

Yongzhen Wu

List of Publications by Year in descending order

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84
papers

14,652
citations

44069

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docs citations

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times ranked

12457
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving Contact and Passivation of Buried Interface for High-Efficiency and Large-Area Inverted Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2022, 32, 2109968.	14.9	47
2	Efficient and Stable Methylammonium-Free Tin-Lead Perovskite Solar Cells with Hexaazatrinaphthylene-Based Hole-Transporting Materials. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 6852-6858.	8.0	13
3	Methylthiophene terminated D ¹⁸ O molecular semiconductors as multifunctional interfacial materials for high performance perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2022, 10, 1862-1869.	5.5	4
4	Dopant-free hole-transporting materials for stable Sb ₂ (S,Se) ₃ solar cells. <i>Chemical Communications</i> , 2022, 58, 4787-4790.	4.1	15
5	Reconstructed covalent organic frameworks. <i>Nature</i> , 2022, 604, 72-79.	27.8	190
6	Stable FAPbI ₃ in Inverted Perovskite Solar Cells with Efficiency Exceeding 22% via a Self-Passivation Strategy. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	47
7	Synergistic effect of amide and fluorine of polymers assist stable inverted perovskite solar cells with fill factor > 83%. <i>Chemical Engineering Journal</i> , 2022, 442, 136136.	12.7	29
8	Molecular engineering of star-shaped indoline hole transport materials: The influence of planarity on the hole extraction and transport processes. <i>Chemistry - A European Journal</i> , 2022, , .	3.3	1
9	Robust hole transport material with interface anchors enhances the efficiency and stability of inverted formamidinium cesium perovskite solar cells with a certified efficiency of 22.3%. <i>Energy and Environmental Science</i> , 2022, 15, 2567-2580.	30.8	46
10	In situ growth of graphene on both sides of a Cu-Ni alloy electrode for perovskite solar cells with improved stability. <i>Nature Energy</i> , 2022, 7, 520-527.	39.5	68
11	A Coplanar Extended Quinoxaline Based Hole-Transporting Material Enabling over 21% Efficiency for Dopant-Free Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2021, 133, 2706-2711.	2.0	17
12	A Coplanar Extended Quinoxaline Based Hole-Transporting Material Enabling over 21% Efficiency for Dopant-Free Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2674-2679.	13.8	140
13	Anchorable Perylene Diimides as Chemically Inert Electron Transport Layer for Efficient and Stable Perovskite Solar Cells with High Reproducibility. <i>Solar Rrl</i> , 2021, 5, 2000736.	5.8	14
14	Comparative Studies on the Structure-Performance Relationships of Phenothiazine-Based Organic Dyes for Dye-Sensitized Solar Cells. <i>ACS Omega</i> , 2021, 6, 6817-6823.	3.5	16
15	Making Room for Growing Oriented FASn ₃ with Large Grains via Cold Precursor Solution. <i>Advanced Functional Materials</i> , 2021, 31, 2100931.	14.9	57
16	Bonding Strength Regulates Anchoring-Based Self-Assembly Monolayers for Efficient and Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2103847.	14.9	53
17	Engineering Nanoparticulate Organic Photocatalysts via a Scalable Flash Nanoprecipitation Process for Efficient Hydrogen Production. <i>Angewandte Chemie</i> , 2021, 133, 15718-15725.	2.0	1
18	Engineering Nanoparticulate Organic Photocatalysts via a Scalable Flash Nanoprecipitation Process for Efficient Hydrogen Production. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15590-15597.	13.8	29

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19	Lignin Nanoparticles: Promising Sustainable Building Blocks of Photoluminescent and Haze Films for Improving Efficiency of Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 33536-33545.	8.0	13
20	The Main Progress of Perovskite Solar Cells in 2020~2021. Nano-Micro Letters, 2021, 13, 152.	27.0	250
21	Star-shaped D- π -D hole-transporting materials regulated by molecular planarity and their application in efficient perovskite solar cells. Journal of Power Sources, 2021, 506, 230102.	7.8	7
22	Reduction of Nonradiative Loss in Inverted Perovskite Solar Cells by Donor~ π -Acceptor Dipoles. ACS Applied Materials & Interfaces, 2021, 13, 44321-44328.	8.0	30
23	Pyridine functionalized phenothiazine derivatives as low-cost and stable hole-transporting material for perovskite solar cells. Materials Today Energy, 2021, , 100903.	4.7	4
24	Synergistic Coassembly of Highly Wettable and Uniform Hole~ π -Extraction Monolayers for Scaling~ μ p Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 1909509.	14.9	41
25	Phenanthrene~ π -Fused~ π -Quinoxaline as a Key Building Block for Highly Efficient and Stable Sensitizers in Copper~ π -Electrolyte~ π -Based Dye~ π -Sensitized Solar Cells. Angewandte Chemie, 2020, 132, 9410-9415.	2.0	17
26	Phenanthrene~ π -Fused~ π -Quinoxaline as a Key Building Block for Highly Efficient and Stable Sensitizers in Copper~ π -Electrolyte~ π -Based Dye~ π -Sensitized Solar Cells. Angewandte Chemie - International Edition, 2020, 59, 9324-9329.	13.8	59
27	Stabilizing Formamidinium Lead Iodide Perovskite by Sulfonyl~ π -Functionalized Phenethylammonium Salt via Crystallization Control and Surface Passivation. Solar Rrl, 2020, 4, 2000069.	5.8	33
28	Electron-enriched thione enables strong Pb~ π -S interaction for stabilizing high quality CsPbI ₃ perovskite films with low-temperature processing. Chemical Science, 2020, 11, 3132-3140.	7.4	29
29	High Electron Affinity Enables Fast Hole Extraction for Efficient Flexible Inverted Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1903487.	19.5	210
30	Charge-transport layer engineering in perovskite solar cells. Science Bulletin, 2020, 65, 1237-1241.	9.0	115
31	Indeno[1,2- <i>b,c</i>]carbazole as Methoxy~ π -Free Donor Group: Constructing Efficient and Stable Hole~ π -Transporting Materials for Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 15868-15872.	2.0	15
32	Indeno[1,2- <i>b,c</i>]carbazole as Methoxy~ π -Free Donor Group: Constructing Efficient and Stable Hole~ π -Transporting Materials for Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 15721-15725.	13.8	94
33	Semi~ π -Locked Tetrathienylethene as a Building Block for Hole~ π -Transporting Materials: Toward Efficient and Stable Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 3824-3829.	2.0	29
34	Semi~ π -Locked Tetrathienylethene as a Building Block for Hole~ π -Transporting Materials: Toward Efficient and Stable Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 3784-3789.	13.8	163
35	Efficient Defect Passivation for Perovskite Solar Cells by Controlling the Electron Density Distribution of Donor~ π -Acceptor Molecules. Advanced Energy Materials, 2019, 9, 1803766.	19.5	280
36	Efficient p-i-n structured perovskite solar cells employing low-cost and highly reproducible oligomers as hole transporting materials. Science China Chemistry, 2019, 62, 767-774.	8.2	16

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37	Efficient and Stable Chemical Passivation on Perovskite Surface via Bidentate Anchoring. <i>Advanced Energy Materials</i> , 2019, 9, 1803573.	19.5	232
38	Self-assembled naphthalimide derivatives as an efficient and low-cost electron extraction layer for n-i-p perovskite solar cells. <i>Chemical Communications</i> , 2019, 55, 13239-13242.	4.1	27
39	Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 1779-1787.	30.8	148
40	Molecular Engineering of Quinoxaline-Based D π A π D Organic Sensitizers: Taking the Merits of a Large and Rigid Auxiliary Acceptor. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13635-13644.	8.0	45
41	Control of Electrical Potential Distribution for High-Performance Perovskite Solar Cells. <i>Joule</i> , 2018, 2, 296-306.	24.0	138
42	Extrinsic Movable Ions in MAPbI ₃ Modulate Energy Band Alignment in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018, 8, 1701981.	19.5	62
43	Incorporating quinoxaline unit as additional acceptor for constructing efficient donor-free solar cell sensitizers. <i>Dyes and Pigments</i> , 2018, 149, 65-72.	3.7	10
44	Sulfone-containing covalent organic frameworks for photocatalytic hydrogen evolution from water. <i>Nature Chemistry</i> , 2018, 10, 1180-1189.	13.6	883
45	Low cost and stable quinoxaline-based hole-transporting materials with a D π A π D molecular configuration for efficient perovskite solar cells. <i>Chemical Science</i> , 2018, 9, 5919-5928.	7.4	146
46	Thermally Stable MAPbI ₃ Perovskite Solar Cells with Efficiency of 19.19% and Area over 1 cm ² achieved by Additive Engineering. <i>Advanced Materials</i> , 2017, 29, 1701073.	21.0	541
47	Accurate and fast evaluation of perovskite solar cells with least hysteresis. <i>Applied Physics Express</i> , 2017, 10, 076601.	2.4	12
48	Diffusion engineering of ions and charge carriers for stable efficient perovskite solar cells. <i>Nature Communications</i> , 2017, 8, 15330.	12.8	356
49	Stable Inverted Planar Perovskite Solar Cells with Low-Temperature-Processed Hole-Transport Bilayer. <i>Advanced Energy Materials</i> , 2017, 7, 1700763.	19.5	115
50	Vertical recrystallization for highly efficient and stable formamidinium-based inverted-structure perovskite solar cells. <i>Energy and Environmental Science</i> , 2017, 10, 1942-1949.	30.8	402
51	Molecular engineering and sequential cosensitization for preventing the "trade-off" effect with photovoltaic enhancement. <i>Chemical Science</i> , 2017, 8, 2115-2124.	7.4	41
52	Cost-Performance Analysis of Perovskite Solar Modules. <i>Advanced Science</i> , 2017, 4, 1600269.	11.2	345
53	Annealing-free perovskite films by instant crystallization for efficient solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 8548-8553.	10.3	103
54	Novel Squaraine Cosensitization System of Panchromatic Light-Harvesting with Synergistic Effect for Highly Efficient Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 3567-3574.	6.7	23

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55	Enhanced Stability of Perovskite Solar Cells through Corrosion-Free Pyridine Derivatives in Hole-Transporting Materials. <i>Advanced Materials</i> , 2016, 28, 10738-10743.	21.0	147
56	Perovskite solar cells with 18.21% efficiency and area over 1%cm ² fabricated by heterojunction engineering. <i>Nature Energy</i> , 2016, 1, .	39.5	555
57	High-Quality Mixed-Organic-Cation Perovskites from a Phase-Pure Non-stoichiometric Intermediate (FAI) for Solar Cells. <i>Advanced Materials</i> , 2015, 27, 4918-4923.	21.0	140
58	Selective Deposition of Insulating Metal Oxide in Perovskite Solar Cells with Enhanced Device Performance. <i>ChemSusChem</i> , 2015, 8, 2625-2629.	6.8	10
59	Rational Molecular Engineering of Indoline-Based D-A- π -A Organic Sensitizers for Long-Wavelength-Responsive Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26802-26810.	8.0	48
60	Insight into D-A- π -A Structured Sensitizers: A Promising Route to Highly Efficient and Stable Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 9307-9318.	8.0	278
61	D-A- π -A featured sensitizers containing an auxiliary acceptor of benzoxadiazole: molecular engineering and co-sensitization. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10603-10609.	10.3	33
62	Cosensitization of D-A- π -A Quinoxaline Organic Dye: Efficiently Filling the Absorption Valley with High Photovoltaic Efficiency. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5296-5304.	8.0	102
63	Efficient and stable large-area perovskite solar cells with inorganic charge extraction layers. <i>Science</i> , 2015, 350, 944-948.	12.6	2,007
64	Consecutive Morphology Controlling Operations for Highly Reproducible Mesostructured Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 20707-20713.	8.0	43
65	Hybrid interfacial layer leads to solid performance improvement of inverted perovskite solar cells. <i>Energy and Environmental Science</i> , 2015, 8, 629-640.	30.8	285
66	Co-sensitization of benzoxadiazole based D-A- π -A featured sensitizers: compensating light-harvesting and retarding charge recombination. <i>Journal of Materials Chemistry A</i> , 2014, 2, 14649-14657.	10.3	39
67	Insight into Benzothiadiazole Acceptor in D-A- π -A Configuration on Photovoltaic Performances of Dye-Sensitized Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 1026-1034.	6.7	86
68	Effect of a Long Alkyl Group on Cyclopentadithiophene as a Conjugated Bridge for D-A- π -A Organic Sensitizers: IPCE, Electron Diffusion Length, and Charge Recombination. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 14621-14630.	8.0	67
69	Retarding the crystallization of Pbl ₂ for highly reproducible planar-structured perovskite solar cells via sequential deposition. <i>Energy and Environmental Science</i> , 2014, 7, 2934-2938.	30.8	807
70	A dopant-free hole-transporting material for efficient and stable perovskite solar cells. <i>Energy and Environmental Science</i> , 2014, 7, 2963-2967.	30.8	668
71	Dye-Sensitized Solar Cells Based on Quinoxaline Dyes: Effect of π -Linker on Absorption, Energy Levels, and Photovoltaic Performances. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16552-16561.	3.1	72
72	Highly compact TiO ₂ layer for efficient hole-blocking in perovskite solar cells. <i>Applied Physics Express</i> , 2014, 7, 052301.	2.4	199

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73	Near-Infrared Colorimetric and Fluorescent Cu ²⁺ Sensors Based on Indoline-Benzothiadiazole Derivatives via Formation of Radical Cations. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 12215-12220.	8.0	56
74	Organic sensitizers from D-A to A-A: effect of the internal electron-withdrawing units on molecular absorption, energy levels and photovoltaic performances. <i>Chemical Society Reviews</i> , 2013, 42, 2039-2058.	38.1	997
75	Constructing High-Efficiency A-Featured Solar Cell Sensitizers: a Promising Building Block of 2,3-Diphenylquinoxaline for Antiaggregation and Photostability. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 4986-4995.	8.0	187
76	Organic sensitizers incorporating 3,4-ethylenedioxythiophene as the conjugated bridge: Joint photophysical and electrochemical analysis of photovoltaic performance. <i>Dyes and Pigments</i> , 2013, 99, 176-184.	3.7	17
77	D-A-Featured Sensitizers Bearing Phthalimide and Benzotriazole as Auxiliary Acceptor: Effect on Absorption and Charge Recombination Dynamics in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 1822-1830.	8.0	148
78	A novel A-organic sensitizer containing a diketopyrrolopyrrole unit with a branched alkyl chain for highly efficient and stable dye-sensitized solar cells. <i>Chemical Communications</i> , 2012, 48, 6972.	4.1	229
79	High-conversion-efficiency organic dye-sensitized solar cells: molecular engineering on A-featured organic indoline dyes. <i>Energy and Environmental Science</i> , 2012, 5, 8261.	30.8	308
80	Constructing Organic A-Featured Sensitizers with a Quinoxaline Unit for High-Efficiency Solar Cells: The Effect of an Auxiliary Acceptor on the Absorption and the Energy Level Alignment. <i>Chemistry - A European Journal</i> , 2012, 18, 8190-8200.	3.3	171
81	Hexylthiophene-Featured A Structural Indoline Chromophores for Coadsorbent-Free and Panchromatic Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2012, 2, 149-156.	19.5	190
82	Absorption and photovoltaic properties of organic solar cell sensitizers containing fluorene unit as conjunction bridge. <i>Energy and Environmental Science</i> , 2011, 4, 1830.	30.8	88
83	Incorporating Benzotriazole Moiety to Construct A Organic Sensitizers for Solar Cells: Significant Enhancement of Open-Circuit Photovoltage with Long Alkyl Group. <i>Chemistry of Materials</i> , 2011, 23, 4394-4401.	6.7	253
84	Organic A Solar Cell Sensitizers with Improved Stability and Spectral Response. <i>Advanced Functional Materials</i> , 2011, 21, 756-763.	14.9	601