Meng Zhang

List of Publications by Year
in descending order

72 papers	4,646 citations	136950 32 h-index	98798 67 g-index
73 all docs	73 docs citations	73 times ranked	6182 citing authors

#	Article	IF	Citations
1	Hole Selective NiO Contact for Efficient Perovskite Solar Cells with Carbon Electrode. Nano Letters, 2015, 15, 2402-2408.	9.1	412
2	Organicâ€“inorganic bismuth (III)-based material: A lead-free, air-stable and solution-processable light-absorber beyond organolead perovskites. Nano Research, 2016, 9, 692-702.	10.4	351
3	Strontium-Doped Low-Temperature-Processed CsPbI₂Br Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 2319-2325.	17.4	314
4	Gas chromatographyâ€“mass spectrometry analyses of encapsulated stable perovskite solar cells. Science, 2020, 368, .	12.6	306
5	High-Efficiency Rubidium-Incorporated Perovskite Solar Cells by Gas Quenching. ACS Energy Letters, 2017, 2, 438-444.	17.4	247
6	Composition-dependent photoluminescence intensity and prolonged recombination lifetime of perovskite CH₃NH₃PbBr_{3âˆ'x}Cl_xfilms. Chemical Communications, 2014, 50, 11727-11730.	4.1	225
7	Enhanced performance <i>via</i> partial lead replacement with calcium for a CsPbI₃ perovskite solar cell exceeding 13% power conversion efficiency. Journal of Materials Chemistry A, 2018, 6, 5580-5586.	10.3	202
8	Untapped Potentials of Inorganic Metal Halide Perovskite Solar Cells. Joule, 2019, 3, 938-955.	24.0	196
9	Large area efficient interface layer free monolithic perovskite/homo-junction-silicon tandem solar cell with over 20% efficiency. Energy and Environmental Science, 2018, 11, 2432-2443.	30.8	172
10	Overcoming the Challenges of Large-Area High-Efficiency Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 1978-1984.	17.4	130
11	Stable and Lowâ€Cost Mesoscopic CH₃NH₃PbI₂Br Perovskite Solar Cells by using a Thin Poly(3â€hexylthiophene) Layer as a Hole Transporter. Chemistry - A European Journal, 2015, 21, 434-439.	3.3	106
12	The Effect of Stoichiometry on the Stability of Inorganic Cesium Lead Mixed-Halide Perovskites Solar Cells. Journal of Physical Chemistry C, 2017, 121, 19642-19649.	3.1	101
13	Solution-Processed, Silver-Doped NiO_{<i>x</i>} as Hole Transporting Layer for High-Efficiency Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 561-570.	5.1	95
14	Transition from the Tetragonal to Cubic Phase of Organohalide Perovskite: The Role of Chlorine in Crystal Formation of CH₃NH₃PbI₃ on TiO₂ Substrates. Journal of Physical Chemistry Letters, 2015, 6, 4379-4384.	4.6	91
15	NiO nanosheets as efficient top hole transporters for carbon counter electrode based perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 24121-24127.	10.3	91
16	Low-temperature processed solar cells with formamidinium tin halide perovskite/fullerene heterojunctions. Nano Research, 2016, 9, 1570-1577.	10.4	88
17	Large-Area 23%-Efficient Monolithic Perovskite/Homojunction-Silicon Tandem Solar Cell with Enhanced UV Stability Using Down-Shifting Material. ACS Energy Letters, 2019, 4, 2623-2631.	17.4	88
18	Acetic Acid Assisted Crystallization Strategy for High Efficiency and Longâ€Term Stable Perovskite Solar Cell. Advanced Science, 2020, 7, 1903368.	11.2	85

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19	Superior Selfâ€Powered Roomâ€Temperature Chemical Sensing with Lightâ€Activated Inorganic Halides Perovskites. Small, 2018, 14, 1702571.	10.0	82
20	Semitransparent Fully Air Processed Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 17776-17781.	8.0	75
21	Spin-coating free fabrication for highly efficient perovskite solar cells. Solar Energy Materials and Solar Cells, 2017, 168, 165-171.	6.2	70
22	Minimizing Voltage Loss in Efficient All-Inorganic CsPbI₂Br Perovskite Solar Cells through Energy Level Alignment. ACS Energy Letters, 2019, 4, 2491-2499.	17.4	68
23	PTAA as Efficient Hole Transport Materials in Perovskite Solar Cells: A Review. Solar Rrl, 2022, 6, .	5.8	65
24	Recent advances on interface engineering of perovskite solar cells. Nano Research, 2022, 15, 85-103.	10.4	59
25	Elucidating Mechanisms behind Ambient Storage-Induced Efficiency Improvements in Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 925-933.	17.4	52
26	Facile preparation of smooth perovskite films for efficient meso/planar hybrid structured perovskite solar cells. Chemical Communications, 2015, 51, 10038-10041.	4.1	49
27	The Impact of a Dynamic Twoâ€Step Solution Process on Film Formation of Cs_{0.15}(MA_{0.7}FA_{0.3})_{0.85}PbI₃ Perovskite and Solar Cell Performance. Small, 2019, 15, e1804858.	10.0	46
28	Integrating Lowâ€Cost Earthâ€Abundant Coâ€Catalysts with Encapsulated Perovskite Solar Cells for Efficient and Stable Overall Solar Water Splitting. Advanced Functional Materials, 2021, 31, 2008245.	14.9	43
29	Excess PbI2 evolution for triple-cation based perovskite solar cells with 21.9% efficiency. Journal of Energy Chemistry, 2022, 66, 152-160.	12.9	43
30	Halogen-substituted fullerene derivatives for interface engineering of perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 21368-21378.	10.3	40
31	Synergistic effect of potassium and iodine from potassium triiodide complex additive on gas-quenched perovskite solar cells. Nano Energy, 2019, 63, 103853.	16.0	37
32	Electrode Design to Overcome Substrate Transparency Limitations for Highly Efficient 1 cm2 Mesoscopic Perovskite Solar Cells. Joule, 2018, 2, 2694-2705.	24.0	34
33	Baseplate Temperatureâ€Dependent Vertical Composition Gradient in Pseudoâ€Bilayer Films for Printing Nonâ€Fullerene Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102135.	19.5	33
34	Phosphorescent [3 + 2 + 1] coordinated Ir(<scp>iii</scp>) cyano complexes for achieving efficient phosphors and their application in OLED devices. Chemical Science, 2021, 12, 10165-10178.	7.4	32
35	Heterogeneous lead iodide obtains perovskite solar cells with efficiency of 24.27%. Chemical Engineering Journal, 2022, 448, 137676.	12.7	29
36	A Review on Gasâ€Quenching Technique for Efficient Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100386.	5.8	28

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37	Superior Selfâ€Charged and â€Powered Chemical Sensing with High Performance for NO₂ Detection at Room Temperature. Advanced Optical Materials, 2020, 8, 1901863.	7.3	27
38	Recent advances in lowâ€toxic leadâ€free metal halide perovskite materials for solar cell application. Asia-Pacific Journal of Chemical Engineering, 2016, 11, 392-398.	1.5	26
39	Highly compact and uniform CH3NH3Sn0.5Pb0.5I3 films for efficient panchromatic planar perovskite solar cells. Science Bulletin, 2016, 61, 1558-1562.	9.0	25
40	Light-activated inorganic CsPbBr₂I perovskite for room-temperature self-powered chemical sensing. Physical Chemistry Chemical Physics, 2019, 21, 24187-24193.	2.8	23
41	Oxidization-Free Spiro-OMeTAD Hole-Transporting Layer for Efficient CsPbI₂Br Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 52779-52787.	8.0	23
42	Potassium tetrafluoroborate-induced defect tolerance enables efficient wide-bandgap perovskite solar cells. Journal of Colloid and Interface Science, 2022, 605, 710-717.	9.4	20
43	Synthesis of 2-Aryl-5-alkyl-fulleropyrrolidines: Metal-Free-Mediated Reaction of [60]Fullerene with Aromatic Aldehydes and Inactive Primary Amines. Journal of Organic Chemistry, 2017, 82, 8617-8627.	3.2	19
44	Configuration-centered photovoltaic applications of metal halide perovskites. Journal of Materials Chemistry A, 2017, 5, 902-909.	10.3	18
45	Switched Photocurrent on Tin Sulfideâ€Based Nanoplate Photoelectrodes. ChemSusChem, 2017, 10, 670-674.	6.8	18
46	Stereoselective synthesis of <i>N</i>-ethyl-2-arylvinyl-5-methyl fulleropyrrolidines: reaction of [60]fullerene with aromatic aldehydes and triethylamine/diethylamine in the absence or presence of manganese(<scp>iii</scp>) acetate. Organic and Biomolecular Chemistry, 2018, 16, 2975-2985.	2.8	17
47	Effects of Annealing Time on Triple Cation Perovskite Films and Their Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 29344-29356.	8.0	16
48	Multifunctional quantum dot materials for perovskite solar cells: Charge transport, efficiency and stability. Nano Today, 2021, 40, 101286.	11.9	16
49	Pyridine linked fluorene hybrid bipolar host for blue, green, and orange phosphorescent organic light-emitting diodes toward solution processing. Journal of Materials Chemistry C, 2017, 5, 11937-11946.	5.5	15
50	Efficient carrier transport via dual-function interfacial engineering using cesium iodide for high-performance perovskite solar cells based on NiOx hole transporting materials. Nano Research, 2021, 14, 3864-3872.	10.4	14
51	Low-pressure accessible gas-quenching for absolute methylammonium-free perovskite solar cells. Journal of Materials Chemistry A, 2022, 10, 2105-2112.	10.3	13
52	Ultra-smooth CsPbI2Br film via programmable crystallization process for high-efficiency inorganic perovskite solar cells. Journal of Materials Science and Technology, 2021, 66, 150-156.	10.7	12
53	Novel spiro[fluorene-9,9â€²-xanthene]-based hole transport layers for red and green PHOLED devices with high efficiency and low efficiency roll-off. Journal of Materials Chemistry C, 2021, 9, 3247-3256.	5.5	12
54	Bias-dependent effects in planar perovskite solar cells based on CH3NH3PbI3âˆ’Cl films. Journal of Colloid and Interface Science, 2015, 453, 9-14.	9.4	11

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55	Effect of Pressing Pressure on the Performance of Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 2358-2363.	5.1	11
56	A series of uranium-organic frameworks: Crucial role of the protonation ability of auxiliary ligands. Inorganic Chemistry Communication, 2020, 111, 107628.	3.9	11
57	Rising from the Ashes: Gaseous Therapy for Robust and Large-Area Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 49648-49658.	8.0	11
58	Unraveling the Mechanism of Ion-Migration Suppression by Interstitial Doping for Operationally Stable CsPbI₂Br Perovskite Solar Cells. Chemistry of Materials, 2022, 34, 1010-1019.	6.7	11
59	Stereoselective synthesis of cyclopentafullerenes: the reaction of [60]fullerene with aldehydes and triethylamine promoted by magnesium perchlorate. New Journal of Chemistry, 2018, 42, 9291-9299.	2.8	10
60	Metal-free synthesis of fulleropyrrolidin-2-ols: a novel reaction of [60]fullerene with amines and 2,2-disubstituted acetaldehydes. Organic and Biomolecular Chemistry, 2018, 16, 7648-7656.	2.8	10
61	Small molecule interfacial cross-linker for highly efficient two-dimensional perovskite solar cells. Journal of Energy Chemistry, 2022, 68, 35-41.	12.9	10
62	Pristine inorganic nickel oxide as desirable hole transporting material for efficient quasi two-dimensional perovskite solar cells. Journal of Power Sources, 2021, 512, 230452.	7.8	9
63	Insight into the liquid state of organo-lead halide perovskites and their new roles in dye-sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 10355.	10.3	8
64	Deconstruction-assisted perovskite formation for sequential solution processing of Cs0.15(MA0.7FA0.3)0.85PbI3 solar cells. Solar Energy Materials and Solar Cells, 2019, 203, 110200.	6.2	8
65	A Highâ€Performance Photodetector Based on 1D Perovskite Radial Heterostructure. Advanced Optical Materials, 2021, 9, 2101504.	7.3	8
66	Highly crystalline CsPbI₂Br films for efficient perovskite solar cells <i>via</i> compositional engineering. RSC Advances, 2019, 9, 30534-30540.	3.6	7
67	CdS sensitized nanoporous TiO2/CuO layer prepared by dealloying of Tiâ€"Cu amorphous alloy. Materials Letters, 2012, 80, 131-134.	2.6	6
68	Remanent solvent management engineering of perovskite films for PEDOT: PSS-based inverted solar cells. Solar Energy, 2021, 216, 530-536.	6.1	6
69	Understanding how chlorine additive in a dynamic sequential process affects FA0.3MA0.7PbI3 perovskite film growth for solar cell application. Materials Today Energy, 2020, 18, 100551.	4.7	5
70	A Review on Gasâ€Quenching Technique for Efficient Perovskite Solar Cells. Solar Rrl, 2021, 5, 2170105.	5.8	2
71	Large Area 23%-Efficient Monolithic Perovskite/Homo-Junction-Silicon Tandem Solar Cell with Enhanced UV Stability Using Down-Shifting Material. SSRN Electronic Journal, 0, , .	0.4	0
72	Low-pressure accessible gas-quenching for MA-free perovskite solar cells. , 0, , .		0