Yahui Liu

List of Publications by Year
in descending order

73 papers	3,782 citations	147726 31 h-index	128225 60 g-index
74 all docs	74 docs citations	74 times ranked	2430 citing authors

#	Article	IF	Citations
1	Enhancing the performance of organic solar cells by modification of cathode with a self-assembled monolayer of aromatic organophosphonic acid. Chinese Chemical Letters, 2023, 34, 107495.	4.8	2
2	Chlorination Enabling a Lowâ€Cost Benzodithiopheneâ€Based Wideâ€Bandgap Donor Polymer with an Efficiency of over 17%. Advanced Materials, 2022, 34, e2105483.	11.1	53
3	High-performance nonfused ring electron acceptor with a steric hindrance induced planar molecular backbone. Science China Chemistry, 2022, 65, 594-601.	4.2	33
4	Synthesis of a metal oxide affinity chromatography magnetic mesoporous nanomaterial and development of a one-step selective phosphopeptide enrichment strategy for analysis of phosphorylated proteins. Analytica Chimica Acta, 2022, 1195, 339430.	2.6	15
5	Diphenylamine Substituted High-performance Fully Nonfused Ring Electron Acceptors: The Effect of Isomerism. Chemical Engineering Journal, 2022, 435, 134987.	6.6	17
6	A Versatile Planar Building Block with C_{2V} Symmetry for Highâ€Performance Nonâ€Halogenated Solvent Processable Polymer Donors. Advanced Energy Materials, 2022, 12, .	10.2	29
7	Recent progress in organic solar cells (Part I material science). Science China Chemistry, 2022, 65, 224-268.	4.2	349
8	Designing High-Performance Nonfused Ring Electron Acceptors <i>via</i> Synergistically Adjusting Side Chains and Electron-Withdrawing End-Groups. ACS Applied Materials & Interfaces, 2022, 14, 21287-21294.	4.0	12
9	A simple high-performance fully nonfused ring electron acceptor with a planar molecular backbone. Chemical Engineering Journal, 2022, 444, 136472.	6.6	19
10	Thermal annealing effect on non-fused ring acceptor based bulk heterojunction investigated by transient absorption spectroscopy. Journal of Photochemistry and Photobiology, 2022, 11, 100129.	1.1	2
11	Recent progress in organic solar cells (Part II device engineering). Science China Chemistry, 2022, 65, 1457-1497.	4.2	157
12	Ultrafast Carrier Dynamics of Non-fullerene Acceptors with Different Planarity: Impact of Steric Hindrance. Journal of Physical Chemistry Letters, 2022, 13, 5860-5866.	2.1	15
13	Random Terpolymer Enabling Highâ€Efficiency Organic Solar Cells Processed by Nonhalogenated Solvent with a Low Nonradiative Energy Loss. Advanced Functional Materials, 2022, 32, .	7.8	49
14	Molecular-Shape-Controlled Nonfused Ring Electron Acceptors for High-Performance Organic Solar Cells with Tunable Phase Morphology. ACS Applied Materials & Interfaces, 2022, 14, 28807-28815.	4.0	16
15	Effect of Polymer Chain Regularity on the Photovoltaic Performance of Organic Solar Cells. Chinese Journal of Polymer Science (English Edition), 2022, 40, 996-1002.	2.0	3
16	Designing high performance conjugated materials for photovoltaic cells with the aid of intramolecular noncovalent interactions. Chemical Communications, 2021, 57, 302-314.	2.2	65
17	Improving the performance of organic solar cells by side chain engineering of fused ring electron acceptors. Journal of Materials Chemistry C, 2021, 9, 6937-6943.	2.7	13
18	Insights into out-of-plane side chains effects on optoelectronic and photovoltaic properties of simple non-fused electron acceptors. Organic Electronics, 2021, 89, 106029.	1.4	14

#	Article	IF	Citations
19	Flexibleâ€“Rigid Synergetic Strategy for Saddle-Shaped Perylene Diimide Acceptors in As-Cast Polymer Solar Cells. Journal of Physical Chemistry C, 2021, 125, 10841-10849.	1.5	12
20	Fused perylenediimide dimer as nonfullerene acceptor for high-performance organic solar cells. Dyes and Pigments, 2021, 189, 109269.	2.0	8
21	High-Performance Simple Nonfused Ring Electron Acceptors with Diphenylamino Flanking Groups. ACS Applied Materials & Interfaces, 2021, 13, 39652-39659.	4.0	47
22	Improving the Efficiency of Organic Solar Cells by Introducing Perylene Diimide Derivative as Third Component and Individually Dissolving Donor/Acceptor. ChemSusChem, 2021, 14, 5442-5449.	3.6	9
23	Hybrid Nonfused-Ring Electron Acceptors with Fullerene Pendant for High-Efficiency Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 1603-1611.	4.0	19
24	Simple Nonfused Ring Electron Acceptors with 3D Network Packing Structure Boosting the Efficiency of Organic Solar Cells to 15.44%. Advanced Energy Materials, 2021, 11, 2102591.	10.2	111
25	Nonfused Ring Electron Acceptors with a Small Side-Chain Difference Lead to Vastly Different Power Conversion Efficiencies: Impact of Aggregation. Journal of Physical Chemistry C, 2021, 125, 23613-23621.	1.5	8
26	Ternary Strategy Enabling Highâ€Performance Organic Solar Cells with Optimized Film Morphology and Reduced Nonradiative Energy Loss. Solar Rrl, 2021, 5, 2100806.	3.1	10
27	Photovoltaic Performances of Fused Ring Acceptors with Isomerized Ladder-Type Dipyran Cores. ACS Applied Materials & Interfaces, 2020, 12, 4887-4894.	4.0	20
28	High-efficiency ternary nonfullerene polymer solar cells with increased phase purity and reduced nonradiative energy loss. Journal of Materials Chemistry A, 2020, 8, 2123-2130.	5.2	29
29	Regulating the Packing of Non-Fullerene Acceptors via Multiple Noncovalent Interactions for Enhancing the Performance of Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 4638-4648.	4.0	87
30	Perylene diimide acceptor with two planar arms and a twisted core for high efficiency polymer solar cells. Dyes and Pigments, 2020, 175, 108186.	2.0	17
31	A Green Solvent Processable Wideâ€Bandgap Conjugated Polymer for Organic Solar Cells. Solar Rrl, 2020, 4, 2000547.	3.1	13
32	Regulating molecular orientations of dipyran-based nonfullerene acceptors through side-chain engineering at the Ï€-bridge. Journal of Materials Chemistry A, 2020, 8, 22416-22422.	5.2	13
33	Enhancing the Photovoltaic Performance of a Benzo[<i>c</i>][1,2,5]thiadiazole-Based Polymer Donor via a Non-Fullerene Acceptor Pairing Strategy. ACS Applied Materials & Interfaces, 2020, 12, 53021-53028.	4.0	6
34	A Fully Nonâ€fused Ring Acceptor with Planar Backbone and Nearâ€IR Absorption for High Performance Polymer Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 22714-22720.	7.2	184
35	A Fully Nonâ€fused Ring Acceptor with Planar Backbone and Nearâ€IR Absorption for High Performance Polymer Solar Cells. Angewandte Chemie, 2020, 132, 22903-22909.	1.6	23
36	Noncovalently Fused-Ring Electron Acceptors with <i>C</i>_{2<i>v</i>} Symmetry for Regulating the Morphology of Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 46220-46230.	4.0	43

#	Article	IF	Citations
37	Enhancing the Performance of Organic Solar Cells by Prolonging the Lifetime of Photogenerated Excitons. Advanced Materials, 2020, 32, e2003164.	11.1	42
38	Small molecule acceptors with a ladder-like core for high-performance organic solar cells with low non-radiative energy losses. Journal of Materials Chemistry A, 2020, 8, 12495-12501.	5.2	57
39	Efficient Organic Solar Cells Based on Non-Fullerene Acceptors with Two Planar Thiophene-Fused Perylene Diimide Units. ACS Applied Materials & Interfaces, 2020, 12, 10746-10754.	4.0	23
40	Highâ€Efficiency Asâ€Cast Organic Solar Cells Based on Acceptors with Steric Hindrance Induced Planar Terminal Group. Advanced Energy Materials, 2019, 9, 1901280.	10.2	86
41	Automatic Identification of Tool Wear Based on Convolutional Neural Network in Face Milling Process. Sensors, 2019, 19, 3817.	2.1	84
42	Perylene diimide based star-shaped small molecular acceptors for high efficiency organic solar cells. Journal of Materials Chemistry C, 2019, 7, 819-825.	2.7	37
43	Crosslinked and dopant free hole transport materials for efficient and stable planar perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 5522-5529.	5.2	41
44	Fluoro-Modulated Molecular Geometry in Diketopyrrolopyrrole-Based Low-Bandgap Copolymers for Tuning the Photovoltaic Performance. Frontiers in Chemistry, 2019, 7, 333.	1.8	3
45	The preparation of Ag3BiBr6 films and their preliminary use for solution processed photovoltaics. SN Applied Sciences, 2019, 1, 1.	1.5	5
46	Polymer solar cells based on spontaneously-spreading film with double electron-transporting layers. Organic Electronics, 2019, 69, 56-61.	1.4	7
47	Nonfullerene acceptors comprising a naphthalene core for high efficiency organic solar cells. RSC Advances, 2019, 9, 39163-39169.	1.7	7
48	Controlling Molecular Packing and Orientation via Constructing a Ladder-Type Electron Acceptor with Asymmetric Substituents for Thick-Film Nonfullerene Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 3098-3106.	4.0	40
49	Fused-ring acceptor with a spiro-bridged ladder-type core for organic solar cells. Dyes and Pigments, 2019, 163, 153-158.	2.0	9
50	Bis(carboxylate) substituted benzodithiophene based wide-bandgap polymers for high performance nonfullerene polymer solar cells. Dyes and Pigments, 2019, 162, 120-125.	2.0	7
51	Fused pentacyclic electron acceptors with four <i>cis</i>-arranged alkyl side chains for efficient polymer solar cells. Journal of Materials Chemistry A, 2018, 6, 3724-3729.	5.2	27
52	High efficiency small molecular acceptors based on novel O-functionalized ladder-type dipyran building block. Nano Energy, 2018, 45, 10-20.	8.2	45
53	High efficiency ternary polymer solar cells based on a fused pentacyclic electron acceptor. Journal of Materials Chemistry A, 2018, 6, 6854-6859.	5.2	16
54	The influence of the Ï€-bridging unit of fused-ring acceptors on the performance of organic solar cells. Journal of Materials Chemistry A, 2018, 6, 21335-21340.	5.2	30

#	Article	IF	Citations
55	Enhancing the Performance of Non-Fullerene Organic Solar Cells Using Regioregular Wide-Bandgap Polymers. Macromolecules, 2018, 51, 8646-8651.	2.2	39
56	Enhance the performance of polymer solar cells via extension of the flanking end groups of fused ring acceptors. Science China Chemistry, 2018, 61, 1320-1327.	4.2	22
57	Nonfullerene Acceptors with Enhanced Solubility and Ordered Packing for High-Efficiency Polymer Solar Cells. ACS Energy Letters, 2018, 3, 1832-1839.	8.8	115
58	Enhancing the Performance of Organic Solar Cells by Hierarchically Supramolecular Self-Assembly of Fused-Ring Electron Acceptors. Chemistry of Materials, 2018, 30, 4307-4312.	3.2	116
59	Exploiting Noncovalently Conformational Locking as a Design Strategy for High Performance Fused-Ring Electron Acceptor Used in Polymer Solar Cells. Journal of the American Chemical Society, 2017, 139, 3356-3359.	6.6	499
60	Enhancing the Performance of Polymer Solar Cells by Using Donor Polymers Carrying Discretely Distributed Side Chains. ACS Applied Materials & Interfaces, 2017, 9, 24020-24026.	4.0	14
61	Simultaneous enhancement of the molecular planarity and the solubility of non-fullerene acceptors: effect of aliphatic side-chain substitution on the photovoltaic performance. Journal of Materials Chemistry A, 2017, 5, 7776-7783.	5.2	87
62	Influence of polymer side chains on the photovoltaic performance of non-fullerene organic solar cells. Journal of Materials Chemistry C, 2017, 5, 937-942.	2.7	19
63	Fusedâ€Ring Acceptors with Asymmetric Side Chains for Highâ€Performance Thickâ€Film Organic Solar Cells. Advanced Materials, 2017, 29, 1703527.	11.1	238
64	Effect of Non-fullerene Acceptorsâ€™ Side Chains on the Morphology and Photovoltaic Performance of Organic Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 33906-33912.	4.0	66
65	Enhancing the Efficiency of Polymer Solar Cells by Incorporation of 2,5-Difluorobenzene Units into the Polymer Backbone via Random Copolymerization. ACS Applied Materials & Interfaces, 2017, 9, 23775-23781.	4.0	9
66	High efficiency polymer solar cells based on alkylthio substituted benzothiadiazole-quaterthiophene alternating conjugated polymers. Organic Electronics, 2017, 40, 36-41.	1.4	16
67	Efficient polymer solar cells processed by environmentally friendly halogen-free solvents. RSC Advances, 2016, 6, 39074-39079.	1.7	11
68	Enhancing the power conversion efficiency of polymer solar cells to 9.26% by a synergistic effect of fluoro and carboxylate substitution. Journal of Materials Chemistry A, 2016, 4, 8097-8104.	5.2	39
69	An effective way to reduce energy loss and enhance open-circuit voltage in polymer solar cells based on a diketopyrrolopyrrole polymer containing three regular alternating units. Journal of Materials Chemistry A, 2016, 4, 13265-13270.	5.2	41
70	Elimination of the Jâ€“V hysteresis of planar perovskite solar cells by interfacial modification with a thermo-cleavable fullerene derivative. Journal of Materials Chemistry A, 2016, 4, 17649-17654.	5.2	24
71	1,8-Naphthalimide-Based Planar Small Molecular Acceptor for Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 5475-5483.	4.0	80
72	4-Alkyl-3,5-difluorophenyl-Substituted Benzodithiophene-Based Wide Band Gap Polymers for High-Efficiency Polymer Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 3686-3692.	4.0	75

#	Article	IF	Citations
73	Engineered Ionic Gates for Ion Conduction Based on Sodium and Potassium Activated Nanochannels. Journal of the American Chemical Society, 2015, 137, 11976-11983.	6.6	184