Hongping Yan

List of Publications by Year
in descending order

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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	Tuning Conjugated Polymer Chain Packing for Stretchable Semiconductors. Advanced Materials, 2022, 34, e2104747.	21.0	47
2	Revealing temperature-dependent polymer aggregation in solution with small-angle X-ray scattering. Journal of Materials Chemistry A, 2022, 10, 2096-2104.	10.3	8
3	High-brightness all-polymer stretchable LED with charge-trapping dilution. Nature, 2022, 603, 624-630.	27.8	170
4	Regulating crystallization to maintain balanced carrier mobility via ternary strategy in blade-coated flexible organic solar cells. Organic Electronics, 2021, 89, 106027.	2.6	12
5	Manipulation and statistical analysis of the fluid flow of polymer semiconductor solutions during meniscus-guided coating. MRS Bulletin, 2021, 46, 380-393.	3.5	5
6	Controlling Polymer Morphology in Blade-Coated All-Polymer Solar Cells. Chemistry of Materials, 2021, 33, 5951-5961.	6.7	14
7	Polymerized small molecular acceptor based all-polymer solar cells with an efficiency of 16.16% via tuning polymer blend morphology by molecular design. Nature Communications, 2021, 12, 5264.	12.8	170
8	High Energy Density Shape Memory Polymers Using Strain-Induced Supramolecular Nanostructures. ACS Central Science, 2021, 7, 1657-1667.	11.3	43
9	Metalâ€“Ligand Based Mechanophores Enhance Both Mechanical Robustness and Electronic Performance of Polymer Semiconductors. Advanced Functional Materials, 2021, 31, 2009201.	14.9	30
10	A Highly Stretchable and Selfâ€Healing Supramolecular Elastomer Based on Sliding Crosslinks and Hydrogen Bonds. Advanced Functional Materials, 2020, 30, 1907139.	14.9	165
11	Impact of Isomer Design on Physicochemical Properties and Performance in High-Efficiency All-Polymer Solar Cells. Macromolecules, 2020, 53, 9026-9033.	4.8	25
12	Sequential Doping of Ladder-Type Conjugated Polymers for Thermally Stable n-Type Organic Conductors. ACS Applied Materials & Interfaces, 2020, 12, 53003-53011.	8.0	41
13	Color-neutral, semitransparent organic photovoltaics for power window applications. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21147-21154.	7.1	109
14	Multivalent Assembly of Flexible Polymer Chains into Supramolecular Nanofibers. Journal of the American Chemical Society, 2020, 142, 16814-16824.	13.7	33
15	Engineering Supramolecular Polymer Conformation for Efficient Carbon Nanotube Sorting. Small, 2020, 16, e2000923.	10.0	4
16	Achieving Balanced Crystallization Kinetics of Donor and Acceptor by Sequentialâ€Blade Coated Double Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2020, 10, 2000826.	19.5	77
17	Effect of Extensional Flow on the Evaporative Assembly of a Donorâ€“Acceptor Semiconducting Polymer. ACS Applied Electronic Materials, 2019, 1, 2445-2454.	4.3	4
18	An Intrinsically Stretchable Highâ€Performance Polymer Semiconductor with Low Crystallinity. Advanced Functional Materials, 2019, 29, 1905340.	14.9	120

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19	Fine Optimization of Morphology Evolution Kinetics with Binary Additives for Efficient Nonâ€Fullerene Organic Solar Cells. Advanced Science, 2019, 6, 1801560.	11.2	26
20	Fullerene derivative induced morphology of bulk heterojunction blends: PIPCP:PC₆₁BM. RSC Advances, 2019, 9, 4106-4112.	3.6	10
21	Morphology of Organic Semiconductors Electrically Doped from Solution Using Phosphomolybdic Acid. Chemistry of Materials, 2019, 31, 6677-6683.	6.7	4
22	Strain- and Strain-Rate-Invariant Conductance in a Stretchable and Compressible 3D Conducting Polymer Foam. Matter, 2019, 1, 205-218.	10.0	58
23	Molecular packing control enables excellent performance and mechanical property of blade-cast all-polymer solar cells. Nano Energy, 2019, 59, 277-284.	16.0	47
24	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384.	12.8	249
25	Quadruple H-Bonding Cross-Linked Supramolecular Polymeric Materials as Substrates for Stretchable, Antitearing, and Self-Healable Thin Film Electrodes. Journal of the American Chemical Society, 2018, 140, 5280-5289.	13.7	464
26	Understanding the Impact of Oligomeric Polystyrene Side Chain Arrangement on the Allâ€Polymer Solar Cell Performance. Advanced Energy Materials, 2018, 8, 1701552.	19.5	21
27	Impact of Polymer Side Chain Modification on OPV Morphology and Performance. Chemistry of Materials, 2018, 30, 7872-7884.	6.7	38
28	Enhancing Molecular Alignment and Charge Transport of Solutionâ€Sheared Semiconducting Polymer Films by the Electricalâ€Blade Effect. Advanced Electronic Materials, 2018, 4, 1800110.	5.1	27
29	Microstructural Evolution of the Thin Films of a Donorâ€“Acceptor Semiconducting Polymer Deposited by Meniscus-Guided Coating. Macromolecules, 2018, 51, 4325-4340.	4.8	21
30	A Wide Band Gap Polymer with a Deep Highest Occupied Molecular Orbital Level Enables 14.2% Efficiency in Polymer Solar Cells. Journal of the American Chemical Society, 2018, 140, 7159-7167.	13.7	654
31	Importance of Nucleation during Morphology Evolution of the Blade-Cast PffBT4T-2OD-Based Organic Solar Cells. Macromolecules, 2018, 51, 6682-6691.	4.8	34
32	Rapid flame doping of Co to WS₂ for efficient hydrogen evolution. Energy and Environmental Science, 2018, 11, 2270-2277.	30.8	74
33	Electric Field Tuning Molecular Packing and Electrical Properties of Solutionâ€Shearing Coated Organic Semiconducting Thin Films. Advanced Functional Materials, 2017, 27, 1605503.	14.9	47
34	A highly stretchable, transparent, and conductive polymer. Science Advances, 2017, 3, e1602076.	10.3	962
35	Rollâ€toâ€Roll Printed Largeâ€Area Allâ€Polymer Solar Cells with 5% Efficiency Based on a Low Crystallinity Conjugated Polymer Blend. Advanced Energy Materials, 2017, 7, 1602742.	19.5	214
36	Effects of Molecular Structure and Packing Order on the Stretchability of Semicrystalline Conjugated Poly(Tetrathienoaceneâ€diketopyrrolopyrrole) Polymers. Advanced Electronic Materials, 2017, 3, 1600311.	5.1	89

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37	Solution-Phase Conformation and Dynamics of Conjugated Isoindigo-Based Donorâ€“Acceptor Polymer Single Chains. Journal of Physical Chemistry Letters, 2017, 8, 5479-5486.	4.6	24
38	A Twisted Thieno[3,4â€‹b]thiopheneâ€‹Based Electron Acceptor Featuring a 14aâ€‹Ï€â€‹Electron Indenoindene Core for Highâ€‹Performance Organic Photovoltaics. Advanced Materials, 2017, 29, 1704510.	21.0	196
39	Tuning domain size and crystallinity in isoindigo/PCBM organic solar cells via solution shearing. Organic Electronics, 2017, 40, 79-87.	2.6	16
40	Tunable Polyanilineâ€‹Based Porous Carbon with Ultrahigh Surface Area for CO₂ Capture at Elevated Pressure. Advanced Energy Materials, 2016, 6, 1502491.	19.5	129
41	Comparison of the Morphology Development of Polymerâ€“Fullerene and Polymerâ€“Polymer Solar Cells during Solutionâ€‹Shearing Blade Coating. Advanced Energy Materials, 2016, 6, 1601225.	19.5	79
42	All-Polymer Solar Cells Employing Non-Halogenated Solvent and Additive. Chemistry of Materials, 2016, 28, 5037-5042.	6.7	69
43	Compact Roll-to-Roll Coater for in Situ X-ray Diffraction Characterization of Organic Electronics Printing. ACS Applied Materials & Interfaces, 2016, 8, 1687-1694.	8.0	35
44	Nanoarchitectured materials composed of fullerene-like spheroids and disordered graphene layers with tunable mechanical properties. Nature Communications, 2015, 6, 6212.	12.8	57
45	Flow-enhanced solution printing of all-polymer solar cells. Nature Communications, 2015, 6, 7955.	12.8	221
46	Topographic measurement of buried thin-film interfaces using a grazing resonant soft x-ray scattering technique. Physical Review B, 2014, 90, .	3.2	15
47	Termination and hydration of forsteritic olivine (0 1 0) surface. Geochimica Et Cosmochimica Acta, 2014, 145, 268-280.	3.9	16
48	Accurate and Facile Determination of the Index of Refraction of Organic Thin Films Near the Carbon<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>1</mml:mn><mml:mi>s</mml:mi></mml:math>Absorption Edge. Physical Review Letters, 2013, 110, 177401.	7.8	42
49	Influence of dielectric-dependent interfacial widths on device performance in top-gate P(NDI2OD-T2) field-effect transistors. Applied Physics Letters, 2012, 101, 093308.	3.3	18
50	Correlating the Efficiency and Nanomorphology of Polymer Blend Solar Cells Utilizing Resonant Soft X-ray Scattering. ACS Nano, 2012, 6, 677-688.	14.6	149
51	Polarized X-ray scattering reveals non-crystalline orientational ordering in organic films. Nature Materials, 2012, 11, 536-543.	27.5	281
52	Interfaces in organic devices studied with resonant soft x-ray reflectivity. Journal of Applied Physics, 2011, 110, .	2.5	27
53	The case for soft X-rays: Improved compositional contrast for structure and morphology determination with real and reciprocal space methods. IOP Conference Series: Materials Science and Engineering, 2010, 14, 012020.	0.6	6
54	Influence of Annealing and Interfacial Roughness on the Performance of Bilayer Donor/Acceptor Polymer Photovoltaic Devices. Advanced Functional Materials, 2010, 20, 4329-4337.	14.9	105

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55	Nanomorphology of Bulk Heterojunction Photovoltaic Thin Films Probed with Resonant Soft X-ray Scattering. Nano Letters, 2010, 10, 2863-2869.	9.1	182
56	Characterization of multicomponent polymer trilayers with resonant soft Xâ€ray reflectivity. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 1291-1299.	2.1	24
57	Interfacial Widths of Conjugated Polymer Bilayers. Journal of the American Chemical Society, 2009, 131, 12538-12539.	13.7	42
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