Morphology changes upon scaling a high-efficiency, sol

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Citation Report

#	Article	IF	CITATIONS
2	Highly efficient polymer solar cells with printed photoactive layer: rational process transfer from spin-coating. Journal of Materials Chemistry A, 2016, 4, 16036-16046.	5.2	57
3	High Performance Organic Solar Cells Processed by Blade Coating in Air from a Benign Food Additive Solution. Chemistry of Materials, 2016, 28, 7451-7458.	3.2	91
4	Film morphology evolution during solvent vapor annealing of highly efficient small molecule donor/acceptor blends. Journal of Materials Chemistry A, 2016, 4, 15511-15521.	5.2	35
5	Achieving a solar power conversion efficiency exceeding 9% by modifying the structure of a simple, inexpensive and highly scalable polymer. Journal of Materials Chemistry A, 2016, 4, 18585-18597.	5.2	32
6	Small is Powerful: Recent Progress in Solutionâ€Processed Small Molecule Solar Cells. Advanced Energy Materials, 2017, 7, 1602242.	10.2	371
7	N-Annulated perylene diimide dimers: acetylene linkers as a strategy for controlling structural conformation and the impact on physical, electronic, optical and photovoltaic properties. Journal of Materials Chemistry C, 2017, 5, 2074-2083.	2.7	68
8	High-performance ternary organic solar cells with thick active layer exceeding 11% efficiency. Energy and Environmental Science, 2017, 10, 885-892.	15.6	193
9	In Situ X-ray Scattering Studies of the Influence of an Additive on the Formation of a Low-Bandgap Bulk Heterojunction. Chemistry of Materials, 2017, 29, 2283-2293.	3.2	23
10	Rollâ€ŧoâ€Roll Printed Largeâ€Area Allâ€Polymer Solar Cells with 5% Efficiency Based on a Low Crystallinity Conjugated Polymer Blend. Advanced Energy Materials, 2017, 7, 1602742.	10.2	214
11	Morphology Development in Solution-Processed Functional Organic Blend Films: An In Situ Viewpoint. Chemical Reviews, 2017, 117, 6332-6366.	23.0	145
12	Morphological characterization of fullerene and fullerene-free organic photovoltaics by combined real and reciprocal space techniques. Journal of Materials Research, 2017, 32, 1921-1934.	1.2	28
13	Quantitative Morphology–Performance Correlations in Organic Solar Cells: Insights from Soft Xâ€Ray Scattering. Advanced Energy Materials, 2017, 7, 1700084.	10.2	123
14	A universal rollâ€toâ€roll slotâ€die coating approach towards highâ€efficiency organic photovoltaics. Progress in Photovoltaics: Research and Applications, 2017, 25, 928-935.	4.4	34
15	<i>In situ</i> characterization methods for evaluating microstructure formation and drying kinetics of solution-processed organic bulk-heterojunction films. Journal of Materials Research, 2017, 32, 1855-1879.	1.2	16
16	Highly Efficient and Reproducible Nonfullerene Solar Cells from Hydrocarbon Solvents. ACS Energy Letters, 2017, 2, 1494-1500.	8.8	89
17	Structure formation and evolution in semiconductor films for perovskite and organic photovoltaics. Journal of Materials Research, 2017, 32, 1798-1824.	1.2	16
18	Recent advances in high performance donor-acceptor polymers for organic photovoltaics. Progress in Polymer Science, 2017, 70, 34-51.	11.8	217
19	Ternary blends to achieve well-developed nanoscale morphology in organic bulk heterojunction solar cells. Organic Electronics, 2017, 45, 263-272.	1.4	9

#	Article	IF	CITATIONS
20	Morphology Control in Films of Isoindigo Polymers by Side-Chain and Molecular Weight Effects. ACS Applied Materials & Interfaces, 2017, 9, 13357-13368.	4.0	26
21	Highly Efficient Organic Solar Cells Consisting of Double Bulk Heterojunction Layers. Advanced Materials, 2017, 29, 1606729.	11.1	124
22	Perovskite ink with wide processing window for scalable high-efficiency solar cells. Nature Energy, 2017, 2, .	19.8	499
23	Reduced bimolecular recombination in blade-coated, high-efficiency, small-molecule solar cells. Journal of Materials Chemistry A, 2017, 5, 6893-6904.	5.2	16
24	Printing-friendly sequential deposition via intra-additive approach for roll-to-roll process of perovskite solar cells. Nano Energy, 2017, 41, 443-451.	8.2	91
25	MINERVA: A facility to study Microstructure and INterface Evolution in Realtime under VAcuum. Review of Scientific Instruments, 2017, 88, 103901.	0.6	11
26	In Situ GIWAXS Analysis of Solvent and Additive Effects on PTB7 Thin Film Microstructure Evolution during Spin Coating. Advanced Materials, 2017, 29, 1703933.	11.1	80
27	Small-Molecule Organic Photovoltaic Modules Fabricated via Halogen-Free Solvent System with Roll-to-Roll Compatible Scalable Printing Method. ACS Applied Materials & Interfaces, 2017, 9, 39519-39525.	4.0	25
28	Simple transfer from spin coating to blade coating through processing aggregated solutions. Journal of Materials Chemistry A, 2017, 5, 20687-20695.	5.2	21
29	ITO-Free Flexible Perovskite Solar Cells Based on Roll-to-Roll, Slot-Die Coated Silver Nanowire Electrodes. Solar Rrl, 2017, 1, 1700059.	3.1	78
30	Precise Manipulation of Multilength Scale Morphology and Its Influence on Ecoâ€Friendly Printed Allâ€Polymer Solar Cells. Advanced Functional Materials, 2017, 27, 1702016.	7.8	99
31	Donor-fullerene dyads for energy cascade organic solar cells. Inorganica Chimica Acta, 2017, 468, 192-202.	1.2	10
32	Synergetic Effect of a Surfactant on the Facile Fabrication and High Detectivity of an Inverted Organic Bulk Heterojunction Photodiode. ACS Photonics, 2017, 4, 2085-2090.	3.2	24
33	Molecular weight tuning of low bandgap polymers by continuous flow chemistry: increasing the applicability of PffBT4T for organic photovoltaics. Journal of Materials Chemistry A, 2017, 5, 18166-18175.	5.2	23
34	In situ electrical and thermal monitoring of printed electronics by two-photon mapping. Scientific Reports, 2017, 7, 3787.	1.6	5
35	Bladeâ€Cast Nonfullerene Organic Solar Cells in Air with Excellent Morphology, Efficiency, and Stability. Advanced Materials, 2018, 30, e1800343.	11.1	154
36	Flexible perovskite solar cells based on green, continuous roll-to-roll printing technology. Journal of Energy Chemistry, 2018, 27, 971-989.	7.1	55
37	The meniscus-guided deposition of semiconducting polymers. Nature Communications, 2018, 9, 534.	5.8	324

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#	Article	IF	CITATIONS
38	Stretchable Polymer Semiconductors for Plastic Electronics. Advanced Electronic Materials, 2018, 4, 1700429.	2.6	168
39	Surpassing 10% Efficiency Benchmark for Nonfullerene Organic Solar Cells by Scalable Coating in Air from Single Nonhalogenated Solvent. Advanced Materials, 2018, 30, 1705485.	11.1	150
40	Rollâ€ŧoâ€Roll Fabrication of Solution Processed Electronics. Advanced Engineering Materials, 2018, 20, 1701190.	1.6	107
41	Field-Assisted Exciton Dissociation in Highly Efficient PffBT4T-2OD:Fullerene Organic Solar Cells. Chemistry of Materials, 2018, 30, 2660-2667.	3.2	49
42	Blade-Coated Hybrid Perovskite Solar Cells with Efficiency > 17%: An In Situ Investigation. ACS Energy Letters, 2018, 3, 1078-1085.	8.8	171
43	Designing 1,5â€Naphthyridineâ€2,6â€dioneâ€Based Conjugated Polymers for Higher Crystallinity and Enhanced Light Absorption to Achieve 9.63% Efficiency Polymer Solar Cells. Advanced Energy Materials, 2018, 8, 1701467.	10.2	16
44	Environmentally Friendly Solventâ€Processed Organic Solar Cells that are Highly Efficient and Adaptable for the Blade oating Method. Advanced Materials, 2018, 30, 1704837.	11.1	173
45	Efficient Large Area Organic Solar Cells Processed by Bladeâ€Coating With Singleâ€Component Green Solvent. Solar Rrl, 2018, 2, 1700169.	3.1	79
46	Randomly Distributed Conjugated Polymer Repeat Units for High-Efficiency Photovoltaic Materials with Enhanced Solubility and Processability. ACS Applied Materials & Interfaces, 2018, 10, 44583-44588.	4.0	18
47	Achieving Balanced Crystallinity of Donor and Acceptor by Combining Bladeâ€Coating and Ternary Strategies in Organic Solar Cells. Advanced Materials, 2018, 30, e1805041.	11.1	131
48	In Situ Analysis of Solvent and Additive Effects on Film Morphology Evolution in Spin ast Smallâ€Molecule and Polymer Photovoltaic Materials. Advanced Energy Materials, 2018, 8, 1800611.	10.2	51
49	Enhancing Polymer Photovoltaic Performance via Optimized Intramolecular Ester-Based Noncovalent Sulfur··À·Oxygen Interactions. Macromolecules, 2018, 51, 3874-3885.	2.2	53
50	Subtle Side-Chain Engineering of Random Terpolymers for High-Performance Organic Solar Cells. Chemistry of Materials, 2018, 30, 3294-3300.	3.2	64
51	Does the Electron-Donating Polymer Design Criteria Hold True for the Non-Fullerene Bulk Heterojunction Electron Acceptor Boron Subphthalocyanine? Yes. ACS Applied Energy Materials, 2018, 1, 2490-2501.	2.5	8
52	Conjugated Polymers: Relationship Between Morphology and Optical Properties. Springer Series in Surface Sciences, 2018, , 335-353.	0.3	0
53	Hot slot die coating for additive-free fabrication of high performance roll-to-roll processed polymer solar cells. Energy and Environmental Science, 2018, 11, 3248-3255.	15.6	85
54	Importance of Nucleation during Morphology Evolution of the Blade-Cast PffBT4T-2OD-Based Organic Solar Cells. Macromolecules, 2018, 51, 6682-6691.	2.2	34
55	Progress in Scalable Coating and Rollâ€ŧoâ€Roll Compatible Printing Processes of Perovskite Solar Cells toward Realization of Commercialization. Advanced Optical Materials, 2018, 6, 1701182.	3.6	52

#	Article	IF	CITATIONS
56	Ecoâ€Compatible Solventâ€Processed Organic Photovoltaic Cells with Over 16% Efficiency. Advanced Materials, 2019, 31, e1903441.	11.1	445
57	A General Approach for Labâ€toâ€Manufacturing Translation on Flexible Organic Solar Cells. Advanced Materials, 2019, 31, e1903649.	11.1	114
58	Slotâ€Die and Rollâ€ŧoâ€Roll Processed Single Junction Organic Photovoltaic Cells with the Highest Efficiency. Advanced Energy Materials, 2019, 9, 1901805.	10.2	62
59	Field emission scanning electron microscopy (FESEM): an easy way to characterize morphologies of P3HT:PCBM coated and printed solar cells. Flexible and Printed Electronics, 2019, 4, 034001.	1.5	1
60	Band Alignment Engineering between Planar SnO ₂ and Halide Perovskites via Two-Step Annealing. Journal of Physical Chemistry Letters, 2019, 10, 6545-6550.	2.1	28
61	Processing-Friendly Slot-Die-Cast Nonfullerene Organic Solar Cells with Optimized Morphology. ACS Applied Materials & Interfaces, 2019, 11, 42392-42402.	4.0	29
62	Effect of Extensional Flow on the Evaporative Assembly of a Donor–Acceptor Semiconducting Polymer. ACS Applied Electronic Materials, 2019, 1, 2445-2454.	2.0	4
63	Recent advances in molecular design of functional conjugated polymers for high-performance polymer solar cells. Progress in Polymer Science, 2019, 99, 101175.	11.8	140
64	Scalable Ambient Fabrication of High-Performance CsPbl2Br Solar Cells. Joule, 2019, 3, 2485-2502.	11.7	124
65	Molecular Ordering and Performance of Ternary Nonfullerene Organic Solar Cells via Bar-Coating in Air with an Efficiency over 13%. ACS Applied Materials & Interfaces, 2019, 11, 35827-35834.	4.0	21
66	Side Chain and Solvent Direction of Film Morphology in Small-Molecule Organic Solar Materials. Chemistry of Materials, 2019, 31, 8308-8319.	3.2	9
67	Perylene Diimide Based Organic Photovoltaics with Slot-Die Coated Active Layers from Halogen-Free Solvents in Air at Room Temperature. ACS Applied Materials & Interfaces, 2019, 11, 39010-39017.	4.0	33
68	12.88% efficiency in doctor-blade coated organic solar cells through optimizing the surface morphology of a ZnO cathode buffer layer. Journal of Materials Chemistry A, 2019, 7, 212-220.	5.2	70
69	Vacuum-assisted annealing method for high efficiency printable large-area polymer solar cell modules. Journal of Materials Chemistry C, 2019, 7, 3206-3211.	2.7	27
70	Temperatureâ€Dependent Aggregation Donor Polymers Enable Highly Efficient Sequentially Processed Organic Photovoltaics Without the Need of Orthogonal Solvents. Advanced Functional Materials, 2019, 29, 1902478.	7.8	50
71	Morphology of a thermally stable small molecule OPV blend comprising a liquid crystalline donor and fullerene acceptor. Journal of Materials Chemistry A, 2019, 7, 16458-16471.	5.2	17
72	Triimideâ€Functionalized nâ€Type Polymer Semiconductors Enabling Allâ€Polymer Solar Cells with Power Conversion Efficiencies Approaching 9%. Solar Rrl, 2019, 3, 1900107.	3.1	43
73	Room Temperature Processed Highly Efficient Largeâ€Area Polymer Solar Cells Achieved with Molecular Engineering of Copolymers. Advanced Energy Materials, 2019, 9, 1900168.	10.2	50

#	ARTICLE	IF	CITATIONS
74	Advances in solution processing of organic materials for devices. , 2019, , 551-577.		2
75	Unifying Energetic Disorder from Charge Transport and Band Bending in Organic Semiconductors. Advanced Functional Materials, 2019, 29, 1901109.	7.8	62
76	Optimizing Polymer Solar Cells Using Non-Halogenated Solvent Blends. Polymers, 2019, 11, 544.	2.0	7
77	Evolution of molecular aggregation in bar-coated non-fullerene organic solar cells. Materials Chemistry Frontiers, 2019, 3, 1062-1070.	3.2	25
78	A review of non-fullerene polymer solar cells: from device physics to morphology control. Reports on Progress in Physics, 2019, 82, 036601.	8.1	184
79	Oxygen-Induced Doping as a Degradation Mechanism in Highly Efficient Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 1943-1950.	2.5	29
80	Molecular packing control enables excellent performance and mechanical property of blade-cast all-polymer solar cells. Nano Energy, 2019, 59, 277-284.	8.2	47
81	Eco-Friendly Push-Coated Polymer Solar Cells with No Active Material Wastes Yield Power Conversion Efficiencies over 5.5%. ACS Applied Materials & Interfaces, 2019, 11, 10785-10793.	4.0	8
82	High-efficiency non-halogenated solvent processable polymer/PCBM solar cells <i>via</i> fluorination-enabled optimized nanoscale morphology. Journal of Materials Chemistry A, 2019, 7, 24992-25002.	5.2	21
83	A blade-coated highly efficient thick active layer for non-fullerene organic solar cells. Journal of Materials Chemistry A, 2019, 7, 22265-22273.	5.2	46
84	Suppressing the excessive aggregation of nonfullerene acceptor in bladeâ€coated active layer by using nâ€type polymer additive to achieve largeâ€area printed organic solar cells with efficiency over 15%. EcoMat, 2019, 1, e12006.	6.8	45
85	Higher Mobility and Carrier Lifetimes in Solutionâ€Processable Smallâ€Molecule Ternary Solar Cells with 11% Efficiency. Advanced Energy Materials, 2019, 9, 1802836.	10.2	65
86	Highâ€Performance Largeâ€Area Organic Solar Cells Enabled by Sequential Bilayer Processing via Nonhalogenated Solvents. Advanced Energy Materials, 2019, 9, 1802832.	10.2	152
87	Revealing the Impact of F4â€TCNQ as Additive on Morphology and Performance of Highâ€Efficiency Nonfullerene Organic Solar Cells. Advanced Functional Materials, 2019, 29, 1806262.	7.8	55
88	Towards Green Synthesis and Processing of Organic Solar Cells. Chemical Record, 2019, 19, 1039-1049.	2.9	41
89	Largeâ€Area Organic Solar Cells: Material Requirements, Modular Designs, and Printing Methods. Advanced Materials, 2019, 31, e1805089.	11.1	246
90	High Performance Rollâ€toâ€Roll Produced Fullereneâ€Free Organic Photovoltaic Devices via Temperatureâ€Controlled Slot Die Coating. Advanced Functional Materials, 2019, 29, 1805825.	7.8	64
91	Can Polymer Solar Cells Open the Path to Sustainable and Efficient Photovoltaic Windows Fabrication?. Chemical Record, 2019, 19, 1166-1178.	2.9	13

#	Article	IF	CITATIONS
92	Manipulating nanoscale structure to control functionality in printed organic photovoltaic, transistor and bioelectronic devices. Nanotechnology, 2020, 31, 092002.	1.3	22
93	Stable Efficient Methylammonium Lead Iodide Thin Film Photodetectors with Highly Oriented Millimeter-Sized Crystal Grains. ACS Photonics, 2020, 7, 57-67.	3.2	9
94	Processing Strategies for an Organic Photovoltaic Module with over 10% Efficiency. Joule, 2020, 4, 189-206.	11.7	154
95	Efficient organic solar cells with the active layer fabricated from glovebox to ambient condition. Applied Physics Letters, 2020, 117, 133301.	1.5	11
96	Recent advances in non-fullerene organic solar cells: from lab to fab. Chemical Communications, 2020, 56, 14337-14352.	2.2	75
97	Progress in Materials, Solution Processes, and Longâ€Term Stability for Largeâ€Area Organic Photovoltaics. Advanced Materials, 2020, 32, e2002217.	11.1	124
98	Systematic Study on the Morphological Development of Blade-Coated Conjugated Polymer Thin Films via In Situ Measurements. ACS Applied Materials & Interfaces, 2020, 12, 36417-36427.	4.0	15
99	Significant Photostability Enhancement of Inverted Organic Solar Cells by Inserting an N-Annulated Perylene Diimide (PDIN-H) between the ZnO Electron Extraction Layer and the Organic Active Layer. ACS Applied Energy Materials, 2020, 3, 11655-11665.	2.5	20
100	In Situ Studies of Solvent Additive Effects on the Morphology Development during Printing of Bulk Heterojunction Films for Organic Solar Cells. Small Methods, 2020, 4, 2000418.	4.6	20
101	Side chain independent photovoltaic performance of thienopyrroledione conjugated donor–acceptor polymers. Journal of Materials Chemistry C, 2020, 8, 16452-16462.	2.7	2
102	Hybrid and organic photovoltaics for greenhouse applications. Applied Energy, 2020, 278, 115582.	5.1	75
103	Single-Component Non-halogen Solvent-Processed High-Performance Organic Solar Cell Module with Efficiency over 14%. Joule, 2020, 4, 2004-2016.	11.7	225
104	Large-Area Nonfullerene Organic Solar Cell Modules Fabricated by a Temperature-Independent Printing Method. ACS Applied Materials & Interfaces, 2020, 12, 41877-41885.	4.0	30
105	Coating Thickness Controls Crystallinity and Enables Homoepitaxial Growth of Ultraâ€Thinâ€Channel Bladeâ€Coated In ₂ O ₃ Transistors. Advanced Electronic Materials, 2020, 6, 2000354.	2.6	7
106	What Is the Assembly Pathway of a Conjugated Polymer From Solution to Thin Films?. Frontiers in Chemistry, 2020, 8, 583521.	1.8	21
107	Cosolvent Effects When Blade-Coating a Low-Solubility Conjugated Polymer for Bulk Heterojunction Organic Photovoltaics. ACS Applied Materials & amp; Interfaces, 2020, 12, 27416-27424.	4.0	7
108	Role of the electronically-active amorphous state in low-temperature processed In ₂ O ₃ thin-film transistors. Materials Advances, 2020, 1, 167-176.	2.6	12
109	Balancing the pre-aggregation and crystallization kinetics enables high efficiency slot-die coated organic solar cells with reduced non-radiative recombination losses. Energy and Environmental Science, 2020, 13, 2467-2479.	15.6	69

		Report	
#	Article	IF	CITATIONS
110	Toward Fast Screening of Organic Solar Cell Blends. Advanced Science, 2020, 7, 2000960.	5.6	15
111	Achieving Balanced Crystallization Kinetics of Donor and Acceptor by Sequentialâ€Blade Coated Double Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2020, 10, 2000826.	10.2	77
112	Highly Efficient Large-Area Organic Photovoltaic Module with a 350 nm Thick Active Layer Using a Random Terpolymer Donor. Chemistry of Materials, 2020, 32, 3469-3479.	3.2	19
113	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17551-17557.	3.3	24
114	In situ measurements of the structure and strain of a π-conjugated semiconducting polymer under mechanical load. Journal of Applied Physics, 2020, 127, 045108.	1.1	8
115	Critical Role of Polymer Aggregation and Miscibility in Nonfullereneâ€Based Organic Photovoltaics. Advanced Energy Materials, 2020, 10, 1902430.	10.2	41
116	Influence of Polymer Aggregation and Liquid Immiscibility on Morphology Tuning by Varying Composition in PffBT4Tâ€2DT/Nonfullerene Organic Solar Cells. Advanced Energy Materials, 2020, 10, 1903248.	10.2	23
117	Sequential Bladeâ€Coated Acceptor and Donor Enables Simultaneous Enhancement of Efficiency, Stability, and Mechanical Properties for Organic Solar Cells. Advanced Energy Materials, 2020, 10, 1903609.	10.2	70
118	In Situ Printing: Insights into the Morphology Formation and Optical Property Evolution of Slotâ€Dieâ€Coated Active Layers Containing Low Bandgap Polymer Donor and Nonfullerene Small Molecule Acceptor. Solar Rrl, 2020, 4, 2000086.	3.1	13
119	Blade-coated efficient and stable large-area organic solar cells with optimized additive. Organic Electronics, 2020, 83, 105771.	1.4	18
120	Temperature Induced Aggregation of Organic Semiconductors. Chemistry - A European Journal, 2021, 27, 2908-2919.	1.7	26
121	Regulating crystallization to maintain balanced carrier mobility via ternary strategy in blade-coated flexible organic solar cells. Organic Electronics, 2021, 89, 106027.	1.4	12
122	SMART Perovskite Growth: Enabling a Larger Range of Process Conditions. ACS Energy Letters, 2021, 6, 650-658.	8.8	14
123	Probing Crystallization Effects when Processing Bulk-Heterojunction Active Layers: Comparing Fullerene and Nonfullerene Acceptors. Chemistry of Materials, 2021, 33, 657-667.	3.2	8
124	Flexible electrochromic devices based on tungsten oxide and Prussian blue nanoparticles for automobile applications. RSC Advances, 2021, 11, 28614-28620.	1.7	18
125	Unfavourable interactions enable stability. Nature Materials, 2021, 20, 447-448.	13.3	3
126	Using In Situ Optical Spectroscopy to Elucidate Film Formation of Metal Halide Perovskites. Journal of Physical Chemistry A, 2021, 125, 2209-2225.	1.1	10
127	Patterned Blade Coating Strategy Enables the Enhanced Device Reproducibility and Optimized Morphology of Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2100098.	10.2	47

#	Article	IF	CITATIONS
128	Largeâ€Area Bladeâ€Coated Solar Cells: Advances and Perspectives. Advanced Energy Materials, 2021, 11, 2100378.	10.2	77
129	Orientational Ordering within Semiconducting Polymer Fibrils. Advanced Functional Materials, 2021, 31, 2102522.	7.8	3
130	The Use of Greenâ€Solvent Processable Molecules with Large Dipole Moments in the Electron Extraction Layer of Inverted Organic Solar Cells as a Universal Route for Enhancing Stability. Advanced Sustainable Systems, 2022, 6, 2100078.	2.7	7
131	Controlling Polymer Morphology in Blade-Coated All-Polymer Solar Cells. Chemistry of Materials, 2021, 33, 5951-5961.	3.2	14
132	Over 13.8% efficiency of organic solar cells fabricated by air-processable spontaneously spreading process through water temperature control. Nano Energy, 2021, 85, 105982.	8.2	11
133	Understanding Differences in the Crystallization Kinetics between Oneâ€Step Slotâ€Die Coating and Spin Coating of MAPbI ₃ Using Multimodal In Situ Optical Spectroscopy. Advanced Optical Materials, 2021, 9, 2101161.	3.6	8
134	Layerâ€byâ€layered organic solar cells: Morphology optimizing strategies and processing techniques. Aggregate, 2022, 3, e107.	5.2	26
135	High-efficiency single and tandem fullerene solar cells with asymmetric monofluorinated diketopyrrolopyrrole-based polymer. Journal of Energy Chemistry, 2022, 64, 236-245.	7.1	15
136	BODIPY-modified terpolymer donors for efficient fullerene- and nonfullerene-polymer solar cells. Journal of Materials Chemistry C, 2021, 9, 7035-7045.	2.7	14
137	Bridging the thermodynamics and kinetics of temperature-induced morphology evolution in polymer/fullerene organic solar cell bulk heterojunction. Materials Horizons, 2021, 8, 1272-1285.	6.4	21
138	Efficient Polymer Solar Cells Sprayâ€Coated from Nonâ€Halogenated Solvents towards Practical Fabrication. Energy Technology, 2018, 6, 171-177.	1.8	6
139	Soft X-Ray Scattering Characterization of Polymer Semiconductors. , 2019, , 427-458.		9
140	Quinoxaline-Based Small Molecules: Synthesis and Investigation on Their Optoelectronic Properties. Materials Science-Poland, 2018, 36, 167-176.	0.4	3
141	Optimized Charge Transport Channel Enables Thick-Film All-Small-Molecule Organic Solar Cells. Energy & Fuels, 2021, 35, 19756-19764.	2.5	0
142	Ambient Condition, Threeâ€Layer Slotâ€Die Coated Organic Photovoltaics with PCE of 10%. Advanced Materials Interfaces, 0, , 2101418.	1.9	10
143	A liquid-crystalline non-fullerene acceptor enabling high-performance organic solar cells. Journal of Materials Chemistry A, 2021, 9, 26917-26928.	5.2	5
144	A Universal Cosolvent Evaporation Strategy Enables Direct Printing of Perovskite Single Crystals for Optoelectronic Device Applications. Advanced Materials, 2022, 34, e2109862.	11.1	18
145	From-lab-to-fab: challenges and vision for sustainable organic electronics—organic photovoltaic case. , 2022, , 521-560.		0

#	Article	IF	CITATIONS
146	Revealing Donor–Acceptor Interaction on the Printed Active Layer Morphology and the Formation Kinetics for Nonfullerene Organic Solar Cells at Ambient Conditions. Advanced Energy Materials, 2022, 12, .	10.2	40
147	Organic Photovoltaics' New Renaissance: Advances Toward Rollâ€ŧoâ€Roll Manufacturing of Nonâ€Fullerene Acceptor Organic Photovoltaics. Advanced Materials Technologies, 2022, 7, .	3.0	32
149	Meniscusâ€Assisted Coating with Optimized Active‣ayer Morphology toward Highly Efficient Allâ€Polymer Solar Cells. Advanced Materials, 2022, 34, e2108508.	11.1	26
150	Recent Progress of Benzodifuranâ€Based Polymer Donors for Highâ€Performance Organic Photovoltaics. Small Science, 2022, 2, .	5.8	10
151	Protective Coating Interfaces for Perovskite Solar Cell Materials: A First-Principles Study. ACS Applied Materials & Interfaces, 2022, 14, 12758-12765.	4.0	2
152	Long-Wavelength Instabilities Impact Alignment during Blade Coating of a Stretchable Organic Transistor Blend. ACS Applied Materials & Interfaces, 2022, 14, 1537-1545.	4.0	2
153	CHAPTER 6. Structure/Property/Processing Relationships for Organic Solar Cells. RSC Nanoscience and Nanotechnology, 0, , 182-225.	0.2	0
154	Recent progress in organic solar cells (Part II device engineering). Science China Chemistry, 2022, 65, 1457-1497.	4.2	157
155	Introduction of Water Treatment in Slotâ€Die Coated Organic Solar Cells to Improve Device Performance and Stability. Advanced Functional Materials, 2022, 32, .	7.8	5
156	Real-time views of morphological evolution in solution-processed organic photovoltaics. Journal of Materials Chemistry C, 2022, 10, 13646-13675.	2.7	2
157	Non-Halogenated Solvents and Layer-by-Layer Blade-Coated Ternary Organic Solar Cells via Cascade Acceptor Adjusting Morphology and Crystallization to Reduce Energy Loss. ACS Applied Materials & Interfaces, 2022, 14, 31054-31065.	4.0	15
158	Chain Alignment and Charge Transport Anisotropy in Blade-Coated P(NDI2OD-T2)/PS Blend Films. ACS Applied Polymer Materials, 2022, 4, 5501-5514.	2.0	2
159	Flexible solar and thermal energy conversion devices: Organic photovoltaics (OPVs), organic thermoelectric generators (OTEGs) and hybrid PV-TEG systems. Applied Materials Today, 2022, 29, 101614.	2.3	16
160	Recent progress in solution-processed flexible organic photovoltaics. Npj Flexible Electronics, 2022, 6, .	5.1	11
161	Benzothiadiazole-based push-pull copolymers – Balancing synthetic complexity against organic solar cell efficiency. Organic Electronics, 2022, 111, 106667.	1.4	3
162	<i>In Situ</i> and <i>Operando</i> Characterizations of Metal Halide Perovskite and Solar Cells: Insights from Lab-Sized Devices to Upscaling Processes. Chemical Reviews, 2023, 123, 3160-3236.	23.0	15
163	Development and application of blade-coating technique in organic solar cells. Nano Research, 2023, 16, 11571-11588.	5.8	7
164	Solution Aggregate Structures of Donor Polymers Determine the Morphology and Processing Resiliency of Non-Fullerene Organic Solar Cells. Chemistry of Materials, 2023, 35, 2713-2729.	3.2	12

		CITATION REPORT	
#	Article	IF	CITATIONS
165	From Solution to Thin Film: Molecular Assembly of π-Conjugated Systems and Impact on (Opto)electronic Properties. Chemical Reviews, 2023, 123, 8395-8487.	23.0	27