

# Hongping Yan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/591257/publications.pdf>

Version: 2024-02-01

59  
papers

5,849  
citations

117625

34  
h-index

144013

57  
g-index

60  
all docs

60  
docs citations

60  
times ranked

7751  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | A highly stretchable, transparent, and conductive polymer. <i>Science Advances</i> , 2017, 3, e1602076.   | 10.3 | 962       |
| 2  | A Wide Band Gap Polymer with a Deep Highest Occupied Molecular Orbital Level Enables 14.2% Efficiency in Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 7159-7167.                           | 13.7 | 654       |
| 3  | Quadruple H-Bonding Cross-Linked Supramolecular Polymeric Materials as Substrates for Stretchable, Antitearing, and Self-Healable Thin Film Electrodes. <i>Journal of the American Chemical Society</i> , 2018, 140, 5280-5289. | 13.7 | 464       |
| 4  | Polarized X-ray scattering reveals non-crystalline orientational ordering in organic films. <i>Nature Materials</i> , 2012, 11, 536-543.  | 27.5 | 281       |
| 5  | Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. <i>Nature Communications</i> , 2019, 10, 5384.   | 12.8 | 249       |
| 6  | Flow-enhanced solution printing of all-polymer solar cells. <i>Nature Communications</i> , 2015, 6, 7955.   | 12.8 | 221       |
| 7  | Roll-to-roll Printed Large Area All-Polymer Solar Cells with 5% Efficiency Based on a Low Crystallinity Conjugated Polymer Blend. <i>Advanced Energy Materials</i> , 2017, 7, 1602742.  | 19.5 | 214       |
| 8  | A Twisted Thieno[3,4- <i>b</i> ]thiophene-Based Electron Acceptor Featuring a 14- $\pi$ -Electron Indenoindene Core for High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2017, 29, 1704510.                  | 21.0 | 196       |
| 9  | Nanomorphology of Bulk Heterojunction Photovoltaic Thin Films Probed with Resonant Soft X-ray Scattering. <i>Nano Letters</i> , 2010, 10, 2863-2869.  | 9.1  | 182       |
| 10 | Polymerized small molecular acceptor based all-polymer solar cells with an efficiency of 16.16% via tuning polymer blend morphology by molecular design. <i>Nature Communications</i> , 2021, 12, 5264.                         | 12.8 | 170       |
| 11 | High-brightness all-polymer stretchable LED with charge-trapping dilution. <i>Nature</i> , 2022, 603, 624-630.  | 27.8 | 170       |
| 12 | A Highly Stretchable and Self-Healing Supramolecular Elastomer Based on Sliding Crosslinks and Hydrogen Bonds. <i>Advanced Functional Materials</i> , 2020, 30, 1907139.  | 14.9 | 165       |
| 13 | Correlating the Efficiency and Nanomorphology of Polymer Blend Solar Cells Utilizing Resonant Soft X-ray Scattering. <i>ACS Nano</i> , 2012, 6, 677-688.  | 14.6 | 149       |
| 14 | Tunable Polyaniline-Based Porous Carbon with Ultrahigh Surface Area for CO <sub>2</sub> Capture at Elevated Pressure. <i>Advanced Energy Materials</i> , 2016, 6, 1502491.  | 19.5 | 129       |
| 15 | An Intrinsically Stretchable High-Performance Polymer Semiconductor with Low Crystallinity. <i>Advanced Functional Materials</i> , 2019, 29, 1905340.   | 14.9 | 120       |
| 16 | Color-neutral, semitransparent organic photovoltaics for power window applications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21147-21154.                            | 7.1  | 109       |
| 17 | Influence of Annealing and Interfacial Roughness on the Performance of Bilayer Donor/Acceptor Polymer Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2010, 20, 4329-4337.   | 14.9 | 105       |
| 18 | Effects of Molecular Structure and Packing Order on the Stretchability of Semicrystalline Conjugated Poly(Tetrathienoacene-diketopyrrolopyrrole) Polymers. <i>Advanced Electronic Materials</i> , 2017, 3, 1600311.             | 5.1  | 89        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Comparison of the Morphology Development of Polymer-Fullerene and Polymer-Polymer Solar Cells during Solution-Shearing Blade Coating. <i>Advanced Energy Materials</i> , 2016, 6, 1601225.         | 19.5 | 79        |
| 20 | Achieving Balanced Crystallization Kinetics of Donor and Acceptor by Sequential Blade Coated Double Bulk Heterojunction Organic Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 2000826. | 19.5 | 77        |
| 21 | Rapid flame doping of Co to WS <sub>2</sub> for efficient hydrogen evolution. <i>Energy and Environmental Science</i> , 2018, 11, 2270-2277.   | 30.8 | 74        |
| 22 | All-Polymer Solar Cells Employing Non-Halogenated Solvent and Additive. <i>Chemistry of Materials</i> , 2016, 28, 5037-5042.   | 6.7  | 69        |
| 23 | Strain- and Strain-Rate-Invariant Conductance in a Stretchable and Compressible 3D Conducting Polymer Foam. <i>Matter</i> , 2019, 1, 205-218.  | 10.0 | 58        |
| 24 | Nanoarchitected materials composed of fullerene-like spheroids and disordered graphene layers with tunable mechanical properties. <i>Nature Communications</i> , 2015, 6, 6212.                    | 12.8 | 57        |
| 25 | Electric Field Tuning Molecular Packing and Electrical Properties of Solution-Shearing Coated Organic Semiconducting Thin Films. <i>Advanced Functional Materials</i> , 2017, 27, 1605503.         | 14.9 | 47        |
| 26 | Molecular packing control enables excellent performance and mechanical property of blade-cast all-polymer solar cells. <i>Nano Energy</i> , 2019, 59, 277-284.                                     | 16.0 | 47        |
| 27 | Tuning Conjugated Polymer Chain Packing for Stretchable Semiconductors. <i>Advanced Materials</i> , 2022, 34, e2104747.  | 21.0 | 47        |
| 28 | High Energy Density Shape Memory Polymers Using Strain-Induced Supramolecular Nanostructures. <i>ACS Central Science</i> , 2021, 7, 1657-1667.   | 11.3 | 43        |
| 29 | Interfacial Widths of Conjugated Polymer Bilayers. <i>Journal of the American Chemical Society</i> , 2009, 131, 12538-12539.   | 13.7 | 42        |
| 30 | Accurate and Facile Determination of the Index of Refraction of Organic Thin Films Near the Carbon Absorption Edge. <i>Physical Review Letters</i> , 2013, 110, 177401.                            | 7.8  | 42        |
| 31 | Sequential Doping of Ladder-Type Conjugated Polymers for Thermally Stable n-Type Organic Conductors. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 53003-53011.                        | 8.0  | 41        |
| 32 | Impact of Polymer Side Chain Modification on OPV Morphology and Performance. <i>Chemistry of Materials</i> , 2018, 30, 7872-7884.  | 6.7  | 38        |
| 33 | Compact Roll-to-Roll Coater for in Situ X-ray Diffraction Characterization of Organic Electronics Printing. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 1687-1694.                    | 8.0  | 35        |
| 34 | Importance of Nucleation during Morphology Evolution of the Blade-Cast PffBT4T-2OD-Based Organic Solar Cells. <i>Macromolecules</i> , 2018, 51, 6682-6691.   | 4.8  | 34        |
| 35 | Multivalent Assembly of Flexible Polymer Chains into Supramolecular Nanofibers. <i>Journal of the American Chemical Society</i> , 2020, 142, 16814-16824.  | 13.7 | 33        |
| 36 | Metal-Ligand Based Mechanophores Enhance Both Mechanical Robustness and Electronic Performance of Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2021, 31, 2009201.                | 14.9 | 30        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Interfaces in organic devices studied with resonant soft x-ray reflectivity. <i>Journal of Applied Physics</i> , 2011, 110, .  | 2.5  | 27        |
| 38 | Enhancing Molecular Alignment and Charge Transport of Solution-Sheared Semiconducting Polymer Films by the Electrical-Blade Effect. <i>Advanced Electronic Materials</i> , 2018, 4, 1800110.                                     | 5.1  | 27        |
| 39 | Fine Optimization of Morphology Evolution Kinetics with Binary Additives for Efficient Non-Fullerene Organic Solar Cells. <i>Advanced Science</i> , 2019, 6, 1801560.  | 11.2 | 26        |
| 40 | Impact of Isomer Design on Physicochemical Properties and Performance in High-Efficiency All-Polymer Solar Cells. <i>Macromolecules</i> , 2020, 53, 9026-9033.   | 4.8  | 25        |
| 41 | Characterization of multicomponent polymer trilayers with resonant soft X-ray reflectivity. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2009, 47, 1291-1299.  | 2.1  | 24        |
| 42 | Solution-Phase Conformation and Dynamics of Conjugated Isoindigo-Based Donor-Acceptor Polymer Single Chains. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5479-5486.  | 4.6  | 24        |
| 43 | Understanding the Impact of Oligomeric Polystyrene Side Chain Arrangement on the All-Polymer Solar Cell Performance. <i>Advanced Energy Materials</i> , 2018, 8, 1701552.  | 19.5 | 21        |
| 44 | Microstructural Evolution of the Thin Films of a Donor-Acceptor Semiconducting Polymer Deposited by Meniscus-Guided Coating. <i>Macromolecules</i> , 2018, 51, 4325-4340.  | 4.8  | 21        |
| 45 | Influence of dielectric-dependent interfacial widths on device performance in top-gate P(NDI2OD-T2) field-effect transistors. <i>Applied Physics Letters</i> , 2012, 101, 093308.  | 3.3  | 18        |
| 46 | Termination and hydration of forsteritic olivine (0 1 0) surface. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 145, 268-280.   | 3.9  | 16        |
| 47 | Tuning domain size and crystallinity in isoindigo/PCBM organic solar cells via solution shearing. <i>Organic Electronics</i> , 2017, 40, 79-87.  | 2.6  | 16        |
| 48 | Topographic measurement of buried thin-film interfaces using a grazing resonant soft x-ray scattering technique. <i>Physical Review B</i> , 2014, 90, .  | 3.2  | 15        |
| 49 | Controlling Polymer Morphology in Blade-Coated All-Polymer Solar Cells. <i>Chemistry of Materials</i> , 2021, 33, 5951-5961.   | 6.7  | 14        |
| 50 | Regulating crystallization to maintain balanced carrier mobility via ternary strategy in blade-coated flexible organic solar cells. <i>Organic Electronics</i> , 2021, 89, 106027.   | 2.6  | 12        |
| 51 | Fullerene derivative induced morphology of bulk heterojunction blends: PIPCP:PC <sub>61</sub> BM. <i>RSC Advances</i> , 2019, 9, 4106-4112.  | 3.6  | 10        |
| 52 | Revealing temperature-dependent polymer aggregation in solution with small-angle X-ray scattering. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2096-2104.  | 10.3 | 8         |
| 53 | The case for soft X-rays: Improved compositional contrast for structure and morphology determination with real and reciprocal space methods. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010, 14, 012020. | 0.6  | 6         |
| 54 | Manipulation and statistical analysis of the fluid flow of polymer semiconductor solutions during meniscus-guided coating. <i>MRS Bulletin</i> , 2021, 46, 380-393.  | 3.5  | 5         |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Effect of Extensional Flow on the Evaporative Assembly of a Donor-acceptor Semiconducting Polymer. ACS Applied Electronic Materials, 2019, 1, 2445-2454. | 4.3  | 4         |
| 56 | Morphology of Organic Semiconductors Electrically Doped from Solution Using Phosphomolybdic Acid. Chemistry of Materials, 2019, 31, 6677-6683.           | 6.7  | 4         |
| 57 | Engineering Supramolecular Polymer Conformation for Efficient Carbon Nanotube Sorting. Small, 2020, 16, e2000923.  | 10.0 | 4         |
| 58 | Manipulation and statistical analysis of the fluid flow of polymer semiconductor solutions during meniscus-guided coating. MRS Bulletin, 0, , 1-14.      | 3.5  | 0         |
| 59 | Reconfigurable Crosslinking System via Asymmetric Metal-Ligand Coordination Strategy. Polymer Chemistry, 0, , .  | 3.9  | 0         |