

# Longbin Qiu

## 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.

97 papers	8,571 citations	49 h-index	92 g-index
103 ext. papers	9,641 ext. citations	16.6 avg, IF	6.26 L-index

#	Paper	IF	Citations
97	An implantable flexible fiber generator without encapsulation made from differentially oxidized carbon nanotube fibers. <i>Chemical Engineering Journal</i> , <b>2022</b> , 441, 136106	14.7	1
96	Perovskite solar cells by vapor deposition based and assisted methods. <i>Applied Physics Reviews</i> , <b>2022</b> , 9, 021305	17.3	9
95	Flexible sensors based on assembled carbon nanotubes. <i>Aggregate</i> , <b>2021</b> , 2, e143	22.9	2
94	Scalable Fabrication of >90 cm <sup>2</sup> Perovskite Solar Modules with >1000 h Operational Stability Based on the Intermediate Phase Strategy. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003712	21.8	33
93	Removal of residual compositions by powder engineering for high efficiency formamidinium-based perovskite solar cells with operation lifetime over 2000h. <i>Nano Energy</i> , <b>2021</b> , 87, 106152	17.1	16
92	Continuous dry/wet spinning of white, stretchable, and conductive fibers of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) and ATO@TiO <sub>2</sub> nanoparticles for wearable e-textiles. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 8362-8367	7.1	9
91	Inverse Growth of Large-Grain-Size and Stable Inorganic Perovskite Micronanowire Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 14185-14194	9.5	21
90	How far are we from attaining 10-year lifetime for metal halide perovskite solar cells?. <i>Materials Science and Engineering Reports</i> , <b>2020</b> , 140, 100545	30.9	43
89	Interface engineering strategies towards Cs <sub>2</sub> AgBiBr <sub>6</sub> single-crystalline photodetectors with good Ohmic contact behaviours. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 276-284	7.1	53
88	Rapid hybrid chemical vapor deposition for efficient and hysteresis-free perovskite solar modules with an operation lifetime exceeding 800 hours. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 23404-23412	13	17
87	A holistic approach to interface stabilization for efficient perovskite solar modules with over 2,000-hour operational stability. <i>Nature Energy</i> , <b>2020</b> , 5, 596-604	62.3	140
86	Progress of Surface Science Studies on ABX <sub>3</sub> -Based Metal Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902726	21.8	51
85	Highly Efficient and Stable Perovskite Solar Cells via Modification of Energy Levels at the Perovskite/Carbon Electrode Interface. <i>Advanced Materials</i> , <b>2019</b> , 31, e1804284	24	116
84	Reduction of lead leakage from damaged lead halide perovskite solar modules using self-healing polymer-based encapsulation. <i>Nature Energy</i> , <b>2019</b> , 4, 585-593	62.3	191
83	Phase transition induced recrystallization and low surface potential barrier leading to 10.91%-efficient CsPbBr <sub>3</sub> perovskite solar cells. <i>Nano Energy</i> , <b>2019</b> , 65, 104015	17.1	111
82	Scalable Fabrication of Metal Halide Perovskite Solar Cells and Modules. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2147-2167	20.1	110
81	Carbon-Based Electrode Engineering Boosts the Efficiency of All Low-Temperature-Processed Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2032-2039	20.1	42

80	Hybrid chemical vapor deposition enables scalable and stable Cs-FA mixed cation perovskite solar modules with a designated area of 91.8 cm <sup>2</sup> approaching 10% efficiency. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 6920-6929	13	69
79	Negligible-Pb-Waste and Upscalable Perovskite Deposition Technology for High-Operational-Stability Perovskite Solar Modules. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1803047	21.8	48
78	Unraveling the Impact of Halide Mixing on Perovskite Stability. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 3515-3523	16.4	71
77	Scalable Fabrication of Stable High Efficiency Perovskite Solar Cells and Modules Utilizing Room Temperature Sputtered SnO <sub>2</sub> Electron Transport Layer. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1806779	15.6	84
76	Spin-Coated Crystalline Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 1318-1323	6.4	31
75	Enhancing Optical, Electronic, Crystalline, and Morphological Properties of Cesium Lead Halide by Mn Substitution for High-Stability All-Inorganic Perovskite Solar Cells with Carbon Electrodes. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800504	21.8	221
74	Chemical-to-Electricity Carbon: Water Device. <i>Advanced Materials</i> , <b>2018</b> , 30, e1707635	24	32
73	Large-Area Perovskite Solar Modules: Combination of Hybrid CVD and Cation Exchange for Upscaling Cs-Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability (Adv. Funct. Mater. 1/2018). <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1870007	15.6	3
72	Engineering Interface Structure to Improve Efficiency and Stability of Organometal Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 511-520	3.4	48
71	Advances and challenges to the commercialization of organic-inorganic halide perovskite solar cell technology. <i>Materials Today Energy</i> , <b>2018</b> , 7, 169-189	7	172
70	Interfacial Flat-Lying Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 22513-22519	9.5	14
69	The influence of secondary solvents on the morphology of a spiro-MeOTAD hole transport layer for lead halide perovskite solar cells. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 294001	3	14
68	Combination of Hybrid CVD and Cation Exchange for Upscaling Cs-Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1703835	15.6	126
67	Gas-solid reaction based over one-micrometer thick stable perovskite films for efficient solar cells and modules. <i>Nature Communications</i> , <b>2018</b> , 9, 3880	17.4	82
66	A coaxial triboelectric nanogenerator fiber for energy harvesting and sensing under deformation. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 6032-6037	13	69
65	Biocompatible carbon nanotube fibers for implantable supercapacitors. <i>Carbon</i> , <b>2017</b> , 122, 162-167	10.4	66
64	The Deformations of Carbon Nanotubes under Cutting. <i>ACS Nano</i> , <b>2017</b> , 11, 8464-8470	16.7	14
63	Methylammonium Lead Bromide Perovskite Light-Emitting Diodes by Chemical Vapor Deposition. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 3193-3198	6.4	85

62	Stretchable supercapacitor based on a cellular structure. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 10124-10129	13	41
61	An all-solid-state fiber-type solar cell achieving 9.49% efficiency. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 10105-10109	13	61
60	Fiber-Shaped Perovskite Solar Cells with High Power Conversion Efficiency. <i>Small</i> , <b>2016</b> , 12, 2419-24	11	87
59	A three-dimensionally stretchable high performance supercapacitor. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 14968-14973	13	38
58	Recent advancement of nanostructured carbon for energy applications. <i>Chemical Reviews</i> , <b>2015</b> , 115, 5159-223	68.1	598
57	Radically grown obelisk-like ZnO arrays for perovskite solar cell fibers and fabrics through a mild solution process. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 9406-9410	13	62
56	Elastic perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 21070-21076	13	56
55	Biologically inspired, sophisticated motions from helically assembled, conducting fibers. <i>Advanced Materials</i> , <b>2015</b> , 27, 1042-7	24	31
54	Freestanding aligned carbon nanotube array grown on a large-area single-layered graphene sheet for efficient dye-sensitized solar cell. <i>Small</i> , <b>2015</b> , 11, 1150-5	11	30
53	A Mechanically Actuating Carbon-Nanotube Fiber in Response to Water and Moisture. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 15093-15097	3.6	25
52	A Mechanically Actuating Carbon-Nanotube Fiber in Response to Water and Moisture. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 14880-4	16.4	72
51	Energy harvesting and storage devices fused into various patterns. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 14977-14984	13	21
50	Orienting polydiacetylene using aligned carbon nanotubes. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 2642-2649	7.1	7
49	Recent progress in solar cells based on one-dimensional nanomaterials. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1139-1159	35.4	146
48	Integrated polymer solar cell and electrochemical supercapacitor in a flexible and stable fiber format. <i>Advanced Materials</i> , <b>2014</b> , 26, 466-70	24	298
47	Flexible and stable lithium ion batteries based on three-dimensional aligned carbon nanotube/silicon hybrid electrodes. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 9306	13	61
46	A novel energy fiber by coaxially integrating dye-sensitized solar cell and electrochemical capacitor. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 1897-1902	13	110
45	Stable wire-shaped dye-sensitized solar cells based on eutectic melts. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 3841	13	21

44	Surface-nanostructured cactus-like carbon microspheres for efficient photovoltaic devices. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 15132	13	9
43	Cross-stacking aligned carbon-nanotube films to tune microwave absorption frequencies and increase absorption intensities. <i>Advanced Materials</i> , <b>2014</b> , 26, 8120-5	24	548
42	Integrating perovskite solar cells into a flexible fiber. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 10425-8	16.4	219
41	Quasi-solid-state, coaxial, fiber-shaped dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 345-349	13	61
40	Twisted aligned carbon nanotube/silicon composite fiber anode for flexible wire-shaped lithium-ion battery. <i>Advanced Materials</i> , <b>2014</b> , 26, 1217-22	24	256
39	Core-sheath carbon nanostructured fibers for efficient wire-shaped dye-sensitized solar cells. <i>Advanced Materials</i> , <b>2014</b> , 26, 1694-8	24	74
38	Integrating Perovskite Solar Cells into a Flexible Fiber. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 10593-10596	3.6	16
37	Solar Cells: Core-Sheath Carbon Nanostructured Fibers for Efficient Wire-Shaped Dye-Sensitized Solar Cells (Adv. Mater. 11/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 1791-1791	24	2
36	Innentitelbild: Integrating Perovskite Solar Cells into a Flexible Fiber (Angew. Chem. 39/2014). <i>Angewandte Chemie</i> , <b>2014</b> , 126, 10420-10420	3.6	0
35	Photovoltaic wire with high efficiency attached onto and detached from a substrate using a magnetic field. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 8276-80	16.4	42
34	Efficient dye-sensitized photovoltaic wires based on an organic redox electrolyte. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 10622-5	16.4	125
33	Novel electric double-layer capacitor with a coaxial fiber structure. <i>Advanced Materials</i> , <b>2013</b> , 25, 6436-41	14	314
32	Aligned carbon nanotube/polymer composite film with anisotropic tribological behavior. <i>Journal of Colloid and Interface Science</i> , <b>2013</b> , 395, 322-5	9.3	9
31	Free-standing highly ordered mesoporous carbon/silica composite thin films. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 13490	13	29
30	Oriented PEDOT:PSS on aligned carbon nanotubes for efficient dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 13268	13	58
29	The synthesis of porous materials with macroscopically oriented mesopores interconnected by branched mesopores. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 4693	13	2
28	An integrated device for both photoelectric conversion and energy storage based on free-standing and aligned carbon nanotube film. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 954-958	13	129
27	Novel solar cells in a wire format. <i>Chemical Society Reviews</i> , <b>2013</b> , 42, 5031-41	58.5	155

26	Photovoltaic Wire Derived from a Graphene Composite Fiber Achieving an 8.45 % Energy Conversion Efficiency. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 7693-7696	3.6	50
25	Batteries: Twisting Carbon Nanotube Fibers for Both Wire-Shaped Micro-Supercapacitor and Micro-Battery (Adv. Mater. 8/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 1224-1224	24	10
24	Twisting carbon nanotube fibers for both wire-shaped micro-supercapacitor and micro-battery. <i>Advanced Materials</i> , <b>2013</b> , 25, 1155-9, 1224	24	635
23	Flexible, weavable and efficient microsupercapacitor wires based on polyaniline composite fibers incorporated with aligned carbon nanotubes. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 258-261	13	201
22	Photovoltaic wire derived from a graphene composite fiber achieving an 8.45 % energy conversion efficiency. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 7545-8	16.4	138
21	Synthesis of aligned carbon nanotube composite fibers with high performances by electrochemical deposition. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 2211-2216	13	34
20	Conducting polymer composite film incorporated with aligned carbon nanotubes for transparent, flexible and efficient supercapacitor. <i>Scientific Reports</i> , <b>2013</b> , 3, 1353	4.9	212
19	Capacitors: Novel Electric Double-Layer Capacitor with a Coaxial Fiber Structure (Adv. Mater. 44/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 6468-6468	24	
18	Photovoltaic Wire with High Efficiency Attached onto and Detached from a Substrate Using a Magnetic Field. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 8434-8438	3.6	10
17	An Integrated Energy Wire for both Photoelectric Conversion and Energy Storage. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 12143-12146	3.6	36
16	Innentitelbild: An Integrated Energy Wire for both Photoelectric Conversion and Energy Storage (Angew. Chem. 48/2012). <i>Angewandte Chemie</i> , <b>2012</b> , 124, 12078-12078	3.6	
15	An Integrated "energy wire" for both photoelectric conversion and energy storage. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 11977-80	16.4	377
14	A nanotube colorant for synthetic fibers with much improved properties. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 18653		8
13	Penetrated and aligned carbon nanotubes for counter electrodes of highly efficient dye-sensitized solar cells. <i>Chemical Physics Letters</i> , <b>2012</b> , 549, 82-85	2.5	19
12	Polymer photovoltaic wires based on aligned carbon nanotube fibers. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 23655		53
11	Intertwined aligned carbon nanotube fiber based dye-sensitized solar cells. <i>Nano Letters</i> , <b>2012</b> , 12, 2568-2575	17.5	231
10	Hierarchically tunable helical assembly of achiral porphyrin-incorporated alkoxysilane. <i>Advanced Materials</i> , <b>2012</b> , 24, 2906-10	24	12
9	A novel electromechanical actuation mechanism of a carbon nanotube fiber. <i>Advanced Materials</i> , <b>2012</b> , 24, 5379-84	24	74

8	Designing aligned inorganic nanotubes at the electrode interface: towards highly efficient photovoltaic wires. <i>Advanced Materials</i> , <b>2012</b> , 24, 4623-8	24	107
7	Unusual Reversible Photomechanical Actuation in Polymer/Nanotube Composites. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 8648-8652	3.6	13
6	Unusual reversible photomechanical actuation in polymer/nanotube composites. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 8520-4	16.4	101
5	Perpendicularly aligned carbon nanotube/olefin composite films for the preparation of graphene nanomaterials. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 16209		4
4	Preparation and Application of Aligned Carbon Nanotube/Polymer Composite Material. <i>Acta Chimica Sinica</i> , <b>2012</b> , 70, 1523	3.3	40
3	Aligned carbon nanotube sheets for the electrodes of organic solar cells. <i>Advanced Materials</i> , <b>2011</b> , 23, 5436-9	24	161
2	Atomic-scale insight into the enhanced surface stability of methylammonium lead iodide perovskite by controlled deposition of lead chloride. <i>Energy and Environmental Science</i> ,	35.4	11
1	Metal halide perovskite solar cells by modified chemical vapor deposition. <i>Journal of Materials Chemistry A</i> ,	13	4