Zhike Liu

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73	5,852	39	76
papers	citations	h-index	g-index
79 ext. papers	7,045 ext. citations	12.9 avg, IF	6.11 L-index

#	Paper	IF	Citations
73	Infrared photodetectors based on CVD-grown graphene and PbS quantum dots with ultrahigh responsivity. <i>Advanced Materials</i> , 2012 , 24, 5878-83	24	579
72	Efficient and stable perovskite solar cells prepared in ambient air irrespective of the humidity. <i>Nature Communications</i> , 2016 , 7, 11105	17.4	389
71	Efficient Semitransparent Perovskite Solar Cells with Graphene Electrodes. <i>Advanced Materials</i> , 2015 , 27, 3632-8	24	387
70	The application of highly doped single-layer graphene as the top electrodes of semitransparent organic solar cells. <i>ACS Nano</i> , 2012 , 6, 810-8	16.7	270
69	Functionalized graphene and other two-dimensional materials for photovoltaic devices: device design and processing. <i>Chemical Society Reviews</i> , 2015 , 44, 5638-79	58.5	238
68	Package-free flexible organic solar cells with graphene top electrodes. <i>Advanced Materials</i> , 2013 , 25, 4296-301	24	229
67	Precursor Engineering for All-Inorganic CsPbI2Br Perovskite Solar Cells with 14.78% Efficiency. <i>Advanced Functional Materials</i> , 2018 , 28, 1803269	15.6	206
66	Ultrasensitive broadband phototransistors based on perovskite/organic-semiconductor vertical heterojunctions. <i>Light: Science and Applications</i> , 2017 , 6, e17023	16.7	203
65	Controlled n-Doping in Air-Stable CsPbI2Br Perovskite Solar Cells with a Record Efficiency of 16.79%. <i>Advanced Functional Materials</i> , 2020 , 30, 1909972	15.6	173
64	Ultrathin and flexible perovskite solar cells with graphene transparent electrodes. <i>Nano Energy</i> , 2016 , 28, 151-157	17.1	158
63	High-Performance Hole-Extraction Layer of Sol¶el-Processed NiO Nanocrystals for Inverted Planar Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2014 , 126, 12779-12783	3.6	158
62	Enhancing Efficiency and Stability of Perovskite Solar Cells through Nb-Doping of TiO at Low Temperature. <i>ACS Applied Materials & Acs Applied & A</i>	9.5	150
61	Dynamical Transformation of Two-Dimensional Perovskites with Alternating Cations in the Interlayer Space for High-Performance Photovoltaics. <i>Journal of the American Chemical Society</i> , 2019 , 141, 2684-2694	16.4	135
60	Dithiafulvenyl unit as a new donor for high-efficiency dye-sensitized solar cells: synthesis and demonstration of a family of metal-free organic sensitizers. <i>Organic Letters</i> , 2012 , 14, 2214-7	6.2	116
59	Neutral-Color Semitransparent Organic Solar Cells with All-Graphene Electrodes. <i>ACS Nano</i> , 2015 , 9, 12026-34	16.7	114
58	High-Performance Dopamine Sensors Based on Whole-Graphene Solution-Gated Transistors. <i>Advanced Functional Materials</i> , 2014 , 24, 978-985	15.6	112
57	Multifunctional Enhancement for Highly Stable and Efficient Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2005776	15.6	111

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56	Interfacial Engineering at the 2D/3D Heterojunction for High-Performance Perovskite Solar Cells. <i>Nano Letters</i> , 2019 , 19, 7181-7190	11.5	110
55	A Novel Anion Doping for Stable CsPbI2Br Perovskite Solar Cells with an Efficiency of 15.56% and an Open Circuit Voltage of 1.30 V. <i>Advanced Energy Materials</i> , 2019 , 9, 1902279	21.8	105
54	Water-Soluble Triazolium Ionic-Liquid-Induced Surface Self-Assembly to Enhance the Stability and Efficiency of Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1900417	15.6	102
53	Room-Temperature Processed NbO as the Electron-Transporting Layer for Efficient Planar Perovskite Solar Cells. <i>ACS Applied Materials & Samp; Interfaces</i> , 2017 , 9, 23181-23188	9.5	100
52	NbF5: A Novel Phase Stabilizer for FA-Based Perovskite Solar Cells with High Efficiency. <i>Advanced Functional Materials</i> , 2019 , 29, 1807850	15.6	97
51	Scalable Ambient Fabrication of High-Performance CsPbI2Br Solar Cells. <i>Joule</i> , 2019 , 3, 2485-2502	27.8	94
50	High efficient ultraviolet photocatalytic activity of BiFeO3 nanoparticles synthesized by a chemical coprecipitation process. <i>Journal of Materials Science: Materials in Electronics</i> , 2010 , 21, 380-384	2.1	78
49	Low Temperature Fabrication for High Performance Flexible CsPbIBr Perovskite Solar Cells. <i>Advanced Science</i> , 2018 , 5, 1801117	13.6	71
48	High-Performance, Self-Powered Photodetectors Based on Perovskite and Graphene. <i>ACS Applied Materials & Amp; Interfaces</i> , 2017 , 9, 42779-42787	9.5	69
47	Precursor Engineering for Ambient-Compatible Antisolvent-Free Fabrication of High-Efficiency CsPbI2Br Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2000691	21.8	68
46	Enhanced photovoltaic performance of polymer solar cells by adding fullerene end-capped polyethylene glycol. <i>Journal of Materials Chemistry</i> , 2011 , 21, 6848		64
45	27%-Efficiency Four-Terminal Perovskite/Silicon Tandem Solar Cells by Sandwiched Gold Nanomesh. <i>Advanced Functional Materials</i> , 2020 , 30, 1908298	15.6	62
44	Europium and Acetate Co-doping Strategy for Developing Stable and Efficient CsPbI Br Perovskite Solar Cells. <i>Small</i> , 2019 , 15, e1904387	11	61
43	Polymeric room-temperature molten salt as a multifunctional additive toward highly efficient and stable inverted planar perovskite solar cells. <i>Energy and Environmental Science</i> , 2020 , 13, 5068-5079	35.4	61
42	Additive Engineering to Grow Micron-Sized Grains for Stable High Efficiency Perovskite Solar Cells. <i>Advanced Science</i> , 2019 , 6, 1901241	13.6	60
41	2D Cs2PbI2Cl2 Nanosheets for Holistic Passivation of Inorganic CsPbI2Br Perovskite Solar Cells for Improved Efficiency and Stability. <i>Advanced Energy Materials</i> , 2020 , 10, 2002882	21.8	58
40	Low-temperature and facile solution-processed two-dimensional TiS2 as an effective electron transport layer for UV-stable planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 913	2-913	3 ⁵⁶
39	Bifunctional Hydroxylamine Hydrochloride Incorporated Perovskite Films for Efficient and Stable Planar Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 900-909	6.1	55

38	Simultaneous Cesium and Acetate Coalloying Improves Efficiency and Stability of FA0.85MA0.15PbI3 Perovskite Solar Cell with an Efficiency of 21.95%. <i>Solar Rrl</i> , 2019 , 3, 1900220	7.1	50
37	Air and thermally stable perovskite solar cells with CVD-graphene as the blocking layer. <i>Nanoscale</i> , 2017 , 9, 8274-8280	7.7	49
36	Novel Surface Passivation for Stable FA0.85MA0.15PbI3 Perovskite Solar Cells with 21.6% Efficiency. <i>Solar Rrl</i> , 2019 , 3, 1900072	7.1	49
35	A High Mobility Conjugated Polymer Enables Air and Thermally Stable CsPbI2Br Perovskite Solar Cells with an Efficiency Exceeding 15%. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900311	6.8	39
34	Record-Efficiency Flexible Perovskite Solar Cells Enabled by Multifunctional Organic Ions Interface Passivation <i>Advanced Materials</i> , 2022 , e2201681	24	39
33	Metal-Free Halide Perovskite Single Crystals with Very Long Charge Lifetimes for Efficient X-ray Imaging. <i>Advanced Materials</i> , 2020 , 32, e2003353	24	33
32	Controlled defects and enhanced electronic extraction in fluorine-incorporated zinc oxide for high-performance planar perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2018 , 182, 263-27	16.4	32
31	Introduction of Fluorine Into spiro[fluorene-9,9?-xanthene]-Based Hole Transport Material to Obtain Sensitive-Dopant-Free, High Efficient and Stable Perovskite Solar Cells. <i>Solar Rrl</i> , 2019 , 3, 18003	5 ⁷ 2 ^{.1}	30
30	Highly efficient and stable planar CsPbI2Br perovskite solar cell with a new sensitive-dopant-free hole transport layer obtained via an effective surface passivation. <i>Solar Energy Materials and Solar Cells</i> , 2019 , 201, 110052	6.4	30
29	CO Plasma-Treated TiO Film as an Effective Electron Transport Layer for High-Performance Planar Perovskite Solar Cells. <i>ACS Applied Materials & Amp; Interfaces</i> , 2017 , 9, 33989-33996	9.5	30
28	Solvent Engineering Using a Volatile Solid for Highly Efficient and Stable Perovskite Solar Cells. <i>Advanced Science</i> , 2020 , 7, 1903250	13.6	29
27	A Special Additive Enables All Cations and Anions Passivation for Stable Perovskite Solar Cells with Efficiency over 23. <i>Nano-Micro Letters</i> , 2021 , 13, 169	19.5	29
26	Dual Passivation of Perovskite and SnO for High-Efficiency MAPbI Perovskite Solar Cells. <i>Advanced Science</i> , 2021 , 8, 2001466	13.6	25
25	Synthesis and Properties of Dithiafulvenyl Functionalized Spiro[fluorene-9,9Sxanthene] Molecules. <i>Organic Letters</i> , 2018 , 20, 780-783	6.2	24
24	The Application of Bismuth-Based Oxides in Organic-Inorganic Hybrid Photovoltaic Devices. <i>Journal of the American Ceramic Society</i> , 2012 , 95, 1944-1948	3.8	23
23	Detection of Bisphenol A Using DNA-Functionalized Graphene Field Effect Transistors Integrated in Microfluidic Systems. <i>ACS Applied Materials & Discrete Systems</i> , 10, 23522-23528	9.5	22
22	Magnetic Field-Assisted Perovskite Film Preparation for Enhanced Performance of Solar Cells. <i>ACS Applied Materials & District Material</i>	9.5	20
21	Beach-Chair-Shaped Energy Band Alignment for High-Performance ECsPbI3 Solar Cells. <i>Cell Reports Physical Science</i> , 2020 , 1, 100180	6.1	18

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20	Photovoltaic effect of BiFeO3/poly(3-hexylthiophene) heterojunction. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011 , 5, 367-369	2.5	17
19	NaCl-assisted defect passivation in the bulk and surface of TiO2 enhancing efficiency and stability of planar perovskite solar cells. <i>Journal of Power Sources</i> , 2020 , 448, 227586	8.9	17
18	Stoichiometry control of sputtered zinc oxide films by adjusting Ar/O2 gas ratios as electron transport layers for efficient planar perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2018 , 178, 200-207	6.4	16
17	A Key 2D Intermediate Phase for Stable High-Efficiency CsPbI2Br Perovskite Solar Cells. <i>Advanced Energy Materials</i> ,2103019	21.8	12
16	Symmetrical AcceptorDonorAcceptor Molecule as a Versatile Defect Passivation Agent toward Efficient FA 0.85 MA 0.15 PbI 3 Perovskite Solar Cells. <i>Advanced Functional Materials</i> ,2112032	15.6	11
15	Unraveling Passivation Mechanism of Imidazolium-Based Ionic Liquids on Inorganic Perovskite to Achieve Near-Record-Efficiency CsPbIBr Solar Cells. <i>Nano-Micro Letters</i> , 2021 , 14, 7	19.5	11
14	Graded 2D/3D (CF3-PEA)2FA0.85MA0.15Pb2I7/FA0.85MA0.15PbI3 heterojunction for stable perovskite solar cell with an efficiency over 23.0%. <i>Journal of Energy Chemistry</i> , 2022 , 65, 480-489	12	11
13	p-Type Carbon Dots for Effective Surface Optimization for Near-Record-Efficiency CsPbI Br Solar Cells. <i>Small</i> , 2021 , 17, e2102272	11	10
12	Fluorine Functionalized MXene QDs for Near-Record-Efficiency CsPbI 3 Solar Cell with High Open-Circuit Voltage. <i>Advanced Functional Materials</i> ,2203704	15.6	9
11	Oxidation, reduction, and inert gases plasma-modified defects in TiO2 as electron transport layer for planar perovskite solar cells. <i>Journal of CO2 Utilization</i> , 2019 , 32, 46-52	7.6	8
10	Simultaneous dual-interface and bulk defect passivation for high-efficiency and stable CsPbI2Br perovskite solar cells. <i>Journal of Power Sources</i> , 2021 , 492, 229580	8.9	7
9	Decorating hole transport material with IIF3 groups for highly efficient and stable perovskite solar cells. <i>Journal of Energy Chemistry</i> , 2021 , 62, 523-531	12	7
8	Synthesis of fused conjugated polymers containing imidazo[2,1-b]thiazole units by multicomponent one-pot polymerization. <i>Polymer Chemistry</i> , 2020 , 11, 5200-5206	4.9	5
7	Improvement of Colloidal Characteristics in a Precursor Solution by a PbI-(DMSO) Complex for Efficient Nonstoichiometrically Prepared CsPbIBr Perovskite Solar Cells. <i>ACS Applied Materials & Amp; Interfaces</i> , 2020 , 12, 48756-48764	9.5	3
6	Synthesis and properties of triphenylamine functionalized tetrathiafulvalene. <i>Tetrahedron Letters</i> , 2020 , 61, 151949	2	2
5	Urea Derivative-Promoted CsPbI2Br Perovskite Solar Cells with High Open-Circuit Voltage. <i>Solar Rrl</i> ,210	0†0157	2
4	An efficient phenylaminecarbazole-based three-dimensional hole-transporting materials for high-stability perovskite solar cells. <i>Dyes and Pigments</i> , 2020 , 182, 108663	4.6	2
3	Synergistic Effect of RbBr Interface Modification on Highly Efficient and Stable Perovskite Solar Cells. <i>ACS Omega</i> , 2021 , 6, 13766-13773	3.9	2

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