Xiangchuan Meng

List of Publications by Year
in descending order

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41	2,117	279701	254106
papers	citations	23 h-index	43 g-index

43	43	43	2387
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highâ€Performance Perovskite Solar Cells with Excellent Humidity and Thermoâ€Stability via Fluorinated Perylenediimide. Advanced Energy Materials, 2019, 9, 1900198.	10.2	205
2	A Mechanically Robust Conducting Polymer Network Electrode for Efficient Flexible Perovskite Solar Cells. Joule, 2019, 3, 2205-2218.	11.7	175
3	Bio-inspired vertebral design for scalable and flexible perovskite solar cells. Nature Communications, 2020, 11, 3016.	5.8	173
4	Enhanced Hole Transportation for Inverted Tinâ€Based Perovskite Solar Cells with High Performance and Stability. Advanced Functional Materials, 2019, 29, 1808059.	7.8	133
5	Stretchable Perovskite Solar Cells with Recoverable Performance. Angewandte Chemie - International Edition, 2020, 59, 16602-16608.	7.2	122
6	Grain Boundary Modification via F4TCNQ To Reduce Defects of Perovskite Solar Cells with Excellent Device Performance. ACS Applied Materials & Interfaces, 2018, 10, 1909-1916.	4.0	115
7	A General Approach for Labâ€toâ€Manufacturing Translation on Flexible Organic Solar Cells. Advanced Materials, 2019, 31, e1903649.	11.1	114
8	Nacre-inspired crystallization and elastic â€œbrick-and-mortarâ€•structure for a wearable perovskite solar module. Energy and Environmental Science, 2019, 12, 979-987.	15.6	114
9	Waterâ€Resistant and Flexible Perovskite Solar Cells via a Glued Interfacial Layer. Advanced Functional Materials, 2019, 29, 1902629.	7.8	89
10	Large-Scale Stretchable Semiembedded Copper Nanowire Transparent Conductive Films by an Electrospinning Template. ACS Applied Materials & Interfaces, 2017, 9, 26468-26475.	4.0	69
11	Fluorobenzotriazole (FTAZ)â€Based Polymer Donor Enables Organic Solar Cells Exceeding 12% Efficiency. Advanced Functional Materials, 2019, 29, 1808828.	7.8	61
12	A Biomimetic Selfâ€Shield Interface for Flexible Perovskite Solar Cells with Negligible Lead Leakage. Advanced Functional Materials, 2021, 31, 2106460.	7.8	54
13	A Bionic Interface to Suppress the Coffeeâ€Ring Effect for Reliable and Flexible Perovskite Modules with a Nearâ€90% Yield Rate. Advanced Materials, 2022, 34, e2201840.	11.1	54
14	Wearable Tinâ€Based Perovskite Solar Cells Achieved by a Crystallographic Size Effect. Angewandte Chemie - International Edition, 2021, 60, 14693-14700.	7.2	53
15	Printable and Homogeneous NiO_x Hole Transport Layers Prepared by a Polymerâ€Network Gel Method for Largeâ€Area and Flexible Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2106495.	7.8	51
16	An in situ bifacial passivation strategy for flexible perovskite solar module with mechanical robustness by roll-to-roll fabrication. Journal of Materials Chemistry A, 2021, 9, 5759-5768.	5.2	48
17	A Highly Tolerant Printing for Scalable and Flexible Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2107726.	7.8	43
18	Mechanically Robust and Flexible Perovskite Solar Cells via a Printable and Gelatinous Interface. ACS Applied Materials & Interfaces, 2021, 13, 19959-19969.	4.0	39

#	Article	IF	Citations
19	A general enlarging shear impulse approach to green printing large-area and efficient organic photovoltaics. Energy and Environmental Science, 2022, 15, 2130-2138.	15.6	38
20	Crystallization and conformation engineering of solution-processed polymer transparent electrodes with high conductivity. Journal of Materials Chemistry C, 2017, 5, 382-389.	2.7	36
21	Spontaneous Formation of Upper Gradient 2D Structure for Efficient and Stable Quasiâ€2D Perovskites. Advanced Materials, 2021, 33, e2101823.	11.1	36
22	An Effective Method for Recovering Nonradiative Recombination Loss in Scalable Organic Solar Cells. Advanced Functional Materials, 2020, 30, 2000417.	7.8	31
23	Pseudoâ€Planar Heterojunction Organic Photovoltaics with Optimized Light Utilization for Printable Solar Windows. Advanced Materials, 2022, 34, e2201604.	11.1	30
24	Rollâ€toâ€Roll Fabrication of Flexible Orientated Graphene Transparent Electrodes by Shear Force and Oneâ€Step Reducing Postâ€Treatment. Advanced Materials Technologies, 2017, 2, 1700138.	3.0	24
25	Stabilized and Operational PbI₂ Precursor Ink for Large-Scale Perovskite Solar Cells via Two-Step Blade-Coating. Journal of Physical Chemistry C, 2020, 124, 8129-8139.	1.5	23
26	Atomic Layer Deposition of Metal Oxides in Perovskite Solar Cells: Present and Future. Small Methods, 2020, 4, 2000588.	4.6	21
27	A non-wetting and conductive polyethylene dioxothiophene hole transport layer for scalable and flexible perovskite solar cells. Science China Chemistry, 2021, 64, 834-843.	4.2	21
28	Toward efficient perovskite solar cells by planar imprint for improved perovskite film quality and granted bifunctional barrier. Journal of Materials Chemistry A, 2021, 9, 16178-16186.	5.2	21
29	Silver Mesh Electrodes via Electroless Deposition-Coupled Inkjet-Printing Mask Technology for Flexible Polymer Solar Cells. Langmuir, 2019, 35, 9713-9720.	1.6	20
30	Releasing Nanocapsules for Highâ€Throughput Printing of Stable Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2101291.	10.2	18
31	A Regularityâ€Based Fullerene Interfacial Layer for Efficient and Stable Perovskite Solar Cells via Bladeâ€Coating. Advanced Functional Materials, 2022, 32, 2105917.	7.8	14
32	Ultra-flexible and waterproof perovskite photovoltaics for washable power source applications. Chemical Communications, 2021, 57, 6320-6323.	2.2	12
33	Wearable Tinâ€Based Perovskite Solar Cells Achieved by a Crystallographic Size Effect. Angewandte Chemie, 2021, 133, 14814-14821.	1.6	12
34	Scalable Flexible Perovskite Solar Cells Based on a Crystalline and Printable Template with Intelligent Temperature Sensitivity. Solar Rrl, 2022, 6, .	3.1	9
35	Perovskite Solar Cells: Highâ€Performance Perovskite Solar Cells with Excellent Humidity and Thermoâ€Stability via Fluorinated Perylenediimide (Adv. Energy Mater. 18/2019). Advanced Energy Materials, 2019, 9, 1970064.	10.2	8
36	Stretchable Perovskite Solar Cells with Recoverable Performance. Angewandte Chemie, 2020, 132, 16745.	1.6	8

#	Article	IF	Citations
37	3D Networkâ€Assisted Crystallization for Fully Printed Perovskite Solar Cells with Superior Irradiation Stability. Advanced Functional Materials, 2022, 32, .	7.8	8
38	Flexible Solar Cells: A General Approach for Labâ€toâ€Manufacturing Translation on Flexible Organic Solar Cells (Adv. Mater. 41/2019). Advanced Materials, 2019, 31, 1970294.	11.1	5
39	Hole Transportation: Enhanced Hole Transportation for Inverted Tinâ€Based Perovskite Solar Cells with High Performance and Stability (Adv. Funct. Mater. 18/2019). Advanced Functional Materials, 2019, 29, 1970117.	7.8	4
40	Recent Advances of PEDOT in Flexible Energy Conversion and Storage Devices. Acta Chimica Sinica, 2021, 79, 853.	0.5	3
41	InnenrÃ¼cktitelbild: Stretchable Perovskite Solar Cells with Recoverable Performance (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Over	1.6	1