

Over 17.7% efficiency ternary-blend organic solar cells with thickness-tolerance

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Non-conjugated electrolytes as thickness-insensitive interfacial layers for high-performance organic solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 22926-22933.	5.2	9
2	Organic photovoltaics with 300 nm thick ternary active layers exhibiting 15.6% efficiency. <i>Journal of Materials Chemistry C</i> , 2021, 9, 9892-9898.	2.7	43
3	Rational compatibility in a ternary matrix enables all-small-molecule organic solar cells with over 16% efficiency. <i>Energy and Environmental Science</i> , 2021, 14, 3945-3953.	15.6	124
4	Highly sensitive all-polymer photodetectors with ultraviolet-visible to near-infrared photo-detection and their application as an optical switch. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5349-5355.	2.7	45
5	Highly sensitive, broad-band organic photomultiplication-type photodetectors covering UV-Vis-NIR. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6357-6364.	2.7	75
6	Progress in morphology control from fullerene to nonfullerene acceptors for scalable high-performance organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2021, 9, 24729-24758.	5.2	28
7	Ultra-Narrow-Band NIR Photomultiplication Organic Photodetectors Based on Charge Injection Narrowing. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2937-2943.	2.1	90
8	Smart Strategy: Transparent Hole-Transporting Polymer as a Regulator to Optimize Photomultiplication-type Polymer Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 21565-21572.	4.0	55
9	Efficient p-Doping with F 6 TCNQ for Improving Performance of Polymer Photodetectors with Photomultiplication. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100107.	1.2	0
10	Over 17.6% Efficiency Organic Photovoltaic Devices with Two Compatible Polymer Donors. <i>Solar Rrl</i> , 2021, 5, 2100175.	3.1	49
11	Over 16% Efficiency of Thick-Film Organic Photovoltaics with Symmetric and Asymmetric Non-Fullerene Materials as Alloyed Acceptor. <i>Solar Rrl</i> , 2021, 5, 2100365.	3.1	13
12	Asymmetric Isomer Effects in Benzo[ <i>c</i> ][1,2,5]thiadiazole-Fused Nonacyclic Acceptors: Dielectric Constant and Molecular Crystallinity Control for Significant Photovoltaic Performance Enhancement. <i>Advanced Functional Materials</i> , 2021, 31, 2104369.	7.8	46
13	Recent Progress of Organic Photovoltaics with Efficiency over 17%. <i>Energies</i> , 2021, 14, 4200.	1.6	75
14	Highly sensitive, sub-microsecond polymer photodetectors for blood oxygen saturation testing. <i>Science China Chemistry</i> , 2021, 64, 1302-1309.	4.2	69
15	Two-Pronged Effect of Warm Solution and Solvent-Vapor Annealing for Efficient and Stable All-Small-Molecule Organic Solar Cells. <i>ACS Energy Letters</i> , 2021, 6, 2898-2906.	8.8	50
16	Enhanced Short-Wavelength Absorption and Effective Exciton Dissociation in NC70BA-Based Ternary Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 8432-8441.	2.5	7
17	Ternary polymer solar cells by employing two well-compatible donors with cascade energy levels. <i>Dyes and Pigments</i> , 2021, 192, 109424.	2.0	5
18	Incorporation of a Guaiacol-Based Small Molecule Guest Donor Enables Efficient Nonfullerene Acceptor-Based Ternary Organic Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100402.	3.1	8

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19	Aminonaphthalimide-Based Molecular Cathode Interlayers for As-Cast Organic Solar Cells. <i>ChemSusChem</i> , 2021, 14, 4783-4792.	3.6	14
20	Binary and Ternary Polymer Solar Cells Based on a Wide Bandgap D $\pi$ A Copolymer Donor and Two Nonfullerene Acceptors with Complementary Absorption Spectral. <i>ChemSusChem</i> , 2021, 14, 4731-4740.	3.6	3
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23	Wide Bandgap Polymer with Narrow Photon Harvesting in Visible Light Range Enables Efficient Semitransparent Organic Photovoltaics. <i>Advanced Functional Materials</i> , 2021, 31, 2107934.	7.8	133
24	Two Y6 Derivations with Similar Chemical Structure As One Alloyed Acceptor Enable Efficient Ternary-Blend Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 11761-11768.	2.5	8
25	The design of quinoxaline based unfused non-fullerene acceptors for high performance and stable organic solar cells. <i>Chemical Engineering Journal</i> , 2022, 427, 131473.	6.6	32
26	Ternary polymerization strategy to approach 12% efficiency in all-polymer solar cells processed by green solvent and additive. <i>Chemical Engineering Journal</i> , 2022, 429, 132407.	6.6	15
27	Employing liquid crystal material as regulator to enhance performance of photomultiplication type polymer photodetectors. <i>Chemical Engineering Journal</i> , 2022, 427, 131802.	6.6	71
28	17.25% high efficiency ternary solar cells with increased open-circuit voltage using a high HOMO level small molecule guest donor in a PM6:Y6 blend. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20493-20501.	5.2	24
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30	Natural biomaterial sarcosine as an interfacial layer enables inverted organic solar cells to exhibit over 16.4% efficiency. <i>Nanoscale</i> , 2021, 13, 11128-11137.	2.8	16
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32	Development of new nonacyclic small-molecule acceptors involving two benzo[1,2-b:4,5-b $\pi$ 2]dithiophene moieties for efficient polymer solar cells. <i>Synthetic Metals</i> , 2021, 282, 116922.	2.1	0
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34	Enhanced photomultiplication of organic photodetectors <i>via</i> phosphorescent material incorporation. <i>Journal of Materials Chemistry C</i> , 2021, 9, 16918-16924.	2.7	2
35	Modulation of Vertical Component Distribution for Large-Area Thick-Film Organic Solar Cells. <i>Solar Rrl</i> , 2022, 6, 2100838.	3.1	9
36	Ternary Blend Organic Solar Cells: Understanding the Morphology from Recent Progress. <i>Advanced Materials</i> , 2022, 34, e2107476.	11.1	100

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38	Smart Ternary Strategy in Promoting the Performance of Polymer Solar Cells Based on Bulkâ€“Heterojunction or Layerâ€“Byâ€“Layer Structure. Small, 2022, 18, e2104215.	5.2	100
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44	Improving charge transport and reducing non-radiative energy loss <i>via</i> a nonacyclic carbazole-based third component for over 18% efficiency polymer solar cells. Journal of Materials Chemistry A, 2022, 10, 7090-7098.	5.2	14
45	Efficient ternary bulk heterojunction organic solar cells using a low-cost nonfullerene acceptor. Journal of Materials Chemistry C, 2022, 10, 4372-4382.	2.7	5
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56	Efficient energy transfer and smooth charge transport via second donor as third component materials in ternary polymer solar cells. <i>Dyes and Pigments</i> , 2022, 204, 110426.	2.0	0
57	Perovskite-based tandem solar cells: Device architecture, stability, and economic perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 165, 112553.	8.2	16
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64	High-Performance Ternary Organic Solar Cells through Incorporation of a Series of A <sub>2</sub> -A <sub>1</sub> -D-A <sub>1</sub> -A <sub>2</sub> Type Nonfullerene Acceptors with Different Terminal Groups. <i>ACS Energy Letters</i> , 2022, 7, 2845-2855.	8.8	29
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66	Stabilized Efficiency of Nonfullerene Organic Solar Cells Under UV-Filtered Sunlight. <i>Solar Rrl</i> , 0, , 2200712.	3.1	0
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72	Organic N-Type Dopants with a Phenyl Tertiary Carbon Structure: Molecular Structure and Doping Properties. <i>ChemistrySelect</i> , 2022, 7, .	0.7	1

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73	Co <sup>2+</sup> -La <sup>3+</sup> -Based Hole-Transporting Layers for Binary Organic Solar Cells with 18.82% Efficiency. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	4
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75	Ternary Organic Solar Cells: Recent Insight on Structure-Processing-Property-Performance Relationships. <i>Energy Technology</i> , 2023, 11, .	1.8	8
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78	Recent Developments of Polymer Solar Cells with Photovoltaic Performance over 17%. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	38
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