# Tao Wang

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 167 papers | 9,344 citations | 36299 51 h-index | 46795 89 g-index |
| 168 all docs | 168 docs citations | 168 times ranked | 9431 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 50â€Fold EQE Improvement up to 6.27% of Solutionâ€Processed Allâ€Inorganic Perovskite CsPbBr<sub>3</sub> QLEDs via Surface Ligand Density Control. Advanced Materials, 2017, 29, 1603885. | 21.0 | 982 |
| 2 | A History and Perspective of Nonâ€Fullerene Electron Acceptors for Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2003570. | 19.5 | 323 |
| 3 | Multifunctional Enhancement for Highly Stable and Efficient Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2005776. | 14.9 | 273 |
| 4 | A Layer-by-Layer Architecture for Printable Organic Solar Cells Overcoming the Scaling Lag of Module Efficiency. Joule, 2020, 4, 407-419. | 24.0 | 272 |
| 5 | Molecular engineering of conjugated polymers for efficient hole transport and defect passivation in perovskite solar cells. Nano Energy, 2018, 45, 28-36. | 16.0 | 241 |
| 6 | Molecular Order Control of Non-fullerene Acceptors for High-Efficiency Polymer Solar Cells. Joule, 2019, 3, 819-833. | 24.0 | 209 |
| 7 | Simultaneous enhanced efficiency and thermal stability in organic solar cells from a polymer acceptor additive. Nature Communications, 2020, 11, 1218. | 12.8 | 197 |
| 8 | A universal layer-by-layer solution-processing approach for efficient non-fullerene organic solar cells. Energy and Environmental Science, 2019, 12, 384-395. | 30.8 | 193 |
| 9 | A review of non-fullerene polymer solar cells: from device physics to morphology control. Reports on Progress in Physics, 2019, 82, 036601. | 20.1 | 184 |
| 10 | From fullerene acceptors to non-fullerene acceptors: prospects and challenges in the stability of organic solar cells. Journal of Materials Chemistry A, 2019, 7, 23361-23377. | 10.3 | 163 |
| 11 | Carbonâ€“Oxygenâ€Bridged Ladderâ€Type Building Blocks for Highly Efficient Nonfullerene Acceptors. Advanced Materials, 2019, 31, e1804790. | 21.0 | 139 |
| 12 | Balancing the efficiency, stability, and cost potential for organic solar cells via a new figure of merit. Joule, 2021, 5, 1209-1230. | 24.0 | 138 |
| 13 | Correlating Structure with Function in Thermally Annealed PCDTBT:PC<sub>70</sub>BM Photovoltaic Blends. Advanced Functional Materials, 2012, 22, 1399-1408. | 14.9 | 131 |
| 14 | Conjugated Small Molecule for Efficient Hole Transport in Highâ€Performance pâ€iâ€n Type Perovskite Solar Cells. Advanced Functional Materials, 2017, 27, 1702613. | 14.9 | 131 |
| 15 | Waterborne, Nanocomposite Pressure-Sensitive Adhesives with High Tack Energy, Optical Transparency, and Electrical Conductivity. Advanced Materials, 2006, 18, 2730-2734. | 21.0 | 130 |
| 16 | Ionic Additive Engineering Toward Highâ€Efficiency Perovskite Solar Cells with Reduced Grain Boundaries and Trap Density. Advanced Functional Materials, 2018, 28, 1801985. | 14.9 | 130 |
| 17 | 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<sub>2</sub> layer. Journal of Materials Chemistry A, 2017, 5, 9402-9411. | 10.3 | 127 |
| 18 | The development of nanoscale morphology in polymer:fullerene photovoltaic blends during solvent casting. Soft Matter, 2010, 6, 4128. | 2.7 | 121 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Solutionâ€Processed Polymer Solar Cells with over 17% Efficiency Enabled by an Iridium Complexation Approach. Advanced Energy Materials, 2020, 10, 2000590. | 19.5 | 117 |
| 20 | Conjugatedâ€Polymer Blends for Organic Photovoltaics: Rational Control of Vertical Stratification for High Performance. Advanced Materials, 2017, 29, 1601674. | 21.0 | 114 |
| 21 | A Phase Diagram of the P3HT:PCBM Organic Photovoltaic System: Implications for Device Processing and Performance. Macromolecules, 2011, 44, 2908-2917. | 4.8 | 109 |
| 22 | Evolution of Structure, Optoelectronic Properties, and Device Performance of Polythiophene:Fullerene Solar Cells During Thermal Annealing. Advanced Functional Materials, 2011, 21, 1383-1390. | 14.9 | 109 |
| 23 | Recent progress and challenges of organometal halide perovskite solar cells. Reports on Progress in Physics, 2016, 79, 026501. | 20.1 | 107 |
| 24 | Ladder-Type Dithienonaphthalene-Based Small-Molecule Acceptors for Efficient Nonfullerene Organic Solar Cells. Chemistry of Materials, 2017, 29, 7942-7952. | 6.7 | 105 |
| 25 | The Nanoscale Morphology of a PCDTBT:PCBM Photovoltaic Blend. Advanced Energy Materials, 2011, 1, 499-504. | 19.5 | 99 |
| 26 | Solutionâ€Processed Centimeterâ€Scale Highly Aligned Organic Crystalline Arrays for Highâ€Performance Organic Fieldâ€Effect Transistors. Advanced Materials, 2020, 32, e1908388. | 21.0 | 99 |
| 27 | Aggregation of non-fullerene acceptors in organic solar cells. Journal of Materials Chemistry A, 2020, 8, 15607-15619. | 10.3 | 99 |
| 28 | Achieving over 11% power conversion efficiency in PffBT4T-2OD-based ternary polymer solar cells with enhanced open-circuit-voltage and suppressed charge recombination. Nano Energy, 2018, 44, 155-163. | 16.0 | 94 |
| 29 | Large deformation behavior and effective network chain density of swollen poly(N-isopropylacrylamide)â€“Laponite nanocomposite hydrogels. Soft Matter, 2012, 8, 774-783. | 2.7 | 92 |
| 30 | Fabricating High Performance, Donorâ€“Acceptor Copolymer Solar Cells by Sprayâ€Coating in Air. Advanced Energy Materials, 2013, 3, 505-512. | 19.5 | 85 |
| 31 | Design and fabrication of colloidal polymer nanocomposites. Advances in Colloid and Interface Science, 2009, 147-148, 319-332. | 14.7 | 80 |
| 32 | Soft polymer and nano-clay supracolloidal particles in adhesives: synergistic effects on mechanical properties. Soft Matter, 2009, 5, 3842. | 2.7 | 79 |
| 33 | A conjugated donor-acceptor block copolymer enables over 11% efficiency for single-component polymer solar cells. Joule, 2021, 5, 1800-1815. | 24.0 | 77 |
| 34 | Chlorinated Fullerene Dimers for Interfacial Engineering Toward Stable Planar Perovskite Solar Cells with 22.3% Efficiency. Advanced Energy Materials, 2020, 10, 2000615. | 19.5 | 76 |
| 35 | Current Status of Outdoor Lifetime Testing of Organic Photovoltaics. Advanced Science, 2018, 5, 1800434. | 11.2 | 73 |
| 36 | Environmentally durable superhydrophobic surfaces with robust photocatalytic self-cleaning and self-healing properties prepared via versatile film deposition methods. Journal of Colloid and Interface Science, 2018, 527, 107-116. | 9.4 | 69 |

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|---|---|---|---|
| 37 | Rationalizing Phase Transitions with Thermal Annealing Temperatures for P3HT:PCBM Organic Photovoltaic Devices. Macromolecules, 2012, 45, 1499-1508. | 4.8 | 68 |
| 38 | Lightâ€Soakingâ€Free Inverted Polymer Solar Cells with an Efficiency of 10.5% by Compositional and Surface Modifications to a Lowâ€Temperatureâ€Processed TiO<sub>2</sub> Electronâ€Transport Layer. Advanced Materials, 2017, 29, 1604044. | 21.0 | 68 |
| 39 | Correlating molecular morphology with optoelectronic function in solar cells based on low band-gap copolymer:fullerene blends. Journal of Materials Chemistry C, 2013, 1, 7266. | 5.5 | 67 |
| 40 | High-performance all-polymer solar cells with only 0.47 eV energy loss. Science China Chemistry, 2020, 63, 1449-1460. | 8.2 | 62 |
| 41 | Stability Of Nonâ€Fullerene Electron Acceptors and Their Photovoltaic Devices. Advanced Functional Materials, 2021, 31, 2104552. | 14.9 | 58 |
| 42 | Poly(9-vinylcarbazole) as a hole transport material for efficient and stable inverted planar heterojunction perovskite solar cells. Solar Energy Materials and Solar Cells, 2017, 163, 210-217. | 6.2 | 57 |
| 43 | Retarding the Crystallization of a Nonfullerene Electron Acceptor for Highâ€Performance Polymer Solar Cells. Advanced Functional Materials, 2019, 29, 1807662. | 14.9 | 57 |
| 44 | Spontaneous open-circuit voltage gain of fully fabricated organic solar cells caused by elimination of interfacial energy disorder. Energy and Environmental Science, 2019, 12, 2518-2528. | 30.8 | 57 |
| 45 | Influences of Non-fullerene Acceptor Fluorination on Three-Dimensional Morphology and Photovoltaic Properties of Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 26194-26203. | 8.0 | 57 |
| 46 | Coldâ€Aging and Solvent Vapor Mediated Aggregation Control toward 18% Efficiency Binary Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102000. | 19.5 | 57 |
| 47 | pH Dependence of the Properties of Waterborne Pressure-Sensitive Adhesives Containing Acrylic Acid. ACS Applied Materials & Interfaces, 2009, 1, 631-639. | 8.0 | 56 |
| 48 | Morphology Development in Amorphous Polymer:Fullerene Photovoltaic Blend Films During Solution Casting. Advanced Functional Materials, 2014, 24, 659-667. | 14.9 | 55 |
| 49 | Highâ€Performance Ladderâ€Type Heteroheptaceneâ€Based Nonfullerene Acceptors Enabled by Asymmetric Cores with Enhanced Noncovalent Intramolecular Interactions. Angewandte Chemie - International Edition, 2021, 60, 19314-19323. | 13.8 | 54 |
| 50 | Contrasting Effects of Energy Transfer in Determining Efficiency Improvements in Ternary Polymer Solar Cells. Advanced Functional Materials, 2018, 28, 1704212. | 14.9 | 53 |
| 51 | PCDTBT based solar cells: one year of operation under real-world conditions. Scientific Reports, 2016, 6, 21632. | 3.3 | 52 |
| 52 | Restrained light-soaking and reduced hysteresis in perovskite solar cells employing a helical perylene diimide interfacial layer. Journal of Materials Chemistry A, 2018, 6, 10379-10387. | 10.3 | 51 |
| 53 | 13.9% Efficiency Ternary Nonfullerene Organic Solar Cells Featuring Low-Structural Order. ACS Energy Letters, 2019, 4, 2378-2385. | 17.4 | 51 |
| 54 | Spectral Tuning of Efficient CsPbBr<sub>x</sub>Cl<sub>3â€“x</sub> Blue Light-Emitting Diodes via Halogen Exchange Triggered by Benzenesulfonates. Chemistry of Materials, 2020, 32, 3211-3218. | 6.7 | 50 |

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|---|---|---|---|
| 55 | Alkyl Chain Tuning of Non-fullerene Electron Acceptors toward 18.2% Efficiency Binary Organic Solar Cells. Chemistry of Materials, 2021, 33, 8854-8862. | 6.7 | 50 |
| 56 | Correlating Threeâ€dimensional Morphology With Function in PBDBâ€T:ITâ€M Nonâ€Fullerene Organic Solar Cells. Solar Rrl, 2018, 2, 1800114. | 5.8 | 49 |
| 57 | Fluorinated solid additives enable high efficiency non-fullerene organic solar cells. Journal of Materials Chemistry A, 2020, 8, 4230-4238. | 10.3 | 47 |
| 58 | The Intrinsic Role of Molecular Mass and Polydispersity Index in Highâ€Performance Nonâ€Fullerene Polymer Solar Cells. Advanced Energy Materials, 2021, 11, . | 19.5 | 47 |
| 59 | Highly Efficient and Stable All-Polymer Solar Cells Enabled by Near-Infrared Isomerized Polymer Acceptors. Chemistry of Materials, 2021, 33, 761-773. | 6.7 | 47 |
| 60 | Protein Nanopatterning on Self-Organized Poly(styrene-b-isoprene) Thin Film Templates. Langmuir, 2009, 25, 4526-4534. | 3.5 | 46 |
| 61 | Grain size dependence of degradation of aluminium/calcium cathodes in organic solar cells following exposure to humid air. Solar Energy Materials and Solar Cells, 2015, 140, 25-32. | 6.2 | 45 |
| 62 | Simultaneously Enhanced Efficiency and Operational Stability of Nonfullerene Organic Solar Cells via Solidâ€Additiveâ€Mediated Aggregation Control. Small, 2021, 17, e2102558. | 10.0 | 45 |
| 63 | Correlating the electron-donating core structure with morphology and performance of carbon oxygen-bridged ladder-type non-fullerene acceptor based organic solar cells. Nano Energy, 2019, 61, 318-326. | 16.0 | 43 |
| 64 | Achieving Ecoâ€Compatible Organic Solar Cells with Efficiency >16.5% Based on an Iridium Complexâ€Incorporated Polymer Donor. Solar Rrl, 2020, 4, 2000156. | 5.8 | 43 |
| 65 | High-performance all-small-molecule organic solar cells without interlayers. Energy and Environmental Science, 2021, 14, 3174-3183. | 30.8 | 43 |
| 66 | Morphology and efficiency enhancements of PTB7-Th:ITIC nonfullerene organic solar cells processed via solvent vapor annealing. Journal of Energy Chemistry, 2019, 37, 148-156. | 12.9 | 42 |
| 67 | Anthracene-based donorâ€“acceptor low band gap polymers for application in solar cells. Chemical Communications, 2013, 49, 2252. | 4.1 | 41 |
| 68 | The role of dynamic measurements in correlating structure with optoelectronic properties in polymerâ€‰:â€‰fullerene bulk-heterojunction solar cells. Reports on Progress in Physics, 2013, 76, 022501. | 20.1 | 41 |
| 69 | Efficient planar heterojunction perovskite solar cells with weak hysteresis fabricated via bar coating. Solar Energy Materials and Solar Cells, 2017, 159, 412-417. | 6.2 | 41 |
| 70 | Halogen-substituted fullerene derivatives for interface engineering of perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 21368-21378. | 10.3 | 40 |
| 71 | Tuning of the Interconnecting Layer for Monolithic Perovskite/Organic Tandem Solar Cells with Record Efficiency Exceeding 21%. Nano Letters, 2021, 21, 7845-7854. | 9.1 | 40 |
| 72 | PEDOT:PSSâ€Free Polymer Nonâ€Fullerene Polymer Solar Cells with Efficiency up to 18.60% Employing a Binaryâ€Solventâ€Chlorinated ITO Anode. Advanced Functional Materials, 2021, 31, 2106846. | 14.9 | 40 |

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|---|---|---|---|
| 73 | Ligandâ€Exchange of Lowâ€Temperature Synthesized CsPbBr<sub>3</sub> Perovskite toward Highâ€Efficiency Lightâ€Emitting Diodes. Small Methods, 2019, 3, 1800489. | 8.6 | 38 |
| 74 | Modulation of J-Aggregation of Nonfullerene Acceptors toward Near-Infrared Absorption and Enhanced Efficiency. Macromolecules, 2020, 53, 3747-3755. | 4.8 | 38 |
| 75 | Organic photovoltaic devices with enhanced efficiency processed from non-halogenated binary solvent blends. Organic Electronics, 2015, 21, 216-222. | 2.6 | 37 |
| 76 | Non-fullerene acceptor fibrils enable efficient ternary organic solar cells with 16.6% efficiency. Science China Chemistry, 2020, 63, 1461-1468. | 8.2 | 37 |
| 77 | Organic Ligands Armored ZnO Enhances Efficiency and Stability of CsPbI<sub>2</sub>Br Perovskite Solar Cells. Advanced Science, 2020, 7, 2000421. | 11.2 | 35 |
| 78 | Competition between substrate-mediated Ï€-Ï€ stacking and surface-mediated Tg depression in ultrathin conjugated polymer films. European Physical Journal E, 2012, 35, 9807. | 1.6 | 34 |
| 79 | Solution-processed Graphene-MoS2 heterostructure for efficient hole extraction in organic solar cells. Carbon, 2019, 142, 156-163. | 10.3 | 34 |
| 80 | The impacts of PbI<sub>2</sub> purity on the morphology and device performance of one-step spray-coated planar heterojunction perovskite solar cells. Sustainable Energy and Fuels, 2018, 2, 436-443. | 4.9 | 34 |
| 81 | A Molecular Mechanism for Toughening and Strengthening Waterborne Nanocomposites. Advanced Materials, 2008, 20, 90-94. | 21.0 | 33 |
| 82 | Recent progress and prospects of integrated perovskite/organic solar cells. Applied Physics Reviews, 2020, 7, . | 11.3 | 33 |
| 83 | Asymmetric and Halogenated Fusedâ€Ring Electron Acceptor for Efficient Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2102189. | 14.9 | 33 |
| 84 | Baseplate Temperatureâ€Dependent Vertical Composition Gradient in Pseudoâ€Bilayer Films for Printing Nonâ€Fullerene Organic Solar Cells. Advanced Energy Materials, 2021, 11, 2102135. | 19.5 | 33 |
| 85 | Solid-state cooling by elastocaloric polymer with uniform chain-lengths. Nature Communications, 2022, 13, 9. | 12.8 | 33 |
| 86 | Comparative indoor and outdoor stability measurements of polymer based solar cells. Scientific Reports, 2017, 7, 1305. | 3.3 | 32 |
| 87 | Regulating the morphology of fluorinated non-fullerene acceptor and polymer donor via binary solvent mixture for high efficiency polymer solar cells. Science China Chemistry, 2019, 62, 1221-1229. | 8.2 | 32 |
| 88 | A binary solvent system for improved liquid phase exfoliation of pristine graphene materials. Carbon, 2015, 94, 405-411. | 10.3 | 31 |
| 89 | Improving Photovoltaic Performance of Nonâ€Fullerene Polymer Solar Cells Enables by Fineâ€Tuning Blend Microstructure via Binary Solvent Mixtures. Advanced Functional Materials, 2021, 31, 2008767. | 14.9 | 31 |
| 90 | Eliminating Light-Soaking Instability in Planar Heterojunction Perovskite Solar Cells by Interfacial Modifications. ACS Applied Materials & Interfaces, 2018, 10, 33144-33152. | 8.0 | 30 |

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| 91 | Trap passivation and efficiency improvement of perovskite solar cells by a guanidinium additive. Materials Chemistry Frontiers, 2019, 3, 1357-1364. | 5.9 | 30 |
| 92 | Constructing enhanced pseudocapacitive Li+ intercalation via multiple ionically bonded interfaces toward advanced lithium storage. Energy Storage Materials, 2020, 24, 138-146. | 18.0 | 30 |
| 93 | Simultaneous Enhanced Device Efficiency and Color Neutrality in Semitransparent Organic Photovoltaics Employing a Synergy of Ternary Strategy and Optical Engineering. Advanced Functional Materials, 2022, 32, . | 14.9 | 30 |
| 94 | Synthesis of EVA-g-MAH and its compatibilization effect to PA11/PVC blends. Journal of Materials Science, 2007, 42, 3398. | 3.7 | 28 |
| 95 | Importance of Molecular Friction in a Soft Polymerâ˜Nanotube Nanocomposite. Macromolecules, 2008, 41, 7656-7661. | 4.8 | 28 |
| 96 | Waterborne, Semicrystalline, Pressure-Sensitive Adhesives with Temperature-Responsiveness and Optimum Properties. ACS Applied Materials & Interfaces, 2010, 2, 443-451. | 8.0 | 28 |
| 97 | Bright perovskite light-emitting diodes with improved film morphology and reduced trap density via surface passivation using quaternary ammonium salts. Organic Electronics, 2019, 67, 187-193. | 2.6 | 28 |
| 98 | Deviations of the glass transition temperature in amorphous conjugated polymer thin films. Physical Review E, 2013, 88, 022601. | 2.1 | 27 |
| 99 | Impact of fluorine substitution upon the photovoltaic properties of benzothiadiazole-fluorene alternate copolymers. RSC Advances, 2015, 5, 46386-46394. | 3.6 | 27 |
| 100 | High efficiency arrays of polymer solar cells fabricated by sprayâ€coating in air. Progress in Photovoltaics: Research and Applications, 2016, 24, 275-282. | 8.1 | 27 |
| 101 | Dependence on material choice of degradation of organic solar cells following exposure to humid air. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 216-224. | 2.1 | 27 |
| 102 | TDI/TiO<sub>2</sub> Hybrid Networks for Superhydrophobic Coatings with Superior UV Durability and Cation Adsorption Functionality. ACS Applied Materials & Interfaces, 2019, 11, 7488-7497. | 8.0 | 27 |
| 103 | Dopant-free polymeric hole transport materials for efficient CsPbI<sub>2</sub>Br perovskite cells with a fill factor exceeding 84%. Journal of Materials Chemistry C, 2020, 8, 8507-8514. | 5.5 | 27 |
| 104 | Optimising the efficiency of carbazole co-polymer solar-cells by control over the metal cathode electrode. Organic Electronics, 2012, 13, 1401-1408. | 2.6 | 26 |
| 105 | Organic photovoltaic devices incorporating a molybdenum oxide hole-extraction layer deposited by spray-coating from an ammonium molybdate tetrahydrate precursor. Organic Electronics, 2014, 15, 692-700. | 2.6 | 26 |
| 106 | Temperature Induced Aggregation of Organic Semiconductors. Chemistry - A European Journal, 2021, 27, 2908-2919. | 3.3 | 26 |
| 107 | Cross-Linked Network Development in Compatibilized Alkyd/Acrylic Hybrid Latex Films for the Creation of Hard Coatings. Langmuir, 2010, 26, 14323-14333. | 3.5 | 25 |
| 108 | Air processed organic photovoltaic devices incorporating a MoOx anode buffer layer. Applied Physics Letters, 2013, 102, 183303. | 3.3 | 25 |

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| 109 | Vertical stratification and its impact on device performance in a polycarbazole based copolymer solar cells. Journal of Materials Chemistry C, 2015, 3, 4007-4015. | 5.5 | 25 |
| 110 | Evolution of molecular aggregation in bar-coated non-fullerene organic solar cells. Materials Chemistry Frontiers, 2019, 3, 1062-1070. | 5.9 | 25 |
| 111 | Facile preparation of pristine graphene using urea/glycerol as efficient stripping agents. Nano Research, 2018, 11, 820-830. | 10.4 | 22 |
| 112 | Molecular Ordering and Performance of Ternary Nonfullerene Organic Solar Cells via Bar-Coating in Air with an Efficiency over 13%. ACS Applied Materials & Interfaces, 2019, 11, 35827-35834. | 8.0 | 21 |
| 113 | Alkoxythiophene and alkylthiothiophene Ï€-bridges enhance the performance of Aâ€“Dâ€“A electron acceptors. Materials Chemistry Frontiers, 2019, 3, 492-495. | 5.9 | 21 |
| 114 | Improved Performance of Perovskite Light-Emitting Diodes by Dual Passivation with an Ionic Additive. ACS Applied Energy Materials, 2019, 2, 3336-3342. | 5.1 | 21 |
| 115 | Heating induced aggregation in non-fullerene organic solar cells towards high performance. Journal of Energy Chemistry, 2021, 54, 131-137. | 12.9 | 21 |
| 116 | Enhancing the efficiency of PTB7-Th:COi8DFIC-based ternary solar cells with versatile third components. Applied Physics Reviews, 2019, 6, . | 11.3 | 20 |
| 117 | Non-fullerene acceptor pre-aggregates enable high efficiency pseudo-bulk heterojunction organic solar cells. Science China Chemistry, 2022, 65, 373-381. | 8.2 | 20 |
| 118 | Sodium bromide additive improved film morphology and performance in perovskite light-emitting diodes. Applied Physics Letters, 2017, 111, . | 3.3 | 19 |
| 119 | Versatile Device Architectures for High-Performing Light-Soaking-Free Inverted Polymer Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 32678-32687. | 8.0 | 18 |
| 120 | An effective surface modification strategy with high reproducibility for simultaneously improving efficiency and stability of inverted MA-free perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 21476-21487. | 10.3 | 18 |
| 121 | Contrasting Effects of Organic Chloride Additives on Performance of Direct and Inverted Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 37833-37841. | 8.0 | 17 |
| 122 | Hotâ€Casting Boosts Efficiency of Halogenâ€Free Solvent Processed Nonâ€Fullerene Organic Solar Cells. Advanced Functional Materials, 2021, 31, 2105794. | 14.9 | 17 |
| 123 | An alternative approach to the modification of talc for the fabrication of polypropylene/talc composites. Journal of Applied Polymer Science, 2007, 106, 386-393. | 2.6 | 16 |
| 124 | Mesoporous silica hybrids as an antireflective coating to enhance light harvesting and achieve over 16% efficiency of organic solar cells. Journal of Materials Chemistry C, 2019, 7, 14962-14969. | 5.5 | 14 |
| 125 | Thickness-dependent glass transition temperature and charge mobility in cross-linked polyfluorene thin films. Physical Review E, 2016, 94, 052503. | 2.1 | 13 |
| 126 | Fabricating high performance conventional and inverted polymer solar cells by spray coating in air. Vacuum, 2017, 139, 154-158. | 3.5 | 13 |

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|---|---|---|---|
| 127 | A Near-Infrared Polymer Acceptor Enables over 15% Efficiency for All-Polymer Solar Cells. Chinese Journal of Polymer Science (English Edition), 2022, 40, 877-888. | 3.8 | 13 |
| 128 | Preparation and structural characterization of nanocrystalline poly(vinyl chloride). Journal of Applied Polymer Science, 2004, 91, 563-569. | 2.6 | 12 |
| 129 | Preparation and properties of compatibilized PVC/SMA-g-PA6 blends. Journal of Applied Polymer Science, 2004, 94, 432-439. | 2.6 | 12 |
| 130 | Thiophene Terminated Fullerene Derivatives for Interfacial Modification toward High Efficiency MAPbI<sub>3</sub> Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 9824-9832. | 5.1 | 12 |
| 131 | Photoconductive Charge Transfer Complexes as Charge Transport Layers for High Performance Inverted Perovskite Solar Cells. Advanced Functional Materials, 2022, 32, . | 14.9 | 12 |
| 132 | Co<sub>3</sub>O<sub>4</sub>/C/graphene nanocomposites as novel anode materials for high capacity lithium ion batteries. RSC Advances, 2015, 5, 73677-73683. | 3.6 | 11 |
| 133 | Minimizing the Thickness of Ethoxylated Polyethylenimine to Produce Stable Lowâ€Work Function Interface for Nonfullerene Organic Solar Cells. Advanced Energy and Sustainability Research, 2021, 2, 2000094. | 5.8 | 11 |
| 134 | Remove the water-induced traps toward improved performance in organic solar cells. Science China Materials, 2021, 64, 2629-2644. | 6.3 | 11 |
| 135 | Facile fabrication of robust and healable superhydrophobic cotton fabric with flower-like Ni(OH)2@ODA micro-nanoparticles. Cellulose, 2021, 28, 581-592. | 4.9 | 10 |
| 136 | Bilayer broadband antireflective coating to achieve planar heterojunction perovskite solar cells with 23.9% efficiency. Science China Materials, 2021, 64, 789-797. | 6.3 | 10 |
| 137 | Heatingâ€induced aggregation control for efficient sequentialâ€cast organic solar cells. Aggregate, 2022, 3, e104. | 9.9 | 10 |
| 138 | Reduced miscibility between highly compatible non-fullerene acceptor and donor enables efficient ternary organic solar cells. Polymer, 2021, 236, 124322. | 3.8 | 10 |
| 139 | Revealing the microstructure-related light-induced degradation for all-polymer solar cells based on regioisomerized end-capping group acceptors. Journal of Materials Chemistry C, 2022, 10, 1246-1258. | 5.5 | 10 |
| 140 | Polymer-based solar cells having an active area of 1.6 cm2 fabricated via spray coating. APL Materials, 2015, 3, . | 5.1 | 9 |
| 141 | Polymer Light Emitting Diodes Powered via Paper-Mounted Electronics. Journal of Display Technology, 2016, 12, 583-588. | 1.2 | 9 |
| 142 | Highâ€Performance Ladderâ€Type Heteroheptaceneâ€Based Nonfullerene Acceptors Enabled by Asymmetric Cores with Enhanced Noncovalent Intramolecular Interactions. Angewandte Chemie, 2021, 133, 19463-19472. | 2.0 | 9 |
| 143 | Enhanced Efficiency and Stability of Quasiâ€2D Perovskite Lightâ€Emitting Diodes with Crosslinkable Alkenyl Amine Cations. Advanced Optical Materials, 2021, 9, 2101475. | 7.3 | 9 |
| 144 | Polymer/non-fullerene acceptor bulk heterojunction nanoparticles for efficient photocatalytic hydrogen production from water. Polymer, 2022, 244, 124667. | 3.8 | 9 |

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|---|---|---|---|
| 145 | A chemical sensor based on a photonic-crystal L3 nanocavity defined in a silicon-nitride membrane. Journal of Materials Chemistry C, 2014, 2, 8700-8706. | 5.5 | 8 |
| 146 | Improved efficiency in fullerene and non-fullerene polymer solar cells having an interdigitated interface with the electron transport layer. Materials Chemistry Frontiers, 2018, 2, 1859-1865. | 5.9 | 8 |
| 147 | Methylammonium-Mediated Crystallization of Cesium-Based 2D/3D Perovskites toward High-Efficiency Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2019, 11, 43452-43459. | 8.0 | 8 |
| 148 | Binary Additive Engineering Enables Efficient Perovskite Solar Cells via Spray-Coating in Air. ACS Applied Energy Materials, 2021, 4, 11496-11504. | 5.1 | 8 |
| 149 | Surface and Interface Modified Thermal, Structural and Charge Transport Properties in Conjugated Polymer Thin Films. Advanced Materials Interfaces, 2016, 3, 1600084. | 3.7 | 7 |
| 150 | Correlating Nanoscale Morphology with Device Performance in Conventional and Inverted PffBT4T-2OD:PC<sub>71</sub>BM Polymer Solar Cells. ACS Applied Energy Materials, 2018, 1, 3505-3512. | 5.1 | 7 |
| 151 | Two similar near-infrared (IR) non-fullerene acceptors as near IR sensitizers for ternary solar cells. Organic Electronics, 2020, 85, 105880. | 2.6 | 7 |
| 152 | Quasi-2D bromide perovskite nanocrystals with narrow phase distribution prepared using ternary organic cations for sky-blue light-emitting diodes. Applied Physics Letters, 2021, 118, 083302. | 3.3 | 7 |
| 153 | Fineâ€Tuning Aggregation of Nonfullerene Acceptor Enables Highâ€Efficiency Organic Solar Cells. Small Structures, 2021, 2, 2100055. | 12.0 | 7 |
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