

# Zhiping Wang

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

7,167  
citations

147801

31  
h-index

214800

47  
g-index

49  
all docs

49  
docs citations

49  
times ranked

8608  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced photovoltage for inverted planar heterojunction perovskite solar cells. <i>Science</i> , 2018, 360, 1442-1446.	12.6	1,221
2	Efficient ambient-air-stable solar cells with 2D/3D heterostructured butylammonium-caesium-formamidinium lead halide perovskites. <i>Nature Energy</i> , 2017, 2, .	39.5	1,169
3	Planar perovskite solar cells with long-term stability using ionic liquid additives. <i>Nature</i> , 2019, 571, 245-250.	27.8	1,103
4	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. <i>Science</i> , 2017, 358, 1192-1197.	12.6	554
5	Efficient perovskite solar cells by metal ion doping. <i>Energy and Environmental Science</i> , 2016, 9, 2892-2901.	30.8	372
6	Crystallization Kinetics and Morphology Control of Formamidinium/Cesium Mixed-Cation Lead Mixed-Halide Perovskite via Tunability of the Colloidal Precursor Solution. <i>Advanced Materials</i> , 2017, 29, 1607039.	21.0	263
7	Efficient and Air-Stable Mixed-Cation Lead Mixed-Halide Perovskite Solar Cells with Doped Organic Electron Extraction Layers. <i>Advanced Materials</i> , 2017, 29, 1604186.	21.0	237
8	Solution-Processed Cesium Hexabromopalladate(IV), Cs <sub>2</sub> PdBr <sub>6</sub> , for Optoelectronic Applications. <i>Journal of the American Chemical Society</i> , 2017, 139, 6030-6033.	13.7	189
9	Impact of Bi <sup>3+</sup> Heterovalent Doping in Organic/Inorganic Metal Halide Perovskite Crystals. <i>Journal of the American Chemical Society</i> , 2018, 140, 574-577.	13.7	181
10	High irradiance performance of metal halide perovskites for concentrator photovoltaics. <i>Nature Energy</i> , 2018, 3, 855-861.	39.5	180
11	The Effects of Doping Density and Temperature on the Optoelectronic Properties of Formamidinium Tin Triiodide Thin Films. <i>Advanced Materials</i> , 2018, 30, e1804506.	21.0	156
12	Fractional deviations in precursor stoichiometry dictate the properties, performance and stability of perovskite photovoltaic devices. <i>Energy and Environmental Science</i> , 2018, 11, 3380-3391.	30.8	125
13	Identification and Mitigation of a Critical Interfacial Instability in Perovskite Solar Cells Employing Copper Thiocyanate Hole-Transporter. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600571.	3.7	105
14	Fabrication of Efficient and Stable CsPbI <sub>3</sub> Perovskite Solar Cells through Cation Exchange Process. <i>Advanced Energy Materials</i> , 2019, 9, 1901685.	19.5	101
15	Carbazole-based enamine: Low-cost and efficient hole transporting material for perovskite solar cells. <i>Nano Energy</i> , 2017, 32, 551-557.	16.0	97
16	Metal composition influences optoelectronic quality in mixed-metal lead/tin triiodide perovskite solar absorbers. <i>Energy and Environmental Science</i> , 2020, 13, 1776-1787.	30.8	87
17	Surface modification induced by perovskite quantum dots for triple-cation perovskite solar cells. <i>Nano Energy</i> , 2020, 67, 104189.	16.0	81
18	Room-Temperature Atomic Layer Deposition of Al <sub>2</sub> O <sub>3</sub> : Impact on Efficiency, Stability and Surface Properties in Perovskite Solar Cells. <i>ChemSusChem</i> , 2016, 9, 3401-3406.	6.8	76

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19	Hybrid Perovskites: Prospects for Concentrator Solar Cells. <i>Advanced Science</i> , 2018, 5, 1700792.	11.2	76
20	Efficient and Stable Perovskite Solar Cells Using Low-Cost Aniline-Based Enamine Hole-Transporting Materials. <i>Advanced Materials</i> , 2018, 30, e1803735.	21.0	68
21	Charge-Carrier Trapping and Radiative Recombination in Metal Halide Perovskite Semiconductors. <i>Advanced Functional Materials</i> , 2020, 30, 2004312.	14.9	67
22	Layered Mixed Tin-Lead Hybrid Perovskite Solar Cells with High Stability. <i>ACS Energy Letters</i> , 2018, 3, 2246-2251.	17.4	64
23	Near-Infrared and Short-Wavelength Infrared Photodiodes Based on Dye-Perovskite Composites. <i>Advanced Functional Materials</i> , 2017, 27, 1702485.	14.9	59
24	Highly Crystalline Methylammonium Lead Tribromide Perovskite Films for Efficient Photovoltaic Devices. <i>ACS Energy Letters</i> , 2018, 3, 1233-1240.	17.4	54
25	Low cost triazatruxene hole transporting material for >20% efficiency perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5235-5243.	5.5	50
26	Charge-Carrier Dynamics, Mobilities, and Diffusion Lengths of 2D-3D Hybrid Butylammonium-Cesium-Formamidinium Lead Halide Perovskites. <i>Advanced Functional Materials</i> , 2019, 29, 1902656.	14.9	45
27	Degradation Kinetics of Inverted Perovskite Solar Cells. <i>Scientific Reports</i> , 2018, 8, 5977.	3.3	44
28	Monolithic Wide Band Gap Perovskite/Perovskite Tandem Solar Cells with Organic Recombination Layers. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27256-27262.	3.1	40
29	Controlling Nucleation and Growth of Metal Halide Perovskite Thin Films for High-Efficiency Perovskite Solar Cells. <i>Small</i> , 2017, 13, 1602808.	10.0	36
30	Reproducible Planar Heterojunction Solar Cells Based on One-Step Solution-Processed Methylammonium Lead Halide Perovskites. <i>Chemistry of Materials</i> , 2017, 29, 462-473.	6.7	35
31	Preparation of silicon carbide film by a plasma focus device. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 7179-7182.	2.1	31
32	Solubilization of Carbon Nanotubes with Ethylene-Vinyl Acetate for Solution-Processed Conductive Films and Charge Extraction Layers in Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 1185-1191.	8.0	31
33	Fabrication of DLC films by pulsed ion beam ablation in a dense plasma focus device. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 4169-4173.	2.1	28
34	Templating Effects in Molecular Growth of Blended Films for Efficient Small-Molecule Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 6369-6377.	8.0	28
35	Growth of preferentially-oriented AlN films on amorphous substrate by pulsed laser deposition. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 3007-3011.	2.1	16
36	Insights Into the Microscopic and Degradation Processes in Hybrid Perovskite Solar Cells Using Noise Spectroscopy. <i>Solar Rrl</i> , 2018, 2, 1700173.	5.8	13

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37	Advances in Phase Stability of Cesium Lead Halide Perovskites. <i>Solar Rrl</i> , 2020, 4, 2000495.	5.8	13
38	Thermal stability of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>x</sub> Cl <sub>3-x</sub> versus [HC(NH <sub>2</sub> ) <sub>2</sub> ] <sub>0.83</sub> Cs <sub>0.17</sub> Pb <sub>12.7</sub> Br <sub>0.3</sub> perovskite films by X-ray photoelectron spectroscopy. <i>Applied Surface Science</i> , 2020, 513, 145596.	6.1	13
39	Large-area perovskite films for PV applications: A perspective from nucleation and crystallization. <i>Journal of Energy Chemistry</i> , 2021, 59, 626-641.	12.9	11
40	Fabrication of carbon nanotube hybrid films as transparent electrodes for small-molecule photovoltaic cells. <i>RSC Advances</i> , 2016, 6, 25062-25069.	3.6	10
41	Self-assembled 2D-3D heterostructured butylammonium-caesium-formamidinium lead halide perovskites for stable and efficient solar cells. , 0, , .		7
42	Efficiency limit analysis of organic solar cells: model simulation based on vanadyl phthalocyanine/C <sub>60</sub> planar junction cell. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 01AB12.	1.5	6
43	Structural influences on charge carrier dynamics for small-molecule organic photovoltaics. <i>Journal of Applied Physics</i> , 2014, 116, 013105.	2.5	6
44	Synthesis of Novel Pushâ€Pull Chromophores based on <i>N</i> -Ethylcarbazole for Vacuum Deposition Processed Organic Photovoltaics. <i>Chemistry Letters</i> , 2015, 44, 958-960.	1.3	5
45	Constructing Nanostructured Donor/Acceptor Bulk Heterojunctions via Interfacial Templates for Efficient Organic Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43893-43901.	8.0	5
46	Role of Nitrogen in the Formation of $\text{CN}_x$ Films by Pulsed Laser Deposition. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 1815-1819.	1.3	4
47	Understanding Device-Structure-Induced Variations in Open-Circuit Voltage for Organic Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 10814-10822.	8.0	2
48	Crystallization kinetics and morphology control of formamidinium-cesium mixed-cation lead mixed-halide perovskite via tunability of the colloidal precursor solution. , 0, , .		0