Bowei Xu

List of Publications by Year
in descending order

50 papers	4,312 citations	172457 29 h-index	189892 50 g-index
50 all docs	50 docs citations	50 times ranked	4269 citing authors

#	Article	IF	Citations
1	Highly Stable Organic Solar Cells Based on an Ultraviolet-Resistant Cathode Interfacial Layer. CCS Chemistry, 2022, 4, 938-948.	7.8	42
2	Fluidic Manipulating of Printable Zinc Oxide for Flexible Organic Solar Cells. Advanced Materials, 2022, 34, e2106453.	21.0	62
3	Facile solution-processed molybdenum oxide as hole transporting material for efficient organic solar cell. Journal of Energy Chemistry, 2022, 69, 108-114.	12.9	8
4	A New PEDOT Derivative for Efficient Organic Solar Cell with a Fill Factor of 0.80. Advanced Energy Materials, 2022, 12, .	19.5	52
5	Highâ€Efficiency ITOâ€Free Organic Photovoltaics with Superior Flexibility and Upscalability. Advanced Materials, 2022, 34, e2200044.	21.0	41
6	Universal Hole Transporting Material <i>via</i> Mutual Doping for Conventional, Inverted, and Blade-Coated Large-Area Organic Solar Cells. Chemistry of Materials, 2022, 34, 6312-6322.	6.7	12
7	Optimizing polymer aggregation and blend morphology for boosting the photovoltaic performance of polymer solar cells via a random terpolymerization strategy. Journal of Energy Chemistry, 2021, 59, 30-37.	12.9	20
8	n-doped inorganic molecular clusters as a new type of hole transport material for efficient organic solar cells. Joule, 2021, 5, 646-658.	24.0	76
9	<scp>Solutionâ€Processed</scp> Silver Nanowire as Flexible Transparent Electrodes in Organic Solar Cells. Chinese Journal of Chemistry, 2021, 39, 2315-2329.	4.9	33
10	Significant influence of doping effect on photovoltaic performance of efficient fullerene-free polymer solar cells. Journal of Energy Chemistry, 2020, 43, 40-46.	12.9	43
11	A ternary organic solar cell with 300 nm thick active layer shows over 14% efficiency. Science China Chemistry, 2020, 63, 21-27.	8.2	72
12	Tuning the Energetic Landscape of Ruddlesdenâ€"Popper Perovskite Films for Efficient Solar Cells. ACS Energy Letters, 2020, 5, 39-46.	17.4	47
13	The effect of aggregation behavior on photovoltaic performances in benzodithiophene-thiazolothiazole-based wide band-gap conjugated polymers with side chain position changes. Polymer Chemistry, 2020, 11, 1629-1636.	3.9	30
14	Increased conjugated backbone twisting to improve carbonylated-functionalized polymer photovoltaic performance. Organic Chemistry Frontiers, 2020, 7, 261-266.	4.5	10
15	Tailoring and Modifying an Organic Electron Acceptor toward the Cathode Interlayer for Highly Efficient Organic Solar Cells. Advanced Materials, 2020, 32, e1906557.	21.0	109
16	Inorganic Molecular Clusters with Facile Preparation and Neutral pH for Efficient Hole Extraction in Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 39462-39470.	8.0	14
17	Reduced Nonradiative Recombination Energy Loss Enabled Efficient Polymer Solar Cells via Tuning Alkyl Chain Positions on Pendent Benzene Units of Polymers. ACS Applied Materials & Interfaces, 2020, 12, 24184-24191.	8.0	7
18	Impact of the Hole Transport Layer on the Charge Extraction of Ruddlesdenâ€"Popper Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 29505-29512.	8.0	4

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19	15.3% efficiency all-small-molecule organic solar cells enabled by symmetric phenyl substitution. Science China Materials, 2020, 63, 1142-1150.	6.3	140
20	Enhanced photovoltaic effect from naphtho[2,3-<i>c</i>]thiophene-4,9-dione-based polymers through alkyl side chain induced backbone distortion. Journal of Materials Chemistry A, 2020, 8, 14706-14712.	10.3	10
21	Influence of Covalent and Noncovalent Backbone Rigidification Strategies on the Aggregation Structures of a Wide-Band-Gap Polymer for Photovoltaic Cells. Chemistry of Materials, 2020, 32, 1993-2003.	6.7	36
22	An inorganic molecule-induced electron transfer complex for highly efficient organic solar cells. Journal of Materials Chemistry A, 2020, 8, 5580-5586.	10.3	21
23	Reduced Nonradiative Energy Loss Caused by Aggregation of Nonfullerene Acceptor in Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1901823.	19.5	72
24	A Carbonylated Terthiopheneâ€"Based Twisted Polymer for Efficient Ternary Polymer Solar Cells. Macromolecular Rapid Communications, 2019, 40, e1900246.	3.9	7
25	Effect of linear side-chain length on the photovoltaic performance of benzodithiophene-<i>alt</i>-dicarboxylic ester terthiophene polymers. New Journal of Chemistry, 2019, 43, 12950-12956.	2.8	9
26	Over 16% efficiency organic photovoltaic cells enabled by a chlorinated acceptor with increased open-circuit voltages. Nature Communications, 2019, 10, 2515.	12.8	1,431
27	p-Doped Conducting Polyelectrolyte as an Anode Interlayer Enables High Efficiency for 1 cm² Printed Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 20205-20213.	8.0	28
28	Significant Effect of Fluorination on Simultaneously Improving Work Function and Transparency of Anode Interlayer for Organic Solar Cells. Advanced Energy Materials, 2019, 9, 1803826.	19.5	21
29	A Printable Organic Cathode Interlayer Enables over 13% Efficiency for 1-cm2 Organic Solar Cells. Joule, 2019, 3, 227-239.	24.0	193
30	Solutionâ€Processable Conjugated Polymers as Anode Interfacial Layer Materials for Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1800022.	19.5	95
31	Critical Role of Molecular Electrostatic Potential on Charge Generation in Organic Solar Cells. Chinese Journal of Chemistry, 2018, 36, 491-494.	4.9	163
32	The Critical Role of Anode Work Function in Non-Fullerene Organic Solar Cells Unveiled by Counterion-Size-Controlled Self-Doping Conjugated Polymers. Chemistry of Materials, 2018, 30, 1078-1084.	6.7	44
33	Conjugated Polymers Containing Sulfonic Acid Fluorene Unit for Achieving Multiple Interfacial Modifications in Fullerene-free Organic Solar Cells. Journal of Physical Chemistry C, 2018, 122, 19328-19337.	3.1	14
34	Over 100â€nmâ€Thick MoO<i>_x</i> Films with Superior Hole Collection and Transport Properties for Organic Solar Cells. Advanced Energy Materials, 2018, 8, 1800698.	19.5	38
35	Printable MoO<i>_x</i> Anode Interlayers for Organic Solar Cells. Advanced Materials, 2018, 30, e1801718.	21.0	71
36	Molecular design of a wide-band-gap conjugated polymer for efficient fullerene-free polymer solar cells. Energy and Environmental Science, 2017, 10, 546-551.	30.8	180

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37	Efficient Fullerene-Free Polymer Solar Cells Based on Alkylthio Substituted Conjugated Polymers. Journal of Physical Chemistry C, 2017, 121, 4825-4833.	3.1	28
38	Fine-Tuned Photoactive and Interconnection Layers for Achieving over 13% Efficiency in a Fullerene-Free Tandem Organic Solar Cell. Journal of the American Chemical Society, 2017, 139, 7302-7309.	13.7	427
39	Twisted terrylene dyes: synthesis and application in organic solar cells. Organic Chemistry Frontiers, 2017, 4, 811-816.	4.5	21
40	Effectively Improving Extinction Coefficient of Benzodithiophene and Benzodithiophenedioneâ€based Photovoltaic Polymer by Grafting Alkylthio Functional Groups. Chemistry - an Asian Journal, 2016, 11, 2650-2655.	3.3	11
41	A Bifunctional Interlayer Material for Modifying Both the Anode and Cathode in Highly Efficient Polymer Solar Cells. Advanced Materials, 2016, 28, 434-439.	21.0	85
42	Efficient fullerene-based and fullerene-free polymer solar cells using two wide band gap thiophene-thiazolothiazole-based photovoltaic materials. Journal of Materials Chemistry A, 2016, 4, 9511-9518.	10.3	34
43	Fullerene-free polymer solar cell based on a polythiophene derivative with an unprecedented energy loss of less than 0.5 eV. Journal of Materials Chemistry A, 2016, 4, 18043-18049.	10.3	88
44	A Novel pH Neutral Self-Doped Polymer for Anode Interfacial Layer in Efficient Polymer Solar Cells. Macromolecules, 2016, 49, 8126-8133.	4.8	69
45	Enhanced efficiency of polymer photovoltaic cells via the incorporation of a water-soluble naphthalene diimide derivative as a cathode interlayer. Journal of Materials Chemistry C, 2015, 3, 9565-9571.	5.5	60
46	Solution-dispersed porous hyperbranched conjugated polymer nanoparticles for fluorescent sensing of TNT with enhanced sensitivity. Polymer Chemistry, 2014, 5, 4521.	3.9	74
47	Porous films based on a conjugated polymer gelator for fluorescent detection of explosive vapors. Polymer Chemistry, 2013, 4, 5056.	3.9	29
48	Solution-processible hyperbranched conjugated polymer nanoparticles with tunable particle sizes by Suzuki polymerization in miniemulsion. RSC Advances, 2013, 3, 8645.	3.6	23
49	Metaâ€linked and paraâ€linked waterâ€soluble poly(arylene ethynylene)s with amino acid side chains: Effects of different linkage on Hg²⁺ ion sensing properties in aqueous media. Journal of Polymer Science Part A, 2012, 50, 1521-1529.	2.3	9
50	Highly Selective and Sensitive Detection of Cyanide by a Reaction-Based Conjugated Polymer Chemosensor. Macromolecules, 2011, 44, 4241-4248.	4.8	99