

Qunping Fan

List of Publications by Year in descending order

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75
papers

4,591
citations

117453

34
h-index

102304

66
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all docs

75
docs citations

75
times ranked

2554
citing authors

#	ARTICLE	IF	CITATIONS
1	All-polymer solar cells with over 16% efficiency and enhanced stability enabled by compatible solvent and polymer additives. <i>Aggregate</i> , 2022, 3, e58.	5.2	85
2	Near-infrared absorbing polymer acceptors enabled by selenophene-fused core and halogenated end-group for binary all-polymer solar cells with efficiency over 16%. <i>Nano Energy</i> , 2022, 92, 106718.	8.2	65
3	High-Throughput Screening of Blade-Coated Polymer:Polymer Solar Cells: Solvent Determines Achievable Performance. <i>ChemSusChem</i> , 2022, 15, .	3.6	9
4	Enabling high-performance, centimeter-scale organic solar cells through three-dimensional charge transport. <i>Cell Reports Physical Science</i> , 2022, , 100761.	2.8	4
5	Siloxane-functional small molecule acceptor for high-performance organic solar cells with 16.6% efficiency. <i>Chemical Engineering Journal</i> , 2022, 442, 136018.	6.6	8
6	16.3% Efficiency binary all-polymer solar cells enabled by a novel polymer acceptor with an asymmetrical selenophene-fused backbone. <i>Science China Chemistry</i> , 2022, 65, 309-317.	4.2	54
7	Enhancing the photovoltaic performance of chlorobenzene-cored unfused electron acceptors by introducing S π O noncovalent interaction. <i>Chemical Engineering Journal</i> , 2022, 446, 137375.	6.6	4
8	Non-Fullerene Acceptor Doped Block Copolymer for Efficient and Stable Organic Solar Cells. <i>ACS Energy Letters</i> , 2022, 7, 2196-2202.	8.8	34
9	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 & Interfaces</i> , 2022, 14, 26970-26977.	4.0	10
10	A Top-Down Strategy to Engineer Active Layer Morphology for Highly Efficient and Stable All-Polymer Solar Cells. <i>Advanced Materials</i> , 2022, 34, .	11.1	41
11	Optimized Active Layer Morphologies via Ternary Copolymerization of Polymer Donors for 17.6% Efficiency Organic Solar Cells with Enhanced Fill Factor. <i>Angewandte Chemie</i> , 2021, 133, 2352-2359.	1.6	21
12	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.	7.2	138
13	Carboxylate substituted pyrazine: A simple and low-cost building block for novel wide bandgap polymer donor enables 15.3% efficiency in organic solar cells. <i>Nano Energy</i> , 2021, 82, 105679.	8.2	48
14	Nonconjugated Terpolymer Acceptors with Two Different Fused-Ring Electron-Deficient Building Blocks for Efficient All-Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6442-6449.	4.0	28
15	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.	6.6	245
16	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.	1.6	6
17	High-performance all-polymer solar cells enabled by a novel low bandgap non-fully conjugated polymer acceptor. <i>Science China Chemistry</i> , 2021, 64, 1380-1388.	4.2	51
18	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.	7.2	125

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19	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.	2.6	21
20	13.4% Efficiency from All-Small-Molecule Organic Solar Cells Based on a Crystalline Donor with Chlorine and Trialkylsilyl Substitutions. ChemSusChem, 2021, 14, 3535-3543.	3.6	15
21	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. Chemistry of Materials, 2021, 33, 5981-5990.	3.2	15
22	Ternary organic solar cells with improved efficiency and stability enabled by compatible dual-acceptor strategy. Organic Electronics, 2021, 96, 106227.	1.4	16
23	Polymer acceptors based on Y6 derivatives for all-polymer solar cells. Science Bulletin, 2021, 66, 1950-1953.	4.3	42
24	Enabling High Efficiency of Hydrocarbon-Solvent Processed Organic Solar Cells through Balanced Charge Generation and Non-Radiative Loss. Advanced Energy Materials, 2021, 11, 2101768.	10.2	61
25	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.	15.6	170
26	A Non-Conjugated Polymer Acceptor for Efficient and Thermally Stable All-Polymer Solar Cells. Angewandte Chemie, 2020, 132, 20007-20012.	1.6	16
27	A Non-Conjugated Polymer Acceptor for Efficient and Thermally Stable All-Polymer Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 19835-19840.	7.2	105
28	Reducing energy loss via tuning energy levels of polymer acceptors for efficient all-polymer solar cells. Science China Chemistry, 2020, 63, 1785-1792.	4.2	32
29	Adding a Third Component with Reduced Miscibility and Higher LUMO Level Enables Efficient Ternary Organic Solar Cells. ACS Energy Letters, 2020, 5, 2711-2720.	8.8	188
30	Lateral size reduction of graphene oxide preserving its electronic properties and chemical functionality. RSC Advances, 2020, 10, 29432-29440.	1.7	9
31	Mechanically Robust All-Polymer Solar Cells from Narrow Band Gap Acceptors with Hetero-Bridging Atoms. Joule, 2020, 4, 658-672.	11.7	279
32	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. Small Methods, 2020, 4, 1900766.	4.6	19
33	10.13% Efficiency All-Polymer Solar Cells Enabled by Improving the Optical Absorption of Polymer Acceptors. Solar Rrl, 2020, 4, 2000142.	3.1	45
34	Synthesis and photovoltaic properties of a small molecule acceptor with thienylenevinylene thiophene as π -bridge. Dyes and Pigments, 2019, 160, 227-233.	2.0	10
35	Fluorinated Photovoltaic Materials for High-Performance Organic Solar Cells. Chemistry - an Asian Journal, 2019, 14, 3085-3095.	1.7	66
36	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.	5.2	24

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37	Non-fullerene organic solar cells based on a small molecule with benzo[1,2-c:4,5-c']dithiophene-4,8-dione as Γ -bridge. <i>Organic Electronics</i> , 2019, 67, 175-180.	1.4	9
38	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.	5.2	71
39	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. <i>Solar Rrl</i> , 2019, 3, 1900169.	3.1	22
40	Overcoming the energy loss in asymmetrical non-fullerene acceptor-based polymer solar cells by halogenation of polymer donors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15404-15410.	5.2	39
41	Efficient as-cast semi-transparent organic solar cells with efficiency over 9% and a high average visible transmittance of 27.6%. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10660-10666.	1.3	29
42	High-Performance Nonfullerene Polymer Solar Cells Based on a Wide-Bandgap Polymer without Extra Treatment. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800660.	2.0	5
43	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.	8.2	257
44	Significant enhancement of the photovoltaic performance of organic small molecule acceptors <i>via</i> side-chain engineering. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7988-7996.	5.2	38
45	A narrow-bandgap donor polymer for highly efficient as-cast non-fullerene polymer solar cells with a high open circuit voltage. <i>Organic Electronics</i> , 2018, 58, 82-87.	1.4	22
46	Synthesis and photovoltaic properties of a simple non-fused small molecule acceptor. <i>Organic Electronics</i> , 2018, 58, 133-138.	1.4	30
47	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.	4.2	342
48	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.	11.1	233
49	High-performance organic solar cells based on a small molecule with thieno[3,2-b]thiophene as Γ -bridge. <i>Organic Electronics</i> , 2018, 53, 273-279.	1.4	30
50	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.	15.6	261
51	Efficient and thermally stable all-polymer solar cells based on a fluorinated wide-bandgap polymer donor with high crystallinity. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16403-16411.	5.2	26
52	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.	2.2	8
53	A 1,1'-vinylene-fused indacenodithiophene-based low bandgap polymer for efficient polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5106-5114.	5.2	34
54	Selenium-Containing Medium Bandgap Copolymer for Bulk Heterojunction Polymer Solar Cells with High Efficiency of 9.8%. <i>Chemistry of Materials</i> , 2017, 29, 4811-4818.	3.2	60

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55	Two compatible nonfullerene acceptors with similar structures as alloy for efficient ternary polymer solar cells. <i>Nano Energy</i> , 2017, 38, 510-517.	8.2	149
56	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.	5.2	76
57	High-performance Non-fullerene Polymer Solar Cells Based on Fluorine Substituted Wide Bandgap Copolymers Without Extra Treatments. <i>Solar Rrl</i> , 2017, 1, 1700020.	3.1	107
58	High-performance nonfullerene polymer solar cells based on a fluorinated wide bandgap copolymer with a high open-circuit voltage of 1.04 V. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22180-22185.	5.2	68
59	High-performance nonfullerene polymer solar cells with open-circuit voltage over 1 V and energy loss as low as 0.54 eV. <i>Nano Energy</i> , 2017, 40, 20-26.	8.2	70
60	Efficient polymer solar cells based on a new quinoxaline derivative with fluorinated phenyl side chain. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2606-2613.	2.7	44
61	Fluorination as an effective tool to increase the photovoltaic performance of indacenodithiophene-alt-quinoxaline based wide-bandgap copolymers. <i>Organic Electronics</i> , 2016, 33, 128-134.	1.4	21
62	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.	5.2	91
63	Improved photovoltaic performance of D-type small molecules with isoindigo and pyrene units by inserting different π -conjugated bridge. <i>Tetrahedron</i> , 2016, 72, 4543-4549.	1.0	5
64	A New Polythiophene Derivative for High Efficiency Polymer Solar Cells with PCE over 9%. <i>Advanced Energy Materials</i> , 2016, 6, 1600430.	10.2	84
65	Enhancing the photovoltaic properties of low bandgap terpolymers based on benzodithiophene and phenanthrophenazine by introducing different second acceptor units. <i>Polymer Chemistry</i> , 2016, 7, 1747-1755.	1.9	20
66	Synthesis and photovoltaic performance of DPP-based small molecules with tunable energy levels by altering the molecular terminals. <i>Dyes and Pigments</i> , 2016, 125, 151-158.	2.0	20
67	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.	4.2	5
68	Acceptor-donor-acceptor small molecules containing benzo[1,2-b:4,5-b']dithiophene and rhodanine units for solution processed organic solar cells. <i>Dyes and Pigments</i> , 2015, 116, 13-19.	2.0	31
69	Benzodithiophene-based two-dimensional polymers with extended conjugated thienyltriphenylamine substituents for high-efficiency polymer solar cells. <i>Organic Electronics</i> , 2015, 23, 124-132.	1.4	16
70	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. <i>Journal of Materials Chemistry C</i> , 2015, 3, 6240-6248.	2.7	40
71	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.	2.1	7
72	Improved photovoltaic performance of a 2D-conjugated benzodithiophene-based polymer by the side chain engineering of quinoxaline. <i>Polymer Chemistry</i> , 2015, 6, 4290-4298.	1.9	29

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73	Significantly increasing open-circuit voltage of the benzo[1,2-b:4,5-b ²]dithiophene-alt-5,8-dithienyl-quinoxaline copolymers based PSCs by appending dioctyloxy chains at 6,7-positions of quinoxaline. <i>Organic Electronics</i> , 2015, 17, 129-137.	1.4	28
74	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.	1.1	11
75	Donor-acceptor copolymers based on benzo[1,2-b:4,5-b ²]dithiophene and pyrene-fused phenazine for high-performance polymer solar cells. <i>Organic Electronics</i> , 2014, 15, 3375-3383.	1.4	44