

# Zhen Wang

## List of Publications by Year in descending order

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41  
papers

2,126  
citations

304368

22  
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288905

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41  
docs citations

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times ranked

2311  
citing authors

#	ARTICLE	IF	CITATIONS
1	High Miscibility Compatible with Ordered Molecular Packing Enables an Excellent Efficiency of 16.2% in All-Small-Molecule Organic Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2106316.	11.1	74
2	Branched Alkoxy Side Chain Enables High-Performance Non-Fullerene Acceptors with High Open-Circuit Voltage and Highly Ordered Molecular Packing. <i>Chemistry of Materials</i> , 2022, 34, 2059-2068.	3.2	20
3	Revealing aggregation of non-fullerene acceptors in intermixed phase by ultraviolet-visible absorption spectroscopy. <i>Cell Reports Physical Science</i> , 2022, 3, 100983.	2.8	6
4	Functionalization of Benzotriazole-Based Conjugated Polymers for Solar Cells: Heteroatom vs Substituents. <i>ACS Applied Polymer Materials</i> , 2021, 3, 30-41.	2.0	14
5	Optically Probing Field-Dependent Charge Dynamics in Non-Fullerene Organic Photovoltaics with Small Interfacial Energy Offsets. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1714-1722.	1.5	5
6	Creating Side Transport Pathways in Organic Solar Cells by Introducing Delayed Fluorescence Molecules. <i>Chemistry of Materials</i> , 2021, 33, 4578-4585.	3.2	11
7	Orientationally engineered 2D/3D perovskite for high efficiency solar cells. <i>Sustainable Energy and Fuels</i> , 2020, 4, 324-330.	2.5	35
8	Impact of Isomer Design on Physicochemical Properties and Performance in High-Efficiency All-Polymer Solar Cells. <i>Macromolecules</i> , 2020, 53, 9026-9033.	2.2	25
9	Incorporation of alkylthio side chains on benzothiadiazole-based non-fullerene acceptors enables high-performance organic solar cells with over 16% efficiency. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23239-23247.	5.2	39
10	Deciphering the Role of Chalcogen-Containing Heterocycles in Nonfullerene Acceptors for Organic Solar Cells. <i>ACS Energy Letters</i> , 2020, 5, 3415-3425.	8.8	73
11	Tailoring non-fullerene acceptors using selenium-incorporated heterocycles for organic solar cells with over 16% efficiency. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23756-23765.	5.2	85
12	Selective Hole and Electron Transport in Efficient Quaternary Blend Organic Solar Cells. <i>Joule</i> , 2020, 4, 1790-1805.	11.7	110
13	Modulating Energy Level on an A <sup>2</sup> D <sup>2</sup> A <sup>2</sup> -Type Unfused Acceptor by a Benzothiadiazole Core Enables Organic Solar Cells with Simple Procedure and High Performance. <i>Solar Rrl</i> , 2020, 4, 2000421.	3.1	48
14	Thermodynamic Properties and Molecular Packing Explain Performance and Processing Procedures of Three D18:NFA Organic Solar Cells. <i>Advanced Materials</i> , 2020, 32, e2005386.	11.1	130
15	Ternary Organic Solar Cells Based on Two Non-Fullerene Acceptors with Complimentary Absorption and Balanced Crystallinity. <i>Chinese Journal of Chemistry</i> , 2020, 38, 935-940.	2.6	21
16	Effect of Side-Chain Variation on Single-Crystalline Structures for Revealing the Structure-Property Relationships of Organic Solar Cells. <i>Organic Materials</i> , 2020, 02, 026-032.	1.0	1
17	Chain Engineering of Benzodifuran-Based Wide-Bandgap Polymers for Efficient Non-Fullerene Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900227.	2.0	15
18	A-D-A small-molecule donors with different end alkyl chains obtain different morphologies in organic solar cells. <i>Chinese Chemical Letters</i> , 2019, 30, 906-910.	4.8	8

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19	Efficient Polymer Solar Cells With High Fill Factor Enabled by A Furo[3,4- <i>c</i> ]pyrrole-4,6-dione-Based Copolymer. <i>Solar Rrl</i> , 2019, 3, 1900012.	3.1	17
20	Organic Solar Cells Based on High Hole Mobility Conjugated Polymer and Nonfullerene Acceptor with Comparable Bandgaps and Suitable Energy Level Offsets Showing Significant Suppression of Charge Recombination. <i>Solar Rrl</i> , 2019, 3, 1900079.	3.1	25
21	Fluorination-substitution effect on all-small-molecule organic solar cells. <i>Science China Chemistry</i> , 2019, 62, 837-844.	4.2	32
22	Efficient post-treatment-free polymer solar cells from indacenodithiophene and fluorinated quinoxaline-based conjugated polymers. <i>Dyes and Pigments</i> , 2018, 154, 164-171.	2.0	5
23	Naphtho[1,2- <i>b</i> :5,6- <i>b'</i> ]dithiophene-Based Conjugated Polymers for Fullerene-Free Inverted Polymer Solar Cells. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1700872.	2.0	11
24	Two-dimensional benzo[1,2- <i>b</i> :4,5- <i>b'</i> ]difuran-based wide bandgap conjugated polymers for efficient fullerene-free polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4023-4031.	5.2	37
25	Improve the Performance of the All-Small-Molecule Nonfullerene Organic Solar Cells through Enhancing the Crystallinity of Acceptors. <i>Advanced Energy Materials</i> , 2018, 8, 1702377.	10.2	87
26	From Alloy-Like to Cascade Blended Structure: Designing High-Performance All-Small-Molecule Ternary Solar Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 1549-1556.	6.6	145
27	Wide-Bandgap Conjugated Polymers Based on Alkylthiofuran-Substituted Benzo[1,2- <i>b</i> :4,5- <i>b'</i> ]difuran for Efficient Fullerene-Free Polymer Solar Cells. <i>Macromolecules</i> , 2018, 51, 2498-2505.	2.2	23
28	Fluorination Induced Donor to Acceptor Transformation in All-Small-Molecule Ternary Photovoltaic Small Molecules. <i>Frontiers in Chemistry</i> , 2018, 6, 384.	1.8	4
29	Suppressing charge recombination in small-molecule ternary organic solar cells by modulating donor-acceptor interfacial arrangements. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 24570-24576.	1.3	13
30	Macroscopic helical chirality and self-motion of hierarchical self-assemblies induced by enantiomeric small molecules. <i>Nature Communications</i> , 2018, 9, 3808.	5.8	34
31	An Asymmetrical Polymer Based on Thieno[2,3- <i>f</i> ]benzofuran for Efficient Fullerene-Free Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , 2018, 1, 1888-1892.	2.5	18
32	Modulation of the Molecular Orientation at the Bulk Heterojunction Interface via Tuning the Small Molecular Donor-Nonfullerene Acceptor Interactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 31526-31534.	4.0	26
33	1D/2A ternary blend active layer enables as-cast polymer solar cells with higher efficiency, better thickness tolerance, and higher thermal stability. <i>Organic Electronics</i> , 2018, 61, 359-365.	1.4	18
34	Aromatic end-capped acceptor effects on molecular stacking and the photovoltaic performance of solution-processable small molecules. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22077-22085.	5.2	19
35	Combining Energy Transfer and Optimized Morphology for Highly Efficient Ternary Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1602552.	10.2	97
36	All-Small-Molecule Electron-Donating Small Molecules for Solution-Processed Organic Solar Cells: A Review. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700470.	2.0	70

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37	Versatile asymmetric thiophene/benzothiophene flanked diketopyrrolopyrrole polymers with ambipolar properties for OFETs and OSCs. <i>Polymer Chemistry</i> , 2017, 8, 5603-5610.	1.9	33
38	Self-Doped and Crown-Ether Functionalized Fullerene as Cathode Buffer Layer for Highly Efficient Inverted Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, .	10.2	13
39	Fluorination-enabled optimal morphology leads to over 11% efficiency for inverted small-molecule organic solar cells. <i>Nature Communications</i> , 2016, 7, 13740.	5.8	549
40	Acceptor End-Capped Oligomeric Conjugated Molecules with Broadened Absorption and Enhanced Extinction Coefficients for High-Efficiency Organic Solar Cells. <i>Advanced Materials</i> , 2016, 28, 5980-5985.	11.1	87
41	Understanding the Impact of Hierarchical Nanostructure in Ternary Organic Solar Cells. <i>Advanced Science</i> , 2015, 2, 1500250.	5.6	43