Weijun Ke

List of Publications by Year
in descending order

64 papers	10,846 citations	41344 49 h-index	114465 63 g-index
65 all docs	65 docs citations	65 times ranked	9625 citing authors

#	Article	IF	Citations
1	Organic-inorganic hybrid hole transport layers with SnS doping boost the performance of perovskite solar cells. Journal of Energy Chemistry, 2022, 68, 637-645.	12.9	9
2	Film formation mechanisms in mixed-dimensional 2D/3D halide perovskite films revealed by in situ grazing-incidence wide-angle X-ray scattering. CheM, 2022, 8, 1067-1082.	11.7	16
3	Internal Encapsulation for Lead Halide Perovskite Films for Efficient and Very Stable Solar Cells. Advanced Energy Materials, 2022, 12, .	19.5	59
4	Revealing key factors of efficient narrow-bandgap mixed lead-tin perovskite solar cells via numerical simulations and experiments. Nano Energy, 2022, 96, 107078.	16.0	21
5	Highly Efficient Quasiâ€2D Green Perovskite Lightâ€Emitting Diodes with Bifunctional Amino Acid. Advanced Optical Materials, 2022, 10, .	7.3	14
6	2,3-Diphenylthieno[3,4-<i>b</i>]pyrazines as Hole-Transporting Materials for Stable, High-Performance Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 2118-2127.	17.4	27
7	In Quest of Environmentally Stable Perovskite Solar Cells: A Perspective. Helvetica Chimica Acta, 2021, 104, .	1.6	15
8	CsPbBr3 perovskite detectors with 1.4% energy resolution for high-energy Î3-rays. Nature Photonics, 2021, 15, 36-42.	31.4	210
9	Tripleâ€Cation and Mixedâ€Halide Perovskite Single Crystal for Highâ€Performance Xâ€ray Imaging. Advanced Materials, 2021, 33, e2006010.	21.0	163
10	Inch-sized high-quality perovskite single crystals by suppressing phase segregation for light-powered integrated circuits. Science Advances, 2021, 7, .	10.3	81
11	Tunable Broad Light Emission from 3D â€œHollowâ€•Bromide Perovskites through Defect Engineering. Journal of the American Chemical Society, 2021, 143, 7069-7080.	13.7	37
12	Selective Capture Mechanism of Radioactive Thorium from Highly Acidic Solution by a Layered Metal Sulfide. ACS Applied Materials & Interfaces, 2021, 13, 37308-37315.	8.0	11
13	Revealing the Mechanism of Ï€ Aromatic Molecule as an Effective Passivator and Stabilizer in Highly Efficient Wideâ€Bandgap Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100249.	5.8	11
14	Interfacial engineering of a thiophene-based 2D/3D perovskite heterojunction for efficient and stable inverted wide-bandgap perovskite solar cells. Nano Energy, 2021, 90, 106608.	16.0	71
15	Narrow-Bandgap Mixed Lead/Tin-Based 2D Dionâ€“Jacobson Perovskites Boost the Performance of Solar Cells. Journal of the American Chemical Society, 2020, 142, 15049-15057.	13.7	103
16	Three-Dimensional Lead Iodide Perovskitoid Hybrids with High X-ray Photoresponse. Journal of the American Chemical Society, 2020, 142, 6625-6637.	13.7	82
17	Conventional Solvent Oxidizes Sn(II) in Perovskite Inks. ACS Energy Letters, 2020, 5, 1153-1155.	17.4	127
18	Water-Stable 1D Hybrid Tin(II) Iodide Emits Broad Light with 36% Photoluminescence Quantum Efficiency. Journal of the American Chemical Society, 2020, 142, 9028-9038.	13.7	57

#	ARTICLE	IF	CITATIONS
19	Two-Dimensional Dionâ€“Jacobson Hybrid Lead Iodide Perovskites with Aromatic Diammonium Cations. Journal of the American Chemical Society, 2019, 141, 12880-12890.	13.7	241
20	Benzodithiophene Holeâ€Transporting Materials for Efficient Tinâ€Based Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905393.	14.9	49
21	Seven-Layered 2D Hybrid Lead Iodide Perovskites. CheM, 2019, 5, 2593-2604.	11.7	79
22	Compositional and Solvent Engineering in Dionâ€“Jacobson 2D Perovskites Boosts Solar Cell Efficiency and Stability. Advanced Energy Materials, 2019, 9, 1803384.	19.5	219
23	Improved Environmental Stability and Solar Cell Efficiency of (MA,FA)PbI₃ Perovskite Using a Wide-Band-Gap 1D Thiazolium Lead Iodide Capping Layer Strategy. ACS Energy Letters, 2019, 4, 1763-1769.	17.4	118
24	Ethylenediammonium-Based â€œHollowâ€•Pb/Sn Perovskites with Ideal Band Gap Yield Solar Cells with Higher Efficiency and Stability. Journal of the American Chemical Society, 2019, 141, 8627-8637.	13.7	93
25	Uniaxial Expansion of the 2D Ruddlesdenâ€“Popper Perovskite Family for Improved Environmental Stability. Journal of the American Chemical Society, 2019, 141, 5518-5534.	13.7	193
26	Combustion Synthesized Zinc Oxide Electronâ€Transport Layers for Efficient and Stable Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1900265.	14.9	121
27	Prospects for low-toxicity lead-free perovskite solar cells. Nature Communications, 2019, 10, 965.	12.8	695
28	Modern Processing and Insights on Selenium Solar Cells: The World's First Photovoltaic Device. Advanced Energy Materials, 2019, 9, 1802766.	19.5	53
29	Dynamical Transformation of Two-Dimensional Perovskites with Alternating Cations in the Interlayer Space for High-Performance Photovoltaics. Journal of the American Chemical Society, 2019, 141, 2684-2694.	13.7	189
30	Graphene-Modified Tin Dioxide for Efficient Planar Perovskite Solar Cells with Enhanced Electron Extraction and Reduced Hysteresis. ACS Applied Materials & Interfaces, 2019, 11, 666-673.	8.0	66
31	â€œUnleadedâ€•Perovskites: Status Quo and Future Prospects of Tinâ€Based Perovskite Solar Cells. Advanced Materials, 2019, 31, e1803230.	21.0	345
32	Hybrid Dionâ€“Jacobson 2D Lead Iodide Perovskites. Journal of the American Chemical Society, 2018, 140, 3775-3783.	13.7	686
33	Effective Carrierâ€Concentration Tuning of SnO₂ Quantum Dot Electronâ€Selective Layers for Highâ€Performance Planar Perovskite Solar Cells. Advanced Materials, 2018, 30, e1706023.	21.0	333
34	Unraveling the Chemical Nature of the 3D â€œHollowâ€•Hybrid Halide Perovskites. Journal of the American Chemical Society, 2018, 140, 5728-5742.	13.7	132
35	Dopant-Free Tetrakis-Triphenylamine Hole Transporting Material for Efficient Tin-Based Perovskite Solar Cells. Journal of the American Chemical Society, 2018, 140, 388-393.	13.7	163
36	Myths and reality of HPbI3 in halide perovskite solar cells. Nature Communications, 2018, 9, 4785.	12.8	238

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37	Resolving the Energy of Î³-Ray Photons with MAPbI₃ Single Crystals. ACS Photonics, 2018, 5, 4132-4138.	6.6	100
38	Two-Dimensional Halide Perovskites Incorporating Straight Chain Symmetric Diammonium Ions, (NH₃C_{<i>m</i>}H_{2<i>m</i>}NH₃)(CH₃NH₃)<sub><i>n</i (<i>m</i> = 4â€“9; <i>n</i> = 1â€“4). Journal of the American Chemical Society, 2018, 140, 12226-12238.	13.7	184
39	Diammonium Cations in the FASnI₃ Perovskite Structure Lead to Lower Dark Currents and More Efficient Solar Cells. ACS Energy Letters, 2018, 3, 1470-1476.	17.4	114
40	Efficient Lead-Free Solar Cells Based on Hollow {en}MASnI₃ Perovskites. Journal of the American Chemical Society, 2017, 139, 14800-14806.	13.7	230
41	Junction Quality of SnO₂-Based Perovskite Solar Cells Investigated by Nanometer-Scale Electrical Potential Profiling. ACS Applied Materials & Interfaces, 2017, 9, 38373-38380.	8.0	56
42	Enhanced photovoltaic performance and stability with a new type of hollow 3D perovskite {en}FASnI ₃. Science Advances, 2017, 3, e1701293.	10.3	325
43	Highly Efficient and Stable Planar Perovskite Solar Cells With Largeâ€Scale Manufacture of Eâ€Beam Evaporated SnO₂ Toward Commercialization. Solar Rrl, 2017, 1, 1700118.	5.8	75
44	Millisecond-pulsed photonically-annealed tin oxide electron transport layers for efficient perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 24110-24115.	10.3	41
45	Reducing Hysteresis and Enhancing Performance of Perovskite Solar Cells Using Lowâ€Temperature Processed Yâ€Doped SnO₂ Nanosheets as Electron Selective Layers. Small, 2017, 13, 1601769.	10.0	183
46	Optical properties and degradation monitoring of CH<inf>3</inf>NH<inf>3</inf>PbI<inf>3</inf>. , 2016, , .		0
47	Performance enhancement of high temperature SnO₂-based planar perovskite solar cells: electrical characterization and understanding of the mechanism. Journal of Materials Chemistry A, 2016, 4, 8374-8383.	10.3	156
48	Cooperative tin oxide fullerene electron selective layers for high-performance planar perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 14276-14283.	10.3	204
49	Improved Performance of Electroplated CZTS Thinâ€Film Solar Cells with Bifacial Configuration. ChemSusChem, 2016, 9, 2149-2158.	6.8	40
50	TiO₂â€“ZnS Cascade Electron Transport Layer for Efficient Formamidinium Tin Iodide Perovskite Solar Cells. Journal of the American Chemical Society, 2016, 138, 14998-15003.	13.7	220
51	Employing Lead Thiocyanate Additive to Reduce the Hysteresis and Boost the Fill Factor of Planar Perovskite Solar Cells. Advanced Materials, 2016, 28, 5214-5221.	21.0	487
52	Recent progress in electron transport layers for efficient perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 3970-3990.	10.3	472
53	Photovoltaic Properties of Two-Dimensional (CH₃NH₃)₂Pb(SCN)₂I₂ Perovskite: A Combined Experimental and Density Functional Theory Study. Journal of Physical Chemistry Letters, 2016, 7, 1213-1218.	4.6	135
54	Perovskite Solar Cells Based on Low-Temperature Processed Indium Oxide Electron Selective Layers. ACS Applied Materials & Interfaces, 2016, 8, 8460-8466.	8.0	128

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55	Annealing-free efficient vacuum-deposited planar perovskite solar cells with evaporated fullerenes as electron-selective layers. Nano Energy, 2016, 19, 88-97.	16.0	125
56	Low-Temperature Solution-Processed Tin Oxide as an Alternative Electron Transporting Layer for Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2015, 137, 6730-6733.	13.7	1,045
57	Efficient hole-blocking layer-free planar halide perovskite thin-film solar cells. Nature Communications, 2015, 6, 6700.	12.8	358
58	Effects of annealing temperature of tin oxide electron selective layers on the performance of perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 24163-24168.	10.3	186
59	Efficient fully-vacuum-processed perovskite solar cells using copper phthalocyanine as hole selective layers. Journal of Materials Chemistry A, 2015, 3, 23888-23894.	10.3	161
60	Efficient planar perovskite solar cells using room-temperature vacuum-processed C₆₀ electron selective layers. Journal of Materials Chemistry A, 2015, 3, 17971-17976.	10.3	100
61	In situ growth of double-layer MoO3/MoS2 film from MoS2 for hole-transport layers in organic solar cell. Journal of Materials Chemistry A, 2014, 2, 2742.	10.3	184
62	Perovskite Solar Cell with an Efficient TiO₂ Compact Film. ACS Applied Materials & Interfaces, 2014, 6, 15959-15965.	8.0	300
63	In Situ Synthesis of NiS Nanowall Networks on Ni Foam as a TCO-Free Counter Electrode for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 5525-5530.	8.0	96
64	Low-temperature synthesis of size-controllable anatase TiO2 microspheres and interface optimization of bi-layer anodes for high efficiency dye sensitized solar cells. Electrochimica Acta, 2014, 137, 17-25.	5.2	14