

# Chu-Chen Chueh

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

258 papers	20,850 citations	81 h-index	139 g-index
267 ext. papers	24,208 ext. citations	13 avg, IF	7.39 L-index

#	Paper	IF	Citations
258	Low-Energy-Consumption and Electret-Free Photosynaptic Transistor Utilizing Poly(3-hexylthiophene)-Based Conjugated Block Copolymers.. <i>Advanced Science</i> , <b>2022</b> , e2105190	13.6	5
257	An asymmetric 2,3-fluoranthene imide building block for regioregular semiconductors with aggregation-induced emission properties.. <i>Chemical Science</i> , <b>2022</b> , 13, 996-1002	9.4	3
256	Reducing the side-chain influences of isoindigo-based polymer donors by backbone fluorination in photovoltaic applications. <i>Dyes and Pigments</i> , <b>2022</b> , 199, 110038	4.6	0
255	An effective and economical encapsulation method for trapping lead leakage in rigid and flexible perovskite photovoltaics. <i>Nano Energy</i> , <b>2022</b> , 93, 106853	17.1	15
254	Inorganic-Cation Pseudohalide 2D Cs <sub>2</sub> Pb(SCN) <sub>2</sub> Br <sub>2</sub> Perovskite Single Crystal (Adv. Mater. 7/2022). <i>Advanced Materials</i> , <b>2022</b> , 34, 2270054	24	
253	Organometallic-functionalized interfaces for highly efficient inverted perovskite solar cells.. <i>Science</i> , <b>2022</b> , 376, 416-420	33.3	81
252	Improving Thermal and Photostability of Polymer Solar Cells by Robust Interface Engineering.. <i>Small</i> , <b>2022</b> , e2107834	11	1
251	Polymer synaptic transistors from memory to neuromorphic computing. <i>Materials Chemistry and Physics</i> , <b>2022</b> , 126263	4.4	0
250	Surface engineered CoP/CoO heterojunction for high-performance bi-functional water splitting electro-catalysis. <i>Nanoscale</i> , <b>2021</b> ,	7.7	2
249	Coil-to-coil triblock copolymers synthesized by macromolecular clicking and their compatibilizer effects in all-polymer solar cells. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 10, 346-359	7.1	0
248	Biaxially Extended Side-Chain Conjugation of Benzodithiophene-Based Polymer Dots for Superior Photocatalytic Stability under Visible-Light Irradiation. <i>Journal of Environmental Chemical Engineering</i> , <b>2021</b> , 10, 106927	6.8	0
247	Intrinsically stretchable naphthalenediimide-bithiophene conjugated statistical terpolymers using branched conjugation break spacers for field-effect transistors. <i>Polymer Chemistry</i> , <b>2021</b> , 12, 6167-6178	4.9	3
246	Designs from single junctions, heterojunctions to multijunctions for high-performance perovskite solar cells. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 13090-13128	58.5	23
245	Enabling High Efficiency of Hydrocarbon-Solvent Processed Organic Solar Cells through Balanced Charge Generation and Non-Radiative Loss. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101768	21.8	18
244	Selenium-Containing Organic Photovoltaic Materials. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 3906-3916	14.3	15
243	Low-Bandgap Organic Bulk-Heterojunction Enabled Efficient and Flexible Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2021</b> , 33, e2105539	24	27
242	Realizing Nonvolatile Photomemories with Multilevel Memory Behaviors Using Water-Processable Polymer Dots-Based Hybrid Floating Gates. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 1708-1718	4	8

241	Improving Mobility & Stretchability Properties of Polythiophene Derivatives through Ester-Substituted, Biaxially Extended Conjugated Side Chains. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 1628-1637	4.3	6
240	Pyrene-Incorporated Side Chain in Conjugated Polymers for Non-Volatile Transistor-Type Memory Devices with Improved Stretchability. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 2109-2119	4.3	1
239	A Simple Dithieno[3,2-b:2'-b']pyrrole-Rhodanine Molecular Third Component Enables Over 16.7% Efficiency and Stable Organic Solar Cells. <i>Small</i> , <b>2021</b> , 17, e2007746	11	13
238	Comprehensive Non-volatile Photo-programming Transistor Memory via a Dual-Functional Perovskite-Based Floating Gate. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 20417-20426	9.5	9
237	Cross-Linking of Poly(arylenebutadiynylene)s and Its Effect on Charge Carrier Mobilities in Thin-Film Transistors. <i>Macromolecules</i> , <b>2021</b> , 54, 4351-4362	5.5	1
236	Low-Cost Hole-Transporting Materials Based on Carbohelicene for High-Performance Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 20051-20059	9.5	1
235	Technical Challenges and Perspectives for the Commercialization of Solution-Processable Solar Cells. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2000960	6.8	18
234	An Efficient and Reversible Battery Anode Electrode Derived from a Lead-Based Metal-Organic Framework. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 9669-9682	4.1	4
233	Materials Design and Optimization for Next-Generation Solar Cell and Light-Emitting Technologies. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 4638-4657	6.4	5
232	Multi-Selenophene-Containing Narrow Bandgap Polymer Acceptors for All-Polymer Solar Cells with over 15 % Efficiency and High Reproducibility. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 16071-16079	3.6	0
231	Dopant-Free Hole-Transporting Material with Enhanced Intermolecular Interaction for Efficient and Stable n-i-p Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100967	21.8	11
230	Multi-Selenophene-Containing Narrow Bandgap Polymer Acceptors for All-Polymer Solar Cells with over 15 % Efficiency and High Reproducibility. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 15935-15943	16.4	54
229	Stable blue perovskite light-emitting diodes achieved by optimization of crystal dimension through zinc bromide addition. <i>Chemical Engineering Journal</i> , <b>2021</b> , 414, 128774	14.7	17
228	Asymmetric Isomer Effects in Benzo[c][1,2,5]thiadiazole-Fused Nonacyclic Acceptors: Dielectric Constant and Molecular Crystallinity Control for Significant Photovoltaic Performance Enhancement. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2104369	15.6	15
227	Low-Temperature Processed Carbon Electrode-Based Inorganic Perovskite Solar Cells with Enhanced Photovoltaic Performance and Stability. <i>Energy and Environmental Materials</i> , <b>2021</b> , 4, 95-102	13	10
226	Efficient thick film non-fullerene organic solar cells enabled by using a strong temperature-dependent aggregative wide bandgap polymer. <i>Chemical Engineering Journal</i> , <b>2021</b> , 405, 127033	14.7	6
225	XPS spectra as a tool for studying photochemical and thermal degradation in APbX <sub>3</sub> hybrid halide perovskites. <i>Nano Energy</i> , <b>2021</b> , 79, 105421	17.1	15
224	Fabricating efficient flexible organic photovoltaics using an eco-friendly cellulose nanofibers/silver nanowires conductive substrate. <i>Chemical Engineering Journal</i> , <b>2021</b> , 405, 126996	14.7	16

223	Enhancing Long-Term Thermal Stability of Non-Fullerene Organic Solar Cells Using Self-Assembly Amphiphilic Dendritic Block Copolymer Interlayers. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2005753	15.6	16
222	Over 17% Efficiency Binary Organic Solar Cells with Photoresponses Reaching 1000 nm Enabled by Selenophene-Fused Nonfullerene Acceptors. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 9-15	20.1	79
221	Dopant-free dicyanofluoranthene-based hole transporting material with low cost enables efficient flexible perovskite solar cells. <i>Nano Energy</i> , <b>2021</b> , 82, 105701	17.1	35
220	Asymmetric Acceptors Enabling Organic Solar Cells to Achieve an over 17% Efficiency: Conformation Effects on Regulating Molecular Properties and Suppressing Nonradiative Energy Loss. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003177	21.8	61
219	Exploring the effect of the spacer structure in the heterocyclic ring-fused isoindigo-based conjugated polymer on the charge-transporting property. <i>Journal of Polymer Research</i> , <b>2021</b> , 28, 1	2.7	0
218	Improving the performance of all-inorganic perovskite light-emitting diodes through using polymeric interlayers with a pendant design. <i>Materials Chemistry Frontiers</i> , <b>2021</b> , 5, 7199-7207	7.8	0
217	Intrinsically stretchable polymer semiconductors: molecular design, processing and device applications. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 2660-2684	7.1	13
216	Investigating the backbone conformation and configuration effects for donor-acceptor conjugated polymers with ladder-type structures synthesized through Aldol polycondensation. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 9473-9483	7.1	2
215	Improved stability and efficiency of perovskite/organic tandem solar cells with an all-inorganic perovskite layer. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 19778-19787	13	13
214	Modifying Surface Termination of CsPbI <sub>3</sub> Grain Boundaries by 2D Perovskite Layer for Efficient and Stable Photovoltaics. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2009515	15.6	24
213	Efficient Inverted Perovskite Solar Cells with Low Voltage Loss Achieved by a Pyridine-Based Dopant-Free Polymer Semiconductor. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 7227-7233	16.4	42
212	Efficient Inverted Perovskite Solar Cells with Low Voltage Loss Achieved by a Pyridine-Based Dopant-Free Polymer Semiconductor. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 7303-7309	3.6	8
211	High Efficiency (15.8%) All-Polymer Solar Cells Enabled by a Regioregular Narrow Bandgap Polymer Acceptor. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 2665-2670	16.4	112
210	Synergistical Dipole-Dipole Interaction Induced Self-Assembly of Phenoxazine-Based Hole-Transporting Materials for Efficient and Stable Inverted Perovskite Solar Cells. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 20600-20605	3.6	1
209	Thiol-end-functionalized Regioregular Poly(3-hexylthiophene) for PbS Quantum Dot Dispersions. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 4450-4459	4.3	0
208	Realizing Stable High-Performance and Low-Energy-Loss Ternary Photovoltaics through Judicious Selection of the Third Component. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100450	7.1	7
207	Influence of Oxygen Ion Migration from Substrates on Photochemical Degradation of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Hybrid Perovskite. <i>Energies</i> , <b>2021</b> , 14, 5062	3.1	0
206	Investigation of the Mobility-Stretchability Properties of Naphthalenediimide-Based Conjugated Random Terpolymers with a Functionalized Conjugation Break Spacer. <i>Macromolecules</i> , <b>2021</b> , 54, 7388-7399	5.5	10

205	Synergistical Dipole-Dipole Interaction Induced Self-Assembly of Phenoxazine-Based Hole-Transporting Materials for Efficient and Stable Inverted Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 20437-20442	16.4	13
204	Highly efficient and stable perovskite solar cells enabled by a fluoro-functionalized TiO <sub>2</sub> inorganic interlayer. <i>Matter</i> , <b>2021</b> ,	12.7	8
203	A highly responsive hybrid photodetector based on all-inorganic 2D heterojunction consisting of Cs <sub>2</sub> Pb(SCN) <sub>2</sub> Br <sub>2</sub> and MoS <sub>2</sub> . <i>Chemical Engineering Journal</i> , <b>2021</b> , 422, 130112	14.7	3
202	Naphthalene-diimide-based all-conjugated block copolymer as an effective compatibilizer to improve the performance and thermal stability of all-polymer solar cells. <i>Materials Chemistry Frontiers</i> , <b>2021</b> , 5, 7216-7227	7.8	3
201	Inorganic-Cation Pseudo-Halide Two-dimensional Cs Pb(SCN) Br Perovskite Single Crystal. <i>Advanced Materials</i> , <b>2021</b> , e2104782	24	6
200	Composition Engineering of All-Inorganic Perovskite Film for Efficient and Operationally Stable Solar Cells. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001764	15.6	42
199	Interfacial Modification through a Multifunctional Molecule for Inorganic Perovskite Solar Cells with over 18% Efficiency. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000205	7.1	22
198	Modulation of Defects and Interfaces through Alkylammonium Interlayer for Efficient Inverted Perovskite Solar Cells. <i>Joule</i> , <b>2020</b> , 4, 1248-1262	27.8	143
197	Dopant-Free Crossconjugated Hole-Transporting Polymers for Highly Efficient Perovskite Solar Cells. <i>Advanced Science</i> , <b>2020</b> , 7, 1903331	13.6	29
196	Study on Intrinsic Stretchability of Diketopyrrolopyrrole-Based EConjugated Copolymers with Poly(acryl amide) Side Chains for Organic Field-Effect Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 33014-33027	9.5	31
195	Investigation of the MobilityStretchability Relationship of Ester-Substituted Polythiophene Derivatives. <i>Macromolecules</i> , <b>2020</b> , 53, 4968-4981	5.5	15
194	Hybrid Perovskite-Organic Flexible Tandem Solar Cell Enabling Highly Efficient Electrocatalysis Overall Water Splitting. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000361	21.8	37
193	Solution-Processable Anion-doped Conjugated Polymer for Nonvolatile Organic Transistor Memory with Synaptic Behaviors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 33968-33978	9.5	18
192	Development of Block Copolymers with Poly(3-hexylthiophene) Segments as Compatibilizers in Non-Fullerene Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 12083-12092	9.5	15
191	Recent progress of anion-based 2D perovskites with different halide substitutions. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 4294-4302	7.1	11
190	Dopant-Free Organic Hole-Transporting Material for Efficient and Stable Inverted All-Inorganic and Hybrid Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2020</b> , 32, e1908011	24	120
189	Facile Fabrication of Stretchable Touch-Responsive Perovskite Light-Emitting Diodes Using Robust Stretchable Composite Electrodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 14408-14415	9.5	20
188	Biaxially-extended side-chain engineering of benzodithiophene-based conjugated polymers and their applications in polymer solar cells. <i>Organic Electronics</i> , <b>2020</b> , 79, 105630	3.5	10

187	Structure-Mobility Relationship of Benzodithiophene-Based Conjugated Polymers with Varied Biaxially Extended Conjugated Side Chains. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2020</b> , 59, 9105-9115	3.9	9
186	Improving the Performance and Stability of Perovskite Light-Emitting Diodes by a Polymeric Nanothick Interlayer-Assisted Grain Control Process. <i>ACS Omega</i> , <b>2020</b> , 5, 8972-8981	3.9	13
185	Exploitation of two-dimensional conjugated covalent organic frameworks based on tetraphenylethylene with bicarbazole and pyrene units and applications in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 11448-11459	13	58
184	XPS evidence of degradation mechanism in CHNHPbI hybrid perovskite. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 095501	1.8	10
183	Highly efficient all-inorganic perovskite solar cells with suppressed non-radiative recombination by a Lewis base. <i>Nature Communications</i> , <b>2020</b> , 11, 177	17.4	200
182	Electrospinning-induced elastomeric properties of conjugated polymers for extremely stretchable nanofibers and rubbery optoelectronics. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 873-882	7.1	20
181	Vertical Orientated Dion-Jacobson Quasi-2D Perovskite Film with Improved Photovoltaic Performance and Stability. <i>Small Methods</i> , <b>2020</b> , 4, 1900831	12.8	52
180	Conjugated polysquaraines synthesized by polycondensation: Physical, optical, and charge transport properties. <i>Dyes and Pigments</i> , <b>2020</b> , 175, 108162	4.6	1
179	Improving Photovoltaic Performance Using Perovskite/Surface-Modified Graphitic Carbon Nitride Heterojunction. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900413	7.1	22
178	Minimized surface deficiency on wide-bandgap perovskite for efficient indoor photovoltaics. <i>Nano Energy</i> , <b>2020</b> , 78, 105377	17.1	32
177	Recent advance in renewable materials and green processes for optoelectronic applications. <i>Materials Today Sustainability</i> , <b>2020</b> , 11-12, 100057	5	2
176	Regulating Surface Termination for Efficient Inverted Perovskite Solar Cells with Greater Than 23% Efficiency. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 20134-20142	16.4	185
175	Two-Dimensional CsPb(SCN)Br-Based Photomemory Devices Showing a Photoinduced Recovery Behavior and an Unusual Fully Optically Driven Memory Behavior. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 36398-36408	9.5	22
174	High Mobility Preservation of Near Amorphous Conjugated Polymers in the Stretched States Enabled by Biaxially-Extended Conjugated Side-Chain Design. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 7370-7382	9.6	27
173	Backbone Engineering of Diketopyrrolopyrrole-Based Conjugated Polymers through Random Terpolymerization for Improved Mobility-Stretchability Property. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 50648-50659	9.5	20
172	2D metal-organic framework for stable perovskite solar cells with minimized lead leakage. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 934-940	28.7	119
171	A Non-fullerene Acceptor with Enhanced Intermolecular $\pi$ -Core Interaction for High-Performance Organic Solar Cells. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 15246-15251	16.4	138
170	A Generally Applicable Approach Using Sequential Deposition to Enable Highly Efficient Organic Solar Cells. <i>Small Methods</i> , <b>2020</b> , 4, 2000687	12.8	56



169	Improving Performance of Nonvolatile Perovskite-Based Photomemory by Size Restraining of Perovskites Nanocrystals in the Hybrid Floating Gate. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000458	6.4	14
168	Over 15% Efficiency in Ternary Organic Solar Cells by Enhanced Charge Transport and Reduced Energy Loss. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 21633-21640	9.5	22
167	Engineering of perovskite light-emitting diodes based on quasi-2D perovskites formed by diamine cations. <i>Organic Electronics</i> , <b>2019</b> , 75, 105400	3.5	12
166	Stretchable and Ambient Stable Perovskite/Polymer Luminous Hybrid Nanofibers of Multicolor Fiber Mats and Their White LED Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 23605-23615	8.5	37
165	Harnessing MOF materials in photovoltaic devices: recent advances, challenges, and perspectives. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 17079-17095	13	182
164	Efficient large guanidinium mixed perovskite solar cells with enhanced photovoltage and low energy losses. <i>Chemical Communications</i> , <b>2019</b> , 55, 4315-4318	5.8	85
163	Perovskite Solar Cells: Enhancing Efficiency and Stability of Photovoltaic Cells by Using Perovskite/Zr-MOF Heterojunction Including Bilayer and Hybrid Structures (Adv. Sci. 5/2019). <i>Advanced Science</i> , <b>2019</b> , 6, 1970030	13.6	6
162	Improving Performance of Perovskite Solar Cells Using [7]Helicenes with Stable Partial Biradical Characters as the Hole-Extraction Layers. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808625	15.6	29
161	Asymmetric Side-Chain Engineering of Isoindigo-Based Polymers for Improved Stretchability and Applications in Field-Effect Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 34158-34170	9.5	35
160	Photon-Induced Reshaping in Perovskite Material Yields of Nanocrystals with Accurate Control of Size and Morphology. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 4149-4156	6.4	7
159	Trihydrazine Dihydriodide-Assisted Fabrication of Efficient Formamidinium Tin Iodide Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2019</b> , 3, 1900285	7.1	25
158	Boosting the Performance of Environmentally Friendly Quantum Dot-Sensitized Solar Cells over 13% Efficiency by Dual Sensitizers with Cascade Energy Structure. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903696	34	37
157	A 0D/3D Heterostructured All-Inorganic Halide Perovskite Solar Cell with High Performance and Enhanced Phase Stability. <i>Advanced Materials</i> , <b>2019</b> , 31, e1904735	24	77
156	A Dopant-Free Polymeric Hole-Transporting Material Enabled High Fill Factor Over 81% for Highly Efficient Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1902600	21.8	52
155	Enhanced Near-Infrared Photoresponse of Inverted Perovskite Solar Cells Through Rational Design of Bulk-Heterojunction Electron-Transporting Layers. <i>Advanced Science</i> , <b>2019</b> , 6, 1901714	13.6	16
154	Dopant-Free Squaraine-Based Polymeric Hole-Transporting Materials with Comprehensive Passivation Effects for Efficient All-Inorganic Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 17724-17730	16.4	83
153	Recent advances in molecular design of functional conjugated polymers for high-performance polymer solar cells. <i>Progress in Polymer Science</i> , <b>2019</b> , 99, 101175	29.6	83
152	Boosting Photovoltaic Performance for Lead Halide Perovskites Solar Cells with BF <sub>4</sub> <sup>-</sup> Anion Substitutions. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808833	15.6	62

151	Exploitation of Thermoresponsive Switching Organic Field-Effect Transistors. <i>ACS Omega</i> , <b>2019</b> , 4, 22082-22088	3.3	3
150	Enhancing Efficiency and Stability of Photovoltaic Cells by Using Perovskite/Zr-MOF Heterojunction Including Bilayer and Hybrid Structures. <i>Advanced Science</i> , <b>2019</b> , 6, 1801715	13.6	104
149	Improved Efficiency and Stability of Pb/Sn Binary Perovskite Solar Cells Fabricated by Galvanic Displacement Reaction. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1802774	21.8	48
148	Improving performance of Cs-based perovskite light-emitting diodes by dual additives consisting of polar polymer and n-type small molecule. <i>Organic Electronics</i> , <b>2019</b> , 67, 294-301	3.5	24
147	Stable, color-tunable 2D SCN-based perovskites: revealing the critical influence of an asymmetric pseudo-halide on constituent ions. <i>Nanoscale</i> , <b>2019</b> , 11, 2608-2616	7.7	13
146	Feasibility study of atmospheric-pressure dielectric barrier discharge treatment on CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> films for inverted planar perovskite solar cells. <i>Electrochimica Acta</i> , <b>2019</b> , 293, 1-7	6.7	14
145	Fluoranthene-based dopant-free hole transporting materials for efficient perovskite solar cells. <i>Chemical Science</i> , <b>2018</b> , 9, 2698-2704	9.4	87
144	Tunable Band Gap and Long Carrier Recombination Lifetime of Stable Mixed CH <sub>3</sub> NH <sub>3</sub> Pb <sub>x</sub> Sn <sub>1-x</sub> Br <sub>3</sub> Single Crystals. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 1556-1565	9.6	63
143	Low-Temperature Solution-Processed CuCrO <sub>2</sub> Hole-Transporting Layer for Efficient and Photostable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702762	21.8	100
142	Realizing Efficient Lead-Free Formamidinium Tin Triiodide Perovskite Solar Cells via a Sequential Deposition Route. <i>Advanced Materials</i> , <b>2018</b> , 30, 1703800	24	151
141	Mechanically robust, stretchable organic solar cells via buckle-on-elastomer strategy. <i>Organic Electronics</i> , <b>2018</b> , 53, 339-345	3.5	25
140	Uniform Luminous Perovskite Nanofibers with Color-Tunability and Improved Stability Prepared by One-Step Core/Shell Electrospinning. <i>Small</i> , <b>2018</b> , 14, e1704379	11	68
139	Nonfullerene Acceptor Molecules for Bulk Heterojunction Organic Solar Cells. <i>Chemical Reviews</i> , <b>2018</b> , 118, 3447-3507	68.1	1051
138	Enhanced crystallization and performance of formamidinium lead triiodide perovskite solar cells through PbI <sub>2</sub> -SrCl <sub>2</sub> modulation. <i>Materials Today Energy</i> , <b>2018</b> , 7, 239-245	7	9
137	Enhancing efficiency of perovskite solar cells by reducing defects through imidazolium cation incorporation. <i>Materials Today Energy</i> , <b>2018</b> , 7, 161-168	7	31
136	Inorganic CsPb <sub>1-x</sub> Sn <sub>x</sub> IBr <sub>2</sub> for Efficient Wide-Bandgap Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800525	21.8	154
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134	Bio-Based Transparent Conductive Film Consisting of Polyethylene Furanoate and Silver Nanowires for Flexible Optoelectronic Devices. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, e1800271	4.8	29



133	Realization of Intrinsically Stretchable Organic Solar Cells Enabled by Charge-Extraction Layer and Photoactive Material Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 21712-21720	9.5	36
132	Efficient and UV-stable perovskite solar cells enabled by side chain-engineered polymeric hole-transporting layers. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 12999-13004	13	36
131	Highly Efficient and Stable Perovskite Solar Cells Enabled by All-Crosslinked Charge-Transporting Layers. <i>Joule</i> , <b>2018</b> , 2, 168-183	27.8	84
130	Advances and challenges of green materials for electronics and energy storage applications: from design to end-of-life recovery. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 20546-20563	13	65
129	Alcohol-Soluble Cross-Linked Poly( nBA) - b-Poly(NVTri) Block Copolymer and Its Applications in Organic Photovoltaic Cells for Improved Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 44741-44750	9.5	8
128	A Nonfullerene Semitransparent Tandem Organic Solar Cell with 10.5% Power Conversion Efficiency. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800529	21.8	71
127	Intrinsically stretchable, solution-processable functional poly(siloxane-imide)s for stretchable resistive memory applications. <i>Polymer Chemistry</i> , <b>2018</b> , 9, 5145-5154	4.9	19
126	Interlayer Modification Using Eco-friendly Glucose-Based Natural Polymers in Polymer Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 14621-14630	8.3	29
125	5,14-Diaryldiindeno[2,1-f:1',2'-r]picene: A New Stable [7]Helicene with a Partial Biradical Character. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 14357-14366	16.4	50
124	Influence of polymeric electrets on the performance of derived hybrid perovskite-based photo-memory devices. <i>Nanoscale</i> , <b>2018</b> , 10, 18869-18877	7.7	40
123	Possible interfacial ion/charge accumulation in thin-film perovskite/fullerene surfactant planar heterojunction solar cells. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 504001	3	3
122	Electrospun Nanofibers: Uniform Luminous Perovskite Nanofibers with Color-Tunability and Improved Stability Prepared by One-Step Core/Shell Electrospinning (Small 22/2018). <i>Small</i> , <b>2018</b> , 14, 1870103	11	2
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120	Interface Engineering for All-Inorganic CsPbI Br Perovskite Solar Cells with Efficiency over 14. <i>Advanced Materials</i> , <b>2018</b> , 30, e1802509	24	269
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114	A regioregular conjugated polymer for high performance thick-film organic solar cells without processing additive. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 10517-10525	13	38
113	Nonvolatile Perovskite-Based Photomemory with a Multilevel Memory Behavior. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702217	24	87
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111	Doping Versatile n-Type Organic Semiconductors via Room Temperature Solution-Processable Anionic Dopants. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 1136-1144	9.5	28
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107	Enhanced Moisture Stability of Cesium-Containing Compositional Perovskites by a Feasible Interfacial Engineering. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1700598	4.6	49
106	Boosting performance of inverted organic solar cells by using a planar coronene based electron-transporting layer. <i>Nano Energy</i> , <b>2017</b> , 39, 454-460	17.1	33
105	4-Tert-butylpyridine Free Organic Hole Transporting Materials for Stable and Efficient Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700683	21.8	91
104	Intrinsically Stretchable Nanostructured Silver Electrodes for Realizing Efficient Strain Sensors and Stretchable Organic Photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 27853-27862	9.5	24
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102	Multi-state memristive behavior in a light-emitting electrochemical cell. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 11421-11428	7.1	4
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98	Stable Low-Bandgap Pb-Sn Binary Perovskites for Tandem Solar Cells. <i>Advanced Materials</i> , <b>2016</b> , 28, 8990-8997	24	254

97	Rational Design of Dipolar Chromophore as an Efficient Dopant-Free Hole-Transporting Material for Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 11833-9	16.4	150
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95	Hierarchical Dual-Scaffolds Enhance Charge Separation and Collection for High Efficiency Semitransparent Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1600484	4.6	34
94	Stabilized Wide Bandgap Perovskite Solar Cells by Tin Substitution. <i>Nano Letters</i> , <b>2016</b> , 16, 7739-7747	11.5	155
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92	Modulation of PEDOT:PSS pH for Efficient Inverted Perovskite Solar Cells with Reduced Potential Loss and Enhanced Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 32068-32076	9.5	132
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90	Improved efficiency and stability of PbSn binary perovskite solar cells by Cs substitution. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 17939-17945	13	115
89	Rigidifying Nonplanar Perylene Diimides by Ring Fusion Toward Geometry-Tunable Acceptors for High-Performance Fullerene-Free Solar Cells. <i>Advanced Materials</i> , <b>2016</b> , 28, 951-8	24	222
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77	Large Grained Perovskite Solar Cells Derived from Single-Crystal Perovskite Powders with Enhanced Ambient Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 14513-20	9.5	54
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48	Recent progress and perspective in solution-processed Interfacial materials for efficient and stable polymer and organometal perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1160-1189	35.4	637
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45	A General Route to Enhance Polymer Solar Cell Performance using Plasmonic Nanoprisms. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400206	21.8	106
44	Additive enhanced crystallization of solution-processed perovskite for highly efficient planar-heterojunction solar cells. <i>Advanced Materials</i> , <b>2014</b> , 26, 3748-54	24	1242



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34	Efficiency enhancement of perovskite solar cells through fast electron extraction: the role of graphene quantum dots. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 3760-3	16.4	590
33	Integrated molecular, interfacial, and device engineering towards high-performance non-fullerene based organic solar cells. <i>Advanced Materials</i> , <b>2014</b> , 26, 5708-14	24	366
32	Close-Packed Colloidal SiO <sub>2</sub> as a Nanoreactor: Generalized Synthesis of Metal Oxide Mesoporous Single Crystals and Mesocrystals. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 5700-5709	9.6	36
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24	Solution-processible highly conducting fullerenes. <i>Advanced Materials</i> , <b>2013</b> , 25, 2457-61	24	113
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21	Effective interfacial layer to enhance efficiency of polymer solar cells via solution-processed fullerene-surfactants. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 8574		149
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12	New thiophene-phenylene-thiophene acceptor random conjugated copolymers for optoelectronic applications. <i>Journal of Polymer Science Part A</i> , <b>2010</b> , 48, 2351-2360	2.5	35
11	High hole mobility from thiophene-thienopyrazine copolymer based thin film transistors. <i>Journal of Polymer Research</i> , <b>2009</b> , 16, 239-244	2.7	5
10	Synthesis and properties of new dialkoxyphenylene quinoxaline-based donor-acceptor conjugated polymers and their applications on thin film transistors and solar cells. <i>Journal of Polymer Science Part A</i> , <b>2009</b> , 47, 973-985	2.5	40
9	New P-type of poly(4-methoxy-triphenylamine)s derived by coupling reactions: Synthesis, electrochromic behaviors, and hole mobility. <i>Journal of Polymer Science Part A</i> , <b>2009</b> , 47, 4037-4050	2.5	22
8	All-conjugated diblock copolymer of poly(3-hexylthiophene)-block-poly(3-phenoxyethylthiophene) for field-effect transistor and photovoltaic applications. <i>Organic Electronics</i> , <b>2009</b> , 10, 1541-1548	3.5	44

7	Synthesis and Memory Device Characteristics of New Sulfur Donor Containing Polyimides. <i>Macromolecules</i> , <b>2009</b> , 42, 4456-4463	5.5	142
6	Synthesis of New Indolocarbazole-Acceptor Alternating Conjugated Copolymers and Their Applications to Thin Film Transistors and Photovoltaic Cells. <i>Macromolecules</i> , <b>2009</b> , 42, 1897-1905	5.5	113
5	Synthesis, properties, and field effect transistor characteristics of new thiophene-[1,2,5]thiadiazolo[3,4-g]quinoxaline-thiophene-based conjugated polymers. <i>Journal of Polymer Science Part A</i> , <b>2008</b> , 46, 6305-6316	2.5	29
4	Synthesis of New Fluorene-Indolocarbazole Alternating Copolymers for Light-Emitting Diodes and Field Effect Transistors. <i>Polymer Journal</i> , <b>2008</b> , 40, 249-255	2.7	21
3	Effects of Acceptors on the Electronic and Optoelectronic Properties of Fluorene-Based Donor-Acceptor-Donor Copolymers. <i>Macromolecular Chemistry and Physics</i> , <b>2007</b> , 208, 1919-1927	2.6	52
2	Interfacial Engineering of Wide-Bandgap Perovskites for Efficient Perovskite/CZTSSe Tandem Solar Cells. <i>Advanced Functional Materials</i> , 2107359	15.6	10
1	Interface Engineering for All-Inorganic CsPbIBr <sub>2</sub> Perovskite Solar Cells with Enhanced Power Conversion Efficiency over 11%. <i>Energy Technology</i> , 2100562	3.5	5