

Huawei Hu

List of Publications by Year in descending order

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35
papers

7,312
citations

186265

28
h-index

361022

35
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all docs

35
docs citations

35
times ranked

5574
citing authors

#	ARTICLE	IF	CITATIONS
1	Low Voltage Loss Organic Solar Cells Light the Way for Efficient Semitransparent Photovoltaics. Solar Rrl, 2022, 6, .	5.8	3
2	Side-chain engineering with chalcogen-containing heterocycles on non-fullerene acceptors for efficient organic solar cells. Chemical Engineering Journal, 2022, 441, 135998.	12.7	12
3	A molecular interaction "diffusion framework for predicting organic solar cell stability. Nature Materials, 2021, 20, 525-532.	27.5	212
4	Alkyl Chain Branching of Non-Fullerene Acceptors Flanking Conjugated Side Groups toward Highly Efficient Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102596.	19.5	125
5	The Role of Demixing and Crystallization Kinetics on the Stability of Non-Fullerene Organic Solar Cells. Advanced Materials, 2020, 32, e2005348.	21.0	74
6	A decacyclic indacenodithiophene-based non-fullerene electron acceptor with meta-alkyl-phenyl substitutions for polymer solar cells. Journal of Materials Chemistry A, 2019, 7, 4063-4071.	10.3	17
7	Chlorinated Thiophene End Groups for Highly Crystalline Alkylated Non-Fullerene Acceptors toward Efficient Organic Solar Cells. Chemistry of Materials, 2019, 31, 6672-6676.	6.7	48
8	Temperature-Dependent Aggregation Donor Polymers Enable Highly Efficient Sequentially Processed Organic Photovoltaics Without the Need of Orthogonal Solvents. Advanced Functional Materials, 2019, 29, 1902478.	14.9	50
9	Quantifying and Understanding Voltage Losses Due to Nonradiative Recombination in Bulk Heterojunction Organic Solar Cells with Low Energetic Offsets. Advanced Energy Materials, 2019, 9, 1901077.	19.5	69
10	Delineation of Thermodynamic and Kinetic Factors that Control Stability in Non-fullerene Organic Solar Cells. Joule, 2019, 3, 1328-1348.	24.0	143
11	Intramolecular π -stacked perylene-diimide acceptors for non-fullerene organic solar cells. Journal of Materials Chemistry A, 2019, 7, 8136-8143.	10.3	34
12	Highly Efficient, Stable, and Ductile Ternary Nonfullerene Organic Solar Cells from a Two-Donor Polymer Blend. Advanced Materials, 2019, 31, e1808279.	21.0	79
13	Efficient All-Polymer Solar Cells based on a New Polymer Acceptor Achieving 10.3% Power Conversion Efficiency. ACS Energy Letters, 2019, 4, 417-422.	17.4	196
14	A Donor Polymer Based on a Difluorinated Pentathiophene Unit Enabling Enhanced Performance for Nonfullerene Organic Solar Cells. Small Methods, 2018, 2, 1700415.	8.6	13
15	Quantitative relations between interaction parameter, miscibility and function in organic solar cells. Nature Materials, 2018, 17, 253-260.	27.5	556
16	Multiple Cases of Efficient Nonfullerene Ternary Organic Solar Cells Enabled by an Effective Morphology Control Method. Advanced Energy Materials, 2018, 8, 1701370.	19.5	140
17	Influence of Donor Polymer on the Molecular Ordering of Small Molecular Acceptors in Nonfullerene Polymer Solar Cells. Advanced Energy Materials, 2018, 8, 1701674.	19.5	60
18	A Facile Method to Fine-Tune Polymer Aggregation Properties and Blend Morphology of Polymer Solar Cells Using Donor Polymers with Randomly Distributed Alkyl Chains. Advanced Energy Materials, 2018, 8, 1701895.	19.5	62

#	ARTICLE	IF	CITATIONS
19	Donor polymer based on alkylthiophene side chains for efficient non-fullerene organic solar cells: insights into fluorination and side chain effects on polymer aggregation and blend morphology. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23270-23277.	10.3	16
20	Effect of Ring-Fusion on Miscibility and Domain Purity: Key Factors Determining the Performance of PDI-Based Nonfullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1800234.	19.5	75
21	Modulation of End Groups for Low-Bandgap Nonfullerene Acceptors Enabling High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1801203.	19.5	99
22	Carboxylate substitution position influencing polymer properties and enabling non-fullerene organic solar cells with high open circuit voltage and low voltage loss. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16874-16881.	10.3	15
23	A random donor polymer based on an asymmetric building block to tune the morphology of non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22480-22488.	10.3	12
24	Design of Donor Polymers with Strong Temperature-Dependent Aggregation Property for Efficient Organic Photovoltaics. <i>Accounts of Chemical Research</i> , 2017, 50, 2519-2528.	15.6	222
25	Ring-Fusion of Perylene Diimide Acceptor Enabling Efficient Nonfullerene Organic Solar Cells with a Small Voltage Loss. <i>Journal of the American Chemical Society</i> , 2017, 139, 16092-16095.	13.7	304
26	Reduced Intramolecular Twisting Improves the Performance of 3D Molecular Acceptors in Non-Fullerene Organic Solar Cells. <i>Advanced Materials</i> , 2016, 28, 8546-8551.	21.0	161
27	Influence of fluorination on the properties and performance of isoindigo-quaterthiophene-based polymers. <i>Journal of Materials Chemistry A</i> , 2016, 4, 5039-5043.	10.3	35
28	High-Performance Non-Fullerene Polymer Solar Cells Based on a Pair of Donor-Acceptor Materials with Complementary Absorption Properties. <i>Advanced Materials</i> , 2015, 27, 7299-7304.	21.0	230
29	Efficient Low-Bandgap Polymer Solar Cells with High Open-Circuit Voltage and Good Stability. <i>Advanced Energy Materials</i> , 2015, 5, 1501282.	19.5	76
30	Efficient non-fullerene polymer solar cells enabled by tetrahedron-shaped core based 3D-structure small-molecular electron acceptors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13632-13636.	10.3	100
31	Dramatic performance enhancement for large bandgap thick-film polymer solar cells introduced by a difluorinated donor unit. <i>Nano Energy</i> , 2015, 15, 607-615.	16.0	93
32	Terthiophene-Based D-A Polymer with an Asymmetric Arrangement of Alkyl Chains That Enables Efficient Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 14149-14157.	13.7	386
33	A Tetraphenylethylene Core-Based 3D Structure Small Molecular Acceptor Enabling Efficient Non-Fullerene Organic Solar Cells. <i>Advanced Materials</i> , 2015, 27, 1015-1020.	21.0	362
34	High-efficiency non-fullerene organic solar cells enabled by a difluorobenzothiadiazole-based donor polymer combined with a properly matched small molecule acceptor. <i>Energy and Environmental Science</i> , 2015, 8, 520-525.	30.8	379
35	Aggregation and morphology control enables multiple cases of high-efficiency polymer solar cells. <i>Nature Communications</i> , 2014, 5, 5293.	12.8	2,854