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List of Publications by Year in descending order

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39
papers

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279701

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docs citations

40
times ranked

5076
citing authors

#	ARTICLE	IF	CITATIONS
1	Chalcogenide Perovskites: Tantalizing Prospects, Challenging Materials. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	58
2	Effects of material properties of bandâ€gapâ€graded Cu(In,Ga)Se ₂ thin films on the onset of the quantum efficiency spectra of corresponding solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2022, 30, 1238-1246.	4.4	5
3	Surface preparation for 10% efficient CZTSe solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2021, 29, 188-199.	4.4	10
4	BaZrS ₃ Chalcogenide Perovskite Thin Films by H ₂ S Sulfurization of Oxide Precursors. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2148-2153.	2.1	46
5	Compositional and Interfacial Engineering Yield High-Performance and Stable p-i-n Perovskite Solar Cells and Mini-Modules. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 13022-13033.	4.0	69
6	Influence of the Rear Interface on Composition and Photoluminescence Yield of CZTSSe Absorbers: A Case for an Al ₂ O ₃ Intermediate Layer. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 19487-19496.	4.0	7
7	Probing the Origin of the Open Circuit Voltage in Perovskite Quantum Dot Photovoltaics. <i>ACS Nano</i> , 2021, 15, 19334-19344.	7.3	18
8	The Doping Mechanism of Halide Perovskite Unveiled by Alkaline Earth Metals. <i>Journal of the American Chemical Society</i> , 2020, 142, 2364-2374.	6.6	132
9	Effects of Postdeposition Annealing on the Luminescence of Mixed-Phase CsPb ₂ Br ₅ /CsPbBr ₃ Thin Films. <i>Journal of Physical Chemistry C</i> , 2020, 124, 19514-19521.	1.5	21
10	Dependence of phase transitions on halide ratio in inorganic CsPb(Br _x I _{1-x}) ₃ perovskite thin films obtained from high-throughput experimentation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22626-22631.	5.2	20
11	Microscopic origins of performance losses in highly efficient Cu(In,Ga)Se ₂ thin-film solar cells. <i>Nature Communications</i> , 2020, 11, 4189.	5.8	51
12	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. <i>Science</i> , 2020, 370, 1300-1309.	6.0	1,120
13	Photoluminescenceâ€Based Characterization of Halide Perovskites for Photovoltaics. <i>Advanced Energy Materials</i> , 2020, 10, 1904134.	10.2	299
14	High-temperature decomposition of Cu ₂ BaSnS ₄ with Sn loss reveals newly identified compound Cu ₂ Ba ₃ Sn ₂ S ₈ . <i>Journal of Materials Chemistry A</i> , 2020, 8, 11346-11353.	5.2	8
15	Reaction Pathway for Efficient Cu ₂ ZnSnSe ₄ Solar Cells from Alloyed Cu _{1-x} Sn Precursor via a Cuâ€Rich Selenization Stage. <i>Solar Rrl</i> , 2020, 4, 2000124.	3.1	13
16	Upper limit to the photovoltaic efficiency of imperfect crystals from first principles. <i>Energy and Environmental Science</i> , 2020, 13, 1481-1491.	15.6	107
17	Effect of Ag incorporation on structure and optoelectronic properties of (Ag _{1-x} Cu _x) ₂ ZnSnSe ₄ solid solutions. <i>Physical Review Materials</i> , 2020, 4, .	0.9	12
18	The impact of energy alignment and interfacial recombination on the internal and external open-circuit voltage of perovskite solar cells. <i>Energy and Environmental Science</i> , 2019, 12, 2778-2788.	15.6	570

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19	From Bulk to Surface: Sodium Treatment Reduces Recombination at the Nickel Oxide/Perovskite Interface. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900789.	1.9	45
20	Suppressed Deep Traps and Bandgap Fluctuations in Cu ₂ CdSnS ₄ Solar Cells with ~8% Efficiency. <i>Advanced Energy Materials</i> , 2019, 9, 1902509.	10.2	65
21	21.6%-Efficient Monolithic Perovskite/Cu(In,Ga)Se ₂ Tandem Solar Cells with Thin Conformal Hole Transport Layers for Integration on Rough Bottom Cell Surfaces. <i>ACS Energy Letters</i> , 2019, 4, 583-590.	8.8	155
22	High open circuit voltages in pin-type perovskite solar cells through strontium addition. <i>Sustainable Energy and Fuels</i> , 2019, 3, 550-563.	2.5	57
23	Deep Defect States in Wide-Band-Gap ABX ₃ Halide Perovskites. <i>ACS Energy Letters</i> , 2019, 4, 1150-1157.	8.8	54
24	Low Temperature Synthesis of Stable CsPbI_3 Perovskite Layers for Solar Cells Obtained by High Throughput Experimentation. <i>Advanced Energy Materials</i> , 2019, 9, 1900555.	10.2	108
25	Relating Carrier Dynamics and Photovoltaic Device Performance of Single-Crystalline $\text{Cu}_2\text{ZnSnS}_4$. <i>Physical Review Applied</i> , 2019, 11, .	1.5	11
26	Mixtures of Dopant-Free Spiro-OMeTAD and Water-Free PEDOT as a Passivating Hole Contact in Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 9172-9181.	4.0	28
27	Conformal monolayer contacts with lossless interfaces for perovskite single junction and monolithic tandem solar cells. <i>Energy and Environmental Science</i> , 2019, 12, 3356-3369.	15.6	519
28	Open-Circuit Voltages Exceeding 1.26 V in Planar Methylammonium Lead Iodide Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2019, 4, 110-117.	8.8	296
29	Phase and film formation pathway for vacuum-deposited Cu ₂ BaSn(S,Se) ₄ absorber layers. <i>Physical Review Materials</i> , 2019, 3, .	0.9	10
30	Synergistic Effects of Double Cation Substitution in Solution-Processed CZTS Solar Cells with over 10% Efficiency. <i>Advanced Energy Materials</i> , 2018, 8, 1802540.	10.2	113
31	High Efficiency (Li _x Cu _{1-x}) ₂ ZnSn(S,Se) ₄ Kesterite Solar Cells with Lithium Alloying. <i>Advanced Energy Materials</i> , 2018, 8, 1801191.	10.2	87
32	Revealing the beneficial effects of Ge doping on Cu ₂ ZnSnSe ₄ thin film solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11759-11772.	5.2	46
33	Pre-annealing of metal stack precursors and its beneficial effect on kesterite absorber properties and device performance. <i>Solar Energy Materials and Solar Cells</i> , 2018, 185, 226-232.	3.0	11
34	Visualization and suppression of interfacial recombination for high-efficiency large-area pin perovskite solar cells. <i>Nature Energy</i> , 2018, 3, 847-854.	19.8	721
35	Chemistry and Dynamics of Ge in Kesterite: Toward Band-Gap-Graded Absorbers. <i>Chemistry of Materials</i> , 2017, 29, 9399-9406.	3.2	59
36	Earth abundant thin film solar cells from co-evaporated Cu ₂ SnS ₃ absorber layers. <i>Journal of Alloys and Compounds</i> , 2016, 689, 182-186.	2.8	24

#	ARTICLE	IF	CITATIONS
37	Microscopic insight into the impact of the KF post-deposition treatment on optoelectronic properties of (Ag,Cu)(In,Ga)Se 2 solar cells. Progress in Photovoltaics: Research and Applications, 0, , .	4.4	1
38	Thin Conformal Hole Transport Layers Enabling Highly Efficient Monolithic Perovskite/CIGSe Tandem Solar Cells. , 0, , .		0
39	Efficiency Potential and Loss Analysis of Inorganic CsPbI ₂ Br Perovskite Solar Cells. , 0, , .		0