Yi Lin

List of Publications by Year in descending order

65 papers	9,769 citations	71102 41 h-index	114465 63 g-index
68 all docs	68 docs citations	68 times ranked	12606 citing authors

#	Article	IF	Citations
1	Functionalized Carbon Nanotubes:â€‰ Properties and Applications. Accounts of Chemical Research, 2002, 35, 1096-1104.	15.6	1,560
2	Advances toward bioapplications of carbon nanotubes. Journal of Materials Chemistry, 2004, 14, 527.	6.7	827
3	Advances in 2D boron nitride nanostructures: nanosheets, nanoribbons, nanomeshes, and hybrids with graphene. Nanoscale, 2012, 4, 6908.	5.6	745
4	Soluble, Exfoliated Hexagonal Boron Nitride Nanosheets. Journal of Physical Chemistry Letters, 2010, 1, 277-283.	4.6	668
5	Aqueous Dispersions of Few-Layered and Monolayered Hexagonal Boron Nitride Nanosheets from Sonication-Assisted Hydrolysis: Critical Role of Water. Journal of Physical Chemistry C, 2011, 115, 2679-2685.	3.1	519
6	Functionalization of Carbon Nanotubes with Polystyrene. Macromolecules, 2002, 35, 9466-9471.	4.8	379
7	Carbon Nanosheets for Polymeric Nanocomposites with High Thermal Conductivity. Advanced Materials, 2009, 21, 2088-2092.	21.0	324
8	Highly Rechargeable Lithiumâ€CO₂ Batteries with a Boronâ€•and Nitrogenâ€Codoped Holeyâ€Graphene Cathode. Angewandte Chemie - International Edition, 2017, 56, 6970-6974.	13.8	260
9	Extrusionâ€Based 3D Printing of Hierarchically Porous Advanced Battery Electrodes. Advanced Materials, 2018, 30, e1705651.	21.0	241
10	Rapid, Solventless, Bulk Preparation of Metal Nanoparticle-Decorated Carbon Nanotubes. ACS Nano, 2009, 3, 871-884.	14.6	233
11	Scalable Holey Graphene Synthesis and Dense Electrode Fabrication toward High-Performance Ultracapacitors. ACS Nano, 2014, 8, 8255-8265.	14.6	212
12	Defect Functionalization of Hexagonal Boron Nitride Nanosheets. Journal of Physical Chemistry C, 2010, 114, 17434-17439.	3.1	208
13	Defunctionalization of Functionalized Carbon Nanotubes. Nano Letters, 2001, 1, 439-441.	9.1	191
14	Solubilization of boron nitride nanotubes. Chemical Communications, 2005, , 3670.	4.1	188
15	Carbonâ€Based Metalâ€Free Catalysts for Energy Storage and Environmental Remediation. Advanced Materials, 2019, 31, e1806128.	21.0	188
16	Aqueously Dispersed Silver Nanoparticle-Decorated Boron Nitride Nanosheets for Reusable, Thermal Oxidation-Resistant Surface Enhanced Raman Spectroscopy (SERS) Devices. ACS Applied Materials & Interfaces, 2012, 4, 1110-1117.	8.0	168
17	Solution Processed Boron Nitride Nanosheets: Synthesis, Assemblies and Emerging Applications. Advanced Functional Materials, 2017, 27, 1701450.	14.9	160
18	Functionalized carbon nanotubes for polymeric nanocomposites. Journal of Materials Chemistry, 2007, 17, 1143.	6.7	153

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19	Protein-Affinity of Single-Walled Carbon Nanotubes in Water. Journal of Physical Chemistry B, 2004, 108, 3760-3764.	2.6	150
20	Holey Graphene Nanomanufacturing: Structure, Composition, and Electrochemical Properties. Advanced Functional Materials, 2015, 25, 2920-2927.	14.9	150
21	Highâ€Performance, Longâ€Life, Rechargeable Liâ€“CO₂ Batteries based on a 3D Holey Graphene Cathode Implanted with Single Iron Atoms. Advanced Materials, 2020, 32, e1907436.	21.0	133
22	Ultrahigh-Capacity Lithiumâ€“Oxygen Batteries Enabled by Dry-Pressed Holey Graphene Air Cathodes. Nano Letters, 2017, 17, 3252-3260.	9.1	132
23	Highâ€Performance Liâ€CO₂ Batteries Based on Metalâ€Free Carbon Quantum Dot/Holey Graphene Composite Catalysts. Advanced Functional Materials, 2018, 28, 1804630.	14.9	121
24	High Aqueous Solubility of Functionalized Single-Walled Carbon Nanotubes. Langmuir, 2004, 20, 4777-4778.	3.5	119
25	Flexible lithiumâ€“CO₂ battery with ultrahigh capacity and stable cycling. Energy and Environmental Science, 2018, 11, 3231-3237.	30.8	117
26	Nitrogen-Doped Holey Graphene for High-Performance Rechargeable Liâ€“O₂ Batteries. ACS Energy Letters, 2016, 1, 260-265.	17.4	116
27	Nitrogenâ€Doped Holey Graphene as an Anode for Lithiumâ€Ion Batteries with High Volumetric Energy Density and Long Cycle Life. Small, 2015, 11, 6179-6185.	10.0	115
28	Instantaneous Formation of Metal and Metal Oxide Nanoparticles on Carbon Nanotubes and Graphene via Solvent-Free Microwave Heating. ACS Applied Materials & Interfaces, 2011, 3, 1652-1664.	8.0	97
29	Bulk preparation of holey graphene via controlled catalytic oxidation. Nanoscale, 2013, 5, 7814.	5.6	97
30	Palladium nanoparticles supported on carbon nanotubes from solventless preparations: versatile catalysts for ligand-free Suzuki cross coupling reactions. Journal of Materials Chemistry A, 2013, 1, 12909.	10.3	92
31	Functionalization of Carbon Nanotubes with Derivatized Polyimide. Macromolecules, 2005, 38, 7670-7675.	4.8	85
32	Holey graphene: a unique structural derivative of graphene. Materials Research Letters, 2017, 5, 209-234.	8.7	85
33	An ultra-long life, high-performance, flexible Liâ€“CO2 battery based on multifunctional carbon electrocatalysts. Nano Energy, 2020, 71, 104595.	16.0	80
34	Functionalized Carbon Nanotubes with Tethered Pyrenes:â€‰ Synthesis and Photophysical Properties. Journal of Physical Chemistry B, 2004, 108, 11447-11453.	2.6	76
35	Dry-Processed, Binder-Free Holey Graphene Electrodes for Supercapacitors with Ultrahigh Areal Loadings. ACS Applied Materials & Interfaces, 2016, 8, 29478-29485.	8.0	76
36	Chemical Sharpening, Shortening, and Unzipping of Boron Nitride Nanotubes. Advanced Functional Materials, 2014, 24, 4497-4506.	14.9	67

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37	Oxidative Etching of Hexagonal Boron Nitride Toward Nanosheets with Defined Edges and Holes. Scientific Reports, 2015, 5, 14510.	3.3	58
38	Scalable Dry Processing of Binder-Free Lithium-Ion Battery Electrodes Enabled by Holey Graphene. ACS Applied Energy Materials, 2019, 2, 2990-2997.	5.1	55
39	Nanomanufacturing of graphene nanosheets through nano-hole opening and closing. Materials Today, 2019, 24, 26-32.	14.2	48
40	Compressible, Dense, Three-Dimensional Holey Graphene Monolithic Architecture. ACS Nano, 2017, 11, 3189-3197.	14.6	44
41	Evaluating graphene oxide and holey graphene oxide membrane performance for water purification. Journal of Membrane Science, 2019, 588, 117195.	8.2	43
42	Polyaniline/Carbon Nanotube Sheet Nanocomposites: Fabrication and Characterization. ACS Applied Materials & Interfaces, 2013, 5, 8597-8606.	8.0	40
43	Highly compressible, binderless and ultrathick holey graphene-based electrode architectures. Nano Energy, 2017, 31, 386-392.	16.0	39
44	Direct Mechanochemical Formation of Metal Nanoparticles on Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 14858-14862.	3.1	37
45	Mercury Capture from Flue Gas Using Palladium Nanoparticle-Decorated Substrates as Injected Sorbent. Energy & Fuels, 2009, 23, 1512-1517.	5.1	25
46	Large scale synthesis of single-crystal and polycrystalline boron nitride nanosheets. Journal of Materials Science, 2013, 48, 2543-2549.	3.7	25
47	Facile, Solventâ€Free Preparation of High Density, High Mass Loading Sulfur Cathodes Enabled by Dryâ€Pressable Holey Graphene Scaffolds. Batteries and Supercaps, 2019, 2, 774-783.	4.7	25
48	Highly Rechargeable Lithiumâ€CO‹sub›2‹/sub› Batteries with a Boronâ€and Nitrogenâ€Codoped Holeyâ€Graphene Cathode. Angewandte Chemie, 2017, 129, 7074-7078.	2.0	24
49	Purification of Carbon Nanotube Sheets. Advanced Engineering Materials, 2015, 17, 674-688.	3.5	22
50	Holey Carbon Nanotubes from Controlled Air Oxidation. Advanced Functional Materials, 2017, 27, 1700762.	14.9	21
51	Evolution of MoirÃ© Profiles from van der Waals Superstructures of Boron Nitride Nanosheets. Scientific Reports, 2016, 6, 26084.	3.3	19
52	Picosecond laser surface treatment and analysis of thermoplastic composites for structural adhesive bonding. Composites Part B: Engineering, 2020, 191, 107939.	12.0	19
53	Optimized surface treatment of aerospace composites using a picosecond laser. Composites Part B: Engineering, 2019, 175, 107155.	12.0	16
54	Preparation, Characterization, and Evaluation of Immuno Carbon Nanotubes. Mikrochimica Acta, 2006, 152, 249-254.	5.0	13

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55	Carbon Nanotubes for Immunomagnetic Separation of Escherichia Coli O157:H7. Journal of Nanoscience and Nanotechnology, 2006, 6, 868-871.	0.9	13
56	Dry Pressing Neat Active Materials into Ultrahigh Mass Loading Sandwich Cathodes Enabled by Holey Graphene Scaffold. ACS Applied Energy Materials, 2020, 3, 6374-6382.	5.1	10
57	Dry-pressed lithium nickel cobalt manganese oxide (NCM) cathodes enabled by holey graphene host. Electrochimica Acta, 2020, 362, 137129.	5.2	9
58	Shuttling Induced Starvation of Redox Mediators in High Areal Capacity Rechargeable Lithium-Oxygen Batteries. Journal of the Electrochemical Society, 2020, 167, 080522.	2.9	7
59	Practical considerations in designing solid state Li-S cells for electric aviation. Electrochimica Acta, 2022, 403, 139406.	5.2	7
60	In situmechanical property measurements of amorphous carbonâ€“boron nitride nanotube nanostructures. Nanotechnology, 2012, 23, 035701.	2.6	5
61	Architecture Transformations of Ultrahigh Areal Capacity Air Cathodes for Lithiumâ€Oxygen Batteries. Batteries and Supercaps, 2021, 4, 120-130.	4.7	5
62	Holey Grapheneâ€“Enabled Solvent-Free Preparation of Ultrahigh Mass Loading Selenium Cathodes for High Areal Capacity Lithiumâ€“Selenium Batteries. Frontiers in Energy Research, 2021, 9, .	2.3	3
63	Li-Ion Permeability of Holey Graphene in Solid State Batteries: A Particle Dynamics Study. ACS Applied Materials & Interfaces, 2022, 14, 21363-21370.	8.0	1
64	Low friction, elastomer-containing copolyimides. High Performance Polymers, 2013, 25, 3-12.	1.8	0
65	Synthesis and characterization of copolyimides containing fluorine and silicon surface-modifying agents. High Performance Polymers, 2018, 30, 355-364.	1.8	0