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List of Publications by Year
in descending order

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72 papers	6,456 citations	81839 39 h-index	76872 74 g-index
75 all docs	75 docs citations	75 times ranked	6097 citing authors

#	Article	IF	Citations
1	Singleâ€Junction Polymer Solar Cells Exceeding 10% Power Conversion Efficiency. Advanced Materials, 2015, 27, 1035-1041.	11.1	1,004
2	Flexible and Semitransparent Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1701791.	10.2	556
3	Improvement of open-circuit voltage and photovoltaic properties of 2D-conjugated polymers by alkylthio substitution. Energy and Environmental Science, 2014, 7, 2276-2284.	15.6	493
4	High efficiency polymer solar cells based on poly(3-hexylthiophene)/indene-C70 bisadduct with solvent additive. Energy and Environmental Science, 2012, 5, 7943.	15.6	400
5	High-performance conjugated polymer donor materials for polymer solar cells with narrow-bandgap nonfullerene acceptors. Energy and Environmental Science, 2019, 12, 3225-3246.	15.6	236
6	Volatilizable Solid Additiveâ€Assisted Treatment Enables Organic Solar Cells with Efficiency over 18.8% and Fill Factor Exceeding 80%. Advanced Materials, 2021, 33, e2105301.	11.1	222
7	Highâ€Performance Organic Solar Cells Based on a Small Molecule with Alkylthioâ€Thienylâ€Conjugated Side Chains without Extra Treatments. Advanced Materials, 2015, 27, 7469-7475.	11.1	186
8	High-performance polymer solar cells based on a 2D-conjugated polymer with an alkylthio side-chain. Energy and Environmental Science, 2016, 9, 885-891.	15.6	165
9	Enhanced Performance and Stability of a Polymer Solar Cell by Incorporation of Vertically Aligned, Crossâ€Linked Fullerene Nanorods. Angewandte Chemie - International Edition, 2011, 50, 9386-9390.	7.2	162
10	Highâ€Performance Colorful Semitransparent Polymer Solar Cells with Ultrathin Hybridâ€Metal Electrodes and Fineâ€Tuned Dielectric Mirrors. Advanced Functional Materials, 2017, 27, 1605908.	7.8	157
11	Fullerene Derivatives for the Applications as Acceptor and Cathode Buffer Layer Materials for Organic and Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1601251.	10.2	152
12	Transfer-Printed PEDOT:PSS Electrodes Using Mild Acids for High Conductivity and Improved Stability with Application to Flexible Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 14029-14036.	4.0	145
13	Rationally pairing photoactive materials for high-performance polymer solar cells with efficiency of 16.53%. Science China Chemistry, 2020, 63, 265-271.	4.2	139
14	Simultaneously Improved Efficiency and Stability in All-Polymer Solar Cells by a Pâ€“iâ€“N Architecture. ACS Energy Letters, 2019, 4, 2277-2286.	8.8	127
15	New Strategy for Twoâ€Step Sequential Deposition: Incorporation of Hydrophilic Fullerene in Second Precursor for Highâ€Performance pâ€iâ€n Planar Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703054.	10.2	124
16	Evaluation of Electron Donor Materials for Solutionâ€Processed Organic Solar Cells via a Novel Figure of Merit. Advanced Energy Materials, 2017, 7, 1700465.	10.2	114
17	Selective Hole and Electron Transport in Efficient Quaternary Blend Organic Solar Cells. Joule, 2020, 4, 1790-1805.	11.7	110
18	Ternary Polymer Solar Cells Facilitating Improved Efficiency and Stability. Advanced Materials, 2019, 31, e1904601.	11.1	90

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19	Efficient Polymer Solar Cells Based on Poly(3â€hexylthiophene):Indeneâ€C₇₀ Bisadduct with a MoO₃ Buffer Layer. Advanced Functional Materials, 2012, 22, 585-590.	7.8	88
20	Efficient Polymer Solar Cells Based on Poly(3-hexylthiophene) and Indeneâ€“C₆₀ Bisadduct Fabricated with Non-halogenated Solvents. ACS Applied Materials & Interfaces, 2014, 6, 8190-8198.	4.0	86
21	Efficiency Enhancement of Polymer Solar Cells Based on Poly(3â€hexylthiophene)/Indeneâ€C₇₀ Bisadduct via Methylthiophene Additive. Advanced Energy Materials, 2011, 1, 1058-1061.	10.2	80
22	Solution-processed vanadium oxide as a hole collection layer on an ITO electrode for high-performance polymer solar cells. Physical Chemistry Chemical Physics, 2012, 14, 14589.	1.3	75
23	Solution-processed nickel acetate as hole collection layer for polymer solar cells. Physical Chemistry Chemical Physics, 2012, 14, 14217.	1.3	75
24	Fully Solutionâ€Processed Small Molecule Semitransparent Solar Cells: Optimization of Transparent Cathode Architecture and Four Absorbing Layers. Advanced Functional Materials, 2016, 26, 4543-4550.	7.8	73
25	Poly(thieno[3,2-b]thiophene-alt-bithiazole): A Dâ€“A Copolymer Donor Showing Improved Photovoltaic Performance with Indene-C₆₀ Bisadduct Acceptor. Macromolecules, 2012, 45, 6930-6937.	2.2	71
26	Effects of Alkylthio and Alkoxy Side Chains in Polymer Donor Materials for Organic Solar Cells. Macromolecular Rapid Communications, 2016, 37, 287-302.	2.0	71
27	A new dialkylthio-substituted naphtho[2,3-c]thiophene-4,9-dione based polymer donor for high-performance polymer solar cells. Energy and Environmental Science, 2019, 12, 675-683.	15.6	71
28	A Dâ€“A copolymer of dithienosilole and a new acceptor unit of naphtho[2,3-c]thiophene-4,9-dione for efficient polymer solar cells. Chemical Communications, 2011, 47, 11345.	2.2	68
29	A new two-dimensional oligothiophene end-capped with alkyl cyanoacetate groups for highly efficient solution-processed organic solar cells. Chemical Communications, 2013, 49, 4409.	2.2	66
30	Synthesis and Characterization of Dioctyloxybenzo[1,2-b:4,3-bâ€²]dithiophene-Containing Copolymers for Polymer Solar Cells. Macromolecules, 2011, 44, 7625-7631.	2.2	63
31	Morphology optimization of photoactive layers in organic solar cells. Aggregate, 2021, 2, e31.	5.2	63
32	Sideâ€Chain Engineering for Enhancing the Properties of Small Molecule Solar Cells: A Tradeâ€off Beyond Efficiency. Advanced Energy Materials, 2016, 6, 1600515.	10.2	62
33	Performance improvement of polymer solar cells by using a solvent-treated poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate) buffer layer. Applied Physics Letters, 2011, 98, .	1.5	61
34	Toward Scalable PbS Quantum Dot Solar Cells Using a Tailored Polymeric Hole Conductor. ACS Energy Letters, 2019, 4, 2850-2858.	8.8	61
35	Molecular design with silicon core: toward commercially available hole transport materials for high-performance planar pâ€“iâ€“n perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 404-413.	5.2	60
36	High-Performance Polymer Solar Cells with Minimal Energy Loss Enabled by a Main-Chain-Twisted Nonfullerene Acceptor. Chemistry of Materials, 2019, 31, 4222-4227.	3.2	52

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37	Anthraceneâ€Assisted Morphology Optimization in Photoactive Layer for Highâ€Efficiency Polymer Solar Cells. Advanced Functional Materials, 2021, 31, 2103944.	7.8	51
38	Side Chain Engineering of Polythiophene Derivatives with a Thienyleneâ€“Vinylene Conjugated Side Chain for Application in Polymer Solar Cells. Macromolecules, 2012, 45, 2312-2320.	2.2	50
39	High performance all-small-molecule solar cells: engineering the nanomorphology via processing additives. Journal of Materials Chemistry A, 2016, 4, 14234-14240.	5.2	43
40	Achieving efficient thick active layer and large area ternary polymer solar cells by incorporating a new fused heptacyclic non-fullerene acceptor. Journal of Materials Chemistry A, 2018, 6, 20313-20326.	5.2	34
41	Achieving over 9.8% Efficiency in Nonfullerene Polymer Solar Cells by Environmentally Friendly Solvent Processing. ACS Applied Materials & Interfaces, 2017, 9, 37078-37086.	4.0	32
42	Synthesis and photovoltaic properties of Dâ€“A copolymers of benzodithiophene and naphtho[2,3-c]thiophene-4,9-dione. Polymer Chemistry, 2012, 3, 99-104.	1.9	29
43	Realizing Enhanced Efficiency in Nonhalogen Solvent Processed Ternary Polymer Solar Cells by Incorporating Compatible Polymer Donor. Solar Rrl, 2018, 2, 1800060.	3.1	27
44	Impact of Isomer Design on Physicochemical Properties and Performance in High-Efficiency All-Polymer Solar Cells. Macromolecules, 2020, 53, 9026-9033.	2.2	25
45	Effects of Heteroatom Substitution on the Photovoltaic Performance of Donor Materials in Organic Solar Cells. Accounts of Materials Research, 2021, 2, 986-997.	5.9	25
46	Highâ€Efficiency Polymer Solar Cells Based on Poly(3â€pentylthiophene) with Indeneâ€C₇₀ Bisadduct as an Acceptor. Advanced Energy Materials, 2012, 2, 966-969.	10.2	24
47	Recent Progress in Fused-Ring Based Nonfullerene Acceptors for Polymer Solar Cells. Frontiers in Chemistry, 2018, 6, 404.	1.8	24
48	A new polymer donor for efficient polymer solar cells: simultaneously realizing high short-circuit current density and transparency. Journal of Materials Chemistry A, 2018, 6, 14700-14708.	5.2	22
49	A small-molecule/fullerene acceptor alloy: a powerful tool to enhance the device efficiency and thermal stability of ternary polymer solar cells. Journal of Materials Chemistry C, 2020, 8, 11223-11238.	2.7	21
50	Towards improved efficiency of polymer solar cells via chlorination of a benzo[1,2-b:4,5-bâ€²]dithiophene based polymer donor. Journal of Materials Chemistry A, 2019, 7, 2261-2267.	5.2	20
51	Conjugated side-chain optimization of indacenodithiophene-based nonfullerene acceptors for efficient polymer solar cells. Journal of Materials Chemistry C, 2019, 7, 10028-10038.	2.7	18
52	Synergistic effect of solvent and solid additives on morphology optimization for high-performance organic solar cells. Science China Chemistry, 2021, 64, 2017-2024.	4.2	16
53	Polymer Solar Cells: Singleâ€Junction Polymer Solar Cells Exceeding 10% Power Conversion Efficiency (Adv. Mater. 6/2015). Advanced Materials, 2015, 27, 1132-1132.	11.1	15
54	Random Polymer Donor for High-Performance Polymer Solar Cells with Efficiency over 14%. ACS Applied Materials & Interfaces, 2019, 11, 40339-40346.	4.0	15

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55	The effect of alkylthio side chains in oligothiophene-based donor materials for organic solar cells. Molecular Systems Design and Engineering, 2018, 3, 131-141.	1.7	13
56	Effect of Branched Side Chains on the Physicochemical and Photovoltaic Properties of Poly(3â€hexylthiophene) Isomers. Macromolecular Chemistry and Physics, 2012, 213, 2267-2274.	1.1	12
57	Metallated conjugation in small-sized-molecular donors for solution-processed organic solar cells. Science China Chemistry, 2015, 58, 347-356.	4.2	12
58	Toward high open-circuit voltage by smart chain engineering in 2D-conjugated polymer for polymer solar cells. Solar Energy Materials and Solar Cells, 2016, 149, 162-169.	3.0	11
59	Conjugated side-chain engineering of polymer donors enabling improved efficiency for polymer solar cells. Journal of Materials Chemistry A, 2020, 8, 15919-15926.	5.2	9
60	Conjugated Oligothiophene Derivatives Based on Bithiophene with Unsaturated Bonds as Building Blocks for Solutionâ€Processed Bulk Heterojunction Organic Solar Cells. Chemistry - an Asian Journal, 2016, 11, 3557-3567.	1.7	8
61	Cooperative assembly of an active layer utilizing the synergistic effect of a functional fullerene triad as an acceptor for efficient P3HT-based PSCs. Journal of Materials Chemistry A, 2015, 3, 17991-18000.	5.2	7
62	Manipulating the photovoltaic properties of small-molecule donor materials by tailoring end-capped alkylthio substitution. RSC Advances, 2016, 6, 108908-108916.	1.7	7
63	Molecular Optimization on Polymer Acceptor Enables Efficient Allâ€Polymer Solar Cell with High Openâ€Circuit Voltage of 1.10ÂV. Macromolecular Rapid Communications, 2022, 43, e2100925.	2.0	7
64	Effects of the length and steric hindrance of Ï€-bridge on molecular configuration and optoelectronic properties of diindole[3,2-b:4,5-bâ€²]pyrrole-based small molecules. Dyes and Pigments, 2019, 171, 107687.	2.0	6
65	Conjugated polymer donor with alkylthio-thiophene Ï€-bridge for efficient polymer solar cells. Organic Electronics, 2018, 63, 289-295.	1.4	5
66	Indacenodithiophene-based small-molecule donor with strong crystallinity for efficient organic solar cells. Chemical Communications, 2021, 57, 10767-10770.	2.2	5
67	A Largeâ€Bandgap Guest Material Enabling Improved Efficiency and Reduced Energy Loss for Ternary Polymer Solar Cells. Solar Rrl, 2021, 5, 2100013.	3.1	5
68	Synthesis and optoelectronic property manipulation of conjugated polymer photovoltaic materials based on benzo[d]-dithieno[3,2-b;2â€²,3â€²-f]azepine. Polymer, 2018, 147, 184-195.	1.8	3
69	Low-bandgap D-A1-D-A2 type copolymers based on TPTI unit for efficient fullerene and nonfullerene polymer solar cells. Polymer, 2019, 182, 121850.	1.8	3
70	Synthesis and photovoltaic properties of alternative copolymers of benzo[1,2-b:4,5-bâ€²]dithiophene and thiophene. Polymer Bulletin, 2012, 68, 2107-2119.	1.7	2
71	Impact of fluorine substituted Ï€-bridges on the photovoltaic performance of organic small-molecule donor materials. Molecular Systems Design and Engineering, 2021, 6, 739-747.	1.7	2
72	Front Cover: Morphology optimization of photoactive layers in organic solar cells. Aggregate, 2021, 2, e52.	5.2	1