Lianjie Zhang

List of Publications by Year
in descending order

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52 papers	1,978 citations	279701 23 h-index	243529 44 g-index
54 all docs	54 docs citations	54 times ranked	2219 citing authors

#	Article	IF	Citations
1	Face-on oriented hydrophobic conjugated polymers as dopant-free hole-transport materials for efficient and stable perovskite solar cells with a fill factor approaching 85%. Journal of Materials Chemistry A, 2022, 10, 3409-3417.	5.2	19
2	A comparison of the positional effect of difluorination and the synergistic effect of siloxane-terminated side chains on benzodithiophene-based conjugated polymers for efficient photovoltaic application. Journal of Materials Chemistry C, 2022, 10, 7189-7200.	2.7	3
3	A Simple Fusedâ€Ring Acceptor toward Highâ€Sensitivity Binary Nearâ€Infrared Photodetector. Advanced Optical Materials, 2022, 10, .	3.6	11
4	Using 3.0ÂeV Large Bandgap Conjugated Polymer as Host Donor to Construct Ternary Semiâ€Transparent Polymer Solar Cells: Increased Average Visible Transmittance and Modified Color Temperature. Macromolecular Rapid Communications, 2022, 43, e2200199.	2.0	9
5	Unravelling the Role of Electron Acceptors for the Universal Enhancement of Charge Transport in Quinoidâ€Donorâ€Acceptor Polymers for Highâ€Performance Transistors. Advanced Functional Materials, 2022, 32, .	7.8	11
6	Fineâ€Tuning of Siloxane Pendant Distance for Achieving Highly Efficient Ecoâ€Friendly Nonfullerene Solar Cells. ChemSusChem, 2022, 15, .	3.6	4
7	2D/1A ternary blend system enables non-fused ring electron acceptor based polymer solar cells with improved photovoltaic parameters. Organic Electronics, 2022, 107, 106562.	1.4	0
8	In Situ Construction of CeO₂-Incorporated Hybrid Covalent Organic Frameworks for Highly Efficient Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2022, 5, 8554-8562.	2.5	5
9	Alkyl side chain engineering for difluorinated benzothiadiazole flanked non-fullerene acceptors toward efficient polymer solar cells. Journal of Materials Science: Materials in Electronics, 2021, 32, 219-231.	1.1	3
10	Dithienobenzoxadiazole-based wide bandgap donor polymers with strong aggregation properties for the preparation of efficient as-cast non-fullerene polymer solar cells processed using a non-halogenated solvent. Journal of Materials Chemistry C, 2021, 9, 249-259.	2.7	12
11	An unprecedented quinoidâ€“donorâ€“acceptor strategy to boost the carrier mobilities of semiconducting polymers for organic field-effect transistors. Journal of Materials Chemistry A, 2021, 9, 23497-23505.	5.2	20
12	A ligand-free direct heteroarylation approach for benzodithiophenedione-based simple small molecular acceptors toward high efficiency polymer solar cells. Journal of Materials Chemistry A, 2021, 9, 3314-3321.	5.2	41
13	Cross-Linkable and Alcohol-Soluble Pyridine-Incorporated Polyfluorene Derivative as a Cathode Interface Layer for High-Efficiency and Stable Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 12296-12304.	4.0	28
14	Blade-coated organic solar cells from non-halogenated solvent offer 17% efficiency. Journal of Semiconductors, 2021, 42, 030502.	2.0	27
15	Synthesis and photovoltaic performance of a non-fullerene acceptor comprising siloxane-terminated alkoxyl side chain. Organic Electronics, 2021, 91, 106087.	1.4	13
16	Replacing alkyl side chain of non-fullerene acceptor with siloxane-terminated side chain enables lower surface energy towards optimizing bulk-heterojunction morphology and high photovoltaic performance. Science China Chemistry, 2021, 64, 1208-1218.	4.2	13
17	Hydrogen Evolution Prediction for Alternating Conjugated Copolymers Enabled by Machine Learning with Multidimension Fragmentation Descriptors. ACS Applied Materials & Interfaces, 2021, 13, 34033-34042.	4.0	12
18	Introducing Siloxane-Terminated Side Chains in Small Molecular Donors for All-Small-Molecule Organic Solar Cells: Modulated Molecular Orientation and Enhanced Efficiency. ACS Applied Materials & Interfaces, 2021, 13, 36080-36088.	4.0	24

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19	A dithienobenzothiadiazole-quaterthiophene wide bandgap polymer enables non-fullerene based polymer solar cells with over 15% efficiency. Polymer, 2021, 233, 124193.	1.8	12
20	Binary non-fullerene-based polymer solar cells with a 430 nm thick active layer showing 15.39% efficiency and 73.38% fill factor. Journal of Materials Chemistry A, 2021, 9, 7129-7136.	5.2	28
21	Delicately Controlled Polymer Orientation for High-Performance Non-Fullerene Solar Cells with Halogen-Free Solvent Processing. ACS Applied Materials & Interfaces, 2021, 13, 57654-57663.	4.0	12
22	Introduction of Siloxane-Terminated Side Chains into Semiconducting Polymers To Tune Phase Separation with Nonfullerene Acceptor for Polymer Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 4659-4672.	4.0	52
23	Improved Average Figureâ€ofâ€Merit of Highâ€Efficiency Nonfullerene Solar Cells via Minor Combinatory Side Chain Approach. Solar Rrl, 2020, 4, 2000062.	3.1	38
24	Significantly enhanced electron transport of a nonfullerene acceptor in a blend film with a high hole mobility polymer of high molecular weight: thick-film nonfullerene polymer solar cells showing a high fill factor. Journal of Materials Chemistry A, 2020, 8, 7765-7774.	5.2	28
25	Investigation of halogen-free solvents towards high-performance additive-free non-fullerene organic solar cells. Organic Electronics, 2020, 85, 105871.	1.4	6
26	Dramatically different photovoltaic effect induced by siloxane-terminated combinatory side chain in polymer solar cells. Synthetic Metals, 2019, 256, 116116.	2.1	12
27	Impact of the Siloxane-Terminated Side Chain on Photovoltaic Performances of the Dithienylbenzodithiopheneâ€“Difluorobenzotriazole-Based Wide Band Gap Polymer Donor in Non-Fullerene Polymer Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 29094-29104.	4.0	39
28	Simultaneous improvement of three parameters using a binary processing solvent system approach in as-cast non-fullerene solar cells. Journal of Materials Chemistry A, 2019, 7, 25978-25984.	5.2	12
29	Synthesis, characterization and device application of a novel blue-emitting copolymer incorporating fluorene and benzothiazole backbone units. Optical Materials, 2019, 98, 109443.	1.7	10
30	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 J_{sc}â€“V_{oc} Tradeâ€Off. Solar Rrl, 2019, 3, 1900079.	3.1	25
31	Silaindacenodithiopheneâ€Based Fusedâ€Ring Nonâ€Fullerene Electron Acceptor for Efficient Polymer Solar Cells. Chinese Journal of Chemistry, 2018, 36, 495-501.	2.6	20
32	5,6-Difluorobenzothiazole-Based Conjugated Polymers with Large Band Gaps and Deep Highest Occupied Molecular Orbital Levels. ACS Applied Materials & Interfaces, 2018, 10, 11094-11100.	4.0	10
33	Benzoxadiazole and Benzoselenadiazole as Ï€â€Bridges in Nonfullerene Acceptors for Efficient Polymer Solar Cells. Asian Journal of Organic Chemistry, 2018, 7, 2285-2293.	1.3	7
34	Unraveling the Main Chain and Side Chain Effects on Thin Film Morphology and Charge Transport in Quinoidal Conjugated Polymers. Advanced Functional Materials, 2018, 28, 1801874.	7.8	53
35	1D/2A ternary blend active layer enables as-cast polymer solar cells with higher efficiency, better thickness tolerance, and higher thermal stability. Organic Electronics, 2018, 61, 359-365.	1.4	18
36	An extended Ï€-conjugated area of electron-donating units in Dâ€“A structured polymers towards high-mobility field-effect transistors and highly efficient polymer solar cells. Journal of Materials Chemistry C, 2017, 5, 2786-2793.	2.7	32

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37	para-Azaquinodimethane: A Compact Quinodimethane Variant as an Ambient Stable Building Block for High-Performance Low Band Gap Polymers. Journal of the American Chemical Society, 2017, 139, 8355-8363.	6.6	65
38	A Highly Crystalline Wide-Band-Gap Conjugated Polymer toward High-Performance As-Cast Nonfullerene Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 36061-36069.	4.0	34
39	Low band gap conjugated polymers combining siloxane-terminated side chains and alkyl side chains: side-chain engineering achieving a large active layer processing window for PCE > 10% in polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 17619-17631.	5.2	116
40	Siloxane-Terminated Side Chain Engineering of Acceptor Polymers Leading to Over 7% Power Conversion Efficiencies in All-Polymer Solar Cells. ACS Macro Letters, 2017, 6, 1310-1314.	2.3	51
41	Using oâ€Chlorobenzaldehyde as a Fast Removable Solvent Additive during Spinâ€Coating PTB7â€Based Active Layers: High Efficiency Thickâ€Film Polymer Solar Cells. Advanced Energy Materials, 2017, 7, 1601344.	10.2	45
42	Alternating dithienobenzoxadiazole-based conjugated polymers for field-effect transistors and polymer solar cells. Organic Electronics, 2016, 31, 1-10.	1.4	11
43	Low band-gap benzodithiophene-thienothiophenecopolymers: the effect of dual two-dimensional substitutions on optoelectronic properties. Science China Chemistry, 2015, 58, 267-275.	4.2	8
44	Dithienobenzothiadiazoleâ€Based Conjugated Polymer: Processing Solventâ€Relied Interchain Aggregation and Device Performances in Fieldâ€Effect Transistors and Polymer Solar Cells. Macromolecular Rapid Communications, 2014, 35, 1960-1967.	2.0	24
45	Low Bandâ€Gap Conjugated Polymers with Strong Interchain Aggregation and Very High Hole Mobility Towards Highly Efficient Thickâ€Film Polymer Solar Cells. Advanced Materials, 2014, 26, 2586-2591.	11.1	375
46	D-A copolymers based on 5,6-difluorobenzotriazole and oligothiophenes: Synthesis, field effect transistors, and polymer solar cells. Polymer, 2014, 55, 1707-1715.	1.8	26
47	Low bandâ€gap Dâ€“A conjugated copolymers based on anthradithiophene and diketopyrrolopyrrole for polymer solar cells and fieldâ€effect transistors. Journal of Polymer Science Part A, 2014, 52, 1652-1661.	2.5	12
48	Donorâ€“acceptor copolymers based on phenanthrene as electronâ€donating unit: Synthesis and photovoltaic performances. Journal of Polymer Science Part A, 2013, 51, 4966-4974.	2.5	9
49	Hydrophilic poly(triphenylamines) with phosphonate groups on the side chains: synthesis and photovoltaic applications. Journal of Materials Chemistry, 2012, 22, 4329.	6.7	46
50	High Efficiency and High V_{oc} Inverted Polymer Solar Cells Based on a Low-Lying HOMO Polycarbazole Donor and a Hydrophilic Polycarbazole Interlayer on ITO Cathode. Journal of Physical Chemistry C, 2012, 116, 14188-14198.	1.5	105
51	Largely Enhanced Efficiency with a PFN/Al Bilayer Cathode in High Efficiency Bulk Heterojunction Photovoltaic Cells with a Low Bandgap Polycarbazole Donor. Advanced Materials, 2011, 23, 3086-3089.	11.1	238
52	Bulk-Heterojunction Solar Cells with Benzotriazole-Based Copolymers as Electron Donors: Largely Improved Photovoltaic Parameters by Using PFN/Al Bilayer Cathode. Macromolecules, 2010, 43, 9771-9778.	2.2	143