Ziyin Lin

List of Publications by Year
in descending order

78 papers	9,223 citations	66343 42 h-index	133252 59 g-index
78 all docs	78 docs citations	78 times ranked	13937 citing authors

#	Article	IF	Citations
1	Low-Cost High-Performance Solid-State Asymmetric Supercapacitors Based on MnO₂ Nanowires and Fe₂O₃ Nanotubes. Nano Letters, 2014, 14, 731-736.	9.1	1,035
2	Facile Synthesis of Nitrogenâ€Doped Graphene via Pyrolysis of Graphene Oxide and Urea, and its Electrocatalytic Activity toward the Oxygenâ€Reduction Reaction. Advanced Energy Materials, 2012, 2, 884-888.	19.5	840
3	Hydrogenated ZnO Coreâ€“Shell Nanocables for Flexible Supercapacitors and Self-Powered Systems. ACS Nano, 2013, 7, 2617-2626.	14.6	781
4	Magnetic Alignment of Hexagonal Boron Nitride Platelets in Polymer Matrix: Toward High Performance Anisotropic Polymer Composites for Electronic Encapsulation. ACS Applied Materials & Interfaces, 2013, 5, 7633-7640.	8.0	394
5	3D Nitrogen-doped graphene prepared by pyrolysis of graphene oxide with polypyrrole for electrocatalysis of oxygen reduction reaction. Nano Energy, 2013, 2, 241-248.	16.0	367
6	Large-scale production of two-dimensional nanosheets. Journal of Materials Chemistry, 2012, 22, 13494.	6.7	351
7	Simple preparation of nanoporous few-layer nitrogen-doped graphene for use as an efficient electrocatalyst for oxygen reduction and oxygen evolution reactions. Carbon, 2013, 53, 130-136.	10.3	331
8	Superior Capacitance of Functionalized Graphene. Journal of Physical Chemistry C, 2011, 115, 7120-7125.	3.1	307
9	Solvent-Assisted Thermal Reduction of Graphite Oxide. Journal of Physical Chemistry C, 2010, 114, 14819-14825.	3.1	264
10	Facile preparation of nitrogen-doped graphene as a metal-free catalyst for oxygen reduction reaction. Physical Chemistry Chemical Physics, 2012, 14, 3381.	2.8	261
11	Exfoliated hexagonal boron nitride-based polymer nanocomposite with enhanced thermal conductivity for electronic encapsulation. Composites Science and Technology, 2014, 90, 123-128.	7.8	258
12	A reduced graphene oxide/mixed-valence manganese oxide composite electrode for tailorable and surface mountable supercapacitors with high capacitance and super-long life. Energy and Environmental Science, 2017, 10, 941-949.	30.8	253
13	Scalable fabrication of MnO₂ nanostructure deposited on free-standing Ni nanocone arrays for ultrathin, flexible, high-performance micro-supercapacitor. Energy and Environmental Science, 2014, 7, 2652-2659.	30.8	247
14	An ultrafast, high capacity and superior longevity Ni/Zn battery constructed on nickel nanowire array film. Nano Energy, 2016, 30, 900-908.	16.0	188
15	Facile Fabrication of Superhydrophobic Octadecylamine-Functionalized Graphite Oxide Film. Langmuir, 2010, 26, 16110-16114.	3.5	180
16	An Ultralong, Highly Oriented Nickelâ€Nanowireâ€Array Electrode Scaffold for Highâ€Performance Compressible Pseudocapacitors. Advanced Materials, 2016, 28, 4105-4110.	21.0	171
17	A hybrid energy cell for self-powered water splitting. Energy and Environmental Science, 2013, 6, 2429.	30.8	162
18	3D porous graphene with ultrahigh surface area for microscale capacitive deionization. Nano Energy, 2015, 11, 711-718.	16.0	161

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19	Water-dispersible graphene/polyaniline composites for flexible micro-supercapacitors with high energy densities. Nano Energy, 2015, 16, 470-478.	16.0	151
20	Future paper based printed circuit boards for green electronics: fabrication and life cycle assessment. Energy and Environmental Science, 2014, 7, 3674-3682.	30.8	136
21	Laser-processed graphene based micro-supercapacitors for ultrathin, rollable, compact and designable energy storage components. Nano Energy, 2016, 26, 276-285.	16.0	135
22	Ultrafast, dry microwave synthesis of graphene sheets. Journal of Materials Chemistry, 2010, 20, 4781.	6.7	128
23	Shape-Tailorable Graphene-Based Ultra-High-Rate Supercapacitor for Wearable Electronics. ACS Nano, 2015, 9, 5636-5645.	14.6	127
24	Silicon-Based Hybrid Energy Cell for Self-Powered Electrodegradation and Personal Electronics. ACS Nano, 2013, 7, 2808-2813.	14.6	125
25	Worm-like amorphous MnO2nanowires grown on textiles for high-performance flexible supercapacitors. Journal of Materials Chemistry A, 2014, 2, 595-599.	10.3	120
26	Controlled Growth of Multilayer, Few-Layer, and Single-Layer Graphene on Metal Substrates. Journal of Physical Chemistry C, 2011, 115, 5232-5238.	3.1	119
27	Solid-state flexible polyaniline/silver cellulose nanofibrils aerogel supercapacitors. Journal of Power Sources, 2014, 246, 283-289.	7.8	119
28	Triethanolamine functionalized graphene-based composites for high performance supercapacitors. Journal of Materials Chemistry A, 2015, 3, 21789-21796.	10.3	112
29	Flexible micro-supercapacitor based on in-situ assembled graphene on metal template at room temperature. Nano Energy, 2014, 10, 222-228.	16.0	111
30	Reversible Superhydrophobicâ€“Superhydrophilic Transition of ZnO Nanorod/Epoxy Composite Films. ACS Applied Materials & Interfaces, 2012, 4, 3959-3964.	8.0	108
31	Molecular Level Study of Graphene Networks Functionalized with Phenylenediamine Monomers for Supercapacitor Electrodes. Chemistry of Materials, 2016, 28, 9110-9121.	6.7	98
32	Ionicâ€Liquidâ€Assisted Preparation of Carbon Nanotubeâ€Supported Uniform Noble Metal Nanoparticles and Their Enhanced Catalytic Performance. Advanced Functional Materials, 2010, 20, 3747-3752.	14.9	90
33	Hybridizing ZnO Nanowires with Micropyramid Silicon Wafers as Superhydrophobic Highâ€Efficiency Solar Cells. Advanced Energy Materials, 2012, 2, 47-51.	19.5	89
34	An all-solid-state, lightweight, and flexible asymmetric supercapacitor based on cabbage-like ZnCo₂O₄ and porous VN nanowires electrode materials. Journal of Materials Chemistry A, 2017, 5, 6928-6936.	10.3	81
35	Solid-state, flexible, high strength paper-based supercapacitors. Journal of Materials Chemistry A, 2013, 1, 5835.	10.3	71
36	Hierarchical robust textured structures for large scale self-cleaning black silicon solar cells. Nano Energy, 2014, 3, 127-133.	16.0	71

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37	Molecular engineering of aromatic amine spacers for high-performance graphene-based supercapacitors. Nano Energy, 2016, 21, 276-294.	16.0	61
38	Holey nickel nanotube reticular network scaffold for high-performance flexible rechargeable Zn/MnO2 batteries. Chemical Engineering Journal, 2019, 370, 330-336.	12.7	56
39	Hierarchical ferric-cobalt-nickel ternary oxide nanowire arrays supported on graphene fibers as high-performance electrodes for flexible asymmetric supercapacitors. Nano Research, 2018, 11, 1775-1786.	10.4	55
40	Electrospray-deposition of graphene electrodes: a simple technique to build high-performance supercapacitors. Nanoscale, 2015, 7, 9133-9139.	5.6	54
41	Alternating current line-filter based on electrochemical capacitor utilizing template-patterned graphene. Scientific Reports, 2015, 5, 10983.	3.3	53
42	High performance, environmentally benign and integratable Zn//MnO₂microbatteries. Journal of Materials Chemistry A, 2018, 6, 3933-3940.	10.3	53
43	Rational preparation of faceted platinum nanocrystals supported on carbon nanotubes with remarkably enhanced catalytic performance. Chemical Communications, 2009, , 7167.	4.1	39
44	Robust vertically aligned carbon nanotubeâ€“carbon fiber paper hybrid as versatile electrodes for supercapacitors and capacitive deionization. Carbon, 2013, 63, 547-553.	10.3	35
45	Inkjet-printed graphene-based wireless gas sensor modules. , 2012, , .		33
46	A combined etching process toward robust superhydrophobic SiC surfaces. Nanotechnology, 2012, 23, 255703.	2.6	28
47	Preparation of Water-Based Carbon Nanotube Inks and Application in the Inkjet Printing of Carbon Nanotube Gas Sensors. Journal of Electronic Packaging, Transactions of the ASME, 2013, 135, .	1.8	20
48	Flexible copper wires through galvanic replacement of zinc paste: a highly cost-effective technology for wiring flexible printed circuits. Journal of Materials Chemistry C, 2015, 3, 8329-8335.	5.5	18
49	High Refractive Index and Transparent Nanocomposites as Encapsulant for High Brightness LED Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 1125-1130.	2.5	17
50	Vapor-Phase Polymerized Poly(3,4-Ethylenedioxythiophene) on a Nickel Nanowire Array Film: Aqueous Symmetrical Pseudocapacitors with Superior Performance. PLoS ONE, 2016, 11, e0166529.	2.5	14
51	Self-Patterning of Silica/Epoxy Nanocomposite Underfill by Tailored Hydrophilic-Superhydrophobic Surfaces for 3D Integrated Circuit (IC) Stacking. ACS Applied Materials & Interfaces, 2017, 9, 8437-8442.	8.0	13
52	A novel graphene-based inkjet-printed WISP-enabled wireless gas sensor. , 2012, , .		12
53	Conformal Pad-Printing Electrically Conductive Composites onto Thermoplastic Hemispheres: Toward Sustainable Fabrication of 3-Cents Volumetric Electrically Small Antennas. PLoS ONE, 2015, 10, e0136939.	2.5	12
54	Double-Sided Transferred Carbon Nanotube Arrays for Improved Thermal Interface Materials. Journal of Electronic Packaging, Transactions of the ASME, 2015, 137, .	1.8	10

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55	Superhydrophobic Nanocomposite Coating for Reliability Improvement of Microelectronics. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 1079-1083.	2.5	9
56	Enhanced thermal transport of hexagonal boron nitride filled polymer composite by magnetic field-assisted alignment. , 2013, , .		8
57	Capacitance enhancement by electrochemically active benzene derivatives for graphene-based supercapacitors. RSC Advances, 2015, 5, 84113-84118.	3.6	8
58	Novel preparation of functionalized graphene oxide for large scale, low cost, and self-cleaning coatings of electronic devices. , 2011, , .		7
59	ZnO quantum dots-filled encapsulant for LED packaging. , 2012, , .		7
60	Single/few-layer boron nitride-based nanocomposites for high thermal conductivity underfills. , 2012, , .		7
61	Graphene enhanced wireless sensors. , 2012, , .		7
62	Low-cost micrometer-scale silicon vias (SVs) fabrication by metal-assisted chemical etching (MaCE) and carbon nanotubes (CNTs) filling. , 2013, , .		7
63	Inkjet Printing of Radio Frequency Electronics: Design Methodologies and Application of Novel Nanotechnologies. Journal of Electronic Packaging, Transactions of the ASME, 2013, 135, .	1.8	6
64	Ultra-high refractive index LED encapsulant. , 2014, , .		5
65	Polyhedral oligomeric silsesquioxanes (POSS)-filled underfill with excellent high temperature performance. , 2012, , .		4
66	Novel surface modification of nanosilica for low stress underfill. , 2013, , .		4
67	Novel ZnO nanowires/silicon hierarchical structures for superhydrophobic, low reflection, and high efficiency solar cells. , 2011, , .		3
68	High refractive index and transparency nanocomposites as encapsulant for high brightness LED packaging. , 2013, , .		3
69	Carbon nanotubes inhibit the freeâ€radical crossâ€linking of siloxane polymers. Journal of Applied Polymer Science, 2014, 131, .	2.6	3
70	Nanocomposite for low stress underfill. , 2011, , .		2
71	Effects of Mn2+ on the electrical resistance of electrolessly plated Niâ€“P thin-film and its application as embedded resistor. Journal of Materials Science: Materials in Electronics, 2014, 25, 1341-1347.	2.2	2
72	Controlled preparation of CuO and Cu nanoparticles attached on carbon nanotubes for glucose sensing. Materials Technology, 2015, 30, A186-A191.	3.0	2

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73	Robust, novel, and low cost superhydrophobic nanocomposites coating for reliability improvement of microelectronics. , 2012, , .		1
74	Self-patterning, pre-applied underfilling technology for stack-die packaging. , 2014, , .		1
75	Enhanced-performance wireless conformal "smart skins" utilizing inkjet-printed carbon-nanostructures. , 2014, , .		1
76	Smart Skins: Could they be the ultimate sensing tool? TodayuFFFDs industry and personal medical care both strongly demand accurate, reliable, robust, lo. IEEE Nanotechnology Magazine, 2015, 9, 4-10.	1.3	1
77	Surface engineering of graphene for high performance supercapacitors. , 2011, , .		0
78	Capacitive deionization of water coolant using hybrid carbon electrodes for high power electronic applications. , 2014, , .		0