Jeffrey A Christians

List of Publications by Year
in descending order

39 papers	11,395 citations	147566 31 h-index	360668 35 g-index
39 all docs	39 docs citations	39 times ranked	13436 citing authors

#	Article	IF	Citations
1	Quantum dotâ€“induced phase stabilization of Î±-CsPbI ₃ perovskite for high-efficiency photovoltaics. Science, 2016, 354, 92-95.	6.0	2,287
2	Intriguing Optoelectronic Properties of Metal Halide Perovskites. Chemical Reviews, 2016, 116, 12956-13008.	23.0	1,343
3	An Inorganic Hole Conductor for Organo-Lead Halide Perovskite Solar Cells. Improved Hole Conductivity with Copper Iodide. Journal of the American Chemical Society, 2014, 136, 758-764.	6.6	1,196
4	Transformation of the Excited State and Photovoltaic Efficiency of CH₃NH₃PbI₃ Perovskite upon Controlled Exposure to Humidified Air. Journal of the American Chemical Society, 2015, 137, 1530-1538.	6.6	1,160
5	Enhanced mobility CsPbI ₃ quantum dot arrays for record-efficiency, high-voltage photovoltaic cells. Science Advances, 2017, 3, eaao4204.	4.7	801
6	Tailored interfaces of unencapsulated perovskite solar cells for >1,000 hour operational stability. Nature Energy, 2018, 3, 68-74.	19.8	722
7	Making and Breaking of Lead Halide Perovskites. Accounts of Chemical Research, 2016, 49, 330-338.	7.6	571
8	Extrinsic ion migration in perovskite solar cells. Energy and Environmental Science, 2017, 10, 1234-1242.	15.6	458
9	Targeted Ligand-Exchange Chemistry on Cesium Lead Halide Perovskite Quantum Dots for High-Efficiency Photovoltaics. Journal of the American Chemical Society, 2018, 140, 10504-10513.	6.6	303
10	Best Practices in Perovskite Solar Cell Efficiency Measurements. Avoiding the Error of <i>Making Bad Cells Look Good</i>. Journal of Physical Chemistry Letters, 2015, 6, 852-857.	2.1	294
11	Doping strategies for small molecule organic hole-transport materials: impacts on perovskite solar cell performance and stability. Chemical Science, 2019, 10, 1904-1935.	3.7	279
12	Structural and chemical evolution of methylammonium lead halide perovskites during thermal processing from solution. Energy and Environmental Science, 2016, 9, 2072-2082.	15.6	188
13	Perovskite Quantum Dot Photovoltaic Materials beyond the Reach of Thin Films: Full-Range Tuning of A-Site Cation Composition. ACS Nano, 2018, 12, 10327-10337.	7.3	186
14	High-Work-Function Molybdenum Oxide Hole Extraction Contacts in Hybrid Organicâ€“Inorganic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 31491-31499.	4.0	151
15	Trap and Transfer. Two-Step Hole Injection Across the Sb₂S₃/CuSCN Interface in Solid-State Solar Cells. ACS Nano, 2013, 7, 7967-7974.	7.3	131
16	Quantum Dot Solar Cells: Hole Transfer as a Limiting Factor in Boosting the Photoconversion Efficiency. Langmuir, 2014, 30, 5716-5725.	1.6	126
17	Insights into operational stability and processing of halide perovskite active layers. Energy and Environmental Science, 2019, 12, 1341-1348.	15.6	125
18	Stability in Perovskite Photovoltaics: A Paradigm for Newfangled Technologies. ACS Energy Letters, 2018, 3, 2136-2143.	8.8	113

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19	High-Performance Flexible Perovskite Solar Cells on Ultrathin Glass: Implications of the TCO. Journal of Physical Chemistry Letters, 2017, 8, 4960-4966.	2.1	111
20	Multifaceted Excited State of CH₃NH₃PbI₃. Charge Separation, Recombination, and Trapping. Journal of Physical Chemistry Letters, 2015, 6, 2086-2095.	2.1	107
21	Rate limiting interfacial hole transfer in Sb₂S₃ solid-state solar cells. Energy and Environmental Science, 2014, 7, 1148-1158.	15.6	97
22	Degradation of Highly Alloyed Metal Halide Perovskite Precursor Inks: Mechanism and Storage Solutions. ACS Energy Letters, 2018, 3, 979-985.	8.8	84
23	Reactions at noble metal contacts with methylammonium lead triiodide perovskites: Role of underpotential deposition and electrochemistry. APL Materials, 2019, 7, .	2.2	74
24	Probing Perovskite Inhomogeneity beyond the Surface: TOF-SIMS Analysis of Halide Perovskite Photovoltaic Devices. ACS Applied Materials & Interfaces, 2018, 10, 28541-28552.	4.0	72
25	Thermally Stable Perovskite Solar Cells by Systematic Molecular Design of the Hole-Transport Layer. ACS Energy Letters, 2019, 4, 473-482.	8.8	66
26	Monitoring a Silent Phase Transition in CH₃NH₃PbI₃ Solar Cells via <i>Operando</i> X-ray Diffraction. ACS Energy Letters, 2016, 1, 1007-1012.	8.8	52
27	Suppressing Cation Migration in Triple-Cation Lead Halide Perovskites. ACS Energy Letters, 2020, 5, 2802-2810.	8.8	51
28	A quantitative and spatially resolved analysis of the performance-bottleneck in high efficiency, planar hybrid perovskite solar cells. Energy and Environmental Science, 2018, 11, 960-969.	15.6	40
29	CdSeS Nanowires: Compositionally Controlled Band Gap and Exciton Dynamics. Journal of Physical Chemistry Letters, 2014, 5, 1103-1109.	2.1	38
30	Comment on â€œLight-induced lattice expansion leads to high-efficiency perovskite solar cellsâ€• Science, 2020, 368, .	6.0	38
31	Curtailing Perovskite Processing Limitations via Lamination at the Perovskite/Perovskite Interface. ACS Energy Letters, 2018, 3, 1192-1197.	8.8	33
32	Stability at Scale: Challenges of Module Interconnects for Perovskite Photovoltaics. ACS Energy Letters, 2018, 3, 2502-2503.	8.8	31
33	Wide Dynamic Range Sensing with Single Quantum Dot Biosensors. ACS Nano, 2012, 6, 8078-8086.	7.3	29
34	Solar Cells versus Solar Fuels: Two Different Outcomes. Journal of Physical Chemistry Letters, 2015, 6, 1917-1918.	2.1	24
35	Substrate-Dependent Photoconductivity Dynamics in a High-Efficiency Hybrid Perovskite Alloy. Journal of Physical Chemistry C, 2019, 123, 3402-3415.	1.5	10
36	Perovskite Quantum Dots. A New Absorber for Perovskite-Perovskite Tandem Solar Cells. , 2018, , .		2

#	Article	IF	Citations
37	Measuring Phase Changes to Predict Halide Perovskite Solar Cell Degradation. , 2021, , .		2
38	Operando X-Ray Diffraction for Characterization of Photovoltaic Materials. , 2017, , .		0
39	In Situ Measurment of Halide Perovskite Phase Changes. , 0, , .		0