Xuewen Zhang

List of Publications by Year
in descending order

40 papers	752 citations	759190 12 h-index	526264 27 g-index
42 all docs	42 docs citations	42 times ranked	1443 citing authors

#	Article	IF	Citations
1	Anomalously large interface charge in polarity-switchable photovoltaic devices: an indication of mobile ions in organicâ€“inorganic halide perovskites. Energy and Environmental Science, 2015, 8, 1256-1260.	30.8	202
2	Dynamic interface charge governing the currentâ€“voltage hysteresis in perovskite solar cells. Physical Chemistry Chemical Physics, 2015, 17, 9613-9618.	2.8	88
3	Organicâ€“Inorganic Perovskite Lightâ€Emitting Electrochemical Cells with a Large Capacitance. Advanced Functional Materials, 2015, 25, 7226-7232.	14.9	87
4	Modeling and simulation of bulk heterojunction polymer solar cells. Solar Energy Materials and Solar Cells, 2014, 127, 67-86.	6.2	60
5	Secondary Grain Growth in Organicâ€“Inorganic Perovskite Films with Ethylamine Hydrochloride Additives for Highly Efficient Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 20026-20034.	8.0	25
6	Tailoring a dynamic crystalline process during the conversion of lead-halide perovskite layer to achieve high performance solar cells. Journal of Materials Chemistry A, 2018, 6, 24793-24804.	10.3	24
7	Interface Engineering of 2D/3D Perovskite Heterojunction Improves Photovoltaic Efficiency and Stability. Solar Rrl, 2021, 5, 2100072.	5.8	21
8	Effective approach for reducing the migration of ions and improving the stability of organicâ€“inorganic perovskite solar cells. Journal of Alloys and Compounds, 2018, 741, 489-494.	5.5	20
9	High-Performance Photovoltaic Materials Based on the Superlattice Structures of Organicâ€“Inorganic Halide Perovskite and Superhalogen Hybrid Perovskite. Journal of Physical Chemistry Letters, 2020, 11, 5282-5294.	4.6	17
10	Manipulating hybrid structures of polymer/a-Si for thin film solar cells. Applied Physics Letters, 2014, 104, .	3.3	14
11	Molecular interactions and functionalities of an organic additive in a perovskite semiconducting device: a case study towards high performance solar cells. Journal of Materials Chemistry A, 2022, 10, 2876-2887.	10.3	14
12	Understanding the low-loss mechanism of general organicâ€“inorganic perovskites from first-principles calculation. Chemical Physics Letters, 2015, 627, 13-19.	2.6	13
13	Exploring Electron Transporting Layer in Combination with a Polyelectrolyte for nâ€iâ€p Perovskite Solar Cells. Advanced Materials Interfaces, 2020, 7, 2000412.	3.7	13
14	Spatially separated charge densities of electrons and holes in organic-inorganic halide perovskites. Journal of Applied Physics, 2015, 117, 074901.	2.5	12
15	Electron transporting organic materials with an exceptional large scale homeotropic molecular orientation. Physical Chemistry Chemical Physics, 2016, 18, 8554-8560.	2.8	12
16	Influence of Functional Diamino Organic Cations on the Stability, Electronic Structure, and Carrier Transport Properties of Three-Dimensional Hybrid Halide Perovskite. Journal of Physical Chemistry C, 2020, 124, 6796-6810.	3.1	12
17	Understanding the phase behavior from multiple-step isothermally crystallized poly(3-hexylthiophene)s. Polymer, 2016, 98, 61-69.	3.8	11
18	Electronic and optical absorption properties of organicâ€“inorganic perovskites as influenced by different long-chain diamine molecules: first-principles calculations. RSC Advances, 2019, 9, 14718-14726.	3.6	11

#	Article	IF	Citations
19	Optimization of a SnO₂-Based Electron Transport Layer Using Zirconium Acetylacetonate for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 54579-54588.	8.0	11
20	Additional Organicâ€Solventâ€Rinsing Process to Enhance Perovskite Photovoltaic Performance. Advanced Electronic Materials, 2019, 5, 1900244.	5.1	10
21	Controlled Crystallization of CsRbâ€Based Multiâ€Cation Perovskite Using a Blended Sequential Process for Highâ€Performance Solar Cells. Solar Rrl, 2021, 5, 2100050.	5.8	10
22	A preliminary development in hybrid a-silicon/polymer solar cells. Renewable Energy, 2014, 63, 145-152.	8.9	9
23	Electronic and Optical Properties of van der Waals Heterostructures Based on Two-Dimensional Perovskite (PEA)₂PbI₄ and Black Phosphorus. ACS Omega, 2021, 6, 20877-20886.	3.5	9
24	Improved fill factor in inverted planar perovskite solar cells with zirconium acetate as the hole-and-ion-blocking layer. Physical Chemistry Chemical Physics, 2018, 20, 7395-7400.	2.8	7
25	Superhalogen Boron Tetrafluoride Surface Modification Reduces the Formation of Organic Cation Vacancies on the Surface of Halide Perovskite Films. Journal of Physical Chemistry C, 2021, 125, 21223-21233.	3.1	6
26	Perovskite Passivation with a Bifunctional Molecule 1,2â€Benzisothiazolinâ€3â€One for Efficient and Stable Planar Solar Cells. Solar Rrl, 2021, 5, 2100472.	5.8	5
27	Multifunctional Organic Additive for Improving the Open Circuit Voltage of Perovskite Solar Cells. Solar Rrl, 0, , .	5.8	5
28	Enhancing performance of organic-inorganic perovskite solar cells using super halogen additive. Organic Electronics, 2022, 108, 106548.	2.6	5
29	Trap-induced light enhancement from a polymer light emitting device. Applied Physics Letters, 2013, 103, 043306.	3.3	4
30	The influence of localized states on the optical absorption and carrier transport properties of acylamino hybrid perovskites with tunable electronic structures. Chinese Journal of Physics, 2021, 70, 240-250.	3.9	4
31	High-Stability and High-Efficiency Photovoltaic Materials Based on Functional Diamino Organic Cation Halide Hybrid Perovskite Superlattice Structures. ACS Applied Energy Materials, 2021, 4, 8774-8790.	5.1	3
32	8â€Hydroxyquinoline Metal Complexes as Cathode Interfacial Materials in Inverted Planar Perovskite Solar Cells. Advanced Materials Interfaces, 2021, 8, 2100506.	3.7	2
33	Electronic and magnetic properties of F atoms adsorbed on TiO₂:Mn(001) diluted magnetic semiconductor surfaces: First-principles calculations. International Journal of Modern Physics B, 2014, 28, 1450096.	2.0	1
34	Solid Electrolytes: Organic-Inorganic Perovskite Light-Emitting Electrochemical Cells with a Large Capacitance (Adv. Funct. Mater. 46/2015). Advanced Functional Materials, 2015, 25, 7243-7243.	14.9	1
35	Perovskite Solar Cells: Additional Organicâ€Solventâ€Rinsing Process to Enhance Perovskite Photovoltaic Performance (Adv. Electron. Mater. 10/2019). Advanced Electronic Materials, 2019, 5, 1970053.	5.1	1
36	Quasi three-dimensional lead iodide perovskite using pyridine-2,5-diamine and 4,4â€²-bipyridine with tunable electronic structure, carrier transport, optical absorption properties. Journal of Alloys and Compounds, 2021, 856, 157391.	5.5	1

#	Article	IF	Citations
37	Tuning Molecular Interaction in Polymer Solar Cells via a Multifunctional Discotic Component to Enhance Photovoltaic Response. Solar Rrl, 0, , 2200101.	5.8	1
38	Organic solar cells with improved spectral coverage based on copper phthalocyanine : MEH-PPV : C60 bulk heterojunctions. , 2007, , .		0
39	Enhancement of polymer photovoltaic performances by doping with modified carbon black nanoparticles. Applied Physics A: Materials Science and Processing, 2015, 120, 601-607.	2.3	0
40	Perovskite Solar Cells: Exploring Electron Transporting Layer in Combination with a Polyelectrolyte for nâ€iâ€p Perovskite Solar Cells (Adv. Mater. Interfaces 17/2020). Advanced Materials Interfaces, 2020, 7, 2070094.	3.7	0