	4.6	470
3	Mechanism of Tin Oxidation and Stabilization by Lead Substitution in Tin Halide Perovskites. ACS Energy Letters, 2017, 2, 2159-2165.	17.4	351
4	Compositional and orientational control in metal halide perovskites of reduced dimensionality. Nature Materials, 2018, 17, 900-907.	27.5	351
5	Defect-Induced Band-Edge Reconstruction of a Bismuth-Halide Double Perovskite for Visible-Light Absorption. Journal of the American Chemical Society, 2017, 139, 5015-5018.	13.7	288
6	Engineering Stress in Perovskite Solar Cells to Improve Stability. Advanced Energy Materials, 2018, 8, 1802139.	19.5	271
7	Chloride in Lead Chloride-Derived Organo-Metal Halides for Perovskite-Absorber Solar Cells. Chemistry of Materials, 2014, 26, 7158-7165.	6.7	256
8	Impact of Surfaces on Photoinduced Halide Segregation in Mixed-Halide Perovskites. ACS Energy Letters, 2018, 3, 2694-2700.	17.4	184
9	Tin–lead halide perovskites with improved thermal and air stability for efficient all-perovskite tandem solar cells. Sustainable Energy and Fuels, 2018, 2, 2450-2459.	4.9	167
10	Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. ACS Energy Letters, 2018, 3, 1225-1232.	17.4	148
11	Ultrafast narrowband exciton routing within layered perovskite nanoplatelets enables low-loss luminescent solar concentrators. Nature Energy, 2019, 4, 197-205.	39.5	132
12	Structural Origins of Light-Induced Phase Segregation in Organic-Inorganic Halide Perovskite Photovoltaic Materials. Matter, 2020, 2, 207-219.	10.0	128
13	Chlorine in PbCl ₂ -Derived Hybrid-Perovskite Solar Absorbers. Chemistry of Materials, 2015, 27, 7240-7243.	6.7	91
14	Acoustic phonon lifetimes limit thermal transport in methylammonium lead iodide. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11905-11910.	7.1	81
15	Transformation from crystalline precursor to perovskite in PbCl2-derived MAPbl3. Nature Communications, 2018, 9, 3458.	12.8	77
16	Tuning the bandgap of Cs ₂ AgBiBr ₆ through dilute tin alloying. Chemical Science, 2019, 10, 10620-10628.	7.4	58
17	Degradation mechanisms in mixed-cation and mixed-halide Cs _x FA _{1â^'x} Pb(Br _y I _{1â^'y}) ₃ perovskite films under ambient conditions. Journal of Materials Chemistry A, 2020, 8, 9302-9312.	10.3	26
18	Alloying a single and a double perovskite: a Cu ^{+/2+} mixed-valence layered halide perovskite with strong optical absorption. Chemical Science, 2021, 12, 8689-8697.	7.4	24

2

#	Article	IF	CITATIONS
19	Compositional heterogeneity in Cs _{<i>y</i>} FA _{1â^²<i>y</i>} Pb(Br _{<i>x</i>} I _{1â^²<i>x</i>}) _{3< perovskite films and its impact on phase behavior. Energy and Environmental Science, 2021, 14, 6394-6405.}	/sub> 30.8	20
20	Test of the Dynamic-Domain and Critical Scattering Hypotheses in Cubic Methylammonium Lead Triiodide. Physical Review Letters, 2020, 125, .	7.8	13
21	Designing Contact Layers and Surface Treatments to Overcome Performance Challenges for Perovskite Tandems. , 0, , .		0