Qiaoshi An

List of Publications by Year
in descending order

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63 papers	6,759 citations	61984 43 h-index	114465 63 g-index
63 all docs	63 docs citations	63 times ranked	3730 citing authors

#	Article	IF	Citations
1	Non-fullerene acceptors with hetero-dihalogenated terminals induce significant difference in single crystallography and enable binary organic solar cells with 17.5% efficiency. Energy and Environmental Science, 2022, 15, 320-333.	30.8	95
2	Revealing the Sole Impact of Acceptor's Molecular Conformation to Energy Loss and Device Performance of Organic Solar Cells through Positional Isomers. Advanced Science, 2022, 9, e2103428.	11.2	9
3	Isogenous Asymmetricâ€“Symmetric Acceptors Enable Efficient Ternary Organic Solar Cells with Thin and 300Ânm Thick Active Layers Simultaneously. Advanced Functional Materials, 2022, 32, .	14.9	75
4	Intramolecular Chloroâ€“Sulfur Interaction and Asymmetric Sideâ€Chain Isomerization to Balance Crystallinity and Miscibility in Allâ€Smallâ€Molecule Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	29
5	Intramolecular Chloroâ€“Sulfur Interaction and Asymmetric Sideâ€Chain Isomerization to Balance Crystallinity and Miscibility in Allâ€Smallâ€Molecule Solar Cells. Angewandte Chemie, 2022, 134, .	2.0	3
6	Rational compatibility in a ternary matrix enables all-small-molecule organic solar cells with over 16% efficiency. Energy and Environmental Science, 2021, 14, 3945-3953.	30.8	124
7	Over 17.6% Efficiency Organic Photovoltaic Devices with Two Compatible Polymer Donors. Solar Rrl, 2021, 5, 2100175.	5.8	49
8	Two-Pronged Effect of Warm Solution and Solvent-Vapor Annealing for Efficient and Stable All-Small-Molecule Organic Solar Cells. ACS Energy Letters, 2021, 6, 2898-2906.	17.4	50
9	A Synergistic Strategy of Manipulating the Number of Selenophene Units and Dissymmetric Central Core of Small Molecular Acceptors Enables Polymer Solar Cells with 17.5â€‰% Efficiency. Angewandte Chemie - International Edition, 2021, 60, 19241-19252.	13.8	129
10	A Synergistic Strategy of Manipulating the Number of Selenophene Units and Dissymmetric Central Core of Small Molecular Acceptors Enables Polymer Solar Cells with 17.5â€‰% Efficiency. Angewandte Chemie, 2021, 133, 19390-19401.	2.0	22
11	Twoâ€Dimensional Conjugated Benzo[1,2â€‹b:4,5â€‹bâ€²]diselenopheneâ€Based Copolymer Donor Enables Large Openâ€Circuit Voltage and High Efficiency in Selenopheneâ€based Organic Solar Cells. ChemSusChem, 2021, 14, 4454-4465.	6.8	10
12	Semitransparent polymer solar cells with 12.37% efficiency and 18.6% average visible transmittance. Science Bulletin, 2020, 65, 131-137.	9.0	151
13	Over 16.7% efficiency of ternary organic photovoltaics by employing extra PC71BM as morphology regulator. Science China Chemistry, 2020, 63, 83-91.	8.2	160
14	Efficient ternary organic photovoltaics with two polymer donors by minimizing energy loss. Journal of Materials Chemistry A, 2020, 8, 1265-1272.	10.3	84
15	Two compatible polymer donors contribute synergistically for ternary organic solar cells with 17.53% efficiency. Energy and Environmental Science, 2020, 13, 5039-5047.	30.8	189
16	Over 14% efficiency all-polymer solar cells enabled by a low bandgap polymer acceptor with low energy loss and efficient charge separation. Energy and Environmental Science, 2020, 13, 5017-5027.	30.8	170
17	An asymmetrical fused-ring electron acceptor designed by a cross-conceptual strategy achieving 15.6% efficiency. Journal of Materials Chemistry A, 2020, 8, 14583-14591.	10.3	32
18	Alloy-like ternary polymer solar cells with over 17.2% efficiency. Science Bulletin, 2020, 65, 538-545.	9.0	252

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19	Over 14.5% efficiency and 71.6% fill factor of ternary organic solar cells with 300 nm thick active layers. Energy and Environmental Science, 2020, 13, 958-967.	30.8	198
20	Thickâ€Film Organic Solar Cells Achieving over 11% Efficiency and Nearly 70% Fill Factor at Thickness over 400 nm. Advanced Functional Materials, 2020, 30, 1908336.	14.9	94
21	Two Wellâ€Compatible Acceptors with Efficient Energy Transfer Enable Ternary Organic Photovoltaics Exhibiting a 13.36% Efficiency. Small, 2019, 15, e1902602.	10.0	14
22	13.26% Efficiency Polymer Solar Cells by Optimizing Photogenerated Exciton Distribution and Phase Separation with the Third Component. Solar Rrl, 2019, 3, 1900269.	5.8	12
23	Nonfullerene organic photovoltaic cells exhibiting 13.76% efficiency by employing upsideâ€down solvent vapor annealing. International Journal of Energy Research, 2019, 43, 8716.	4.5	5
24	Solvent additive-free ternary polymer solar cells with 16.27% efficiency. Science Bulletin, 2019, 64, 504-506.	9.0	247
25	Ternary polymer solar cells with alloyed donor achieving 14.13% efficiency and 78.4% fill factor. Nano Energy, 2019, 60, 768-774.	16.0	117
26	Achieving 14.11% efficiency of ternary polymer solar cells by simultaneously optimizing photon harvesting and exciton distribution. Journal of Materials Chemistry A, 2019, 7, 7843-7851.	10.3	130
27	Semitransparent ternary nonfullerene polymer solar cells exhibiting 9.40% efficiency and 24.6% average visible transmittance. Nano Energy, 2019, 55, 424-432.	16.0	179
28	Efficient ternary non-fullerene polymer solar cells with PCE of 11.92% and FF of 76.5%. Energy and Environmental Science, 2018, 11, 841-849.	30.8	210
29	Energy level modulation of non-fullerene acceptors enables efficient organic solar cells with small energy loss. Journal of Materials Chemistry A, 2018, 6, 2468-2475.	10.3	145
30	Efficient Ternary Polymer Solar Cells with Two Wellâ€Compatible Donors and One Ultranarrow Bandgap Nonfullerene Acceptor. Advanced Energy Materials, 2018, 8, 1702854.	19.5	195
31	Ternary Nonfullerene Polymer Solar Cells with a Power Conversion Efficiency of 11.6% by Inheriting the Advantages of Binary Cells. ACS Energy Letters, 2018, 3, 555-561.	17.4	161
32	High-efficiency and air stable fullerene-free ternary organic solar cells. Nano Energy, 2018, 45, 177-183.	16.0	193
33	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
34	Efficient Ternary Organic Solar Cells with Two Compatible Nonâ€Fullerene Materials as One Alloyed Acceptor. Small, 2018, 14, e1802983.	10.0	55
35	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
36	Ternary non-fullerene polymer solar cells with an efficiency of 11.6% by simultaneously optimizing photon harvesting and phase separation. Journal of Materials Chemistry A, 2018, 6, 11751-11758.	10.3	30

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37	Ternary nonfullerene polymer solar cells with efficiency >13.7% by integrating the advantages of the materials and two binary cells. Energy and Environmental Science, 2018, 11, 2134-2141.	30.8	223
38	Asymmetrical Ladderâ€Type Donorâ€Induced Polar Small Molecule Acceptor to Promote Fill Factors Approaching 77% for Highâ€Performance Nonfullerene Polymer Solar Cells. Advanced Materials, 2018, 30, e1800052.	21.0	252
39	Designing an asymmetrical isomer to promote the LUMO energy level and molecular packing of a non-fullerene acceptor for polymer solar cells with 12.6% efficiency. Chemical Science, 2018, 9, 8142-8149.	7.4	67
40	Nematic liquid crystal materials as a morphology regulator for ternary small molecule solar cells with power conversion efficiency exceeding 10%. Journal of Materials Chemistry A, 2017, 5, 3589-3598.	10.3	173
41	Simultaneously Enhanced Efficiency and Stability of Polymer Solar Cells by Employing Solvent Additive and Upside-down Drying Method. ACS Applied Materials & Interfaces, 2017, 9, 8863-8871.	8.0	32
42	Highly Efficient Parallel-Like Ternary Organic Solar Cells. Chemistry of Materials, 2017, 29, 2914-2920.	6.7	152
43	A liquid crystal material as the third component for ternary polymer solar cells with an efficiency of 10.83% and enhanced stability. Journal of Materials Chemistry A, 2017, 5, 13145-13153.	10.3	65
44	Dramatically Boosted Efficiency of Small Molecule Solar Cells by Synergistically Optimizing Molecular Aggregation and Crystallinity. ACS Sustainable Chemistry and Engineering, 2017, 5, 1982-1989.	6.7	10
45	Side Group Engineering of Small Molecular Acceptors for Highâ€Performance Fullereneâ€Free Polymer Solar Cells: Thiophene Being Superior to Selenophene. Advanced Functional Materials, 2017, 27, 1702194.	14.9	88
46	Highly efficient polymer solar cells by step-by-step optimizing donor molecular packing and acceptor redistribution. Physical Chemistry Chemical Physics, 2017, 19, 709-716.	2.8	8
47	Alloy Acceptor: Superior Alternative to PCBM toward Efficient and Stable Organic Solar Cells. Advanced Materials, 2016, 28, 8021-8028.	21.0	207
48	Efficient ternary organic photovoltaic cells with better trade-off photon harvesting and phase separation by doping DIB-SQ. Journal of Materials Chemistry C, 2016, 4, 7809-7816.	5.5	12
49	Side-chain Engineering of Benzo[1,2-b:4,5-bâ€™]dithiophene Core-structured Small Molecules for High-Performance Organic Solar Cells. Scientific Reports, 2016, 6, 25355.	3.3	18
50	Highly efficient ternary polymer solar cells by optimizing photon harvesting and charge carrier transport. Nano Energy, 2016, 22, 241-254.	16.0	196
51	Adjusting acceptor redistribution for highly efficient solvent additive-free polymer solar cells. Journal of Materials Chemistry C, 2016, 4, 3202-3208.	5.5	8
52	Versatile ternary organic solar cells: a critical review. Energy and Environmental Science, 2016, 9, 281-322.	30.8	585
53	Simultaneous Improvement in Short Circuit Current, Open Circuit Voltage, and Fill Factor of Polymer Solar Cells through Ternary Strategy. ACS Applied Materials & Interfaces, 2015, 7, 3691-3698.	8.0	114
54	Improved efficiency of ternary the blend polymer solar cells by doping a narrow band gap polymer material. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-5.	5.1	1

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55	Highly sensitive polymer photodetectors with a broad spectral response range from UV light to the near infrared region. Journal of Materials Chemistry C, 2015, 3, 7386-7393.	5.5	72
56	A two-step strategy to clarify the roles of a solution processed PFN interfacial layer in highly efficient polymer solar cells. Journal of Materials Chemistry A, 2015, 3, 18432-18441.	10.3	79
57	Efficient small molecular ternary solar cells by synergistically optimized photon harvesting and phase separation. Journal of Materials Chemistry A, 2015, 3, 16653-16662.	10.3	72
58	Trap-Assisted Photomultiplication Polymer Photodetectors Obtaining an External Quantum Efficiency of 37â€¯500%. ACS Applied Materials & Interfaces, 2015, 7, 5890-5897.	8.0	118
59	Achieving EQE of 16,700% in P3HT:PC71BM based photodetectors by trap-assisted photomultiplication. Scientific Reports, 2015, 5, 9181.	3.3	165
60	Efficient ternary polymer solar cells with a parallel-linkage structure. Journal of Materials Chemistry C, 2015, 3, 11930-11936.	5.5	33
61	Tuning nanoscale morphology using mixed solvents and solvent vapor treatment for high performance polymer solar cells. RSC Advances, 2014, 4, 48724-48733.	3.6	29
62	Enhanced performance of polymer solar cells by employing a ternary cascade energy structure. Physical Chemistry Chemical Physics, 2014, 16, 16103-16109.	2.8	24
63	Improved Efficiency of Bulk Heterojunction Polymer Solar Cells by Doping Low-Bandgap Small Molecules. ACS Applied Materials & Interfaces, 2014, 6, 6537-6544.	8.0	91