

# Kai Wang

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/8513737/kai-wang-publications-by-year.pdf>  
**Version:** 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

61 papers	3,972 citations	31 h-index	63 g-index
67 ext. papers	4,656 ext. citations	15.4 avg, IF	5.78 L-index

#	Paper	IF	Citations
61	Probe of the excitonic transitions and lifetimes in quasi-2D organic/inorganic halide perovskites. <i>AIP Advances</i> , <b>2022</b> , 12, 015114	1.5	
60	Bio-inspired strategies for next-generation perovskite solar mobile power sources. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 12915-12984	58.5	2
59	Self-Powered Red/UV Narrowband Photodetector by Unbalanced Charge Carrier Transport Strategy. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2007016	15.6	18
58	One-key-reset/Recycling of whole perovskite solar cell. <i>Matter</i> , <b>2021</b> , 4, 2522-2541	12.7	10
57	Cost-Effective High-Performance Charge-Carrier-Transport-Layer-Free Perovskite Solar Cells Achieved by Suppressing Ion Migration. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 3044-3052	20.1	16
56	A Nonionic and Low-Entropic MA(MMA)nPbI <sub>3</sub> -Ink for Fast Crystallization of Perovskite Thin Films. <i>Joule</i> , <b>2020</b> , 4, 615-630	27.8	23
55	Organismic materials for beyond von Neumann machines. <i>Applied Physics Reviews</i> , <b>2020</b> , 7, 011309	17.3	12
54	Multifunctional nanostructured materials for next generation photovoltaics. <i>Nano Energy</i> , <b>2020</b> , 70, 104480	17.1	25
53	Pitch Gradation by Ion-Dragging Effect in Polymer-Stabilized Cholesteric Liquid Crystal Reflector Device. <i>Polymers</i> , <b>2020</b> , 12,	4.5	6
52	Nature of terrace edge states (TES) in lower-dimensional halide perovskite. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 7659-7670	13	8
51	High performance perovskites solar cells by hybrid perovskites co-crystallized with poly(ethylene oxide). <i>Nano Energy</i> , <b>2020</b> , 67, 104229	17.1	31
50	Artemisinin (ART)-Induced Perovskite/perovskite/bilayer structured photovoltaics. <i>Nano Energy</i> , <b>2020</b> , 78, 105133	17.1	11
49	Two-dimensional hybrid organic/inorganic perovskites as emergent ferroelectric materials. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 060906	2.5	13
48	Isothermally crystallized perovskites at room-temperature. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 3412-3422	35.4	71
47	Monocrystalline perovskite wafers/thin films for photovoltaic and transistor applications. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 24661-24690	13	18
46	Solution-Processed Ultrahigh Detectivity Photodetectors by Hybrid Perovskite Incorporated with Heterovalent Neodymium Cations. <i>ACS Omega</i> , <b>2019</b> , 4, 15873-15878	3.9	10
45	Enhanced Performance and Stability in DNA-Perovskite Heterostructure-Based Solar Cells. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2646-2655	20.1	26

44	Ultrahigh Durability Perovskite Solar Cells. <i>Nano Letters</i> , <b>2019</b> , 19, 1251-1259	11.5	27
43	Nonionic Sc <sup>3+</sup> Dopant for Efficient and Stable Halide Perovskite Photovoltaics. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1852-1861	20.1	28
42	Stable Efficiency Exceeding 20.6% for Inverted Perovskite Solar Cells through Polymer-Optimized PCBM Electron-Transport Layers. <i>Nano Letters</i> , <b>2019</b> , 19, 3313-3320	11.5	111
41	Efficient perovskite solar cells by hybrid perovskites incorporated with heterovalent neodymium cations. <i>Nano Energy</i> , <b>2019</b> , 61, 352-360	17.1	53
40	Fullerene Polymer Complex Inducing Dipole Electric Field for Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1804419	15.6	28
39	Melanin/Perovskite Composites for Photothermal Conversion. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901753	15.8	18
38	Distinct conducting layer edge states in two-dimensional (2D) halide perovskite. <i>Science Advances</i> , <b>2019</b> , 5, eaau3241	14.3	47
37	Recent progress in fundamental understanding of halide perovskite semiconductors. <i>Progress in Materials Science</i> , <b>2019</b> , 106, 100580	42.2	69
36	Mono-crystalline Perovskite Photovoltaics toward Ultrahigh Efficiency?. <i>Joule</i> , <b>2019</b> , 3, 311-316	27.8	33
35	Quasi-Two-Dimensional Halide Perovskite Single Crystal Photodetector. <i>ACS Nano</i> , <b>2018</b> , 12, 4919-4929	16.7	178
34	Wide-Bandgap Perovskite Solar Cells With Large Open-Circuit Voltage of 1653 mV Through Interfacial Engineering. <i>Solar Rrl</i> , <b>2018</b> , 2, 1800083	7.1	51
33	High efficiency planar-type perovskite solar cells with negligible hysteresis using EDTA-complexed SnO. <i>Nature Communications</i> , <b>2018</b> , 9, 3239	17.4	721
32	All electro spray printed perovskite solar cells. <i>Nano Energy</i> , <b>2018</b> , 53, 440-448	17.1	31
31	Efficient Polymer Solar Cells by Lithium Sulfonated Polystyrene as a Charge Transport Interfacial Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 5348-5357	9.5	28
30	NiSe@MoSe Nanosheet Arrays as the Electrode for High-Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 17067-17075	9.5	160
29	Ionic liquid induced surface trap-state passivation for efficient perovskite hybrid solar cells. <i>Organic Electronics</i> , <b>2017</b> , 41, 42-48	3.5	32
28	Inverted polymer solar cells with Zn <sub>2</sub> SnO <sub>4</sub> nanoparticles as the electron extraction layer. <i>Chinese Chemical Letters</i> , <b>2017</b> , 28, 1755-1759	8.1	2
27	Perovskite hybrid solar cells with a fullerene derivative electron extraction layer. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 4190-4197	7.1	20

26	Radical polymers as interfacial layers in inverted hybrid perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 23831-23839	13	32
25	Moderately reduced graphene oxide/PEDOT:PSS as hole transport layer to fabricate efficient perovskite hybrid solar cells. <i>Organic Electronics</i> , <b>2016</b> , 39, 288-295	3.5	36
24	High Performance Perovskite Hybrid Solar Cells with E-beam-Processed TiOx Electron Extraction Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 1876-83	9.5	37
23	Low bandgap semiconducting polymers for polymeric photovoltaics. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 4825-46	58.5	372
22	Efficient Perovskite Hybrid Solar Cells by Highly Electrical Conductive PEDOT:PSS Hole Transport Layer. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1501773	21.8	113
21	Inverted organic photovoltaic cells. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 2937-75	58.5	153
20	PbS quantum dots-induced trap-assisted charge injection in perovskite photodetectors. <i>Nano Energy</i> , <b>2016</b> , 30, 27-35	17.1	79
19	Preparation of TiO <sub>2</sub> /MWCNT core/shell heterostructures containing a single MWCNT and their electromagnetic properties. <i>Composite Interfaces</i> , <b>2015</b> , 22, 343-351	2.3	2
18	Ultrasensitive solution-processed perovskite hybrid photodetectors. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 6600-6606	7.1	88
17	Polyaniline-Modified Oriented Graphene Hydrogel Film as the Free-Standing Electrode for Flexible Solid-State Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 23932-40	9.5	68
16	Efficient Perovskite Hybrid Solar Cells via Controllable Crystallization Film Morphology. <i>IEEE Journal of Photovoltaics</i> , <b>2015</b> , 5, 1402-1407	3.7	4
15	Ultrasensitive solution-processed broad-band photodetectors using CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> /perovskite hybrids and PbS quantum dots as light harvesters. <i>Nanoscale</i> , <b>2015</b> , 7, 16460-9	7.7	90
14	High performance planar heterojunction perovskite solar cells with fullerene derivatives as the electron transport layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 1153-9	9.5	90
13	Efficient Perovskite Hybrid Solar Cells via Ionomer Interfacial Engineering. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 6875-6884	15.6	48
12	Design of TiO <sub>2</sub> @graphene nanosheets with rough surface and its reinforcement to polyarylene ether nitriles. <i>Polymers for Advanced Technologies</i> , <b>2015</b> , 26, 1267-1274	3.2	1
11	Polymer-based composites with improved energy density and dielectric constants by monoaxial hot-stretching for organic film capacitor applications. <i>RSC Advances</i> , <b>2015</b> , 5, 51975-51982	3.7	8
10	Efficient Perovskite Hybrid Solar Cells Through a Homogeneous High-Quality Organolead Iodide Layer. <i>Small</i> , <b>2015</b> , 11, 3369-76	11	40
9	Single-junction polymer solar cells with over 10% efficiency by a novel two-dimensional donor-acceptor conjugated copolymer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 4928-35	9.5	241

8	Bulk heterojunction perovskite hybrid solar cells with large fill factor. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1245-1255	35.4	223
7	High-detectivity inverted near-infrared polymer photodetectors using cross-linkable conjugated polyfluorene as an electron extraction layer. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 9592-9598	7.1	31
6	Enhanced performance of polymer solar cells using PEDOT:PSS doped with Fe <sub>3</sub> O <sub>4</sub> magnetic nanoparticles aligned by an external magnetostatic field as an anode buffer layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 13201-8	9.5	27
5	Molecular weight effect on the efficiency of polymer solar cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 12163-7	9.5	102
4	Solution-processed Fe <sub>3</sub> O <sub>4</sub> magnetic nanoparticle thin film aligned by an external magnetostatic field as a hole extraction layer for polymer solar cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 10325-30	9.5	42
3	Effect of Oligothiophene Bridge Length on the Photovoltaic Properties of D <sub>A</sub> Copolymers Based on Carbazole and Quinoxalinoporphyry. <i>Macromolecules</i> , <b>2012</b> , 45, 7806-7814	5.5	47
2	Localized Electron Density Engineering for Stabilized B-TCsSnI <sub>3</sub> -Based Perovskite Solar Cells with Efficiencies >10%. <i>ACS Energy Letters</i> , 1480-1489	20.1	50
1	Homogenization of Optical Field in Nanocrystal-Embedded Perovskite Composites. <i>ACS Energy Letters</i> , 1657-1671	20.1	