Ziqi Xu

List of Publications by Year in Descending Order

66	16,722	36	70
papers	citations	h-index	g-index
70	18,780	15.9	6.64
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
66	Avoiding Structural Collapse to Reduce Lead Leakage in Perovskite Photovoltaics.. *Angewandte Chemie - International Edition*, **2022**,	16.4	5
65	Phase transformation barrier modulation of CsPbI3 films via PbI3complex for efficient all-inorganic perovskite photovoltaics. *Nano Energy*, **2022**, 99, 107388	17.1	0
64	Progress in flexible perovskite solar cells with improved efficiency. *Journal of Semiconductors*, **2021**, 42, 101605	2.3	4
63	An overview of rare earth coupled lead halide perovskite and its application in photovoltaics and light emitting devices. *Progress in Materials Science*, **2021**, 120, 100737	42.2	10
62	Thermal Management Enables More Efficient and Stable Perovskite Solar Cells. *ACS Energy Letters*, **2021**, 6, 3029-3036	20.1	5
61	Synergistic Effects of Eu-MOF on Perovskite Solar Cells with Improved Stability. *Advanced Materials*, **2021**, 33, e2102947	24	29
60	Ion migration in halide perovskite solar cells: mechanism, characterization, impact and suppression. *Journal of Energy Chemistry*, **2021**,	12	8
59	Promoting Energy Transfer via Manipulation of Crystallization Kinetics of Quasi-2D Perovskites for Efficient Green Light-Emitting Diodes. *Advanced Materials*, **2021**, 33, e2102246	24	25
58	Repair Strategies for Perovskite Solar Cells. *Chemical Research in Chinese Universities*, **2021**, 37, 1055	2.2	1
57	Interfacial-engineering enhanced performance and stability of ZnO nanowire-based perovskite solar cells. *Nanotechnology*, **2021**, 32,	3.4	9
56	The Role of Surface Termination in Halide Perovskites for Efficient Photocatalytic Synthesis. *Angewandte Chemie - International Edition*, **2020**, 59, 12931-12937	16.4	19
55	The Role of Surface Termination in Halide Perovskites for Efficient Photocatalytic Synthesis. *Angewandte Chemie*, **2020**, 132, 13031-13037	3.6	1
54	Defect suppression and passivation for perovskite solar cells: from the birth to the lifetime operation. *EnergyChem*, **2020**, 2, 100032	36.9	12
53	Carrier transport composites with suppressed glass-transition for stable planar perovskite solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 14106-14113	13	13
52	Recent Advances in Improving Phase Stability of Perovskite Solar Cells. *Small Methods*, **2020**, 4, 1900877	12.8	35
51	1000 h Operational Lifetime Perovskite Solar Cells by Ambient Melting Encapsulation. *Advanced Energy Materials*, **2020**, 10, 1902472	21.8	60
50	Understanding the Defect Properties of Quasi-2D Halide Perovskites for Photovoltaic Applications. *Journal of Physical Chemistry Letters*, **2020**, 11, 3521-3528	6.4	29

49	Self-Elimination of Intrinsic Defects Improves the Low-Temperature Performance of Perovskite Photovoltaics. *Joule*, **2020**, 4, 1961-1976	27.8	82
48	Collective and individual impacts of the cascade doping of alkali cations in perovskite single crystals. *Journal of Materials Chemistry C*, **2020**, 8, 15351-15360	7.1	1
47	Defects chemistry in high-efficiency and stable perovskite solar cells. *Journal of Applied Physics*, **2020**, 128, 060903	2.5	43
46	Towards commercialization: the operational stability of perovskite solar cells. *Chemical Society Reviews*, **2020**, 49, 8235-8286	58.5	143
45	Electronic Tunability and Mobility Anisotropy of Quasi-2D Perovskite Single Crystals with Varied Spacer Cations. *Journal of Physical Chemistry Letters*, **2020**, 11, 7610-7616	6.4	13
44	Energy-Level Modulation in Diboron-Modified SnO2 for High-Efficiency Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 1900217	7.1	21
43	Stacking Effects on Electron-Phonon Coupling in Layered Hybrid Perovskites Microstrain Manipulation. *ACS Nano*, **2020**, 14, 5806-5817	16.7	24
42	Cation and anion immobilization through chemical bonding enhancement with fluorides for stable halide perovskite solar cells. *Nature Energy*, **2019**, 4, 408-415	62.3	511
41	A Thermodynamically Favored Crystal Orientation in Mixed Formamidinium/Methylammonium Perovskite for Efficient Solar Cells. *Advanced Materials*, **2019**, 31, e1900390	24	62
40	Impacts of alkaline on the defects property and crystallization kinetics in perovskite solar cells. *Nature Communications*, **2019**, 10, 1112	17.4	124
39	Temporal and spatial pinhole constraints in small-molecule hole transport layers for stable and efficient perovskite photovoltaics. *Journal of Materials Chemistry A*, **2019**, 7, 7338-7346	13	28
38	Strain engineering in perovskite solar cells and its impacts on carrier dynamics. *Nature Communications*, **2019**, 10, 815	17.4	286
37	A Eu-Eu ion redox shuttle imparts operational durability to Pb-I perovskite solar cells. *Science*, **2019**, 363, 265-270	33.3	533
36	Extremely low trap-state energy level perovskite solar cells passivated using NH2-POSS with improved efficiency and stability. *Journal of Materials Chemistry A*, **2018**, 6, 6806-6814	13	34
35	Manipulation of facet orientation in hybrid perovskite polycrystalline films by cation cascade. *Nature Communications*, **2018**, 9, 2793	17.4	127
34	Congeneric Incorporation of CsPbBr3 Nanocrystals in a Hybrid Perovskite Heterojunction for Photovoltaic Efficiency Enhancement. *ACS Energy Letters*, **2018**, 3, 30-38	20.1	86
33	Low-temperature-processed inorganic perovskite solar cells via solvent engineering with enhanced mass transport. *Journal of Materials Chemistry A*, **2018**, 6, 23602-23609	13	49
32	Monolithic perovskite/Si tandem solar cells exceeding 22% efficiency via optimizing top cell absorber. *Nano Energy*, **2018**, 53, 798-807	17.1	56

31	High-Performance Fused Ring Electron Acceptor-Perovskite Hybrid. *Journal of the American Chemical Society*, **2018**, 140, 14938-14944	16.4	51
30	The Exploration of Carrier Behavior in the Inverted Mixed Perovskite Single-Crystal Solar Cells. *Advanced Materials Interfaces*, **2018**, 5, 1800224	4.6	38
29	High-Mobility p-Type Organic Semiconducting Interlayer Enhancing Efficiency and Stability of Perovskite Solar Cells. *Advanced Science*, **2017**, 4, 1700025	13.6	29
28	Chemical Reduction of Intrinsic Defects in Thicker Heterojunction Planar Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1606774	24	267
27	Tailored Au@TiO2 nanostructures for the plasmonic effect in planar perovskite solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 12034-12042	13	51
26	CsI Pre-Intercalation in the Inorganic Framework for Efficient and Stable FA Cs PbI (Cl) Perovskite Solar Cells. *Small*, **2017**, 13, 1700484	11	88
25	To probe the performance of perovskite memory devices: defects property and hysteresis. *Journal of Materials Chemistry C*, **2017**, 5, 5810-5817	7.1	46
24	The intrinsic properties of FA(1⊠)MAxPbI3 perovskite single crystals. *Journal of Materials Chemistry A*, **2017**, 5, 8537-8544	13	110
23	Precise Composition Tailoring of Mixed-Cation Hybrid Perovskites for Efficient Solar Cells by Mixture Design Methods. *ACS Nano*, **2017**, 11, 8804-8813	16.7	44
22	Reduction of intrinsic defects in hybrid perovskite films via precursor purification. *Chemical Communications*, **2017**, 53, 10548-10551	5.8	24
21	A general approach for nanoparticle composite transport materials toward efficient perovskite solar cells. *Chemical Communications*, **2017**, 53, 11028-11031	5.8	2
20	Impact of H2O on organic⊠norganic hybrid perovskite solar cells. *Energy and Environmental Science*, **2017**, 10, 2284-2311	35.4	248
19	A-Site Cation Effect on Growth Thermodynamics and Photoconductive Properties in Ultrapure Lead Iodine Perovskite Monocrystalline Wires. *ACS Applied Materials & Interfaces*, **2017**, 9, 25985-25994	9.5	9
18	Microstructure variations induced by excess PbX or AX within perovskite thin films. *Chemical Communications*, **2017**, 53, 12966-12969	5.8	7
17	A low temperature processed fused-ring electron transport material for efficient planar perovskite solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 24820-24825	13	36
16	An amino-substituted perylene diimide polymer for conventional perovskite solar cells. *Materials Chemistry Frontiers*, **2017**, 1, 2078-2084	7.8	15
15	Enhanced physical properties of pulsed laser deposited NiO films via annealing and lithium doping for improving perovskite solar cell efficiency. *Journal of Materials Chemistry C*, **2017**, 5, 7084-7094	7.1	92
14	Improved air stability of perovskite solar cells via solution-processed metal oxide transport layers. *Nature Nanotechnology*, **2016**, 11, 75-81	28.7	1614

13	Guanidinium: A Route to Enhanced Carrier Lifetime and Open-Circuit Voltage in Hybrid Perovskite Solar Cells. *Nano Letters*, **2016**, 16, 1009-16	11.5	400
12	The Progress of Interface Design in Perovskite-Based Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1600460	21.8	121
11	Low-Temperature TiOx Compact Layer for Planar Heterojunction Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 11076-83	9.5	91
10	The Additive Coordination Effect on Hybrids Perovskite Crystallization and High-Performance Solar Cell. *Advanced Materials*, **2016**, 28, 9862-9868	24	235
9	Perovskite solar cells: film formation and properties. *Journal of Materials Chemistry A*, **2015**, 3, 9032-9050	13	327
8	Under the spotlight: The organic‐inorganic hybrid halide perovskite for optoelectronic applications. *Nano Today*, **2015**, 10, 355-396	17.9	700
7	The optoelectronic role of chlorine in CH3NH3PbI3(Cl)-based perovskite solar cells. *Nature Communications*, **2015**, 6, 7269	17.4	354
6	The identification and characterization of defect states in hybrid organic-inorganic perovskite photovoltaics. *Physical Chemistry Chemical Physics*, **2015**, 17, 112-6	3.6	285
5	Effects of Synthesis Parameters on Silicon Nanopowders Produced by CO2 Laser-Driven Pyrolysis of Silane. *Chemical Vapor Deposition*, **2015**, 21, 133-139		1
4	Planar heterojunction perovskite solar cells via vapor-assisted solution process. *Journal of the American Chemical Society*, **2014**, 136, 622-5	16.4	1921
3	Photovoltaics. Interface engineering of highly efficient perovskite solar cells. *Science*, **2014**, 345, 542-6	33.3	5272
2	Controllable self-induced passivation of hybrid lead iodide perovskites toward high performance solar cells. *Nano Letters*, **2014**, 14, 4158-63	11.5	1143
1	Moisture assisted perovskite film growth for high performance solar cells. *Applied Physics Letters*, **2014**, 105, 183902	3.4	598