

# Zhi-Xiang Wei

## List of Publications by Year in descending order

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275  
papers

28,860  
citations

6592

79  
h-index

5663

162  
g-index

281  
all docs

281  
docs citations

281  
times ranked

20474  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Over 16% efficiency organic photovoltaic cells enabled by a chlorinated acceptor with increased open-circuit voltages. <i>Nature Communications</i> , 2019, 10, 2515.                 | 5.8  | 1,431     |
| 2  | Single-junction Organic Photovoltaic Cells with Approaching 18% Efficiency. <i>Advanced Materials</i> , 2020, 32, e1908205.   | 11.1 | 1,407     |
| 3  | Hierarchical Nanocomposites of Polyaniline Nanowire Arrays on Graphene Oxide Sheets with Synergistic Effect for Energy Storage. <i>ACS Nano</i> , 2010, 4, 5019-5026.                 | 7.3  | 1,287     |
| 4  | Single-junction Organic Photovoltaic Cell with 19% Efficiency. <i>Advanced Materials</i> , 2021, 33, e2102420.  | 11.1 | 1,072     |
| 5  | Conducting Polymer Nanowire Arrays for High Performance Supercapacitors. <i>Small</i> , 2014, 10, 14-31.  | 5.2  | 685       |
| 6  | All-polymer Solar Cells Based on Absorption-complementary Polymer Donor and Acceptor with High Power Conversion Efficiency of 8.27%. <i>Advanced Materials</i> , 2016, 28, 1884-1890. | 11.1 | 670       |
| 7  | A low cost and high performance polymer donor material for polymer solar cells. <i>Nature Communications</i> , 2018, 9, 743.  | 5.8  | 635       |
| 8  | Single-junction Binary Blend Nonfullerene Polymer Solar Cells with 12.1% Efficiency. <i>Advanced Materials</i> , 2017, 29, 1700144.   | 11.1 | 629       |
| 9  | Nanostructures of Polyaniline Doped with Inorganic Acids. <i>Macromolecules</i> , 2002, 35, 5937-5942.  | 2.2  | 594       |
| 10 | High-performance Two-ply Yarn Supercapacitors Based on Carbon Nanotubes and Polyaniline Nanowire Arrays. <i>Advanced Materials</i> , 2013, 25, 1494-1498.                             | 11.1 | 555       |
| 11 | Fluorination-enabled optimal morphology leads to over 11% efficiency for inverted small-molecule organic solar cells. <i>Nature Communications</i> , 2016, 7, 13740.                  | 5.8  | 549       |
| 12 | Conjugated Polymer-Small Molecule Alloy Leads to High Efficient Ternary Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 8176-8183.                  | 6.6  | 518       |
| 13 | Formation Mechanism of Self-Assembled Polyaniline Micro/Nanotubes. <i>Langmuir</i> , 2002, 18, 917-921.   | 1.6  | 499       |
| 14 | Conducting Polyaniline Nanowire Arrays for High Performance Supercapacitors. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8062-8067.   | 1.5  | 497       |
| 15 | Hierarchical Porous Graphene/Polyaniline Composite Film with Superior Rate Performance for Flexible Supercapacitors. <i>Advanced Materials</i> , 2013, 25, 6985-6990.                 | 11.1 | 472       |
| 16 | Achieving Over 15% Efficiency in Organic Photovoltaic Cells via Copolymer Design. <i>Advanced Materials</i> , 2019, 31, e1808356.   | 11.1 | 388       |
| 17 | Chemically Crosslinked Hydrogel Film Leads to Integrated Flexible Supercapacitors with Superior Performance. <i>Advanced Materials</i> , 2015, 27, 7451-7457.                         | 11.1 | 386       |
| 18 | Binary Organic Solar Cells Breaking 19% via Manipulating the Vertical Component Distribution. <i>Advanced Materials</i> , 2022, 34, .   | 11.1 | 384       |

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|----|--|------|-----------|
| 19 | Conducting polymer nanostructures and their application in biosensors. <i>Journal of Colloid and Interface Science</i> , 2010, 341, 1-11.  | 5.0  | 366       |
| 20 | Nitrogen-Doped Graphene Aerogels as Efficient Supercapacitor Electrodes and Gas Adsorbents. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 1431-1438.  | 4.0  | 364       |
| 21 | Mapping Polymer Donors toward High-Efficiency Fullerene Free Organic Solar Cells. <i>Advanced Materials</i> , 2017, 29, 1604155.   | 11.1 | 360       |
| 22 | A Highly Efficient Non-Fullerene Organic Solar Cell with a Fill Factor over 0.80 Enabled by a Fine-Tuned Hole-Transporting Layer. <i>Advanced Materials</i> , 2018, 30, e1801801.  | 11.1 | 360       |
| 23 | Integrated energy storage and electrochromic function in one flexible device: an energy storage smart window. <i>Energy and Environmental Science</i> , 2012, 5, 8384.   | 15.6 | 352       |
| 24 | An All-Solid-State Flexible Micro-Supercapacitor on a Chip. <i>Advanced Energy Materials</i> , 2011, 1, 1068-1072.   | 10.2 | 344       |
| 25 | All-small-molecule organic solar cells with over 14% efficiency by optimizing hierarchical morphologies. <i>Nature Communications</i> , 2019, 10, 5393.  | 5.8  | 273       |
| 26 | Large-Area Organic Solar Cells: Material Requirements, Modular Designs, and Printing Methods. <i>Advanced Materials</i> , 2019, 31, e1805089.  | 11.1 | 246       |
| 27 | Benzotriazole-Based Acceptor and Donors, Coupled with Chlorination, Achieve a High $V_{OC}$ of 1.24 V and an Efficiency of 10.5% in Fullerene-Free Organic Solar Cells. <i>Chemistry of Materials</i> , 2019, 31, 3941-3947. | 3.2  | 236       |
| 28 | High-Performance As-Cast Nonfullerene Polymer Solar Cells with Thicker Active Layer and Large Area Exceeding 11% Power Conversion Efficiency. <i>Advanced Materials</i> , 2018, 30, 1704546.                                 | 11.1 | 233       |
| 29 | An Electron Acceptor with Porphyrin and Perylene Bisimides for Efficient Non-Fullerene Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2694-2698.  | 7.2  | 232       |
| 30 | Core-Spun Carbon Nanotube Yarn Supercapacitors for Wearable Electronic Textiles. <i>ACS Nano</i> , 2014, 8, 4571-4579.   | 7.3  | 228       |
| 31 | High-Performance All-Carbon Yarn Micro-Supercapacitor for an Integrated Energy System. <i>Advanced Materials</i> , 2014, 26, 4100-4106.  | 11.1 | 223       |
| 32 | Volatilizable Solid Additive-Assisted Treatment Enables Organic Solar Cells with Efficiency over 18.8% and Fill Factor Exceeding 80%. <i>Advanced Materials</i> , 2021, 33, e2105301.  | 11.1 | 222       |
| 33 | Flexible supercapacitors based on cloth-supported electrodes of conducting polymer nanowire array/SWCNT composites. <i>Journal of Materials Chemistry</i> , 2011, 21, 16373.   | 6.7  | 202       |
| 34 | Flexible and Binder-Free Organic Cathode for High-Performance Lithium-Ion Batteries. <i>Advanced Materials</i> , 2014, 26, 3338-3343.  | 11.1 | 200       |
| 35 | An organic cathode material based on a polyimide/CNT nanocomposite for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6366.   | 5.2  | 197       |
| 36 | Synergistic Effect of Polymer and Small Molecules for High-Performance Ternary Organic Solar Cells. <i>Advanced Materials</i> , 2015, 27, 1071-1076.   | 11.1 | 192       |

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|----|---|------|-----------|
| 37 | Achievement of High $V_{oc}$ of 1.02 V for P3HT-Based Organic Solar Cell Using a Benzotriazole-Containing Non-Fullerene Acceptor. <i>Advanced Energy Materials</i> , 2017, 7, 1602269.  | 10.2 | 191       |
| 38 | Conducting polymernanowire arrays with enhanced electrochemical performance. <i>Journal of Materials Chemistry</i> , 2010, 20, 1117-1121.   | 6.7  | 189       |
| 39 | Simultaneously Achieved High Open-Circuit Voltage and Efficient Charge Generation by Fine-Tuning Charge-Transfer Driving Force in Nonfullerene Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1704507. | 7.8  | 180       |
| 40 | Fluorination vs. chlorination: a case study on high performance organic photovoltaic materials. <i>Science China Chemistry</i> , 2018, 61, 1328-1337.   | 4.2  | 177       |
| 41 | Mechanical Analyses and Structural Design Requirements for Flexible Energy Storage Devices. <i>Advanced Energy Materials</i> , 2017, 7, 1700535.  | 10.2 | 170       |
| 42 | Supramolecular Helices: Chirality Transfer from Conjugated Molecules to Structures. <i>Advanced Materials</i> , 2013, 25, 6039-6049.  | 11.1 | 158       |
| 43 | Modulating Molecular Orientation Enables Efficient Nonfullerene Small-Molecule Organic Solar Cells. <i>Chemistry of Materials</i> , 2018, 30, 2129-2134.  | 3.2  | 157       |
| 44 | Asymmetric Diketopyrrolopyrrole Conjugated Polymers for Field-Effect Transistors and Polymer Solar Cells Processed from a Nonchlorinated Solvent. <i>Advanced Materials</i> , 2016, 28, 943-950.                              | 11.1 | 155       |
| 45 | Flexible high performance wet-spun graphene fiber supercapacitors. <i>RSC Advances</i> , 2013, 3, 23957.  | 1.7  | 152       |
| 46 | Large-Area Polyimide/SWCNT Nanocable Cathode for Flexible Lithium-Ion Batteries. <i>Advanced Materials</i> , 2015, 27, 6504-6510.   | 11.1 | 150       |
| 47 | Thread-Like Supercapacitors Based on One-Step Spun Nanocomposite Yarns. <i>Small</i> , 2014, 10, 3187-3193.   | 5.2  | 146       |
| 48 | From Alloy-Like to Cascade Blended Structure: Designing High-Performance All-Small-Molecule Ternary Solar Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 1549-1556.                                      | 6.6  | 145       |
| 49 | Over 11% Efficiency in Tandem Polymer Solar Cells Featured by a Low-Band-Gap Polymer with Fine-Tuned Properties. <i>Advanced Materials</i> , 2016, 28, 5133-5138.   | 11.1 | 144       |
| 50 | Inversion of the Supramolecular Chirality of Nanofibrous Structures through Co-Assembly with Achiral Molecules. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2411-2415.                                       | 7.2  | 140       |
| 51 | Aniline Oligomers "Architecture, Function and New Opportunities for Nanostructured Materials. <i>Macromolecular Rapid Communications</i> , 2008, 29, 280-292.   | 2.0  | 139       |
| 52 | Toward Over 15% Power Conversion Efficiency for Organic Solar Cells: Current Status and Perspectives. <i>Small Methods</i> , 2017, 1, 1700258.  | 4.6  | 130       |
| 53 | A New Conjugated Polymer that Enables the Integration of Photovoltaic and Light-Emitting Functions in One Device. <i>Advanced Materials</i> , 2021, 33, e2101090.   | 11.1 | 129       |
| 54 | A Carbonyl Compound-Based Flexible Cathode with Superior Rate Performance and Cyclic Stability for Flexible Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018, 30, 1703868.   | 11.1 | 128       |

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|----|--|------|-----------|
| 55 | The Introduction of Fluorine and Sulfur Atoms into Benzotriazole-Based p-Type Polymers to Match with a Benzotriazole-Containing n-Type Small Molecule: "The Same-Acceptor" Strategy to Realize High Open-Circuit Voltage. <i>Advanced Energy Materials</i> , 2018, 8, 1801582. | 10.2 | 122       |
| 56 | Small Exciton Binding Energies Enabling Direct Charge Photogeneration Towards Low-Driving-Force Organic Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15348-15353.   | 7.2  | 121       |
| 57 | A flexible electrode based on a three-dimensional graphene network-supported polyimide for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10842-10846.  | 5.2  | 120       |
| 58 | Advanced functional polymer materials. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1803-1915.  | 3.2  | 117       |
| 59 | 17% efficiency all-small-molecule organic solar cells enabled by nanoscale phase separation with a hierarchical branched structure. <i>Energy and Environmental Science</i> , 2021, 14, 5903-5910.   | 15.6 | 116       |
| 60 | Enhancing Performance of Large-Area Organic Solar Cells with Thick Film via Ternary Strategy. <i>Small</i> , 2017, 13, 1700388.  | 5.2  | 113       |
| 61 | Small reorganization energy acceptors enable low energy losses in non-fullerene organic solar cells. <i>Nature Communications</i> , 2022, 13, .  | 5.8  | 113       |
| 62 | Polyaniline nanotubes and their dendrites doped with different naphthalene sulfonic acids. <i>Acta Materialia</i> , 2005, 53, 1373-1379.   | 3.8  | 112       |
| 63 | Modulating helicity through amphiphilicity tuning supramolecular interactions for the controlled assembly of perylenes. <i>Chemical Communications</i> , 2011, 47, 5554-5556.  | 2.2  | 112       |
| 64 | Polymer/Small Molecule/Fullerene Based Ternary Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1602540.   | 10.2 | 111       |
| 65 | Conjugated microporous polymers for energy storage: Recent progress and challenges. <i>Nano Energy</i> , 2021, 85, 105958.   | 8.2  | 110       |
| 66 | Self-Assembled Sugar-Substituted Perylene Diimide Nanostructures with Homochirality and High Gas Sensitivity. <i>Advanced Functional Materials</i> , 2012, 22, 4149-4158.  | 7.8  | 107       |
| 67 | Biomass-derived flexible porous carbon materials and their applications in supercapacitor and gas adsorption. <i>Materials and Design</i> , 2017, 129, 164-172.  | 3.3  | 105       |
| 68 | Combining Energy Transfer and Optimized Morphology for Highly Efficient Ternary Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1602552.  | 10.2 | 97        |
| 69 | A Fused Ring Electron Acceptor with Decacyclic Core Enables over 13.5% Efficiency for Organic Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1802050.  | 10.2 | 97        |
| 70 | Efficient Two-Dimensional Tin Halide Perovskite Light-Emitting Diodes via a Spacer Cation Substitution Strategy. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1120-1127.   | 2.1  | 97        |
| 71 | Helical supramolecular aggregates, mesoscopic organisation and nanofibers of a perylenebisimide "chiral surfactant complex via ionic self-assembly. <i>Journal of Materials Chemistry</i> , 2009, 19, 2356.  | 6.7  | 96        |
| 72 | Exciton Binding Energies of Nonfullerene Small Molecule Acceptors: Implication for Exciton Dissociation Driving Forces in Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 22309-22316.  | 1.5  | 93        |

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|----|---|------|-----------|
| 73 | Polypyrrole nanofiber arrays synthesized by a biphasic electrochemical strategy. <i>Journal of Materials Chemistry</i> , 2008, 18, 2276.  | 6.7  | 92        |
| 74 | Synergistic Optimization Enables Large-Area Flexible Organic Solar Cells to Maintain over 98% PCE of the Small-Area Rigid Devices. <i>Advanced Materials</i> , 2020, 32, e2005153.  | 11.1 | 89        |
| 75 | Recent Progress in Polymeric Carbonyl-Based Electrode Materials for Lithium and Sodium Ion Batteries. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800565.  | 2.0  | 88        |
| 76 | Acceptor End-Capped Oligomeric Conjugated Molecules with Broadened Absorption and Enhanced Extinction Coefficients for High-Efficiency Organic Solar Cells. <i>Advanced Materials</i> , 2016, 28, 5980-5985.  | 11.1 | 87        |
| 77 | Improve the Performance of the All-Small-Molecule Nonfullerene Organic Solar Cells through Enhancing the Crystallinity of Acceptors. <i>Advanced Energy Materials</i> , 2018, 8, 1702377.   | 10.2 | 87        |
| 78 | Effects of energy-level offset between a donor and acceptor on the photovoltaic performance of non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18889-18897.   | 5.2  | 87        |
| 79 | Regulating Bulk-Heterojunction Molecular Orientations through Surface Free Energy Control of Hole-Transporting Layers for High-Performance Organic Solar Cells. <i>Advanced Materials</i> , 2019, 31, e1806921.   | 11.1 | 86        |
| 80 | Simple Nonfused-Ring Electron Acceptors with Noncovalently Conformational Locks for Low-Cost and High-Performance Organic Solar Cells Enabled by End-Group Engineering. <i>Advanced Functional Materials</i> , 2022, 32, 2108861.                               | 7.8  | 84        |
| 81 | Molecular Engineering of D-A Copolymers Based on 4,8-Bis(4-chlorothiophen-2-yl)benzo[1,2-b:4,5-b']dithiophene (BDT-T-Cl) for High-Performance Fullerene-Free Organic Solar Cells. <i>Macromolecules</i> , 2019, 52, 6227-6233.                                  | 2.2  | 83        |
| 82 | Self-Assembly and Electrical Conductivity Transitions in Conjugated Oligoaniline-Surfactant Complexes. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 751-756.  | 7.2  | 81        |
| 83 | An Efficiency of 16.46% and a $>80$ 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. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 17869-17881. | 4.0  | 80        |
| 84 | Effects of Shortened Alkyl Chains on Solution-Processable Small Molecules with Oxo-Alkylated Nitrile End-Capped Acceptors for High-Performance Organic Solar Cells. <i>Advanced Energy Materials</i> , 2014, 4, 1400538.  | 10.2 | 79        |
| 85 | Optimized Alloy-Parallel-Morphology of Ternary Organic Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1502456.  | 10.2 | 79        |
| 86 | Highly efficient flexible MAPbI <sub>3</sub> solar cells with a fullerene derivative-modified SnO <sub>2</sub> layer as the electron transport layer. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6659-6664.   | 5.2  | 77        |
| 87 | PBDT-TSR: a highly efficient conjugated polymer for polymer solar cells with a regioregular structure. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1708-1713.  | 5.2  | 75        |
| 88 | A universal method for constructing high efficiency organic solar cells with stacked structures. <i>Energy and Environmental Science</i> , 2021, 14, 2314-2321.   | 15.6 | 75        |
| 89 | Biomimetic Superhelical Conducting Microfibers with Homochirality for Enantioselective Sensing. <i>Journal of the American Chemical Society</i> , 2014, 136, 578-581.   | 6.6  | 74        |
| 90 | Oligomeric Donor Material for High-Efficiency Organic Solar Cells: Breaking Down a Polymer. <i>Advanced Materials</i> , 2015, 27, 4229-4233.  | 11.1 | 74        |

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|-----|---|------|-----------|
| 91  | High Miscibility Compatible with Ordered Molecular Packing Enables an Excellent Efficiency of 16.2% in All-Small-Molecule Organic Solar Cells. <i>Advanced Materials</i> , 2022, 34, e2106316.                                | 11.1 | 74        |
| 92  | The effect of alkyl substitution position of thienyl outer side chains on photovoltaic performance of A <sup>A</sup> -DA <sup>A</sup> -A type acceptors. <i>Energy and Environmental Science</i> , 2022, 15, 2011-2020.       | 15.6 | 73        |
| 93  | Molecular imprinted polypyrrole nanowires for chiral amino acid recognition. <i>Sensors and Actuators B: Chemical</i> , 2008, 134, 573-578.   | 4.0  | 72        |
| 94  | A <sup>A</sup> -i <sup>A</sup> -DA <sup>A</sup> -i <sup>A</sup> -A Electron-Donating Small Molecules for Solution-Processed Organic Solar Cells: A Review. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1700470.    | 2.0  | 70        |
| 95  | Molecular design revitalizes the low-cost PTV-polymer for highly efficient organic solar cells. <i>National Science Review</i> , 2021, 8, nwab031.  | 4.6  | 70        |
| 96  | Self-Powered Organic Photodetectors with High Detectivity for Near Infrared Light Detection Enabled by Dark Current Reduction. <i>Advanced Functional Materials</i> , 2021, 31, 2106326.                                      | 7.8  | 70        |
| 97  | Hexagonal Superlattice of Chiral Conducting Polymers Self-Assembled by Mimicking $\beta$ -Sheet Proteins with Anisotropic Electrical Transport. <i>Journal of the American Chemical Society</i> , 2010, 132, 12006-12012.     | 6.6  | 67        |
| 98  | Ammonia Sensory Properties Based on Single-Crystalline Micro/Nanostructures of Perylenediimide Derivatives: Core-Substituted Effect. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10399-10404.                         | 1.5  | 67        |
| 99  | $\alpha$ -N <sup>A</sup> -i <sup>A</sup> -i <sup>A</sup> -Type Oligomeric Acceptor Achieves an OPV Efficiency of 18.19% with Low Energy Loss and Excellent Stability. <i>Advanced Science</i> , 2022, 9, .                    | 5.6  | 67        |
| 100 | Decorating Polypyrrole Nanotubes with Au Nanoparticles by an In Situ Reduction Process. <i>Macromolecular Rapid Communications</i> , 2009, 30, 936-940.   | 2.0  | 66        |
| 101 | Self-Assembled Organic Functional Nanotubes and Nanorods and Their Sensory Properties. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3929-3933.   | 1.5  | 66        |
| 102 | Metal-Organic Framework-Derived Metal Oxide Embedded in Nitrogen-Doped Graphene Network for High-Performance Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43171-43178.                     | 4.0  | 66        |
| 103 | Tuning the Supramolecular Chirality of Polyaniline by Methyl Substitution. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2003-2006.  | 7.2  | 64        |
| 104 | Ambipolar Conjugated Polymers with Ultrahigh Balanced Hole and Electron Mobility for Printed Organic Complementary Logic via a Two-Step C <sup>A</sup> H Activation Strategy. <i>Advanced Materials</i> , 2019, 31, e1806010. | 11.1 | 63        |
| 105 | Controllable Supramolecular Chiral Twisted Nanoribbons from Achiral Conjugated Oligoaniline Derivatives. <i>Journal of the American Chemical Society</i> , 2018, 140, 9417-9425.  | 6.6  | 62        |
| 106 | Gamma-Irradiated Carbon Nanotube Yarn As Substrate for High-Performance Fiber Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 2553-2560.  | 4.0  | 61        |
| 107 | Achieving Small Exciton Binding Energies in Small Molecule Acceptors for Organic Solar Cells: Effect of Molecular Packing. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4888-4894.                                | 2.1  | 60        |
| 108 | Facile-Effective Hole-Transporting Materials Based on Dibenzo[a,c]carbazole: The Key Role of Linkage Position to Photovoltaic Performance of Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2019, 4, 2514-2521.          | 8.8  | 59        |

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|-----|--|------|-----------|
| 109 | Asymmetric Substitution of End Groups Triggers 16.34% Efficiency for All-Small-Molecule Organic Solar Cells. <i>Advanced Materials</i> , 2022, 34, .   | 11.1 | 59        |
| 110 | Exquisite modulation of ZnO nanoparticle electron transporting layer for high-performance fullerene-free organic solar cell with inverted structure. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3570-3576. | 5.2  | 58        |
| 111 | Enhancing the Photovoltaic Performance via Vertical Phase Distribution Optimization in Small Molecule:PC <sub>71</sub> BM Blends. <i>Advanced Energy Materials</i> , 2017, 7, 1701548.                             | 10.2 | 57        |
| 112 | Spontaneous open-circuit voltage gain of fully fabricated organic solar cells caused by elimination of interfacial energy disorder. <i>Energy and Environmental Science</i> , 2019, 12, 2518-2528.                 | 15.6 | 57        |
| 113 | Scalable Production of Wearable Solid-State Li-Ion Capacitors from N-Doped Hierarchical Carbon. <i>Advanced Materials</i> , 2020, 32, e2005531.  | 11.1 | 57        |
| 114 | Liquid-Crystalline Small Molecules for Nonfullerene Solar Cells with High Fill Factors and Power Conversion Efficiencies. <i>Advanced Energy Materials</i> , 2019, 9, 1803175.                                     | 10.2 | 55        |
| 115 | Stepwise Self-Assembly of P3HT/CdSe Hybrid Nanowires with Enhanced Photoconductivity. <i>Macromolecular Rapid Communications</i> , 2009, 30, 1419-1423.  | 2.0  | 54        |
| 116 | Moving Alkyl-Chain Branching Point Induced a Hierarchical Morphology for Efficient All-Small-Molecule Organic Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2005426.                               | 7.8  | 54        |
| 117 | Progress and prospects of thick-film organic solar cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3125-3150.  | 5.2  | 53        |
| 118 | Management of the crystallization in two-dimensional perovskite solar cells with enhanced efficiency within a wide temperature range and high stability. <i>Nano Energy</i> , 2019, 58, 706-714.                   | 8.2  | 52        |
| 119 | Asymmetric thiophene/pyridine flanked diketopyrrolopyrrole polymers for high performance polymer ambipolar field-effect transistors and solar cells. <i>Journal of Materials Chemistry C</i> , 2017, 5, 566-572.   | 2.7  | 51        |
| 120 | Naphtho[1,2-b:5,6-b']dithiophene-Based Small Molecules for Thick-Film Organic Solar Cells with High Fill Factors. <i>Chemistry of Materials</i> , 2016, 28, 943-950.   | 3.2  | 50        |
| 121 | Nitrogen-doped nanoarray-modified 3D hierarchical graphene as a cofunction host for high-performance flexible Li-S battery. <i>EcoMat</i> , 2020, 2, e12010.   | 6.8  | 50        |
| 122 | All-small-molecule organic solar cells based on an electron donor incorporating binary electron-deficient units. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6056-6063.                                     | 5.2  | 49        |
| 123 | Regulating the phase separation of ternary organic solar cells via 3D architected AIE molecules. <i>Nano Energy</i> , 2020, 68, 104271.  | 8.2  | 47        |
| 124 | 18.4% efficiency achieved by the cathode interface engineering in non-fullerene polymer solar cells. <i>Nano Today</i> , 2021, 41, 101289.   | 6.2  | 47        |
| 125 | Synthesis and characterization of self-doped poly(aniline-co-aminonaphthalene sulfonic acid) nanotubes. <i>Journal of Applied Polymer Science</i> , 2003, 87, 1297-1301.   | 1.3  | 46        |
| 126 | A graphene supported polyimide nanocomposite as a high performance organic cathode material for lithium ion batteries. <i>RSC Advances</i> , 2016, 6, 33287-33294.   | 1.7  | 46        |



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|-----|--|------|-----------|
| 127 | Nitrogen-Doped Porous Carbons Derived from Polypyrrole-Based Aerogels for Gas Uptake and Supercapacitors. <i>ACS Applied Nano Materials</i> , 2018, 1, 609-616.  | 2.4  | 46        |
| 128 | Naphtho[1,2-b:5,6-b <sup>2</sup> ]dithiophene Based Two-Dimensional Conjugated Polymers for Highly Efficient Thick-Film Inverted Polymer Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 6947-6954.                                       | 3.2  | 45        |
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