Haijun Bin

List of Publications by Year
in descending order

40 papers	6,354 citations	201674 27 h-index	302126 39 g-index
40 all docs	40 docs citations	40 times ranked	4517 citing authors

#	Article	IF	Citations
1	11.4% Efficiency non-fullerene polymer solar cells with trialkylsilyl substituted 2D-conjugated polymer as donor. Nature Communications, 2016, 7, 13651.	12.8	917
2	Side-Chain Isomerization on an n-type Organic Semiconductor ITIC Acceptor Makes 11.77% High Efficiency Polymer Solar Cells. Journal of the American Chemical Society, 2016, 138, 15011-15018.	13.7	826
3	Non-Fullerene Polymer Solar Cells Based on Alkylthio and Fluorine Substituted 2D-Conjugated Polymers Reach 9.5% Efficiency. Journal of the American Chemical Society, 2016, 138, 4657-4664.	13.7	743
4	A low cost and high performance polymer donor material for polymer solar cells. Nature Communications, 2018, 9, 743.	12.8	635
5	Mapping Polymer Donors toward Highâ€Efficiency Fullerene Free Organic Solar Cells. Advanced Materials, 2017, 29, 1604155.	21.0	360
6	9.73% Efficiency Nonfullerene All Organic Small Molecule Solar Cells with Absorption-Complementary Donor and Acceptor. Journal of the American Chemical Society, 2017, 139, 5085-5094.	13.7	303
7	Polymer Doping for Highâ€Efficiency Perovskite Solar Cells with Improved Moisture Stability. Advanced Energy Materials, 2018, 8, 1701757.	19.5	293
8	Fineâ€Tuning of Molecular Packing and Energy Level through Methyl Substitution Enabling Excellent Small Molecule Acceptors for Nonfullerene Polymer Solar Cells with Efficiency up to 12.54%. Advanced Materials, 2018, 30, 1706124.	21.0	253
9	Highâ€Efficiency Nonfullerene Polymer Solar Cells with Medium Bandgap Polymer Donor and Narrow Bandgap Organic Semiconductor Acceptor. Advanced Materials, 2016, 28, 8288-8295.	21.0	247
10	Side Chain Engineering on Medium Bandgap Copolymers to Suppress Triplet Formation for Highâ€Efficiency Polymer Solar Cells. Advanced Materials, 2017, 29, 1703344.	21.0	209
11	All-Small-Molecule Nonfullerene Organic Solar Cells with High Fill Factor and High Efficiency over 10%. Chemistry of Materials, 2017, 29, 7543-7553.	6.7	184
12	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.	14.9	180
13	Highâ€Efficiency Allâ€Smallâ€Molecule Organic Solar Cells Based on an Organic Molecule Donor with Alkylsilylâ€Thienyl Conjugated Side Chains. Advanced Materials, 2018, 30, e1706361.	21.0	154
14	Effect of Alkylsilyl Sideâ€Chain Structure on Photovoltaic Properties of Conjugated Polymer Donors. Advanced Energy Materials, 2018, 8, 1702324.	19.5	102
15	High Efficiency Ternary Nonfullerene Polymer Solar Cells with Two Polymer Donors and an Organic Semiconductor Acceptor. Advanced Energy Materials, 2017, 7, 1602215.	19.5	92
16	Medium Bandgap Polymer Donor Based on Bi(trialkylsilylthienylâ€benzo[1,2â€b:4,5â€bâ€²]â€difuran) for High Performance Nonfullerene Polymer Solar Cells. Advanced Energy Materials, 2017, 7, 1700746.	19.5	72
17	Indacenodithienothiopheneâ€“naphthalene diimide copolymer as an acceptor for all-polymer solar cells. Journal of Materials Chemistry A, 2016, 4, 5810-5816.	10.3	66
18	Insertion of double bond Ï€-bridges of Aâ€“Dâ€“A acceptors for high performance near-infrared polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 22588-22597.	10.3	61

#	Article	IF	Citations
19	Controlling the Microstructure of Conjugated Polymers in Highâ€Mobility Monolayer Transistors via the Dissolution Temperature. Angewandte Chemie - International Edition, 2020, 59, 846-852.	13.8	61
20	Ultrafast hole transfer mediated by polaron pairs in all-polymer photovoltaic blends. Nature Communications, 2019, 10, 398.	12.8	56
21	All-small molecule solar cells based on donor molecule optimization with highly enhanced efficiency and stability. Journal of Materials Chemistry A, 2018, 6, 15675-15683.	10.3	55
22	Efficient Electron Transport Layer Free Smallâ€Molecule Organic Solar Cells with Superior Device Stability. Advanced Materials, 2021, 33, e2008429.	21.0	51
23	Development of Spiro[cyclopenta[1,2-<i>b</i>:5,4-<i>b</i>â€²]dithiophene-4,9â€²-fluorene]-Based A-Ï€-D-Ï€-A Small Molecules with Different Acceptor Units for Efficient Organic Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 4614-4625.	8.0	49
24	Synthesis and optoelectronic properties of new Dâ€“A copolymers based on fluorinated benzothiadiazole and benzoselenadiazole. Polymer Chemistry, 2014, 5, 567-577.	3.9	48
25	Effect of Side-Chain Engineering of Bithienylbenzodithiophene-<i>alt</i>-fluorobenzotriazole-Based Copolymers on the Thermal Stability and Photovoltaic Performance of Polymer Solar Cells. Macromolecules, 2018, 51, 6028-6036.	4.8	47
26	A universal nonfullerene electron acceptor matching with different band-gap polymer donors for high-performance polymer solar cells. Journal of Materials Chemistry A, 2018, 6, 6874-6881.	10.3	37
27	Precise Control of Phase Separation Enables 12% Efficiency in All Small Molecule Solar Cells. Advanced Energy Materials, 2020, 10, 2001589.	19.5	33
28	Effects of donor unit and Ï€â€bridge on photovoltaic properties of Dâ€“A copolymers based on benzo[1,2â€<i>b</i>:4,5â€<i>c</i>']â€dithiopheneâ€4,8â€dione acceptor unit. Journal of Polymer Science Part A, 2014, 52, 1929-1940.	2.3	28
29	Effect of furan Ï€-bridge on the photovoltaic performance of D-A copolymers based on bi(alkylthio-thienyl)benzodithiophene and fluorobenzotriazole. Science China Chemistry, 2017, 60, 537-544.	8.2	27
30	Alkoxy substituted benzodithiophene-alt-fluorobenzotriazole copolymer as donor in non-fullerene polymer solar cells. Science China Chemistry, 2016, 59, 1317-1322.	8.2	26
31	Effect of Replacing Thiophene by Selenophene on the Photovoltaic Performance of Wide Bandgap Copolymer Donors. Macromolecules, 2019, 52, 4776-4784.	4.8	26
32	Synthesis and characterization of arylenevinylenearyleneâ€“naphthalene diimide copolymers as acceptor in allâ€“polymer solar cells. Journal of Polymer Science Part A, 2017, 55, 1757-1764.	2.3	19
33	Naphthalenediimideâ€<i>alt</i>â€Fused Thiophene Dâ€“A Copolymers for the Application as Acceptor in Allâ€Polymer Solar Cells. Chemistry - an Asian Journal, 2016, 11, 2785-2791.	3.3	18
34	Ternary non-fullerene polymer solar cells with a high crystallinity n-type organic semiconductor as the second acceptor. Journal of Materials Chemistry A, 2018, 6, 24814-24822.	10.3	16
35	Short-axis substitution approach on ladder-type benzodithiophene-based electron acceptor toward highly efficient organic solar cells. Science China Chemistry, 2018, 61, 1405-1412.	8.2	16
36	Controlling the Microstructure of Conjugated Polymers in Highâ€Mobility Monolayer Transistors via the Dissolution Temperature. Angewandte Chemie, 2020, 132, 856-862.	2.0	15

#	Article	IF	Citations
37	Multi-length scale morphology of nonfullerene all-small molecule blends and its relation to device function in organic solar cells. Materials Chemistry Frontiers, 2019, 3, 137-144.	5.9	12
38	Effect of main and side chain chlorination on the photovoltaic properties of benzodithiophene-<i>alt</i>-benzotriazole polymers. Journal of Materials Chemistry C, 2020, 8, 15426-15435.	5.5	10
39	Cellular Architectureâ€Based Allâ€Polymer Flexible Thinâ€Film Photodetectors with High Performance and Stability in Harsh Environment. Advanced Materials Technologies, 2017, 2, 1700185.	5.8	7
40	Efficient Solar Cells Based on a Polymer Donor with Î²-Branching in Trialkylsilyl Side Chains. Organic Materials, 2021, 03, 134-140.	2.0	0