

# Jafar I Khan

## List of Publications by Year in Descending Order

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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.

32  
papers

912  
citations

13  
h-index

30  
g-index

36  
ext. papers

1,234  
ext. citations

14  
avg, IF

4.12  
L-index

#	Paper	IF	Citations
32	A Universal Cosolvent Evaporation Strategy Enables Direct Printing of Perovskite Single Crystals for Optoelectronic Device Applications.. <i>Advanced Materials</i> , <b>2022</b> , e2109862	24	1
31	28.2%-efficient, outdoor-stable perovskite/silicon tandem solar cell. <i>Joule</i> , <b>2021</b> ,	27.8	15
30	Chemical Design Rules for Non-Fullerene Acceptors in Organic Solar Cells (Adv. Energy Mater. 44/2021). <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2170175	21.8	0
29	Printed Memtransistor Utilizing a Hybrid Perovskite/Organic Heterojunction Channel. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 51592-51601	9.5	4
28	Impact of Photoluminescence Reabsorption in Metal-Halide Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100029	7.1	4
27	Impact of Acceptor Quadrupole Moment on Charge Generation and Recombination in Blends of IDT-Based Non-Fullerene Acceptors with PCE10 as Donor Polymer. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100839	21.8	6
26	Scaling-up perovskite solar cells on hydrophobic surfaces. <i>Nano Energy</i> , <b>2021</b> , 81, 105633	17.1	15
25	Intrinsic efficiency limits in low-bandgap non-fullerene acceptor organic solar cells. <i>Nature Materials</i> , <b>2021</b> , 20, 378-384	27	108
24	Impact of Cesium/Rubidium Incorporation on the Photophysics of Multiple-Cation Lead Halide Perovskites. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000072	7.1	8
23	Impact of Residual Lead Iodide on Photophysical Properties of Lead Triiodide Perovskite Solar Cells. <i>Energy Technology</i> , <b>2020</b> , 8, 1900627	3.5	8
22	How Humidity and Light Exposure Change the Photophysics of Metal Halide Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000382	7.1	13
21	Thienyl Sidechain Substitution and Backbone Fluorination of Benzodithiophene-Based Donor Polymers Concertedly Minimize Carrier Losses in ITIC-Based Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 10420-10429	3.8	7
20	Triarylphosphine Oxide as Cathode Interfacial Material for Inverted Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900434	4.6	11
19	P3HT Molecular Weight Determines the Performance of P3HT:O-IDTBR Solar Cells. <i>Solar Rrl</i> , <b>2019</b> , 3, 1900023	7.1	21
18	Key Parameters Requirements for Non-Fullerene-Based Organic Solar Cells with Power Conversion Efficiency >20. <i>Advanced Science</i> , <b>2019</b> , 6, 1802028	13.6	107
17	The Growth of Photoactive Porphyrin-Based MOF Thin Films Using the Liquid-Phase Epitaxy Approach and their Optoelectronic Properties. <i>Materials</i> , <b>2019</b> , 12,	3.5	6
16	Carrier Extraction from Perovskite to Polymeric Charge Transport Layers Probed by Ultrafast Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 6921-6928	6.4	11

15	Impact of Nonfullerene Acceptor Core Structure on the Photophysics and Efficiency of Polymer Solar Cells. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 802-811	20.1	38
14	Thermal annealing reduces geminate recombination in TQ1:N2200 all-polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 7428-7438	13	30
13	Impact of Structural Polymorphs on Charge Collection and Nongeminate Recombination in Organic Photovoltaic Devices. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 29141-29149	3.8	2
12	A Universal Double-Side Passivation for High Open-Circuit Voltage in Perovskite Solar Cells: Role of Carbonyl Groups in Poly(methyl methacrylate). <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801208	21.8	268
11	Progress in Poly (3-Hexylthiophene) Organic Solar Cells and the Influence of Its Molecular Weight on Device Performance. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801001	21.8	72
10	Improved Morphology and Efficiency of n-i-p Planar Perovskite Solar Cells by Processing with Glycol Ether Additives. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 1960-1968	20.1	39
9	Nanowires: Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy (Small 17/2016). <i>Small</i> , <b>2016</b> , 12, 2312	11	1
8	Real-Space Visualization of Energy Loss and Carrier Diffusion in a Semiconductor Nanowire Array Using 4D Electron Microscopy. <i>Advanced Materials</i> , <b>2016</b> , 28, 5106-11	24	23
7	Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy. <i>Small</i> , <b>2016</b> , 12, 2313-20	11	34
6	Real-Space Imaging of Carrier Dynamics of Materials Surfaces by Second-Generation Four-Dimensional Scanning Ultrafast Electron Microscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 3884-90	6.4	31
5	Understanding the Role of Order in Y-Series Non-Fullerene Solar Cells to Realize High Open-Circuit Voltages. <i>Advanced Energy Materials</i> , 2103422	21.8	2
4	Chemical Design Rules for Non-Fullerene Acceptors in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2102363	21.8	7
3	Charge Carrier Recombination at Perovskite/Hole Transport Layer Interfaces Monitored by Time-Resolved Spectroscopy. <i>ACS Energy Letters</i> , 4155-4164	20.1	2
2	Efficiency Limits in Wide-Bandgap Ge-Containing Donor Polymer:Nonfullerene Acceptor Bulk Heterojunction Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2100206	2.5	1
1	Understanding the Charge Transfer State and Energy Loss Trade-offs in Non-fullerene-Based Organic Solar Cells. <i>ACS Energy Letters</i> , 3408-3416	20.1	13