Jinsong Huang

List of Publications by Year
in descending order

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250	68,038	831	1013
papers	citations	121 h-index	243 g-index

262	262	262	35903
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A comparative study of Bayesian inverse analyses of spatially varying soil parameters for slope reliability updating. Georisk, 2022, 16, 746-765.	2.6	6
2	Reducing sputter induced stress and damage for efficient perovskite/silicon tandem solar cells. Journal of Materials Chemistry A, 2022, 10, 1343-1349.	5.2	27
3	Direct Observation of Fast Carriers Transport along Out-of-Plane Direction in a Dionâ€“Jacobson Layered Perovskite. ACS Energy Letters, 2022, 7, 984-987.	8.8	24
4	Gradient Doping in Snâ€“Pb Perovskites by Barium Ions for Efficient Singleâ€Junction and Tandem Solar Cells. Advanced Materials, 2022, 34, e2110351.	11.1	62
5	Transient quantum beatings of trions in hybrid organic tri-iodine perovskite single crystal. Nature Communications, 2022, 13, 1428.	5.8	15
6	Evolution of defects during the degradation of metal halide perovskite solar cells under reverse bias and illumination. Nature Energy, 2022, 7, 65-73.	19.8	158
7	Pathways to High Efficiency Perovskite Monolithic Solar Modules. , 2022, 1, .		5
8	Blading of Conformal Electronâ€Transport Layers in pâ€“iâ€“n Perovskite Solar Cells. Advanced Materials, 2022, 34, .	11.1	19
9	Origin of the X-Ray-Induced Damage in Perovskite Solar Cells. IEEE Transactions on Nuclear Science, 2022, 69, 1850-1856.	1.2	3
10	Defect engineering in wide-bandgap perovskites for efficient perovskiteâ€“silicon tandem solar cells. Nature Photonics, 2022, 16, 588-594.	15.6	112
11	Synergistic strain engineering of perovskite single crystals for highly stable and sensitive X-ray detectors with low-bias imaging and monitoring. Nature Photonics, 2022, 16, 575-581.	15.6	138
12	Revealing defective nanostructured surfaces and their impact on the intrinsic stability of hybrid perovskites. Energy and Environmental Science, 2021, 14, 1563-1572.	15.6	55
13	Crystallization in one-step solution deposition of perovskite films: Upward or downward?. Science Advances, 2021, 7, .	4.7	165
14	Mixed halide perovskites for spectrally stable and high-efficiency blue light-emitting diodes. Nature Communications, 2021, 12, 361.	5.8	268
15	Metallic surface doping of metal halide perovskites. Nature Communications, 2021, 12, 7.	5.8	66
16	Response to Comment on â€œResolving spatial and energetic distributions of trap states in metal halide perovskite solar cellsâ€. Science, 2021, 371, .	6.0	15
17	Layer number dependent ferroelasticity in 2D Ruddlesdenâ€“Popper organic-inorganic hybrid perovskites. Nature Communications, 2021, 12, 1332.	5.8	28
18	Preventing lead leakage with built-in resin layers for sustainable perovskite solar cells. Nature Sustainability, 2021, 4, 636-643.	11.5	111

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19	Ligand assisted growth of perovskite single crystals with low defect density. Nature Communications, 2021, 12, 1686.	5.8	110
20	Iodine reduction for reproducible and high-performance perovskite solar cells and modules. Science Advances, 2021, 7, .	4.7	158
21	Acquiring and Modeling of Si Solar-Cell Transient Response to Pulsed X-Ray. IEEE Transactions on Nuclear Science, 2021, 68, 1152-1160.	1.2	0
22	Perovskite solar cells with embedded homojunction via nonuniform metal ion doping. Cell Reports Physical Science, 2021, 2, 100415.	2.8	10
23	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells. Joule, 2021, 5, 1246-1266.	11.7	91
24	Defect compensation in formamidiniumâ€“caesium perovskites for highly efficient solar mini-modules with improved photostability. Nature Energy, 2021, 6, 633-641.	19.8	215
25	Highly Efficient Pureâ€Blue Lightâ€Emitting Diodes Based on Rubidium and Chlorine Alloyed Metal Halide Perovskite. Advanced Materials, 2021, 33, e2100783.	11.1	77
26	Perovskite crystals redissolution strategy for affordable, reproducible, efficient and stable perovskite photovoltaics. Materials Today, 2021, 50, 199-223.	8.3	43
27	Stabilizing perovskite-substrate interfaces for high-performance perovskite modules. Science, 2021, 373, 902-907.	6.0	402
28	Unveiling the ambipolar carrier transport property of SnO2â^'X for multiple-functional interlayers in perovskite solar cells. Applied Physics Letters, 2021, 119, 123501.	1.5	2
29	Strain engineering in metal halide perovskite materials and devices: Influence on stability and optoelectronic properties. Chemical Physics Reviews, 2021, 2, .	2.6	23
30	Heterojunction structures for reduced noise in large-area and sensitive perovskite x-ray detectors. Science Advances, 2021, 7, eabg6716.	4.7	77
31	Evaporation of Methylammonium Iodide in Thermal Deposition of MAPbI3. Nanomaterials, 2021, 11, 2532.	1.9	6
32	Large-area and efficient perovskite light-emitting diodes via low-temperature blade-coating. Nature Communications, 2021, 12, 147.	5.8	100
33	Recycling lead and transparent conductors from perovskite solar modules. Nature Communications, 2021, 12, 5859.	5.8	69
34	Lead-adsorbing ionogel-based encapsulation for impact-resistant, stable, and lead-safe perovskite modules. Science Advances, 2021, 7, eabi8249.	4.7	71
35	Scalable Fabrication of Efficient Perovskite Solar Modules on Flexible Glass Substrates. Advanced Energy Materials, 2020, 10, 1903108.	10.2	186
36	Fullerenes with dipoles: boosting the efficiency of perovskite solar cells. Science China Chemistry, 2020, 63, 145-146.	4.2	3

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37	Ultrafast Exciton Transport with a Long Diffusion Length in Layered Perovskites with Organic Cation Functionalization. Advanced Materials, 2020, 32, e2004080.	11.1	34
38	Simplified interconnection structure based on C60/SnO2-x for all-perovskite tandem solar cells. Nature Energy, 2020, 5, 657-665.	19.8	186
39	Perovskite Solar Cells: Synergistic Cascade Carrier Extraction via Dual Interfacial Positioning of Ambipolar Black Phosphorene for Highâ€Efficiency Perovskite Solar Cells (Adv. Mater. 28/2020). Advanced Materials, 2020, 32, 2070211.	11.1	1
40	Identifying the Soft Nature of Defective Perovskite Surface Layer and Its Removal Using a Facile Mechanical Approach. Joule, 2020, 4, 2661-2674.	11.7	81
41	Low defects density CsPbBr₃ single crystals grown by an additive assisted method for gamma-ray detection. Journal of Materials Chemistry C, 2020, 8, 11360-11368.	2.7	63
42	Reduced Self-Doping of Perovskites Induced by Short Annealing for Efficient Solar Modules. Joule, 2020, 4, 1949-1960.	11.7	72
43	Suppressing Interfacial Charge Recombination in Electronâ€Transportâ€Layerâ€Free Perovskite Solar Cells to Give an Efficiency Exceeding 21â€‰%. Angewandte Chemie, 2020, 132, 21166-21173.	1.6	36
44	Suppressing Interfacial Charge Recombination in Electronâ€Transportâ€Layerâ€Free Perovskite Solar Cells to Give an Efficiency Exceeding 21â€‰%. Angewandte Chemie - International Edition, 2020, 59, 20980-20987.	7.2	65
45	Trapping lead in perovskite solar modules with abundant and low-cost cation-exchange resins. Nature Energy, 2020, 5, 1003-1011.	19.8	126
46	Perovskite-filled membranes for flexible and large-area direct-conversion X-ray detector arrays. Nature Photonics, 2020, 14, 612-617.	15.6	228
47	Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBrâ‚ƒ Gamma-Ray Detector. IEEE Transactions on Nuclear Science, 2020, 67, 2255-2262.	1.2	35
48	Benign ferroelastic twin boundaries in halide perovskites for charge carrier transport and recombination. Nature Communications, 2020, 11, 2215.	5.8	47
49	Synergistic Cascade Carrier Extraction via Dual Interfacial Positioning of Ambipolar Black Phosphorene for Highâ€Efficiency Perovskite Solar Cells. Advanced Materials, 2020, 32, e2000999.	11.1	104
50	Double Active Layers Constructed with Halide Perovskite and Quantum Dots for Broadband Photodetection. Advanced Optical Materials, 2020, 8, 2000557.	3.6	19
51	Blading Phaseâ€Pure Formamidiniumâ€Alloyed Perovskites for Highâ€Efficiency Solar Cells with Low Photovoltage Deficit and Improved Stability. Advanced Materials, 2020, 32, e2000995.	11.1	125
52	Tunable perovskite-based photodetectors in optical sensing. Sensors and Actuators B: Chemical, 2020, 321, 128462.	4.0	11
53	Resolving spatial and energetic distributions of trap states in metal halide perovskite solar cells. Science, 2020, 367, 1352-1358.	6.0	699
54	Interfacial Molecular Doping of Metal Halide Perovskites for Highly Efficient Solar Cells. Advanced Materials, 2020, 32, e2001581.	11.1	139

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55	Reducing Surface Halide Deficiency for Efficient and Stable Iodide-Based Perovskite Solar Cells. Journal of the American Chemical Society, 2020, 142, 3989-3996.	6.6	236
56	Tailoring carrier dynamics in perovskite solar cells via precise dimension and architecture control and interfacial positioning of plasmonic nanoparticles. Energy and Environmental Science, 2020, 13, 1743-1752.	15.6	63
57	Is Formamidinium Always More Stable than Methylammonium?. Chemistry of Materials, 2020, 32, 2501-2507.	3.2	34
58	Comparative studies of optoelectrical properties of prominent PV materials: Halide perovskite, CdTe, and GaAs. Materials Today, 2020, 36, 18-29.	8.3	33
59	Blade-Coated Perovskites on Textured Silicon for 26%-Efficient Monolithic Perovskite/Silicon Tandem Solar Cells. Joule, 2020, 4, 850-864.	11.7	281
60	Templated growth of oriented layered hybrid perovskites on 3D-like perovskites. Nature Communications, 2020, 11, 582.	5.8	167
61	Managing grains and interfaces via ligand anchoring enables 22.3%-efficiency inverted perovskite solar cells. Nature Energy, 2020, 5, 131-140.	19.8	894
62	Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection. IEEE Transactions on Nuclear Science, 2020, 67, 443-449.	1.2	50
63	Stabilizing halide perovskite surfaces for solar cell operation with wide-bandgap lead oxysalts. Science, 2019, 365, 473-478.	6.0	723
64	Synergistic Effect of Elevated Device Temperature and Excess Charge Carriers on the Rapid Lightâ€Induced Degradation of Perovskite Solar Cells. Advanced Materials, 2019, 31, e1902413.	11.1	90
65	Enhancing electron diffusion length in narrow-bandgap perovskites for efficient monolithic perovskite tandem solar cells. Nature Communications, 2019, 10, 4498.	5.8	234
66	Fast Growth of Thin MAPbI₃ Crystal Wafers on Aqueous Solution Surface for Efficient Lateralâ€Structure Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1807707.	7.8	62
67	Metal Ions in Halide Perovskite Materials and Devices. Trends in Chemistry, 2019, 1, 394-409.	4.4	44
68	Meniscus fabrication of halide perovskite thin films at high throughput for large area and low-cost solar panels. International Journal of Extreme Manufacturing, 2019, 1, 022004.	6.3	50
69	Imperfections and their passivation in halide perovskite solar cells. Chemical Society Reviews, 2019, 48, 3842-3867.	18.7	1,257
70	Oligomeric Silica-Wrapped Perovskites Enable Synchronous Defect Passivation and Grain Stabilization for Efficient and Stable Perovskite Photovoltaics. ACS Energy Letters, 2019, 4, 1231-1240.	8.8	111
71	Tailoring Passivation Molecular Structures for Extremely Small Open-Circuit Voltage Loss in Perovskite Solar Cells. Journal of the American Chemical Society, 2019, 141, 5781-5787.	6.6	585
72	Synthetic control over orientational degeneracy of spacer cations enhances solar cell efficiency in two-dimensional perovskites. Nature Communications, 2019, 10, 1276.	5.8	222

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73	Halide lead perovskites for ionizing radiation detection. Nature Communications, 2019, 10, 1066.	5.8	568
74	Bilateral alkylamine for suppressing charge recombination and improving stability in blade-coated perovskite solar cells. Science Advances, 2019, 5, eaav8925.	4.7	388
75	Rational molecular passivation for high-performance perovskite light-emitting diodes. Nature Photonics, 2019, 13, 418-424.	15.6	970
76	Unveiling the operation mechanism of layered perovskite solar cells. Nature Communications, 2019, 10, 1008.	5.8	216
77	Tailoring solvent coordination for high-speed, room-temperature blading of perovskite photovoltaic films. Science Advances, 2019, 5, eaax7537.	4.7	312
78	Efficient sky-blue perovskite light-emitting diodes via photoluminescence enhancement. Nature Communications, 2019, 10, 5633.	5.8	267
79	Organohalide Lead Perovskites: More Stable than Glass under Gammaâ€Ray Radiation. Advanced Materials, 2019, 31, e1805547.	11.1	92
80	Grain Engineering for Perovskite/Silicon Monolithic Tandem Solar Cells with Efficiency of 25.4%. Joule, 2019, 3, 177-190.	11.7	329
81	Panchromatic Allâ€Polymer Photodetector with Tunable Polarization Sensitivity. Advanced Optical Materials, 2019, 7, 1801346.	3.6	26
82	Accurate characterization of next-generation thin-film photodetectors. Nature Photonics, 2019, 13, 1-4.	15.6	436
83	Molecular doping enabled scalable blading of efficient hole-transport-layer-free perovskite solar cells. Nature Communications, 2018, 9, 1625.	5.8	314
84	Realâ€Time Observation of Orderâ€Disorder Transformation of Organic Cations Induced Phase Transition and Anomalous Photoluminescence in Hybrid Perovskites. Advanced Materials, 2018, 30, e1705801.	11.1	60
85	Suppressed Ion Migration along the In-Plane Direction in Layered Perovskites. ACS Energy Letters, 2018, 3, 684-688.	8.8	240
86	Enhanced Thermal Stability in Perovskite Solar Cells by Assembling 2D/3D Stacking Structures. Journal of Physical Chemistry Letters, 2018, 9, 654-658.	2.1	447
87	Environmental Surface Stability of the MAPbBr₃ Single Crystal. Journal of Physical Chemistry C, 2018, 122, 3513-3522.	1.5	66
88	Argon Plasma Treatment to Tune Perovskite Surface Composition for High Efficiency Solar Cells and Fast Photodetectors. Advanced Materials, 2018, 30, 1705176.	11.1	81
89	Hotâ€Substrate Deposition of Holeâ€and Electronâ€Transport Layers for Enhanced Performance in Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1701659.	10.2	20
90	Themed issue on perovskite solar cells: research on metal halide perovskite solar cells towards deeper understanding, upscalable fabrication, long-term stability and Pb-free alternatives. Sustainable Energy and Fuels, 2018, 2, 2378-2380.	2.5	6

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91	Excess charge-carrier induced instability of hybrid perovskites. Nature Communications, 2018, 9, 4981.	5.8	159
92	Intrinsic Behavior of CH₃NH₃PbBr₃ Single Crystals under Light Illumination. Advanced Materials Interfaces, 2018, 5, 1801206.	1.9	18
93	Large electrostrictive response in lead halide perovskites. Nature Materials, 2018, 17, 1020-1026.	13.3	137
94	Dual Functions of Crystallization Control and Defect Passivation Enabled by Sulfonic Zwitterions for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2018, 30, e1803428.	11.1	296
95	Organohalide Perovskites: Real-Time Observation of Order-Disorder Transformation of Organic Cations Induced Phase Transition and Anomalous Photoluminescence in Hybrid Perovskites (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	11.1	
96	Surfactant-controlled ink drying enables high-speed deposition of perovskite films for efficient photovoltaic modules. Nature Energy, 2018, 3, 560-566.	19.8	585
97	High Performance and Stable Allâ€Inorganic Metal Halide Perovskiteâ€Based Photodetectors for Optical Communication Applications. Advanced Materials, 2018, 30, e1803422.	11.1	342
98	Enhanced Piezoelectric Response in Hybrid Lead Halide Perovskite Thin Films via Interfacing with Ferroelectric PbZr_{0.2}Ti_{0.8}O₃. ACS Applied Materials & Interfaces, 2018, 10, 19218-19225.	4.0	24
99	Hybrid Perovskite Based Photodetectors. Materials and Energy, 2018, , 1-29.	2.5	0
100	Valence band dispersion measurements of perovskite single crystals using angle-resolved photoemission spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 5361-5365.	1.3	32
101	Quantification of re-absorption and re-emission processes to determine photon recycling efficiency in perovskite single crystals. Nature Communications, 2017, 8, 14417.	5.8	189
102	Universal Strategy To Reduce Noise Current for Sensitive Organic Photodetectors. ACS Applied Materials & Interfaces, 2017, 9, 9176-9183.	4.0	77
103	Real-Time Nanoscale Open-Circuit Voltage Dynamics of Perovskite Solar Cells. Nano Letters, 2017, 17, 2554-2560.	4.5	111
104	Light-Induced Degradation of CH₃NH₃PbI₃ Hybrid Perovskite Thin Film. Journal of Physical Chemistry C, 2017, 121, 3904-3910.	1.5	265
105	Highly Narrowband Photomultiplication Type Organic Photodetectors. Nano Letters, 2017, 17, 1995-2002.	4.5	278
106	The Functions of Fullerenes in Hybrid Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 782-794.	8.8	217
107	Progress in Tandem Solar Cells Based on Hybrid Organicâ€“Inorganic Perovskites. Advanced Energy Materials, 2017, 7, 1602400.	10.2	130
108	Double Perovskite Cs₂BBiX₆ (B = Ag, Cu; X = Br, Cl)/TiO₂ Heterojunction: An Efficient Pb-Free Perovskite Interface for Charge Extraction. Journal of Physical Chemistry C, 2017, 121, 4471-4480.	1.5	87

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109	CH ₃ NH ₃ PbI ₃ perovskites: Ferroelasticity revealed. Science Advances, 2017, 3, e1602165.	4.7	257
110	Monolithic integration of hybrid perovskite single crystals with heterogenous substrate for highly sensitive X-ray imaging. Nature Photonics, 2017, 11, 315-321.	15.6	580
111	Spontaneous Passivation of Hybrid Perovskite by Sodium Ions from Glass Substrates: Mysterious Enhancement of Device Efficiency Revealed. ACS Energy Letters, 2017, 2, 1400-1406.	8.8	143
112	Matching Charge Extraction Contact for Wideâ€Bandgap Perovskite Solar Cells. Advanced Materials, 2017, 29, 1700607.	11.1	178
113	Detecting 100 fW cm^{â¯2} Light with Trapped Electron Gated Organic Phototransistors. Advanced Materials, 2017, 29, 1603969.	11.1	47
114	Composition Engineering in Doctorâ€Blading of Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1700302.	10.2	239
115	Efficient Flexible Solar Cell based on Compositionâ€Tailored Hybrid Perovskite. Advanced Materials, 2017, 29, 1605900.	11.1	184
116	Suppressed Ion Migration in Low-Dimensional Perovskites. ACS Energy Letters, 2017, 2, 1571-1572.	8.8	404
117	Anomalous photovoltaic effect in organic-inorganic hybrid perovskite solar cells. Science Advances, 2017, 3, e1602164.	4.7	165
118	Ï€â€Conjugated Lewis Base: Efficient Trapâ€Passivation and Chargeâ€Extraction for Hybrid Perovskite Solar Cells. Advanced Materials, 2017, 29, 1604545.	11.1	543
119	Detection of charged particles with a methylammonium lead tribromide perovskite single crystal. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 848, 106-108.	0.7	61
120	Integration of perovskite and polymer photoactive layers to produce ultrafast response, ultraviolet-to-near-infrared, sensitive photodetectors. Materials Horizons, 2017, 4, 242-248.	6.4	127
121	Scaling behavior of moisture-induced grain degradation in polycrystalline hybrid perovskite thin films. Energy and Environmental Science, 2017, 10, 516-522.	15.6	720
122	Photoluminescence from Radiative Surface States and Excitons in Methylammonium Lead Bromide Perovskites. Journal of Physical Chemistry Letters, 2017, 8, 4258-4263.	2.1	46
123	Lowâ€Noise and Largeâ€Linearâ€Dynamicâ€Range Photodetectors Based on Hybridâ€Perovskite Thinâ€Singleâ€Crystals. Advanced Materials, 2017, 29, 1703209.	11.1	281
124	Stabilizing the Î±-Phase of CsPbI3 Perovskite by Sulfobetaine Zwitterions in One-Step Spin-Coating Films. Joule, 2017, 1, 371-382.	11.7	442
125	Selfâ€Filtered Narrowband Perovskite Photodetectors with Ultrafast and Tuned Spectral Response. Advanced Optical Materials, 2017, 5, 1700672.	3.6	78
126	Unraveling the High Open Circuit Voltage and High Performance of Integrated Perovskite/Organic Bulk-Heterojunction Solar Cells. Nano Letters, 2017, 17, 5140-5147.	4.5	78

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127	In- and Ga-based inorganic double perovskites with direct bandgaps for photovoltaic applications. Physical Chemistry Chemical Physics, 2017, 19, 21691-21695.	1.3	37
128	Discrete Iron(III) Oxide Nanoislands for Efficient and Photostable Perovskite Solar Cells. Advanced Functional Materials, 2017, 27, 1702090.	7.8	79
129	Thin single crystal perovskite solar cells to harvest below-bandgap light absorption. Nature Communications, 2017, 8, 1890.	5.8	467
130	Strained hybrid perovskite thin films and their impact on the intrinsic stability of perovskite solar cells. Science Advances, 2017, 3, eaao5616.	4.7	635
131	Stable Graphene-Two-Dimensional Multiphase Perovskite Heterostructure Phototransistors with High Gain. Nano Letters, 2017, 17, 7330-7338.	4.5	88
132	Defect passivation in hybrid perovskite solar cells using quaternary ammonium halide anions andÂcations. Nature Energy, 2017, 2, .	19.8	1,694
133	Understanding the physical properties of hybrid perovskites for photovoltaic applications. Nature Reviews Materials, 2017, 2, .	23.3	927
134	Meniscus-assisted solution printing of large-grained perovskite films for high-efficiency solar cells. Nature Communications, 2017, 8, 16045.	5.8	359
135	Dopant compensation in alloyed CH3NH3PbBr3âˆ’xClx perovskite single crystals for gamma-ray spectroscopy. Nature Materials, 2017, 16, 826-833.	13.3	475
136	Thin Insulating Tunneling Contacts for Efficient and Waterâ€Resistant Perovskite Solar Cells. Advanced Materials, 2016, 28, 6734-6739.	11.1	533
137	Ultrahigh Gain, Low Noise, Ultraviolet Photodetectors with Highly Aligned Organic Crystals. Advanced Optical Materials, 2016, 4, 264-270.	3.6	69
138	Electricâ€Fieldâ€Driven Reversible Conversion Between Methylammonium Lead Triiodide Perovskites and Lead Iodide at Elevated Temperatures. Advanced Energy Materials, 2016, 6, 1501803.	10.2	287
139	A Highly Sensitive Narrowband Nanocomposite Photodetector with Gain. Advanced Materials, 2016, 28, 2043-2048.	11.1	128
140	Lateralâ€Structure Singleâ€Crystal Hybrid Perovskite Solar Cells via Piezoelectric Poling. Advanced Materials, 2016, 28, 2816-2821.	11.1	144
141	Airâ€Stable, Efficient Mixedâ€Cation Perovskite Solar Cells with Cu Electrode by Scalable Fabrication of Active Layer. Advanced Energy Materials, 2016, 6, 1600372.	10.2	275
142	Surface Analytical Investigation on Organometal Triiodide Perovskite. Materials Research Society Symposia Proceedings, 2016, 1735, 151.	0.1	0
143	A filterless, visible-blind, narrow-band, and near-infrared photodetector with a gain. Nanoscale, 2016, 8, 12990-12997.	2.8	114
144	Film-through large perovskite grains formation via a combination of sequential thermal and solvent treatment. Journal of Materials Chemistry A, 2016, 4, 8554-8561.	5.2	80

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145	Ultrafast ion migration in hybrid perovskite polycrystalline thin films under light and suppression in single crystals. Physical Chemistry Chemical Physics, 2016, 18, 30484-30490.	1.3	322
146	Physical aspects of ferroelectric semiconductors for photovoltaic solar energy conversion. Physics Reports, 2016, 653, 1-40.	10.3	166
147	Ion Migration in Hybrid Perovskite Solar Cells. , 2016, , 137-162.		16
148	Low Temperature Solutionâ€Processed Sb:SnO₂ Nanocrystals for Efficient Planar Perovskite Solar Cells. ChemSusChem, 2016, 9, 2686-2691.	3.6	172
149	Advances in Perovskite Solar Cells. Advanced Science, 2016, 3, 1500324.	5.6	482
150	Highâ€Performance Allâ€Polymer Photoresponse Devices Based on Acceptorâ€“Acceptor Conjugated Polymers. Advanced Functional Materials, 2016, 26, 6306-6315.	7.8	88
151	Photovoltaic Diode Effect Induced by Positive Bias Poling of Organic Layerâ€Mediated Interface in Perovskite Heterostructure Î±â€HC(NH₂)₂PbI₃/TiO₂. Advanced Materials Interfaces, 2016, 3, 1600267.	1.9	9
152	Efficient Semitransparent Perovskite Solar Cells for 23.0%â€Efficiency Perovskite/Silicon Fourâ€Terminal Tandem Cells. Advanced Energy Materials, 2016, 6, 1601128.	10.2	240
153	A Selfâ€Powered, Subâ€nanosecondâ€Response Solutionâ€Processed Hybrid Perovskite Photodetector for Timeâ€Resolved Photoluminescenceâ€Lifetime Detection. Advanced Materials, 2016, 28, 10794-10800.	11.1	295
154	Doping and alloying for improved perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 17623-17635.	5.2	157
155	Ultrahigh sensitivity of methylammonium lead tribromide perovskite single crystals to environmental gases. Science Advances, 2016, 2, e1600534.	4.7	304
156	Is Cu a stable electrode material in hybrid perovskite solar cells for a 30-year lifetime?. Energy and Environmental Science, 2016, 9, 3650-3656.	15.6	239
157	Enhancing stability and efficiency of perovskite solar cells with crosslinkable silane-functionalized and doped fullerene. Nature Communications, 2016, 7, 12806.	5.8	350
158	Correlation of energy disorder and open-circuit voltage in hybrid perovskite solar cells. Nature Energy, 2016, 1, .	19.8	646
159	Energyâ€Efficient Hybrid Perovskite Memristors and Synaptic Devices. Advanced Electronic Materials, 2016, 2, 1600100.	2.6	323
160	Ion Migration in Organometal Trihalide Perovskite and Its Impact on Photovoltaic Efficiency and Stability. Accounts of Chemical Research, 2016, 49, 286-293.	7.6	1,343
161	Unraveling the hidden function of a stabilizer in a precursor in improving hybrid perovskite film morphology for high efficiency solar cells. Energy and Environmental Science, 2016, 9, 867-872.	15.6	62
162	Effects of Precursor Ratios and Annealing on Electronic Structure and Surface Composition of CH₃NH₃PbI₃ Perovskite Films. Journal of Physical Chemistry C, 2016, 120, 215-220.	1.5	108

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163	Sensitive X-ray detectors made of methylammonium lead tribromide perovskite single crystals. Nature Photonics, 2016, 10, 333-339.	15.6	1,271
164	Grain boundary dominated ion migration in polycrystalline organicâ€“inorganic halide perovskite films. Energy and Environmental Science, 2016, 9, 1752-1759.	15.6	917
165	Stabilized Wide Bandgap MAPbBr_xI_{3â€“x} Perovskite by Enhanced Grain Size and Improved Crystallinity. Advanced Science, 2016, 3, 1500301.	5.6	229
166	Thin-film semiconductor perspective of organometal trihalide perovskite materials for high-efficiency solar cells. Materials Science and Engineering Reports, 2016, 101, 1-38.	14.8	117
167	Charge Carrier Lifetimes Exceeding 15 Î¼s in Methylammonium Lead Iodide Single Crystals. Journal of Physical Chemistry Letters, 2016, 7, 923-928.	2.1	226
168	Manipulating Crystallization of Organolead Mixed-Halide Thin Films in Antisolvent Baths for Wide-Bandgap Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 2232-2237.	4.0	91
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