

Jianhua Chen

List of Publications by Year in descending order

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46
papers

1,986
citations

218592

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254106

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47
docs citations

47
times ranked

2154
citing authors

#	ARTICLE	IF	CITATIONS
1	Heteroalkyl Substitution in Molecular Organic Semiconductors: Chalcogen Effect on Crystallography, Conformational Lock, and Charge Transport. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	22
2	A Solution Processable Dithioalkyl Dithienothiophene (DSDTT) Based Small Molecule and Its Blends for High Performance Organic Field Effect Transistors. <i>ACS Nano</i> , 2021, 15, 727-738.	7.3	21
3	Porous Semiconducting Polymers Enable High Performance Electrochemical Transistors. <i>Advanced Materials</i> , 2021, 33, e2007041.	11.1	61
4	Fused Bithiophene Imide Dimer Based n-Type Polymers for High Performance Organic Electrochemical Transistors. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24198-24205.	7.2	60
5	Fused Bithiophene Imide Dimer Based n-Type Polymers for High Performance Organic Electrochemical Transistors. <i>Angewandte Chemie</i> , 2021, 133, 24400-24407.	1.6	14
6	High-Efficiency All-Polymer Solar Cells with Poly-Small-Molecule Acceptors Having π -Extended Units with Broad Near-IR Absorption. <i>ACS Energy Letters</i> , 2021, 6, 728-738.	8.8	74
7	Dielectric materials for electrolyte gated transistor applications. <i>Journal of Materials Chemistry C</i> , 2021, 9, 9348-9376.	2.7	36
8	Flexible complementary circuits operating at sub-0.5 V via hybrid organic-inorganic electrolyte-gated transistors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	34
9	Transition metal-catalysed molecular n-doping of organic semiconductors. <i>Nature</i> , 2021, 599, 67-73.	13.7	152
10	Reducing energy loss via tuning energy levels of polymer acceptors for efficient all-polymer solar cells. <i>Science China Chemistry</i> , 2020, 63, 1785-1792.	4.2	32
11	Hole (donor) and electron (acceptor) transporting organic semiconductors for bulk-heterojunction solar cells. <i>EnergyChem</i> , 2020, 2, 100042.	10.1	55
12	Teaching an Old Anchoring Group New Tricks: Enabling Low-Cost, Eco-Friendly Hole-Transporting Materials for Efficient and Stable Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2020, 142, 16632-16643.	6.6	154
13	Readily Accessible Benzo[d]thiazole Polymers for Nonfullerene Solar Cells with \geq 16% Efficiency and Potential Pitfalls. <i>ACS Energy Letters</i> , 2020, 5, 1780-1787.	8.8	58
14	Engineering Intrinsic Flexibility in Polycrystalline Molecular Semiconductor Films by Grain Boundary Plasticization. <i>Journal of the American Chemical Society</i> , 2020, 142, 5487-5492.	6.6	30
15	Stable Organic Diradicals Based on Fused Quinoidal Oligothiophene Imides with High Electrical Conductivity. <i>Journal of the American Chemical Society</i> , 2020, 142, 4329-4340.	6.6	95
16	π -Extended Naphthalene Diimide Derivatives for n-Type Semiconducting Polymers. <i>Chemistry of Materials</i> , 2020, 32, 5317-5326.	3.2	32
17	Imide-Functionalized Heteroarene-Based n-Type Terpolymers Incorporating Intramolecular Noncovalent Sulfur TM -Oxygen Interactions for Additive-Free All-Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1903970.	7.8	53
18	A Narrow-Bandgap n-Type Polymer Semiconductor Enabling Efficient All-Polymer Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1905161.	11.1	121

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19	Improved photovoltaic performance of a nonfullerene acceptor based on a benzo[<i>b</i>]thiophene fused end group with extended π -conjugation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9822-9830.	5.2	38
20	Polymer Semiconductors: Phthalimide-Based High Mobility Polymer Semiconductors for Efficient Nonfullerene Solar Cells with Power Conversion Efficiencies over 13% (Adv. Sci. 2/2019). <i>Advanced Science</i> , 2019, 6, 1970012.	5.6	8
21	Backbone Conformation Tuning of Carboxylate-Functionalized Wide Band Gap Polymers for Efficient Non-Fullerene Organic Solar Cells. <i>Macromolecules</i> , 2019, 52, 341-353.	2.2	37
22	Phthalimide-Based High Mobility Polymer Semiconductors for Efficient Nonfullerene Solar Cells with Power Conversion Efficiencies over 13%. <i>Advanced Science</i> , 2019, 6, 1801743.	5.6	45
23	Drastic Effects of Fluorination on Backbone Conformation of Head-to-Head Bithiophene-Based Polymer Semiconductors. <i>ACS Macro Letters</i> , 2018, 7, 519-524.	2.3	22
24	Side-Chain Optimization of Phthalimide-Bithiophene Copolymers for Efficient All-Polymer Solar Cells with Large Fill Factors. <i>Asian Journal of Organic Chemistry</i> , 2018, 7, 2239-2247.	1.3	4
25	Ladder-Type Heteroarene-Based Organic Semiconductors. <i>Chemistry - an Asian Journal</i> , 2018, 13, 2587-2600.	1.7	60
26	Enhancing Polymer Photovoltaic Performance via Optimized Intramolecular Ester-Based Noncovalent Sulfur-Oxygen Interactions. <i>Macromolecules</i> , 2018, 51, 3874-3885.	2.2	53
27	Improved photovoltaic performance of 2,7-pyrene based small molecules via the use of 3-carbazole as terminal unit. <i>Tetrahedron</i> , 2018, 74, 3989-3995.	1.0	7
28	Improving photovoltaic properties of the linear A-Ar-A type small molecules with rhodanine by extending arylene core. <i>Dyes and Pigments</i> , 2017, 139, 42-49.	2.0	6
29	Dithienylbenzodiimide: a new electron-deficient unit for n-type polymer semiconductors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 9559-9569.	2.7	24
30	Phthalimide-Based Wide Bandgap Donor Polymers for Efficient Non-Fullerene Solar Cells. <i>Macromolecules</i> , 2017, 50, 8928-8937.	2.2	31
31	Photovoltaic Small Molecules of TPA(F ₃ BT-T-Cz) ₃ : Tuning Open-Circuit Voltage over 1.0 V for Their Organic Solar Cells by Increasing Fluorine Substitution. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 30320-30327.	4.0	20
32	Benzodi(pyridothiophene): a novel acceptor unit for application in A ₁ -A-A ₁ type photovoltaic small molecules. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1507-1515.	1.3	11
33	Tuning the central fused ring and terminal units to improve the photovoltaic performance of Ar(Ar'D) ₂ type small molecules in solution-processed organic solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4952-4961.	5.2	32
34	Improving Photovoltaic Performance of the Linear A-Ar-A-type Small Molecules with Diketopyrrolopyrrole Arms by Tuning the Linkage Position of the Anthracene Core. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 18292-18299.	4.0	25
35	Recent progress in luminescent liquid crystal materials: design, properties and application for linearly polarised emission. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7993-8005.	2.7	151
36	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

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37	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
38	Improving photovoltaic properties of linear small molecules with TPA ^{''} DPP segment by tuning their frameworks. <i>Synthetic Metals</i> , 2015, 199, 400-407.	2.1	10
39	Significantly increasing open-circuit voltage of the benzo[1,2-b:4,5-b ^{''}]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
40	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
41	Synthesis, characterization and photovoltaic properties of two-dimensional conjugated polybenzodithiophene derivatives appending diketopyrrolopyrrole units as side chain. <i>Polymer</i> , 2014, 55, 4857-4864.	1.8	11
42	A pentacyclic aromatic lactam building block for efficient polymer solar cells. <i>Energy and Environmental Science</i> , 2013, 6, 3224.	15.6	143
43	Synthesis and photovoltaic performances of benzo[1,2-b:4,5-b ^{''}]dithiophene- <i>alt</i> -2,3-diphenylquinoxaline copolymers pending functional groups in phenyl rings. <i>Journal of Polymer Science Part A</i> , 2013, 51, 1051-1057.		15
44	A new donor ^{''} acceptor ^{''} donor ternary copolymer pending additional diketopyrrolopyrrole unit in the side of a donor for efficient solar cells. <i>Organic Electronics</i> , 2013, 14, 1510-1515.	1.4	16
45	D ^{''} A Conjugated Polymers Based on Tetracyclic Acceptor Units: Synthesis and Application in Organic Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2013, 214, 2054-2060.	1.1	8
46	Polyfluorene derivatives pending iridium complexes: Improved optoelectronic properties by introducing D ^{''} A units and altering pendent mode. <i>Journal of Polymer Science Part A</i> , 2012, 50, 1900-1905.	2.5	10