

Chang Duk Yang

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Effect of Third Component on Efficiency and Stability in Ternary Organic Solar Cells: More than a Simple Superposition. <i>Solar Rrl</i> , 2022, 6, 2100819.	5.8	32
2	Guanine-Based Quadruplexes Templated by Various Cations toward Potential Use as Single-Ion Conductors. <i>ChemSusChem</i> , 2022, 15, .	6.8	1
3	Volatile Solid Additive-Assisted Sequential Deposition Enables 18.42% Efficiency in Organic Solar Cells. <i>Advanced Science</i> , 2022, 9, e2105347.	11.2	72
4	Selective, Stable, Bias-Free, and Efficient Solar Hydrogen Peroxide Production on Inorganic Layered Materials. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	19
5	Large-area perovskite solar cells employing spiro-Naph hole transport material. <i>Nature Photonics</i> , 2022, 16, 119-125.	31.4	123
6	Stretchable N-Type High-Performance Polymers Based on Asymmetric Thienylvinyl-1,1-Dicyanomethylene-3-Indanone for Plastic Electronics. <i>Chemistry of Materials</i> , 2022, 34, 1554-1566.	6.7	27
7	Intrachain photophysics of a donor-acceptor copolymer. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 1982-1992.	2.8	7
8	Random Copolymerization Strategy for Host Polymer Donor PM6 Enables Improved Efficiency Both in Binary and Ternary Organic Solar Cells. <i>ChemSusChem</i> , 2022, 15, .	6.8	4
9	Oligomer-Assisted Photoactive Layers Enable >18% Efficiency of Organic Solar Cells. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	12
10	Oligomer-Assisted Photoactive Layers Enable >18% Efficiency of Organic Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	43
11	Non-conjugated terpolymer acceptors for highly efficient and stable lager-area all-polymer solar cells. <i>Journal of Energy Chemistry</i> , 2022, 71, 631-638.	12.9	11
12	Rational Regulation of the Molecular Aggregation Enables A Facile Blade-Coating Process of Large-area All-Polymer Solar Cells with Record Efficiency. <i>Small</i> , 2022, 18, e2200734.	10.0	14
13	Layer-by-layer and non-halogenated solvent processing of benzodithiophene-free simple polymer donors for organic solar cells. <i>Chemical Engineering Journal</i> , 2022, 443, 136515.	12.7	14
14	Usefulness of Polar and Bulky Phosphonate Chain-End Solubilizing Groups in Polymeric Semiconductors. <i>Macromolecules</i> , 2022, 55, 4367-4377.	4.8	15
15	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.	8.0	10
16	Isomerization of Asymmetric Ladder-Type Heteroheptacene-Based Small-Molecule Acceptors Improving Molecular Packing: Efficient Nonfullerene Organic Solar Cells with Excellent Fill Factors. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	20
17	Naphthalene as a Thermal-Annealing-Free Volatile Solid Additive in Non-Fullerene Polymer Solar Cells with Improved Performance and Reproducibility. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	29
18	Molecular ordering and phase segregation induced by a volatile solid additive for highly efficient all-small-molecule organic solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2857-2863.	10.3	36

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19	High electron mobility fluorinated indacenodithiophene small molecule acceptors for organic solar cells. Chinese Chemical Letters, 2021, 32, 1257-1262.	9.0	15
20	Strategien zur Steigerung der Leistung von PEDOT:PSS/Si-Hybrid-Solarzellen. Angewandte Chemie, 2021, 133, 5092-5112.	2.0	5
21	Performance-Enhancing Approaches for PEDOT:PSS-Si Hybrid Solar Cells. Angewandte Chemie - International Edition, 2021, 60, 5036-5055.	13.8	54
22	Sustainable highly charged C ₆₀ -functionalized polyimide in a non-contact mode triboelectric nanogenerator. Energy and Environmental Science, 2021, 14, 1004-1015.	30.8	52
23	A donor polymer based on 3-cyanothiophene with superior batch-to-batch reproducibility for high-efficiency organic solar cells. Energy and Environmental Science, 2021, 14, 5530-5540.	30.8	66
24	Folic Acid Functionalized Carbon Dot/Polypyrrole Nanoparticles for Specific Bioimaging and Photothermal Therapy. ACS Applied Bio Materials, 2021, 4, 3453-3461.	4.6	21
25	Ligand-engineered bandgap stability in mixed-halide perovskite LEDs. Nature, 2021, 591, 72-77.	27.8	471
26	Antioxidant Additive with a High Dielectric Constant for High Photo-Oxidative Stabilization of Organic Solar Cells without Almost Sacrificing Initial High Efficiencies. Solar Rrl, 2021, 5, 2000812.	5.8	12
27	Novel High-Efficiency Polymer Acceptors via Random Ternary Copolymerization Engineering Enables All-Polymer Solar Cells with Excellent Performance and Stability. ACS Applied Materials & Interfaces, 2021, 13, 17892-17901.	8.0	11
28	Two new A-D-A type small molecule acceptors based on C _{2v} -symmetric dithienocyclopentasp[fluorene-9,9'-xanthene] core for polymer solar cells. Organic Electronics, 2021, 92, 106120.	2.6	1
29	Thermally Stable and High-Mobility Dithienopyran-Based Copolymers: How Donor-Acceptor and Donor-Donor Type Structures Differ in Thin-Film Transistors. Small Structures, 2021, 2, 2100024.	12.0	6
30	Triisopropylsilyl-Substituted Benzo[1,2-b:4,5-c']dithiophene-4,8-dione-Containing Copolymers with More Than 17% Efficiency in Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2102371.	14.9	43
31	Layer-by-Layer Solution-Processed Organic Solar Cells with Perylene Diimides as Acceptors. ACS Applied Materials & Interfaces, 2021, 13, 29876-29884.	8.0	14
32	Graphene-Assisted Zwitterionic Conjugated Polycyclic Molecular Interfacial Layer Enables Highly Efficient and Stable Inverted Perovskite Solar Cells. Chemistry of Materials, 2021, 33, 5563-5571.	6.7	11
33	Over 13.8% efficiency of organic solar cells fabricated by air-processable spontaneously spreading process through water temperature control. Nano Energy, 2021, 85, 105982.	16.0	11
34	N-Type Quinoidal Polymers Based on Dipyrrolopyrazinedione for Application in All-Polymer Solar Cells. Chemistry - A European Journal, 2021, 27, 13527-13533.	3.3	8
35	Unidirectional Macroscopic Alignment of Chlorobenzo[1,2,5]thiadiazole-Based Semiconducting Copolymers with Controlled Regiochemistry. Advanced Electronic Materials, 2021, 7, 2100551.	5.1	4
36	Phase Transition Modulation and Defect Suppression in Perovskite Solar Cells Enabled by a Self-Sacrificed Template. Solar Rrl, 2021, 5, 2100448.	5.8	10

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37	Toward All-vacuum-Processable Perovskite Solar Cells with High Efficiency, Stability, and Scalability Enabled by Fluorinated Spiro-OMeTAD through Thermal Evaporation. <i>Solar Rrl</i> , 2021, 5, 2100415.	5.8	10
38	Diazapentalene-Containing Ultralow-Band-Gap Copolymers for High-Performance Near-Infrared Organic Phototransistors. <i>Chemistry of Materials</i> , 2021, 33, 7499-7508.	6.7	19
39	Artificial Intelligence Designer for Highly-Efficient Organic Photovoltaic Materials. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8847-8854.	4.6	15
40	Thiophene with Oligoethylene Oxide Side Chain Enables Random Terpolymer Acceptor to Achieve Efficient All-Polymer Solar Cells. <i>ChemElectroChem</i> , 2021, 8, 3936-3942.	3.4	7
41	Highly crystalline acceptor materials based on benzodithiophene with different amount of fluorine substitution on alkoxyphenyl conjugated side chains for organic photovoltaics. <i>Materials Reports Energy</i> , 2021, 1, 100059.	3.2	2
42	Regioregular, yet ductile and amorphous indacenodithiophene-based polymers with high-mobility for stretchable plastic transistors. <i>Journal of Materials Chemistry C</i> , 2021, 9, 9670-9682.	5.5	25
43	Viable Mixing Protocol Based on Formulated Equations for Achieving Desired Molecular Weight and Maximal Charge Separation of Photovoltaic Polymer. <i>Advanced Energy Materials</i> , 2021, 11, 2102594.	19.5	19
44	Effects of the Polarity and Bulkiness of End-Functionalized Side Chains on the Charge Transport of Dicyanovinyl-End-Capped Diketopyrrolopyrrole-Based n-Type Small Molecules. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52840-52849.	8.0	10
45	A guest-assisted molecular-organization approach for >17% efficiency organic solar cells using environmentally friendly solvents. <i>Nature Energy</i> , 2021, 6, 1045-1053.	39.5	230
46	Sequentially Deposited Active Layer with Bulk-Heterojunction-like Morphology for Efficient Conventional and Inverted All-Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 13307-13315.	5.1	10
47	Chiral Optoelectronic Functionalities via DNA-Organic Semiconductor Complex. <i>ACS Nano</i> , 2021, 15, 20353-20363.	14.6	7
48	Controlling the ambipolarity of thieno-benzo-isoidindigo polymer-based transistors: the balance of face-on and edge-on populations. <i>Journal of Materials Chemistry C</i> , 2020, 8, 296-302.	5.5	23
49	Horizontal, Vertical, and Cross-Conjugated Small Molecules: Conjugated Pathway-Performance Correlations along Operation Mechanisms in Ternary Non-Fullerene Organic Solar Cells. <i>Small</i> , 2020, 16, e1905309.	10.0	25
50	High Efficiency Polymer Solar Cells with Efficient Hole Transfer at Zero Highest Occupied Molecular Orbital Offset between Methylated Polymer Donor and Brominated Acceptor. <i>Journal of the American Chemical Society</i> , 2020, 142, 1465-1474.	13.7	344
51	Subtle Molecular Tailoring Induces Significant Morphology Optimization Enabling over 16% Efficiency Organic Solar Cells with Efficient Charge Generation. <i>Advanced Materials</i> , 2020, 32, e1906324.	21.0	312
52	Toxic Solvent- and Additive-Free Efficient All-Polymer Solar Cells via a Simple Random Sequence Strategy in Both Donor and Acceptor Copolymer Backbones. <i>Small Methods</i> , 2020, 4, 1900696.	8.6	19
53	A built-in electric field induced by ferroelectrics increases halogen-free organic solar cell efficiency in various device types. <i>Nano Energy</i> , 2020, 68, 104327.	16.0	38
54	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

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55	Silicon and oxygen synergistic effects for the discovery of new high-performance nonfullerene acceptors. <i>Nature Communications</i> , 2020, 11, 5814.	12.8	29
56	3D Cu ball-based hybrid triboelectric nanogenerator with non-fullerene organic photovoltaic cells for self-powering indoor electronics. <i>Nano Energy</i> , 2020, 77, 105271.	16.0	33
57	A low boiling-point and low-cost fluorinated additive improves the efficiency and stability of organic solar cells. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15296-15302.	5.5	10
58	High-performance and stable photoelectrochemical water splitting cell with organic-photoactive-layer-based photoanode. <i>Nature Communications</i> , 2020, 11, 5509.	12.8	103
59	Highly Efficient Organic Photovoltaics Enhanced Using Organic Passivation Layer Vacuum Deposition. <i>Advanced Functional Materials</i> , 2020, 30, 2005037.	14.9	20
60	Stable perovskite solar cells with efficiency exceeding 24.8% and 0.3-V voltage loss. <i>Science</i> , 2020, 369, 1615-1620.	12.6	1,122
61	Dopant-free polymeric hole transport materials for efficient CsPbI ₂ Br perovskite cells with a fill factor exceeding 84%. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8507-8514.	5.5	27
62	Cathode engineering with perylene-diimide interlayer enabling over 17% efficiency single-junction organic solar cells. <i>Nature Communications</i> , 2020, 11, 2726.	12.8	467
63	Tuning the electron-deficient core of a non-fullerene acceptor to achieve over 17% efficiency in a single-junction organic solar cell. <i>Energy and Environmental Science</i> , 2020, 13, 2459-2466.	30.8	324
64	Wide Band-gap Two-dimension Conjugated Polymer Donors with Different Amounts of Chlorine Substitution on Alkoxyphenyl Conjugated Side Chains for Non-fullerene Polymer Solar Cells. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2020, 38, 797-805.	3.8	15
65	Volatilizable and cost-effective quinone-based solid additives for improving photovoltaic performance and morphological stability in non-fullerene polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13049-13058.	10.3	41
66	Molecular Lock Induced by Chloroplatinic Acid Doping of PEDOT:PSS for High-Performance Organic Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 30954-30961.	8.0	33
67	A "Hole"-Containing Volatile Solid Additive Enabling 16.5% Efficiency Organic Solar Cells. <i>Science</i> , 2020, 23, 100965.	4.1	61
68	Two-Dimension Conjugated Acceptors Based on Benzodi(cyclopentadithiophene) Core with Thiophene-Fused Ending Group for Efficient Polymer Solar Cells. <i>Solar Rrl</i> , 2020, 4, 2000071.	5.8	12
69	"A Copolymer Donor Based on Bithienyl Benzodithiophene D-Unit and Monoalkoxy Bifluoroquinoxaline A-Unit for High-Performance Polymer Solar Cells. <i>Chemistry of Materials</i> , 2020, 32, 3254-3261.	6.7	43
70	Dithienogermole-Based Nonfullerene Acceptors: Roles of the Side-Chains™ Direction and Development of Green-Tinted Efficient Semitransparent Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 7689-7698.	5.1	21
71	Recent Progress in Flexible and Stretchable Organic Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2002529.	14.9	123
72	Regular H-Bonding-Containing Polymers with Stretchability up to 100% External Strain for Self-Healable Plastic Transistors. <i>Chemistry of Materials</i> , 2020, 32, 1914-1924.	6.7	60

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73	Zwitterionic Conjugated Surfactant Functionalization of Graphene with pH-Independent Dispersibility: An Efficient Electron Mediator for the Oxygen Evolution Reaction in Acidic Media. <i>Small</i> , 2020, 16, 1906635.	10.0	8
74	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
75	Understanding the Effect of the Third Component PC ₇₁ BM on Nanoscale Morphology and Photovoltaic Properties of Ternary Organic Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900540.	5.8	37
76	Understanding the Morphology of High-Performance Solar Cells Based on a Low-Cost Polymer Donor. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9537-9544.	8.0	17
77	Hole Transfer Promoted by a Viscosity Additive in an All-Polymer Photovoltaic Blend. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1384-1389.	4.6	6
78	Flexible Organic Solar Cells Over 15% Efficiency with Polyimide-Integrated Graphene Electrodes. <i>Joule</i> , 2020, 4, 1021-1034.	24.0	148
79	Guest-oriented non-fullerene acceptors for ternary organic solar cells with over 16.0% and 22.7% efficiencies under one-sun and indoor light. <i>Nano Energy</i> , 2020, 75, 104896.	16.0	72
80	High-Output Triboelectric Nanogenerator Based on Dual Inductive and Resonance Effects-Controlled Highly Transparent Polyimide for Self-Powered Sensor Network Systems. <i>Advanced Energy Materials</i> , 2019, 9, 1901987.	19.5	73
81	Modulating Structure Ordering via Side-Chain Engineering of Thieno[3,4- <i>b</i>]thiophene-Based Electron Acceptors for Efficient Organic Solar Cells with Reduced Energy Losses. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35193-35200.	8.0	7
82	Insights into constitutional isomeric effects on donor-acceptor intermolecular arrangements in non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18468-18479.	10.3	38
83	All-Small-Molecule Organic Solar Cells with an Ordered Liquid Crystalline Donor. <i>Joule</i> , 2019, 3, 3034-3047.	24.0	257
84	Understanding of Fluorination Dependence on Electron Mobility and Stability of Naphthalenediimide-Based Polymer Transistors in Environment with 100% Relative Humidity. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40347-40357.	8.0	26
85	Conjugation-Curtailing of Benzodithionopyran-Cored Molecular Acceptor Enables Efficient Air-Processed Small Molecule Solar Cells. <i>Small</i> , 2019, 15, e1902656.	10.0	11
86	Balancing hydrogen adsorption/desorption by orbital modulation for efficient hydrogen evolution catalysis. <i>Nature Communications</i> , 2019, 10, 4060.	12.8	131
87	Backbone Fluorination of Polythiophenes Improves Device Performance of Non-Fullerene Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 7572-7583.	5.1	38
88	Multifaceted Role of a Dibutylhydroxytoluene Processing Additive in Enhancing the Efficiency and Stability of Planar Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38828-38837.	8.0	10
89	Aqueous dispersions of thienoisoindigo-based semiconductor nanorods assembled with 2-bromobenzaldehyde and a phospholipid. <i>Journal of Molecular Liquids</i> , 2019, 288, 111046.	4.9	2
90	Dithienosilole-co-5-fluoro-2,1,3-benzothiadiazole-containing regioisomeric polymers for organic field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8522-8526.	5.5	8

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91	Cathode interfacial layer-free all small-molecule solar cells with efficiency over 12%. Journal of Materials Chemistry A, 2019, 7, 15944-15950.	10.3	36
92	Furan-flanked diketopyrrolopyrrole-based chalcogenophene copolymers with siloxane hybrid side chains for organic field-effect transistors. Polymer Chemistry, 2019, 10, 2854-2862.	3.9	33
93	Bioderived and Eco-Friendly Solvent-Processed High-Mobility Ambipolar Plastic Transistors through Controlled Irregularity of the Polymer Backbone. Chemistry of Materials, 2019, 31, 3831-3839.	6.7	20
94	Improvement in the Efficiency of Alkylsilyl Functionalized Copolymer for Polymer Solar Cells: Orientation Enhanced by Random Copolymerization. Solar Rrl, 2019, 3, 1900122.	5.8	17
95	Thick-Film High-Performance Solar Cells with a C ₆₀ -Containing Polystyrene Additive. Solar Rrl, 2019, 3, 1900033.	5.8	16
96	Ring-perfluorinated non-volatile additives with a high dielectric constant lead to highly efficient and stable organic solar cells. Journal of Materials Chemistry C, 2019, 7, 4716-4724.	5.5	29
97	A Simple Approach to Prepare Chlorinated Polymer Donors with Low-Lying HOMO Level for High Performance Polymer Solar Cells. Chemistry of Materials, 2019, 31, 6558-6567.	6.7	50
98	Dye encapsulated polymeric nanoprobe for in vitro and in vivo fluorescence imaging in panchromatic range. Journal of Industrial and Engineering Chemistry, 2019, 73, 87-94.	5.8	4
99	Enhanced performance of ternary organic solar cells with a wide bandgap acceptor as the third component. Journal of Materials Chemistry A, 2019, 7, 27423-27431.	10.3	23
100	Organic Photovoltaics with Multiple Donor-Acceptor Pairs. Advanced Materials, 2019, 31, e1804762.	21.0	106
101	Boosting the energy conversion efficiency of a combined triboelectric nanogenerator-capacitor. Nano Energy, 2019, 56, 571-580.	16.0	20
102	Influence of the Crystalline Nature of Small Donors Molecules on the Efficiency and Stability of Organic Photovoltaic Devices. Solar Rrl, 2018, 2, 1700235.	5.8	11
103	High-efficiency organic solar cells based on a small-molecule donor and a low-bandgap polymer acceptor with strong absorption. Journal of Materials Chemistry A, 2018, 6, 9613-9622.	10.3	25
104	Cubic-Like Bimolecular Crystal Evolution and over 12% Efficiency in Halogen-Free Ternary Solar Cells. Advanced Functional Materials, 2018, 28, 1707278.	14.9	27
105	A thieno[3,4-b]thiophene linker enables a low-bandgap fluorene-cored molecular acceptor for efficient non-fullerene solar cells. Materials Chemistry Frontiers, 2018, 2, 760-767.	5.9	12
106	High performance p-type chlorinated-benzothiadiazole-based polymer electrolyte gated organic field-effect transistors. Organic Electronics, 2018, 54, 255-260.	2.6	5
107	Effects of incorporating different chalcogenophene comonomers into random acceptor terpolymers on the morphology and performance of all-polymer solar cells. Polymer Chemistry, 2018, 9, 593-602.	3.9	30
108	Regioregular dithienosilole- and dithienogermole-based small molecules with symmetric distal/distal orientation of F atoms. Dyes and Pigments, 2018, 155, 7-13.	3.7	4

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109	A Comparative Investigation of Cyclohexyl-End-Capped Versus Hexyl-End-Capped Small-Molecule Donors on Small Donor/Polymer Acceptor Junction Solar Cells. <i>Solar Rrl</i> , 2018, 2, 1800009.	5.8	11
110	Overcoming Fill Factor Reduction in Ternary Polymer Solar Cells by Matching the Highest Occupied Molecular Orbital Energy Levels of Donor Polymers. <i>Advanced Energy Materials</i> , 2018, 8, 1702251.	19.5	48
111	Feasible D1-A-D2-A Random Copolymers for Simultaneous High-Performance Fullerene and Nonfullerene Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1702166.	19.5	61
112	An efficient lactone-to-lactam conversion for the synthesis of thiophene Pechmann lactam and the characterization of polymers thereof. <i>Polymer Chemistry</i> , 2018, 9, 5234-5241.	3.9	2
113	Thienoisindigo-Based Semiconductor Nanowires Assembled with 2-Bromobenzaldehyde via Both Halogen and Chalcogen Bonding. <i>Scientific Reports</i> , 2018, 8, 14448.	3.3	16
114	Semi-transparent low-donor content organic solar cells employing cyclopentadithiophene-based conjugated molecules. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10532-10537.	5.5	14
115	Effects of Alkoxy and Fluorine Atom Substitution of Donor Molecules on the Morphology and Photovoltaic Performance of All Small Molecule Organic Solar Cells. <i>Frontiers in Chemistry</i> , 2018, 6, 413.	3.6	19
116	Harmonious Compatibility Dominates Influence of Side-Chain Engineering on Morphology and Performance of Ternary Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1800616.	19.5	45
117	Stepwise heating in Stille polycondensation toward no batch-to-batch variations in polymer solar cell performance. <i>Nature Communications</i> , 2018, 9, 1867.	12.8	60
118	Ultrafast Channel II process induced by a 3-D texture with enhanced acceptor order ranges for high-performance non-fullerene polymer solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 2569-2580.	30.8	72
119	An Ultrahigh Mobility in Isomorphic Fluorobenzo[1,2,5]thiadiazole-Based Polymers. <i>Angewandte Chemie</i> , 2018, 130, 13817-13822.	2.0	4
120	Highly Flexible and Efficient All-Polymer Solar Cells with High-Viscosity Processing Polymer Additive toward Potential of Stretchable Devices. <i>Angewandte Chemie</i> , 2018, 130, 13461-13466.	2.0	108
121	Highly Flexible and Efficient All-Polymer Solar Cells with High-Viscosity Processing Polymer Additive toward Potential of Stretchable Devices. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13277-13282.	13.8	166
122	An Ultrahigh Mobility in Isomorphic Fluorobenzo[1,2,5]thiadiazole-Based Polymers. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13629-13634.	13.8	43
123	Side-Chain Impact on Molecular Orientation of Organic Semiconductor Acceptors: High Performance Nonfullerene Polymer Solar Cells with Thick Active Layer over 400 nm. <i>Advanced Energy Materials</i> , 2018, 8, 1800856.	19.5	118
124	A Role of Side-Chain Regiochemistry of Thienylene-Vinylene-Thienylene (TVT) in the Transistor Performance of Isomeric Polymers. <i>Macromolecules</i> , 2017, 50, 884-890.	4.8	49
125	Effect of Heterocyclic Anchoring Sequence on the Properties of Dithienogermole-Based Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 7091-7099.	8.0	16
126	High-Performance Furan-Containing Conjugated Polymer for Environmentally Benign Solution Processing. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15652-15661.	8.0	46

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127	Densely Packed Random Quarterpolymers Containing Two Donor and Two Acceptor Units: Controlling Absorption Ability and Molecular Interaction to Enable Enhanced Polymer Photovoltaic Devices. <i>Advanced Energy Materials</i> , 2017, 7, 1700349.	19.5	22
128	Chlorinated 2,1,3-Benzothiadiazole-Based Polymers for Organic Field-Effect Transistors. <i>Macromolecules</i> , 2017, 50, 4649-4657.	4.8	33
129	Locking-In Optimal Nanoscale Structure Induced by Naphthalenediimide-Based Polymeric Additive Enables Efficient and Stable Inverted Polymer Solar Cells. <i>ACS Nano</i> , 2017, 11, 7409-7415.	14.6	34
130	Robust nanogenerators based on graft copolymers via control of dielectrics for remarkable output power enhancement. <i>Science Advances</i> , 2017, 3, e1602902.	10.3	204
131	9.73% Efficiency Nonfullerene All Organic Small Molecule Solar Cells with Absorption-Complementary Donor and Acceptor. <i>Journal of the American Chemical Society</i> , 2017, 139, 5085-5094.	13.7	303
132	Chemically Robust Ambipolar Organic Transistor Array Directly Patterned by Photolithography. <i>Advanced Materials</i> , 2017, 29, 1605282.	21.0	59
133	Improved interface control for high-performance graphene-based organic solar cells. <i>2D Materials</i> , 2017, 4, 045004.	4.4	20
134	Influence of Simultaneous Tuning of Molecular Weights and Alkyl Substituents of Poly(thienoisindigo- <i>n</i> -naphthalene)s on Morphology and Charge Transport Properties. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30755-30763.	8.0	14
135	Constructing a Strongly Absorbing Low-Bandgap Polymer Acceptor for High-Performance All-Polymer Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13503-13507.	13.8	468
136	Constructing a Strongly Absorbing Low-Bandgap Polymer Acceptor for High-Performance All-Polymer Solar Cells. <i>Angewandte Chemie</i> , 2017, 129, 13688-13692.	2.0	51
137	Modulating the Molecular Packing and Nanophase Blending via a Random Terpolymerization Strategy toward 11% Efficiency Nonfullerene Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1701125.	19.5	98
138	Over 10% efficiency in single-junction polymer solar cells developed from easily accessible random terpolymers. <i>Nano Energy</i> , 2017, 39, 229-237.	16.0	44
139	Ternary solar cells with a mixed face-on and edge-on orientation enable an unprecedented efficiency of 12.1%. <i>Energy and Environmental Science</i> , 2017, 10, 258-265.	30.8	318
140	A Synergetic Effect of Molecular Weight and Fluorine in All-Polymer Solar Cells with Enhanced Performance. <i>Advanced Functional Materials</i> , 2017, 27, 1603564.	14.9	92
141	11.4% Efficiency non-fullerene polymer solar cells with trialkylsilyl substituted 2D-conjugated polymer as donor. <i>Nature Communications</i> , 2016, 7, 13651.	12.8	917
142	Siloxane Side Chains: A Universal Tool for Practical Applications of Organic Field-Effect Transistors. <i>Macromolecules</i> , 2016, 49, 3739-3748.	4.8	58
143	Improved efficiency of DTGe(FBTTh ₂) ₂ -based solar cells by using macromolecular additives: How macromolecular additives versus small additives influence nanoscale morphology and photovoltaic performance. <i>Nano Energy</i> , 2016, 24, 56-62.	16.0	25
144	Dicyanomethylene-quinoid vs. dicyanovinyl-benzenoid organic semiconductors: Understanding structure-property correlations in mesomerism-like forms. <i>Organic Electronics</i> , 2016, 37, 402-410.	2.6	14

#	ARTICLE	IF	CITATIONS
145	Ultra-narrow-bandgap thienoisindigo polymers: structure–property correlations in field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2016, 4, 9554-9560.	5.5	28
146	The use of an n-type macromolecular additive as a simple yet effective tool for improving and stabilizing the performance of organic solar cells. <i>Energy and Environmental Science</i> , 2016, 9, 3464-3471.	30.8	99
147	Side-Chain Isomerization on an n-type Organic Semiconductor ITIC Acceptor Makes 11.77% High Efficiency Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 15011-15018.	13.7	826
148	Effect of Donor Molecular Structure and Gate Dielectric on Charge-Transporting Characteristics for Isoindigo-Based Donor–Acceptor Conjugated Polymers. <i>Advanced Functional Materials</i> , 2016, 26, 4695-4703.	14.9	30
149	Non-Fullerene Polymer Solar Cells Based on Alkylthio and Fluorine Substituted 2D-Conjugated Polymers Reach 9.5% Efficiency. <i>Journal of the American Chemical Society</i> , 2016, 138, 4657-4664.	13.7	743
150	An Indacenodithiophene–Quinoxaline Polymer Prepared by Direct Arylation Polymerization for Organic Photovoltaics. <i>Macromolecules</i> , 2016, 49, 527-536.	4.8	67
151	Control of Charge Dynamics via Use of Nonionic Phosphonate Chains and Their Effectiveness for Inverted Structure Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1500844.	19.5	28
152	Improvement in Solubility and Molecular Assembly of Cyclopentadithiophene-Benzothiadiazole Polymer. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1244-1250.	2.2	14
153	A Roundabout Approach to Control Morphological Orientation and Solar Cell Performance by Modulating Side-Chain Branching Position in Benzodithiophene-Based Polymers. <i>ChemPhysChem</i> , 2015, 16, 1305-1314.	2.1	15
154	Dithienogermole-Containing Small-Molecule Solar Cells with 7.3% Efficiency: In-Depth Study on the Effects of Heteroatom Substitution of Si with Ge. <i>Advanced Energy Materials</i> , 2015, 5, 1402044.	19.5	40
155	A Balanced Face-On to Edge-On Texture Ratio in Naphthalene Diimide-Based Polymers with Hybrid Siloxane Chains Directs Highly Efficient Electron Transport. <i>Macromolecules</i> , 2015, 48, 5179-5187.	4.8	82
156	Thienoisindigo (TIIC)-based small molecules for the understanding of structure–property–device performance correlations. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9899-9908.	10.3	33
157	Effect of electron-donating unit on crystallinity and charge transport in organic field-effect transistors with thienoisindigo-based small molecules. <i>Organic Electronics</i> , 2015, 26, 151-157.	2.6	15
158	A Timely Synthetic Tailoring of Biaxially Extended Thienylenevinylene-Like Polymers for Systematic Investigation on Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2015, 25, 586-596.	14.9	54
159	<i>i>μ</i>-Branched Flexible Side Chain Substituted Diketopyrrolopyrrole-Containing Polymers Designed for High Hole and Electron Mobilities. <i>Advanced Functional Materials</i>, 2015, 25, 247-254.</i>	14.9	108
160	Synthesis of PCDTBT-Based Fluorinated Polymers for High Open-Circuit Voltage in Organic Photovoltaics: Towards an Understanding of Relationships between Polymer Energy Levels Engineering and Ideal Morphology Control. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 7523-7534.	8.0	88
161	Acceptor–acceptor type isoindigo-based copolymers for high-performance n-channel field-effect transistors. <i>Chemical Communications</i> , 2014, 50, 2180.	4.1	73
162	Benzodipyrrolidone (BDP)-Based Polymer Semiconductors Containing a Series of Chalcogen Atoms: Comprehensive Investigation of the Effect of Heteroaromatic Blocks on Intrinsic Semiconducting Properties. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 4872-4882.	8.0	30

#	ARTICLE	IF	CITATIONS
163	Ambipolar Semiconducting Polymers with π -Spacer Linked Bis-Benzothiadiazole Blocks as Strong Accepting Units. <i>Chemistry of Materials</i> , 2014, 26, 4933-4942.	6.7	53
164	A Thienoisindigo-Naphthalene Polymer with Ultrahigh Mobility of $14.4 \text{ cm}^2/\text{Vs}$ That Substantially Exceeds Benchmark Values for Amorphous Silicon Semiconductors. <i>Journal of the American Chemical Society</i> , 2014, 136, 9477-9483.	13.7	553
165	Naphthalene Diimide Incorporated Thiophene-Free Copolymers with Acene and Heteroacene Units: Comparison of Geometric Features and Electron-Donating Strength of Co-units. <i>Chemistry of Materials</i> , 2013, 25, 3251-3259.	6.7	91
166	Visible-Near Infrared Absorbing Polymers Containing Thienoisindigo and Electron-Rich Units for Organic Transistors with Tunable Polarity. <i>Advanced Functional Materials</i> , 2013, 23, 5317-5325.	14.9	77
167	Boosting the Ambipolar Performance of Solution-Processable Polymer Semiconductors via Hybrid Side-Chain Engineering. <i>Journal of the American Chemical Society</i> , 2013, 135, 9540-9547.	13.7	460
168	Solution-Processable Ambipolar Diketopyrrolopyrrole-Selenophene Polymer with Unprecedentedly High Hole and Electron Mobilities. <i>Journal of the American Chemical Society</i> , 2012, 134, 20713-20721.	13.7	341
169	A Selenophene Analogue of PCDTBT: Selective Fine-Tuning of LUMO to Lower of the Bandgap for Efficient Polymer Solar Cells. <i>Macromolecules</i> , 2012, 45, 8658-8664.	4.8	110