Ailing

List of Publications by Year
in descending order

82 papers	4,487 citations	125106 35 h-index	120465 65 g-index
82 all docs	82 docs citations	82 times ranked	3790 citing authors

#	ARTICLE	IF	CITATIONS
1	The Subtle Structure Modulation of A₂â€A₁â€Dâ€A₁â€A₂ Type Nonfullerene Acceptors Extends the Photoelectric Response for Highâ€Voltage Organic Photovoltaic Cells. Macromolecular Rapid Communications, 2022, 43, e2100810.	2.0	5
2	A linear 2D-conjugated polymer based on 4,8-bis(4-chloro-5-tripropylsilyl-thiophen-2-yl)benzo[1,2-<i>b</i>:4,5-<i>b</i>â€²]dithiophene (BDT-T-SiCl) for low voltage loss organic photovoltaics. Journal of Materials Chemistry A, 2022, 10, 9869-9877.	5.2	17
3	PTB7-Th-Based Organic Photovoltaic Cells with a High <i>V</i>_{OC} of over 1.0 V <i>via</i> Fluorination and Side Chain Engineering of Benzotriazole-Containing Nonfullerene Acceptors. ACS Applied Materials & Interfaces, 2022, 14, 18764-18772.	4.0	15
4	Modulating the molecular orientation of linear benzodifuran-based isomeric polymers by exchanging the positions of chlorine and fluorine atoms. Nano Energy, 2022, 99, 107413.	8.2	27
5	Introducing methoxy or fluorine substitutions on the conjugated side chain to reduce the voltage loss of organic solar cells. Journal of Materials Chemistry C, 2021, 9, 11163-11171.	2.7	10
6	Side-chain engineering of copolymers based on benzotriazole (BTA) and dithieno[2,3-d;2â€²,3â€²-dâ€²]benzo[1,2-b;4,5-bâ€²]dithiophenes (DTBDT) enables a high PCE of 14.6%. Nanotechnology, 2021, 32, 225403.	1.3	18
7	Utilizing Benzotriazole-Fused DAD-Type Heptacyclic Ring to Construct n-Type Polymer for All-Polymer Solar Cell Application. ACS Applied Energy Materials, 2021, 4, 4217-4223.	2.5	20
8	Fabrication of High <i>V</i>_{OC} Organic Solar Cells with a Non-Halogenated Solvent and the Effect of Substituted Groups for â€œSame-A-Strategyâ€•Material Combinations. ACS Applied Materials & Interfaces, 2021, 13, 21556-21564.	4.0	29
9	Fluorination of the Quinoxaline-Based p-Type Polymer and n-Type Small Molecule for High <i>V</i>_{OC} Organic Solar Cells. Journal of Physical Chemistry C, 2021, 125, 10876-10882.	1.5	24
10	Tricyclic or Pentacyclic D Units: Design of Dâˆ’Ï€â€“A-Type Copolymers for High <i>V</i>_{OC} Organic Photovoltaic Cells. ACS Applied Materials & Interfaces, 2021, 13, 30756-30765.	4.0	16
11	~1.2 V open-circuit voltage from organic solar cells. Journal of Semiconductors, 2021, 42, 070202.	2.0	11
12	Modulating the middle and end-capped units of A2-A1-D-A1-A2 type non-fullerene acceptors for high VOC organic solar cells. Organic Electronics, 2021, 95, 106195.	1.4	11
13	Benzothiadiazole-based non-fullerene acceptors. Nano Energy, 2021, 87, 106174.	8.2	137
14	The optimization of Ï€-bridge for trialkylsilyl substituted D-Ï€-A photovoltaic polymers. Dyes and Pigments, 2021, 194, 109609.	2.0	11
15	Gradually modulating the three parts of D-Ï€-A type polymers for high-performance organic solar cells. Journal of Energy Chemistry, 2021, 62, 532-537.	7.1	45
16	Effects of Halogenation on the Benzotriazole Unit of Non-Fullerene Acceptors in Organic Solar Cells with High Voltages. ACS Applied Materials & Interfaces, 2021, 13, 58994-59005.	4.0	22
17	Side chain engineering of quinoxaline-based small molecular nonfullerene acceptors for high-performance poly(3-hexylthiophene)-based organic solar cells. Science China Chemistry, 2020, 63, 254-264.	4.2	42
18	Wide-Band-Gap Phthalimide-Based D-Ï€-A Polymers for Nonfullerene Organic Solar Cells: The Effect of Conjugated Ï€-Bridge from Thiophene to Thieno[3,2-<i>b</i>]thiophene. Journal of Physical Chemistry C, 2020, 124, 230-236.	1.5	22

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19	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.	4.0	39
20	Tuning the intermolecular interaction of A2-A1-D-A1-A2 type non-fullerene acceptors by substituent engineering for organic solar cells with ultrahigh VOC of ~1.2 V. Science China Chemistry, 2020, 63, 1666-1674.	4.2	86
21	Gradual Fluorination on the Phenyl Side Chains for Benzodithiophene-Based Linear Polymers to Improve the Photovoltaic Performance. ACS Applied Materials & Interfaces, 2020, 12, 38451-38459.	4.0	18
22	Wide Band Gap Photovoltaic Polymer Based on Pyrrolo[3,4-<i>f</i>]benzotriazole-5,7-dione (TzBI) with Ultrahigh <i>V</i>_{OC} Beyond 1.25 V. Journal of Physical Chemistry C, 2020, 124, 19492-19498.	1.5	16
23	Utilizing an electron-deficient thieno[3,4-<i>c</i>]pyrrole-4,6-dione (TPD) unit as a Ï€-bridge to improve the photovoltaic performance of Aâ€“Ï€â€“Dâ€“Ï€â€“A type acceptors. Journal of Materials Chemistry C, 2020, 8, 15981-15984.	2.7	24
24	Chlorination of dithienobenzodithiophene (DTBDT) based polymers to simultaneously improve the <i>V</i>_{OC}, <i>J</i>_{SC} and FF of non-fullerene organic solar cells. Sustainable Energy and Fuels, 2020, 4, 5665-5673.	2.5	10
25	Solutionâ€Processed Organic Solar Cells with High Openâ€Circuit Voltage of 1.3 V and Low Nonâ€Radiative Voltage Loss of 0.16 V. Advanced Materials, 2020, 32, e2002122.	11.1	168
26	Low-Bandgap n-Type Polymer Based on a Fused-DAD-Type Heptacyclic Ring for All-Polymer Solar Cell Application with a Power Conversion Efficiency of 10.7%. ACS Macro Letters, 2020, 9, 706-712.	2.3	59
27	Molecular Engineering of Dâˆ’Ï€â€“A Copolymers Based on 4,8-Bis(4-chlorothiophen-2-yl)benzo[1,2-<i>b</i>:4,5-<i>b</i>â€²]dithiophene (BDT-T-Cl) for High-Performance Fullerene-Free Organic Solar Cells. Macromolecules, 2019, 52, 6227-6233.	2.2	83
28	A thieno[3,4-<i>b</i>]pyrazine-based A₂â€“A₁â€“Dâ€“A₁â€“A₂ type low bandgap non-fullerene acceptor with 1,1-dicyanomethylene-3-indanone (IC) as the terminal group. Journal of Materials Chemistry C, 2019, 7, 8820-8824.	2.7	10
29	Modulation of Three p-Type Polymers Containing a Fluorinated-Thiophene-Fused-Benzotriazole Unit To Pair with a Benzotriazole-Based Non-fullerene Acceptor for High <i>V</i>_{OC} Organic Solar Cells. Macromolecules, 2019, 52, 8625-8630.	2.2	26
30	Conjugated materials containing dithieno[3,2-<i>b</i>:2â€²,3â€²-<i>d</i>]pyrrole and its derivatives for organic and hybrid solar cell applications. Journal of Materials Chemistry A, 2019, 7, 64-96.	5.2	133
31	Side-chain effect in ethenylene fused thiophene-vinylene-thiophene (ETVT) based photovoltaic polymers. Polymer, 2019, 167, 31-39.	1.8	5
32	First-principles theoretical designing of planar non-fullerene small molecular acceptors for organic solar cells: manipulation of noncovalent interactions. Physical Chemistry Chemical Physics, 2019, 21, 2128-2139.	1.3	82
33	Introducing Fluorine and Sulfur Atoms into Quinoxaline-Based p-type Polymers To Gradually Improve the Performance of Fullerene-Free Organic Solar Cells. ACS Macro Letters, 2019, 8, 743-748.	2.3	83
34	Changing the Ï€-bridge from thiophene to thieno[3,2-<i>b</i>]thiophene for the Dâ€“Ï€â€“A type polymer enables high performance fullerene-free organic solar cells. Chemical Communications, 2019, 55, 6708-6710.	2.2	88
35	Benzotriazole-Based Acceptor and Donors, Coupled with Chlorination, Achieve a High <i>V</i>_{OC} of 1.24 V and an Efficiency of 10.5% in Fullerene-Free Organic Solar Cells. Chemistry of Materials, 2019, 31, 3941-3947.	3.2	236
36	Indacenodithieno[3,2-<i>b</i>]thiophene-Based Wide Bandgap D-Ï€-A Copolymer for Nonfullerene Organic Solar Cells. ACS Macro Letters, 2019, 8, 1599-1604.	2.3	25

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37	Controlling the Cyanoâ€Containing A₂ Segments in A₂â€A₁â€Dâ€A₁â€A₂ Type Nonâ€Fullerene Acceptors to Combine with a Benzotriazoleâ€Based pâ€Type Polymer: â€œSameâ€Acceptorâ€Strategyâ€• for High <i>V</i>_{OC} Organic Solar Cells. Solar Rrl, 2019, 3, 1800332.	3.1	23
38	Planar Benzofuran Inside-Fused Perylenediimide Dimers for High <i>V</i>_{OC} Fullerene-Free Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 4203-4210.	4.0	38
39	Aromaticâ€Diimideâ€Based nâ€Type Conjugated Polymers for Allâ€Polymer Solar Cell Applications. Advanced Materials, 2019, 31, e1804699.	11.1	191
40	Quinoxaline-Containing Nonfullerene Small-Molecule Acceptors with a Linear A₂-A₁-D-A₁-A₂ Skeleton for Poly(3-hexylthiophene)-Based Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 10254-10261.	4.0	60
41	Wide Band Gap Nonâ€Fullerene Small Molecular Acceptors Containing Spirobifluorene and Benzotriazole with Three Different Endâ€Capped Groups for P3HTâ€Based Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 392-398.	2.6	15
42	A perylenediimide dimer containing an asymmetric Ï€-bridge and its fused derivative for fullerene-free organic solar cells. Journal of Materials Chemistry C, 2018, 6, 2580-2587.	2.7	34
43	Modulating the Symmetry of Benzodithiophene by Molecular Tailoring for the Application in Naphthalene Diimideâ€Based Nâ€Type Photovoltaic Polymers. Solar Rrl, 2018, 2, 1700230.	3.1	28
44	Design and Synthesis of a Novel nâ€Type Polymer Based on Asymmetric Rylene Diimide for the Application in Allâ€Polymer Solar Cells. Macromolecular Rapid Communications, 2018, 39, e1700715.	2.0	27
45	Theoretical and experimental study of electron-deficient core substitution effect of diketopyrrolopyrrole derivatives on optoelectrical and charge transport properties. Chemical Physics, 2018, 500, 67-73.	0.9	12
46	Simultaneously Achieved High Openâ€Circuit Voltage and Efficient Charge Generation by Fineâ€Tuning Chargeâ€Transfer Driving Force in Nonfullerene Polymer Solar Cells. Advanced Functional Materials, 2018, 28, 1704507.	7.8	180
47	A novel thiazole based acceptor for fullerene-free organic solar cells. Dyes and Pigments, 2018, 149, 470-474.	2.0	81
48	Introducing Four 1,1-Dicyanomethylene-3-indanone End-Capped Groups as an Alternative Strategy for the Design of Small-Molecular Nonfullerene Acceptors. Journal of Physical Chemistry C, 2018, 122, 29122-29128.	1.5	79
49	A₂â€"A₁â€"Dâ€"A₁â€"A₂ Type Non-Fullerene Acceptors with 2-(1,1-Dicyanomethylene)rhodanine as the Terminal Groups for Poly(3-hexylthiophene)-Based Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 34427-34434.	4.0	52
50	A₂â€"A₁â€"Dâ€"A₁â€"A₂ type non-fullerene acceptors based on methoxy substituted benzotriazole with three different end-capped groups for P3HT-based organic solar cells. Journal of Materials Chemistry C, 2018, 6, 10902-10909.	2.7	33
51	A small molecular electron acceptor based on asymmetric hexacyclic core of thieno[1,2- b]indaceno[5,6- b â€²]thienothiophene for efficient fullerene-free polymer solar cells. Science Bulletin, 2018, 63, 845-852.	4.3	28
52	Recent progress in porphyrin-based materials for organic solar cells. Journal of Materials Chemistry A, 2018, 6, 16769-16797.	5.2	215
53	The Introduction of Fluorine and Sulfur Atoms into Benzotriazoleâ€Based pâ€Type Polymers to Match with a Benzotriazoleâ€Containing nâ€Type Small Molecule: â€œThe Sameâ€Acceptorâ€Strategyâ€• to Realize High Openâ€Circuit Voltage. Advanced Energy Materials, 2018, 8, 1801582.	10.2	122
54	Utilizing Benzotriazole and Indacenodithiophene Units to Construct Both Polymeric Donor and Small Molecular Acceptors to Realize Organic Solar Cells With High Open-Circuit Voltages Beyond 1.2 V. Frontiers in Chemistry, 2018, 6, 147.	1.8	20

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55	Ring Fusion of Thiopheneâ€“Vinyleneâ€“Thiophene (TVT) Benefits Both Fullerene and Non-Fullerene Polymer Solar Cells. Macromolecules, 2018, 51, 4598-4607.	2.2	10
56	Inside-fused perylenediimide dimers with planar structures for high-performance fullerene-free organic solar cells. RSC Advances, 2017, 7, 13749-13753.	1.7	9
57	Comparison among Perylene Diimide (PDI), Naphthalene Diimide (NDI), and Naphthodithiophene Diimide (NDTI) Based n-Type Polymers for All-Polymer Solar Cells Application. Macromolecules, 2017, 50, 3179-3185.	2.2	85
58	P3HT-Based Photovoltaic Cells with a High <i>V</i>_{oc} of 1.22 V by Using a Benzotriazole-Containing Nonfullerene Acceptor End-Capped with Thiazolidine-2,4-dione. ACS Macro Letters, 2017, 6, 410-414.	2.3	117
59	Achievement of High <i>V</i>_{oc} of 1.02 V for P3HTâ€Based Organic Solar Cell Using a Benzotriazoleâ€Containing Nonâ€Fullerene Acceptor. Advanced Energy Materials, 2017, 7, 1602269.	10.2	191
60	Nonâ€Fullerene Acceptors With A₂â€‰=â€‰A₁â€Dâ€A₁â€‰=â€‰A₂ Skeleton Containing Benzothiadiazole and Thiazolidineâ€2,4â€Dione for Highâ€Performance P3HTâ€Based Organic Solar Cells. Solar Rrl, 2017, 1, 1700166.	3.1	43
61	PTB7-Th based organic solar cell with a high Voc of 1.05 V by modulating the LUMO energy level of benzotriazole-containing non-fullerene acceptor. Science Bulletin, 2017, 62, 1275-1282.	4.3	30
62	The effect of conjugated Ï€-bridge and fluorination on the properties of asymmetric-building-block-containing polymers (ABC polymers) based on dithienopyran donor and benzothiadiazole acceptors. Polymer Chemistry, 2017, 8, 5396-5406.	1.9	17
63	Design of Diketopyrrolopyrrole (DPP)â€Based Small Molecules for Organicâ€Solarâ€Cell Applications. Advanced Materials, 2017, 29, 1600013.	11.1	290
64	Medium Bandgap D-A Type Photovoltaic Polymers Based on an Asymmetric Dithienopyran Donor and a Benzotriazole Acceptor. Polymers, 2017, 9, 516.	2.0	3
65	Effect of fluorination and symmetry on the properties of polymeric photovoltaic materials based on an asymmetric building block. RSC Advances, 2016, 6, 90051-90060.	1.7	23
66	Series of Quinoidal Methyl-Dioxocyano-Pyridine Based Ï€-Extended Narrow-Bandgap Oligomers for Solution-Processed Small-Molecule Organic Solar Cells. Chemistry of Materials, 2015, 27, 4719-4730.	3.2	52
67	Comparative Study of Effects of Terminal Nonâ€Alkyl Aromatic and Alkyl Groups on Smallâ€Molecule Solar Cell Performance. Advanced Energy Materials, 2015, 5, 1500059.	10.2	42
68	The effect of post-annealing on the interface between the aluminum electrode and the active layer in polymer/fullerene solar cells. Applied Physics A: Materials Science and Processing, 2014, 117, 1335-1341.	1.1	4
69	Photocurrent Enhancement of BODIPY-Based Solution-Processed Small-Molecule Solar Cells by Dimerization via the Meso Position. ACS Applied Materials & Interfaces, 2014, 6, 22496-22505.	4.0	48
70	Photocurrent Enhancement in Diketopyrrolopyrrole Solar Cells by Manipulating Dipolar Anchoring Terminals on Alkylâ€Chain Spacers. Chemistry - an Asian Journal, 2014, 9, 883-892.	1.7	17
71	A new solution-processed diketopyrrolopyrrole donor for non-fullerene small-molecule solar cells. Journal of Materials Chemistry A, 2014, 2, 1869-1876.	5.2	28
72	A Solutionâ€Processed Smallâ€Molecule Diketopyrrolopyrrole Dimer for Organic Solar Cells. Asian Journal of Organic Chemistry, 2014, 3, 948-952.	1.3	6

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73	Tuning morphology and photovoltaic properties of diketopyrrolopyrrole-based small-molecule solar cells by taloring end-capped aromatic groups. Physical Chemistry Chemical Physics, 2014, 16, 4664.	1.3	19
74	Peryleneâ€"Diimide Based Non-Fullerene Solar Cells with 4.34% Efficiency through Engineering Surface Donor/Acceptor Compositions. Chemistry of Materials, 2014, 26, 2907-2914.	3.2	150
75	Cooperatively Tuning Phase Size and Absorption of Near IR Photons in P3HT:Perylene Diimide Solar Cells by Bay-Modifications on the Acceptor. Journal of Physical Chemistry C, 2014, 118, 24212-24220.	1.5	39
76	Solution-Processed DPP-Based Small Molecule that Gives High Photovoltaic Efficiency with Judicious Device Optimization. ACS Applied Materials & Interfaces, 2013, 5, 2033-2039.	4.0	163
77	Controllable Hierarchical Selfâ€Assembly and Disassembly of Stable Zinc Phthalocyanineâ€Peptide Nucleic Acidâ€Perylene Diimide Nanoheterojunctions. Asian Journal of Organic Chemistry, 2013, 2, 54-59.	1.3	4
78	Significant improvement of photovoltaic performance by embedding thiophene in solution-processed star-shaped TPA-DPP backbone. Journal of Materials Chemistry A, 2013, 1, 5747.	5.2	69
79	Conformation-variable PDI@Î²-sheet nanohelices show stimulus-responsive supramolecular chirality. Chemical Communications, 2013, 49, 4914.	2.2	24
80	Phenylâ€1,3,5â€Trithienylâ€Diketopyrrolopyrrole: A Molecular Backbone Potentially Affording High Efficiency for Solutionâ€Processed Smallâ€Molecule Organic Solar Cells through Judicious Molecular Design. Chemistry - an Asian Journal, 2013, 8, 2407-2416.	1.7	22
81	Fine-tuning device performances of small molecule solar cells via the more polarized DPP-attached donor units. Physical Chemistry Chemical Physics, 2012, 14, 14238.	1.3	53
82	Large-scale, ultra-dense and vertically standing zinc phthalocyanine Ï€â€"Ï€ stacks as a hole-transporting layer on an ITO electrode. Journal of Materials Chemistry, 2012, 22, 23492.	6.7	18