

Zaiyu Wang

List of Publications by Year in descending order

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46
papers

4,271
citations

136950

32
h-index

243625

44
g-index

46
all docs

46
docs citations

46
times ranked

4212
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluorination-enabled optimal morphology leads to over 11% efficiency for inverted small-molecule organic solar cells. <i>Nature Communications</i> , 2016, 7, 13740.	12.8	549
2	Conjugated Polymer–Small Molecule Alloy Leads to High Efficient Ternary Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 8176-8183.	13.7	518
3	High-Performance Ternary Organic Solar Cell Enabled by a Thick Active Layer Containing a Liquid Crystalline Small Molecule Donor. <i>Journal of the American Chemical Society</i> , 2017, 139, 2387-2395.	13.7	404
4	A planar electron acceptor for efficient polymer solar cells. <i>Energy and Environmental Science</i> , 2015, 8, 3215-3221.	30.8	307
5	10.8% Efficiency Polymer Solar Cells Based on PTB7–Th and PC ₇₁ BM via Binary Solvent Additives Treatment. <i>Advanced Functional Materials</i> , 2016, 26, 6635-6640.	14.9	279
6	A Conjugated Polymeric Supramolecular Network with Aggregation-Induced Emission Enhancement: An Efficient Light-Harvesting System with an Ultrahigh Antenna Effect. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9908-9913.	13.8	159
7	Structure Evolution of Oligomer Fused-Ring Electron Acceptors toward High Efficiency of As-Cast Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1600854.	19.5	152
8	From Alloy-Like to Cascade Blended Structure: Designing High-Performance All-Small-Molecule Ternary Solar Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 1549-1556.	13.7	145
9	The coupling and competition of crystallization and phase separation, correlating thermodynamics and kinetics in OPV morphology and performances. <i>Nature Communications</i> , 2021, 12, 332.	12.8	140
10	AIE-based theranostic systems for detection and killing of pathogens. <i>Theranostics</i> , 2019, 9, 3223-3248.	10.0	116
11	Enhancing Performance of Large-Area Organic Solar Cells with Thick Film via Ternary Strategy. <i>Small</i> , 2017, 13, 1700388.	10.0	113
12	Combining Energy Transfer and Optimized Morphology for Highly Efficient Ternary Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2017, 7, 1602552.	19.5	97
13	Acceptor End-Capped Oligomeric Conjugated Molecules with Broadened Absorption and Enhanced Extinction Coefficients for High-Efficiency Organic Solar Cells. <i>Advanced Materials</i> , 2016, 28, 5980-5985.	21.0	87
14	15.4% Efficiency all-polymer solar cells. <i>Science China Chemistry</i> , 2021, 64, 408-412.	8.2	83
15	Optimized “Alloy-Parallel” Morphology of Ternary Organic Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1502456.	19.5	79
16	Understanding the Effect of End Group Halogenation in Tuning Miscibility and Morphology of High-Performance Small Molecular Acceptors. <i>Solar Rrl</i> , 2020, 4, 2000250.	5.8	63
17	Molecular Motions in AIEgen Crystals: Turning on Photoluminescence by Force-Induced Filament Sliding. <i>Journal of the American Chemical Society</i> , 2020, 142, 14608-14618.	13.7	62
18	BioAIEgens derived from rosin: how does molecular motion affect their photophysical processes in solid state?. <i>Nature Communications</i> , 2021, 12, 1773.	12.8	62

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19	Enhancing the Photovoltaic Performance via Vertical Phase Distribution Optimization in Small Molecule:PC ₇₁ BM Blends. <i>Advanced Energy Materials</i> , 2017, 7, 1701548.	19.5	57
20	Over 15% Efficiency Polymer Solar Cells Enabled by Conformation Tuning of Newly Designed Asymmetric Small-Molecule Acceptors. <i>Advanced Functional Materials</i> , 2020, 30, 2000383.	14.9	55
21	Indacenodithiophene-based wide bandgap copolymers for high performance single-junction and tandem polymer solar cells. <i>Nano Energy</i> , 2017, 33, 313-324.	16.0	52
22	Steric Engineering of Alkylthiolation Side Chains to Finely Tune Miscibility in Nonfullerene Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1802686.	19.5	51
23	Incorporation of Fluorine onto Different Positions of Phenyl Substituted Benzo[1,2- <i>b</i> :4,5- <i>b'</i>]-dithiophene Unit: Influence on Photovoltaic Properties. <i>Macromolecules</i> , 2015, 48, 4347-4356.	4.8	50
24	Panchromatic Ternary Organic Solar Cells with Porphyrin Dimers and Absorption-Complementary Benzodithiophene-based Small Molecules. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 6283-6291.	8.0	49
25	Less is more: Silver-AIE core@shell nanoparticles for multimodality cancer imaging and synergistic therapy. <i>Biomaterials</i> , 2020, 238, 119834.	11.4	48
26	10.13% Efficiency All-Polymer Solar Cells Enabled by Improving the Optical Absorption of Polymer Acceptors. <i>Solar Rrl</i> , 2020, 4, 2000142.	5.8	45
27	Understanding the Impact of Hierarchical Nanostructure in Ternary Organic Solar Cells. <i>Advanced Science</i> , 2015, 2, 1500250.	11.2	43
28	A Cross-Linkable Donor Polymer as the Underlying Layer to Tune the Active Layer Morphology of Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2016, 26, 226-232.	14.9	41
29	Supramolecular Polymerization with Dynamic Self-Sorting Sequence Control. <i>Macromolecules</i> , 2019, 52, 8814-8825.	4.8	40
30	Revisiting an ancient inorganic aggregation-induced emission system: An enlightenment to clusteroluminescence. <i>Aggregate</i> , 2021, 2, e36.	9.9	40
31	Efficient modulation of end groups for the asymmetric small molecule acceptors enabling organic solar cells with over 15% efficiency. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5927-5935.	10.3	39
32	Rational selection of solvents and fine tuning of morphologies toward highly efficient polymer solar cells fabricated using green solvents. <i>RSC Advances</i> , 2015, 5, 69567-69572.	3.6	37
33	Evoking Highly Immunogenic Ferroptosis Aided by Intramolecular Motion-Induced Photo-Hyperthermia for Cancer Therapy. <i>Advanced Science</i> , 2022, 9, e2104885.	11.2	34
34	Evolution of morphology and open-circuit voltage in alloy-energy transfer coexisting ternary organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9859-9866.	10.3	30
35	Indenothiophene-Based Wide Bandgap Copolymer for Polymer Fullerene Solar Cells with 9.01% Efficiency and 1.0 V Open Circuit Voltage. <i>Advanced Electronic Materials</i> , 2016, 2, 1600340.	5.1	28
36	A Conjugated Polymeric Supramolecular Network with Aggregation-Induced Emission Enhancement: An Efficient Light-Harvesting System with an Ultrahigh Antenna Effect. <i>Angewandte Chemie</i> , 2020, 132, 9994-9999.	2.0	22

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37	Critical Role of Vertical Phase Separation in Small-Molecule Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 12913-12920.	8.0	21
38	Aromatic end-capped acceptor effects on molecular stacking and the photovoltaic performance of solution-processable small molecules. Journal of Materials Chemistry A, 2018, 6, 22077-22085.	10.3	19
39	Taming Reactive Oxygen Species: Mitochondria-Targeting Aggregation-Induced Emission Luminogen for Neuron Protection via Photosensitization-Triggered Autophagy. CCS Chemistry, 2022, 4, 2249-2257.	7.8	14
40	Tuning molecule diffusion to control the phase separation of the p-DTS(FBTTh ₂) ₂ /EP-PDI blend system via thermal annealing. Journal of Materials Chemistry C, 2017, 5, 6842-6851.	5.5	13
41	Side chain engineering of polymer acceptors for all-polymer solar cells with enhanced efficiency. Journal of Materials Chemistry C, 2020, 8, 4012-4020.	5.5	13
42	Autonomous Visualization of Damage in Polymers by Metal-Free Polymerizations of Microencapsulated Activated Alkynes. Advanced Science, 2022, 9, e2105395.	11.2	8
43	Functionalized alkenyl side chains: a feasible strategy to improve charge transport and photovoltaic performance. Journal of Materials Chemistry C, 2020, 8, 2171-2177.	5.5	4
44	A Simple but Efficient Small Molecule with a High Open Circuit Voltage of 1.07 V in Solution-Processable Organic Solar Cells. Asian Journal of Organic Chemistry, 2018, 7, 558-562.	2.7	3
45	Frontispiz: A Conjugated Polymeric Supramolecular Network with Aggregation-Induced Emission Enhancement: An Efficient Light-Harvesting System with an Ultrahigh Antenna Effect. Angewandte Chemie, 2020, 132, .	2.0	0
46	Frontispiece: A Conjugated Polymeric Supramolecular Network with Aggregation-Induced Emission Enhancement: An Efficient Light-Harvesting System with an Ultrahigh Antenna Effect. Angewandte Chemie - International Edition, 2020, 59, .	13.8	0