

# Jian Wang

## List of Publications by Year in descending order

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41  
papers

2,288  
citations

279798

23  
h-index

289244

40  
g-index

41  
all docs

41  
docs citations

41  
times ranked

4480  
citing authors

#	ARTICLE	IF	CITATIONS
1	Impurities and Electronic Property Variations of Natural MoS <sub>2</sub> Crystal Surfaces. ACS Nano, 2015, 9, 9124-9133.	14.6	240
2	Efficient and bright white light-emitting diodes based on single-layer heterophase halide perovskites. Nature Photonics, 2021, 15, 238-244.	31.4	231
3	Two-Dimensional Perovskite Solar Cells with 14.1% Power Conversion Efficiency and 0.68% External Radiative Efficiency. ACS Energy Letters, 2018, 3, 2086-2093.	17.4	224
4	HfSe <sub>2</sub> Thin Films: 2D Transition Metal Dichalcogenides Grown by Molecular Beam Epitaxy. ACS Nano, 2015, 9, 474-480.	14.6	195
5	Carbon coated Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> cathode material prepared by a PVA assisted sol-gel method. Electrochimica Acta, 2010, 55, 3864-3869.	5.2	149
6	Reducing Surface Recombination Velocities at the Electrical Contacts Will Improve Perovskite Photovoltaics. ACS Energy Letters, 2019, 4, 222-227.	17.4	138
7	Perovskite White Light Emitting Diodes: Progress, Challenges, and Opportunities. ACS Nano, 2021, 15, 17150-17174.	14.6	101
8	Room-temperature fabrication of a delafossite CuCrO <sub>2</sub> hole transport layer for perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 469-477.	10.3	91
9	Low-Temperature Solution-Processed Molybdenum Oxide Nanoparticle Hole Transport Layers for Organic Photovoltaic Devices. Advanced Energy Materials, 2012, 2, 1193-1197.	19.5	82
10	Fully Solution-Processed Tandem White Quantum-Dot Light-Emitting Diode with an External Quantum Efficiency Exceeding 25%. ACS Nano, 2018, 12, 6040-6049.	14.6	82
11	Intensity and wavelength dependence of bimolecular recombination in P3HT:PCBM solar cells: A white-light biased external quantum efficiency study. Journal of Applied Physics, 2013, 113, .	2.5	65
12	Effect of Plasmonic Au Nanoparticles on Inverted Organic Solar Cell Performance. Journal of Physical Chemistry C, 2013, 117, 85-91.	3.1	61
13	Solution Synthesized p-Type Copper Gallium Oxide Nanoplates as Hole Transport Layer for Organic Photovoltaic Devices. Journal of Physical Chemistry Letters, 2015, 6, 1071-1075.	4.6	59
14	Photon-Induced Reversible Phase Transition in CsPbBr <sub>3</sub> Perovskite. Advanced Functional Materials, 2019, 29, 1807922.	14.9	56
15	Sub-10 nm copper chromium oxide nanocrystals as a solution processed p-type hole transport layer for organic photovoltaics. Journal of Materials Chemistry C, 2016, 4, 3607-3613.	5.5	50
16	Transport Effects on Capacitance-Frequency Analysis for Defect Characterization in Organic Photovoltaic Devices. Physical Review Applied, 2016, 6, .	3.8	36
17	Reducing Surface Recombination Velocity of Methylammonium-Free Mixed-Cation Mixed-Halide Perovskites via Surface Passivation. Chemistry of Materials, 2021, 33, 5035-5044.	6.7	33
18	Solution Processed ZnO Hybrid Nanocomposite with Tailored Work Function for Improved Electron Transport Layer in Organic Photovoltaic Devices. ACS Applied Materials & Interfaces, 2013, 5, 9128-9133.	8.0	32

#	ARTICLE	IF	CITATIONS
19	Effects of Contact-Induced Doping on the Behaviors of Organic Photovoltaic Devices. <i>Nano Letters</i> , 2015, 15, 7627-7632.	9.1	32
20	Combustion Synthesis of p-Type Transparent Conducting $\text{CuCrO}_{2+x}$ and $\text{Cu:CrO}_x$ Thin Films at 180 °C. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 3732-3738.	8.0	29
21	Surface photovoltage characterization of organic photovoltaic devices. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	28
22	Tropical and Boreal Forest " Atmosphere Interactions: A Review. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 74, 24.	1.6	27
23	Origin of Photocurrent in Fullerene-Based Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15140-15148.	3.1	24
24	Scanning Kelvin Probe Microscopy Reveals That Ion Motion Varies with Dimensionality in 2D Halide Perovskites. <i>ACS Energy Letters</i> , 2021, 6, 100-108.	17.4	23
25	Solution-processed oxide thin film transistors on shape memory polymer enabled by photochemical self-patterning. <i>Journal of Materials Research</i> , 2018, 33, 2454-2462.	2.6	22
26	Role of Charge Transfer States in P3HT-Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 27681-27689.	3.1	20
27	One-Step Synthesis of ZnO Nanocrystals in <i>n</i> -Butanol with Bandgap Control: Applications in Hybrid and Organic Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18417-18423.	3.1	16
28	Revealing the effect of donor/acceptor intermolecular arrangement on organic solar cells performance based on two-dimensional conjugated small molecule as electron donor. <i>Organic Electronics</i> , 2015, 24, 30-36.	2.6	16
29	Quantitative Analyses of Competing Photocurrent Generation Mechanisms in Fullerene-Based Organic Photovoltaics. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16470-16477.	3.1	15
30	Significance of Ambient Temperature Control for Highly Reproducible Layered Perovskite Light-Emitting Diodes. <i>ACS Photonics</i> , 2020, 7, 2489-2497.	6.6	15
31	Organic-inorganic hybrid semiconductor thin films deposited using molecular-atomic layer deposition (MALD). <i>Journal of Materials Chemistry C</i> , 2016, 4, 2382-2389.	5.5	14
32	Bismuth Doping Alters Structural Phase Transitions in Methylammonium Lead Tribromide Single Crystals. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 2749-2755.	4.6	14
33	Effect of metal/bulk-heterojunction interfacial properties on organic photovoltaic device performance. <i>Journal of Materials Chemistry A</i> , 2014, 2, 15288.	10.3	11
34	Role of Contact Injection, Exciton Dissociation, and Recombination, Revealed through Voltage and Intensity Mapping of the Quantum Efficiency of Polymer:Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 10146-10155.	3.1	11
35	Controlling Spatial Crystallization Uniformity and Phase Orientation of Quasi-2D Perovskite-Based Light-Emitting Diodes Using Lewis Bases. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901860.	3.7	11
36	Revealing lattice and photocarrier dynamics of high-quality $\text{MAPbBr}_3$ single crystals by far infrared reflection and surface photovoltage spectroscopy. <i>Journal of Applied Physics</i> , 2019, 125, 025706.	2.5	9

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37	Relating Nongeminate Recombination to Charge-Transfer States in Bulk Heterojunction Organic Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19628-19633.	3.1	8
38	nâ€­Type Doping Induced by Electron Transport Layer in Organic Photovoltaic Devices. <i>Advanced Electronic Materials</i> , 2017, 3, 1600458.	5.1	8
39	General method to synthesize ultrasmall metal oxide nanoparticle suspensions for hole contact layers in organic photovoltaic devices. <i>MRS Communications</i> , 2015, 5, 45-50.	1.8	4
40	Solution-deposited Al <sub>2</sub> O <sub>3</sub> dielectric towards fully-patterned thin film transistors on shape memory polymer. , 2017, , .		4
41	Structural Order: The Dominant Factor for Nongeminate Recombination in Organic Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9242-9248.	3.1	2