

# Jianhua Huang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9155905/publications.pdf>

Version: 2024-02-01

35  
papers

1,447  
citations

430874

18  
h-index

377865

34  
g-index

35  
all docs

35  
docs citations

35  
times ranked

1770  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | 16% efficiency all-polymer organic solar cells enabled by a finely tuned morphology via the design of ternary blend. <i>Joule</i> , 2021, 5, 914-930.  | 24.0 | 228       |
| 2  | Solution-Processed DPP-Based Small Molecule that Gives High Photovoltaic Efficiency with Judicious Device Optimization. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 2033-2039.  | 8.0  | 163       |
| 3  | 8.78% Efficient All-Polymer Solar Cells Enabled by Polymer Acceptors Based on a $\pi$ -Embedded Electron-Deficient Unit. <i>Advanced Materials</i> , 2019, 31, e1904585.   | 21.0 | 113       |
| 4  | BN Embedded Polycyclic $\pi$ -Conjugated Systems: Synthesis, Optoelectronic Properties, and Photovoltaic Applications. <i>Frontiers in Chemistry</i> , 2018, 6, 341.   | 3.6  | 95        |
| 5  | <i>In situ</i> and <i>ex situ</i> investigations on ternary strategy and co-solvent effects towards high-efficiency organic solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 2479-2488.  | 30.8 | 84        |
| 6  | Phthalimide Polymer Donor Guests Enable over 17% Efficient Organic Solar Cells via Parallel-Like Ternary and Quaternary Strategies. <i>Advanced Energy Materials</i> , 2020, 10, 2001436.  | 19.5 | 75        |
| 7  | Additive-Assisted Control over Phase-Separated Nanostructures by Manipulating Alkylthienyl Position at Donor Backbone for Solution-Processed, Non-Fullerene, All-Small-Molecule Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 3853-3862. | 8.0  | 70        |
| 8  | Significant improvement of photovoltaic performance by embedding thiophene in solution-processed star-shaped TPA-DPP backbone. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5747.  | 10.3 | 69        |
| 9  | Benzodithiophene bridged dimeric perylene diimide amphiphiles as efficient solution-processed non-fullerene small molecules. <i>Polymer Chemistry</i> , 2013, 4, 4631.   | 3.9  | 66        |
| 10 | Fine-tuning device performances of small molecule solar cells via the more polarized DPP-attached donor units. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 14238.   | 2.8  | 53        |
| 11 | Effects of structure-manipulated molecular stacking on solid-state optical properties and device performances. <i>Polymer Chemistry</i> , 2012, 3, 2832.   | 3.9  | 41        |
| 12 | Cooperatively Tuning Phase Size and Absorption of Near IR Photons in P3HT:Perylene Diimide Solar Cells by Bay-Modifications on the Acceptor. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24212-24220.  | 3.1  | 39        |
| 13 | Semitransparent fullerene-free polymer solar cell with 44% AVT and 7% efficiency based on a new chlorinated small molecule acceptor. <i>Dyes and Pigments</i> , 2019, 166, 196-202.  | 3.7  | 35        |
| 14 | Wide band gap copolymers based on phthalimide: synthesis, characterization, and photovoltaic properties with 3.70% efficiency. <i>Polymer Chemistry</i> , 2013, 4, 2174.   | 3.9  | 28        |
| 15 | A new solution-processed diketopyrrolopyrrole donor for non-fullerene small-molecule solar cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 1869-1876.  | 10.3 | 28        |
| 16 | Fused Dithienopicenocarbazole Enabling High Mobility Dopant-Free Hole-Transporting Polymers for Efficient and Stable Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 6688-6698.  | 8.0  | 26        |
| 17 | Synthesis and charge-transporting properties of electron-deficient CN <sub>2</sub> -fluorene based $\pi$ -A copolymers. <i>Polymer Chemistry</i> , 2012, 3, 2170.  | 3.9  | 24        |
| 18 | $\pi$ -Coordination: From Chemistry to Organic Photovoltaic Materials. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100016.  | 5.8  | 24        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Structural Cutting of Non-fullerene Acceptors by Chlorination: Effects of Substituent Number on Device Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 50541-50549.                                   | 8.0  | 20        |
| 20 | Large-scale, ultra-dense and vertically standing zinc phthalocyanine "I" stacks as a hole-transporting layer on an ITO electrode. <i>Journal of Materials Chemistry</i> , 2012, 22, 23492.                                   | 6.7  | 18        |
| 21 | Effects of Halogenation in B "N Embedded Polymer Acceptors on Performance of All-Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 2733-2742.   | 8.0  | 17        |
| 22 | Terminal moiety-driven electrical performance of asymmetric small-molecule-based organic solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15688-15697.  | 10.3 | 16        |
| 23 | B "N Bridged Polymer Acceptors with 900 nm Absorption Edges Enabling High-Performance All-Polymer Solar Cells. <i>Macromolecules</i> , 2020, 53, 9529-9538.  | 4.8  | 16        |
| 24 | A Lewis acid-base chemistry approach towards narrow bandgap dye molecules. <i>Dyes and Pigments</i> , 2018, 153, 1-9.  | 3.7  | 15        |
| 25 | Adjusting the energy levels and bandgaps of conjugated polymers via Lewis acid-base reactions. <i>New Journal of Chemistry</i> , 2018, 42, 18961-18968.  | 2.8  | 15        |
| 26 | Synthesis of B "N embedded indacenodithiophene chromophores and effects of bromine atoms on photophysical properties and energy levels. <i>Tetrahedron</i> , 2018, 74, 4308-4314.  | 1.9  | 12        |
| 27 | Synthesis of aromatic substituted B "N embedded units with good stability and strong electron-affinity. <i>Tetrahedron Letters</i> , 2019, 60, 151286.   | 1.4  | 11        |
| 28 | Quaternary polymer solar cells with over 13% efficiency enabled by improving film-morphologies via binary mixed fullerene additive. <i>Materials Chemistry Frontiers</i> , 2019, 3, 301-307.                                 | 5.9  | 11        |
| 29 | Synthesis of Conjugated Polymers Containing B "N Bonds with Strong Electron Affinity and Extended Absorption. <i>Polymers</i> , 2019, 11, 1630.  | 4.5  | 10        |
| 30 | Fullerene-free polymer solar cells enabled with a PhI-based wide band gap donor polymer: promoting efficiencies via acceptor screening and device engineering. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8442-8449. | 5.5  | 7         |
| 31 | A Solution-Processed Small-Molecule Diketopyrrolopyrrole Dimer for Organic Solar Cells. <i>Asian Journal of Organic Chemistry</i> , 2014, 3, 948-952.  | 2.7  | 6         |
| 32 | Green-Solvent-Processed 17% Efficient Polymer Solar Cell Achieved Synergistically by Aligning Energy Levels and Improving Morphology with the Quaternary Strategy. <i>Solar Rrl</i> , 2022, 6, .                             | 5.8  | 5         |
| 33 | B "N Coordination Enables Efficient p-Doping in a Pyrazine-Based Polymer Donor Toward Enhanced Photovoltaic Performance. <i>Macromolecules</i> , 2021, 54, 10758-10766.  | 4.8  | 4         |
| 34 | Chlorinated phthalimide polymer donor as ultra-wide bandgap and deep HOMO guest for achieving highly efficient polymer solar cells. <i>Chinese Chemical Letters</i> , 2023, 34, 107436.                                      | 9.0  | 3         |
| 35 | Synthesis of a Benzothiadiazole-Based D "A Molecule with Aggregation-Induced Emission and Controlled Assembly Properties. <i>Processes</i> , 2021, 9, 1094.  | 2.8  | 0         |