Chang-Qi

List of Publications by Year
in descending order

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54 papers	4,680 citations	236925 25 h-index	155660 55 g-index
55 all docs	55 docs citations	55 times ranked	6260 citing authors

#	Article	IF	Citations
1	Functional Oligothiophenes: Molecular Design for Multidimensional Nanoarchitectures and Their Applications. Chemical Reviews, 2009, 109, 1141-1276.	47.7	1,314
2	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	39.5	797
3	Manipulating the D:A interfacial energetics and intermolecular packing for 19.2% efficiency organic photovoltaics. Energy and Environmental Science, 2022, 15, 2537-2544.	30.8	311
4	Solutionâ€Processed Bulkâ€Heterojunction Solar Cells Based on Monodisperse Dendritic Oligothiophenes. Advanced Functional Materials, 2008, 18, 3323-3331.	14.9	234
5	Functionalized 3D Oligothiophene Dendrons and Dendrimersâ€" Novel Macromolecules for Organic Electronics. Angewandte Chemie - International Edition, 2007, 46, 1679-1683.	13.8	230
6	Thiophene Dendrimers as Entangled Photon Sensor Materials. Journal of the American Chemical Society, 2009, 131, 973-979.	13.7	135
7	Self-Assembling Thiophene Dendrimers with a Hexa-peri-hexabenzocoronene Coreâ^'Synthesis, Characterization and Performance in Bulk Heterojunction Solar Cells. Chemistry of Materials, 2010, 22, 457-466.	6.7	113
8	Flexible silver grid/PEDOT:PSS hybrid electrodes for large area inverted polymer solar cells. Nano Energy, 2014, 10, 259-267.	16.0	111
9	Silane-Capped ZnO Nanoparticles for Use as the Electron Transport Layer in Inverted Organic Solar Cells. ACS Nano, 2018, 12, 5518-5529.	14.6	101
10	Synthesis of N,S-Doped Carbon Quantum Dots for Use in Organic Solar Cells as the ZnO Modifier To Eliminate the Light-Soaking Effect. ACS Applied Materials & Interfaces, 2019, 11, 2243-2253.	8.0	94
11	Roll-to-roll micro-gravure printed large-area zinc oxide thin film as the electron transport layer for solution-processed polymer solar cells. Organic Electronics, 2017, 45, 190-197.	2.6	87
12	Solution-Processed MoO₃:PEDOT:PSS Hybrid Hole Transporting Layer for Inverted Polymer Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 7170-7179.	8.0	83
13	Fully Coated Semitransparent Organic Solar Cells with a Doctor-Blade-Coated Composite Anode Buffer Layer of Phosphomolybdic Acid and PEDOT:PSS and a Spray-Coated Silver Nanowire Top Electrode. ACS Applied Materials & Interfaces, 2018, 10, 943-954.	8.0	83
14	An Efficiency of 16.46% and a T₈₀ Lifetime of Over 4000 h for the PM6:Y6 Inverted Organic Solar Cells Enabled by Surface Acid Treatment of the Zinc Oxide Electron Transporting Layer. ACS Applied Materials & Interfaces, 2021, 13, 17869-17881.	8.0	80
15	Doping-Induced Charge Trapping in Organic Light-Emitting Devices. Advanced Functional Materials, 2005, 15, 323-330.	14.9	78
16	12.88% efficiency in doctor-blade coated organic solar cells through optimizing the surface morphology of a ZnO cathode buffer layer. Journal of Materials Chemistry A, 2019, 7, 212-220.	10.3	70
17	Fully Solutionâ€Processed Semiâ€Transparent Perovskite Solar Cells With Inkâ€Jet Printed Silver Nanowires Top Electrode. Solar Rrl, 2018, 2, 1700184.	5.8	66
18	Zinc oxide: Conjugated polymer nanocomposite as cathode buffer layer for solution processed inverted organic solar cells. Solar Energy Materials and Solar Cells, 2015, 141, 248-259.	6.2	63

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19	High Power Conversion Efficiency of 13.61% for 1 cm² Flexible Polymer Solar Cells Based on Patternable and Massâ€Producible Gravureâ€Printed Silver Nanowire Electrodes. Advanced Functional Materials, 2021, 31, 2007276.	14.9	55
20	Synergetic effects of electrochemical oxidation of Spiro-OMeTAD and Li⁺ ion migration for improving the performance of nâ€“iâ€“p type perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 7575-7585.	10.3	50
21	Roll-to-roll printed stable and thickness-independent ZnO:PEI composite electron transport layer for inverted organic solar cells. Solar Energy, 2019, 193, 102-110.	6.1	49
22	Visible Lightâ€“Induced Degradation of Inverted Polymer:Nonfullerene Acceptor Solar Cells: Initiated by the Light Absorption of ZnO Layer. Solar Rrl, 2021, 5, .	5.8	45
23	2,2â€²:3â€²,2â€²â€²â€²Terthiopheneâ€Based allâ€Thiophene Dendrons and Dendrimers: Synthesis, Structural Characterization, and Properties. Chemistry - A European Journal, 2012, 18, 12880-12901.	3.3	32
24	Simultaneously Achieving Highly Efficient and Stable Polymer:Nonâ€Fullerene Solar Cells Enabled By Molecular Structure Optimization and Surface Passivation. Advanced Science, 2022, 9, e2104588.	11.2	28
25	Influence of the surface treatment of PEDOT:PSS layer with high boiling point solvent on the performance of inverted planar perovskite solar cells. Organic Electronics, 2017, 47, 220-227.	2.6	26
26	External load-dependent degradation of P3HT:PC₆₁BM solar cells: behavior, mechanism, and method of suppression. Journal of Materials Chemistry A, 2017, 5, 10010-10020.	10.3	26
27	An efficiency of 14.29% and 13.08% for 1 cm² and 4 cm² flexible organic solar cells enabled by solâ€“gel ZnO and ZnO nanoparticle bilayer electron transporting layers. Journal of Materials Chemistry A, 2021, 9, 16889-16897.	10.3	26
28	Selective Dispersion of Largeâ€Diameter Semiconducting Carbon Nanotubes by Functionalized Conjugated Dendritic Oligothiophenes for Use in Printed Thin Film Transistors. Advanced Functional Materials, 2017, 27, 1703938.	14.9	22
29	Revealing the Mechanism behind the Catastrophic Failure of nâ€iâ€p Type Perovskite Solar Cells under Operating Conditions and How to Suppress It. Advanced Functional Materials, 2021, 31, 2103820.	14.9	22
30	Simultaneous performance and stability improvement of polymer:fullerene solar cells by doping with piperazine. Journal of Materials Chemistry A, 2019, 7, 7099-7108.	10.3	20
31	Water-assisted formation of highly conductive silver nanowire electrode for all solution-processed semi-transparent perovskite and organic solar cells. Journal of Materials Science, 2020, 55, 14893-14906.	3.7	18
32	Zinc Oxide Coated Carbon Dot Nanoparticles as Electron Transport Layer for Inverted Polymer Solar Cells. ACS Applied Energy Materials, 2020, 3, 11388-11397.	5.1	16
33	Simultaneous Performance and Stability Improvement of Ternary Polymer Solar Cells Enabled by Modulating the Molecular Packing of Acceptors. Solar Rrl, 2020, 4, 2000374.	5.8	15
34	The Role of the Hydrogen Bond between Piperazine and Fullerene Molecules in Stabilizing Polymer:Fullerene Solar Cell Performance. ACS Applied Materials & Interfaces, 2020, 12, 15472-15481.	8.0	15
35	Controllable Synthesis of Wurtzite Cu₂ZnSnS₄ Nanocrystals by Hotâ€Injection Approach and Growth Mechanism Studies. Chemistry - an Asian Journal, 2014, 9, 2309-2316.	3.3	14
36	Phenylformamidinium-enabled quasi-2D Ruddlesden-Popper perovskite solar cells with improved stability. Journal of Energy Chemistry, 2022, 66, 680-688.	12.9	14

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37	Revealing the Interfacial Photoreduction of MoO₃ with P3HT from the Molecular Weight-Dependent â€œBurn-Inâ€•Degradation of P3HT:PC₆₁BM Solar Cells. ACS Applied Energy Materials, 2020, 3, 9714-9723.	5.1	13
38	Nonâ€Uniform Chemical Corrosion of Metal Electrode of pâ€“iâ€“n Type of Perovskite Solar Cells Caused by the Diffusion of CH₃NH₃I. Energy Technology, 2020, 8, 2000250.	3.8	13
39	4,8-Bis(thienyl)-benzo[1,2-b:4,5-bâ€²]dithiophene based A-Ï€-D-Ï€-A typed conjugated small molecules with mono-thiophene as the Ï€-bridge: Synthesis, properties and photovoltaic performance. Dyes and Pigments, 2015, 120, 299-306.	3.7	10
40	Degradation of Polymer Solar Cells: Knowledge Learned from the Polymer:Fullerene Solar Cells. Energy Technology, 2021, 9, 2000920.	3.8	10
41	Thermoplastic elastomer enhanced interface adhesion and bending durability for flexible organic solar cells. Npj Flexible Electronics, 2022, 6, .	10.7	10
42	Peripherally diketopyrrolopyrrole-functionalized dendritic oligothiophenes â€“ synthesis, molecular structure, properties and applications. Polymer Chemistry, 2017, 8, 1460-1476.	3.9	9
43	The interfacial degradation mechanism of polymer:fullerene bis-adduct solar cells and their stability improvement. Materials Advances, 2020, 1, 1307-1317.	5.4	9
44	Monodispersed ZnO nanoink and ultra-smooth large-area ZnO films for high performance and stable organic solar cells. Flexible and Printed Electronics, 2022, 7, 025013.	2.7	9
45	Organic Amines as Targeting Stabilizer at the Polymer/Fullerene Interface for Polymer:PC 61 BM Solar Cells. Energy Technology, 2020, 8, 2000266.	3.8	8
46	Non-fused molecular photovoltaic acceptor with a planar core structure enabled by bulky and embracing-type side chains. Journal of Materials Chemistry C, 2022, 10, 2945-2949.	5.5	8
47	Correlation of the Ï€-conjugation chain length and the property and photovoltaic performance of benzo[1,2-b:4,5-bâ€²]dithiophene-cored A-Ï€-D-Ï€-A type molecules. Solar Energy Materials and Solar Cells, 2016, 157, 831-843.	6.2	7
48	Enhanced Efficiency and Stability of Inverted Planar Perovskite Solar Cells With Piperazine as an Efficient Dopant Into PCBM. IEEE Journal of Photovoltaics, 2020, 10, 811-817.	2.5	7
49	Fully Solutionâ€Processed Semiâ€Transparent Perovskite Solar Cells With Inkâ€Jet Printed Silver Nanowires Top Electrode (Solar RRL 2â•2018). Solar Rrl, 2018, 2, 1770152.	5.8	6
50	Coherent Energy and Charge Transport Processes in Oligothiophene Dendrimers Probed in Solution and in the Solid State with Time-Resolved Spectroscopy and Microscopy Methods. Journal of Physical Chemistry C, 2019, 123, 23419-23426.	3.1	5
51	Cyclopentadithiophene cored A-Ï€-D-Ï€-A non-fullerene electron acceptor in ternary polymer solar cells to extend the light absorption up to 900â€¯nm. Organic Electronics, 2020, 77, 105530.	2.6	5
52	Simplified Synthetic Approach to Tetrabrominated Spiro-Cyclopentadithiophene and the Following Derivation to A-D-A Type Acceptor Molecules for Use in Polymer Solar Cells. Journal of Organic Chemistry, 2022, , .	3.2	4
53	Simultaneous performance and stability improvement of perovskite solar cells by a sequential twice anti-solvent deposition process. Organic Electronics, 2018, 59, 358-365.	2.6	2
54	Synthesis, molecular structure and photovoltaic performance for polythiophenes with Î²-carboxylate side chains. Journal of Polymer Research, 2021, 28, 1.	2.4	1