Lewis Acid–Base Adduct Approach for High Efficienc

Accounts of Chemical Research 49, 311-319 DOI: 10.1021/acs.accounts.5b00440

Citation Report

#	Article	IF	CITATIONS
2	Crystal growth engineering for high efficiency perovskite solar cells. CrystEngComm, 2016, 18, 5977-5985.	1.3	85
3	Constructing water-resistant CH ₃ NH ₃ PbI ₃ perovskite films via coordination interaction. Journal of Materials Chemistry A, 2016, 4, 17018-17024.	5.2	89
4	Quantifying Hole Transfer Yield from Perovskite to Polymer Layer: Statistical Correlation of Solar Cell Outputs with Kinetic and Energetic Properties. ACS Photonics, 2016, 3, 1678-1688.	3.2	54
5	APbI3 (AÂ=ÂCH3NH3 and HC(NH2)2) Perovskite Solar Cells: From Sensitization to Planar Heterojunction. , 2016, , 223-253.		3
6	Methodologies for high efficiency perovskite solar cells. Nano Convergence, 2016, 3, 15.	6.3	88
7	Interface Engineering of Perovskite Solar Cell Using a Reduced-Graphene Scaffold. Journal of Physical Chemistry C, 2016, 120, 19531-19536.	1.5	84
8	Efficient Colorful Perovskite Solar Cells Using a Top Polymer Electrode Simultaneously as Spectrally Selective Antireflection Coating. Nano Letters, 2016, 16, 7829-7835.	4.5	123
9	Tandem Architecture of Perovskite and Cu(In,Ga)(S,Se) ₂ Created by Solution Processes for Solar Cells. Advanced Optical Materials, 2016, 4, 2102-2108.	3.6	14
10	Photoluminescence Lifetimes Exceeding 8 μs and Quantum Yields Exceeding 30% in Hybrid Perovskite Thin Films by Ligand Passivation. ACS Energy Letters, 2016, 1, 438-444.	8.8	452
11	High quality perovskite films fabricated from Lewis acid–base adduct through molecular exchange. RSC Advances, 2016, 6, 70925-70931.	1.7	45
12	Organic-Inorganic Halide Perovskite Photovoltaics. , 2016, , .		115
13	Highly Efficient, Reproducible, Uniform (CH ₃ NH ₃)PbI ₃ Layer by Processing Additive Dripping for Solutionâ€Processed Planar Heterojunction Perovskite Solar Cells. Chemistry - an Asian Journal, 2016, 11, 2399-2405.	1.7	5
14	Polymer-templated nucleation and crystal growth of perovskite films for solar cells with efficiency greater thanÅ21%. Nature Energy, 2016, 1, .	19.8	1,719
15	Towards stable and commercially available perovskite solar cells. Nature Energy, 2016, 1, .	19.8	941
16	Enhanced performance of perovskite solar cells by modulating the Lewis acid–base reaction. Nanoscale, 2016, 8, 19804-19810.	2.8	62
17	A vacuum flash–assisted solution process for high-efficiency large-area perovskite solar cells. Science, 2016, 353, 58-62.	6.0	1,636
18	Management of perovskite intermediates for highly efficient inverted planar heterojunction perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 3193-3202.	5.2	113
19	Controllable Crystallization of CH ₃ NH ₃ Sn _{0.25} Pb _{0.75} I ₃ Perovskites for Hysteresisâ€Free Solar Cells with Efficiency Reaching 15.2%. Advanced Functional Materials, 2017, 27, 1605469	7.8	84

#	Article	IF	CITATIONS
20	Impact of Excess CH ₃ NH ₃ I on Free Carrier Dynamics in High-Performance Nonstoichiometric Perovskites. Journal of Physical Chemistry C, 2017, 121, 3143-3148.	1.5	49
21	Morphology modification of perovskite film by a simple post-treatment process in perovskite solar cell. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 217, 18-25.	1.7	45
22	Controlled growth of CH3NH3PbI3 films towards efficient perovskite solar cells by varied-stoichiometric intermediate adduct. Applied Surface Science, 2017, 403, 572-577.	3.1	25
23	Ascorbic acid as an effective antioxidant additive to enhance the efficiency and stability of Pb/Sn-based binary perovskite solar cells. Nano Energy, 2017, 34, 392-398.	8.2	162
24	A pure and stable intermediate phase is key to growing aligned and vertically monolithic perovskite crystals for efficient PIN planar perovskite solar cells with high processibility and stability. Nano Energy, 2017, 34, 58-68.	8.2	151
25	Large Grain-Based Hole-Blocking Layer-Free Planar-Type Perovskite Solar Cell with Best Efficiency of 18.20%. ACS Applied Materials & Interfaces, 2017, 9, 8113-8120.	4.0	72
26	<i>In-Situ</i> Formed Type I Nanocrystalline Perovskite Film for Highly Efficient Light-Emitting Diode. ACS Nano, 2017, 11, 3311-3319.	7.3	161
27	Study of ethoxyethane deposition time and Co (III) complex doping on the performance of mesoscopic perovskite based solar cells. Solar Energy Materials and Solar Cells, 2017, 163, 224-230.	3.0	14
28	The rapid evolution of highly efficient perovskite solar cells. Energy and Environmental Science, 2017, 10, 710-727.	15.6	942
29	High-quality organohalide lead perovskite films fabricated by layer-by-layer alternating vacuum deposition for high efficiency photovoltaics. Materials Chemistry Frontiers, 2017, 1, 1520-1525.	3.2	33
30	Simple post annealing-free method for fabricating uniform, large grain-sized, and highly crystalline perovskite films. Nano Energy, 2017, 34, 181-187.	8.2	50
31	Thermoresponsive Emission Switching via Lower Critical Solution Temperature Behavior of Organic–Inorganic Perovskite Nanoparticles. Advanced Materials, 2017, 29, 1700047.	11.1	11
32	Anti-solvent dependent device performance in CH ₃ NH ₃ PbI ₃ solar cells: the role of intermediate phase content in the as-prepared thin films. Sustainable Energy and Fuels, 2017, 1, 1041-1048.	2.5	35
33	New insight into solvent engineering technology from evolution of intermediates via one-step spin-coating approach. Science China Materials, 2017, 60, 392-398.	3.5	53
34	Halide Perovskites for Tandem Solar Cells. Journal of Physical Chemistry Letters, 2017, 8, 1999-2011.	2.1	47
35	Controlled Crystal Grain Growth in Mixed Cation–Halide Perovskite by Evaporated Solvent Vapor Recycling Method for High Efficiency Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 18739-18747.	4.0	42
37	Tuning the crystal growth of perovskite thin-films by adding the 2-pyridylthiourea additive for highly efficient and stable solar cells prepared in ambient air. Journal of Materials Chemistry A, 2017, 5, 13448-13456.	5.2	96
38	New Insight into the Formation of Hybrid Perovskite Nanowires via Structure Directing Adducts. Chemistry of Materials, 2017, 29, 587-594.	3.2	68

#	Article	IF	CITATIONS
39	Perovskite solar cells: An integrated hybrid lifecycle assessment and review in comparison with other photovoltaic technologies. Renewable and Sustainable Energy Reviews, 2017, 80, 1321-1344.	8.2	240
40	Control of the morphology of PbI ₂ films for efficient perovskite solar cells by strong Lewis base additives. Journal of Materials Chemistry C, 2017, 5, 7458-7464.	2.7	57
41	In Situ Observation of Crystallization of Methylammonium Lead Iodide Perovskite from Microdroplets. Small, 2017, 13, 1604125.	5.2	39
42	Thermally Stable MAPbI ₃ Perovskite Solar Cells with Efficiency of 19.19% and Area over 1 cm ² achieved by Additive Engineering. Advanced Materials, 2017, 29, 1701073.	11.1	541
43	Radiative Thermal Annealing/in Situ X-ray Diffraction Study of Methylammonium Lead Triiodide: Effect of Antisolvent, Humidity, Annealing Temperature Profile, and Film Substrates. Chemistry of Materials, 2017, 29, 5931-5941.	3.2	35
44	Deciphering the NH ₄ PbI ₃ Intermediate Phase for Simultaneous Improvement on Nucleation and Crystal Growth of Perovskite. Advanced Functional Materials, 2017, 27, 1701804.	7.8	117
45	The Interplay between Trap Density and Hysteresis in Planar Heterojunction Perovskite Solar Cells. Nano Letters, 2017, 17, 4270-4276.	4.5	226
46	Reduced Interfaceâ€Mediated Recombination for High Openâ€Circuit Voltages in CH ₃ NH ₃ PbI ₃ Solar Cells. Advanced Materials, 2017, 29, 1700159.	11.1	210
47	Room-Temperature Synthesis of Widely Tunable Formamidinium Lead Halide Perovskite Nanocrystals. Chemistry of Materials, 2017, 29, 5713-5719.	3.2	112
48	A critical review on tin halide perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 11518-11549.	5.2	463
49	Fabrication of high quality perovskite films by modulating the Pb–O bonds in Lewis acid–base adducts. Journal of Materials Chemistry A, 2017, 5, 8416-8422.	5.2	73
50	Constructing Mieâ€Scattering Porous Interfaceâ€Fused Perovskite Films to Synergistically Boost Light Harvesting and Carrier Transport. Angewandte Chemie - International Edition, 2017, 56, 5232-5236.	7.2	75
51	Morphology-Independent Stable White-Light Emission from Self-Assembled Two-Dimensional Perovskites Driven by Strong Exciton–Phonon Coupling to the Organic Framework. Chemistry of Materials, 2017, 29, 3947-3953.	3.2	200
52	Constructing Mieâ€Scattering Porous Interfaceâ€Fused Perovskite Films to Synergistically Boost Light Harvesting and Carrier Transport. Angewandte Chemie, 2017, 129, 5316-5320.	1.6	12
53	Compositional and morphological engineering of mixed cation perovskite films for highly efficient planar and flexible solar cells with reduced hysteresis. Nano Energy, 2017, 35, 223-232.	8.2	162
54	A non-catalytic vapor growth regime for organohalide perovskite nanowires using anodic aluminum oxide templates. Nanoscale, 2017, 9, 5828-5834.	2.8	53
55	Structure of Organometal Halide Perovskite Films as Determined with Grazingâ€Incidence Xâ€Ray Scattering Methods. Advanced Energy Materials, 2017, 7, 1700131.	10.2	113
56	Highly Efficient and Stable Perovskite Solar Cells Based on Monolithically Grained CH ₃ NH ₃ PbI ₃ Film. Advanced Energy Materials, 2017, 7, 1602017.	10.2	291

ARTICLE IF CITATIONS Improved photovoltaic performance from high quality perovskite thin film grown with the assistance 2.0 16 57 of PC71BM. Chinese Journal of Polymer Science (English Edition), 2017, 35, 309-316. Controllable intermediates by molecular self-assembly for optimizing the fabrication of large-grain perovskite films via one-step spin-coating. Journal of Alloys and Compounds, 2017, 705, 205-210. 2.8 Annealing-free perovskite films based on solvent engineering for efficient solar cells. Journal of 59 2.7 63 Materials Chemistry C, 2017, 5, 842-847. Synergistic effect of caprolactam as lewis base and interface engineering for efficient and stable planar perovskite solar cells. Nano Energy, 2017, 42, 222-231. Cathode modification with solution-processed hybrid electron extraction layer for improved charge 61 1.4 6 collection of planar heterojunction perovskite solar cells. Organic Electronics, 2017, 51, 404-409. Investigation on the role of Lewis bases in the ripening process of perovskite films for highly efficient perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 20874-20881. 5.2 Molecular Engineering of the Lead Iodide Perovskite Surface: Case Study on Molecules with Pyridyl 63 1.5 20 Groups. Journal of Physical Chemistry C, 2017, 121, 24612-24617. Solution-processed indium oxide electron transporting layers for high-performance and photo-stable perovskite and organic solar cells. Nanoscale, 2017, 9, 16305-16312. 64 2.8 34 Enhanced performance of perovskite solar cells by strengthening a self-embedded solvent annealing 65 1.7 11 effect in perovskite precursor films. RSC Advances, 2017, 7, 49144-49150. Solvent engineering for high-quality perovskite solar cell with an efficiency approaching 20%. Journal of Power Sources, 2017, 365, 1-6. Fabrication of perovskite solar cells using sputter-processed 67 1.1 19 CH₃NH₃Pbl₃ films. Applied Physics Express, 2017, 10, 094101. Elucidating the Key Role of a Lewis Base Solvent in the Formation of Perovskite Films Fabricated from 68 the Lewis Adduct Ápproach. ACS Applied Materials & amp; Interfaces, 2017, 9, 32868-32875. Improved performance of mesoscopic perovskite solar cell using an accelerated crystalline formation 69 4.0 17 method. Journal of Power Sources, 2017, 365, 169-178. Tailoring nucleation and grain growth by changing the precursor phase ratio for efficient organic lead halide perovskite optoelectronic devices. Journal of Materials Chemistry C, 2017, 5, 10114-10121. 2.7 CH₃NH₃Br Additive for Enhanced Photovoltaic Performance and Air Stability of Planar Perovskite Solar Cells prepared by Twoâ€Step Dipping Method. Energy Technology, 2017, 5, 71 1.8 18 1887-1894. Improvement and Regeneration of Perovskite Solar Cells via Methylamine Gas Postâ€Treatment. 89 Advanced Functional Materials, 2017, 27, 1703060. Highly Efficient Perovskite Solar Cells Using Nonâ€Toxic Industry Compatible Solvent System. Solar Rrl, 73 3.162 2017, 1, 1700091. Understanding and Tailoring Grain Growth of Lead-Halide Perovskite for Solar Cell Application. ACS 74 Applied Materials & amp; Interfaces, 2017, 9, 33925-33933.

#	Article	IF	CITATIONS
75	Minute-Scale Degradation and Shift of Valence-Band Maxima of (CH ₃ NH ₃ SnI ₃ and HC(NH ₂) ₂ SnI ₃ Perovskites upon Air Exposure. Journal of Physical Chemistry C, 2017, 121, 19650-19656.	1.5	44
76	Solvent-Mediated Intragranular-Coarsening of CH ₃ NH ₃ Pbl ₃ Thin Films toward High-Performance Perovskite Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 31959-31967.	4.0	23
77	A facile deposition of large grain and phase pure α-FAPbI3 for perovskite solar cells via a flash crystallization. Materials Today Energy, 2017, 5, 293-298.	2.5	30
78	Updating the road map to metal-halide perovskites for photovoltaics. Journal of Materials Chemistry A, 2017, 5, 17135-17150.	5.2	33
79	Investigation of high performance TiO ₂ nanorod array perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 15970-15980.	5.2	64
80	Polymer assisted growth of high-quality perovskite films by Lewis acid-base adduct for efficient planar-heterojunction solar cells. Materials Research Bulletin, 2017, 95, 216-222.	2.7	9
81	Interfacial Modification of Perovskite Solar Cells Using an Ultrathin MAI Layer Leads to Enhanced Energy Level Alignment, Efficiencies, and Reproducibility. Journal of Physical Chemistry Letters, 2017, 8, 3947-3953.	2.1	101
82	Role of Methylammonium Orientation in Ion Diffusion and Current–Voltage Hysteresis in the CH ₃ NH ₃ Pbl ₃ Perovskite. ACS Energy Letters, 2017, 2, 1997-2004.	8.8	68
83	Amorphous polymer with Cî \in O to improve the performance of perovskite solar cells. Journal of Materials Chemistry C, 2017, 5, 9037-9043.	2.7	45
84	A Bifunctional Lewis Base Additive for Microscopic Homogeneity in Perovskite Solar Cells. CheM, 2017, 3, 290-302.	5.8	335
85	Perovskite-based photodetectors: materials and devices. Chemical Society Reviews, 2017, 46, 5204-5236.	18.7	709
86	Stable high efficiency two-dimensional perovskite solar cells via cesium doping. Energy and Environmental Science, 2017, 10, 2095-2102.	15.6	588
87	Efficient Inorganic Perovskite Light-Emitting Diodes with Polyethylene Glycol Passivated Ultrathin CsPbBr ₃ Films. Journal of Physical Chemistry Letters, 2017, 8, 4148-4154.	2.1	145
88	High Stability Bilayered Perovskites through Crystallization Driven Self-Assembly. ACS Applied Materials & Amp; Interfaces, 2017, 9, 28743-28749.	4.0	20
89	Synthetic Manipulation of Hybrid Perovskite Systems in Search of New and Enhanced Functionalities. ChemSusChem, 2017, 10, 3722-3739.	3.6	11
90	Spatial Inhomogeneity of Methylammonium Lead-Mixed Halide Perovskite Examined by Space- and Time-Resolved Microwave Conductivity. ACS Omega, 2017, 2, 8020-8026.	1.6	4
91	Humidity resistant fabrication of CH3NH3PbI3 perovskite solar cells and modules. Nano Energy, 2017, 39, 60-68.	8.2	197
92	Defect passivation in hybrid perovskite solar cells using quaternary ammonium halide anions andÂcations. Nature Energy, 2017, 2, .	19.8	1,694

#	Article	IF	CITATIONS
93	Capturing the Sun: A Review of the Challenges and Perspectives of Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1700264.	10.2	295
94	Substrate effects on photoluminescence and low temperature phase transition of methylammonium lead iodide hybrid perovskite thin films. Applied Physics Letters, 2017, 111, .	1.5	14
95	Directing nucleation and growth kinetics in solution-processed hybrid perovskite thin-films. Science China Materials, 2017, 60, 617-628.	3.5	64
96	Fluorinated Benzothienoisoindigo Copolymers for Organic Solar Cells: A Comparative Study on Polymer Orientation and Device Performance. Chemistry Letters, 2017, 46, 1133-1136.	0.7	11
97	Controlling nucleation, growth, and orientation of metal halide perovskite thin films with rationally selected additives. Journal of Materials Chemistry A, 2017, 5, 113-123.	5.2	115
98	A low viscosity, low boiling point, clean solvent system for the rapid crystallisation of highly specular perovskite films. Energy and Environmental Science, 2017, 10, 145-152.	15.6	319
99	Quantitative Doping of Chlorine in Formamidinium Lead Trihalide (FAPbl _{3â^'} <i>_x</i> Cl <i>_x</i>) for Planar Heterojunction Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1601297.	10.2	106
100	Highâ€Efficiency Perovskite Solar Cells Using Molecularly Engineered, Thiopheneâ€Rich, Holeâ€Transporting Materials: Influence of Alkyl Chain Length on Power Conversion Efficiency. Advanced Energy Materials, 2017, 7, 1601674.	10.2	125
101	Anti-Solvent Crystallization Strategies for Highly Efficient Perovskite Solar Cells. Crystals, 2017, 7, 291.	1.0	144
102	Perovskite Solar Cells Fabricated by Using an Environmental Friendly Aprotic Polar Additive of 1,3-Dimethyl-2-imidazolidinone. Nanoscale Research Letters, 2017, 12, 632.	3.1	19
103	Sequential Processing: Spontaneous Improvements in Film Quality and Interfacial Engineering for Efficient Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800027.	3.1	33
104	Post-treatment of perovskite film with phenylalkylammonium iodide for hysteresis-less perovskite solar cells. Solar Energy Materials and Solar Cells, 2018, 179, 57-65.	3.0	81
105	Suppressing defects through thiadiazole derivatives that modulate CH ₃ NH ₃ PbI ₃ crystal growth for highly stable perovskite solar cells under dark conditions. Journal of Materials Chemistry A, 2018, 6, 4971-4980.	5.2	95
106	Enhanced performance of perovskite solar cells <i>via</i> anti-solvent nonfullerene Lewis base IT-4F induced trap-passivation. Journal of Materials Chemistry A, 2018, 6, 5919-5925.	5.2	127
107	Exploring Inorganic Binary Alkaline Halide to Passivate Defects in Lowâ€Temperatureâ€Processed Planar‧tructure Hybrid Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1800138.	10.2	186
108	Environmentalâ€Friendly Urea Additive Induced Large Perovskite Grains for High Performance Inverted Solar Cells. Solar Rrl, 2018, 2, 1800054.	3.1	51
109	Phase Transition Control for High Performance Ruddlesden–Popper Perovskite Solar Cells. Advanced		
	Materials, 2018, 30, e1707166.	11,1	244

#	Article	IF	CITATIONS
111	Highâ€Performance Perovskite Solar Cells with Large Grain‣ize obtained by using the Lewis Acidâ€Base Adduct of Thiourea. Solar Rrl, 2018, 2, 1800034.	3.1	102
112	Totally room-temperature solution-processing method for fabricating flexible perovskite solar cells using an Nb ₂ O ₅ –TiO ₂ electron transport layer. RSC Advances, 2018, 8, 12823-12831.	1.7	25
113	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.	5.2	45
114	Lowâ€Dimensional Plasmonic Photodetectors: Recent Progress and Future Opportunities. Advanced Optical Materials, 2018, 6, 1701282.	3.6	75
115	Solvent-modulated reaction between mesoporous PbI2 film and CH3NH3I for enhancement of photovoltaic performances of perovskite solar cells. Electrochimica Acta, 2018, 266, 118-129.	2.6	17
116	All Sequential Dip-Coating Processed Perovskite Layers from an Aqueous Lead Precursor for High Efficiency Perovskite Solar Cells. Scientific Reports, 2018, 8, 2168.	1.6	111
117	Octadecylamineâ€Functionalized Singleâ€Walled Carbon Nanotubes for Facilitating the Formation of a Monolithic Perovskite Layer and Stable Solar Cells. Advanced Functional Materials, 2018, 28, 1705545.	7.8	73
118	Methodologies toward Highly Efficient Perovskite Solar Cells. Small, 2018, 14, e1704177.	5.2	315
119	In Situ Realâ€Time Study of the Dynamic Formation and Conversion Processes of Metal Halide Perovskite Films. Advanced Materials, 2018, 30, 1706401.	11.1	52
120	Improving the Stability of Metal Halide Perovskite Materials and Lightâ€Emitting Diodes. Advanced Materials, 2018, 30, e1704587.	11.1	368
121	Largeâ€Grain Tinâ€Rich Perovskite Films for Efficient Solar Cells via Metal Alloying Technique. Advanced Materials, 2018, 30, 1705998.	11.1	116
122	Solvent-Engineering Method to Deposit Compact Bismuth-Based Thin Films: Mechanism and Application to Photovoltaics. Chemistry of Materials, 2018, 30, 336-343.	3.2	87
123	Low temperature processed ternary oxide as an electron transport layer for efficient and stable perovskite solar cells. Electrochimica Acta, 2018, 261, 474-481.	2.6	23
124	Incorporating C ₆₀ as Nucleation Sites Optimizing PbI ₂ Films To Achieve Perovskite Solar Cells Showing Excellent Efficiency and Stability via Vapor-Assisted Deposition Method. ACS Applied Materials & Interfaces, 2018, 10, 2603-2611.	4.0	27
125	Realizing Efficient Leadâ€Free Formamidinium Tin Triiodide Perovskite Solar Cells via a Sequential Deposition Route. Advanced Materials, 2018, 30, 1703800.	11.1	198
126	Development of organic-inorganic double hole-transporting material for high performance perovskite solar cells. Journal of Power Sources, 2018, 378, 98-104.	4.0	24
127	Scanning Probe Microscopy Applied to Organic–Inorganic Halide Perovskite Materials and Solar Cells. Small Methods, 2018, 2, 1700295.	4.6	57
128	Electronâ€Transportâ€Layerâ€Assisted Crystallization of Perovskite Films for Highâ€Efficiency Planar Heterojunction Solar Cells. Advanced Functional Materials, 2018, 28, 1706317.	7.8	77

#	Article	IF	CITATIONS
129	Alkali Metal Doping for Improved CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells. Advanced Science, 2018, 5, 1700131.	5.6	227
130	Oxygen-induced defects at the lead halide perovskite/graphene oxide interfaces. Journal of Materials Chemistry A, 2018, 6, 1423-1442.	5.2	26
131	Fully metal oxide charge selective layers for n-i-p perovskite solar cells employing nickel oxide nanoparticles. Electrochimica Acta, 2018, 263, 338-345.	2.6	35
132	Post-healing of defects: an alternative way for passivation of carbon-based mesoscopic perovskite solar cells <i>via</i> hydrophobic ligand coordination. Journal of Materials Chemistry A, 2018, 6, 2449-2455.	5.2	66
133	Incorporating 4- <i>tert</i> Butylpyridine in an Antisolvent: A Facile Approach to Obtain Highly Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 3602-3608.	4.0	56
134	Argon Plasma Treatment to Tune Perovskite Surface Composition for High Efficiency Solar Cells and Fast Photodetectors. Advanced Materials, 2018, 30, 1705176.	11.1	81
135	Crystallization manipulation and morphology evolution for highly efficient perovskite solar cell fabrication <i>via</i> hydration water induced intermediate phase formation under heat assisted spin-coating. Journal of Materials Chemistry A, 2018, 6, 3012-3021.	5.2	40
136	A strategic review on processing routes towards highly efficient perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 2406-2431.	5.2	179
137	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. Journal of the American Chemical Society, 2018, 140, 6317-6324.	6.6	338
138	A Bi-functional additive for linking PI 2 and decreasing defects in organo-halide perovskites. Journal of Alloys and Compounds, 2018, 758, 171-176.	2.8	12
139	Hysteresis-free two-dimensional perovskite solar cells prepared by single-source physical vapour deposition. Solar Energy, 2018, 169, 179-186.	2.9	12
140	Global Control of CH ₃ NH ₃ PbI ₃ Formation with Multifunctional Ionic Liquid for Perovskite Hybrid Photovoltaics. Journal of Physical Chemistry C, 2018, 122, 10699-10705.	1.5	26
141	Semitransparent CH ₃ NH ₃ PbI ₃ Films Achieved by Solvent Engineering for Annealing―and Electron Transport Layerâ€Free Planar Perovskite Solar Cells. Solar Rrl, 2018, 2, 1700222.	3.1	22
142	Solvent engineering for efficient inverted perovskite solar cells based on inorganic CsPbI2Br light absorber. Materials Today Energy, 2018, 8, 125-133.	2.5	121
143	Zinc ion as effective film morphology controller in perovskite solar cells. Sustainable Energy and Fuels, 2018, 2, 1093-1100.	2.5	55
144	Scalable fabrication of perovskite solar cells. Nature Reviews Materials, 2018, 3, .	23.3	764
145	Importance of ligands on TiO 2 nanocrystals for perovskite solar cells. Chinese Physics B, 2018, 27, 018401.	0.7	1
146	Smart Passivation Materials with a Liquid Metal Microcapsule as Selfâ€Healing Conductors for Sustainable and Flexible Perovskite Solar Cells. Advanced Functional Materials, 2018, 28, 1800110.	7.8	80

#	Article	IF	CITATIONS
147	First-principles investigation of the Lewis acid–base adduct formation at the methylammonium lead iodide surface. Physical Chemistry Chemical Physics, 2018, 20, 11183-11195.	1.3	9
148	Mesoscopic Oxide Double Layer as Electron Specific Contact for Highly Efficient and UV Stable Perovskite Photovoltaics. Nano Letters, 2018, 18, 2428-2434.	4.5	116
149	BCP influenced crystallization of MAPbI3-xClx for enhanced power conversion efficiency and stability in perovskite solar cell. Organic Electronics, 2018, 52, 130-137.	1.4	10
150	Vapor assisted deposition of alkaline doped perovskites: Pure phase formation of CsxMA1â^'xPbI3. Electrochimica Acta, 2018, 259, 485-491.	2.6	16
151	Inorganic–organic halide perovskites for new photovoltaic technology. National Science Review, 2018, 5, 559-576.	4.6	49
152	Application of mixed-organic-cation for high performance hole-conductor-free perovskite solar cells. Journal of Colloid and Interface Science, 2018, 510, 118-126.	5.0	11
153	Influence of Solvent Coordination on Hybrid Organic–Inorganic Perovskite Formation. ACS Energy Letters, 2018, 3, 92-97.	8.8	273
154	Immobilization of Molecular Catalysts for Enhanced Redox Catalysis. ChemCatChem, 2018, 10, 1686-1702.	1.8	35
155	Heterojunction Engineering for High Efficiency Cesium Formamidinium Double ation Lead Halide Perovskite Solar Cells. ChemSusChem, 2018, 11, 837-842.	3.6	61
156	Electric-field assisted perovskite crystallization for high-performance solar cells. Journal of Materials Chemistry A, 2018, 6, 1161-1170.	5.2	37
157	Interactions between molecules and perovskites in halide perovskite solar cells. Solar Energy Materials and Solar Cells, 2018, 175, 1-19.	3.0	66
158	Highly oriented two-dimensional formamidinium lead iodide perovskites with a small bandgap of 1.51 eV. Materials Chemistry Frontiers, 2018, 2, 121-128.	3.2	95
159	Spectroscopic and first principles investigation on 4-[(4-pyridinylmethylene)amino]-benzoic acid bearing pyridyl and carboxyl anchoring groups. Journal of Molecular Structure, 2018, 1155, 389-393.	1.8	5
160	Sequential deposition method fabricating carbonbased fully-inorganic perovskite solar cells. Science China Materials, 2018, 61, 73-79.	3.5	31
161	The role of grain boundaries in perovskite solar cells. Materials Today Energy, 2018, 7, 149-160.	2.5	209
162	Improved photovoltaic properties of nominal composition CH ₃ NH ₃ Pb ₀₉₉ Zn ₀₀₁ I ₃ carbon-based perovskite solar cells. Optics Express, 2018, 26, A984.	1.7	17
163	Photo-induced dual passivation <i>via</i> Usanovich acid–base on surface defects of methylammonium lead triiodide perovskite. Physical Chemistry Chemical Physics, 2018, 20, 28068-28074.	1.3	5
164	Highly efficient planar perovskite solar cells achieved by simultaneous defect engineering and formation kinetic control. Journal of Materials Chemistry A, 2018, 6, 23865-23874.	5.2	37

#	Article	IF	CITATIONS
165	Suppressing defects through the synergistic effect of a Lewis base and a Lewis acid for highly efficient and stable perovskite solar cells. Energy and Environmental Science, 2018, 11, 3480-3490.	15.6	274
166	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.	5.2	24
167	Tailored Phase Conversion under Conjugated Polymer Enables Thermally Stable Perovskite Solar Cells with Efficiency Exceeding 21%. Journal of the American Chemical Society, 2018, 140, 17255-17262.	6.6	235
168	Thiazole-Induced Surface Passivation and Recrystallization of CH ₃ NH ₃ PbI ₃ Films for Perovskite Solar Cells with Ultrahigh Fill Factors. ACS Applied Materials & Interfaces, 2018, 10, 42436-42443.	4.0	49
169	Novel Cryo-controlled Nucleation Technique for High-efficiency Perovskite Solar Cells. , 2018, , .		0
170	Polymer-Assisted In Situ Growth of All-Inorganic Perovskite Nanocrystal Film for Efficient and Stable Pure-Red Light-Emitting Devices. ACS Applied Materials & Interfaces, 2018, 10, 42564-42572.	4.0	86
172	Materials toward the Upscaling of Perovskite Solar Cells: Progress, Challenges, and Strategies. Advanced Functional Materials, 2018, 28, 1803753.	7.8	145
173	Wet-Chemical Synthesis of Surface-Passivated Halide Perovskite Microwires for Improved Optoelectronic Performance and Stability. ACS Applied Materials & Interfaces, 2018, 10, 43850-43856.	4.0	20
174	Recent Advances in Synthesis and Properties of Hybrid Halide Perovskites for Photovoltaics. Nano-Micro Letters, 2018, 10, 68.	14.4	50
175	Dynamic Disorder Dominates Delocalization, Transport, and Recombination in Halide Perovskites. CheM, 2018, 4, 2826-2843.	5.8	104
176	A New Type of Three-Dimensional Hybrid Polymeric Haloplumbate Based on Rare High-Nuclear Heterometallic Clusters. Inorganic Chemistry, 2018, 57, 12860-12868.	1.9	31
177	Design of an Inorganic Mesoporous Holeâ€Transporting Layer for Highly Efficient and Stable Inverted Perovskite Solar Cells. Advanced Materials, 2018, 30, e1805660.	11.1	179
178	High-Performance Fused Ring Electron Acceptor–Perovskite Hybrid. Journal of the American Chemical Society, 2018, 140, 14938-14944.	6.6	71
179	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
180	New Tin(II) Fluoride Derivative as a Precursor for Enhancing the Efficiency of Inverted Planar Tin/Lead Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 27284-27291.	1.5	26
182	One-pot synthesis of D–π–D–π–D type hole-transporting materials for perovskite solar cells by sequential C–H (hetero)arylations. Chemical Communications, 2018, 54, 11495-11498.	2.2	15
183	A Cryogenic Process for Antisolventâ€Free Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2018, 30, e1804402.	11.1	47
184	Interface Engineering in nâ€iâ€p Metal Halide Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800177.	3.1	53

#	Article	IF	CITATIONS
185	Perovskites for Light Emission. Advanced Materials, 2018, 30, e1801996.	11.1	417
186	A facile route to grain morphology controllable perovskite thin films towards highly efficient perovskite solar cells. Nano Energy, 2018, 53, 405-414.	8.2	60
187	A Two‣tage Annealing Strategy for Crystallization Control of CH ₃ NH ₃ PbI ₃ Films toward Highly Reproducible Perovskite Solar Cells. Small, 2018, 14, e1800181.	5.2	23
188	Surface Engineering of TiO ₂ ETL for Highly Efficient and Hysteresisâ€Less Planar Perovskite Solar Cell (21.4%) with Enhanced Openâ€Circuit Voltage and Stability. Advanced Energy Materials, 2018, 8, 1800794.	10.2	255
189	Fabrication of [CH(NH ₂) ₂] _{0.8} Cs _{0.2} PbI ₃ Perovskite Thin Films for n-i-p Planar-structure Solar Cells by a One-step Method Using 1-Cyclohexyl-2-pyrrolidone as an Additive. Chemistry Letters, 2018, 47, 905-908.	0.7	7
190	Acetate Anion Assisted Crystal Orientation Reconstruction in Organic–Inorganic Lead Halide Perovskite. ACS Applied Energy Materials, 2018, 1, 2730-2739.	2.5	23
191	<i>A</i> -Site Cation in Inorganic <i>A</i> ₃ Sb ₂ I ₉ Perovskite Influences Structural Dimensionality, Exciton Binding Energy, and Solar Cell Performance. Chemistry of Materials, 2018, 30, 3734-3742.	3.2	134
192	Selection of an anti-solvent for efficient and stable cesium-containing triple cation planar perovskite solar cells. Nanoscale, 2018, 10, 12141-12148.	2.8	75
193	Excellent Stability of Perovskite Solar Cells by Passivation Engineering. Solar Rrl, 2018, 2, 1800088.	3.1	61
194	Halogen-free guanidinium-based perovskite solar cell with enhanced stability. RSC Advances, 2018, 8, 17365-17372.	1.7	15
195	Semiconducting Metal Oxides for High Performance Perovskite Solar Cells. , 2018, , 241-265.		4
196	Supersaturation controlled growth of MAFAPbI3 perovskite film for high efficiency solar cells. Science China Chemistry, 2018, 61, 1278-1284.	4.2	49
197	Understanding interactions between halide perovskite surfaces and atmospheric/VOC gas molecules: an ab initio investigation. Journal Physics D: Applied Physics, 2018, 51, 315302.	1.3	23
198	2D perovskite stabilized phase-pure formamidinium perovskite solar cells. Nature Communications, 2018, 9, 3021.	5.8	575
199	Large-grain CH3NH3PbI3 film by incorporation of urea in one-step solution process. Superlattices and Microstructures, 2018, 123, 218-225.	1.4	2
200	Pyridine solvent engineering for high quality anion-cation-mixed hybrid and high performance of perovskite solar cells. Journal of Power Sources, 2018, 399, 144-150.	4.0	57
201	An efficient solvent additive for the preparation of anion-cation-mixed hybrid and the high performance perovskite solar cells. Journal of Colloid and Interface Science, 2018, 531, 602-608.	5.0	15
202	1D Hexagonal HC(NH ₂) ₂ Pbl ₃ for Multilevel Resistive Switching Nonvolatile Memory. Advanced Electronic Materials, 2018, 4, 1800190.	2.6	70

ARTICLE IF CITATIONS Rear-Surface Passivation by Melaminium Iodide Additive for Stable and Hysteresis-less Perovskite Solar 203 4.0 72 Cells. ACS Applied Materials & amp; Interfaces, 2018, 10, 25372-25383. A theoretical study of perovskites related to CH₃NH₃PbX₃(X = F,) Tj ETQq1, $\frac{1}{1}$, 0.78431,4 rgBT 204 Perovskite Solar Cells: Toward Industrial-Scale Methods. Journal of Physical Chemistry Letters, 2018, 205 2.1 66 9, 4326-4335. First representatives of (210)-oriented perovskite variantsa. Synthesis, crystal structures and properties of the new 2D hybrid perovskites <i>A</i>[HC(NH₂)₂]Pbl₄; <i>A</i>=[C(NH₂)₃], [HSC(NH₂)₂]. Zeitschrift Fur 206 Millimeter-sized PbI₂ flakes and Pb₅S₂I₆ nanowires 207 2.7 13 for flexible photodetectors. Journal of Materials Chemistry C, 2018, 6, 7188-7194. Phase Transition Control for High-Performance Blade-Coated Perovskite Solar Cells. Joule, 2018, 2, 1313-1330. 208 11.7 180 CH₃NH₃PbI₃ and HC(NH₂)₂PbI₃ Powders Synthesized from Lowâ€Grade 209 3.6 61 Pbl₂: Single Precursor for Highâ€Efficiency Perovskite Solar Cells. ChemSusChem, 2018, 11, 1813-1823. Efficient Perovskite Solar Cells Fabricated Through CsClâ€Enhanced PbI₂ Precursor via 210 11.1 109 Sequential Deposition. Advanced Materials, 2018, 30, e1803095. Anchoring Fullerene onto Perovskite Film via Grafting Pyridine toward Enhanced Electron Transport 211 4.0 73 in High-Efficiency Solar Cells. ACS Applied Materials & amp; Interfaces, 2018, 10, 32471-32482. Defects engineering for high-performance perovskite solar cells. Npj Flexible Electronics, 2018, 2, . 5.1 334 Understanding the mechanism of PEDOT: PSS modification via solvent on the morphology of 213 2.1 20 perovskite films for efficient solar cells. Synthetic Metals, 2018, 243, 17-24. Grainâ€Boundary "Patches―by In Situ Conversion to Enhance Perovskite Solar Cells Stability. Advanced 11.1 224 Materials, 2018, 30, e1800544. Aqueous Synthesis of Methylammonium Lead Halide Perovskite Nanocrystals. Angewandte Chemie, 215 1.6 9 2018, 130, 9798-9802. Aqueous Synthesis of Methylammonium Lead Halide Perovskite Nanocrystals. Angewandte Chemie -International Edition, 2018, 57, 9650-9654. 7.2 Two new oxyiodoplumbates: the unique 3-D hybrid oxyiodoplumbate based on neutral 2-D 217 7 1.6 [Pb2I4]nlayers. Dalton Transactions, 2018, 47, 8442-8447. Formamidiniumâ€Based Lead Halide Perovskites: Structure, Properties, and Fabrication Methodologies. 48 Small Methods, 2018, 2, 1700387. Nâ€Type Surface Doping of MAPbI₃ via Charge Transfer from Small Molecules. Advanced 219 2.6 33 Electronic Materials, 2018, 4, 1800087. Understanding effects of precursor solution aging in triple cation lead perovskite. RSC Advances, 220 2018, 8, 21551-21557.

#	Article	IF	CITATIONS
221	Introduction of Graphene Nanofibers into the Perovskite Layer of Perovskite Solar Cells. ChemSusChem, 2018, 11, 2921-2929.	3.6	17
222	Colloidal Nanocrystals as a Platform for Rapid Screening of Charge Trap Passivating Molecules for Metal Halide Perovskite Thin Films. Chemistry of Materials, 2018, 30, 4515-4526.	3.2	19
223	The 2019 materials by design roadmap. Journal Physics D: Applied Physics, 2019, 52, 013001.	1.3	236
224	Cold Antisolvent Bathing Derived Highly Efficient Largeâ€Area Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901719.	10.2	67
225	Defect Activity in Lead Halide Perovskites. Advanced Materials, 2019, 31, e1901183.	11.1	191
226	Efficient Semitransparent CsPbl ₃ Quantum Dots Photovoltaics Using a Graphene Electrode. Small Methods, 2019, 3, 1900449.	4.6	49
227	All-inorganic quantum dot assisted enhanced charge extraction across the interfaces of bulk organo-halide perovskites for efficient and stable pin-hole free perovskite solar cells. Chemical Science, 2019, 10, 9530-9541.	3.7	43
228	Variation of Interfacial Interactions in PC ₆₁ BM-like Electron-Transporting Compounds for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 34408-34415.	4.0	29
229	Review of Stability Enhancement for Formamidiniumâ€Based Perovskites. Solar Rrl, 2019, 3, 1900215.	3.1	60
230	Searching for stability at lower dimensions: current trends and future prospects of layered perovskite solar cells. Energy and Environmental Science, 2019, 12, 2860-2889.	15.6	132
231	Synergistic interface and compositional engineering of inverted perovskite solar cells enables highly efficient and stable photovoltaic devices. Chemical Communications, 2019, 55, 9196-9199.	2.2	37
232	Recent progress in fundamental understanding of halide perovskite semiconductors. Progress in Materials Science, 2019, 106, 100580.	16.0	95
233	A High Mobility Conjugated Polymer Enables Air and Thermally Stable CsPbl ₂ Br Perovskite Solar Cells with an Efficiency Exceeding 15%. Advanced Materials Technologies, 2019, 4, 1900311.	3.0	59
234	Sulfonyl-based non-fullerene electron acceptor-assisted grain boundary passivation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 19881-19888.	5.2	28
235	Unravelling fullerene–perovskite interactions introduces advanced blend films for performance-improved solar cells. Sustainable Energy and Fuels, 2019, 3, 2779-2787.	2.5	16
236	Solvent Engineering for Intermediates Phase, All-Ambient-Air-Processed in Organic–Inorganic Hybrid Perovskite Solar Cells. Nanomaterials, 2019, 9, 915.	1.9	9
237	Synergistic effects of multiple functional ionic liquid-treated PEDOT:PSS and less-ion-defects S-acetylthiocholine chloride-passivated perovskite surface enabling stable and hysteresis-free inverted perovskite solar cells with conversion efficiency over 20%. Nano Energy, 2019, 63, 103866.	8.2	60
238	Waterâ€Resistant and Flexible Perovskite Solar Cells via a Glued Interfacial Layer. Advanced Functional Materials, 2019, 29, 1902629.	7.8	89

#	Article	IF	CITATIONS
239	Crystallization and grain growth regulation through Lewis acid-base adduct formation in hot cast perovskite-based solar cells. Organic Electronics, 2019, 74, 172-178.	1.4	32
240	Bimolecular Additives Improve Wide-Band-Gap Perovskites for Efficient Tandem Solar Cells with CICS. Joule, 2019, 3, 1734-1745.	11.7	227
241	Understanding Molecular Adsorption on CuSCN Surfaces toward Perovskite Solar Cell Applications. Journal of Physical Chemistry C, 2019, 123, 26785-26793.	1.5	13
242	Engineering Halide Perovskite Crystals through Precursor Chemistry. Small, 2019, 15, e1903613.	5.2	82
243	Interfacial Passivation for Perovskite Solar Cells: The Effects of the Functional Group in Phenethylammonium Iodide. ACS Energy Letters, 2019, 4, 2913-2921.	8.8	176
244	Advanced Modification of Perovskite Surfaces for Defect Passivation and Efficient Charge Extraction in Air-Stable CsPbBr ₃ Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 19286-19294.	3.2	51
245	Interface Engineering in Tin Perovskite Solar Cells. Advanced Materials Interfaces, 2019, 6, 1901322.	1.9	32
246	A Novel Anion Doping for Stable CsPbI ₂ Br Perovskite Solar Cells with an Efficiency of 15.56% and an Open Circuit Voltage of 1.30 V. Advanced Energy Materials, 2019, 9, 1902279.	10.2	166
247	Carbon Dots in a Matrix: Energyâ€Transferâ€Enhanced Roomâ€Temperature Red Phosphorescence. Angewandte Chemie - International Edition, 2019, 58, 18443-18448.	7.2	125
248	Highly Sensitive, Fast Response Perovskite Photodetectors Demonstrated in Weak Light Detection Circuit and Visible Light Communication System. Small, 2019, 15, e1903599.	5.2	101
249	Targeted Therapy for Interfacial Engineering Toward Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2019, 31, e1903691.	11.1	125
250	Improved Moisture Stability of Perovskite Solar Cells Using N719 Dye Molecules. Solar Rrl, 2019, 3, 1900345.	3.1	30
251	Large area, high efficiency and stable perovskite solar cells enabled by fine control of intermediate phase. Solar Energy Materials and Solar Cells, 2019, 201, 110113.	3.0	9
252	Modulating Crystallization in Semitransparent Perovskite Films Using Submicrometer Spongelike Polymer Colloid Particles to Improve Solar Cell Performance. ACS Applied Energy Materials, 2019, 2, 6624-6633.	2.5	14
253	Monocrystalline perovskite wafers/thin films for photovoltaic and transistor applications. Journal of Materials Chemistry A, 2019, 7, 24661-24690.	5.2	27
254	Morphology control of perovskite in green antisolvent system for MAPbI3-based solar cells with over 20% efficiency. Solar Energy Materials and Solar Cells, 2019, 203, 110197.	3.0	25
255	Pyridine-functionalized fullerene additive enabling coordination interactions with CH ₃ NH ₃ PbI ₃ perovskite towards highly efficient bulk heterojunction solar cells. Journal of Materials Chemistry A, 2019, 7, 2754-2763.	5.2	83
256	Amine additive reactions induced by the soft Lewis acidity of Pb ²⁺ in halide perovskites. Part I: evidence for Pb–alkylamide formation. Journal of Materials Chemistry C, 2019, 7, 5251-5259.	2.7	56

#	Article	IF	CITATIONS
257	Structural and optical properties of 2D Ruddlesdenâ€Popper perovskite (BA) 2 (FA) nâ~'1 Pb n I 3n+1 compounds for photovoltaic applications. Journal of the American Ceramic Society, 2019, 102, 4152-4160.	1.9	8
258	A Dualâ€Retarded Reaction Processed Mixedâ€Cation Perovskite Layer for Highâ€Efficiency Solar Cells. Advanced Functional Materials, 2019, 29, 1807420.	7.8	28
259	Perovskite-polymer composite cross-linker approach for highly-stable and efficient perovskite solar cells. Nature Communications, 2019, 10, 520.	5.8	405
260	A Review of the Role of Solvents in Formation of High-Quality Solution-Processed Perovskite Films. ACS Applied Materials & Interfaces, 2019, 11, 7639-7654.	4.0	113
261	A Cu ₃ PS ₄ nanoparticle hole selective layer for efficient inverted perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 4604-4610.	5.2	29
262	Morphological and compositional progress in halide perovskite solar cells. Chemical Communications, 2019, 55, 1192-1200.	2.2	136
263	Effects of substrate temperature on the crystallization process and properties of mixed-ion perovskite layers. Journal of Materials Chemistry A, 2019, 7, 2804-2811.	5.2	24
264	Fabrication of efficient formamidinium perovskite solar cells under ambient air via intermediate-modulated crystallization. Solar Energy, 2019, 187, 147-155.	2.9	34
265	Improving the quality of perovskite based on lead acetate for efficient solar cell. Synthetic Metals, 2019, 254, 85-91.	2.1	5
266	Limitations of a polymer-based hole transporting layer for application in planar inverted perovskite solar cells. Nanoscale Advances, 2019, 1, 3107-3118.	2.2	35
267	Rationalizing the Molecular Design of Hole‣elective Contacts to Improve Charge Extraction in Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1900990.	10.2	56
268	Enhanced power conversion efficiency and preferential orientation of the MAPbI3 perovskite solar cells by introduction of urea as additive. Organic Electronics, 2019, 73, 130-136.	1.4	13
269	Organic/Inorganic Hybrid p-Type Semiconductor Doping Affords Hole Transporting Layer Free Thin-Film Perovskite Solar Cells with High Stability. ACS Applied Materials & Interfaces, 2019, 11, 22603-22611.	4.0	40
270	Relaying delivery of excited state electrons for fully printable perovskite solar cells via ultra-thin gradient PCBM/perovskite heterojunction. Solar Energy, 2019, 187, 352-357.	2.9	8
271	Efficacy beyond 17% via engineering the length and quality of grafts in organic halide perovskite/CNT photovoltaics. New Journal of Chemistry, 2019, 43, 10567-10574.	1.4	14
272	Improving the Stability and Monodispersity of Layered Cesium Lead Iodide Perovskite Thin Films by Tuning Crystallization Dynamics. Chemistry of Materials, 2019, 31, 4990-4998.	3.2	19
273	Post-treatment of Perovskite Films toward Efficient Solar Cells via Mixed Solvent Annealing. ACS Applied Energy Materials, 2019, 2, 4954-4963.	2.5	24
274	Boosting the Efficiency of SnO ₂ â€Triple Cation Perovskite System Beyond 20% Using Nonhalogenated Antisolvent. Advanced Functional Materials, 2019, 29, 1903213.	7.8	66

ARTICLE IF CITATIONS # Efficient Quantum Dot Light-Emitting Diodes Based on Trioctylphosphine Oxide-Passivated 275 1.6 26 Organometallic Halide Perovskites. ACS Omega, 2019, 4, 9150-9159. Origin of Performance Enhancement in TiO₂ arbon Nanotube Composite Perovskite Solar 276 4.6 Cells. Small Methods, 2019, 3, 1900164. Highly efficient and stable inverted perovskite solar cells using down-shifting quantum dots as a 277 light management layer and moisture-assisted film growth. Journal of Materials Chemistry A, 2019, 7, 5.2 67 14753-14760. Patterned Wettability Surface for Competitionâ€Driving Largeâ€Grained Perovskite Solar Cells. Advanced 278 44 Energy Materials, 2019, 9, 1900838. Pbâ€Reduced CsPb_{0.9}Zn_{0.1}1₂Br Thin Films for Efficient Perovskite 279 10.2 150 Solar Cells. Advanced Energy Materials, 2019, 9, 1900896. Controlling the Morphology of Organic–Inorganic Hybrid Perovskites through Dual 280 Additive-Mediated Crystallization for Solar Cell Applications. ACS Applied Materials & amp; Interfaces, 4.0 2019, 11, 17452-17458. Semiconducting carbon nanotubes as crystal growth templates and grain bridges in perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 12987-12992. 281 5.2 57 Reaction Temperature and Partial Pressure Induced Etching of Methylammonium Lead Iodide Perovskite 1.6 by Trimethylaluminum. Langmuir, 2019, 35, 6522-6531. 283 Perovskite Solar Cells Processed by Solution Nanotechnology., 2019, , 119-174. 0 Boosting Efficiency in Polycrystalline Metal Halide Perovskite Light-Emitting Diodes. ACS Energy 284 8.8 Letters, 2019, 4, 1134-1149 Caffeine Improves the Performance and Thermal Stability of Perovskite Solar Cells. Joule, 2019, 3, 285 11.7 448 1464-1477. Multifunctional keplerate-type polyoxometalate-organic polymer composite films for interface 2.0 engineering in perovskite photodetectors. Dyes and Pigments, 2019, 166, 174-180. Highly crystalline large-grained perovskite films using two additives without an antisolvent for high-efficiency solar cells. Thin Solid Films, 2019, 679, 27-34. 287 0.8 7 Low-Temperature Annealed Perovskite Films: A Trade-Off between Fast and Retarded Crystallization via 4.0 23 Solvent Engineering. ACS Applied Materials & amp; Interfaces, 2019, 11, 16704-16712. Enhanced efficacy of defect passivation and charge extraction for efficient perovskite photovoltaics 289 5.271 with a small open circuit voltage loss. Journal of Materials Chemistry A, 2019, 7, 9025-9033. Bidentate chelating ligands as effective passivating materials for perovskite light-emitting diodes. Physical Chemistry Chemical Physics, 2019, 21, 7867-7873. 291 Verification and mitigation of ion migration in perovskite solar cells. APL Materials, 2019, 7, . 2.2179 Thermally stable methylammonium-free inverted perovskite solar cells with Zn2+ doped CuGaO2 as 8.2 efficient mesoporous hole-transporting layer. Nano Energy, 2019, 61, 148-157.

#	Article	IF	CITATIONS
293	Room-Temperature Molten Salt for Facile Fabrication of Efficient and Stable Perovskite Solar Cells in Ambient Air. CheM, 2019, 5, 995-1006.	5.8	245
294	Flash Surface Treatment of CH ₃ NH ₃ PbI ₃ Films Using 248 nm KrF Excimer Laser Enhances the Performance of Perovskite Solar Cells. Solar RrI, 2019, 3, 1900020.	3.1	5
295	Metal halide perovskite photodetectors: Material features and device engineering. Chinese Physics B, 2019, 28, 018502.	0.7	18
297	Ethanol stabilized precursors for highly reproducible printable mesoscopic perovskite solar cells. Journal of Power Sources, 2019, 424, 261-267.	4.0	21
298	PbI ₂ Initiated Cross-Linking and Integration of a Polymer Matrix with Perovskite Films: 1000 h Operational Devices under Ambient Humidity and Atmosphere and with Direct Solar Illumination. ACS Applied Energy Materials, 2019, 2, 2214-2222.	2.5	28
299	Interface and Defect Engineering for Metal Halide Perovskite Optoelectronic Devices. Advanced Materials, 2019, 31, e1803515.	11.1	315
300	On the Current–Voltage Hysteresis in Perovskite Solar Cells: Dependence on Perovskite Composition and Methods to Remove Hysteresis. Advanced Materials, 2019, 31, e1805214.	11.1	351
301	Perovskite Photovoltaics: The Significant Role of Ligands in Film Formation, Passivation, and Stability. Advanced Materials, 2019, 31, e1805702.	11.1	192
302	Causes and Solutions of Recombination in Perovskite Solar Cells. Advanced Materials, 2019, 31, e1803019.	11.1	422
303	Influence of Alkoxy Chain Length on the Properties of Twoâ€Dimensionally Expanded Azuleneâ€Coreâ€Based Holeâ€Transporting Materials for Efficient Perovskite Solar Cells. Chemistry - A European Journal, 2019, 25, 6741-6752.	1.7	21
304	Amino acid salt-driven planar hybrid perovskite solar cells with enhanced humidity stability. Nano Energy, 2019, 59, 481-491.	8.2	82
305	Improving Performance of Perovskite Solar Cells Using [7]Helicenes with Stable Partial Biradical Characters as the Holeâ€Extraction Layers. Advanced Functional Materials, 2019, 29, 1808625.	7.8	44
306	Perovskite Cluster-Containing Solution for Scalable D-Bar Coating toward High-Throughput Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 1189-1195.	8.8	134
307	Acid-Catalyzed Reactions Activate DMSO as a Reagent in Perovskite Precursor Inks. Chemistry of Materials, 2019, 31, 2114-2120.	3.2	33
308	Passivation of Grain Boundary by Squaraine Zwitterions for Defect Passivation and Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 10012-10020.	4.0	70
309	Halogen bonding reduces intrinsic traps and enhances charge mobilities in halide perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 6840-6848.	5.2	41
310	Bi-functional additive engineering for high-performance perovskite solar cells with reduced trap density. Journal of Materials Chemistry A, 2019, 7, 6450-6458.	5.2	143
311	Perovskite solar cells-A futuristic approach. , 2019, , .		0

#	Article	IF	CITATIONS
312	Hole transport layer free stable perovskite solar cell with low temperature processed carbon electrodes. , 2019, , .		4
313	Influence of Film Quality on Power Conversion Efficiency in Perovskite Solar Cells. Coatings, 2019, 9, 622.	1.2	8
314	Light Intensity-dependent Variation in Defect Contributions to Charge Transport and Recombination in a Planar MAPb13 Perovskite Solar Cell. Scientific Reports, 2019, 9, 19846.	1.6	45
315	Constructive molecular configurations for surface-defect passivation of perovskite photovoltaics. Science, 2019, 366, 1509-1513.	6.0	846
316	Emerging alkali metal ion (Li ⁺ , Na ⁺ , K ⁺ and Rb ⁺) doped perovskite films for efficient solar cells: recent advances and prospects. Journal of Materials Chemistry A, 2019, 7, 24150-24163.	5.2	116
317	Surface Plasmon Assisted Electron–Hole Migration for High Photocurrent Density Generation in a Perovskite Solar Cell. ACS Applied Energy Materials, 2019, 2, 8707-8714.	2.5	11
318	Improved Moisture Stability of Perovskite Solar Cells Using N719 Dye Molecules. Solar Rrl, 2019, 3, 1970115.	3.1	1
319	Influence of drying temperature on morphology of MAPbI3 thin films and the performance of solar cells. Journal of Alloys and Compounds, 2019, 773, 511-518.	2.8	24
320	Reduced Defects of MAPbI ₃ Thin Films Treated by FAI for Highâ€Performance Planar Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1805810.	7.8	73
321	Enhancing Efficiency and Stability of Photovoltaic Cells by Using Perovskite/Zrâ€MOF Heterojunction Including Bilayer and Hybrid Structures. Advanced Science, 2019, 6, 1801715.	5.6	159
322	Tuning Hole Transport Layer Using Urea for Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1806740.	7.8	101
323	Control of Crystal Growth toward Scalable Fabrication of Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1807047.	7.8	111
324	Fabrication of Perovskite Films with Long Carrier Lifetime for Efficient Perovskite Solar Cells from Low-Toxicity 1-Ethyl-2-Pyrrolidone. ACS Applied Energy Materials, 2019, 2, 320-327.	2.5	4
325	Chemical Formation and Multiple Applications of Organic–Inorganic Hybrid Perovskite Materials. Journal of the American Chemical Society, 2019, 141, 1406-1414.	6.6	61
326	Investigation on Crystallization of CH ₃ NH ₃ PbI ₃ Perovskite and Its Intermediate Phase from Polar Aprotic Solvents. Crystal Growth and Design, 2019, 19, 959-965.	1.4	22
327	The roles of acetylacetone additives in enhancing perovskite solar cell performance. Materials Research Express, 2019, 6, 025512.	0.8	4
328	Dimethyl Sulfoxide Solvent Engineering for High Quality Cationâ€Anionâ€Mixed Hybrid and High Efficiency Perovskite Solar Cells. Energy Technology, 2019, 7, 346-351.	1.8	3
329	Synergistic Crystal and Interface Engineering for Efficient and Stable Perovskite Photovoltaics. Advanced Energy Materials, 2019, 9, 1802646.	10.2	189

#	Article	IF	CITATIONS
330	Enhanced Open-Circuit Voltage of Cs-Containing FAPbI ₃ Perovskite Solar Cells by the Formation of a Seed Layer through a Vapor-Assisted Solution Process. ACS Sustainable Chemistry and Engineering, 2019, 7, 3404-3413.	3.2	14
331	High-performance perovskite solar cells with large grain-size obtained by the synergy of urea and dimethyl sulfoxide. Applied Surface Science, 2019, 467-468, 708-714.	3.1	47
332	Multilayer evaporation of MAFAPbI _{3â^'<i>x</i>} Cl _{<i>x</i>} for the fabrication of efficient and large-scale device perovskite solar cells. Journal Physics D: Applied Physics, 2019, 52, 034005.	1.3	19
333	Synthetic Approaches for Halide Perovskite Thin Films. Chemical Reviews, 2019, 119, 3193-3295.	23.0	454
334	Inorganic CsPbI ₂ Br Perovskite Solar Cells: The Progress and Perspective. Solar Rrl, 2019, 3, 1800239.	3.1	217
335	Improvement in inverted polymer solar cells via 1-benzoyl-2-thiourea as surface modifier on sol-gel ZnO. Journal of the Taiwan Institute of Chemical Engineers, 2019, 96, 131-136.	2.7	7
336	3,4-Dihydroxybenzhydrazide as an additive to improve the morphology of perovskite films for efficient and stable perovskite solar cells. Organic Electronics, 2019, 66, 47-52.	1.4	9
337	Vapor-Assisted Ex-Situ Doping of Carbon Nanotube toward Efficient and Stable Perovskite Solar Cells. Nano Letters, 2019, 19, 2223-2230.	4.5	72
338	Antioxidant Grain Passivation for Air‣table Tinâ€Based Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 816-820.	1.6	22
339	Antioxidant Grain Passivation for Airâ€Stable Tinâ€Based Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 806-810.	7.2	369
340	Elucidating the dynamics of solvent engineering for perovskite solar cells. Science China Materials, 2019, 62, 161-172.	3.5	57
341	Dissolution and recrystallization of perovskite induced by N-methyl-2-pyrrolidone in a closed steam annealing method. Journal of Energy Chemistry, 2019, 30, 78-83.	7.1	16
342	Tin Halide Perovskite (ASnX ₃) Solar Cells: A Comprehensive Guide toward the Highest Power Conversion Efficiency. Advanced Energy Materials, 2020, 10, 1902467.	10.2	114
343	A Review on Additives for Halide Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1902492.	10.2	240
344	Improve the quality of HC(NH2)2PblxBr3â^'x through iodine vacancy filling for stable mixed perovskite solar cells. Chemical Engineering Journal, 2020, 384, 123273.	6.6	25
345	Verringerung schÃ d licher Defekte für leistungsstarke Metallhalogenidâ€Perowskitâ€Solarzellen. Angewandte Chemie, 2020, 132, 6740-6764.	1.6	16
346	Pb‣ite Doping of Lead Halide Perovskites for Efficient Solar Cells. Solar Rrl, 2020, 4, 1900227.	3.1	8
347	Influence of Lewis base HMPA on the properties of efficient planar MAPbI3 solar cells fabricated by one-step process assisted by Lewis acid-base adduct approach. Chemical Engineering Journal, 2020, 380, 122436	6.6	24

#	Article	IF	CITATIONS
348	High-efficiency colorful perovskite solar cells using TiO2 nanobowl arrays as a structured electron transport layer. Science China Materials, 2020, 63, 35-46.	3.5	26
349	Progress in Multifunctional Molecules for Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900248.	3.1	13
350	A Short Review on Interface Engineering of Perovskite Solar Cells: A Selfâ€Assembled Monolayer and Its Roles. Solar Rrl, 2020, 4, 1900251.	3.1	75
351	Reducing Detrimental Defects for Highâ€Performance Metal Halide Perovskite Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 6676-6698.	7.2	334
352	Enhanced effect of 1,2-dichlorobenzene on the property of PC61BM and perovskite films for planar heterojunction perovskite solar cells. Organic Electronics, 2020, 77, 105543.	1.4	3
353	Additive Engineering for Efficient and Stable Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1902579.	10.2	477
354	Optically Pumped Lasing from Hybrid Perovskite Lightâ€Emitting Diodes. Advanced Optical Materials, 2020, 8, 1901297.	3.6	49
355	Advances in Inkjetâ€Printed Metal Halide Perovskite Photovoltaic and Optoelectronic Devices. Energy Technology, 2020, 8, 1900991.	1.8	71
356	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. Energy Technology, 2020, 8, 1901114.	1.8	31
357	Highly Stable FA x MA 1 â^'  x PbI 3 â^'  x Br x –2P Precursor for Crystalizing Highâ€Quality, La Perovskite Film in an Ambient Atmosphere. Solar Rrl, 2020, 4, 1900402.	argeâ€Are 3.1	a ₈
358	High performance perovskites solar cells by hybrid perovskites co-crystallized with poly(ethylene) Tj ETQq0 0 0 rg	BT /Overlo	ock 10 Tf 50
359	Constructing "hillocks―like random-textured absorber for efficient planar perovskite solar cells. Chemical Engineering Journal, 2020, 387, 124091.	6.6	12
360	Edge stabilization in reduced-dimensional perovskites. Nature Communications, 2020, 11, 170.	5.8	147
361	Electrospinning-induced elastomeric properties of conjugated polymers for extremely stretchable nanofibers and rubbery optoelectronics. Journal of Materials Chemistry C, 2020, 8, 873-882.	2.7	35
362	Improved Performance of Carbon Electrode Perovskite Solar Cells Using Urea Treatment in Two tep Processing. ChemNanoMat, 2020, 6, 806-815.	1.5	9
363	High Efficiency Perovskite Solar Cells: Materials and Devices Engineering. Transactions on Electrical and Electronic Materials, 2020, 21, 1-15.	1.0	21
364	Modeling of highly efficient and low cost CH3NH3Pb(I1-xClx)3 based perovskite solar cell by numerical simulation. Optical Materials, 2020, 100, 109631.	1.7	132
365	Dual Functions of Crystallization Control and Defect Passivation Enabled by an Ionic Compensation Strategy for Stable and High-Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 3631-3641.	4.0	36

#	Article	IF	CITATIONS
366	Controlling Spatial Crystallization Uniformity and Phase Orientation of Quasiâ€2D Perovskiteâ€Based Lightâ€Emitting Diodes Using Lewis Bases. Advanced Materials Interfaces, 2020, 7, 1901860.	1.9	11
367	Chemical Approaches for Stabilizing Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903249.	10.2	132
368	Spin-coated copper(I) thiocyanate as a hole transport layer for perovskite solar cells. Journal of Solid State Electrochemistry, 2020, 24, 293-304.	1.2	22
369	Crystal structural and thermochromic luminescence properties modulation by ion liquid cations in bromoplumbate perovskites. Inorganic Chemistry Communication, 2020, 112, 107690.	1.8	4
370	Polarizationâ€Dependent Photoluminescence of a Highly (100)â€Oriented Perovskite Film. ChemPhysChem, 2020, 21, 204-211.	1.0	5
371	Tetrahydrofuran as an Oxygen Donor Additive to Enhance Stability and Reproducibility of Perovskite Solar Cells Fabricated in High Relative Humidity (50%) Atmosphere. Energy Technology, 2020, 8, 1900990.	1.8	6
372	Roadmap on halide perovskite and related devices. Nanotechnology, 2020, 31, 152001.	1.3	24
373	Processingâ€Performance Evolution of Perovskite Solar Cells: From Large Grain Polycrystalline Films to Single Crystals. Advanced Energy Materials, 2020, 10, 1902762.	10.2	50
374	Improving performance of perovskites solar cells using solvent engineering, via Lewis adduct of MAI-DMSO-PbI2 and incorporation of imidazolium cation. Journal of Alloys and Compounds, 2020, 817, 153076.	2.8	9
375	Research Direction toward Scalable, Stable, and High Efficiency Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903106.	10.2	193
376	lon Migration: A "Doubleâ€Edged Sword―for Halideâ€Perovskiteâ€Based Electronic Devices. Small Methods, 2020, 4, 1900552.	4.6	127
377	Ethylenediamine chlorides additive assisting formation of high-quality formamidinium-caesium perovskite film with low trap density for efficient solar cells. Journal of Power Sources, 2020, 449, 227484.	4.0	14
378	Dopant-Free Hole-Transport Materials with Germanium Compounds Bearing Pseudohalide and Chalcogenide Moieties for Perovskite Solar Cells. Inorganic Chemistry, 2020, 59, 15154-15166.	1.9	2
379	Controlling the crystallization dynamics of photovoltaic perovskite layers on larger-area coatings. Energy and Environmental Science, 2020, 13, 4666-4690.	15.6	79
380	Crystallization management for high-performance perovskite solar cells by introducing an antisolvent into the perovskite precursor. Journal of Materials Chemistry C, 2020, 8, 15860-15867.	2.7	17
381	Toward ideal hole transport materials: a review on recent progress in dopant-free hole transport materials for fabricating efficient and stable perovskite solar cells. Energy and Environmental Science, 2020, 13, 4057-4086.	15.6	241
382	Traps in metal halide perovskites: characterization and passivation. Nanoscale, 2020, 12, 22425-22451.	2.8	26
383	Application of a natural antioxidant as an efficient strategy to decrease the oxidation in Sn-based perovskites. Journal of Alloys and Compounds, 2020, 846, 156351.	2.8	13

ARTICLE IF CITATIONS Boosting optoelectronic performance of MAPbI3 perovskite solar cells via ethylammonium chloride 3.5 25 additive engineering. Science China Materials, 2020, 63, 2477-2486. Robot-Based High-Throughput Screening of Antisolvents for Lead Halide Perovskites. Joule, 2020, 4, 11.7 1806-1822. Room-temperature random lasing of metal-halide perovskites <i>via</i> 386 2.2 13 synthesis. Nanoscale Advances, 2020, 2, 5833-5840. Hierarchical Structures from Nanocrystalline Colloidal Precursors within Hybrid Perovskite Thin 2.4 Films: Implications for Photovoltaics. ACS Applied Nano Materials, 2020, 3, 11701-11708. Controlled Growth of Large Grains in CH₃NH₃Pbl₃Perovskite 388 Films Mediated by an Intermediate Liquid Phase without an Antisolvent for Efficient Solar Cells. ACS 2.5 13 Applied Energy Materials, 2020, 3, 12484-12493. Perovskite Films with Reduced Interfacial Strains via a Molecularâ€Level Flexible Interlayer for 11.1 Photovoltaic Application. Advanced Materials, 2020, 32, e2001479. In-situ passivation perovskite targeting efficient light-emitting diodes via spontaneously formed silica 390 8.2 28 network. Nano Energy, 2020, 78, 105134. Artemisinin (ART)-Induced "perovskite/perovskite―bilayer structured photovoltaics. Nano Energy, 8.2 30 2020, 78, 105133. 392 High-Efficiency Perovskite Solar Cells. Chemical Reviews, 2020, 120, 7867-7918. 23.0 1,480 Hot-Casting Large-Grain Perovskite Film for Efficient Solar Cells: Film Formation and Device 14.4 Performance. Nano-Micro Letters, 2020, 12, 156. Defect passivation of grain surface toward perovskite solar cells with a high open-circuit voltage 1.1 13 exceeding 1.16 V. Journal of Applied Physics, 2020, 128, 044504. Full Defects Passivation Enables 21% Efficiency Perovskite Solar Cells Operating in Air. Advanced Energy Materials, 2020, 10, 2001958. Building Blocks of Hybrid Perovskites: A Photoluminescence Study of Leadâ€Iodide Solution Species. 1.0 20 ChemPhysChem, 2020, 21, 2327-2333. Defects chemistry in high-efficiency and stable perovskite solar cells. Journal of Applied Physics, 2020, 1.1 128,. Defects and Their Passivation in Hybrid Halide Perovskites toward Solar Cell Applications. Solar Rrl, 398 3.147 2020, 4, 2000505. Large-Grained All-Inorganic Bismuth-Based Perovskites with Narrow Band Gap via Lewis Acid–Base 30 Adduct Approach. ACS Applied Materials & amp; Interfaces, 2020, 12, 43876-43884. Embedding PbS Quantum Dots (QDs) in Pb-Halide Perovskite Matrices: QD Surface Chemistry and 400 18 Antisolvent Effects on QD Dispersion and Confinement Properties. , 2020, 2, 1464-1472.

CITATION REPORT

Interfacial Structure and Composition Managements for Highâ€Performance Methylammoniumâ€Free Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2005846.

394

396

#	Article	IF	CITATIONS
402	Photoelectrochemical and first-principles investigation on halide perovskite/TiO2 film improved by dicyano dye. Optical Materials, 2020, 109, 110350.	1.7	5
403	Antisolvents in Perovskite Solar Cells: Importance, Issues, and Alternatives. Advanced Materials Interfaces, 2020, 7, 2000950.	1.9	94
404	Interface passivation strategy improves the efficiency and stability of organic–inorganic hybrid metal halide perovskite solar cells. Journal of Materials Research, 2020, 35, 2166-2189.	1.2	4
405	Novel amphiphilic corannulene additive for moisture-resistant perovskite solar cells. Chemical Communications, 2020, 56, 11997-12000.	2.2	15
406	Synergistic Effect of Additive and Solvent Vapor Annealing on the Enhancement of MAPbI ₃ Perovskite Solar Cells Fabricated in Ambient Air. ACS Applied Materials & Interfaces, 2020, 12, 46837-46845.	4.0	23
407	Enhanced Device Performances of MAFACsPb(I _{<i>x</i>} Br _{1–<i>x</i>}) Perovskite Solar Cells with Dual-Functional 2-Chloroethyl Acrylate Additives. ACS Applied Materials & Interfaces, 2020, 12, 46846-46853.	4.0	17
408	Airâ€Processed Perovskite Films with Innerâ€toâ€Outside Passivation for Highâ€Efficiency Solar Cells. Solar Rrl, 2020, 4, 2000410.	3.1	5
409	Poly(Ethylene Glycol) Diacrylate as the Passivation Layer for High-Performance Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 45045-45055.	4.0	24
410	Gradient Annealing of Halide Perovskite Films for Improved Performance of Solar Cells. ACS Applied Energy Materials, 2020, 3, 8130-8134.	2.5	6
411	Multifunctional Self-Combustion Additives Strategy to Fabricate Highly Responsive Hybrid Perovskite Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 41674-41686.	4.0	12
412	Role of formamidinium in the crystallization of FAxMA1-xPbI3-yCly perovskite via recrystallization-assisted bath-immersion sequential ambient deposition. Journal of Power Sources, 2020, 477, 228736.	4.0	3
413	Carrier recombination of organic-inorganic 3D halide perovskite single crystals. Chinese Journal of Chemical Physics, 2020, 33, 252-257.	0.6	2
414	Additive Modulated Perovskite Microstructures for High Performance Photodetectors. Micromachines, 2020, 11, 1090.	1.4	6
415	Temperature-Assisted Crystal Growth of Photovoltaic α-Phase FAPbI ₃ Thin Films by Sequential Blade Coating. ACS Applied Materials & Interfaces, 2020, 12, 55830-55837.	4.0	11
416	Introducing ammonium salt into hole transporting materials for perovskite solar cells. Chemical Communications, 2020, 56, 14471-14474.	2.2	14
417	A Critical Review on Crystal Growth Techniques for Scalable Deposition of Photovoltaic Perovskite Thin Films. Materials, 2020, 13, 4851.	1.3	38
418	The Role of Surface Termination in Halide Perovskites for Efficient Photocatalytic Synthesis. Angewandte Chemie - International Edition, 2020, 59, 12931-12937.	7.2	27
419	Solvent modification to suppress halide segregation in mixed halide perovskite solar cells. Journal of Materials Science, 2020, 55, 9787-9794.	1.7	7

#	Article	IF	CITATIONS
420	Recent Advancements and Challenges for Low-Toxicity Perovskite Materials. ACS Applied Materials & amp; Interfaces, 2020, 12, 26776-26811.	4.0	89
421	How the Mixed Cations (Guanidium, Formamidinium, and Phenylethylamine) in Tin lodide Perovskites Affect Their Charge Carrier Dynamics and Solar Cell Characteristics. Journal of Physical Chemistry Letters, 2020, 11, 4043-4051.	2.1	19
422	The Role of Surface Termination in Halide Perovskites for Efficient Photocatalytic Synthesis. Angewandte Chemie, 2020, 132, 13031-13037.	1.6	2
423	A Realistic Methodology for 30% Efficient Perovskite Solar Cells. CheM, 2020, 6, 1254-1264.	5.8	160
424	Unravelling the role of C60 derivatives as additives into active layers for achieving high-efficiency planar perovskite solar cells. Carbon, 2020, 167, 160-168.	5.4	16
425	Metal Halide Perovskites in Quantum Dot Solar Cells: Progress and Prospects. Joule, 2020, 4, 1160-1185.	11.7	211
426	Lewis-base containing spiro type hole transporting materials for high-performance perovskite solar cells with efficiency approaching 20%. Nanoscale, 2020, 12, 13157-13164.	2.8	30
427	Lewis acid/base approach for efficacious defect passivation in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 12201-12225.	5.2	149
428	Sulfur-Donor Solvents Strongly Coordinate Pb ²⁺ in Hybrid Organic–Inorganic Perovskite Precursor Solutions. Journal of Physical Chemistry C, 2020, 124, 14496-14502.	1.5	38
429	High-Power and Flexible Indoor Solar Cells via Controlled Growth of Perovskite Using a Greener Antisolvent. ACS Applied Energy Materials, 2020, 3, 6995-7003.	2.5	44
430	Interface Engineering Driven Stabilization of Halide Perovskites against Moisture, Heat, and Light for Optoelectronic Applications. Advanced Energy Materials, 2020, 10, 2000768.	10.2	62
431	Modulating Performance and Stability of Inorganic Lead-Free Perovskite Solar Cells via Lewis-Pair Mediation. ACS Applied Materials & Interfaces, 2020, 12, 32649-32657.	4.0	32
432	Synergistic morphology control and non-radiative defect passivation using a crown ether for efficient perovskite light-emitting devices. Journal of Materials Chemistry C, 2020, 8, 9986-9992.	2.7	9
433	Interaction engineering in organic–inorganic hybrid perovskite solar cells. Materials Horizons, 2020, 7, 2208-2236.	6.4	35
434	Device simulation of low cost HTM free perovskite solar cell based on TiO2 electron transport layer. AIP Conference Proceedings, 2020, , .	0.3	13
435	Micro―and Nanopatterning of Halide Perovskites Where Crystal Engineering for Emerging Photoelectronics Meets Integrated Device Array Technology. Advanced Materials, 2020, 32, e2000597.	11.1	62
436	Highâ€Efficiency Perovskite Quantum Dot Hybrid Nonfullerene Organic Solar Cells with Nearâ€Zero Driving Force. Advanced Materials, 2020, 32, e2002066.	11.1	46
437	Coordination modulated crystallization and defect passivation in high quality perovskite film for efficient solar cells. Coordination Chemistry Reviews, 2020, 420, 213408.	9.5	51

#	Article	IF	CITATIONS
438	Methylamine-Dimer-Induced Phase Transition toward MAPbI ₃ Films and High-Efficiency Perovskite Solar Modules. Journal of the American Chemical Society, 2020, 142, 6149-6157.	6.6	59
439	Sandwich-like electron transporting layer to achieve highly efficient perovskite solar cells. Journal of Power Sources, 2020, 453, 227876.	4.0	15
440	A Polymerizationâ€Assisted Grain Growth Strategy for Efficient and Stable Perovskite Solar Cells. Advanced Materials, 2020, 32, e1907769.	11.1	161
441	Enhanced optical path and electron diffusion length enable high-efficiency perovskite tandems. Nature Communications, 2020, 11, 1257.	5.8	180
442	Unraveling the Dual-Functional Mechanism of Light Absorption and Hole Transport of Cu ₂ Cd <i>_x</i> Zn _{1–<i>x</i>} SnS ₄ for Achieving Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 17509-17518.	4.0	17
443	Effect of Sr substitution on the property and stability of CH ₃ NH ₃ SnI ₃ perovskite: A firstâ€principles investigation. International Journal of Energy Research, 2020, 44, 5765-5778.	2.2	19
444	Efficient Perovskite Solar Cells Based on CdSe/ZnS Quantum Dots Electron Transporting Layer with Superior UV Stability. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000062.	1.2	11
445	Spontaneously Selfâ€Assembly of a 2D/3D Heterostructure Enhances the Efficiency and Stability in Printed Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2000173.	10.2	126
446	Improving the performance of ultra-flexible perovskite photodetectors through cation engineering. Journal Physics D: Applied Physics, 2020, 53, 235107.	1.3	9
447	Regulated Crystallization of Efficient and Stable Tin-Based Perovskite Solar Cells via a Self-Sealing Polymer. ACS Applied Materials & Interfaces, 2020, 12, 14049-14056.	4.0	95
448	Halide perovskite nanotube toward energy applications: A firstâ€principles investigation. International Journal of Energy Research, 2020, 44, 5412-5424.	2.2	5
449	Understanding of perovskite crystal growth and film formation in scalable deposition processes. Chemical Society Reviews, 2020, 49, 1653-1687.	18.7	364
450	Influence of the cathode microstructure on the stability of inverted planar perovskite solar cells. RSC Advances, 2020, 10, 23653-23661.	1.7	8
451	Controlled Size Growth of Thermally Stable Organometallic Halide Perovskite Microrods: Synergistic Effect of Dual-Doping, Lattice Strain Engineering, Antisolvent Crystallization, and Band Gap Tuning Properties. ACS Omega, 2020, 5, 16106-16119.	1.6	8
452	A pressure process for efficient and stable perovskite solar cells. Nano Energy, 2020, 77, 105063.	8.2	35
453	Highâ€Performance and Reliable Leadâ€Free Layeredâ€Perovskite Transistors. Advanced Materials, 2020, 32, e2002717.	11.1	86
454	The Synergism of DMSO and Diethyl Ether for Highly Reproducible and Efficient MA _{0.5} FA _{0.5} PbI ₃ Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 2001300.	10.2	33
455	Efficient Bidentate Molecules Passivation Strategy for Highâ€Performance and Stable Inorganic CsPbl ₂ Br Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000268.	3.1	21

#	Article	IF	CITATIONS
456	Comprehensive insights into defect passivation and charge dynamics for FA0.8MA0.15Cs0.05Pbl2.8Br0.2 perovskite solar cells. Applied Physics Letters, 2020, 117, .	1.5	7
457	Hydrogen halide-free synthesis of organohalides for organometal trihalide perovskite solar cells. Journal of Industrial and Engineering Chemistry, 2020, 89, 375-382.	2.9	5
458	Enhanced emission from CH ₃ NH ₃ PbBr ₃ perovskite films by graphene quantum dot modification. Materials Research Express, 2020, 7, 016415.	0.8	4
459	Strategies for Improving the Stability of Tinâ€Based Perovskite (ASnX ₃) Solar Cells. Advanced Science, 2020, 7, 1903540.	5.6	123
460	Highâ€Performance CsPbl <i>_x</i> Br _{3â€} <i>_x</i> Allâ€Inorganic Perovskite Solar Cells with Efficiency over 18% via Spontaneous Interfacial Manipulation. Advanced Functional Materials, 2020, 30, 2000457.	7.8	118
461	Solvent selection for highly reproducible carbon-based mixed-cation hybrid lead halide perovskite solar cells via adduct approach. Solar Energy, 2020, 199, 761-771.	2.9	10
463	Thinâ€Film Morphology Improvement and Density Functional Theoryâ€Driven Findings for the Photovoltaic Perovskite MAPI/MAPSI. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900668.	1.2	0
464	Optimizing Lignosulfonic Acid-Grafted Polyaniline as a Hole-Transport Layer for Inverted CH ₃ NH ₃ Pbl ₃ Perovskite Solar Cells. ACS Omega, 2020, 5, 1887-1901.	1.6	23
465	Crystallization tailoring of cesium/formamidinium double-cation perovskite for efficient and highly stable solar cells. Journal of Energy Chemistry, 2020, 48, 217-225.	7.1	45
466	Recent advances in defect passivation of perovskite active layer via additive engineering: a review. Journal Physics D: Applied Physics, 2020, 53, 183002.	1.3	15
467	Layeredâ€Perovskite Nanowires with Longâ€Range Orientational Order for Ultrasensitive Photodetectors. Advanced Materials, 2020, 32, e1905298.	11.1	49
468	Superior Textured Film and Process Tolerance Enabled by Intermediateâ€State Engineering for Highâ€Efficiency Perovskite Solar Cells. Advanced Science, 2020, 7, 1903009.	5.6	22
469	Synergistic effect of additives on 2D perovskite film towards efficient and stable solar cell. Chemical Engineering Journal, 2020, 389, 124266.	6.6	50
470	Introduction of Multifunctional Triphenylamino Derivatives at the Perovskite/HTL Interface To Promote Efficiency and Stability of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 9300-9306.	4.0	53
471	Thioacetamide additive assisted crystallization of solution-processed perovskite films for high performance planar heterojunction solar cells. Solar Energy Materials and Solar Cells, 2020, 208, 110435.	3.0	15
472	Intermolecular π–Ĩ€ Conjugation Selfâ€Assembly to Stabilize Surface Passivation of Highly Efficient Perovskite Solar Cells. Advanced Materials, 2020, 32, e1907396.	11.1	128
473	Recent progress in morphology optimization in perovskite solar cell. Journal of Materials Chemistry A, 2020, 8, 21356-21386.	5.2	159
474	Polyaromatic Nanotweezers on Semiconducting Carbon Nanotubes for the Growth and Interfacing of Lead Halide Perovskite Crystal Grains in Solar Cells. Chemistry of Materials, 2020, 32, 5125-5133.	3.2	45

#	Article	IF	CITATIONS
475	Lead Halide Perovskite Nanocrystals as Photocatalysts for PET-RAFT Polymerization under Visible and Near-Infrared Irradiation. ACS Macro Letters, 2020, 9, 725-730.	2.3	97
476	Heterojunction Incorporating Perovskite and Microporous Metal–Organic Framework Nanocrystals for Efficient and Stable Solar Cells. Nano-Micro Letters, 2020, 12, 80.	14.4	42
477	Perovskite hybrid evaporation/ spin coating method: From band gap tuning to thin film deposition on textures. Thin Solid Films, 2020, 704, 137970.	0.8	22
478	Selective UV Absorbance of Copper Chalcogenide Nanoparticles for Enhanced Illumination Durability in Perovskite Photovoltaics. ACS Sustainable Chemistry and Engineering, 2020, 8, 7617-7627.	3.2	6
479	17% efficient perovskite solar mini-module <i>via</i> hexamethylphosphoramide (HMPA)-adduct-based large-area D-bar coating. Journal of Materials Chemistry A, 2020, 8, 9345-9354.	5.2	44
480	Amphoteric imidazole doping induced large-grained perovskite with reduced defect density for high performance inverted solar cells. Solar Energy Materials and Solar Cells, 2020, 212, 110553.	3.0	25
481	Class rod-sliding and low pressure assisted solution processing composition engineering for high-efficiency perovskite solar cells. Solar Energy Materials and Solar Cells, 2020, 211, 110532.	3.0	11
482	Review on applications of PEDOTs and PEDOT:PSS in perovskite solar cells. Journal of Materials Science: Materials in Electronics, 2021, 32, 12746-12757.	1.1	59
483	Intermediates transformation for efficient perovskite solar cells. Journal of Energy Chemistry, 2021, 52, 102-114.	7.1	26
484	Defect passivation by nontoxic biomaterial yields 21% efficiency perovskite solar cells. Journal of Energy Chemistry, 2021, 55, 265-271.	7.1	50
485	Modulating MAPbI3 perovskite solar cells by amide molecules: Crystallographic regulation and surface passivation. Journal of Energy Chemistry, 2021, 56, 179-185.	7.1	31
486	Understanding the precursor chemistry for one-step deposition of mixed cation perovskite solar cells by methylamine route. Journal of Energy Chemistry, 2021, 57, 386-391.	7.1	9
487	Improved perovskite crystallization via antisolvent-assisted processed using additive engineering for efficient perovskite solar cells. Journal of Alloys and Compounds, 2021, 855, 157396.	2.8	10
488	Strategies from small-area to scalable fabrication for perovskite solar cells. Journal of Energy Chemistry, 2021, 57, 567-586.	7.1	17
489	Effects of guanidinium cations on structural, optoelectronic and photovoltaic properties of perovskites. Journal of Energy Chemistry, 2021, 58, 48-54.	7.1	21
490	Highâ€Efficiency Tin Halide Perovskite Solar Cells: The Chemistry of Tin (II) Compounds and Their Interaction with Lewis Base Additives during Perovskite Film Formation. Solar Rrl, 2021, 5, .	3.1	50
491	Epitaxial halide perovskite-based materials for photoelectric energy conversion. Energy and Environmental Science, 2021, 14, 127-157.	15.6	37
492	Defect mitigation using <scp>d</scp> -penicillamine for efficient methylammonium-free perovskite solar cells with high operational stability. Chemical Science, 2021, 12, 2050-2059.	3.7	88

#	Article	IF	CITATIONS
493	Towards highly stable and efficient planar perovskite solar cells: Materials development, defect control and interfacial engineering. Chemical Engineering Journal, 2021, 420, 127599.	6.6	37
494	Ambient Fabrication of Organic–Inorganic Hybrid Perovskite Solar Cells. Small Methods, 2021, 5, e2000744.	4.6	63
495	Excitonic Solar Cells Using 2D Perovskite of (BA) ₂ (FA) ₂ Pb ₃ 10. Journal of Physical Chemistry C, 2021, 125, 2212-2219.	1.5	17
496	A novel 3-D lead-iodide polymer based on the linkage of rare binuclear [Pb ₂ I] ³⁺ cations and anionic bis(pyrazinyl)-trizole bridges. Dalton Transactions, 2021, 50, 4486-4489.	1.6	4
497	The efficacy of Lewis affinity scale metrics to represent solvent interactions with reagent salts in all-inorganic metal halide perovskite solutions. Journal of Materials Chemistry A, 2021, 9, 13087-13099.	5.2	19
498	Efficient, Stable Solar Cells and Minimodules Enabled by Dual-Functional Isobutylammonium Dithiocarbamate Induced Formamidinium-Cesium Perovskite Crystallization Regulation. SSRN Electronic Journal, 0, , .	0.4	0
499	Perovskite solar cells: A review of architecture, processing methods, and future prospects. , 2021, , 375-412.		6
500	20.8% Slotâ€Die Coated MAPbl ₃ Perovskite Solar Cells by Optimal DMSOâ€Content and Age of 2â€ME Based Precursor Inks. Advanced Energy Materials, 2021, 11, 2003460.	10.2	122
501	Substance and shadow of formamidinium lead triiodide based solar cells. Physical Chemistry Chemical Physics, 2021, 23, 9049-9060.	1.3	7
502	Scalable perovskite coating <i>via</i> anti-solvent-free Lewis acid–base adduct engineering for efficient perovskite solar modules. Journal of Materials Chemistry A, 2021, 9, 3018-3028.	5.2	58
503	High length-to-width aspect ratio lead bromide microwires <i>via</i> perovskite-induced local concentration gradient for X-ray detection. CrystEngComm, 2021, 23, 2215-2221.	1.3	3
504	Ambient processed (110) preferred MAPbI ₃ thin films for highly efficient perovskite solar cells. Nanoscale Advances, 2021, 3, 2056-2064.	2.2	15
505	Rapid hybrid perovskite film crystallization from solution. Chemical Society Reviews, 2021, 50, 7108-7131.	18.7	77
506	Eco-friendly antisolvent enabled inverted MAPbI ₃ perovskite solar cells with fill factors over 84%. Green Chemistry, 2021, 23, 3633-3641.	4.6	22
507	Scalable Fabrication of >90 cm ² Perovskite Solar Modules with >1000 h Operational Stability Based on the Intermediate Phase Strategy. Advanced Energy Materials, 2021, 11, 2003712.	10.2	76
508	Manipulation of Perovskite Crystallization Kinetics via Lewis Base Additives. Advanced Functional Materials, 2021, 31, 2009425.	7.8	61
509	Zwitterions: promising interfacial/doping materials for organic/perovskite solar cells. New Journal of Chemistry, 2021, 45, 15118-15130.	1.4	15
510	The effect of dimensionality on the charge carrier mobility of halide perovskites. Journal of Materials Chemistry A, 2021, 9, 21551-21575.	5.2	49

#	Article	IF	CITATIONS
511	Highly stable and efficient perovskite solar cells passivated by a functional amorphous layer. Journal of Materials Chemistry A, 2021, 9, 21708-21715.	5.2	13
512	Efficient defect passivation with niacin for high-performance and stable perovskite solar cells. Journal of Materials Chemistry C, 0, , .	2.7	10
513	Performance and stability improvements in metal halide perovskite with intralayer incorporation of organic additives. Journal of Materials Chemistry A, 2021, 9, 16281-16338.	5.2	28
514	Fully Air-Processed Dynamic Hot-Air-Assisted M:CsPbI2Br (M: Eu2+, In3+) for Stable Inorganic Perovskite Solar Cells. Matter, 2021, 4, 635-653.	5.0	109
515	Advances to Highâ€Performance Blackâ€Phase FAPbl ₃ Perovskite for Efficient and Stable Photovoltaics. Small Structures, 2021, 2, 2000130.	6.9	81
516	High-Valent Iodoplumbate-Rich Perovskite Precursor Solution <i>via</i> Solar Illumination for Reproducible Power Conversion Efficiency. Journal of Physical Chemistry Letters, 2021, 12, 1676-1682.	2.1	12
517	Hydrophobic Deep Eutectic Solvent and Glycolipid Biosurfactant as Green Asphaltene Inhibitors: Experimental and Theoretical Studies. Energy & Fuels, 2021, 35, 4791-4802.	2.5	18
518	Reconfiguring the band-edge states of photovoltaic perovskites by conjugated organic cations. Science, 2021, 371, 636-640.	6.0	184
519	Photostable and Uniform CH3NH3PbI3 Perovskite Film Prepared via Stoichiometric Modification and Solvent Engineering. Nanomaterials, 2021, 11, 405.	1.9	5
520	Potassium Thiocyanateâ€Assisted Enhancement of Slotâ€Dieâ€Coated Perovskite Films for Highâ€Performance Solar Cells. Small Science, 2021, 1, 2000044.	5.8	26
521	Factors influencing the nucleation and crystal growth of solution-processed organic lead halide perovskites: a review. Journal Physics D: Applied Physics, 2021, 54, 163001.	1.3	35
522	Dual interfacial engineering for efficient Cs2AgBiBr6 based solar cells. Journal of Energy Chemistry, 2021, 53, 372-378.	7.1	46
523	Coordination Strategy Driving the Formation of Compact CuSCN Holeâ€Transporting Layers for Efficient Perovskite Solar Cells. Solar Rrl, 2021, 5, 2000777.	3.1	11
524	Inorganic Ammonium Halide Additive Strategy for Highly Efficient and Stable CsPbI ₃ Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2010813.	7.8	90
525	Simultaneous Transport Promotion and Recombination Suppression in Perovskite Solar Cells by Defect Passivation with Li-Doped Graphitic Carbon Nitride. Journal of Physical Chemistry C, 2021, 125, 5525-5533.	1.5	7
526	Multifunctional molecular incorporation boosting the efficiency and stability of the inverted perovskite solar cells. Journal of Power Sources, 2021, 488, 229449.	4.0	10
527	Strategies for High-Performance Large-Area Perovskite Solar Cells toward Commercialization. Crystals, 2021, 11, 295.	1.0	23
528	The effects of pyridine molecules structure on the defects passivation of perovskite solar cells. Journal of Solid State Electrochemistry, 2021, 25, 1531-1540.	1.2	12

#	Article	IF	CITATIONS
529	CTAB adsorption onto dolomite in the presence of ionic liquid and deep eutectic solvent: Experimental and theoretical studies. Journal of Molecular Liquids, 2021, 325, 115176.	2.3	15
530	Highly Efficient Halide Perovskite Lightâ€Emitting Diodes via Molecular Passivation. Angewandte Chemie, 2021, 133, 8418-8424.	1.6	9
531	Highly Efficient Halide Perovskite Lightâ€Emitting Diodes via Molecular Passivation. Angewandte Chemie - International Edition, 2021, 60, 8337-8343.	7.2	47
532	Polymer-capped copper nanoparticles trigger plasmonic field for improving performance of perovskite solar cells. Synthetic Metals, 2021, 273, 116675.	2.1	4
533	Tuning the Interactions of Methylammonium Acetate with Acetonitrile to Create Efficient Perovskite Solar Cells. Journal of Physical Chemistry C, 2021, 125, 6555-6563.	1.5	16
534	Recent progress on defect modulation for highly efficient metal halide perovskite light-emitting diodes. Applied Materials Today, 2021, 22, 100946.	2.3	11
535	A Synergistic Precursor Regulation Strategy for Scalable Fabrication of Perovskite Solar Cells. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000613.	1.2	3
536	Green Solvent-Based Perovskite Precursor Development for Ink-Jet Printed Flexible Solar Cells. ACS Sustainable Chemistry and Engineering, 2021, 9, 3920-3930.	3.2	23
537	Origin, Influence, and Countermeasures of Defects in Perovskite Solar Cells. Small, 2021, 17, e2005495.	5.2	61
538	Controlling the Microstructure and Porosity of Perovskite Films by Additive Engineering. ACS Applied Energy Materials, 2021, 4, 2990-2998.	2.5	13
539	Printing strategies for scaling-up perovskite solar cells. National Science Review, 2021, 8, nwab075.	4.6	48
540	Ambient Air-Stable CH ₃ NH ₃ Pbl ₃ Perovskite Solar Cells Using Dibutylethanolamine as a Morphology Controller. ACS Applied Energy Materials, 2021, 4, 4395-4407.	2.5	6
541	Chiral Perovskites for Nextâ€Generation Photonics: From Chirality Transfer to Chiroptical Activity. Advanced Materials, 2021, 33, e2005760.	11.1	107
542	Perovskite random lasers: a tunable coherent light source for emerging applications. Nanotechnology, 2021, 32, 282001.	1.3	26
543	Durable Defect Passivation of the Grain Surface in Perovskite Solar Cells with π-Conjugated Sulfamic Acid Additives. ACS Applied Materials & Interfaces, 2021, 13, 26013-26022.	4.0	35
544	Metalâ€Halide Perovskite Crystallization Kinetics: A Review of Experimental and Theoretical Studies. Advanced Energy Materials, 2021, 11, 2100784.	10.2	35
545	Highly Efficient Sky-Blue Perovskite Light-Emitting Diode Via Suppressing Nonradiative Energy Loss. Chemistry of Materials, 2021, 33, 4154-4162.	3.2	46
546	Engineering Copper Iodide (CuI) for Multifunctional pâ€Type Transparent Semiconductors and Conductors. Advanced Science, 2021, 8, 2100546.	5.6	74

ARTICLE IF CITATIONS Halide Perovskites: A New Era of Solutionâ€Processed Electronics. Advanced Materials, 2021, 33, 547 11.1 138 e2005000. Solvent Engineering as a Vehicle for High Quality Thin Films of Perovskites and Their Device 548 5.2 Fabrication. Small, 2021, 17, e2008145. Leadâ€"halide perovskites for next-generation self-powered photodetectors: a comprehensive review. 549 3.4 52 Photonics Research, 2021, 9, 968. Enhanced efficiency and stability of perovskite solar cell by adding polymer mixture in perovskite photoactive layer. Journal of Alloys and Compounds, 2021, 864, 158793. Methylammonium-formamidinium reactivity in aged organometal halide perovskite inks. Cell Reports 551 2.8 18 Physical Science, 2021, 2, 100432. The selection strategy of ammonium-group organic salts in vapor deposited perovskites: From dimension regulation to passivation. Nano Energy, 2021, 84, 105893. 8.2 Intermediate phase-enhanced Ostwald ripening for the elimination of phase segregation in efficient 553 3.5 12 inorganic CsPbIBr2 perovskite solar cells. Science China Materials, 2021, 64, 2655-2666. Interfacial Defect Passivation and Stress Release via Multi-Active-Site Ligand Anchoring Enables Efficient and Stable Methylammonium-Free Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 554 8.8 2526-2538. 555 Recent advances on interface engineering of perovskite solar cells. Nano Research, 2022, 15, 85-103. 5.8 59 Tailored Key Parameters of Perovskite for High-Performance Photovoltaics. Accounts of Materials Research, 2021, 2, 447-457. Understanding the synergistic effect of mixed solvent annealing on perovskite film formation*. 557 0 0.7 Chinese Physics B, 2021, 30, 068103. Scalable Blade Coating: A Technique Accelerating the Commercialization of Perovskiteâ€Based 1.8 Photovoltaics. Energy Technology, 2021, 9, 2100204. Solvent Engineering for Controlled Crystallization and Growth of All-Inorganic Pb-Free Rudorffite 559 1.9 6 Absorbers of Perovskite Solar Cells. Inorganic Chemistry, 2021, 60, 11110-11119. Defect Passivation of Perovskite Films for Highly Efficient and Stable Solar Cells. Solar Rrl, 2021, 5, 3.1 58 2100295. Incorporation of Two-Dimensional WSe₂ into MAPbI₃ Perovskite for Efficient 561 12 2.1 and Stable Photovoltaics. Journal of Physical Chemistry Letters, 2021, 12, 6883-6888. Highâ€Performance Stable Perovskite Solar Cell via Defect Passivation With Constructing Tunable 3.1 Graphitic Carbon Nitride. Solar Rrl, 2021, 5, 2100257. One-Step Synthesis of Snl₂·(DMSO)_{<i>x</i>} Adducts for High-Performance Tin 563 6.6 280 Perovskite Solar Cells. Journal of the American Chemical Society, 2021, 143, 10970-10976. Stability of Perovskite Solar Cells: Degradation Mechanisms and Remedies. Frontiers in Electronics, 564 2021, 2, .

#	Article	IF	CITATIONS
565	Simultaneously Enhancing Efficiency and Stability of Perovskite Solar Cells Through Crystal Crossâ€Linking Using Fluorophenylboronic Acid. Small, 2021, 17, e2102090.	5.2	15
566	Formamidinium Lead Iodide Perovskite Films with Polyvinylpyrrolidone Additive for Active Layer in Perovskite Solar Cells, Enhanced Stability and Electrical Conductivity. Materials, 2021, 14, 4594.	1.3	4
567	Cul/Spiro-OMeTAD Double-Layer Hole Transport Layer to Improve Photovoltaic Performance of Perovskite Solar Cells. Coatings, 2021, 11, 978.	1.2	5
568	Multifunctional Reductive Molecular Modulator toward Efficient and Stable Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100320.	3.1	18
569	Efficient defect passivation for high performance perovskite solar cell by adding alizarin red S. Journal of Materials Science, 2021, 56, 19552-19563.	1.7	2
570	Perovskite crystallization. Journal of Semiconductors, 2021, 42, 080203.	2.0	13
571	MA Cation-Induced Diffusional Growth of Low-Bandgap FA-Cs Perovskites Driven by Natural Gradient Annealing. Research, 2021, 2021, 9765106.	2.8	8
572	Acetate-assistant efficient cation-exchange of halide perovskite nanocrystals to boost the photocatalytic CO2 reduction. Nano Research, 2022, 15, 1845-1852.	5.8	27
573	A Lewis base and boundary passivation bifunctional additive for high performance lead-free layered-perovskite transistors and phototransistors. Materials Today Energy, 2021, 21, 100722.	2.5	15
574	Exploring the Effect of Lewis-Base Additives on the Performance and Stability of Mesoscopic Carbon-Electrode Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 8810-8823.	2.5	7
575	Effective additive for enhancing the performance of Sb2S3 planar thin film solar cells. Journal of Materiomics, 2021, 7, 1074-1082.	2.8	10
576	Cosensitization-based halide perovskite in aqueous solution: A photoelectrochemical and first-principles investigation. Materials Research Bulletin, 2021, 141, 111358.	2.7	6
577	Toward high-performance semitransparent perovskite solar cells: interfacial modification and charge extraction perspectives. Materials Today Energy, 2021, 21, 100833.	2.5	8
578	Intermediate Phaseâ€Free Process for Methylammonium Lead Iodide Thin Film for Highâ€Efficiency Perovskite Solar Cells. Advanced Science, 2021, 8, e2102492.	5.6	20
579	Steric effect of amino-acids as additives for perovskite solar cells. Journal of Alloys and Compounds, 2021, 876, 160140.	2.8	19
580	Strategies and methods for fabricating high quality metal halide perovskite thin films for solar cells. Journal of Energy Chemistry, 2021, 60, 300-333.	7.1	31
581	Materials and Methods for Highâ€Efficiency Perovskite Solar Modules. Solar Rrl, 2022, 6, 2100455.	3.1	51
582	Controlling the Crystallization Kinetics of Leadâ€Free Tin Halide Perovskites for High Performance Green Photovoltaics. Advanced Energy Materials, 2021, 11, 2102131.	10.2	47

#	Article	IF	CITATIONS
583	Toward Commercialization of Efficient and Stable Perovskite Solar Modules. Solar Rrl, 2022, 6, 2100600.	3.1	16
584	MOFs based on the application and challenges of perovskite solar cells. IScience, 2021, 24, 103069.	1.9	27
585	Effective lewis base additive with S-donor for efficient and stable CsPbI2Br based perovskite solar cells. Chemical Engineering Journal, 2021, 420, 129931.	6.6	49
586	Stable Electrochemiluminescence of CsPbBr ₃ Perovskite Nanocrystals Assisted by Graphene Oxide for Ultrasensitive Sensing. ACS Applied Nano Materials, 2021, 4, 8823-8833.	2.4	9
587	Residual solvent extraction via chemical displacement for efficient and stable perovskite solar cells. Journal of Energy Chemistry, 2021, 61, 8-14.	7.1	19
588	Preferential vertically oriented nanopillar perovskite induced by poly(9-vinylcarbazole) field-effect transistor. Synthetic Metals, 2021, 281, 116901.	2.1	1
589	Realize larger grain size of CH3NH3PbI3 film with reduced non-radiative recombination for high performance perovskite solar cells via precursor colloidal size engineering. Journal of Alloys and Compounds, 2021, 886, 161300.	2.8	6
590	A strategic review on processing routes towards scalable fabrication of perovskite solar cells. Journal of Energy Chemistry, 2022, 64, 538-560.	7.1	33
591	Enhancing efficiency and stability of perovskite solar cells <i>via in situ</i> incorporation of lead sulfide layer. Sustainable Energy and Fuels, 2021, 5, 3700-3704.	2.5	3
592	Formamide iodide: a new cation additive for inhibiting l´-phase formation of formamidinium lead iodide perovskite. Materials Advances, 2021, 2, 2272-2277.	2.6	2
593	Sustainable solvent selection for the manufacture of methylammonium lead triiodide (MAPbI ₃) perovskite solar cells. Green Chemistry, 2021, 23, 2471-2486.	4.6	45
594	Improved Efficiency and Stability of Perovskite Solar Cells Induced by Cĩ£¾O Functionalized Hydrophobic Ammoniumâ€Based Additives. Advanced Materials, 2018, 30, 1703670.	11.1	132
595	Simultaneously Passivating Cation and Anion Defects in Metal Halide Perovskite Solar Cells Using a Zwitterionic Amino Acid Additive. Small, 2021, 17, e2005608.	5.2	51
596	Local nearly non-strained perovskite lattice approaching a broad environmental stability window of efficient solar cells. Nano Energy, 2020, 75, 104940.	8.2	15
597	Progress and Opportunities for Cs Incorporated Perovskite Photovoltaics. Trends in Chemistry, 2020, 2, 638-653.	4.4	35
598	Scalable fabrication and coating methods for perovskite solar cells and solar modules. Nature Reviews Materials, 2020, 5, 333-350.	23.3	568
599	A thiourea additive-based quadruple cation lead halide perovskite with an ultra-large grain size for efficient perovskite solar cells. Nanoscale, 2019, 11, 21824-21833.	2.8	53
600	Exploitation of two-dimensional conjugated covalent organic frameworks based on tetraphenylethylene with bicarbazole and pyrene units and applications in perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 11448-11459.	5.2	88

#	Article	IF	Citations
601	Origin of Hysteresis in Perovskite Solar Cells. , 2020, , 1-1-1-42.		19
602	Perovskite solar cells from lab to fab: the main challenges to access the market. Oxford Open Materials Science, 2020, 1, .	0.5	8
603	Low dark current and high-performance hybrid perovskite photodetectors with a PBDB-T:IHIC ultrathin passivation layer. Optics Letters, 2020, 45, 5860.	1.7	9
604	Growth of single crystals of methylammonium lead mixedhalide perovskites. Communications in Physics, 2018, 28, 237.	0.0	2
605	The Path to Perovskite on Silicon PV. , 2018, 1, 1-8.		16
606	Back-Contact Perovskite Solar Cells. , 2019, 1, 1-10.		4
607	D–A–π–A organic sensitizer surface passivation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 25086-25093.	5.2	28
608	Crystallization control <i>via</i> a molecular needle knitting strategy for the enhanced emission efficiency and stability of CsPbBr ₃ films. Journal of Materials Chemistry C, 2021, 9, 15967-15976.	2.7	6
609	Out-of-equilibrium processes in crystallization of organic-inorganic perovskites during spin coating. Nature Communications, 2021, 12, 5624.	5.8	53
610	Multifunctional Polymer Framework Modified SnO ₂ Enabling a Photostable α-FAPbl ₃ Perovskite Solar Cell with Efficiency Exceeding 23%. ACS Energy Letters, 2021, 6, 3824-3830.	8.8	93
611	Effect of Coâ€Solvents on the Crystallization and Phase Distribution of Mixedâ€Dimensional Perovskites. Advanced Energy Materials, 2021, 11, 2102144.	10.2	25
612	A comprehensive review on defect passivation and gradient energy alignment strategies for highly efficient perovskite solar cells. Journal Physics D: Applied Physics, 2022, 55, 043001.	1.3	9
613	Upscaling Solutionâ€₽rocessed Perovskite Photovoltaics. Advanced Energy Materials, 2021, 11, 2101973.	10.2	46
614	Benefitting from Synergistic Effect of Anion and Cation in Antimony Acetate for Stable CH ₃ NH ₃ PbI ₃ â€Based Perovskite Solar Cell with Efficiency Beyond 21%. Small, 2021, 17, e2102186.	5.2	28
615	Enabling Quasiâ€2D Perovskiteâ€Compatible Growth Environment for Efficient Lightâ€Emitting Diodes. Advanced Optical Materials, 2022, 10, .	3.6	7
616	Improved Photostability of Metal Halide Perovskites by microstructure modulation for Photovoltaic Application. Organic Electronics, 2021, 101, 106380.	1.4	1
617	A-site phase segregation in mixed cation perovskite. Materials Reports Energy, 2021, 1, 100064.	1.7	19
618	Allâ€Inorganic Perovskite Polymer–Ceramics for Flexible and Refreshable Xâ€Ray Imaging. Advanced Functional Materials, 2022, 32, 2107424.	7.8	69

#	Article	IF	CITATIONS
619	High-performance CsPbI3 perovskite solar cells without additives in air condition. Solar Energy, 2021, 228, 405-412.	2.9	9
620	Effect of Urea Addition on the Photovoltaic Performance of Perovskite Solar Cells. Hans Journal of Nanotechnology, 2020, 10, 34-42.	0.1	0
622	Multifunctional passivation agents for improving efficiency and stability of perovskite solar cells: Synergy of methyl and carbonyl groups. Applied Surface Science, 2022, 575, 151740.	3.1	13
623	Progress in Perovskite Solar Cells towards Commercialization—A Review. Materials, 2021, 14, 6569.	1.3	10
624	Approach To Enhance the Stability and Efficiency of Triple-Cation Perovskite Solar Cells by Reactive Antisolvents. ACS Applied Energy Materials, 2021, 4, 47-60.	2.5	4
625	Reconstruction of the (EMIm) <i>_x</i> MA _{1â€"<i>x</i>} Pb[(BF ₄) <i>_x</i> 1â€" Interlayer for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & amp; Interfaces, 2021, 13. 727-733.	<i>x</i> </td <td>'syb>]</td>	'syb>]
626	The preparation method of double-blade coating to â€~write' high efficiency perovskite solar cells. Organic Electronics, 2022, 100, 106374.	1.4	2
627	Highly efficient perovskite solar cells enhanced by biphenyl-4,4-dithiol. Solar Energy Materials and Solar Cells, 2022, 235, 111462.	3.0	5
628	Sensitivity of mixed cation/halide perovskites to evaporation kinetics of DMSO at early stage. Journal of Materials Chemistry A, 0, , .	5.2	2
629	Research progress of wide bandgap perovskite materials and solar cells. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 207401.	0.2	2
630	Interfacial Defect Passivation and Charge Carrier Management for Efficient Perovskite Solar Cells via a Highly Crystalline Small Molecule. ACS Energy Letters, 2021, 6, 4209-4219. Numerical simulation and optimization of simulantin	8.8	63
632	xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"> <mml:msub><mml:mi>CH</mml:mi><mml:mn>3</mml:mn></mml:msub> <mml:msub><mml:msub><mml:mi mathvariant="normal">x</mml:mi </mml:msub><mml:msub><mml:mi>Br</mml:mi><mml:mi mathvariant="normal">x</mml:mi </mml:msub></mml:msub> <mml:msub><mml:msub><mml:mi>Br</mml:mi></mml:msub></mml:msub> <td>ni>NH1.7</td> <td>ml:mi><mm< td=""></mm<></td>	ni>NH1.7	ml:mi> <mm< td=""></mm<>
633	conversion efficiency. Optical Materials, 2021, 122, 111734. Current status and trends of carbon-based electrodes for fully solution-processed perovskite solar cells. Journal of Energy Chemistry, 2022, 68, 222-246.	7.1	29
634	Defect Passivation via Additive Engineering to Improve Photodetection Performance in CsPbl ₂ Br Perovskite Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 56358-56365.	4.0	25
635	Chemical insights into perovskite ink stability. CheM, 2022, 8, 31-45.	5.8	19
636	Probing the Origin of the Open Circuit Voltage in Perovskite Quantum Dot Photovoltaics. ACS Nano, 2021, 15, 19334-19344.	7.3	18
637	Universal Dynamic Liquid Interface for Healing Perovskite Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
638	Cooperative Effects of Dopant-Free Hole-Transporting Materials and Polycarbonate Film for Sustainable Perovskite Solar Cells. SSRN Electronic Journal, 0, , .	0.4	Ο

#	Article	IF	Citations
639	Machine Learning and First-Principles Insights on Molecularly Modified CH ₃ NH ₃ Pbl ₃ Film in Water. SSRN Electronic Journal, 0, , .	0.4	0
640	An Amino-Phthalocyanine Additive Enhances the Efficiency of Perovskite Solar Cells Through Defect Passivation in Mixed-Halide Films. SSRN Electronic Journal, 0, , .	0.4	0
641	Perovskite Nanocomposite Layers Engineering for Efficient and Stable Solar Cells. Journal of Nano Research, 0, 71, 71-109.	0.8	4
642	Designing Ionic Liquids as the Solvent for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 22870-22878.	4.0	18
643	MAPbl ₃ Photodetectors with 4.7 MHz Bandwidth and Their Application in Organic Optocouplers. Journal of Physical Chemistry Letters, 2022, 13, 815-821.	2.1	5
644	Solvent strategies toward high-performance perovskite light-emitting diodes. Journal of Materials Chemistry C, 2022, 10, 3276-3286.	2.7	9
645	In Situ Formation of δ-FAPbI ₃ at the Perovskite/Carbon Interface for Enhanced Photovoltage of Printable Mesoscopic Perovskite Solar Cells. Chemistry of Materials, 2022, 34, 728-735.	3.2	24
646	Tunable engineering of photo- and electro-induced carrier dynamics in perovskite photoelectronic devices. Science China Materials, 2022, 65, 855-875.	3.5	9
647	Methylammonium Compensation Effects in MAPbI ₃ Perovskite Solar Cells for High-Quality Inorganic CuSCN Hole Transport Layers. ACS Applied Materials & Interfaces, 2022, 14, 5203-5210.	4.0	24
648	Influence of Lead Source on the Film Morphology of Perovskites Spin-Coated on Planar and Mesoporous Architectures under Ambient Conditions. Journal of Electronic Materials, 2022, 51, 1623.	1.0	0
649	Slow Hot-Carrier-Cooling in a 2D Lead-Iodide Perovskite Film and Its Photovoltaic Device. Journal of Physical Chemistry C, 2022, 126, 2374-2382.	1.5	6
650	Synergistic effects of morphological control and enhanced charge collection enable efficient and stable lead-free CsBi ₃ 1 ₁₀ thin film solar cells. Journal of Materials Chemistry A, 2022, 10, 9384-9392.	5.2	16
651	Cooperative effects of Dopant-Free Hole-Transporting materials and polycarbonate film for sustainable perovskite solar cells. Chemical Engineering Journal, 2022, 437, 135197.	6.6	13
652	From Structural Design to Functional Construction: Amine Molecules in Highâ€Performance Formamidiniumâ€Based Perovskite Solar Cells. Angewandte Chemie, 2022, 134, .	1.6	17
653	From Structural Design to Functional Construction: Amine Molecules in Highâ€Performance Formamidiniumâ€Based Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	7.2	63
654	Roles of Longâ€Chain Alkylamine Ligands in Tripleâ€Halide Perovskites for Efficient NiO _{<i>x</i>} â€Based Inverted Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	14
655	All Green Solvent Engineering of Organic-Inorganic Hybrid Perovskite Layer for High-Performance Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
656	Stronger Binding Force Improving Surface Passivation of Perovskites for High-Performance Inverted Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	CITATIONS
657	Highly Efficient Inverted Planar Solar Cell Using Formamidinium-Based Quasi-Two Dimensional Perovskites. SSRN Electronic Journal, 0, , .	0.4	0
658	Lewis Acidâ^'Base Adduct Approach for High Current Density of Molecular Ferroelectric Photovoltaic Device. SSRN Electronic Journal, 0, , .	0.4	0
659	More Effective Perovskite Surface Passivation Strategy Via Optimized Functional Groups Enables Efficient P-I-N Perovskite Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0
660	Anion Induced Bottom Surface Passivation for High Performance Perovskite Solar Cell. SSRN Electronic Journal, 0, , .	0.4	0
661	Intermediate phase engineering of halide perovskites for photovoltaics. Joule, 2022, 6, 315-339.	11.7	60
662	Alkali Additives Enable Efficient Large Area (>55 cm ²) Slotâ€Đie Coated Perovskite Solar Modules. Advanced Functional Materials, 2022, 32, .	7.8	39
663	A Review of Recent Developments in Preparation Methods for Large-Area Perovskite Solar Cells. Coatings, 2022, 12, 252.	1.2	42
664	Controllable Introduction of Surface Defects on CH3NH3PbI3 Perovskite. Nanomaterials, 2022, 12, 1002.	1.9	1
665	FAPbI ₃ Perovskite Solar Cells: From Film Morphology Regulation to Device Optimization. Solar Rrl, 2022, 6, .	3.1	19
666	Efficient, stable formamidinium-cesium perovskite solar cells and minimodules enabled by crystallization regulation. Joule, 2022, 6, 676-689.	11.7	110
667	Manipulating Crystallization Kinetics in Highâ€Performance Bladeâ€Coated Perovskite Solar Cells via Cosolventâ€Assisted Phase Transition. Advanced Materials, 2022, 34, e2200276.	11.1	64
668	Multifunctional Additive of Potassium Cinnamate Improve Crystallization and Passivate Defect for Perovskite Solar Cell with Efficiency Exceeding 22%. Energy Technology, 0, , 2200125.	1.8	3
669	Hierarchically Ordered Perovskites with High Photoâ€Electronic and Environmental Stability via Nanoimprinting Guided Block Copolymer Selfâ€Assembly. Advanced Materials Interfaces, 2022, 9, .	1.9	11
670	Insights from scalable fabrication to operational stability and industrial opportunities for perovskite solar cells and modules. Cell Reports Physical Science, 2022, 3, 100827.	2.8	16
670		2.8 3.1	16 16
	solar cells and modules. Cell Reports Physical Science, 2022, 3, 100827.		
671	solar cells and modules. Cell Reports Physical Science, 2022, 3, 100827. Phaseâ€Pure Engineering for Efficient and Stable Formamidiniumâ€Based Perovskite Solar Cells. Solar Rrl, 2022, 6, . Halide Perovskite Crystallization Processes and Methods in Nanocrystals, Single Crystals, and Thin	3.1	16

#	Article	IF	CITATIONS
675	Stronger binding force improving surface passivation of perovskites for High-Performance inverted solar cells. Chemical Engineering Journal, 2022, 440, 135974.	6.6	18
676	Anion induced bottom surface passivation for high performance perovskite solar cell. Chemical Engineering Journal, 2022, 442, 135895.	6.6	5
677	Methylammonium Lead Tri-Iodide Perovskite Solar Cells with Varying Equimolar Concentrations of Perovskite Precursors. Applied Sciences (Switzerland), 2021, 11, 11689.	1.3	6
678	Enhanced Activation Energy Released by Coordination of Bifunctional Lewis Base <scp>d</scp> -Tryptophan for Highly Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 58458-58466.	4.0	14
679	Interfacial Modification via a 1,4-Butanediamine-Based 2D Capping Layer for Perovskite Solar Cells with Enhanced Stability and Efficiency. ACS Applied Materials & Interfaces, 2022, 14, 22879-22888.	4.0	26
680	Dicyclopentadithienothiophene (DCDTT)-based organic semiconductor assisted grain boundary passivation for highly efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2022, 10, 11254-11267.	5.2	11
681	Homogeneously Miscible Fullerene inducing Vertical Gradient in Perovskite Thinâ€Film toward Highly Efficient Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	28
682	Molecular Hinges Stabilize Formamidiniumâ€Based Perovskite Solar Cells with Compressive Strain. Advanced Functional Materials, 2022, 32, .	7.8	50
683	Machine learning and first-principles insights on molecularly modified CH3NH3PbI3 film in water. Applied Surface Science, 2022, 593, 153428.	3.1	4
684	Universal Dynamic Liquid Interface for Healing Perovskite Solar Cells. Advanced Materials, 2022, 34, e2202301.	11.1	57
685	Progress of defect and defect passivation in perovskite solar cells. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 166801.	0.2	1
686	Efficient and Stable FAâ€Rich Perovskite Photovoltaics: From Material Properties to Device Optimization. Advanced Energy Materials, 2022, 12, .	10.2	16
687	Metal cation substitution of halide perovskite nanocrystals. Nano Research, 2022, 15, 6522-6550.	5.8	15
688	Progress on Emerging Ferroelectric Materials for Energy Harvesting, Storage and Conversion. Advanced Energy Materials, 2022, 12, .	10.2	45
689	Dye-modified halide perovskite materials. Organic Electronics, 2022, , 106545.	1.4	2
690	Inhibition of Amine–Water Proton Exchange Stabilizes Perovskite Ink for Scalable Solar Cell Fabrication. Chemistry of Materials, 2022, 34, 4394-4402.	3.2	5
691	Designed p-type graphene quantum dots to heal interface charge transfer in Sn-Pb perovskite solar cells. Nano Energy, 2022, 98, 107298.	8.2	25
692	Water electrolysis: from textbook knowledge to the latest scientific strategies and industrial developments. Chemical Society Reviews, 2022, 51, 4583-4762.	18.7	453

#	Article	IF	CITATIONS
693	Simultaneous Optimization of Charge Transport Properties in a Triple-Cation Perovskite Layer and Triple-Cation Perovskite/Spiro-OMeTAD Interface by Dual Passivation. ACS Omega, 2022, 7, 17907-17920.	1.6	2
694	A thioacetamide additive-based hybrid (MA0.5FA0.5)PbI3 perovskite solar cells crossing 21 % efficiency with excellent long term stability. Materials Today Chemistry, 2022, 25, 100950.	1.7	4
695	Review of defect engineering in perovskites for photovoltaic application. Materials Advances, 2022, 3, 5234-5247.	2.6	28
696	Toward Efficient Perovskite Solar Cells: Progress, Strategies, and Perspectives. ACS Energy Letters, 2022, 7, 2084-2091.	8.8	68
697	Efficient molecular ferroelectric photovoltaic device with high photocurrent via lewis acid–base adduct approach. Nanotechnology, 2022, 33, 405402.	1.3	1
698	The Evolution of Classical Spiro-OMeTAD: Synthesis of Arylamine Endcapped Indenone Spirofluorene. Frontiers in Chemistry, 2022, 10, .	1.8	1
699	Interface Modification with Holistically Designed Push–Pull D–π–A Organic Small Molecule Facilitates Band Alignment Engineering, Efficient Defect Passivation, and Enhanced Hydrophobicity in Mixed Cation Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2022, 5, 6783-6796.	2.5	11
700	Towards Bio-Safe and Easily Redispersible Bare ZnO Quantum Dots Engineered Via Organometallic Wet-Chemical Processing. SSRN Electronic Journal, 0, , .	0.4	0
701	Tailoring solvent-mediated ligand exchange for CsPbI3 perovskite quantum dot solar cells with efficiency exceeding 16.5%. Joule, 2022, 6, 1632-1653.	11.7	54
703	An amino-phthalocyanine additive enhances the efficiency of perovskite solar cells through defect passivation in mixed-halide films. Organic Electronics, 2022, 108, 106568.	1.4	4
704	Performance Improvement of Planar Perovskite Solar Cells Using Lauric Acid as Interfacial Modifier. ACS Applied Energy Materials, 2022, 5, 8501-8509.	2.5	2
705	Ionic Liquid Stabilized Perovskite Solar Modules with Power Conversion Efficiency Exceeding 20%. Advanced Functional Materials, 2022, 32, .	7.8	36
706	More effective perovskite surface passivation strategy via optimized functional groups enables efficient p-i-n perovskite solar cells. Applied Surface Science, 2022, 602, 154248.	3.1	5
707	Modifying SnO ₂ with Polyacrylamide to Enhance the Performance of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 34143-34150.	4.0	27
708	CuGaO ₂ Nanosheet Arrays as the Hole-Transport Layer in Inverted Perovskite Solar Cells. ACS Applied Nano Materials, 2022, 5, 10055-10063.	2.4	9
709	Passivation strategies of Perovskite film defects for solar cells by bifunctional amides with various molecular structures. Organic Electronics, 2022, 108, 106597.	1.4	0
710	Recent defect passivation drifts and role of additive engineering in perovskite photovoltaics. Nano Energy, 2022, 101, 107579.	8.2	46
711	Highly efficient inverted planar solar cell using formamidinium-based quasi-two dimensional perovskites. Journal of Alloys and Compounds, 2022, 921, 166139.	2.8	6

#	Article	IF	CITATIONS
712	Additive-Induced Film Morphology Evolution for Inverted Dion–Jacobson Quasi-Two-Dimensional Perovskite Solar Cells with Enhanced Performance. ACS Applied Energy Materials, 2022, 5, 9837-9845.	2.5	5
713	Bulk Restructure of Perovskite Films via Surface Passivation for Highâ€Performance Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	32
714	Resolving Mixed Intermediate Phases in Methylammonium-Free Sn–Pb Alloyed Perovskites for High-Performance Solar Cells. Nano-Micro Letters, 2022, 14, .	14.4	19
715	Spontaneous Hybrid Cross‣inked Network Induced by Multifunctional Copolymer toward Mechanically Resilient Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	28
716	Unshared Pair Electrons of Zincophilic Lewis Base Enable Longâ€life Zn Anodes under "Three High― Conditions. Angewandte Chemie, 2022, 134, .	1.6	14
717	Synthesis, photophysical properties and DFT studies of pyrrolo[1,2â€ <i>a</i>]quinoxaline hosted novel hole transporting molecules for perovskite solar cell (PSC). Journal of Physical Organic Chemistry, 2022, 35, .	0.9	2
718	A roadmap for the commercialization of perovskite light emitters. Nature Reviews Materials, 2022, 7, 757-777.	23.3	96
719	Unshared Pair Electrons of Zincophilic Lewis Base Enable Longâ€life Zn Anodes under "Three High― Conditions. Angewandte Chemie - International Edition, 2022, 61, .	7.2	40
720	Nonplanar Spray-Coated Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 37587-37594.	4.0	9
721	Nanopatterning on Mixed Halide Perovskites for Promoting Photocurrent Generation of Flexible Photodetector. Advanced Functional Materials, 2022, 32, .	7.8	2
722	Bismuth Complex Controlled Morphology Evolution and CuSCN-Induced Transport Improvement Enable Efficient Bil3 Solar Cells. Nanomaterials, 2022, 12, 3121.	1.9	1
723	Solvent engineering for two-dimensional perovskite of guanidium lead iodide. Synthetic Metals, 2022, 291, 117175.	2.1	3
724	A full range of defect passivation strategy targeting efficient and stable planar perovskite solar cells. Chemical Engineering Journal, 2023, 451, 138800.	6.6	13
725	All-in-one additive enables defect passivated, crystallization modulated and moisture resisted perovskite films toward efficient solar cells. Chemical Engineering Journal, 2023, 452, 139345.	6.6	27
726	Recent progress of lead-free bismuth-based perovskite materials for solar cell applications. Journal of Materials Chemistry C, 2022, 10, 16629-16656.	2.7	13
727	Stable perovskite solar cells with 25.17% efficiency enabled by improving crystallization and passivating defects synergistically. Energy and Environmental Science, 2022, 15, 4700-4709.	15.6	86
728	First-principles study of detrimental iodine vacancy in lead halide perovskite under strain and electron injection. Applied Physics Letters, 2022, 121, .	1.5	9
729	Tailoring the Time-Averaged Structure for Polarization-Sensitive Chiral Perovskites. Journal of the American Chemical Society, 2022, 144, 16020-16033.	6.6	13

		CITATION R	EPORT	
#	Article		IF	CITATIONS
730	Facet Engineering for Stable, Efficient Perovskite Solar Cells. ACS Energy Letters, 2022	, 7, 3120-3128.	8.8	36
731	Fabrication of triple cation perovskite solar cells using different post-spin coating anti-s treatments. Journal of Materials Science: Materials in Electronics, 2022, 33, 21161-211	solvent .71.	1.1	0
732	Numerical Study of Various ETL Materials for an Efficient Lead-Free Perovskite Solar Ce Notes in Electrical Engineering, 2023, , 265-272.	ll. Lecture	0.3	0
733	High Efficiency Inorganic Perovskite Solar Cells Based On Low Trap Density and High C CsPbl ₃ Films. Advanced Functional Materials, 2022, 32, .	arrier Mobility	7.8	23
734	Performance of planar perovskite solar cells based on formamidinium cations: Simulati fabrication. International Journal of Energy Research, 2022, 46, 21948-21960.	on and	2.2	4
735	Stabilization of Perovskite Solar Cells: Recent Developments and Future Perspectives. Materials, 2022, 34, .	Advanced	11.1	67
736	Determining the Role of the Molecular Weight of Poly(Ethylene Glycol) Additives in Per Photodetectors. ACS Applied Energy Materials, 2022, 5, 12158-12164.	ovskite	2.5	0
737	Ferroelectricity and Crystal Phases in Mixed ation Lead Iodide Perovskite Solar Cells 6, .	. Solar Rrl, 2022,	3.1	0
738	Moisture-dependent room-temperature perovskite crystallization in vacuum flash-assis processed intermediate phase films. Organic Electronics, 2022, 111, 106652.	ted solution	1.4	2
739	Defect passivation and electrical conductivity enhancement in perovskite solar cells us functionalized graphene quantum dots. Materials Futures, 2022, 1, 045101.	ing	3.1	20
740	Recent Progress in Large-Area Perovskite Photovoltaic Modules. Transactions of Tianjin 2022, 28, 323-340.	University,	3.3	10
741	Organic Additive Engineering to Grow Highâ€Quality Inorganic CsPbX ₃ Po Efficient and Stable Solar Cells. Solar Rrl, 2022, 6, .	erovskite Films for	3.1	7
742	Recent progress of crystal orientation engineering in halide perovskite photovoltaics. N Horizons, 2023, 10, 13-40.	Naterials	6.4	18
743	Chelate Coordination Strengthens Surface Termination to Attain Highâ€Efficiency Perc Cells. Small Methods, 2022, 6, .	vvskite Solar	4.6	8
744	Fullereneâ€Based Inverted Perovskite Solar Cell: A Key to Achieve Promising, Stable, an Photovoltaics. Advanced Materials Interfaces, 2022, 9, .	d Efficient	1.9	12
745	Competition of Iodide/Bromide Ions in the Formation of Methylammonium Lead Halide Solvents. Journal of Physical Chemistry C, 2022, 126, 17656-17662.	in Different	1.5	1
746	Hard and Soft Acid and Base (HSAB) Engineering for Efficient and Stable Snâ€₽b Perov Advanced Energy Materials, 2022, 12, .	skite Solar Cells.	10.2	26
747	Surface Characterization of the Solutionâ€Processed Organic–Inorganic Hybrid Pero Small, 0, , 2204271.	vskite Thin Films.	5.2	1

#	Article	IF	CITATIONS
748	Opportunities and Challenges for Perovskite Solar Cells Based on Vacuum Thermal Evaporation. Advanced Materials Technologies, 2023, 8, .	3.0	10
749	A Thiourea Competitive Crystallization Strategy for FAâ€Based Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, .	7.8	25
750	Cuttingâ€Edge Studies Toward Commercialization of Large Area Solutionâ€Processed Perovskite Solar Cells. Advanced Materials Technologies, 2023, 8, .	3.0	4
751	Mitigation of Openâ€Circuit Voltage Losses in Perovskite Solar Cells Processed over Micrometerâ€Sizedâ€Textured Si Substrates. Advanced Functional Materials, 2023, 33, .	7.8	5
752	Construction of a Highly Anisotropic Supramolecular Assembly Assisted by a Dimensional Confinement Space: Toward Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 52262-52269.	4.0	0
753	Defect engineering of metal halide perovskite optoelectronic devices. Progress in Quantum Electronics, 2022, 86, 100438.	3.5	4
754	Initializing film homogeneity to retard phase segregation for stable perovskite solar cells. Science, 2022, 378, 747-754.	6.0	81
755	Solid–solid chemical bonding featuring targeted defect passivation for efficient perovskite photovoltaics. Energy and Environmental Science, 2023, 16, 178-189.	15.6	19
756	Over 25% efficiency and stable bromine-free RbCsFAMA-based quadruple cation perovskite solar cells enabled by an aromatic zwitterion. Journal of Materials Chemistry A, 2023, 11, 1170-1179.	5.2	12
757	The race between complicated multiple cation/anion compositions and stabilization of FAPbI ₃ for halide perovskite solar cells. Journal of Materials Chemistry C, 2023, 11, 2449-2468.	2.7	3
758	Towards bio-safe and easily redispersible bare ZnO quantum dots engineered via organometallic wet-chemical processing. Chemical Engineering Journal, 2023, 455, 140497.	6.6	7
759	Plantâ€Derived <scp>l</scp> â€Theanine for Ultraviolet/Ozone Resistant Perovskite Photovoltaics. Advanced Energy Materials, 2023, 13, .	10.2	17
760	Cinnamate-Functionalized Cellulose Nanocrystals as Interfacial Layers for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2023, 15, 1348-1357.	4.0	3
761	Efficient Inverted Perovskite Solar Cells via Improved Sequential Deposition. Advanced Materials, 2023, 35, .	11.1	15
762	Regulating film crystallization kinetics with thiourea additive in Cs ₂ AgBiBr ₆ solar cells. Journal Physics D: Applied Physics, 2023, 56, 075501.	1.3	4
763	Addressing the Role of 2D Domains in Highâ€Dimensionality Ruddlesden–Popper Perovskite for Solar Cells. Solar Rrl, 0, , 2200860.	3.1	0
764	Synergistic Effect of Crystallization Control and Defect Passivation Induced by a Multifunctional Primidone Additive for High-Performance Perovskite Solar Cells. Energy & Fuels, 2023, 37, 675-683.	2.5	5
765	Effective Interfaces between Fullerene Derivatives and CH ₃ NH ₃ PbI ₃ to Improve Perovskite Solar Cell Performance. Journal of Physical Chemistry C, 2023, 127, 41-51.	1.5	0

#	Article	IF	CITATIONS
766	Open-circuit voltage loss in perovskite quantum dot solar cells. Nanoscale, 2023, 15, 3713-3729.	2.8	6
767	Naphthalene-imide Self-assembled Monolayers as a Surface Modification of ITO for Improved Thermal Stability of Perovskite Solar Cells. ACS Applied Energy Materials, 2023, 6, 667-677.	2.5	4
768	Dimethyl sulfoxide: a promising solvent for inorganic CsPbI3 perovskite. Science Bulletin, 2023, 68, 192-202.	4.3	12
769	Green antisolvent-mediators stabilize perovskites for efficient NiOx-based inverted solar cells with Voc approaching 1.2ÂV. Chemical Engineering Journal, 2023, 457, 141204.	6.6	13
770	Heterocyclic amino acid molecule as a multifunctional interfacial bridge for improving the efficiency and stability of quadruple cation perovskite solar cells. Nano Energy, 2023, 107, 108154.	8.2	23
771	Surface Passivation of Lead Halide Perovskite Solar Cells by a Bifacial Donorâ^ï€â€"Donor Molecule. ACS Applied Materials & Interfaces, 2023, 15, 6708-6715.	4.0	4
772	Thermalâ€Induced Ceriumâ€Doped Perovskite Solar Cells with a Fill Factor Exceeding 81%. Solar Rrl, 2023, 7, .	3.1	5
773	Ultrafast fabrication of cavity-controlled perovskite-crystallites by a spin-coating method for microlasers. Journal of Materials Chemistry C, 2023, 11, 3030-3038.	2.7	2
774	Surfactant effects on electrochemically durable lead halide perovskite electro-catalysts. Dalton Transactions, 2023, 52, 5956-5968.	1.6	2
775	De-doping buried interface in p-i-n perovskite solar cells by utilizing compositional heterogeneity in depth. Nano Energy, 2023, 108, 108250.	8.2	6
776	3D printing and solar cell fabrication methods: A review of challenges, opportunities, and future prospects. Results in Optics, 2023, 11, 100385.	0.9	6
777	Insight into structure defects in high-performance perovskite solar cells. Journal of Power Sources, 2023, 570, 233011.	4.0	4
778	Enhanced performance of inverted hybrid perovskite solar cells with interfacial passivation filler. Materials Today Sustainability, 2023, 22, 100381.	1.9	0
779	Solvent engineering towards scalable fabrication of high-quality perovskite films for efficient solar modules. Journal of Energy Chemistry, 2023, 80, 689-710.	7.1	16
780	Performance enhancement of perovskite/porous-Si photodetectors by reducing the dark current with concomitant use of graphene quantum dots in the active layer and bathocuproine on the back surface. Journal of Alloys and Compounds, 2023, 948, 169716.	2.8	1
781	Additive engineering for highly efficient and stable perovskite solar cells. Applied Physics Reviews, 2023, 10, .	5.5	13
782	Liquidâ€6tate Dithiocarbonateâ€Based Polymeric Additives with Monodispersity Rendering Perovskite Solar Cells with Exceptionally High Certified Photocurrent and Fill Factor. Advanced Energy Materials, 2023, 13, .	10.2	13
783	Multifunctional Green Solvent for Efficient Perovskite Solar Cells. Electronic Materials Letters, 2023, 19, 462-470.	1.0	4

ATION P

#	Article	IF	Citations
784	High performance perovskite luminescent devices on Si substrates by controlling quasi-two-dimensional phases. Semiconductor Science and Technology, 2023, 38, 055004.	1.0	0
785	Fine-tuning chemical passivation over photovoltaic perovskites by varying the symmetry of bidentate acceptor in D–A molecules. Journal of Materials Chemistry A, 2023, 11, 8299-8307.	5.2	9
786	High Performance Inverted RbCsFAPbI ₃ Perovskite Solar Cells Based on Interface Engineering and Defects Passivation. Small, 2023, 19, .	5.2	3
787	Intermediate Phase Engineering with 2,2â€Azodi(2â€Methylbutyronitrile)Âfor Efficient and Stable Perovskite Solar Cells. Advanced Materials, 2023, 35, .	11.1	18
788	Tailored Cysteineâ€Derived Molecular Structures toward Efficient and Stable Inorganic Perovskite Solar Cells. Advanced Materials, 2023, 35, .	11.1	25
789	Surface Defect Suppression for High Color Purity Lightâ€Emitting Diode of Freeâ€Standing Singleâ€Crystal Perovskite Film. Advanced Functional Materials, 2023, 33, .	7.8	4
790	Enhanced Performance and Stability of Fully Printed Perovskite Solar Cells and Modules by Ternary Additives under High Humidity. Energy & Fuels, 2023, 37, 6049-6061.	2.5	4
791	Enhanced performance in perovskites films by defect engineering and charge carrier transportation via pulsed laser doping of 2D MoS2. Sustainable Materials and Technologies, 2023, 36, e00622.	1.7	1
792	Lead halide perovskite sensitized WSe2 photodiodes with ultrahigh open circuit voltages. ELight, 2023, 3, .	11.9	13
793	Br-I ordered CsPbBr2I perovskite single crystal toward extremely high mobility. CheM, 2023, 9, 1929-1944.	5.8	3
794	Identification and Mitigation of Transient Phenomena That Complicate the Characterization of Halide Perovskite Photodetectors. ACS Applied Energy Materials, 2023, 6, 10233-10242.	2.5	3
795	"Metal Halide Perovskite Solar Modules: The Challenge of Upscaling and Commercializing This Technology― , 2023, , 297-321.		0
808	Green solvents, materials, and lead-free semiconductors for sustainable fabrication of perovskite solar cells. RSC Advances, 2023, 13, 18165-18206.	1.7	7
820	Synergy of 3D and 2D Perovskites for Durable, Efficient Solar Cells and Beyond. Chemical Reviews, 2023, 123, 9565-9652.	23.0	21
823	Organic-inorganic hybrid perovskite material and its application for transistor. Materials Chemistry Frontiers, 0, , .	3.2	0
827	Circular economy for perovskite solar cells – drivers, progress and challenges. Energy and Environmental Science, 2023, 16, 3711-3733.	15.6	4
828	Long-term operating stability in perovskite photovoltaics. Nature Reviews Materials, 2023, 8, 569-586.	23.3	31
838	Optimizing Performance of Mixed Halide Perovskite MA _{0.61} FA _{0.37} Cs _{0.02} PbI _{2.88} Br _{0.12} based Solar Cells through Thickness and Defect Density: A Simulation Study. , 2023, , .		0

#	Article	IF	CITATIONS
852	Cross-linking strategies for efficient and highly stable perovskite solar cells. Journal of Materials Chemistry C, 0, , .	2.7	0
861	Templated-Seeding Renders Tailored Crystallization in Perovskite Photovoltaics: Path towards Future Efficient Modules. Journal of Materials Chemistry A, 0, , .	5.2	0
872	Metal Halide Perovskite Solar Modules: Manufacturing and Performance. , 2024, , 309-323.		0