Jianquan Zhang

List of Publications by Year
in descending order

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Version: 2024-02-01

54 papers	6,086 citations	87886 38 h-index	161844 54 g-index
54 all docs	54 docs citations	54 times ranked	4091 citing authors

#	Article	IF	Citations
1	ZnO electron transporting layer engineering realized over 20% efficiency and over 1.28 V openâ€circuit voltage in allâ€inorganic perovskite solar cells. EcoMat, 2022, 4, .	11.9	23
2	Branched Alkoxy Side Chain Enables High-Performance Non-Fullerene Acceptors with High Open-Circuit Voltage and Highly Ordered Molecular Packing. Chemistry of Materials, 2022, 34, 2059-2068.	6.7	20
3	A Vinyleneâ€Linkerâ€Based Polymer Acceptor Featuring a Coplanar and Rigid Molecular Conformation Enables Highâ€Performance Allâ€Polymer Solar Cells with Over 17% Efficiency. Advanced Materials, 2022, 34, e2200361.	21.0	131
4	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
5	Optimizing spectral and morphological match of nonfullerene acceptors toward efficient indoor organic photovoltaics with enhanced light source adaptability. Nano Energy, 2022, 98, 107281.	16.0	11
6	Unusual light-driven amplification through unexpected regioselective photogeneration of five-membered azaheterocyclic AIEgen. Chemical Science, 2021, 12, 709-717.	7.4	23
7	Asymmetric Alkoxy and Alkyl Substitution on Nonfullerene Acceptors Enabling Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003141.	19.5	144
8	Fluorinated End Group Enables Highâ€Performance Allâ€Polymer Solar Cells with Nearâ€Infrared Absorption and Enhanced Device Efficiency over 14%. Advanced Energy Materials, 2021, 11, 2003171.	19.5	89
9	Optically Probing Field-Dependent Charge Dynamics in Non-Fullerene Organic Photovoltaics with Small Interfacial Energy Offsets. Journal of Physical Chemistry C, 2021, 125, 1714-1722.	3.1	5
10	Fine-tuning of side-chain orientations on nonfullerene acceptors enables organic solar cells with 17.7% efficiency. Energy and Environmental Science, 2021, 14, 3469-3479.	30.8	158
11	Unraveling the Temperature Dependence of Exciton Dissociation and Free Charge Generation in Nonfullerene Organic Solar Cells. Solar Rrl, 2021, 5, 2000789.	5.8	10
12	Achieving Efficient Ternary Organic Solar Cells Using Structurally Similar Nonâ€Fullerene Acceptors with Varying Flanking Side Chains. Advanced Energy Materials, 2021, 11, 2100079.	19.5	80
13	Regioâ€Regular Polymer Acceptors Enabled by Determined Fluorination on End Groups for Allâ€Polymer Solar Cells with 15.2â€‰% Efficiency. Angewandte Chemie, 2021, 133, 10225-10234.	2.0	13
14	Regioâ€Regular Polymer Acceptors Enabled by Determined Fluorination on End Groups for Allâ€Polymer Solar Cells with 15.2â€‰% Efficiency. Angewandte Chemie - International Edition, 2021, 60, 10137-10146.	13.8	145
15	Sideâ€Chain Engineering on Yâ€Series Acceptors with Chlorinated End Groups Enables Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003777.	19.5	82
16	Enlarging the Reservoir: High Absorption Coefficient Dyes Enable Synergetic Near Infraredâ€I Fluorescence Imaging and Near Infraredâ€I Photothermal Therapy. Advanced Functional Materials, 2021, 31, 2102213.	14.9	47
17	A Difluoroâ€Monobromo End Group Enables Highâ€Performance Polymer Acceptor and Efficient Allâ€Polymer Solar Cells Processable with Green Solvent under Ambient Condition. Advanced Functional Materials, 2021, 31, 2100791.	14.9	89
18	A highly crystalline non-fullerene acceptor enabling efficient indoor organic photovoltaics with high EQE and fill factor. Joule, 2021, 5, 1231-1245.	24.0	95

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19	A Chlorinated Donor Polymer Achieving Highâ€Performance Organic Solar Cells with a Wide Range of Polymer Molecular Weight. Advanced Functional Materials, 2021, 31, 2102413.	14.9	69
20	Alkoxy substitution on IDT-Series and Y-Series non-fullerene acceptors yielding highly efficient organic solar cells. Journal of Materials Chemistry A, 2021, 9, 7481-7490.	10.3	42
21	Alkylâ€Chain Branching of Nonâ€Fullerene Acceptors Flanking Conjugated Side Groups toward Highly Efficient Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102596.	19.5	125
22	Deciphering the Role of Chalcogen-Containing Heterocycles in Nonfullerene Acceptors for Organic Solar Cells. ACS Energy Letters, 2020, 5, 3415-3425.	17.4	73
23	Incorporation of Planar Blocks into Twisted Skeletons: Boosting Brightness of Fluorophores for Bioimaging beyond 1500 Nanometer. ACS Nano, 2020, 14, 14228-14239.	14.6	78
24	Tailoring non-fullerene acceptors using selenium-incorporated heterocycles for organic solar cells with over 16% efficiency. Journal of Materials Chemistry A, 2020, 8, 23756-23765.	10.3	85
25	Selective Hole and Electron Transport in Efficient Quaternary Blend Organic Solar Cells. Joule, 2020, 4, 1790-1805.	24.0	110
26	High-Efficiency Indoor Organic Photovoltaics with a Band-Aligned Interlayer. Joule, 2020, 4, 1607-1611.	24.0	12
27	Random Polymerization Strategy Leads to a Family of Donor Polymers Enabling Wellâ€Controlled Morphology and Multiple Cases of Highâ€Performance Organic Solar Cells. Advanced Materials, 2020, 32, e2003500.	21.0	59
28	Thickâ€Film Low Drivingâ€Force Indoor Light Harvesters. Solar Rrl, 2020, 4, 2000291.	5.8	24
29	The Role of Demixing and Crystallization Kinetics on the Stability of Nonâ€Fullerene Organic Solar Cells. Advanced Materials, 2020, 32, e2005348.	21.0	74
30	Improved organic solar cell efficiency based on the regulation of an alkyl chain on chlorinated non-fullerene acceptors. Materials Chemistry Frontiers, 2020, 4, 2428-2434.	5.9	27
31	High-Efficiency Indoor Organic Photovoltaics with a Band-Aligned Interlayer. Joule, 2020, 4, 1486-1500.	24.0	169
32	Enhanced hindrance from phenyl outer side chains on nonfullerene acceptor enables unprecedented simultaneous enhancement in organic solar cell performances with 16.7% efficiency. Nano Energy, 2020, 76, 105087.	16.0	85
33	Transannularly conjugated tetrameric perylene diimide acceptors containing [2.2]paracyclophane for non-fullerene organic solar cells. Journal of Materials Chemistry A, 2020, 8, 6501-6509.	10.3	42
34	Near-infrared electron acceptors with fused nonacyclic molecular backbones for nonfullerene organic solar cells. Materials Chemistry Frontiers, 2020, 4, 1729-1738.	5.9	23
35	Dopantâ€Free Organic Holeâ€Transporting Material for Efficient and Stable Inverted Allâ€Inorganic and Hybrid Perovskite Solar Cells. Advanced Materials, 2020, 32, e1908011.	21.0	195
36	Donor Polymer Can Assist Electron Transport in Bulk Heterojunction Blends with Small Energetic Offsets. Advanced Materials, 2019, 31, e1903998.	21.0	49

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37	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
38	Intramolecular Ï€-stacked perylene-diimide acceptors for non-fullerene organic solar cells. Journal of Materials Chemistry A, 2019, 7, 8136-8143.	10.3	34
39	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
40	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
41	Alkyl Chain Regiochemistry of Benzotriazoleâ€Based Donor Polymers Influencing Morphology and Performances of Nonâ€Fullerene Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1702427.	19.5	36
42	Nonfullerene Acceptor Molecules for Bulk Heterojunction Organic Solar Cells. Chemical Reviews, 2018, 118, 3447-3507.	47.7	1,371
43	A Nonfullerene Semitransparent Tandem Organic Solar Cell with 10.5% Power Conversion Efficiency. Advanced Energy Materials, 2018, 8, 1800529.	19.5	92
44	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.	19.5	75
45	Modulation of End Groups for Lowâ€Bandgap Nonfullerene Acceptors Enabling Highâ€Performance Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1801203.	19.5	99
46	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.	10.3	15
47	Material insights and challenges for non-fullerene organic solar cells based on small molecular acceptors. Nature Energy, 2018, 3, 720-731.	39.5	808
48	Surprising Effects upon Inserting Benzene Units into a Quaterthiopheneâ€Based Dâ€A Polymerâ€“Improving Nonâ€Fullerene Organic Solar Cells via Donor Polymer Design. Advanced Energy Materials, 2017, 7, 1602304.	19.5	57
49	Tuning Energy Levels without Negatively Affecting Morphology: A Promising Approach to Achieving Optimal Energetic Match and Efficient Nonfullerene Polymer Solar Cells. Advanced Energy Materials, 2017, 7, 1602119.	19.5	39
50	Synthesis and side-chain isomeric effect of 4,9-/5,10-dialkylated-Î²-angular-shaped naphthodithiophenes-based donorâ€“acceptor copolymers for polymer solar cells and field-effect transistors. Polymer Chemistry, 2017, 8, 2334-2345.	3.9	20
51	An Allâ€Solution Processed Recombination Layer with Mild Postâ€Treatment Enabling Efficient Homoâ€Tandem Nonâ€fullerene Organic Solar Cells. Advanced Materials, 2017, 29, 1604231.	21.0	68
52	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.	13.7	304
53	A Difluorobenzoxadiazole Building Block for Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 1868-1873.	21.0	125
54	The influence of spacer units on molecular properties and solar cell performance of non-fullerene acceptors. Journal of Materials Chemistry A, 2015, 3, 20108-20112.	10.3	41