Yihang Liu

List of Publications by Year in Descending Order

45 papers	5,212 citations	31 h-index	47 g-index
47 ext. papers	5,786 ext. citations	13.6 avg, IF	5.63 L-index

#	Paper	IF	Citations
45	Flexible Multiplexed InO Nanoribbon Aptamer-Field-Effect Transistors for Biosensing. *IScience*, **2020**, 23, 101469	6.1	19
44	Red-phosphorus-impregnated carbon nanofibers for sodium-ion batteries and liquefaction of red phosphorus. *Nature Communications*, **2020**, 11, 2520	17.4	41
43	Tellurene Photodetector with High Gain and Wide Bandwidth. *ACS Nano*, **2020**, 14, 303-310	16.7	55
42	Gold-vapor-assisted chemical vapor deposition of aligned monolayer WSe2 with large domain size and fast growth rate. *Nano Research*, **2020**, 13, 2625-2631	10	7
41	Fully Printed All-Solid-State Organic Flexible Artificial Synapse for Neuromorphic Computing. *ACS Applied Materials & Interfaces*, **2019**, 11, 16749-16757	9.5	42
40	Synthesis of Red and Black Phosphorus Nanomaterials. *ACS Symposium Series*, **2019**, 1-25	0.4	1
39	Synthesis of interconnected graphene framework with two-dimensional protective layers for stable lithium metal anodes. *Energy Storage Materials*, **2019**, 17, 341-348	19.4	18
38	Quasi-two-dimensional Ga2O3 field effect transistors with large drain current density and low contact resistance via controlled formation of interfacial oxygen vacancies. *Nano Research*, **2019**, 12, 143-148	10	18
37	Highly Sensitive and Wearable InO Nanoribbon Transistor Biosensors with Integrated On-Chip Gate for Glucose Monitoring in Body Fluids. *ACS Nano*, **2018**, 12, 1170-1178	16.7	130
36	Room-Temperature Pressure Synthesis of Layered Black Phosphorus-Graphene Composite for Sodium-Ion Battery Anodes. *ACS Nano*, **2018**, 12, 8323-8329	16.7	55
35	Single-step flash-heat synthesis of red phosphorus/graphene flame-retardant composite as flexible anodes for sodium-ion batteries. *Nano Research*, **2018**, 11, 3780-3790	10	20
34	Hierarchical Carbon-Coated Ball-Milled Silicon: Synthesis and Applications in Free-Standing Electrodes and High-Voltage Full Lithium-Ion Batteries. *ACS Nano*, **2018**, 12, 6280-6291	16.7	79
33	Functional interlayer of PVDF-HFP and carbon nanofiber for long-life lithium-sulfur batteries. *Nano Research*, **2018**, 11, 3340-3352	10	45
32	Top-Contact Self-Aligned Printing for High-Performance Carbon Nanotube Thin-Film Transistors with Sub-Micron Channel Length. *ACS Nano*, **2017**, 11, 2008-2014	16.7	31
31	Red Phosphorus Nanodots on Reduced Graphene Oxide as a Flexible and Ultra-Fast Anode for Sodium-Ion Batteries. *ACS Nano*, **2017**, 11, 5530-5537	16.7	169
30	Synthesis, Characterization, and Device Application of Antimony-Substituted Violet Phosphorus: A Layered Material. *ACS Nano*, **2017**, 11, 4105-4113	16.7	20
29	Atomic Insights into the Enhanced Surface Stability in High Voltage Cathode Materials by Ultrathin Coating. *Advanced Functional Materials*, **2017**, 27, 1602873	15.6	24

28	High-Performance Sub-Micrometer Channel WSe Field-Effect Transistors Prepared Using a Flood-Dike Printing Method. *ACS Nano*, **2017**, 11, 12536-12546	16.7	6
27	Black Phosphorus Field-Effect Transistors with Work Function Tunable Contacts. *ACS Nano*, **2017**, 11, 7126-7133	16.7	40
26	In Situ and Ex Situ TEM Study of Lithiation Behaviours of Porous Silicon Nanostructures. *Scientific Reports*, **2016**, 6, 31334	4.9	28
25	A carbon nanofiber network for stable lithium metal anodes with high Coulombic efficiency and long cycle life. *Nano Research*, **2016**, 9, 3428-3436	10	95
24	Fully Screen-Printed, Large-Area, and Flexible Active-Matrix Electrochromic Displays Using Carbon Nanotube Thin-Film Transistors. *ACS Nano*, **2016**, 10, 9816-9822	16.7	135
23	Highly Sensitive and Quick Detection of Acute Myocardial Infarction Biomarkers Using InO Nanoribbon Biosensors Fabricated Using Shadow Masks. *ACS Nano*, **2016**, 10, 10117-10125	16.7	48
22	Silicon(lithiated)□ulfur full cells with porous silicon anode shielded by Nafion against polysulfides to achieve high capacity and energy density. *Nano Energy*, **2016**, 19, 68-77	17.1	69
21	Layered P2-Na2/3[Ni1/3Mn2/3]O2 as high-voltage cathode for sodium-ion batteries: The capacity decay mechanism and Al2O3 surface modification. *Nano Energy*, **2016**, 27, 27-34	17.1	181
20	High-Performance WSe2 Field-Effect Transistors via Controlled Formation of In-Plane Heterojunctions. *ACS Nano*, **2016**, 10, 5153-60	16.7	89
19	SnO2 coated carbon cloth with surface modification as Na-ion battery anode. *Nano Energy*, **2015**, 16, 399-407	17.1	104
18	High-power lithium ion batteries based on flexible and light-weight cathode of LiNi0.5Mn1.5O4/carbon nanotube film. *Nano Energy*, **2015**, 12, 43-51	17.1	56
17	Superior electrochemical performance and structure evolution of mesoporous Fe2O3 anodes for lithium-ion batteries. *Nano Energy*, **2014**, 3, 26-35	17.1	116
16	Screw-dislocation-driven growth of two-dimensional few-layer and pyramid-like WSe□by sulfur-assisted chemical vapor deposition. *ACS Nano*, **2014**, 8, 11543-51	16.7	117
15	Graphene oxide wrapped croconic acid disodium salt for sodium ion battery electrodes. *Journal of Power Sources*, **2014**, 250, 372-378	8.9	109
14	Ultrathin Surface Modification by Atomic Layer Deposition on High Voltage Cathode LiNi0.5Mn1.5O4 for Lithium Ion Batteries. *Energy Technology*, **2014**, 2, 159-165	3.5	31
13	Electrochemical performance of patterned LiFePO4 nano-electrode with a pristine amorphous layer. *Applied Physics Letters*, **2014**, 104, 171604	3.4	6
12	In situ atomic-scale imaging of phase boundary migration in FePO(4) microparticles during electrochemical lithiation. *Advanced Materials*, **2013**, 25, 5461-6	24	108
11	Hoop-strong nanotubes for battery electrodes. *ACS Nano*, **2013**, 7, 8295-302	16.7	50

10	In situ formed lithium sulfide/microporous carbon cathodes for lithium-ion batteries. *ACS Nano*, **2013**, 7, 10995-1003	16.7	187
9	Selenium@mesoporous carbon composite with superior lithium and sodium storage capacity. *ACS Nano*, **2013**, 7, 8003-10	16.7	335
8	Carbon coated hollow Na2FePO4F spheres for Na-ion battery cathodes. *Journal of Power Sources*, **2013**, 223, 62-67	8.9	115
7	Comparison of electrochemical performances of olivine NaFePO4 in sodium-ion batteries and olivine LiFePO4 in lithium-ion batteries. *Nanoscale*, **2013**, 5, 780-7	7.7	350
6	Tin-coated viral nanoforests as sodium-ion battery anodes. *ACS Nano*, **2013**, 7, 3627-34	16.7	259
5	Uniform nano-Sn/C composite anodes for lithium ion batteries. *Nano Letters*, **2013**, 13, 470-4	11.5	470
4	Electrospun Sb/C fibers for a stable and fast sodium-ion battery anode. *ACS Nano*, **2013**, 7, 6378-86	16.7	557
3	Architecturing hierarchical function layers on self-assembled viral templates as 3D nano-array electrodes for integrated Li-ion microbatteries. *Nano Letters*, **2013**, 13, 293-300	11.5	64
2	Electrochemical Performance of Porous Carbon/Tin Composite Anodes for Sodium-Ion and Lithium-Ion Batteries. *Advanced Energy Materials*, **2013**, 3, 128-133	21.8	701
1	Copolymerization of methyl methacrylate and vinylbenzyl chloride towards alkaline anion exchange membrane for fuel cell applications. *Journal of Membrane Science*, **2012**, 423-424, 209-214	9.6	9