Hu, Huawei

List of Publications by Year
in descending order

43 papers	7,725 citations	136885 32 h-index	254106 43 g-index
45 all docs	45 docs citations	45 times ranked	6043 citing authors

#	Article	IF	Citations
1	Aggregation and morphology control enables multiple cases of high-efficiency polymer solar cells. Nature Communications, 2014, 5, 5293.	5.8	2,854
2	Quantitative relations between interaction parameter, miscibility and function in organic solar cells. Nature Materials, 2018, 17, 253-260.	13.3	556
3	Terthiophene-Based Dâ€"A Polymer with an Asymmetric Arrangement of Alkyl Chains That Enables Efficient Polymer Solar Cells. Journal of the American Chemical Society, 2015, 137, 14149-14157.	6.6	386
4	High-efficiency non-fullerene organic solar cells enabled by a difluorobenzothiadiazole-based donor polymer combined with a properly matched small molecule acceptor. Energy and Environmental Science, 2015, 8, 520-525.	15.6	379
5	A Tetraphenylethylene Coreâ€Based 3D Structure Small Molecular Acceptor Enabling Efficient Nonâ€Fullerene Organic Solar Cells. Advanced Materials, 2015, 27, 1015-1020.	11.1	362
6	Ring-Fusion of Perylene Diimide Acceptor Enabling Efficient Nonfullerene Organic Solar Cells with a Small Voltage Loss. Journal of the American Chemical Society, 2017, 139, 16092-16095.	6.6	304
7	Highâ€Performance Nonâ€Fullerene Polymer Solar Cells Based on a Pair of Donorâ€"Acceptor Materials with Complementary Absorption Properties. Advanced Materials, 2015, 27, 7299-7304.	11.1	230
8	Design of Donor Polymers with Strong Temperature-Dependent Aggregation Property for Efficient Organic Photovoltaics. Accounts of Chemical Research, 2017, 50, 2519-2528.	7.6	222
9	A molecular interactionâ€"diffusion framework for predicting organic solar cell stability. Nature Materials, 2021, 20, 525-532.	13.3	212
10	Efficient All-Polymer Solar Cells based on a New Polymer Acceptor Achieving 10.3% Power Conversion Efficiency. ACS Energy Letters, 2019, 4, 417-422.	8.8	196
11	Reduced Intramolecular Twisting Improves the Performance of 3D Molecular Acceptors in Nonâ€Fullerene Organic Solar Cells. Advanced Materials, 2016, 28, 8546-8551.	11.1	161
12	Stretchable transistors and functional circuits for human-integrated electronics. Nature Electronics, 2021, 4, 17-29.	13.1	153
13	Delineation of Thermodynamic and Kinetic Factors that Control Stability in Non-fullerene Organic Solar Cells. Joule, 2019, 3, 1328-1348.	11.7	143
14	Multiple Cases of Efficient Nonfullerene Ternary Organic Solar Cells Enabled by an Effective Morphology Control Method. Advanced Energy Materials, 2018, 8, 1701370.	10.2	140
15	Alkylâ€Chain Branching of Nonâ€Fullerene Acceptors Flanking Conjugated Side Groups toward Highly Efficient Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102596.	10.2	125
16	Efficient non-fullerene polymer solar cells enabled by tetrahedron-shaped core based 3D-structure small-molecular electron acceptors. Journal of Materials Chemistry A, 2015, 3, 13632-13636.	5.2	100
17	Modulation of End Groups for Lowâ€Bandgap Nonfullerene Acceptors Enabling Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1801203.	10.2	99
18	Dramatic performance enhancement for large bandgap thick-film polymer solar cells introduced by a difluorinated donor unit. Nano Energy, 2015, 15, 607-615.	8.2	93

#	Article	IF	Citations
19	CsPbBr₃ perovskite nanocrystals as highly selective and sensitive spectrochemical probes for gaseous HCl detection. Journal of Materials Chemistry C, 2017, 5, 309-313.	2.7	89
20	Highly Efficient, Stable, and Ductile Ternary Nonfullerene Organic Solar Cells from a Twoâ€Donor Polymer Blend. Advanced Materials, 2019, 31, e1808279.	11.1	79
21	Efficient Lowâ€Bandgap Polymer Solar Cells with High Openâ€Circuit Voltage and Good Stability. Advanced Energy Materials, 2015, 5, 1501282.	10.2	76
22	Effect of Ringâ€Fusion on Miscibility and Domain Purity: Key Factors Determining the Performance of PDIâ€Based Nonfullerene Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1800234.	10.2	75
23	The Role of Demixing and Crystallization Kinetics on the Stability of Nonâ€Fullerene Organic Solar Cells. Advanced Materials, 2020, 32, e2005348.	11.1	74
24	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.	10.2	69
25	A Facile Method to Fineâ€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.	10.2	62
26	Influence of Donor Polymer on the Molecular Ordering of Small Molecular Acceptors in Nonfullerene Polymer Solar Cells. Advanced Energy Materials, 2018, 8, 1701674.	10.2	60
27	Gaining further insight into the effects of thermal annealing and solvent vapor annealing on time morphological development and degradation in small molecule solar cells. Journal of Materials Chemistry A, 2017, 5, 18101-18110.	5.2	50
28	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
29	Stretchable Redoxâ€Active Semiconducting Polymers for Highâ€Performance Organic Electrochemical Transistors. Advanced Materials, 2022, 34, e2201178.	11.1	50
30	Chlorinated Thiophene End Groups for Highly Crystalline Alkylated Non-Fullerene Acceptors toward Efficient Organic Solar Cells. Chemistry of Materials, 2019, 31, 6672-6676.	3.2	48
31	Determination of the movement and persistence of Cry1Ab/1Ac protein released from Bt transgenic rice under field and hydroponic conditions. Soil Biology and Biochemistry, 2013, 58, 107-114.	4.2	39
32	Influence of fluorination on the properties and performance of isoindigoâ€"quaterthiophene-based polymers. Journal of Materials Chemistry A, 2016, 4, 5039-5043.	5.2	35
33	Intramolecular Ï€-stacked perylene-diimide acceptors for non-fullerene organic solar cells. Journal of Materials Chemistry A, 2019, 7, 8136-8143.	5.2	34
34	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.	5.2	17
35	Henry reaction of fluorinated nitro compounds. Journal of Fluorine Chemistry, 2012, 133, 108-114.	0.9	16
36	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. Journal of Materials Chemistry A, 2018, 6, 23270-23277.	5.2	16

#	Article	IF	Citations
37	Carboxylate substitution position influencing polymer properties and enabling non-fullerene organic solar cells with high open circuit voltage and low voltage loss. Journal of Materials Chemistry A, 2018, 6, 16874-16881.	5.2	15
38	Radical Addition of Perfluoroalkyl Iodides to Alkenes and Alkynes Initiated by Sodium Dithionite in an Aqueous Solution in the Presence of a Novel Fluorosurfactant. Chinese Journal of Chemistry, 2013, 31, 939-944.	2.6	13
39	A Donor Polymer Based on a Difluorinated Pentathiophene Unit Enabling Enhanced Performance for Nonfullerene Organic Solar Cells. Small Methods, 2018, 2, 1700415.	4.6	13
40	A random donor polymer based on an asymmetric building block to tune the morphology of non-fullerene organic solar cells. Journal of Materials Chemistry A, 2017, 5, 22480-22488.	5.2	12
41	Organic Solar Cells: A Tetraphenylethylene Coreâ€Based 3D Structure Small Molecular Acceptor Enabling Efficient Nonâ€Fullerene Organic Solar Cells (Adv. Mater. 6/2015). Advanced Materials, 2015, 27, 1014-1014.	11.1	9
42	Michael Addition Reaction of Fluorinated Nitro Compounds. Chinese Journal of Chemistry, 2012, 30, 798-802.	2.6	6
43	Low Voltageâ€Loss Organic Solar Cells Light the Way for Efficient Semitransparent Photovoltaics. Solar Rrl, 2022, 6, .	3.1	3