

# Liang He

## 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.

73  
papers

4,470  
citations

34  
h-index

66  
g-index

75  
ext. papers

5,270  
ext. citations

9.8  
avg, IF

5.63  
L-index

#	Paper	IF	Citations
73	Research Progress of Biomimetic Memristor Flexible Synapse. <i>Coatings</i> , <b>2022</b> , 12, 21	2.9	3
72	Regulating Lattice-Water-Adsorbed Ions to Optimize Intercalation Potential in 3D Prussian Blue Based Multi-Ion Microbattery. <i>Small</i> , <b>2021</b> , 17, e2007791	11	5
71	Unveiling the role of surface P <sub>1</sub> D group in P-doped Co <sub>3</sub> O <sub>4</sub> for electrocatalytic oxygen evolution by On-chip micro-device. <i>Nano Energy</i> , <b>2021</b> , 83, 105748	17.1	16
70	Influence of Structural Parameters of Shape Memory Alloy Corrugated Gaskets on the Contact Pressure of Bolted Flange Joints. <i>Advances in Materials Science and Engineering</i> , <b>2021</b> , 2021, 1-19	1.5	0
69	Progress in Iron Oxides Based Nanostructures for Applications in Energy Storage. <i>Nanoscale Research Letters</i> , <b>2021</b> , 16, 138	5	6
68	A Durable Ni-Zn Microbattery with Ultrahigh-Rate Capability Enabled by In Situ Reconstructed Nanoporous Nickel with Epitaxial Phase. <i>Small</i> , <b>2021</b> , 17, e2103136	11	5
67	Fibers by Electrospinning and Their Emerging Applications in Bone Tissue Engineering. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 9082	2.6	4
66	Bilayered microelectrodes based on electrochemically deposited MnO/polyppyrrrole towards fast charge transport kinetics for micro-supercapacitors.. <i>RSC Advances</i> , <b>2020</b> , 10, 18245-18251	3.7	5
65	Wearable Textile-Based Co-Zn Alkaline Microbattery with High Energy Density and Excellent Reliability. <i>Small</i> , <b>2020</b> , 16, e2000293	11	26
64	Novel Charging-Optimized Cathode for a Fast and High-Capacity Zinc-Ion Battery. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 10420-10427	9.5	27
63	Boosting the electrochemical performance and reliability of conducting polymer microelectrode via intermediate graphene for on-chip asymmetric micro-supercapacitor. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 49, 224-232	12	31
62	Integration of VS <sub>2</sub> nanosheets into carbon for high energy density micro-supercapacitor. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 823, 151769	5.7	17
61	Interwoven Nanowire Based On-Chip Asymmetric Microsupercapacitor with High Integrability, Areal Energy, and Power Density. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2001873	21.8	18
60	Structural Engineering and Coupling of Two-Dimensional Transition Metal Compounds for Micro-Supercapacitor Electrodes. <i>ACS Central Science</i> , <b>2020</b> , 6, 1901-1915	16.8	17
59	High-Performance Microbatteries: Recent Advances in High-Performance Microbatteries: Construction, Application, and Perspective (Small 39/2020). <i>Small</i> , <b>2020</b> , 16, 2070213	11	
58	The Effect of Ageing Treatment on Shape-Setting and Shape Memory Effect of a NiTi SMA Corrugated Structure. <i>Advances in Materials Science and Engineering</i> , <b>2020</b> , 2020, 1-11	1.5	2
57	Recent Advances in High-Performance Microbatteries: Construction, Application, and Perspective. <i>Small</i> , <b>2020</b> , 16, e2003251	11	21

56	Growth Process and Dielectric Breakdown of Micro Arc Oxidation Coating on AZ31 Mg Alloy Pretreated by Alkali Treatment. <i>Protection of Metals and Physical Chemistry of Surfaces</i> , <b>2020</b> , 56, 156-163	9.9	2
55	Doping Nanoscale Graphene Domains Improves Magnetism in Hexagonal Boron Nitride. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805778	24	40
54	Ultrastable High-Energy On-Chip Nickel-Bismuth Microbattery Powered by Crystalline Bi Anode and Ni(OH) <sub>2</sub> Hydroxide Cathode. <i>Energy Technology</i> , <b>2019</b> , 7, 1900144	3.5	9
53	One-step electrodeposited Mn <sub>x</sub> Co <sub>1-x</sub> (OH) <sub>2</sub> nanosheet arrays as cathode for asymmetric on-chip micro-supercapacitors. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 223903	3.4	9
52	An acetylene black modified gel polymer electrolyte for high-performance lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 13679-13686	13	44
51	Surface Engineering of Carbon-Based Microelectrodes for High-Performance Microsupercapacitors. <i>Micromachines</i> , <b>2019</b> , 10,	3.3	5
50	Sb@PPy Coaxial Nanorods: A Versatile and Robust Host Material for Reversible Storage of Alkali Metal Ions. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	19
49	Co-Electrodeposited porous PEDOT-CNT microelectrodes for integrated micro-supercapacitors with high energy density, high rate capability, and long cycling life. <i>Nanoscale</i> , <b>2019</b> , 11, 7761-7770	7.7	49
48	Multicomponent Hierarchical Cu-Doped NiCo-LDH/CuO Double Arrays for Ultralong-Life Hybrid Fiber Supercapacitor. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1809004	15.6	182
47	On-Chip Ni/Zn Microbattery Based on Hierarchical Ordered Porous Ni@Ni(OH) <sub>2</sub> Microelectrode with Ultrafast Ion and Electron Transport Kinetics. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1808470	15.6	56
46	A Low-Cost Zn-Based Aqueous Supercapacitor with High Energy Density. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 5835-5842	6.1	38
45	A Large Scalable and Low-Cost Sulfur/Nitrogen Dual-Doped Hard Carbon as the Negative Electrode Material for High-Performance Potassium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901379	21.8	125
44	Understanding the Behavior and Mechanism of Oxygen-Deficient Anatase TiO <sub>2</sub> toward Sodium Storage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 3061-3069	9.5	16
43	Scalable microfabrication of three-dimensional porous interconnected graphene scaffolds with carbon spheres for high-performance all carbon-based micro-supercapacitors. <i>Journal of Materiomics</i> , <b>2019</b> , 5, 303-312	6.7	11
42	High Energy Density Micro-Supercapacitor Based on a Three-Dimensional Bicontinuous Porous Carbon with Interconnected Hierarchical Pores. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 948-958	8.5	26
41	Oxygen Vacancy-Determined Highly Efficient Oxygen Reduction in NiCoO/Hollow Carbon Spheres. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 16410-16417	9.5	88
40	Graphene Scroll-Coated MnO <sub>2</sub> Nanowires as High-Performance Cathode Materials for Aqueous Zn-Ion Battery. <i>Small</i> , <b>2018</b> , 14, e1703850	11	386
39	MnO <sub>2</sub> by plasma etching with improved capacity and stabilized structure for lithium storage. <i>Nano Energy</i> , <b>2018</b> , 49, 555-563	17.1	86

38	Electric field and photoelectrical effect bi-enhanced hydrogen evolution reaction. <i>Nano Research</i> , <b>2018</b> , 11, 3205-3212	10	11
37	Quantitative in situ fracture testing of tin oxide nanowires for lithium ion battery applications. <i>Nano Energy</i> , <b>2018</b> , 53, 277-285	17.1	15
36	Ultrafine Nickel-Nanoparticle-Enabled SiO <sub>2</sub> Hierarchical Hollow Spheres for High-Performance Lithium Storage. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1704561	15.6	142
35	Self-sacrificed synthesis of carbon-coated SiO <sub>x</sub> nanowires for high capacity lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 4183-4189	13	92
34	Electrochemical in situ X-ray probing in lithium-ion and sodium-ion batteries. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 3697-3718	4.3	30
33	Copper silicate nanotubes anchored on reduced graphene oxide for long-life lithium-ion battery. <i>Energy Storage Materials</i> , <b>2017</b> , 7, 152-156	19.4	51
32	Field-Effect Tuned Adsorption Dynamics of VSe Nanosheets for Enhanced Hydrogen Evolution Reaction. <i>Nano Letters</i> , <b>2017</b> , 17, 4109-4115	11.5	98
31	Carbon-MEMS-Based Alternating Stacked MoS <sub>2</sub> @rGO-CNT Micro-Supercapacitor with High Capacitance and Energy Density. <i>Small</i> , <b>2017</b> , 13, 1700639	11	90
30	Capacitance and voltage matching between MnO <sub>2</sub> nanoflake cathode and Fe <sub>2</sub> O <sub>3</sub> nanoparticle anode for high-performance asymmetric micro-supercapacitors. <i>Nano Research</i> , <b>2017</b> , 10, 2471-2481	10	75
29	In situ nitrogen-doped mesoporous carbon nanofibers as flexible freestanding electrodes for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 23620-23627	13	76
28	Microdevices: Carbon-MEMS-Based Alternating Stacked MoS <sub>2</sub> @rGO-CNT Micro-Supercapacitor with High Capacitance and Energy Density (Small 26/2017). <i>Small</i> , <b>2017</b> , 13,	11	2
27	Microstructuring of carbon/tin quantum dots via a novel photolithography and pyrolysis-reduction process. <i>Nano Research</i> , <b>2017</b> , 10, 3743-3753	10	24
26	Rapid, all dry microfabrication of three-dimensional CoO/Pt nanonetworks for high-performance microsupercapacitors. <i>Nanoscale</i> , <b>2017</b> , 9, 11765-11772	7.7	27
25	Facile Synthesis of Bi <sub>2</sub> S <sub>3</sub> @SiO <sub>2</sub> Core-Shell Microwires as High-Performance Anode Materials for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, A6110-A6115	3.9	17
24	Young's modulus of multi-layer microcantilevers. <i>AIP Advances</i> , <b>2017</b> , 7, 125114	1.5	
23	SnO <sub>2</sub> Quantum Dots@Graphene Oxide as a High-Rate and Long-Life Anode Material for Lithium-Ion Batteries. <i>Small</i> , <b>2016</b> , 12, 588-94	11	307
22	Single-Nanowire Electrochemical Probe Detection for Internally Optimized Mechanism of Porous Graphene in Electrochemical Devices. <i>Nano Letters</i> , <b>2016</b> , 16, 1523-9	11.5	59
21	Improved conductivity and capacitance of interdigital carbon microelectrodes through integration with carbon nanotubes for micro-supercapacitors. <i>Nano Research</i> , <b>2016</b> , 9, 2510-2519	10	62

20	In situ characterization of electrochemical processes in one dimensional nanomaterials for energy storages devices. <i>Nano Energy</i> , <b>2016</b> , 24, 165-188	17.1	81
19	In operando observation of temperature-dependent phase evolution in lithium-incorporation olivine cathode. <i>Nano Energy</i> , <b>2016</b> , 22, 406-413	17.1	24
18	Pyrolyzed carbon with embedded NiO/Ni nanospheres for applications in microelectrodes. <i>RSC Advances</i> , <b>2016</b> , 6, 43436-43441	3.7	34
17	Carbon-coated hierarchical NaTi <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> mesoporous microflowers with superior sodium storage performance. <i>Nano Energy</i> , <b>2016</b> , 28, 224-231	17.1	114
16	Microstructuring of carbon nanotubes-nickel nanocomposite. <i>Nanotechnology</i> , <b>2015</b> , 26, 195601	3.4	25
15	The Young's modulus of high-aspect-ratio carbon/carbon nanotube composite microcantilevers by experimental and modeling validation. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 111908	3.4	43
14	Hydrated vanadium pentoxide with superior sodium storage capacity. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 8070-8075	13	146
13	Integrated SnO <sub>2</sub> nanorod array with polypyrrole coverage for high-rate and long-life lithium batteries. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 7619-23	3.6	70
12	Manganese oxide/carbon yolk-shell nanorod anodes for high capacity lithium batteries. <i>Nano Letters</i> , <b>2015</b> , 15, 738-44	11.5	318
11	Arbitrary Shape Engineerable Spiral Micropseudocapacitors with Ultrahigh Energy and Power Densities. <i>Advanced Materials</i> , <b>2015</b> , 27, 7476-82	24	64
10	Nanoflake-Assembled Hierarchical Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /C Microflowers: Superior Li Storage Performance and Insertion/Extraction Mechanism. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401963	21.8	144
9	Top-down fabrication of three-dimensional porous V <sub>2</sub> O <sub>5</sub> hierarchical microplates with tunable porosity for improved lithium battery performance. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 3297-3302 <sup>13</sup>		72
8	Ultrathin pre-lithiated V <sub>6</sub> O <sub>13</sub> nanosheet cathodes with enhanced electrical transport and cyclability. <i>Journal of Power Sources</i> , <b>2014</b> , 255, 235-241	8.9	67
7	Mesoporous VO <sub>2</sub> nanowires with excellent cycling stability and enhanced rate capability for lithium batteries. <i>RSC Advances</i> , <b>2014</b> , 4, 33332-33337	3.7	45
6	Effect of carbon matrix dimensions on the electrochemical properties of Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> nanograins for high-performance symmetric sodium-ion batteries. <i>Advanced Materials</i> , <b>2014</b> , 26, 3545-53	24	402
5	Heterogeneous branched core-shell SnO <sub>2</sub> /PANI nanorod arrays with mechanical integrity and three dimensional electron transport for lithium batteries. <i>Nano Energy</i> , <b>2014</b> , 8, 196-204	17.1	127
4	Fabrication of CNT-carbon composite microstructures using Si micromolding and pyrolysis. <i>Microsystem Technologies</i> , <b>2014</b> , 20, 201-208	1.7	21
3	Fabrication of a Si-PZT Hybrid XY-Microstage with CNT-Carbon Hinges. <i>IEEJ Transactions on Sensors and Micromachines</i> , <b>2012</b> , 132, 425-426	0.2	4

2	Rapid, low-temperature synthesis of single-crystalline Co(3)O(4) nanorods on silicon substrates on a large scale. <i>Nanotechnology</i> , <b>2008</b> , 19, 155606	3-4	88
1	Advances in wearable textile-based micro energy storage devices: structuring, application and perspective. <i>Nanoscale Advances</i> ,	5-1	5