

Han Yan

List of Publications by Year in descending order

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38
papers

1,053
citations

430874

18
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414414

32
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all docs

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docs citations

38
times ranked

1911
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Chemically Addressable Perovskite Nanocrystals for Light-Emitting Applications. <i>Advanced Materials</i> , 2017, 29, 1701153. | 21.0 | 139 |
| 2 | Increasing Polymer Solar Cell Fill Factor by Trap-Filling with F4TCNQ at Parts Per Thousand Concentration. <i>Advanced Materials</i> , 2016, 28, 6491-6496. | 21.0 | 85 |
| 3 | Thionation Enhances the Electron Mobility of Perylene Diimide for High Performance n-Channel Organic Field Effect Transistors. <i>Advanced Functional Materials</i> , 2015, 25, 3321-3329. | 14.9 | 76 |
| 4 | Controlled Synthesis of Fully π -Conjugated Donor-Acceptor Block Copolymers Using a Ni(II) Diimine Catalyst. <i>ACS Macro Letters</i> , 2014, 3, 671-674. | 4.8 | 65 |
| 5 | Lewis Acid Doping Induced Synergistic Effects on Electronic and Morphological Structure for Donor and Acceptor in Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1703672. | 19.5 | 59 |
| 6 | Integrated Energy-Harvesting System by Combining the Advantages of Polymer Solar Cells and Thermoelectric Devices. <i>Journal of Physical Chemistry C</i> , 2013, 117, 24685-24691. | 3.1 | 54 |
| 7 | Doping Poly(3-hexylthiophene) Nanowires with Selenophene Increases the Performance of Polymer-Nanowire Solar Cells. <i>Chemistry of Materials</i> , 2014, 26, 4605-4611. | 6.7 | 51 |
| 8 | Increasing Quantum Efficiency of Polymer Solar Cells with Efficient Exciton Splitting and Long Carrier Lifetime by Molecular Doping at Heterojunctions. <i>ACS Energy Letters</i> , 2019, 4, 1356-1363. | 17.4 | 45 |
| 9 | Bis(tri-n-alkylsilyl oxide) silicon phthalocyanines: a start to establishing a structure property relationship as both ternary additives and non-fullerene electron acceptors in bulk heterojunction organic photovoltaic devices. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12168-12182. | 10.3 | 41 |
| 10 | A facile strategy to enhance absorption coefficient and photovoltaic performance of two-dimensional benzo[1,2-b:4,5-b ²]dithiophene and thieno[3,4-c]pyrrole-4,6-dione polymers via subtle chemical structure variations. <i>Organic Electronics</i> , 2013, 14, 2652-2661. | 2.6 | 35 |
| 11 | Self-assembly of two-dimensional nanostructures of linear regioregular poly(3-hexylthiophene). <i>RSC Advances</i> , 2012, 2, 338-343. | 3.6 | 34 |
| 12 | Significance of Dopant/Component Miscibility to Efficient N-Doping in Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13021-13028. | 8.0 | 33 |
| 13 | Self-Assembly of Well-Defined Poly(3-hexylthiophene) Nanostructures toward the Structure-Property Relationship Determination of Polymer Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 23858-23863. | 3.1 | 31 |
| 14 | Adding Amorphous Content to Highly Crystalline Polymer Nanowire Solar Cells Increases Performance. <i>Advanced Materials</i> , 2015, 27, 3484-3491. | 21.0 | 29 |
| 15 | Self-Assembly of Graphenelike ZnO Superstructured Nanosheets and Their Application in Hybrid Photoconductors. <i>Small</i> , 2011, 7, 3472-3478. | 10.0 | 22 |
| 16 | Improving the performance of polymer solar cells by altering polymer side chains and optimizing film morphologies. <i>Organic Electronics</i> , 2012, 13, 3234-3243. | 2.6 | 19 |
| 17 | Probe and Control of the Tiny Amounts of Dopants in BHJ Film Enable Higher Performance of Polymer Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 25115-25124. | 8.0 | 19 |
| 18 | Identifying the Electrostatic and Entropy-Related Mechanisms for Charge-Transfer Exciton Dissociation at Doped Organic Heterojunctions. <i>Advanced Functional Materials</i> , 2021, 31, 2101892. | 14.9 | 19 |

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|----|---|------|-----------|
| 19 | Self-Assembling Branched and Hyperbranched Nanostructures of Poly(3-hexylthiophene) by a Solution Process. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3257-3262. | 3.1 | 18 |
| 20 | A facile strategy to enhance the fill factor of ternary blend solar cells by increasing charge carrier mobility. <i>New Journal of Chemistry</i> , 2013, 37, 1728. | 2.8 | 18 |
| 21 | Molecular Doping Efficiency in Organic Semiconductors: Fundamental Principle and Promotion Strategy. <i>Advanced Functional Materials</i> , 2022, 32, . | 14.9 | 18 |
| 22 | Achieving High Doping Concentration by Dopant Vapor Deposition in Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4178-4184. | 8.0 | 17 |
| 23 | Rational Design of Ternary-Phase Polymer Solar Cells by Controlling Polymer Phase Separation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 10552-10559. | 3.1 | 16 |
| 24 | Conjugated Polymers with Switchable Carrier Polarity. <i>Macromolecules</i> , 2015, 48, 5587-5595. | 4.8 | 15 |
| 25 | Unusual Performance Increase in Polymer Solar Cells by Cooling a Hot Donor/Acceptor Ink in a Good Solvent. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 979-984. | 8.0 | 14 |
| 26 | Molecular Doping Increases the Semitransparent Photovoltaic Performance of Dilute Bulk Heterojunction Film with Discontinuous Polymer Donor Networks. <i>Small Methods</i> , 2022, 6, e2101570. | 8.6 | 14 |
| 27 | A material combination principle for highly efficient polymer solar cells investigated by mesoscopic phase heterogeneity. <i>Nanoscale</i> , 2013, 5, 11649. | 5.6 | 11 |
| 28 | Bridging mesoscopic blend structure and property to macroscopic device performance via in situ optoelectronic characterization. <i>Journal of Materials Chemistry</i> , 2012, 22, 4349. | 6.7 | 10 |
| 29 | X-Ray Multispectrum CT Imaging by Projection Sequences Blind Separation Based on Basis-Effect Decomposition. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-8. | 4.7 | 9 |
| 30 | Evolution of polymer photovoltaic performances from subtle chemical structure variations. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 15127. | 2.8 | 7 |
| 31 | Rationalization of the Selectivity in the Optimization of Processing Conditions for High-Performance Polymer Solar Cells Based on the Polymer Self-Assembly Ability. <i>Journal of Physical Chemistry C</i> , 2014, 118, 29473-29481. | 3.1 | 7 |
| 32 | Improved contrast of materials based on multi-voltage images decomposition in X-ray CT. <i>Measurement Science and Technology</i> , 2016, 27, 025402. | 2.6 | 7 |
| 33 | Making weak dopants strong. <i>Nature Materials</i> , 2019, 18, 1269-1270. | 27.5 | 7 |
| 34 | Narrow-Energy-Width CT Based on Multivoltage X-Ray Image Decomposition. <i>International Journal of Biomedical Imaging</i> , 2017, 2017, 1-9. | 3.9 | 5 |
| 35 | Nanoscale structural and electronic evolution for increased efficiency in polymer solar cells monitored by electric scanning probe microscopy. <i>Science Bulletin</i> , 2014, 59, 360-368. | 1.7 | 2 |
| 36 | Magnetic Field Positioning Technology of Indoor Sports Bodies. <i>IEEE Sensors Journal</i> , 2022, 22, 219-228. | 4.7 | 1 |

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|----|---|-----|-----------|
| 37 | Heat Transfer Enhancement of n-Type Organic Semiconductors by an Insulator Blend Approach. ACS Applied Materials & Interfaces, 0, , . | 8.0 | 1 |
| 38 | Statistical iterative spectral CT imaging method based on blind separation of polychromatic projections. Optics Express, 2022, 30, 18219. | 3.4 | 0 |