Zuo Xiao

List of Publications by Year
in descending order

65 papers	9,791 citations	94433 37 h-index	110387 64 g-index
65 all docs	65 docs citations	65 times ranked	5986 citing authors

#	Article	IF	Citations
1	18% Efficiency organic solar cells. Science Bulletin, 2020, 65, 272-275.	9.0	2,380
2	Organic and solution-processed tandem solar cells with 17.3% efficiency. Science, 2018, 361, 1094-1098.	12.6	2,262
3	Ternary organic solar cells offer 14% power conversion efficiency. Science Bulletin, 2017, 62, 1562-1564.	9.0	665
4	26â€¯mAâ€¯cmâ^'2 Jsc from organic solar cells with a low-bandgap nonfullerene acceptor. Science Bulletin, 2017, 62, 1494-1496.	9.0	368
5	A History and Perspective of Nonâ€Fullerene Electron Acceptors for Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003570.	19.5	323
6	Thermostable single-junction organic solar cells with a power conversion efficiency of 14.62%. Science Bulletin, 2018, 63, 340-342.	9.0	260
7	Molecular Order Control of Non-fullerene Acceptors for High-Efficiency Polymer Solar Cells. Joule, 2019, 3, 819-833.	24.0	209
8	Over 13% Efficiency Ternary Nonfullerene Polymer Solar Cells with Tilted Up Absorption Edge by Incorporating a Medium Bandgap Acceptor. Advanced Energy Materials, 2018, 8, 1801968.	19.5	167
9	Progress of the key materials for organic solar cells. Science China Chemistry, 2020, 63, 758-765.	8.2	158
10	A chlorinated copolymer donor demonstrates a 18.13% power conversion efficiency. Journal of Semiconductors, 2021, 42, 010501.	3.7	158
11	An Electrically Modulated Singleâ€Color/Dualâ€Color Imaging Photodetector. Advanced Materials, 2020, 32, e1907257.	21.0	145
12	A pentacyclic aromatic lactam building block for efficient polymer solar cells. Energy and Environmental Science, 2013, 6, 3224.	30.8	143
13	Thiolactone copolymer donor gifts organic solar cells a 16.72% efficiency. Science Bulletin, 2019, 64, 1573-1576.	9.0	140
14	Carbonâ€"Oxygenâ€Bridged Ladderâ€Type Building Blocks for Highly Efficient Nonfullerene Acceptors. Advanced Materials, 2019, 31, e1804790.	21.0	139
15	Thermodynamic Properties and Molecular Packing Explain Performance and Processing Procedures of Three D18:NFA Organic Solar Cells. Advanced Materials, 2020, 32, e2005386.	21.0	130
16	18.69% PCE from organic solar cells. Journal of Semiconductors, 2021, 42, 060502.	3.7	121
17	D18, an eximious solar polymer!. Journal of Semiconductors, 2021, 42, 010502.	3.7	117
18	Suppressing photo-oxidation of non-fullerene acceptors and their blends in organic solar cells by exploring material design and employing friendly stabilizers. Journal of Materials Chemistry A, 2019, 7, 25088-25101.	10.3	107

#	Article	IF	Citations
19	Development of isomer-free fullerene bisadducts for efficient polymer solar cells. Energy and Environmental Science, 2016, 9, 2114-2121.	30.8	95
20	Visible to Nearâ€Infrared Photodetection Based on Ternary Organic Heterojunctions. Advanced Functional Materials, 2019, 29, 1808948.	14.9	95
21	A Highâ€Performance Dâ€“A Copolymer Based on Dithieno[3,2â€b:2â€²,3â€²â€d]Pyridinâ€5(4H)â€One Unit Compatible with Fullerene and Nonfullerene Acceptors in Solar Cells. Advanced Energy Materials, 2017, 7, 1602509.	19.5	92
22	Perovskite-based tandem solar cells. Science Bulletin, 2021, 66, 621-636.	9.0	91
23	A carbon-oxygen-bridged ladder-type building block for efficient donor and acceptor materials used in organic solar cells. Science Bulletin, 2017, 62, 1331-1336.	9.0	84
24	Simultaneously improved efficiency and average visible transmittance of semitransparent polymer solar cells with two ultra-narrow bandgap nonfullerene acceptors. Journal of Materials Chemistry A, 2018, 6, 21485-21492.	10.3	80
25	Pushing Fullerene Absorption into the Nearâ€IR Region by Conjugately Fusing Oligothiophenes. Angewandte Chemie - International Edition, 2012, 51, 9038-9041.	13.8	77
26	A 2.16Â eV bandgap polymer donor gives 16% power conversion efficiency. Science Bulletin, 2020, 65, 179-181.	9.0	75
27	A universal method for constructing high efficiency organic solar cells with stacked structures. Energy and Environmental Science, 2021, 14, 2314-2321.	30.8	75
28	Filterâ€Free Bandâ€Selective Organic Photodetectors. Advanced Optical Materials, 2020, 8, 2001388.	7.3	63
29	Elevated Stability and Efficiency of Solar Cells via Ordered Alloy Co-Acceptors. ACS Energy Letters, 2019, 4, 1106-1114.	17.4	62
30	Over 16% efficiency from thick-film organic solar cells. Science Bulletin, 2020, 65, 1979-1982.	9.0	62
31	NIR to Visible Light Upconversion Devices Comprising an NIR Charge Generation Layer and a Perovskite Emitter. Advanced Optical Materials, 2018, 6, 1801084.	7.3	55
32	5H-dithieno[3,2-b:2â€²,3â€²-d]pyran-5-one unit yields efficient wide-bandgap polymer donors. Science Bulletin, 2019, 64, 1655-1657.	9.0	55
33	Interface engineering gifts $CsPbI_{2.25}Br_{0.75}$ solar cells high performance. Science Bulletin, 2019, 64, 1743-1746.	9.0	51
34	Induced J-aggregation in acceptor alloy enhances photocurrent. Science Bulletin, 2019, 64, 1083-1086.	9.0	43
35	Correlating the electron-donating core structure with morphology and performance of carbon oxygen-bridged ladder-type non-fullerene acceptor based organic solar cells. Nano Energy, 2019, 61, 318-326.	16.0	43
36	A carbonâ€“oxygen-bridged hexacyclic ladder-type building block for low-bandgap nonfullerene acceptors. Materials Chemistry Frontiers, 2018, 2, 700-703.	5.9	41

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37	Effects of Oxygen Atoms Introduced at Different Positions of Non-Fullerene Acceptors in the Performance of Organic Solar Cells with Poly(3-hexylthiophene). ACS Applied Materials & Interfaces, 2020, 12, 1094-1102.	8.0	39
38	A Thieno[3,2â€c]Isoquinolinâ€5(4H)â€One Building Block for Efficient Thickâ€Film Solar Cells. Advanced Energy Materials, 2018, 8, 1800397.	19.5	35
39	Fused-ring bislactone building blocks for polymer donors. Science Bulletin, 2020, 65, 1792-1795.	9.0	35
40	A heptacyclic carbonâ€“oxygen-bridged ladder-type building block for Aâ€“Dâ€“A acceptors. Materials Chemistry Frontiers, 2018, 2, 1716-1719.	5.9	34
41	Multiple conformation locks gift polymer donor high efficiency. Nano Energy, 2020, 77, 105161.	16.0	33
42	Comparative analysis of burn-in photo-degradation in non-fullerene COi8DFIC acceptor based high-efficiency ternary organic solar cells. Materials Chemistry Frontiers, 2019, 3, 1085-1096.	5.9	31
43	Inorganic perovskite/organic tandem solar cells with efficiency over 20%. Journal of Semiconductors, 2021, 42, 020501.	3.7	31
44	Highly Crystalline Near-Infrared Acceptor Enabling Simultaneous Efficiency and Photostability Boosting in High-Performance Ternary Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 48095-48102.	8.0	30
45	Functionality of Nonâ€Fullerene Electron Acceptors in Ternary Organic Solar Cells. Solar Rrl, 2019, 3, 1900322.	5.8	26
46	Enhanced efficiency and stability of nonfullerene ternary polymer solar cells based on a spontaneously assembled active layer: the role of a high mobility small molecular electron acceptor. Journal of Materials Chemistry C, 2020, 8, 6196-6202.	5.5	22
47	Bananaâ€shaped electron acceptors with an electronâ€rich core fragment and 3D packing capability. , 2023, 5, .		22
48	Alkoxythiophene and alkylthiothiophene Ï€-bridges enhance the performance of Aâ€“Dâ€“A electron acceptors. Materials Chemistry Frontiers, 2019, 3, 492-495.	5.9	21
49	Fused-ring phenazine building blocks for efficient copolymer donors. Materials Chemistry Frontiers, 2020, 4, 1454-1458.	5.9	21
50	Enhancing the efficiency of PTB7-Th:CO<i>i</i>8DFIC-based ternary solar cells with versatile third components. Applied Physics Reviews, 2019, 6, .	11.3	20
51	High-performance wide-bandgap copolymers with dithieno[3,2-<i>b</i>:2â€²,3â€²-<i>d</i>]pyridin-5(4<i>H</i>)-one units. Materials Chemistry Frontiers, 2019, 3, 399-402.	5.9	18
52	An efficient medium-bandgap nonfullerene acceptor for organic solar cells. Journal of Materials Chemistry A, 2020, 8, 8857-8861.	10.3	17
53	Engineering of the alkyl chain branching point on a lactone polymer donor yields 17.81% efficiency. Journal of Materials Chemistry A, 2022, 10, 3314-3320.	10.3	17
54	Using Cyclopenta[2,1â€<i>b</i>:3,4â€<i>câ€²</i>]dithiopheneâ€4â€one as a Building Block for Lowâ€Bandgap Conjugated Copolymers Applied in Solar Cells. Macromolecular Rapid Communications, 2012, 33, 1574-1579.	3.9	16

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55	Understanding the side-chain effects on Aâ€“Dâ€“A acceptors: in-plane and out-of-plane. Materials Chemistry Frontiers, 2018, 2, 1563-1567.	5.9	16
56	Post-sulphuration enhances the performance of a lactone polymer donor. Journal of Semiconductors, 2021, 42, 070501.	3.7	14
57	A chlorinated lactone polymer donor featuring high performance and low cost. Journal of Semiconductors, 2022, 43, 050501.	3.7	14
58	A large-bandgap copolymer donor for efficient ternary organic solar cells. Materials Chemistry Frontiers, 2021, 5, 6139-6144.	5.9	13
59	Dithieno[3',2':3,4;2'',3'':5,6]benzo[1,2-c][1,2,5]oxadiazole-based polymer donors with deep HOMO levels. Journal of Semiconductors, 2021, 42, 060501.	3.7	10
60	A wide-bandgap copolymer donor based on a phenanthridin-6(5<i>H</i>)-one unit. Materials Chemistry Frontiers, 2019, 3, 2686-2689.	5.9	6
61	A wide-bandgap copolymer donor with a 5-methyl-4H-dithieno[3,2-e:2',3'-g]isoindole-4,6(5H)-dione unit. Journal of Semiconductors, 2021, 42, 100502.	3.7	6
62	A Wide-Band Gap Copolymer Donor for Efficient Fullerene-Free Solar Cells. ACS Omega, 2019, 4, 14800-14804.	3.5	4
63	Efficient wide-bandgap copolymer donors with reduced synthesis cost. Journal of Materials Chemistry C, 2021, 9, 16187-16191.	5.5	4
64	ADAâ€²DA small molecule acceptors with non-fully-fused core units. Materials Chemistry Frontiers, 2022, 6, 802-806.	5.9	3
65	Low-bandgap small molecule acceptors with asymmetric side chains. Materials Chemistry Frontiers, 2022, 6, 1858-1864.	5.9	2