Shengzhong Liu

List of Publications by Year in Descending Order

242 papers	15,013 citations	64 h-index	116 g-index
261 ext. papers	19,002 ext. citations	12.9 avg, IF	7.25 L-index

#	Paper	IF	Citations
242	Perovskite Quantum Dots in Solar Cells.. *Advanced Science*, **2022**, e2104577	13.6	8
241	Highly Efficient and Stable CsPbTh (Th = I, Br, Cl) Perovskite Solar Cells by Combinational Passivation Strategy.. *Advanced Science*, **2022**, e2105103	13.6	4
240	Enhanced sensitivity of hydrogenated □Fe2O3 nanoplates having {001} facets and the gas sensing mechanism. *Journal of Materials Science: Materials in Electronics*, **2022**, 33, 3617	2.1	
239	2D-CN encapsulated perovskite nanocrystals for efficient photo-assisted thermocatalytic CO reduction.. *Chemical Science*, **2022**, 13, 1335-1341	9.4	7
238	Recent Developments in Upscalable Printing Techniques for Perovskite Solar Cells.. *Advanced Science*, **2022**, e2200308	13.6	4
237	Ionic-Liquid-Perovskite Capping Layer for Stable 24.33%-Efficient Solar Cell. *Advanced Energy Materials*, **2022**, 12, 2103491	21.8	19
236	Record-Efficiency Flexible Perovskite Solar Cells Enabled by Multifunctional Organic Ions Interface Passivation.. *Advanced Materials*, **2022**, e2201681	24	39
235	Recent Progress of Electrode Materials for Flexible Perovskite Solar Cells.. *Nano-Micro Letters*, **2022**, 14, 117	19.5	10
234	Ionic liquid treatment for highest-efficiency ambient printed stable all-inorganic CsPbI perovskite solar cells.. *Advanced Materials*, **2021**, e2106750	24	19
233	Unraveling Passivation Mechanism of Imidazolium-Based Ionic Liquids on Inorganic Perovskite to Achieve Near-Record-Efficiency CsPbIBr Solar Cells. *Nano-Micro Letters*, **2021**, 14, 7	19.5	11
232	Effective surface passivation with 4-bromo-benzonitrile to enhance the performance of perovskite solar cells. *Journal of Materials Chemistry C*, **2021**, 9, 17089-17098	7.1	0
231	Flexible Diodes/Transistors Based on Tunable p-n-Type Semiconductivity in Graphene/Mn-Co-Ni-O Nanocomposites. *Research*, **2021**, 2021, 9802795	7.8	1
230	N-Type Surface Design for p-Type CZTSSe Thin Film to Attain High Efficiency. *Advanced Materials*, **2021**, 33, e2104330	24	10
229	Graphene□MCN pn-junction for ultrafast flexible ultraviolet detector. *MRS Communications*, **2021**, 11, 862	2.7	
228	Centimeter-Sized Molecular Perovskite Crystal for Efficient X-Ray Detection. *Advanced Functional Materials*, **2021**, 31, 2100691	15.6	11
227	Photogenerated Charge Separation between Polar Crystal Facets Under a Spontaneous Electric Field. *Advanced Optical Materials*, **2021**, 9, 2001898	8.1	2
226	Intermolecular Interaction Control Enables Co-optimization of Efficiency, Deformability, Mechanical and Thermal Stability of Stretchable Organic Solar Cells. *Small*, **2021**, 17, e2007011	11	9

225	Film Formation Control for High Performance Dion□acobson 2D Perovskite Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2002733	21.8	20
224	In-Situ Hot Oxygen Cleansing and Passivation for All-Inorganic Perovskite Solar Cells Deposited in Ambient to Breakthrough 19% Efficiency. *Advanced Functional Materials*, **2021**, 31, 2101568	15.6	17
223	Aqueous MXene/PH1000 Hybrid Inks for Inkjet-Printing Micro-Supercapacitors with Unprecedented Volumetric Capacitance and Modular Self-Powered Microelectronics. *Advanced Energy Materials*, **2021**, 11, 2100746	21.8	18
222	Identifying the Electrostatic and Entropy-Related Mechanisms for Charge-Transfer Exciton Dissociation at Doped Organic Heterojunctions. *Advanced Functional Materials*, **2021**, 31, 2101892	15.6	10
221	Versatile Bidentate Chemical Passivation on a Cesium Lead Inorganic Perovskite for Efficient and Stable Photovoltaics. *ACS Applied Energy Materials*, **2021**, 4, 4021-4028	6.1	6
220	Enhanced Efficiency of Inorganic CsPbI3□Brx Perovskite Solar Cell via Self-Regulation of Antisite Defects. *Advanced Energy Materials*, **2021**, 11, 2100403	21.8	18
219	40.1% Record Low-Light Solar-Cell Efficiency by Holistic Trap-Passivation using Micrometer-Thick Perovskite Film. *Advanced Materials*, **2021**, 33, e2100770	24	39
218	Organic Solar Cells: Intermolecular Interaction Control Enables Co-optimization of Efficiency, Deformability, Mechanical and Thermal Stability of Stretchable Organic Solar Cells (Small 21/2021). *Small*, **2021**, 17, 2170100	11	0
217	Effective Phase-Alignment for 2D Halide Perovskites Incorporating Symmetric Diammonium Ion for Photovoltaics. *Advanced Science*, **2021**, 8, e2001433	13.6	9
216	Stable 2D Alternating Cation Perovskite Solar Cells with Power Conversion Efficiency >19% via Solvent Engineering. *Solar Rrl*, **2021**, 5, 2100286	7.1	14
215	Antisolvent- and Annealing-Free Deposition for Highly Stable Efficient Perovskite Solar Cells via Modified ZnO. *Advanced Science*, **2021**, 8, 2002860	13.6	15
214	Semitransparent Flexible Perovskite Solar Cells for Potential Greenhouse Applications. *Solar Rrl*, **2021**, 5, 2100264	7.1	6
213	Samarium-Doped Nickel Oxide for Superior Inverted Perovskite Solar Cells: Insight into Doping Effect for Electronic Applications. *Advanced Functional Materials*, **2021**, 31, 2102452	15.6	11
212	Enhanced Efficiency and Stability of All-Inorganic CsPbI Br Perovskite Solar Cells by Organic and Ionic Mixed Passivation. *Advanced Science*, **2021**, 8, e2101367	13.6	27
211	Micro-Supercapacitors: Aqueous MXene/PH1000 Hybrid Inks for Inkjet-Printing Micro-Supercapacitors with Unprecedented Volumetric Capacitance and Modular Self-Powered Microelectronics (Adv. Energy Mater. 23/2021). *Advanced Energy Materials*, **2021**, 11, 2170088	21.8	0
210	Deep-Level Transient Spectroscopy for Effective Passivator Selection in Perovskite Solar Cells to Attain High Efficiency over 23. *ChemSusChem*, **2021**, 14, 3182-3189	8.3	8
209	Highly Luminescent Metal-Free Perovskite Single Crystal for Biocompatible X-Ray Detector to Attain Highest Sensitivity. *Advanced Materials*, **2021**, 33, e2102190	24	11
208	Single-Atom Doping and High-Valence State for Synergistic Enhancement of NiO Electrocatalytic Water Oxidation. *Small*, **2021**, 17, e2102448	11	7

207	Multifunctional Enhancement for Highly Stable and Efficient Perovskite Solar Cells. *Advanced Functional Materials*, **2021**, 31, 2005776	15.6	111
206	High-Efficiency Perovskite Solar Cells with Imidazolium-Based Ionic Liquid for Surface Passivation and Charge Transport. *Angewandte Chemie - International Edition*, **2021**, 60, 4238-4244	16.4	98
205	Recent advances in resistive random access memory based on lead halide perovskite. *Informaā Materiāy*, **2021**, 3, 293-315	23.1	29
204	Breaking Platinum Nanoparticles to Single-Atomic Pt-C Co-catalysts for Enhanced Solar-to-Hydrogen Conversion. *Angewandte Chemie - International Edition*, **2021**, 60, 2541-2547	16.4	22
203	Synergistically Enhanced Amplified Spontaneous Emission by Cd Doping and Cl-Assisted Crystallization. *Advanced Optical Materials*, **2021**, 9, 2001825	8.1	0
202	Breaking Platinum Nanoparticles to Single-Atomic Pt-C4 Co-catalysts for Enhanced Solar-to-Hydrogen Conversion. *Angewandte Chemie*, **2021**, 133, 2571-2577	3.6	3
201	High-Efficiency Perovskite Solar Cells with Imidazolium-Based Ionic Liquid for Surface Passivation and Charge Transport. *Angewandte Chemie*, **2021**, 133, 4284-4290	3.6	8
200	High Density and Unit Activity Integrated in Amorphous Catalysts for Electrochemical Water Splitting. *Small Structures*, **2021**, 2, 2000096	8.7	42
199	Nanoconfined Crystallization for High-Efficiency Inorganic Perovskite Solar Cells. *Small Science*, **2021**, 1, 2000054		11
198	Stability of the CsPbI3 perovskite: from fundamentals to improvements. *Journal of Materials Chemistry A*, **2021**, 9, 11124-11144	13	26
197	High-efficiency and thermal/moisture stable CsPbI2.84Br0.16 inorganic perovskite solar cells enabled by a multifunctional cesium trimethylacetate organic additive. *Journal of Materials Chemistry A*, **2021**, 9, 4922-4932	13	4
196	High-throughput large-area vacuum deposition for high-performance formamidine-based perovskite solar cells. *Energy and Environmental Science*, **2021**, 14, 3035-3043	35.4	44
195	Triple-Cation and Mixed-Halide Perovskite Single Crystal for High-Performance X-ray Imaging. *Advanced Materials*, **2021**, 33, e2006010	24	64
194	Dual-Interface Modification of CsPbIBr2 Solar Cells with Improved Efficiency and Stability. *Advanced Materials Interfaces*, **2021**, 8, 2001994	4.6	6
193	Inch-sized high-quality perovskite single crystals by suppressing phase segregation for light-powered integrated circuits. *Science Advances*, **2021**, 7,	14.3	26
192	Defect Engineering in Earth-Abundant Cu2ZnSn(S,Se)4 Photovoltaic Materials via Ga3+-Doping for over 12% Efficient Solar Cells. *Advanced Functional Materials*, **2021**, 31, 2010325	15.6	28
191	Multitasking MXene Inks Enable High-Performance Printable Microelectrochemical Energy Storage Devices for All-Flexible Self-Powered Integrated Systems. *Advanced Materials*, **2021**, 33, e2005449	24	64
190	Two-Dimensional (C6H5C2H4NH3)2PbI4 Perovskite Single Crystal Resistive Switching Memory Devices. *IEEE Electron Device Letters*, **2021**, 42, 327-330	4.4	3

189	-Phenylenediammonium as a New Spacer for Dion-Jacobson Two-Dimensional Perovskites. *Journal of the American Chemical Society*, **2021**, 143, 12063-12073	16.4	18
188	p-Type Carbon Dots for Effective Surface Optimization for Near-Record-Efficiency CsPbI Br Solar Cells. *Small*, **2021**, 17, e2102272	11	10
187	Secondary crystallization strategy for highly efficient inorganic CsPbI2Br perovskite solar cells with efficiency approaching 17%. *Journal of Energy Chemistry*, **2021**, 63, 558-558	12	7
186	A Special Additive Enables All Cations and Anions Passivation for Stable Perovskite Solar Cells with Efficiency over 23. *Nano-Micro Letters*, **2021**, 13, 169	19.5	29
185	Pyrenesulfonic Acid Sodium Salt for Effective Bottom-Surface Passivation to Attain High Performance of Perovskite Solar Cells. *Solar Rrl*, **2021**, 5, 2100416	7.1	2
184	Defects in CsPbX Perovskite: From Understanding to Effective Manipulation for High-Performance Solar Cells.. *Small Methods*, **2021**, 5, e2100725	12.8	11
183	Molten-Salt-Assisted CsPbI Perovskite Crystallization for Nearly 20%-Efficiency Solar Cells. *Advanced Materials*, **2021**, 33, e2103770	24	21
182	Rational Surface-Defect Control via Designed Passivation for High-Efficiency Inorganic Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2021**, 60, 23164-23170	16.4	50
181	Interfaces and Interfacial Layers in Inorganic Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2021**, 60, 26440-26453	16.4	16
180	Rational Surface-Defect Control via Designed Passivation for High-Efficiency Inorganic Perovskite Solar Cells. *Angewandte Chemie*, **2021**, 133, 23348	3.6	16
179	IrO @In O Heterojunction from Individually Crystallized Oxides for Weak-Light-Promoted Electrocatalytic Water Oxidation. *Angewandte Chemie - International Edition*, **2021**, 60, 26790-26797	16.4	12
178	Dual Passivation of Perovskite and SnO for High-Efficiency MAPbI Perovskite Solar Cells. *Advanced Science*, **2021**, 8, 2001466	13.6	25
177	A review on the stability of inorganic metal halide perovskites: challenges and opportunities for stable solar cells. *Energy and Environmental Science*, **2021**, 14, 2090-2113	35.4	63
176	Increasing gas sensitivity of Co3O4 octahedra by tuning Co-Co3O4 (111) surface structure and sensing mechanism of 3-coordinated Co atom as an active center. *Journal of Materials Science: Materials in Electronics*, **2020**, 31, 8852-8864	2.1	2
175	All-inorganic 0D/3D Cs4Pb(IBr)6/CsPbI3□Brx mixed-dimensional perovskite solar cells with enhanced efficiency and stability. *Journal of Materials Chemistry C*, **2020**, 8, 6977-6987	7.1	14
174	Centimeter-Sized Single Crystal of Two-Dimensional Halide Perovskites Incorporating Straight-Chain Symmetric Diammonium Ion for X-Ray Detection. *Angewandte Chemie - International Edition*, **2020**, 59, 14896-14902	16.4	58
173	Improved Interface Contact for Highly Stable All-Inorganic CsPbI2Br Planar Perovskite Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 5173-5181	6.1	12
172	Nucleation-controlled growth of superior lead-free perovskite CsBiI single-crystals for high-performance X-ray detection. *Nature Communications*, **2020**, 11, 2304	17.4	139

171	Solvent Engineering Using a Volatile Solid for Highly Efficient and Stable Perovskite Solar Cells. *Advanced Science*, **2020**, 7, 1903250	13.6	29
170	Efficient perovskite solar cells via surface passivation by a multifunctional small organic ionic compound. *Journal of Materials Chemistry A*, **2020**, 8, 8313-8322	13	41
169	Unveiling the Effects of Hydrolysis-Derived DMAI/DMAPbI Intermediate Compound on the Performance of CsPbI Solar Cells. *Advanced Science*, **2020**, 7, 1902868	13.6	54
168	Direct Growth of Pyramid-Textured Perovskite Single Crystals: A New Strategy for Enhanced Optoelectronic Performance. *Advanced Functional Materials*, **2020**, 30, 2002742	15.6	7
167	Low-Temperature Crystallization of CsPbIBr2 Perovskite for High Performance Solar Cells. *Solar Rrl*, **2020**, 4, 2000254	7.1	14
166	Large Lead-Free Perovskite Single Crystal for High-Performance Coplanar X-Ray Imaging Applications. *Advanced Optical Materials*, **2020**, 8, 2000814	8.1	36
165	Recent progress of two-dimensional lead halide perovskite single crystals: Crystal growth, physical properties, and device applications. *EcoMat*, **2020**, 2, e12036	9.4	36
164	Deep-Ultraviolet Photoactivation-Assisted Contact Engineering Toward High-Efficiency and Stable All-Inorganic CsPbI2Br Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 2000001	7.1	25
163	Controlled n-Doping in Air-Stable CsPbI2Br Perovskite Solar Cells with a Record Efficiency of 16.79%. *Advanced Functional Materials*, **2020**, 30, 1909972	15.6	173
162	Room-Temperature Partial Conversion of □FAPbI3 Perovskite Phase via PbI2 Solvation Enables High-Performance Solar Cells. *Advanced Functional Materials*, **2020**, 30, 1907442	15.6	27
161	Superior Textured Film and Process Tolerance Enabled by Intermediate-State Engineering for High-Efficiency Perovskite Solar Cells. *Advanced Science*, **2020**, 7, 1903009	13.6	16
160	Extrinsic Ion Distribution Induced Field Effect in CsPbIBr Perovskite Solar Cells. *Small*, **2020**, 16, e1907283	11	32
159	27%-Efficiency Four-Terminal Perovskite/Silicon Tandem Solar Cells by Sandwiched Gold Nanomesh. *Advanced Functional Materials*, **2020**, 30, 1908298	15.6	62
158	Ambient blade coating of mixed cation, mixed halide perovskites without dripping: in situ investigation and highly efficient solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 1095-1104	13	49
157	Chlorine-modified SnO2 electron transport layer for high-efficiency perovskite solar cells. *Informa□□Materi□y*, **2020**, 2, 401-408	23.1	30
156	High-Pressure Nitrogen-Extraction and Effective Passivation to Attain Highest Large-Area Perovskite Solar Module Efficiency. *Advanced Materials*, **2020**, 32, e2004979	24	65
155	Polymeric room-temperature molten salt as a multifunctional additive toward highly efficient and stable inverted planar perovskite solar cells. *Energy and Environmental Science*, **2020**, 13, 5068-5079	35.4	61
154	2D Perovskite Single Crystals with Suppressed Ion Migration for High-Performance Planar-Type Photodetectors. *Small*, **2020**, 16, e2003145	11	30

153	Morphology Evolution of a High-Efficiency PSC by Modulating the Vapor Process. *Small*, **2020**, 16, e2003582	13	11
152	Surface Engineering to Reduce the Interfacial Resistance for Enhanced Photocatalytic Water Oxidation. *ACS Catalysis*, **2020**, 10, 8742-8750	13.1	15
151	Defect suppression in multinary chalcogenide photovoltaic materials derived from kesterite: progress and outlook. *Journal of Materials Chemistry A*, **2020**, 8, 24920-24942	13	18
150	2D Cs2PbI2Cl2 Nanosheets for Holistic Passivation of Inorganic CsPbI2Br Perovskite Solar Cells for Improved Efficiency and Stability. *Advanced Energy Materials*, **2020**, 10, 2002882	21.8	58
149	Ultrastable Perovskite-Zeolite Composite Enabled by Encapsulation and In Situ Passivation. *Angewandte Chemie - International Edition*, **2020**, 59, 23100-23106	16.4	32
148	Metal-Free Halide Perovskite Single Crystals with Very Long Charge Lifetimes for Efficient X-ray Imaging. *Advanced Materials*, **2020**, 32, e2003353	24	33
147	Printable CsPbI Perovskite Solar Cells with PCE of 19% via an Additive Strategy. *Advanced Materials*, **2020**, 32, e2001243	24	88
146	Ultrastable Perovskite□Zeolite Composite Enabled by Encapsulation and In Situ Passivation. *Angewandte Chemie*, **2020**, 132, 23300-23306	3.6	6
145	Verringerung schädlicher Defekte für leistungsstarke Metallhalogenid-Perowskit-Solarzellen. *Angewandte Chemie*, **2020**, 132, 6740-6764	3.6	7
144	Reducing Detrimental Defects for High-Performance Metal Halide Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 6676-6698	16.4	171
143	Precursor Engineering for Ambient-Compatible Antisolvent-Free Fabrication of High-Efficiency CsPbI2Br Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 2000691	21.8	68
142	Highly stable and efficient perovskite solar cells produced via high-boiling point solvents and additive engineering synergistically. *Science China Chemistry*, **2020**, 63, 818-826	7.9	7
141	Centimeter-Sized Single Crystal of Two-Dimensional Halide Perovskites Incorporating Straight-Chain Symmetric Diammonium Ion for X-Ray Detection. *Angewandte Chemie*, **2020**, 132, 15006-15012	3.6	7
140	A Novel Anion Doping for Stable CsPbI2Br Perovskite Solar Cells with an Efficiency of 15.56% and an Open Circuit Voltage of 1.30 V. *Advanced Energy Materials*, **2019**, 9, 1902279	21.8	105
139	Interfacial Engineering at the 2D/3D Heterojunction for High-Performance Perovskite Solar Cells. *Nano Letters*, **2019**, 19, 7181-7190	11.5	110
138	A straightforward chemical approach for excellent InS electron transport layer for high-efficiency perovskite solar cells.. *RSC Advances*, **2019**, 9, 884-890	3.7	17
137	NbF5: A Novel □Phase Stabilizer for FA-Based Perovskite Solar Cells with High Efficiency. *Advanced Functional Materials*, **2019**, 29, 1807850	15.6	97
136	Perovskite-a Perfect Top Cell for Tandem Devices to Break the S-Q Limit. *Advanced Science*, **2019**, 6, 1801764	13.1	52

135	Impact of the Solvation State of Lead Iodide on Its Two-Step Conversion to MAPbI3: An In Situ Investigation. *Advanced Functional Materials*, **2019**, 29, 1807544	15.6	36
134	Two-dimensional (PEA)2PbBr4 perovskite single crystals for a high performance UV-detector. *Journal of Materials Chemistry C*, **2019**, 7, 1584-1591	7.1	81
133	Chemical Bath Deposition of Co-Doped TiO2 Electron Transport Layer for Hysteresis-Suppressed High-Efficiency Planar Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1900176	7.1	28
132	Single-crystalline lead halide perovskite wafers for high performance photodetectors. *Journal of Materials Chemistry C*, **2019**, 7, 8357-8363	7.1	19
131	Single atom tungsten doped ultrathin Ni(OH) for enhanced electrocatalytic water oxidation. *Nature Communications*, **2019**, 10, 2149	17.4	210
130	Hydrogenated nanotubes/nanowires assembled from TiO2 nanoflakes with exposed {111} facets: excellent photo-catalytic CO2 reduction activity and charge separation mechanism between (111) and () polar surfaces. *Journal of Materials Chemistry A*, **2019**, 7, 14761-14775	13	26
129	Double-Site Ni V Nanosheet for Best Alkaline HER Performance at High Current Density >500 mA cm2. *Advanced Materials Interfaces*, **2019**, 6, 1900308	4.6	10
128	Novel Surface Passivation for Stable FA0.85MA0.15PbI3 Perovskite Solar Cells with 21.6% Efficiency. *Solar Rrl*, **2019**, 3, 1900072	7.1	49
127	Interface-Modification-Induced Gradient Energy Band for Highly Efficient CsPbIBr2 Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803785	21.8	138
126	Low-Temperature Solution-Processed ZnO Electron Transport Layer for Highly Efficient and Stable Planar Perovskite Solar Cells with Efficiency Over 20%. *Solar Rrl*, **2019**, 3, 1900096	7.1	52
125	Water-Soluble Triazolium Ionic-Liquid-Induced Surface Self-Assembly to Enhance the Stability and Efficiency of Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1900417	15.6	102
124	Nitrogen-doped graphene quantum dots for 80% photoluminescence quantum yield for inorganic CsPbI3 perovskite solar cells with efficiency beyond 16%. *Journal of Materials Chemistry A*, **2019**, 7, 5740-5747	13	73
123	Highly Efficient and Stable Planar Perovskite Solar Cells with Modulated Diffusion Passivation Toward High Power Conversion Efficiency and Ultrahigh Fill Factor. *Solar Rrl*, **2019**, 3, 1900293	7.1	71
122	Metal Cations in Efficient Perovskite Solar Cells: Progress and Perspective. *Advanced Materials*, **2019**, 31, e1902037	24	48
121	Additive Engineering to Grow Micron-Sized Grains for Stable High Efficiency Perovskite Solar Cells. *Advanced Science*, **2019**, 6, 1901241	13.6	60
120	A High Mobility Conjugated Polymer Enables Air and Thermally Stable CsPbI2Br Perovskite Solar Cells with an Efficiency Exceeding 15%. *Advanced Materials Technologies*, **2019**, 4, 1900311	6.8	39
119	Simultaneous Cesium and Acetate Coalloying Improves Efficiency and Stability of FA0.85MA0.15PbI3 Perovskite Solar Cell with an Efficiency of 21.95%. *Solar Rrl*, **2019**, 3, 1900220	7.1	50
118	Compositional Control in 2D Perovskites with Alternating Cations in the Interlayer Space for Photovoltaics with Efficiency over 18. *Advanced Materials*, **2019**, 31, e1903848	24	112

117	Fine Multi-Phase Alignments in 2D Perovskite Solar Cells with Efficiency over 17% via Slow Post-Annealing. *Advanced Materials*, **2019**, 31, e1903889	24	106
116	Ruddlesden Popper 2D Component to Stabilize CsPbI3 Perovskite Phase for Stable and Efficient Photovoltaics. *Advanced Energy Materials*, **2019**, 9, 1902529	21.8	74
115	Europium and Acetate Co-doping Strategy for Developing Stable and Efficient CsPbI Br Perovskite Solar Cells. *Small*, **2019**, 15, e1904387	11	61
114	Photoassisted Hydrothermal Synthesis of IrOx TiO2 for Enhanced Water Oxidation. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 17941-17949	8.3	14
113	Influence of Film Quality on Power Conversion Efficiency in Perovskite Solar Cells. *Coatings*, **2019**, 9, 622	2.9	5
112	Pseudohalide (SCN -doped CsPbI3 for high-performance solar cells. *Journal of Materials Chemistry C*, **2019**, 7, 13736-13742	7.1	33
111	The humidity-insensitive fabrication of efficient CsPbI3 solar cells in ambient air. *Journal of Materials Chemistry A*, **2019**, 7, 26776-26784	13	35
110	Record-Low-Threshold Lasers Based on Atomically Smooth Triangular Nanoplatelet Perovskite. *Advanced Functional Materials*, **2019**, 29, 1805553	15.6	37
109	PbTiO3 as Electron-Selective Layer for High-Efficiency Perovskite Solar Cells: Enhanced Electron Extraction via Tunable Ferroelectric Polarization. *Advanced Functional Materials*, **2019**, 29, 1806427	15.6	16
108	Room-Temperature Surface Sulfurization for High-Performance Kesterite CZTSe Solar Cells. *Solar Rrl*, **2019**, 3, 1800236	7.1	17
107	Nanodevices: Record-Low-Threshold Lasers Based on Atomically Smooth Triangular Nanoplatelet Perovskite (Adv. Funct. Mater. 2/2019). *Advanced Functional Materials*, **2019**, 29, 1970012	15.6	1
106	Flexible Perowskit-Solarzellen: Herstellung und Anwendungen. *Angewandte Chemie*, **2019**, 131, 4512-4530	3.6	21
105	Recent Advances in Flexible Perovskite Solar Cells: Fabrication and Applications. *Angewandte Chemie - International Edition*, **2019**, 58, 4466-4483	16.4	183
104	Single-crystalline perovskite wafers with a Cr blocking layer for broad and stable light detection in a harsh environment.. *RSC Advances*, **2018**, 8, 14848-14853	3.7	4
103	g-C3N4 Loading Black Phosphorus Quantum Dot for Efficient and Stable Photocatalytic H2 Generation under Visible Light. *Advanced Functional Materials*, **2018**, 28, 1800668	15.6	192
102	Phase Transition Control for High Performance Ruddlesden-Popper Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1707166	24	192
101	Low-temperature and facile solution-processed two-dimensional TiS2 as an effective electron transport layer for UV-stable planar perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 9132-9138	13	56
100	3D 2D 0D Interface Profiling for Record Efficiency All-Inorganic CsPbBrI2 Perovskite Solar Cells with Superior Stability. *Advanced Energy Materials*, **2018**, 8, 1703246	21.8	256

99	Shape- and Trap-Controlled Nanocrystals for Giant-Performance Improvement of All-Inorganic Perovskite Photodetectors. *Particle and Particle Systems Characterization*, **2018**, 35, 1700363	3.1	23
98	Alkali Metal Doping for Improved CHNHPbI Perovskite Solar Cells. *Advanced Science*, **2018**, 5, 1700131	13.6	160
97	π-Graphene Crosslinked CsPbI3 Quantum Dots for High Efficiency Solar Cells with Much Improved Stability. *Advanced Energy Materials*, **2018**, 8, 1800007	21.8	167
96	High-Performance Planar Perovskite Solar Cells Using Low Temperature, Solution-Combustion-Based Nickel Oxide Hole Transporting Layer with Efficiency Exceeding 20%. *Advanced Energy Materials*, **2018**, 8, 1703432	21.8	209
95	Stable High-Performance Perovskite Solar Cells via Grain Boundary Passivation. *Advanced Materials*, **2018**, 30, e1706576	24	505
94	Polymer Doping for High-Efficiency Perovskite Solar Cells with Improved Moisture Stability. *Advanced Energy Materials*, **2018**, 8, 1701757	21.8	233
93	Precursor Engineering for All-Inorganic CsPbI2Br Perovskite Solar Cells with 14.78% Efficiency. *Advanced Functional Materials*, **2018**, 28, 1803269	15.6	206
92	Synergistic enhancement of Cs and Br doping in formamidinium lead halide perovskites for high performance optoelectronics. *CrystEngComm*, **2018**, 20, 5510-5518	3.3	6
91	Record Efficiency Stable Flexible Perovskite Solar Cell Using Effective Additive Assistant Strategy. *Advanced Materials*, **2018**, 30, e1801418	24	286
90	Highly efficient perovskite solar cells based on a dopant-free conjugated DPP polymer hole transport layer: influence of solvent vapor annealing. *Sustainable Energy and Fuels*, **2018**, 2, 2154-2159	5.8	15
89	High efficiency planar-type perovskite solar cells with negligible hysteresis using EDTA-complexed SnO. *Nature Communications*, **2018**, 9, 3239	17.4	721
88	Nitrogen-promoted molybdenum dioxide nanosheets for electrochemical hydrogen generation. *Journal of Materials Chemistry A*, **2018**, 6, 12532-12540	13	29
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