# Hui Huang

List of Publications by Year
in descending order

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|---|---|---|---|
| 111<br>papers | 5,740<br>citations | 87843<br>38<br>h-index | 79644<br>73<br>g-index |
| 114<br>all docs | 114<br>docs citations | 114<br>times ranked | 5237<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Organic and Polymeric Semiconductors Enhanced by Noncovalent Conformational Locks. Chemical Reviews, 2017, 117, 10291-10318. | 23.0 | 575 |
| 2 | Design, Synthesis, and Characterization of Ladder-Type Molecules and Polymers. Air-Stable, Solution-Processable n-Channel and Ambipolar Semiconductors for Thin-Film Transistors via Experiment and Theory. Journal of the American Chemical Society, 2009, 131, 5586-5608. | 6.6 | 481 |
| 3 | Binary Organic Solar Cells Breaking 19% via Manipulating the Vertical Component Distribution. Advanced Materials, 2022, 34, . | 11.1 | 384 |
| 4 | Morphologyâ€Performance Relationships in Highâ€Efficiency Allâ€Polymer Solar Cells. Advanced Energy Materials, 2014, 4, 1300785. | 10.2 | 227 |
| 5 | Combining Electron-Neutral Building Blocks with Intramolecular â€œConformational Locksâ€•Affords Stable, High-Mobility P- and N-Channel Polymer Semiconductors. Journal of the American Chemical Society, 2012, 134, 10966-10973. | 6.6 | 220 |
| 6 | Halogenated conjugated molecules for ambipolar field-effect transistors and non-fullerene organic solar cells. Materials Chemistry Frontiers, 2017, 1, 1389-1395. | 3.2 | 173 |
| 7 | Achieving Highâ€Performance Ternary Organic Solar Cells through Tuning Acceptor Alloy. Advanced Materials, 2017, 29, 1603154. | 11.1 | 171 |
| 8 | Highâ€Performance Noncovalently Fusedâ€Ring Electron Acceptors for Organic Solar Cells Enabled by Noncovalent Intramolecular Interactions and Endâ€Group Engineering. Angewandte Chemie - International Edition, 2021, 60, 12475-12481. | 7.2 | 155 |
| 9 | Triplet Telluropheneâ€Based Acceptors for Organic Solar Cells. Angewandte Chemie - International Edition, 2018, 57, 1096-1102. | 7.2 | 125 |
| 10 | Achieving Efficient NIRâ€II Typeâ€I Photosensitizers for Photodynamic/Photothermal Therapy upon Regulating Chalcogen Elements. Advanced Materials, 2022, 34, e2108146. | 11.1 | 116 |
| 11 | An A-D-Aâ€²-D-A type unfused nonfullerene acceptor for organic solar cells with approaching 14% efficiency. Science China Chemistry, 2021, 64, 228-231. | 4.2 | 115 |
| 12 | Sideâ€Chain Engineering for Enhancing the Molecular Rigidity and Photovoltaic Performance of Noncovalently Fusedâ€Ring Electron Acceptors. Angewandte Chemie - International Edition, 2021, 60, 17720-17725. | 7.2 | 113 |
| 13 | Recent advances in organic ternary solar cells. Journal of Materials Chemistry A, 2017, 5, 11501-11517. | 5.2 | 106 |
| 14 | Tuning V<sub>oc</sub> for high performance organic ternary solar cells with non-fullerene acceptor alloys. Journal of Materials Chemistry A, 2017, 5, 19697-19702. | 5.2 | 94 |
| 15 | Highâ€Performance Allâ€Polymer Photoresponse Devices Based on Acceptorâ€“Acceptor Conjugated Polymers. Advanced Functional Materials, 2016, 26, 6306-6315. | 7.8 | 88 |
| 16 | Significant enhancement of photovoltaic performance through introducing Sâ‹¯N conformational locks. Journal of Materials Chemistry A, 2017, 5, 21674-21678. | 5.2 | 87 |
| 17 | Influence of Thiol Selfâ€Assembled Monolayer Processing on Bottomâ€Contact Thinâ€Film Transistors Based on nâ€Type Organic Semiconductors. Advanced Functional Materials, 2012, 22, 1856-1869. | 7.8 | 84 |
| 18 | Noncovalent SeÂ·Â·Â·O Conformational Locks for Constructing Highâ€Performing Optoelectronic Conjugated Polymers. Advanced Materials, 2017, 29, 1606025. | 11.1 | 84 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Simple Nonfusedâ€Ring Electron Acceptors with Noncovalently Conformational Locks for Lowâ€Cost and Highâ€Performance Organic Solar Cells Enabled by Endâ€Group Engineering. Advanced Functional Materials, 2022, 32, 2108861. | 7.8 | 84 |
| 20 | Alkoxyâ€Functionalized Thienylâ€Vinylene Polymers for Fieldâ€Effect Transistors and Allâ€Polymer Solar Cells. Advanced Functional Materials, 2014, 24, 2782-2793. | 7.8 | 83 |
| 21 | Versatile Î±,Ï‰â€Disubstituted Tetrathienoacene Semiconductors for High Performance Organic Thinâ€Film Transistors. Advanced Functional Materials, 2012, 22, 48-60. | 7.8 | 82 |
| 22 | Crystallization Kinetics Modulation of FASnI<sub>3</sub> Films with Preâ€nucleation Clusters for Efficient Leadâ€Free Perovskite Solar Cells. Angewandte Chemie - International Edition, 2021, 60, 3693-3698. | 7.2 | 80 |
| 23 | MoS<sub>2</sub> Quantum Dots with a Tunable Work Function for High-Performance Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 26916-26923. | 4.0 | 77 |
| 24 | Triplet Acceptors with a Dâ€A Structure and Twisted Conformation for Efficient Organic Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 15043-15049. | 7.2 | 77 |
| 25 | A universal method for constructing high efficiency organic solar cells with stacked structures. Energy and Environmental Science, 2021, 14, 2314-2321. | 15.6 | 75 |
| 26 | Selfâ€Powered Organic Photodetectors with High Detectivity for Near Infrared Light Detection Enabled by Dark Current Reduction. Advanced Functional Materials, 2021, 31, 2106326. | 7.8 | 70 |
| 27 | Significant Enhancement of Photothermal and Photoacoustic Efficiencies for Semiconducting Polymer Nanoparticles through Simply Molecular Engineering. Advanced Functional Materials, 2018, 28, 1800135. | 7.8 | 68 |
| 28 | Noncovalent conformational locks in organic semiconductors. Science China Chemistry, 2018, 61, 1359-1367. | 4.2 | 60 |
| 29 | Hydrolytic cleavage of both CS2 carbonâ€“sulfur bonds by multinuclear Pd(II) complexes at room temperature. Nature Chemistry, 2017, 9, 188-193. | 6.6 | 57 |
| 30 | Toward Achieving Single-Molecule White Electroluminescence from Dual Emission of Fluorescence and Phosphorescence. Chemistry of Materials, 2020, 32, 4038-4044. | 3.2 | 57 |
| 31 | Achieving Highâ€Performance Photothermal and Photodynamic Effects upon Combining Dâ€“A Structure and Nonplanar Conformation. Small, 2020, 16, e2000909. | 5.2 | 56 |
| 32 | Simultaneous Enhancement of Three Parameters of P3HTâ€Based Organic Solar Cells with One Oxygen Atom. Advanced Energy Materials, 2019, 9, 1803012. | 10.2 | 54 |
| 33 | Anthracenedicarboximide-based semiconductors for air-stable, n-channel organic thin-film transistors: materials design, synthesis, and structural characterization. Journal of Materials Chemistry, 2012, 22, 4459-4472. | 6.7 | 51 |
| 34 | Precisely Tuning Photothermal and Photodynamic Effects of Polymeric Nanoparticles by Controlled Copolymerization. Angewandte Chemie - International Edition, 2020, 59, 12756-12761. | 7.2 | 50 |
| 35 | PEDOT:PSSâ€Assisted Exfoliation and Functionalization of 2D Nanosheets for Highâ€Performance Organic Solar Cells. Advanced Functional Materials, 2017, 27, 1701622. | 7.8 | 46 |
| 36 | High Performing Ternary Solar Cells through FÃ¶rster Resonance Energy Transfer between Nonfullerene Acceptors. ACS Applied Materials & Interfaces, 2017, 9, 26928-26936. | 4.0 | 44 |

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|---|---|---|---|
| 37 | Tellurophene-based metal-organic framework nanosheets for high-performance organic solar cells. Journal of Power Sources, 2018, 401, 13-19. | 4.0 | 44 |
| 38 | Flexible Short-Wave Infrared Image Sensors Enabled by High-Performance Polymeric Photodetectors. Macromolecules, 2020, 53, 10636-10643. | 2.2 | 42 |
| 39 | Wide bandgap small molecular acceptors for low energy loss organic solar cells. Journal of Materials Chemistry C, 2017, 5, 12591-12596. | 2.7 | 39 |
| 40 | Aromatic imide/amide-based organic small-molecule emitters for organic light-emitting diodes. Materials Chemistry Frontiers, 2020, 4, 1554-1568. | 3.2 | 39 |
| 41 | Very Large Silacylic Substituent Effects on Response in Silole-Based Polymer Transistors. Chemistry of Materials, 2011, 23, 2185-2200. | 3.2 | 38 |
| 42 | Achieving high performance non-fullerene organic solar cells through tuning the numbers of electron deficient building blocks of molecular acceptors. Journal of Power Sources, 2016, 324, 538-546. | 4.0 | 38 |
| 43 | Uncommon Aggregationâ€Induced Emission Molecular Materials with Highly Planar Conformations. Advanced Optical Materials, 2018, 6, 1701394. | 3.6 | 37 |
| 44 | Tellurophene-Based N-type Copolymers for Photovoltaic Applications. ACS Applied Materials & Interfaces, 2016, 8, 34620-34629. | 4.0 | 35 |
| 45 | A Highly Planar Nonfullerene Acceptor with Multiple Noncovalent Conformational Locks for Efficient Organic Solar Cells. Small Methods, 2018, 2, 1700330. | 4.6 | 35 |
| 46 | Fused Thiophene Semiconductors: Crystal Structureâ€“Film Microstructure Transistor Performance Correlations. Advanced Functional Materials, 2013, 23, 3850-3865. | 7.8 | 34 |
| 47 | Highâ€Performance Allâ€Smallâ€Molecule Organic Solar Cells Enabled by Regioâ€Isomerization of Noncovalently Conformational Locks. Advanced Functional Materials, 2022, 32, . | 7.8 | 34 |
| 48 | Iris-Like Acceptor with Most PDI Units for Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 28812-28818. | 4.0 | 32 |
| 49 | Highâ€Performance Noncovalently Fusedâ€Ring Electron Acceptors for Organic Solar Cells Enabled by Noncovalent Intramolecular Interactions and Endâ€Group Engineering. Angewandte Chemie, 2021, 133, 12583-12589. | 1.6 | 31 |
| 50 | Perylene Diimideâ€Based Conjugated Polymers for Allâ€Polymer Solar Cells. Chemistry - A European Journal, 2020, 26, 12510-12522. | 1.7 | 29 |
| 51 | Significant enhancement of responsivity of organic photodetectors upon molecular engineering. Journal of Materials Chemistry C, 2019, 7, 5739-5747. | 2.7 | 28 |
| 52 | Acceptorâ€“acceptor-type conjugated polymer semiconductors. Journal of Energy Chemistry, 2021, 59, 364-387. | 7.1 | 28 |
| 53 | Triplet Tellurophene-Based Semiconducting Polymer Nanoparticles for Near-Infrared-Mediated Cancer Theranostics. ACS Applied Materials & Interfaces, 2019, 11, 17884-17893. | 4.0 | 27 |
| 54 | Triplet Telluropheneâ€Based Acceptors for Organic Solar Cells. Angewandte Chemie, 2018, 130, 1108-1114. | 1.6 | 26 |

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|---|---|---|---|
| 55 | Benzotriazole-Based p-Type Polymers with Thieno[3,2-b]thiophene Ï€-Bridges and Fluorine Substituents To Realize High V<sub>OC</sub>. ACS Applied Polymer Materials, 2019, 1, 906-913. | 2.0 | 26 |
| 56 | Combination of noncovalent conformational locks and side chain engineering to tune the crystallinity of nonfullerene acceptors for high-performance P3HT based organic solar cells. Materials Chemistry Frontiers, 2019, 3, 64-69. | 3.2 | 24 |
| 57 | Tellurophene-Based Random Copolymers for High Responsivity and Detectivity Photodetectors. ACS Applied Materials & Interfaces, 2018, 10, 1917-1924. | 4.0 | 23 |
| 58 | Low-cost polymer acceptors with noncovalently fused-ring backbones for efficient all-polymer solar cells. Science China Chemistry, 2022, 65, 926-933. | 4.2 | 22 |
| 59 | Enhancing Photovoltaic Performances of Naphthaleneâ€Based Unfusedâ€Ring Electron Acceptors upon Regioisomerization. Solar Rrl, 2021, 5, 2100094. | 3.1 | 21 |
| 60 | Efficient room temperature catalytic synthesis of alternating conjugated copolymers via C-S bond activation. Nature Communications, 2022, 13, 144. | 5.8 | 21 |
| 61 | Fine-tuning solid state packing and significantly improving photovoltaic performance of conjugated polymers through side chain engineering via random polymerization. Journal of Materials Chemistry A, 2017, 5, 5585-5593. | 5.2 | 20 |
| 62 | Crystallization Kinetics Modulation of FASnI<sub>3</sub> Films with Preâ€nucleation Clusters for Efficient Leadâ€Free Perovskite Solar Cells. Angewandte Chemie, 2021, 133, 3737-3742. | 1.6 | 20 |
| 63 | Self-powered flexible artificial synapse for near-infrared light detection. Cell Reports Physical Science, 2021, 2, 100507. | 2.8 | 19 |
| 64 | Ternary blend polymer solar cells with two non-fullerene acceptors as acceptor alloy. Dyes and Pigments, 2017, 141, 388-393. | 2.0 | 17 |
| 65 | Significantly improving the efficiency of polymer solar cells through incorporating noncovalent conformational locks. Materials Chemistry Frontiers, 2017, 1, 1317-1323. | 3.2 | 17 |
| 66 | The Synthesis and Optoelectronic Applications for Telluropheneâ€Based Small Molecules and Polymers. ChemPhysChem, 2019, 20, 2600-2607. | 1.0 | 17 |
| 67 | Ultra-stable tellurium-doped carbon quantum dots for cell protection and near-infrared photodynamic application. Science Bulletin, 2020, 65, 1580-1586. | 4.3 | 17 |
| 68 | Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXeneâ€RAN van der Waals Heterostructureâ€Based Flexible Transparent NIR Photodetector Array for 1024 Pixel Image Sensing Application. Advanced Materials Technologies, 2022, 7, . | 3.0 | 17 |
| 69 | Defectâ€Free Alternating Conjugated Polymers Enabled by Roomâ€Temperature Stille Polymerization. Angewandte Chemie - International Edition, 2022, 61, . | 7.2 | 15 |
| 70 | Synthetic Routes for Heteroatomâ€Containing Alkylated/Arylated Polycyclic Aromatic Hydrocarbons. Angewandte Chemie - International Edition, 2021, 60, 2924-2928. | 7.2 | 14 |
| 71 | Converting Thioether Waste into Organic Semiconductors by Carbonâ€“Sulfur Bond Activation. Angewandte Chemie - International Edition, 2019, 58, 5044-5048. | 7.2 | 12 |
| 72 | Mutual Inductance Between Arbitrary Conductor and Rogowski Coil With Circular Skeleton and Gap Compensation. IEEE Sensors Journal, 2019, 19, 4106-4114. | 2.4 | 12 |

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|---|---|---|---|
| 73 | Enhancing the Photovoltaic Performance of Triplet Acceptors Enabled by Sideâ€Chain Engineering. Solar Rrl, 2021, 5, 2100522. | 3.1 | 12 |
| 74 | Quasi-Steady-State Rotor EMF-Oriented Vector Control of Doubly Fed Winding Induction Generators for Wind-Energy Generation. Electric Power Components and Systems, 2006, 34, 1201-1211. | 1.0 | 11 |
| 75 | Triplet Acceptors with a Dâ€A Structure and Twisted Conformation for Efficient Organic Solar Cells. Angewandte Chemie, 2020, 132, 15153-15159. | 1.6 | 11 |
| 76 | Sâ‹¯Cl intramolecular interaction: An efficient strategy to improve power conversion efficiency of organic solar cells. Dyes and Pigments, 2020, 179, 108416. | 2.0 | 11 |
| 77 | Thermoelectric Properties of Nanoâ€grained Mooihoekite Cu<sub>9</sub>Fe<sub>9</sub>S<sub>16</sub>. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 1116-1121. | 0.6 | 11 |
| 78 | Air Stable Chalcogen-Doped Rubicenes with Diradical Character. CCS Chemistry, 2022, 4, 3669-3676. | 4.6 | 11 |
| 79 | Positively and negatively large Goosâ€“HÃnchen lateral displacements from a symmetric gyrotropic slab. Applied Physics A: Materials Science and Processing, 2009, 94, 917-922. | 1.1 | 10 |
| 80 | Sulfur vs. tellurium: the heteroatom effects on the nonfullerene acceptors. Science China Chemistry, 2019, 62, 897-903. | 4.2 | 10 |
| 81 | Sideâ€Chain Engineering for Enhancing the Molecular Rigidity and Photovoltaic Performance of Noncovalently Fusedâ€Ring Electron Acceptors. Angewandte Chemie, 2021, 133, 17861-17866. | 1.6 | 10 |
| 82 | AMPK mediates the neurotoxicity of iron oxide nanoparticles retained in mitochondria or lysosomes. Metallomics, 2019, 11, 1200-1206. | 1.0 | 9 |
| 83 | Doping a D-A structural polymer based on benzodithiophene and triazoloquinoxaline for efficiency improvement of ternary solar cells. Electronic Materials Letters, 2015, 11, 236-240. | 1.0 | 8 |
| 84 | Modeling and Analyzing the Mutual Inductance of Rogowski Coils of Arbitrary Skeleton. Sensors, 2019, 19, 3397. | 2.1 | 8 |
| 85 | Thiophene: An eco-friendly solvent for organic solar cells. Dyes and Pigments, 2019, 168, 36-41. | 2.0 | 8 |
| 86 | Optoelectronic properties and aggregation effects on the performance of planar versus contorted pyrene-cored perylenediimide dimers for organic solar cells. Dyes and Pigments, 2020, 173, 107976. | 2.0 | 8 |
| 87 | Effect of Frequency on the Linearity of Double-Layer and Single-Layer Rogowski Coils. IEEE Sensors Journal, 2020, 20, 9910-9918. | 2.4 | 8 |
| 88 | Ultrathin Anode Buffer Layer for Enhancing Performance of Polymer Solar Cells. International Journal of Photoenergy, 2014, 2014, 1-6. | 1.4 | 7 |
| 89 | The effect of DIO additive on performance improvement of polymer solar cells. Science Bulletin, 2014, 59, 3227-3231. | 1.7 | 7 |
| 90 | Precisely Tuning Photothermal and Photodynamic Effects of Polymeric Nanoparticles by Controlled Copolymerization. Angewandte Chemie, 2020, 132, 12856-12861. | 1.6 | 7 |

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|---|---|---|---|
| 91 | A Method for Increasing the Bandwidth of Rogowski Coils Without Changing Their Size. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10. | 2.4 | 7 |
| 92 | Synthetic Routes for Heteroatomâ€Containing Alkylated/Arylated Polycyclic Aromatic Hydrocarbons. Angewandte Chemie, 2021, 133, 2960-2964. | 1.6 | 6 |
| 93 | Efficiency Enhancement in Polymer Solar Cells With a Polar Small Molecule Both at Interface and in the Bulk Heterojunction Layer. IEEE Journal of Photovoltaics, 2015, 5, 1408-1413. | 1.5 | 5 |
| 94 | One-Pot Catalytic Cleavage of Câ•S Double Bonds by Pd Catalysts at Room Temperature. Inorganic Chemistry, 2018, 57, 9266-9273. | 1.9 | 5 |
| 95 | A New Noncovalently Fusedâ€Ring Electron Acceptor Based on 3,7â€Dialkyloxybenzo[1,2â€b:4,5â€b']dithiophene for Lowâ€Cost and Highâ€Performance Organic Solar Cells. Macromolecular Rapid Communications, 2022, 43, e2200085. | 2.0 | 5 |
| 96 | Goos-HÃnchen Lateral Displacements at the Interface between Isotropic and Gyroelectric Media. International Journal of Antennas and Propagation, 2013, 2013, 1-6. | 0.7 | 4 |
| 97 | The influence of numbers of subunits on the photovoltaic performance of non-fullerene acceptors. Synthetic Metals, 2017, 231, 19-24. | 2.1 | 4 |
| 98 | Microwave-Assisted Classic Ullmann Câ€“C Coupling Polymerization for Acceptor-Acceptor Homopolymers. Polymers, 2019, 11, 1741. | 2.0 | 3 |
| 99 | Performance of Preconditioned Nonstationary Methods for Electromagnetic Scattering From One Dimensional Dielectric Rough Surfaces. IEEE Transactions on Antennas and Propagation, 2014, 62, 5362-5365. | 3.1 | 1 |
| 100 | Improved efficiency of ternary the blend polymer solar cells by doping a narrow band gap polymer material. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-5. | 2.0 | 1 |
| 101 | A Wave Splitter with Simple Structure Based on Biaxial Anisotropic Medium. International Journal of Antennas and Propagation, 2017, 2017, 1-7. | 0.7 | 1 |
| 102 | Converting Thioether Waste into Organic Semiconductors by Carbonâ€“Sulfur Bond Activation. Angewandte Chemie, 2019, 131, 5098-5102. | 1.6 | 1 |
| 103 | Simply tuning the electron deficient units to achieve P and N-type conjugated polymers for organic solar cells. Dyes and Pigments, 2019, 162, 728-733. | 2.0 | 1 |
| 104 | Lowâ€frequency performance of openable flexible doubleâ€loop Rogowski coil. IET Science, Measurement and Technology, 2021, 15, 578-587. | 0.9 | 1 |
| 105 | Design and Optimization Methods of the Header of HDI PCB Rogowski Current Sensors. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10. | 2.4 | 1 |
| 106 | The Aryl Sulfide Synthesis via Sulfide Transfer. Chemistry - A European Journal, 2022, , e202200869. | 1.7 | 1 |
| 107 | Frontispiece: Perylene Diimideâ€Based Conjugated Polymers for Allâ€Polymer Solar Cells. Chemistry - A European Journal, 2020, 26, . | 1.7 | 0 |
| 108 | Tobin Marksâ€™ 75th birthday. A celebration of a career devoted to materials chemistry. Journal of Materials Chemistry C, 2020, 8, 14979-14982. | 2.7 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Defectâ€Free Alternating Conjugated Polymers Enabled by Roomâ€Temperature Stille Polymerization. Angewandte Chemie, 0, , . | 1.6 | 0 |
| 110 | Clean synthetic approaches toward small-molecule organic electronics. , 2022, , 95-143. | | 0 |
| 111 | RÃ¼cktitelbild: Defectâ€Free Alternating Conjugated Polymers Enabled by Roomâ€Temperature Stille Polymerization (Angew. Chem. 16/2022). Angewandte Chemie, 2022, 134, . | 1.6 | 0 |