

Wu-Qiang Wu

List of Publications by Year in Descending Order

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Version: 2024-04-23

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

80
papers

4,192
citations

35
h-index

64
g-index

81
ext. papers

5,011
ext. citations

13.6
avg, IF

6
L-index

#	Paper	IF	Citations
80	Small amines bring big benefits to perovskite-based solar cells and light-emitting diodes. <i>Chem</i> , 2022 , 8, 351-383	16.2	6
79	Intermarriage between amorphous and polycrystalline materials in perovskite solar cells: positive or not?. <i>Journal of Energy Chemistry</i> , 2022 , 66, 525-528	12	1
78	Large-Area Blade-Coated Solar Cells: Advances and Perspectives. <i>Advanced Energy Materials</i> , 2021 , 11, 2100378	21.8	28
77	Perovskite crystals redissolution strategy for affordable, reproducible, efficient and stable perovskite photovoltaics. <i>Materials Today</i> , 2021 , 50, 199-199	21.8	14
76	Blade-coating Perovskite Films with Diverse Compositions for Efficient Photovoltaics. <i>Energy and Environmental Materials</i> , 2021 , 4, 277-283	13	15
75	Can the efficiencies of simplified perovskite solar cells go higher?. <i>Journal of Energy Chemistry</i> , 2021 , 58, 33-36	12	4
74	Recent progress of minimal voltage losses for high-performance perovskite photovoltaics. <i>Nano Energy</i> , 2021 , 81, 105634	17.1	20
73	A Novel Annealing-Free Amorphous Inorganic Metal Oxyhydroxide Cathode Interlayer for Efficient and Stable Inverted Perovskite Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2000664	7.1	4
72	Green Fluorine-Free Synthesis of Hollow Rectangular Prism-like TiO ₂ Mesocrystals with Exposed {001} Facets for High-Performance Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 1684-1692	3.8	3
71	Constructing an n/n+ homojunction in a monolithic perovskite film for boosting charge collection in inverted perovskite photovoltaics. <i>Energy and Environmental Science</i> , 2021 , 14, 4048-4058	35.4	29
70	Interfacial Linkage and Carbon Encapsulation Enable Full Solution-Printed Perovskite Photovoltaics with Prolonged Lifespan. <i>Angewandte Chemie</i> , 2021 , 133, 23928	3.6	4
69	Interfacial Linkage and Carbon Encapsulation Enable Full Solution-Printed Perovskite Photovoltaics with Prolonged Lifespan. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 23735-23742	16.4	13
68	Blading Phase-Pure Formamidinium-Alloyed Perovskites for High-Efficiency Solar Cells with Low Photovoltage Deficit and Improved Stability. <i>Advanced Materials</i> , 2020 , 32, e2000995	24	80
67	Spontaneous surface/interface ligand-anchored functionalization for extremely high fill factor over 86% in perovskite solar cells. <i>Nano Energy</i> , 2020 , 75, 104929	17.1	33
66	Fused-ring phenazine building blocks for efficient copolymer donors. <i>Materials Chemistry Frontiers</i> , 2020 , 4, 1454-1458	7.8	11
65	Resolving spatial and energetic distributions of trap states in metal halide perovskite solar cells. <i>Science</i> , 2020 , 367, 1352-1358	33.3	322
64	Correlating alkyl chain length with defect passivation efficacy in perovskite solar cells. <i>Chemical Communications</i> , 2020 , 56, 5006-5009	5.8	20

63	Reducing Surface Halide Deficiency for Efficient and Stable Iodide-Based Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2020 , 142, 3989-3996	16.4	133
62	Low-Temperature Solution-Processed Amorphous Titania Nanowire Thin Films for 1 cm Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 11450-11458	9.5	7
61	Optoelectronic Devices: The Rise of Textured Perovskite Morphology: Revolutionizing the Pathway toward High-Performance Optoelectronic Devices (Adv. Energy Mater. 7/2020). <i>Advanced Energy Materials</i> , 2020 , 10, 2070029	21.8	
60	Multifunctional Phosphorus-Containing Lewis Acid and Base Passivation Enabling Efficient and Moisture-Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2020 , 30, 1910710	15.6	78
59	Understanding of carrier dynamics, heterojunction merits and device physics: towards designing efficient carrier transport layer-free perovskite solar cells. <i>Chemical Society Reviews</i> , 2020 , 49, 354-381	58.5	78
58	The Rise of Textured Perovskite Morphology: Revolutionizing the Pathway toward High-Performance Optoelectronic Devices. <i>Advanced Energy Materials</i> , 2020 , 10, 1902256	21.8	27
57	A Review of Diverse Halide Perovskite Morphologies for Efficient Optoelectronic Applications. <i>Small Methods</i> , 2020 , 4, 1900662	12.8	44
56	Suppressing Interfacial Charge Recombination in Electron-Transport-Layer-Free Perovskite Solar Cells to Give an Efficiency Exceeding 21 %. <i>Angewandte Chemie</i> , 2020 , 132, 21166-21173	3.6	20
55	Suppressing Interfacial Charge Recombination in Electron-Transport-Layer-Free Perovskite Solar Cells to Give an Efficiency Exceeding 21 . <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 20980-20987	16.4	33
54	Synchronous surface and bulk composition management for red-shifted light absorption and suppressed interfacial recombination in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 9743-9752	13	13
53	Solution-Processed Anatase Titania Nanowires: From Hyperbranched Design to Optoelectronic Applications. <i>Accounts of Chemical Research</i> , 2019 , 52, 633-644	24.3	10
52	Branched titania nanostructures for efficient energy conversion and storage: A review on design strategies, structural merits and multifunctionalities. <i>Nano Energy</i> , 2019 , 62, 791-809	17.1	24
51	Bilateral alkylamine for suppressing charge recombination and improving stability in blade-coated perovskite solar cells. <i>Science Advances</i> , 2019 , 5, eaav8925	14.3	262
50	Bifacial Contact Junction Engineering for High-Performance Perovskite Solar Cells with Efficiency Exceeding 21. <i>Small</i> , 2019 , 15, e1900606	11	11
49	Enhanced efficacy of defect passivation and charge extraction for efficient perovskite photovoltaics with a small open circuit voltage loss. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9025-9033 ¹³		49
48	A 3D hybrid nanowire/microcuboid optoelectronic electrode for maximised light harvesting in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 932-939	13	14
47	Maze-Like Halide Perovskite Films for Efficient Electron Transport Layer-Free Perovskite Solar Cells. <i>Solar Rrl</i> , 2019 , 3, 1800268	7.1	38
46	Molecular doping enabled scalable blading of efficient hole-transport-layer-free perovskite solar cells. <i>Nature Communications</i> , 2018 , 9, 1625	17.4	242

45	Solution-processed Zn ₂ SnO ₄ electron transporting layer for efficient planar perovskite solar cells. <i>Materials Today Energy</i> , 2018 , 7, 260-266	7	25
44	Layered-stacking of titania films for solar energy conversion: Toward tailored optical, electronic and photovoltaic performance. <i>Journal of Energy Chemistry</i> , 2018 , 27, 690-702	12	7
43	3D Branched Nanowire-Coated Macroporous Titania Thin Films for Efficient Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018 , 28, 1804356	15.6	15
42	Monodisperse anatase titania microspheres with high-thermal stability and large pore size (~80 nm) as efficient photocatalysts. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 3645-3654	13	18
41	Effect of the Microstructure of the Functional Layers on the Efficiency of Perovskite Solar Cells. <i>Advanced Materials</i> , 2017 , 29, 1601715	24	80
40	Recent progress in hybrid perovskite solar cells based on n-type materials. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 10092-10109	13	118
39	Perovskite Solar Cells: Effect of the Microstructure of the Functional Layers on the Efficiency of Perovskite Solar Cells (Adv. Mater. 20/2017). <i>Advanced Materials</i> , 2017 , 29,	24	2
38	Recent advances in hierarchical three-dimensional titanium dioxide nanotree arrays for high-performance solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 12699-12717	13	40
37	Integrated planar and bulk dual heterojunctions capable of efficient electron and hole extraction for perovskite solar cells with >17% efficiency. <i>Nano Energy</i> , 2017 , 32, 187-194	17.1	19
36	Thin Films of Tin Oxide Nanosheets Used as the Electron Transporting Layer for Improved Performance and Ambient Stability of Perovskite Photovoltaics. <i>Solar Rrl</i> , 2017 , 1, 1700117	7.1	57
35	Three-dimensional titanium oxide nanoarrays for perovskite photovoltaics: surface engineering for cascade charge extraction and beneficial surface passivation. <i>Sustainable Energy and Fuels</i> , 2017 , 1, 1960-1967	5.8	12
34	Solvent-Mediated Intragranular-Coarsening of CH ₃ NHPbI Thin Films toward High-Performance Perovskite Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 31959-31967	9.5	20
33	Trilateral π -conjugation extensions of phenothiazine-based dyes enhance the photovoltaic performance of the dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2016 , 124, 63-71	4.6	71
32	Sub-100 °C solution processed amorphous titania nanowire thin films for high-performance perovskite solar cells. <i>Journal of Power Sources</i> , 2016 , 329, 17-22	8.9	12
31	Optimizing semiconductor thin films with smooth surfaces and well-interconnected networks for high-performance perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12463-12470	13	23
30	Hierarchical ZnO nanorod-on-nanosheet arrays electrodes for efficient CdSe quantum dot-sensitized solar cells. <i>Science China Materials</i> , 2016 , 59, 807-816	7.1	20
29	Solvent-Mediated Dimension Tuning of Semiconducting Oxide Nanostructures as Efficient Charge Extraction Thin Films for Perovskite Solar Cells with Efficiency Exceeding 16%. <i>Advanced Energy Materials</i> , 2016 , 6, 1502027	21.8	47
28	Chapter 7. Controlling the Photoanode Mesostructure for Dye-sensitized and Perovskite-sensitized Solar Cells 2016 , 292-323		

27	Three-dimensional hyperbranched TiO ₂ /ZnO heterostructured arrays for efficient quantum dot-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 14826-14832	13	44
26	Thin Films of Dendritic Anatase Titania Nanowires Enable Effective Hole-Blocking and Efficient Light-Harvesting for High-Performance Mesoscopic Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2015 , 25, 3264-3272	15.6	88
25	CdS/CdSe co-sensitized TiO ₂ nanowire-coated hollow Spheres exceeding 6% photovoltaic performance. <i>Nano Energy</i> , 2015 , 11, 621-630	17.1	85
24	Three-dimensional TiO ₂ /ZnO hybrid array as a heterostructured anode for efficient quantum-dot-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 5199-205	9.5	75
23	Morphology-controlled cactus-like branched anatase TiO ₂ arrays with high light-harvesting efficiency for dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2014 , 260, 6-11	8.9	49
22	Constructing 3D branched nanowire coated macroporous metal oxide electrodes with homogeneous or heterogeneous compositions for efficient solar cells. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 4816-21	16.4	84
21	Multistack integration of three-dimensional hyperbranched anatase titania architectures for high-efficiency dye-sensitized solar cells. <i>Journal of the American Chemical Society</i> , 2014 , 136, 6437-45	16.4	210
20	Maximizing omnidirectional light harvesting in metal oxide hyperbranched array architectures. <i>Nature Communications</i> , 2014 , 5, 3968	17.4	138
19	Ultra-long anatase TiO ₂ nanowire arrays with multi-layered configuration on FTO glass for high-efficiency dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2014 , 7, 644-649	35.4	155
18	Rational surface engineering of anatase titania core-shell nanowire arrays: full-solution processed synthesis and remarkable photovoltaic performance. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 19100-8	9.5	10
17	A family of vertically aligned nanowires with smooth, hierarchical and hyperbranched architectures for efficient energy conversion. <i>Nano Energy</i> , 2014 , 9, 15-24	17.1	44
16	Constructing 3D Branched Nanowire Coated Macroporous Metal Oxide Electrodes with Homogeneous or Heterogeneous Compositions for Efficient Solar Cells. <i>Angewandte Chemie</i> , 2014 , 126, 4916-4921	3.6	10
15	Trilayered Photoanode of TiO ₂ Nanoparticles on a 1D/BD Nanostructured TiO ₂ -Grown Flexible Ti Substrate for High-Efficiency (9.1%) Dye-Sensitized Solar Cells with Unprecedentedly High Photocurrent Density. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 16426-16432	3.8	43
14	CdS/CdSe co-sensitized vertically aligned anatase TiO ₂ nanowire arrays for efficient solar cells. <i>Nano Energy</i> , 2014 , 8, 1-8	17.1	77
13	Hierarchical oriented anatase TiO ₂ nanostructure arrays on flexible substrate for efficient dye-sensitized solar cells. <i>Scientific Reports</i> , 2013 , 3, 1892	4.9	105
12	Fabrication of a double layered photoanode consisting of SnO ₂ nanofibers and nanoparticles for efficient dye-sensitized solar cells. <i>RSC Advances</i> , 2013 , 3, 13804	3.7	23
11	Impact of hydroxy and octyloxy substituents of phenothiazine based dyes on the photovoltaic performance. <i>Dyes and Pigments</i> , 2013 , 99, 299-307	4.6	31
10	Phenothiazine-based dyes with bilateral extension of π -conjugation for efficient dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2013 , 96, 722-731	4.6	68

9	Hierarchical macroporous Zn(2)SnO(4)-ZnO nanorod composite photoelectrodes for efficient CdS/CdSe quantum dot co-sensitized solar cells. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 11865-71	9.5	39
8	Influence of spatial arrangements of spacer and acceptor of phenothiazine based dyes on the performance of dye-sensitized solar cells. <i>Organic Electronics</i> , 2013 , 14, 2662-2672	3.5	31
7	Hydrothermal fabrication of hierarchically anatase TiO ₂ nanowire arrays on FTO glass for dye-sensitized solar cells. <i>Scientific Reports</i> , 2013 , 3, 1352	4.9	272
6	A double layered TiO ₂ photoanode consisting of hierarchical flowers and nanoparticles for high-efficiency dye-sensitized solar cells. <i>Nanoscale</i> , 2013 , 5, 4362-9	7.7	86
5	Dye-sensitized solar cells based on a double layered TiO ₂ photoanode consisting of hierarchical nanowire arrays and nanoparticles with greatly improved photovoltaic performance. <i>Journal of Materials Chemistry</i> , 2012 , 22, 18057		94
4	Hierarchical TiO ₂ flowers built from TiO ₂ nanotubes for efficient Pt-free based flexible dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 13175-9	3.6	37
3	Custom Molecular Design of Ligands for Perovskite Photovoltaics. <i>Accounts of Materials Research</i> ,	7.5	4
2	Room Temperature Fabrication of SnO ₂ Electrodes Enabling Barrier-Free Electron Extraction for Efficient Flexible Perovskite Photovoltaics. <i>Advanced Functional Materials</i> , 2200817	15.6	11
1	Carbon Electrode Endows High-Efficiency Perovskite Photovoltaics Affordable, Fully Printable, and Durable. <i>Solar Rrl</i> , 2200258	7.1	3