

Tao Wang

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162
papers

6,549
citations

42
h-index

75
g-index

168
ext. papers

7,958
ext. citations

10.8
avg, IF

6.32
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 162 | 50-Fold EQE Improvement up to 6.27% of Solution-Processed All-Inorganic Perovskite CsPbBr QLEDs via Surface Ligand Density Control. <i>Advanced Materials</i> , 2017 , 29, 1603885 | 24 | 819 |
| 161 | Molecular engineering of conjugated polymers for efficient hole transport and defect passivation in perovskite solar cells. <i>Nano Energy</i> , 2018 , 45, 28-36 | 17.1 | 174 |
| 160 | A Layer-by-Layer Architecture for Printable Organic Solar Cells Overcoming the Scaling Lag of Module Efficiency. <i>Joule</i> , 2020 , 4, 407-419 | 27.8 | 159 |
| 159 | Molecular Order Control of Non-fullerene Acceptors for High-Efficiency Polymer Solar Cells. <i>Joule</i> , 2019 , 3, 819-833 | 27.8 | 144 |
| 158 | A universal layer-by-layer solution-processing approach for efficient non-fullerene organic solar cells. <i>Energy and Environmental Science</i> , 2019 , 12, 384-395 | 35.4 | 143 |
| 157 | A History and Perspective of Non-Fullerene Electron Acceptors for Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2003570 | 21.8 | 141 |
| 156 | A review of non-fullerene polymer solar cells: from device physics to morphology control. <i>Reports on Progress in Physics</i> , 2019 , 82, 036601 | 14.4 | 127 |
| 155 | Correlating Structure with Function in Thermally Annealed PCDTBT:PC70BM Photovoltaic Blends. <i>Advanced Functional Materials</i> , 2012 , 22, 1399-1408 | 15.6 | 123 |
| 154 | Carbon-Oxygen-Bridged Ladder-Type Building Blocks for Highly Efficient Nonfullerene Acceptors. <i>Advanced Materials</i> , 2019 , 31, e1804790 | 24 | 117 |
| 153 | The development of nanoscale morphology in polymer:fullerene photovoltaic blends during solvent casting. <i>Soft Matter</i> , 2010 , 6, 4128 | 3.6 | 115 |
| 152 | Waterborne, Nanocomposite Pressure-Sensitive Adhesives with High Tack Energy, Optical Transparency, and Electrical Conductivity. <i>Advanced Materials</i> , 2006 , 18, 2730-2734 | 24 | 113 |
| 151 | Simultaneous enhanced efficiency and thermal stability in organic solar cells from a polymer acceptor additive. <i>Nature Communications</i> , 2020 , 11, 1218 | 17.4 | 111 |
| 150 | Multifunctional Enhancement for Highly Stable and Efficient Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2005776 | 15.6 | 111 |
| 149 | Conjugated Small Molecule for Efficient Hole Transport in High-Performance p-i-n Type Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1702613 | 15.6 | 109 |
| 148 | From fullerene acceptors to non-fullerene acceptors: prospects and challenges in the stability of organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 23361-23377 | 13 | 105 |
| 147 | Eliminated hysteresis and stabilized power output over 20% in planar heterojunction perovskite solar cells by compositional and surface modifications to the low-temperature-processed TiO ₂ layer. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9402-9411 | 13 | 101 |
| 146 | Ionic Additive Engineering Toward High-Efficiency Perovskite Solar Cells with Reduced Grain Boundaries and Trap Density. <i>Advanced Functional Materials</i> , 2018 , 28, 1801985 | 15.6 | 101 |

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|-----|---|------|-----|
| 145 | A Phase Diagram of the P3HT:PCBM Organic Photovoltaic System: Implications for Device Processing and Performance. <i>Macromolecules</i> , 2011 , 44, 2908-2917 | 5.5 | 100 |
| 144 | Recent progress and challenges of organometal halide perovskite solar cells. <i>Reports on Progress in Physics</i> , 2016 , 79, 026501 | 14.4 | 97 |
| 143 | Ladder-Type Dithienonaphthalene-Based Small-Molecule Acceptors for Efficient Nonfullerene Organic Solar Cells. <i>Chemistry of Materials</i> , 2017 , 29, 7942-7952 | 9.6 | 96 |
| 142 | The Nanoscale Morphology of a PCDTBT:PCBM Photovoltaic Blend. <i>Advanced Energy Materials</i> , 2011 , 1, 499-504 | 21.8 | 95 |
| 141 | Evolution of Structure, Optoelectronic Properties, and Device Performance of Polythiophene:Fullerene Solar Cells During Thermal Annealing. <i>Advanced Functional Materials</i> , 2011 , 21, 1383-1390 | 15.6 | 94 |
| 140 | Solution-Processed Polymer Solar Cells with over 17% Efficiency Enabled by an Iridium Complexation Approach. <i>Advanced Energy Materials</i> , 2020 , 10, 2000590 | 21.8 | 93 |
| 139 | Conjugated-Polymer Blends for Organic Photovoltaics: Rational Control of Vertical Stratification for High Performance. <i>Advanced Materials</i> , 2017 , 29, 1601674 | 24 | 91 |
| 138 | Large deformation behavior and effective network chain density of swollen poly(N-isopropylacrylamide)/aponite nanocomposite hydrogels. <i>Soft Matter</i> , 2012 , 8, 774-783 | 3.6 | 82 |
| 137 | Achieving over 11% power conversion efficiency in PffBT4T-2OD-based ternary polymer solar cells with enhanced open-circuit-voltage and suppressed charge recombination. <i>Nano Energy</i> , 2018 , 44, 155-165 | 17.1 | 77 |
| 136 | Design and fabrication of colloidal polymer nanocomposites. <i>Advances in Colloid and Interface Science</i> , 2009 , 147-148, 319-32 | 14.3 | 76 |
| 135 | Fabricating High Performance, Donor-Acceptor Copolymer Solar Cells by Spray-Coating in Air. <i>Advanced Energy Materials</i> , 2013 , 3, 505-512 | 21.8 | 75 |
| 134 | Soft polymer and nano-clay supracolloidal particles in adhesives: synergistic effects on mechanical properties. <i>Soft Matter</i> , 2009 , 5, 3842 | 3.6 | 71 |
| 133 | Correlating molecular morphology with optoelectronic function in solar cells based on low band-gap copolymer:fullerene blends. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 7266 | 7.1 | 63 |
| 132 | Solution-Processed Centimeter-Scale Highly Aligned Organic Crystalline Arrays for High-Performance Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2020 , 32, e1908388 | 24 | 62 |
| 131 | Light-Soaking-Free Inverted Polymer Solar Cells with an Efficiency of 10.5% by Compositional and Surface Modifications to a Low-Temperature-Processed TiO Electron-Transport Layer. <i>Advanced Materials</i> , 2017 , 29, 1604044 | 24 | 60 |
| 130 | Current Status of Outdoor Lifetime Testing of Organic Photovoltaics. <i>Advanced Science</i> , 2018 , 5, 1800434 | 3.6 | 59 |
| 129 | Rationalizing Phase Transitions with Thermal Annealing Temperatures for P3HT:PCBM Organic Photovoltaic Devices. <i>Macromolecules</i> , 2012 , 45, 1499-1508 | 5.5 | 57 |
| 128 | Environmentally durable superhydrophobic surfaces with robust photocatalytic self-cleaning and self-healing properties prepared via versatile film deposition methods. <i>Journal of Colloid and Interface Science</i> , 2018 , 527, 107-116 | 9.3 | 52 |

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| 127 | Aggregation of non-fullerene acceptors in organic solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 15607-15619 | 13 | 51 |
| 126 | Poly(9-vinylcarbazole) as a hole transport material for efficient and stable inverted planar heterojunction perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 163, 210-217 | 6.4 | 49 |
| 125 | Morphology Development in Amorphous Polymer:Fullerene Photovoltaic Blend Films During Solution Casting. <i>Advanced Functional Materials</i> , 2014 , 24, 659-667 | 15.6 | 49 |
| 124 | Contrasting Effects of Energy Transfer in Determining Efficiency Improvements in Ternary Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2018 , 28, 1704212 | 15.6 | 49 |
| 123 | pH dependence of the properties of waterborne pressure-sensitive adhesives containing acrylic acid. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 631-9 | 9.5 | 48 |
| 122 | PCDTBT based solar cells: one year of operation under real-world conditions. <i>Scientific Reports</i> , 2016 , 6, 21632 | 4.9 | 47 |
| 121 | Protein nanopatterning on self-organized poly(styrene-b-isoprene) thin film templates. <i>Langmuir</i> , 2009 , 25, 4526-34 | 4 | 44 |
| 120 | 13.9% Efficiency Ternary Nonfullerene Organic Solar Cells Featuring Low-Structural Order. <i>ACS Energy Letters</i> , 2019 , 4, 2378-2385 | 20.1 | 42 |
| 119 | Balancing the efficiency, stability, and cost potential for organic solar cells via a new figure of merit. <i>Joule</i> , 2021 , 5, 1209-1230 | 27.8 | 42 |
| 118 | Chlorinated Fullerene Dimers for Interfacial Engineering Toward Stable Planar Perovskite Solar Cells with 22.3% Efficiency. <i>Advanced Energy Materials</i> , 2020 , 10, 2000615 | 21.8 | 42 |
| 117 | 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 | 35.4 | 39 |
| 116 | High-performance all-polymer solar cells with only 0.47 eV energy loss. <i>Science China Chemistry</i> , 2020 , 63, 1449-1460 | 7.9 | 39 |
| 115 | Correlating Three-dimensional Morphology With Function in PBDB-T:IT-M Non-Fullerene Organic Solar Cells. <i>Solar Rrl</i> , 2018 , 2, 1800114 | 7.1 | 39 |
| 114 | Grain size dependence of degradation of aluminium/calcium cathodes in organic solar cells following exposure to humid air. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 140, 25-32 | 6.4 | 37 |
| 113 | Efficient planar heterojunction perovskite solar cells with weak hysteresis fabricated via bar coating. <i>Solar Energy Materials and Solar Cells</i> , 2017 , 159, 412-417 | 6.4 | 37 |
| 112 | The role of dynamic measurements in correlating structure with optoelectronic properties in polymer : fullerene bulk-heterojunction solar cells. <i>Reports on Progress in Physics</i> , 2013 , 76, 022501 | 14.4 | 37 |
| 111 | Anthracene-based donor-acceptor low band gap polymers for application in solar cells. <i>Chemical Communications</i> , 2013 , 49, 2252-4 | 5.8 | 36 |
| 110 | Influences of Non-fullerene Acceptor Fluorination on Three-Dimensional Morphology and Photovoltaic Properties of Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 26194-26203 | 9.5 | 33 |

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| 109 | Retarding the Crystallization of a Nonfullerene Electron Acceptor for High-Performance Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2018 , 29, 1807662 | 15.6 | 33 |
| 108 | Restrained light-soaking and reduced hysteresis in perovskite solar cells employing a helical perylene diimide interfacial layer. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10379-10387 | 13 | 33 |
| 107 | Correlating the electron-donating core structure with morphology and performance of carbon oxygen-bridged ladder-type non-fullerene acceptor based organic solar cells. <i>Nano Energy</i> , 2019 , 61, 318-326 | 17.1 | 32 |
| 106 | Organic photovoltaic devices with enhanced efficiency processed from non-halogenated binary solvent blends. <i>Organic Electronics</i> , 2015 , 21, 216-222 | 3.5 | 32 |
| 105 | Spectral Tuning of Efficient CsPbBr ₃ Cl ₃ Blue Light-Emitting Diodes via Halogen Exchange Triggered by Benzenesulfonates. <i>Chemistry of Materials</i> , 2020 , 32, 3211-3218 | 9.6 | 32 |
| 104 | A Molecular Mechanism for Toughening and Strengthening Waterborne Nanocomposites. <i>Advanced Materials</i> , 2008 , 20, 90-94 | 24 | 31 |
| 103 | Fluorinated solid additives enable high efficiency non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 4230-4238 | 13 | 30 |
| 102 | Morphology and efficiency enhancements of PTB7-Th:ITIC nonfullerene organic solar cells processed via solvent vapor annealing. <i>Journal of Energy Chemistry</i> , 2019 , 37, 148-156 | 12 | 30 |
| 101 | Achieving Eco-Compatible Organic Solar Cells with Efficiency >16.5% Based on an Iridium Complex-Incorporated Polymer Donor. <i>Solar Rrl</i> , 2020 , 4, 2000156 | 7.1 | 29 |
| 100 | A binary solvent system for improved liquid phase exfoliation of pristine graphene materials. <i>Carbon</i> , 2015 , 94, 405-411 | 10.4 | 28 |
| 99 | Waterborne, semicrystalline, pressure-sensitive adhesives with temperature-responsiveness and optimum properties. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 443-51 | 9.5 | 27 |
| 98 | A conjugated donor-acceptor block copolymer enables over 11% efficiency for single-component polymer solar cells. <i>Joule</i> , 2021 , 5, 1800-1815 | 27.8 | 27 |
| 97 | Optimising the efficiency of carbazole co-polymer solar-cells by control over the metal cathode electrode. <i>Organic Electronics</i> , 2012 , 13, 1401-1408 | 3.5 | 26 |
| 96 | Importance of Molecular Friction in a Soft Polymer Nanotube Nanocomposite. <i>Macromolecules</i> , 2008 , 41, 7656-7661 | 5.5 | 26 |
| 95 | Synthesis of EVA-g-MAH and its compatibilization effect to PA11/PVC blends. <i>Journal of Materials Science</i> , 2007 , 42, 3398 | 4.3 | 26 |
| 94 | Halogen-substituted fullerene derivatives for interface engineering of perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 21368-21378 | 13 | 26 |
| 93 | Comparative indoor and outdoor stability measurements of polymer based solar cells. <i>Scientific Reports</i> , 2017 , 7, 1305 | 4.9 | 25 |
| 92 | Non-fullerene acceptor fibrils enable efficient ternary organic solar cells with 16.6% efficiency. <i>Science China Chemistry</i> , 2020 , 63, 1461-1468 | 7.9 | 25 |

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| 91 | Competition between substrate-mediated H ₂ stacking and surface-mediated T(g) depression in ultrathin conjugated polymer films. <i>European Physical Journal E</i> , 2012 , 35, 9807 | 1.5 | 25 |
| 90 | High efficiency arrays of polymer solar cells fabricated by spray-coating in air. <i>Progress in Photovoltaics: Research and Applications</i> , 2016 , 24, 275-282 | 6.8 | 25 |
| 89 | Modulation of J-Aggregation of Nonfullerene Acceptors toward Near-Infrared Absorption and Enhanced Efficiency. <i>Macromolecules</i> , 2020 , 53, 3747-3755 | 5.5 | 24 |
| 88 | Dependence on material choice of degradation of organic solar cells following exposure to humid air. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016 , 54, 216-224 | 2.6 | 24 |
| 87 | Deviations of the glass transition temperature in amorphous conjugated polymer thin films. <i>Physical Review E</i> , 2013 , 88, 022601 | 2.4 | 24 |
| 86 | Eliminating Light-Soaking Instability in Planar Heterojunction Perovskite Solar Cells by Interfacial Modifications. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33144-33152 | 9.5 | 24 |
| 85 | Regulating the morphology of fluorinated non-fullerene acceptor and polymer donor via binary solvent mixture for high efficiency polymer solar cells. <i>Science China Chemistry</i> , 2019 , 62, 1221-1229 | 7.9 | 23 |
| 84 | Trap passivation and efficiency improvement of perovskite solar cells by a guanidinium additive. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 1357-1364 | 7.8 | 23 |
| 83 | Ligand-Exchange of Low-Temperature Synthesized CsPbBr ₃ Perovskite toward High-Efficiency Light-Emitting Diodes. <i>Small Methods</i> , 2019 , 3, 1800489 | 12.8 | 23 |
| 82 | Organic photovoltaic devices incorporating a molybdenum oxide hole-extraction layer deposited by spray-coating from an ammonium molybdate tetrahydrate precursor. <i>Organic Electronics</i> , 2014 , 15, 692-700 | 3.5 | 23 |
| 81 | Air processed organic photovoltaic devices incorporating a MoO _x anode buffer layer. <i>Applied Physics Letters</i> , 2013 , 102, 183303 | 3.4 | 23 |
| 80 | The impacts of PbI ₂ purity on the morphology and device performance of one-step spray-coated planar heterojunction perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 436-443 | 5.8 | 23 |
| 79 | Solution-processed Graphene-MoS ₂ heterostructure for efficient hole extraction in organic solar cells. <i>Carbon</i> , 2019 , 142, 156-163 | 10.4 | 23 |
| 78 | Organic Ligands Armored ZnO Enhances Efficiency and Stability of CsPbI ₃ Perovskite Solar Cells. <i>Advanced Science</i> , 2020 , 7, 2000421 | 13.6 | 22 |
| 77 | The Intrinsic Role of Molecular Mass and Polydispersity Index in High-Performance Non-Fullerene Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2002709 | 21.8 | 22 |
| 76 | Cold-Aging and Solvent Vapor Mediated Aggregation Control toward 18% Efficiency Binary Organic Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2002000 | 21.8 | 22 |
| 75 | Vertical stratification and its impact on device performance in a polycarbazole based copolymer solar cells. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 4007-4015 | 7.1 | 21 |
| 74 | Impact of fluorine substitution upon the photovoltaic properties of benzothiadiazole-fluorene alternate copolymers. <i>RSC Advances</i> , 2015 , 5, 46386-46394 | 3.7 | 21 |

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|----|---|------|----|
| 73 | Cross-linked network development in compatibilized alkyd/acrylic hybrid latex films for the creation of hard coatings. <i>Langmuir</i> , 2010 , 26, 14323-33 | 4 | 20 |
| 72 | TDI/TiO Hybrid Networks for Superhydrophobic Coatings with Superior UV Durability and Cation Adsorption Functionality. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 7488-7497 | 9.5 | 19 |
| 71 | Evolution of molecular aggregation in bar-coated non-fullerene organic solar cells. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 1062-1070 | 7.8 | 19 |
| 70 | Bright perovskite light-emitting diodes with improved film morphology and reduced trap density via surface passivation using quaternary ammonium salts. <i>Organic Electronics</i> , 2019 , 67, 187-193 | 3.5 | 18 |
| 69 | Facile preparation of pristine graphene using urea/glycerol as efficient stripping agents. <i>Nano Research</i> , 2018 , 11, 820-830 | 10 | 18 |
| 68 | Versatile Device Architectures for High-Performing Light-Soaking-Free Inverted Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 32678-32687 | 9.5 | 17 |
| 67 | Alkoxythiophene and alkylthiothiophene bridges enhance the performance of ADBA electron acceptors. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 492-495 | 7.8 | 16 |
| 66 | Recent progress and prospects of integrated perovskite/organic solar cells. <i>Applied Physics Reviews</i> , 2020 , 7, 031303 | 17.3 | 16 |
| 65 | Asymmetric and Halogenated Fused-Ring Electron Acceptor for Efficient Organic Solar Cells. <i>Advanced Functional Materials</i> , 2021 , 31, 2102189 | 15.6 | 16 |
| 64 | Constructing enhanced pseudocapacitive Li ⁺ intercalation via multiple ionically bonded interfaces toward advanced lithium storage. <i>Energy Storage Materials</i> , 2020 , 24, 138-146 | 19.4 | 16 |
| 63 | Enhancing the efficiency of PTB7-Th:COi8DFIC-based ternary solar cells with versatile third components. <i>Applied Physics Reviews</i> , 2019 , 6, 041405 | 17.3 | 15 |
| 62 | High-performance all-small-molecule organic solar cells without interlayers. <i>Energy and Environmental Science</i> , 2021 , 14, 3174-3183 | 35.4 | 15 |
| 61 | Highly Efficient and Stable All-Polymer Solar Cells Enabled by Near-Infrared Isomerized Polymer Acceptors. <i>Chemistry of Materials</i> , 2021 , 33, 761-773 | 9.6 | 15 |
| 60 | High-Performance Ladder-Type Heteroheptacene-Based Nonfullerene Acceptors Enabled by Asymmetric Cores with Enhanced Noncovalent Intramolecular Interactions. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 19314-19323 | 16.4 | 15 |
| 59 | Molecular Ordering and Performance of Ternary Nonfullerene Organic Solar Cells via Bar-Coating in Air with an Efficiency over 13. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35827-35834 | 9.5 | 14 |
| 58 | Heating induced aggregation in non-fullerene organic solar cells towards high performance. <i>Journal of Energy Chemistry</i> , 2021 , 54, 131-137 | 12 | 14 |
| 57 | Temperature Induced Aggregation of Organic Semiconductors. <i>Chemistry - A European Journal</i> , 2021 , 27, 2908-2919 | 4.8 | 14 |
| 56 | PEDOT:PSS-Free Polymer Non-Fullerene Polymer Solar Cells with Efficiency up to 18.60% Employing a Binary-Solvent-Chlorinated ITO Anode. <i>Advanced Functional Materials</i> , 2106846 | 15.6 | 14 |

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| 55 | Improved Performance of Perovskite Light-Emitting Diodes by Dual Passivation with an Ionic Additive. <i>ACS Applied Energy Materials</i> , 2019 , 2, 3336-3342 | 6.1 | 13 |
| 54 | Sodium bromide additive improved film morphology and performance in perovskite light-emitting diodes. <i>Applied Physics Letters</i> , 2017 , 111, 053301 | 3.4 | 13 |
| 53 | Improving Photovoltaic Performance of Non-Fullerene Polymer Solar Cells Enables by Fine-Tuning Blend Microstructure via Binary Solvent Mixtures. <i>Advanced Functional Materials</i> , 2021 , 31, 2008767 | 15.6 | 13 |
| 52 | Simultaneously Enhanced Efficiency and Operational Stability of Nonfullerene Organic Solar Cells via Solid-Additive-Mediated Aggregation Control. <i>Small</i> , 2021 , 17, e2102558 | 11 | 13 |
| 51 | Dopant-free polymeric hole transport materials for efficient CsPbI ₂ Br perovskite cells with a fill factor exceeding 84%. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 8507-8514 | 7.1 | 12 |
| 50 | Preparation and structural characterization of nanocrystalline poly(vinyl chloride). <i>Journal of Applied Polymer Science</i> , 2004 , 91, 563-569 | 2.9 | 12 |
| 49 | Stability Of Non-Fullerene Electron Acceptors and Their Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2021 , 31, 2104552 | 15.6 | 12 |
| 48 | Co ₃ O ₄ /C/graphene nanocomposites as novel anode materials for high capacity lithium ion batteries. <i>RSC Advances</i> , 2015 , 5, 73677-73683 | 3.7 | 11 |
| 47 | Fabricating high performance conventional and inverted polymer solar cells by spray coating in air. <i>Vacuum</i> , 2017 , 139, 154-158 | 3.7 | 11 |
| 46 | An alternative approach to the modification of talc for the fabrication of polypropylene/talc composites. <i>Journal of Applied Polymer Science</i> , 2007 , 106, 386-393 | 2.9 | 11 |
| 45 | Contrasting Effects of Organic Chloride Additives on Performance of Direct and Inverted Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 37833-37841 | 9.5 | 10 |
| 44 | Thickness-dependent glass transition temperature and charge mobility in cross-linked polyfluorene thin films. <i>Physical Review E</i> , 2016 , 94, 052503 | 2.4 | 10 |
| 43 | Preparation and properties of compatibilized PVC/SMA-g-PA6 blends. <i>Journal of Applied Polymer Science</i> , 2004 , 94, 432-439 | 2.9 | 10 |
| 42 | An effective surface modification strategy with high reproducibility for simultaneously improving efficiency and stability of inverted MA-free perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 21476-21487 | 13 | 9 |
| 41 | Baseplate Temperature-Dependent Vertical Composition Gradient in Pseudo-Bilayer Films for Printing Non-Fullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2102135 | 21.8 | 9 |
| 40 | Alkyl Chain Tuning of Non-fullerene Electron Acceptors toward 18.2% Efficiency Binary Organic Solar Cells. <i>Chemistry of Materials</i> , | 9.6 | 9 |
| 39 | . <i>Journal of Display Technology</i> , 2016 , 12, 583-588 | | 9 |
| 38 | Tuning of the Interconnecting Layer for Monolithic Perovskite/Organic Tandem Solar Cells with Record Efficiency Exceeding 21. <i>Nano Letters</i> , 2021 , 21, 7845-7854 | 11.5 | 8 |

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| 37 | A chemical sensor based on a photonic-crystal L3 nanocavity defined in a silicon-nitride membrane. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 8700-8706 | 7.1 | 7 |
| 36 | Polymer-based solar cells having an active area of 1.6 cm ² fabricated via spray coating. <i>APL Materials</i> , 2015 , 3, 126108 | 5.7 | 7 |
| 35 | Thiophene Terminated Fullerene Derivatives for Interfacial Modification toward High Efficiency MAPbI ₃ Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2020 , 3, 9824-9832 | 6.1 | 7 |
| 34 | Mesoporous silica hybrids as an antireflective coating to enhance light harvesting and achieve over 16% efficiency of organic solar cells. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 14962-14969 | 7.1 | 7 |
| 33 | Correlating Nanoscale Morphology with Device Performance in Conventional and Inverted PffBT4T-2OD:PC71BM Polymer Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 3505-3512 | 6.1 | 7 |
| 32 | Remove the water-induced traps toward improved performance in organic solar cells. <i>Science China Materials</i> , 2021 , 64, 2629-2644 | 7.1 | 7 |
| 31 | Two similar near-infrared (IR) non-fullerene acceptors as near IR sensitizers for ternary solar cells. <i>Organic Electronics</i> , 2020 , 85, 105880 | 3.5 | 6 |
| 30 | Improved efficiency in fullerene and non-fullerene polymer solar cells having an interdigitated interface with the electron transport layer. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 1859-1865 | 7.8 | 6 |
| 29 | Methylammonium-Mediated Crystallization of Cesium-Based 2D/3D Perovskites toward High-Efficiency Light-Emitting Diodes. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 43452-43459 | 9.5 | 6 |
| 28 | Minimizing the Thickness of Ethoxylated Polyethylenimine to Produce Stable Low-Work Function Interface for Nonfullerene Organic Solar Cells. <i>Advanced Energy and Sustainability Research</i> , 2021 , 2, 2000094 | 1.6 | 6 |
| 27 | Surface and Interface Modified Thermal, Structural and Charge Transport Properties in Conjugated Polymer Thin Films. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600084 | 4.6 | 5 |
| 26 | Instability of hydrophobic and viscoelastic polymer thin films in water at room temperature. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 415101 | 1.8 | 5 |
| 25 | Photophysics and morphology of a polyfluorene donor-acceptor triblock copolymer for solar cells. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013 , 51, 1705-1718 | 2.6 | 5 |
| 24 | Study on morphology of compatibilized poly (vinyl chloride)/ultrafine polyamide-6 blends by styrene-maleic anhydride. <i>Journal of Applied Polymer Science</i> , 2005 , 97, 850-854 | 2.9 | 5 |
| 23 | Self-suspended polyaniline containing self-dissolved lyotropic liquid crystal with electrical conductivity. <i>Journal of Polymer Science Part A</i> , 2016 , 54, 3578-3582 | 2.5 | 4 |
| 22 | Non-fullerene acceptor pre-aggregates enable high efficiency pseudo-bulk heterojunction organic solar cells. <i>Science China Chemistry</i> , 2021 , 64, 12000094 | 7.9 | 4 |
| 21 | Enhanced Efficiency and Stability of Quasi-2D Perovskite Light-Emitting Diodes with Crosslinkable Alkenyl Amine Cations. <i>Advanced Optical Materials</i> , 2021 , 9, 2101475 | 8.1 | 4 |
| 20 | Bilayer broadband antireflective coating to achieve planar heterojunction perovskite solar cells with 23.9% efficiency. <i>Science China Materials</i> , 2021 , 64, 789-797 | 7.1 | 4 |

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| 19 | Hot-Casting Boosts Efficiency of Halogen-Free Solvent Processed Non-Fullerene Organic Solar Cells. <i>Advanced Functional Materials</i> ,2105794 | 15.6 | 4 |
| 18 | Simultaneous Enhanced Device Efficiency and Color Neutrality in Semitransparent Organic Photovoltaics Employing a Synergy of Ternary Strategy and Optical Engineering. <i>Advanced Functional Materials</i> ,2200107 | 15.6 | 4 |
| 17 | Triisopropylsilylacetylene-functionalised anthracene-alt-benzothiadiazole copolymers for application in bulk heterojunction solar cells. <i>RSC Advances</i> , 2015 , 5, 101607-101615 | 3.7 | 3 |
| 16 | Solid-state cooling by elastocaloric polymer with uniform chain-lengths.. <i>Nature Communications</i> , 2022 , 13, 9 | 17.4 | 3 |
| 15 | Reduced miscibility between highly compatible non-fullerene acceptor and donor enables efficient ternary organic solar cells. <i>Polymer</i> , 2021 , 236, 124322 | 3.9 | 3 |
| 14 | Heating-induced aggregation control for efficient sequential-cast organic solar cells. <i>Aggregate</i> ,e104 | 22.9 | 3 |
| 13 | High-Performance Ladder-Type Heteroheptacene-Based Nonfullerene Acceptors Enabled by Asymmetric Cores with Enhanced Noncovalent Intramolecular Interactions. <i>Angewandte Chemie</i> , 2021 , 133, 19463-19472 | 3.6 | 3 |
| 12 | Facile fabrication of robust and healable superhydrophobic cotton fabric with flower-like Ni(OH) ₂ @ODA micro-nanoparticles. <i>Cellulose</i> , 2021 , 28, 581-592 | 5.5 | 3 |
| 11 | Hydrothermally Treated TiO ₂ Nanorods as Electron Transport Layer in Planar Perovskite Solar Cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021 , 218, 2000238 | 1.6 | 3 |
| 10 | Fine-Tuning Aggregation of Nonfullerene Acceptor Enables High-Efficiency Organic Solar Cells. <i>Small Structures</i> , 2021 , 2, 2100055 | 8.7 | 3 |
| 9 | Binary Additive Engineering Enables Efficient Perovskite Solar Cells via Spray-Coating in Air. <i>ACS Applied Energy Materials</i> , | 6.1 | 3 |
| 8 | Bulk Heterojunction Morphology Control and Characterization 2014 , 317-366 | | 2 |
| 7 | Quasi-2D bromide perovskite nanocrystals with narrow phase distribution prepared using ternary organic cations for sky-blue light-emitting diodes. <i>Applied Physics Letters</i> , 2021 , 118, 083302 | 3.4 | 2 |
| 6 | Polymer/non-fullerene acceptor bulk heterojunction nanoparticles for efficient photocatalytic hydrogen production from water. <i>Polymer</i> , 2022 , 244, 124667 | 3.9 | 2 |
| 5 | Revealing the microstructure-related light-induced degradation for all-polymer solar cells based on regioisomerized end-capping group acceptors. <i>Journal of Materials Chemistry C</i> , 2022 , 10, 1246-1258 | 7.1 | 1 |
| 4 | An asymmetry strategy to reduce excessive aggregation of brominated non-fullerene acceptors for enhanced efficiency of organic solar cells. <i>Organic Electronics</i> , 2022 , 100, 106357 | 3.5 | 1 |
| 3 | Efficient Hole Transfer via CsPbBr ₃ Quantum Dots Doping toward High-Performance Organic Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2100499 | 7.1 | 1 |
| 2 | Photoconductive Charge Transfer Complexes as Charge Transport Layers for High Performance Inverted Perovskite Solar Cells. <i>Advanced Functional Materials</i> ,2201935 | 15.6 | 1 |

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