

# Qunping Fan

## List of Publications by Year in descending order

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75  
papers

4,591  
citations

117625

34  
h-index

102487

66  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2554  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synergistic effect of fluorination on both donor and acceptor materials for high performance non-fullerene polymer solar cells with 13.5% efficiency. <i>Science China Chemistry</i> , 2018, 61, 531-537.	8.2	342
2	Mechanically Robust All-Polymer Solar Cells from Narrow Band Gap Acceptors with Hetero-Bridging Atoms. <i>Joule</i> , 2020, 4, 658-672.	24.0	279
3	Use of two structurally similar small molecular acceptors enabling ternary organic solar cells with high efficiencies and fill factors. <i>Energy and Environmental Science</i> , 2018, 11, 3275-3282.	30.8	261
4	Chlorine substituted 2D-conjugated polymer for high-performance polymer solar cells with 13.1% efficiency via toluene processing. <i>Nano Energy</i> , 2018, 48, 413-420.	16.0	257
5	High Efficiency (15.8%) All-Polymer Solar Cells Enabled by a Regioregular Narrow Bandgap Polymer Acceptor. <i>Journal of the American Chemical Society</i> , 2021, 143, 2665-2670.	13.7	245
6	High-Performance As-Cast Nonfullerene Polymer Solar Cells with Thicker Active Layer and Large Area Exceeding 11% Power Conversion Efficiency. <i>Advanced Materials</i> , 2018, 30, 1704546.	21.0	233
7	Adding a Third Component with Reduced Miscibility and Higher LUMO Level Enables Efficient Ternary Organic Solar Cells. <i>ACS Energy Letters</i> , 2020, 5, 2711-2720.	17.4	188
8	Over 14% efficiency all-polymer solar cells enabled by a low bandgap polymer acceptor with low energy loss and efficient charge separation. <i>Energy and Environmental Science</i> , 2020, 13, 5017-5027.	30.8	170
9	Two compatible nonfullerene acceptors with similar structures as alloy for efficient ternary polymer solar cells. <i>Nano Energy</i> , 2017, 38, 510-517.	16.0	149
10	Optimized Active Layer Morphologies via Ternary Copolymerization of Polymer Donors for 17.6% Efficiency Organic Solar Cells with Enhanced Fill Factor. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2322-2329.	13.8	138
11	Multi-Selenophene-Containing Narrow Bandgap Polymer Acceptors for All-Polymer Solar Cells with over 15% Efficiency and High Reproducibility. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15935-15943.	13.8	125
12	High-Performance Non-Fullerene Polymer Solar Cells Based on Fluorine Substituted Wide Bandgap Copolymers Without Extra Treatments. <i>Solar Rrl</i> , 2017, 1, 1700020.	5.8	107
13	A Non-Conjugated Polymer Acceptor for Efficient and Thermally Stable All-Polymer Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19835-19840.	13.8	105
14	Efficient ternary blend all-polymer solar cells with a polythiophene derivative as a hole-cascade material. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14752-14760.	10.3	91
15	All-polymer solar cells with over 16% efficiency and enhanced stability enabled by compatible solvent and polymer additives. <i>Aggregate</i> , 2022, 3, e58.	9.9	85
16	A New Polythiophene Derivative for High Efficiency Polymer Solar Cells with PCE over 9%. <i>Advanced Energy Materials</i> , 2016, 6, 1600430.	19.5	84
17	Side-chain engineering for efficient non-fullerene polymer solar cells based on a wide-bandgap polymer donor. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9204-9209.	10.3	76
18	Nonhalogen solvent-processed polymer solar cells based on chlorine and trialkylsilyl substituted conjugated polymers achieve 12.8% efficiency. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2351-2359.	10.3	71

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19	High-performance nonfullerene polymer solar cells with open-circuit voltage over 1 V and energy loss as low as 0.54 eV. Nano Energy, 2017, 40, 20-26.	16.0	70
20	High-performance nonfullerene polymer solar cells based on a fluorinated wide bandgap copolymer with a high open-circuit voltage of 1.04 V. Journal of Materials Chemistry A, 2017, 5, 22180-22185.	10.3	68
21	Fluorinated Photovoltaic Materials for High-Performance Organic Solar Cells. Chemistry - an Asian Journal, 2019, 14, 3085-3095.	3.3	66
22	Near-infrared absorbing polymer acceptors enabled by selenophene-fused core and halogenated end-group for binary all-polymer solar cells with efficiency over 16%. Nano Energy, 2022, 92, 106718.	16.0	65
23	Enabling High Efficiency of Hydrocarbon-Solvent Processed Organic Solar Cells through Balanced Charge Generation and Non-Radiative Loss. Advanced Energy Materials, 2021, 11, 2101768.	19.5	61
24	Selenium-Containing Medium Bandgap Copolymer for Bulk Heterojunction Polymer Solar Cells with High Efficiency of 9.8%. Chemistry of Materials, 2017, 29, 4811-4818.	6.7	60
25	16.3% Efficiency binary all-polymer solar cells enabled by a novel polymer acceptor with an asymmetrical selenophene-fused backbone. Science China Chemistry, 2022, 65, 309-317.	8.2	54
26	High-performance all-polymer solar cells enabled by a novel low bandgap non-fully conjugated polymer acceptor. Science China Chemistry, 2021, 64, 1380-1388.	8.2	51
27	Carboxylate substituted pyrazine: A simple and low-cost building block for novel wide bandgap polymer donor enables 15.3% efficiency in organic solar cells. Nano Energy, 2021, 82, 105679.	16.0	48
28	10.13% Efficiency All-Polymer Solar Cells Enabled by Improving the Optical Absorption of Polymer Acceptors. Solar Rrl, 2020, 4, 2000142.	5.8	45
29	Donor-acceptor copolymers based on benzo[1,2-b:4,5-b']dithiophene and pyrene-fused phenazine for high-performance polymer solar cells. Organic Electronics, 2014, 15, 3375-3383.	2.6	44
30	Efficient polymer solar cells based on a new quinoxaline derivative with fluorinated phenyl side chain. Journal of Materials Chemistry C, 2016, 4, 2606-2613.	5.5	44
31	Polymer acceptors based on Y6 derivatives for all-polymer solar cells. Science Bulletin, 2021, 66, 1950-1953.	9.0	42
32	A Top-Down Strategy to Engineer ActiveLayer Morphology for Highly Efficient and Stable All-Polymer Solar Cells. Advanced Materials, 2022, 34, .	21.0	41
33	Enhancing the photovoltaic properties of terpolymers containing benzo[1,2-b:4,5-b']dithiophene, phenanthro[4,5-abc]phenazine and benzo[c][1,2,5]thiadiazole by changing the substituents. Journal of Materials Chemistry C, 2015, 3, 6240-6248.	5.5	40
34	Overcoming the energy loss in asymmetrical non-fullerene acceptor-based polymer solar cells by halogenation of polymer donors. Journal of Materials Chemistry A, 2019, 7, 15404-15410.	10.3	39
35	Significant enhancement of the photovoltaic performance of organic small molecule acceptors via side-chain engineering. Journal of Materials Chemistry A, 2018, 6, 7988-7996.	10.3	38
36	A 1,1'-vinylene-fused indacenodithiophene-based low bandgap polymer for efficient polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 5106-5114.	10.3	34

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37	Non-Fullerene Acceptor Doped Block Copolymer for Efficient and Stable Organic Solar Cells. ACS Energy Letters, 2022, 7, 2196-2202.	17.4	34
38	Reducing energy loss via tuning energy levels of polymer acceptors for efficient all-polymer solar cells. Science China Chemistry, 2020, 63, 1785-1792.	8.2	32
39	Acceptor-donor-acceptor small molecules containing benzo[1,2-b:4,5-b']dithiophene and rhodanine units for solution processed organic solar cells. Dyes and Pigments, 2015, 116, 13-19.	3.7	31
40	Synthesis and photovoltaic properties of a simple non-fused small molecule acceptor. Organic Electronics, 2018, 58, 133-138.	2.6	30
41	High-performance organic solar cells based on a small molecule with thieno[3,2-b]thiophene as $\pi$ -bridge. Organic Electronics, 2018, 53, 273-279.	2.6	30
42	Improved photovoltaic performance of a 2D-conjugated benzodithiophene-based polymer by the side chain engineering of quinoxaline. Polymer Chemistry, 2015, 6, 4290-4298.	3.9	29
43	Efficient as-cast semi-transparent organic solar cells with efficiency over 9% and a high average visible transmittance of 27.6%. Physical Chemistry Chemical Physics, 2019, 21, 10660-10666.	2.8	29
44	Significantly increasing open-circuit voltage of the benzo[1,2-b:4,5-b']dithiophene-alt-5,8-dithienyl-quinoxaline copolymers based PSCs by appending dioctyloxy chains at 6,7-positions of quinoxaline. Organic Electronics, 2015, 17, 129-137.	2.6	28
45	Nonconjugated Terpolymer Acceptors with Two Different Fused-Ring Electron-Deficient Building Blocks for Efficient All-Polymer Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 6442-6449.	8.0	28
46	Efficient and thermally stable all-polymer solar cells based on a fluorinated wide-bandgap polymer donor with high crystallinity. Journal of Materials Chemistry A, 2018, 6, 16403-16411.	10.3	26
47	A wide bandgap conjugated polymer donor based on alkoxy-fluorophenyl substituted benzodithiophene for high performance non-fullerene polymer solar cells. Journal of Materials Chemistry A, 2019, 7, 1307-1314.	10.3	24
48	A narrow-bandgap donor polymer for highly efficient as-cast non-fullerene polymer solar cells with a high open circuit voltage. Organic Electronics, 2018, 58, 82-87.	2.6	22
49	Synergistic Effects of Side-Chain Engineering and Fluorination on Small Molecule Acceptors to Simultaneously Broaden Spectral Response and Minimize Voltage Loss for 13.8% Efficiency Organic Solar Cells. Solar Rrl, 2019, 3, 1900169.	5.8	22
50	Fluorination as an effective tool to increase the photovoltaic performance of indacenodithiophene-alt-quinoxaline based wide-bandgap copolymers. Organic Electronics, 2016, 33, 128-134.	2.6	21
51	Optimized Active Layer Morphologies via Ternary Copolymerization of Polymer Donors for 17.6% Efficiency Organic Solar Cells with Enhanced Fill Factor. Angewandte Chemie, 2021, 133, 2352-2359.	2.0	21
52	Modulating Crystallinity and Miscibility via Side-Chain Variation Enable High Performance All-Small-Molecule Organic Solar Cells. Chinese Journal of Chemistry, 2021, 39, 2147-2153.	4.9	21
53	Enhancing the photovoltaic properties of low bandgap terpolymers based on benzodithiophene and phenanthrophenazine by introducing different second acceptor units. Polymer Chemistry, 2016, 7, 1747-1755.	3.9	20
54	Synthesis and photovoltaic performance of DPP-based small molecules with tunable energy levels by altering the molecular terminals. Dyes and Pigments, 2016, 125, 151-158.	3.7	20

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55	Weak Makes It Powerful: The Role of Cognate Small Molecules as an Alloy Donor in 2D/1A Ternary Fullerene Solar Cells for Finely Tuned Hierarchical Morphology in Thick Active Layers. <i>Small Methods</i> , 2020, 4, 1900766.	8.6	19
56	Benzodithiophene-based two-dimensional polymers with extended conjugated thienyltriphenylamine substituents for high-efficiency polymer solar cells. <i>Organic Electronics</i> , 2015, 23, 124-132.	2.6	16
57	A Non-Conjugated Polymer Acceptor for Efficient and Thermally Stable All-Polymer Solar Cells. <i>Angewandte Chemie</i> , 2020, 132, 20007-20012.	2.0	16
58	Ternary organic solar cells with improved efficiency and stability enabled by compatible dual-acceptor strategy. <i>Organic Electronics</i> , 2021, 96, 106227.	2.6	16
59	13.4% Efficiency from All-Small-Molecule Organic Solar Cells Based on a Crystalline Donor with Chlorine and Trialkylsilyl Substitutions. <i>ChemSusChem</i> , 2021, 14, 3535-3543.	6.8	15
60	Optimizing the Alkyl Side-Chain Design of a Wide Band-Gap Polymer Donor for Attaining Nonfullerene Organic Solar Cells with High Efficiency Using a Nonhalogenated Solvent. <i>Chemistry of Materials</i> , 2021, 33, 5981-5990.	6.7	15
61	Improved Photovoltaic Performance of a Side-Chain D-A Polymer in Polymer Solar Cells by Shortening the Phenyl Spacer between the D and A Units. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 2075-2083.	2.2	11
62	Synthesis and photovoltaic properties of a small molecule acceptor with thienylenevinylene thiophene as $\pi$ -bridge. <i>Dyes and Pigments</i> , 2019, 160, 227-233.	3.7	10
63	Vinylene-Inserted Asymmetric Polymer Acceptor with Absorption Approaching 1000 nm for Versatile Applications in All-Polymer Solar Cells and Photomultiplication-Type Polymeric Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 26970-26977.	8.0	10
64	Non-fullerene organic solar cells based on a small molecule with benzo[1,2-c:4,5-c']dithiophene-4,8-dione as $\pi$ -bridge. <i>Organic Electronics</i> , 2019, 67, 175-180.	2.6	9
65	Lateral size reduction of graphene oxide preserving its electronic properties and chemical functionality. <i>RSC Advances</i> , 2020, 10, 29432-29440.	3.6	9
66	High-Throughput Screening of Blade-Coated Polymer:Polymer Solar Cells: Solvent Determines Achievable Performance. <i>ChemSusChem</i> , 2022, 15, .	6.8	9
67	Wide Bandgap Random Terpolymers for High Efficiency Halogen-Free Solvent Processed Polymer Solar Cells. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , 2018, 34, 1279-1285.	4.9	8
68	Siloxane-functional small molecule acceptor for high-performance organic solar cells with 16.6% efficiency. <i>Chemical Engineering Journal</i> , 2022, 442, 136018.	12.7	8
69	Synthesis and photovoltaic properties of two star-shaped molecules involving phenylquinoxaline as core and triphenylamine and thiophene units as arms. <i>Synthetic Metals</i> , 2015, 204, 25-31.	3.9	7
70	Multi-Selenophene-Containing Narrow Bandgap Polymer Acceptors for All-Polymer Solar Cells with over 15% Efficiency and High Reproducibility. <i>Angewandte Chemie</i> , 2021, 133, 16071-16079.	2.0	6
71	Polymer light-emitting devices based on europium(III) complex with 11-bromo-dipyrido[3,2-a:2',3'-c]phenazine. <i>Science China Chemistry</i> , 2015, 58, 1152-1158.	8.2	5
72	Improved photovoltaic performance of D-A-D-type small molecules with isoindigo and pyrene units by inserting different $\pi$ -conjugated bridge. <i>Tetrahedron</i> , 2016, 72, 4543-4549.	1.9	5

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73	High-Performance Nonfullerene Polymer Solar Cells Based on a Wide-Bandgap Polymer without Extra Treatment. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800660.	3.9	5
74	Enabling high-performance, centimeter-scale organic solar cells through three-dimensional charge transport. <i>Cell Reports Physical Science</i> , 2022, , 100761.	5.6	4
75	Enhancing the photovoltaic performance of chlorobenzene-cored unfused electron acceptors by introducing Sâ€O noncovalent interaction. <i>Chemical Engineering Journal</i> , 2022, 446, 137375.	12.7	4