

Liangbing Hu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6920509/publications.pdf>

Version: 2024-02-01

416
papers

78,998
citations

239

144
h-index

494

269
g-index

425
all docs

425
docs citations

425
times ranked

47716
citing authors

#	ARTICLE	IF	CITATIONS
1	Stable cycling of double-walled silicon nanotube battery anodes through solid-state electrolyte interphase control. <i>Nature Nanotechnology</i> , 2012, 7, 310-315.	15.6	2,144
2	Emerging Transparent Electrodes Based on Thin Films of Carbon Nanotubes, Graphene, and Metallic Nanostructures. <i>Advanced Materials</i> , 2011, 23, 1482-1513.	11.1	1,963
3	Scalable Coating and Properties of Transparent, Flexible, Silver Nanowire Electrodes. <i>ACS Nano</i> , 2010, 4, 2955-2963.	7.3	1,906
4	Negating interfacial impedance in garnet-based solid-state Li metal batteries. <i>Nature Materials</i> , 2017, 16, 572-579.	13.3	1,583
5	Stretchable, Porous, and Conductive Energy Textiles. <i>Nano Letters</i> , 2010, 10, 708-714.	4.5	1,415
6	Interconnected Silicon Hollow Nanospheres for Lithium-Ion Battery Anodes with Long Cycle Life. <i>Nano Letters</i> , 2011, 11, 2949-2954.	4.5	1,278
7	Highly conductive paper for energy-storage devices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 21490-21494.	3.3	1,138
8	Wood-Derived Materials for Green Electronics, Biological Devices, and Energy Applications. <i>Chemical Reviews</i> , 2016, 116, 9305-9374.	23.0	1,110
9	Carbothermal shock synthesis of high-entropy-alloy nanoparticles. <i>Science</i> , 2018, 359, 1489-1494.	6.0	1,065
10	Enhancing the Supercapacitor Performance of Graphene/MnO ₂ Nanostructured Electrodes by Conductive Wrapping. <i>Nano Letters</i> , 2011, 11, 4438-4442.	4.5	1,062
11	Processing bulk natural wood into a high-performance structural material. <i>Nature</i> , 2018, 554, 224-228.	13.7	970
12	Carbon Nanotube Thin Films: Fabrication, Properties, and Applications. <i>Chemical Reviews</i> , 2010, 110, 5790-5844.	23.0	889
13	Na-Ion Battery Anodes: Materials and Electrochemistry. <i>Accounts of Chemical Research</i> , 2016, 49, 231-240.	7.6	886
14	A radiative cooling structural material. <i>Science</i> , 2019, 364, 760-763.	6.0	856
15	A transparent electrode based on a metal nanotrough network. <i>Nature Nanotechnology</i> , 2013, 8, 421-425.	15.6	851
16	Challenges and Opportunities for Solar Evaporation. <i>Joule</i> , 2019, 3, 683-718.	11.7	850
17	Potassium Ion Batteries with Graphitic Materials. <i>Nano Letters</i> , 2015, 15, 7671-7677.	4.5	805
18	Thin, Flexible Secondary Li-Ion Paper Batteries. <i>ACS Nano</i> , 2010, 4, 5843-5848.	7.3	785

#	ARTICLE	IF	CITATIONS
19	Flexible, solid-state, ion-conducting membrane with 3D garnet nanofiber networks for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7094-7099.	3.3	769
20	Developing fibrillated cellulose as a sustainable technological material. Nature, 2021, 590, 47-56.	13.7	711
21	Plasmonic Wood for High-Efficiency Solar Steam Generation. Advanced Energy Materials, 2018, 8, 1701028.	10.2	701
22	Next-Generation Lithium Metal Anode Engineering via Atomic Layer Deposition. ACS Nano, 2015, 9, 5884-5892.	7.3	700
23	High-Performance Nanostructured Supercapacitors on a Sponge. Nano Letters, 2011, 11, 5165-5172.	4.5	670
24	Electrospun Metal Nanofiber Webs as High-Performance Transparent Electrode. Nano Letters, 2010, 10, 4242-4248.	4.5	660
25	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. Chemical Reviews, 2020, 120, 4257-4300.	23.0	655
26	Toward garnet electrolyte-based Li metal batteries: An ultrathin, highly effective, artificial solid-state electrolyte/metallic Li interface. Science Advances, 2017, 3, e1601659.	4.7	647
27	A High-Performance Self-Regenerating Solar Evaporator for Continuous Water Desalination. Advanced Materials, 2019, 31, e1900498.	11.1	638
28	Structure-property-function relationships of natural and engineered wood. Nature Reviews Materials, 2020, 5, 642-666.	23.3	616
29	Electrospun Sb/C Fibers for a Stable and Fast Sodium-Ion Battery Anode. ACS Nano, 2013, 7, 6378-6386.	7.3	610
30	All-wood, low tortuosity, aqueous, biodegradable supercapacitors with ultra-high capacitance. Energy and Environmental Science, 2017, 10, 538-545.	15.6	602
31	Protected Lithium-Metal Anodes in Batteries: From Liquid to Solid. Advanced Materials, 2017, 29, 1701169.	11.1	596
32	Graphene Oxide-Based Electrode Inks for 3D-Printed Lithium-Ion Batteries. Advanced Materials, 2016, 28, 2587-2594.	11.1	590
33	Highly Flexible and Efficient Solar Steam Generation Device. Advanced Materials, 2017, 29, 1701756.	11.1	584
34	Symmetrical MnO ₂ -Carbon Nanotube-Textile Nanostructures for Wearable Pseudocapacitors with High Mass Loading. ACS Nano, 2011, 5, 8904-8913.	7.3	582
35	Tin Anode for Sodium-Ion Batteries Using Natural Wood Fiber as a Mechanical Buffer and Electrolyte Reservoir. Nano Letters, 2013, 13, 3093-3100.	4.5	556
36	Conformal, Nanoscale ZnO Surface Modification of Garnet-Based Solid-State Electrolyte for Lithium Metal Anodes. Nano Letters, 2017, 17, 565-571.	4.5	556

#	ARTICLE	IF	CITATIONS
37	Transition from Superlithiophobicity to Superlithiophilicity of Garnet Solid-State Electrolyte. <i>Journal of the American Chemical Society</i> , 2016, 138, 12258-12262.	6.6	548
38	Highly Anisotropic, Highly Transparent Wood Composites. <i>Advanced Materials</i> , 2016, 28, 5181-5187.	11.1	518
39	Reducing Interfacial Resistance between Garnet-Structured Solid-State Electrolyte and Li-Metal Anode by a Germanium Layer. <i>Advanced Materials</i> , 2017, 29, 1606042.	11.1	512
40	3D-Printed, All-in-One Evaporator for High-Efficiency Solar Steam Generation under 1 Sun Illumination. <i>Advanced Materials</i> , 2017, 29, 1700981.	11.1	511
41	Ultrafine Silver Nanoparticles for Seeded Lithium Deposition toward Stable Lithium Metal Anode. <i>Advanced Materials</i> , 2017, 29, 1702714.	11.1	510
42	Light-Weight Free-Standing Carbon Nanotube-Silicon Films for Anodes of Lithium Ion Batteries. <i>ACS Nano</i> , 2010, 4, 3671-3678.	7.3	507
43	Three-dimensional bilayer garnet solid electrolyte based high energy density lithium metal-sulfur batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1568-1575.	15.6	499
44	Tree-Inspired Design for High-Efficiency Water Extraction. <i>Advanced Materials</i> , 2017, 29, 1704107.	11.1	494
45	Nature-inspired salt resistant bimodal porous solar evaporator for efficient and stable water desalination. <i>Energy and Environmental Science</i> , 2019, 12, 1558-1567.	15.6	482
46	Transparent paper: fabrications, properties, and device applications. <i>Energy and Environmental Science</i> , 2014, 7, 269-287.	15.6	457
47	Metal nanogrids, nanowires, and nanofibers for transparent electrodes. <i>MRS Bulletin</i> , 2011, 36, 760-765.	1.7	434
48	Transparent and conductive paper from nanocellulose fibers. <i>Energy and Environmental Science</i> , 2013, 6, 513-518.	15.6	431
49	Highly Thermally Conductive Papers with Percolative Layered Boron Nitride Nanosheets. <i>ACS Nano</i> , 2014, 8, 3606-3613.	7.3	425
50	Novel Nanostructured Paper with Ultrahigh Transparency and Ultrahigh Haze for Solar Cells. <i>Nano Letters</i> , 2014, 14, 765-773.	4.5	419
51	High-capacity, low-tortuosity, and channel-guided lithium metal anode. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3584-3589.	3.3	412
52	Muscle-Inspired Highly Anisotropic, Strong, Ion-Conductive Hydrogels. <i>Advanced Materials</i> , 2018, 30, e1801934.	11.1	408
53	Thick Electrode Batteries: Principles, Opportunities, and Challenges. <i>Advanced Energy Materials</i> , 2019, 9, 1901457.	10.2	407
54	Highly Transparent and Flexible Nanopaper Transistors. <i>ACS Nano</i> , 2013, 7, 2106-2113.	7.3	401

#	ARTICLE	IF	CITATIONS
55	Organic electrode for non-aqueous potassium-ion batteries. <i>Nano Energy</i> , 2015, 18, 205-211.	8.2	397
56	Mesoporous, Three-Dimensional Wood Membrane Decorated with Nanoparticles for Highly Efficient Water Treatment. <i>ACS Nano</i> , 2017, 11, 4275-4282.	7.3	392
57	Highly efficient decomposition of ammonia using high-entropy alloy catalysts. <i>Nature Communications</i> , 2019, 10, 4011.	5.8	376
58	Energy and environmental nanotechnology in conductive paper and textiles. <i>Energy and Environmental Science</i> , 2012, 5, 6423.	15.6	374
59	Scalable and Highly Efficient Mesoporous Wood-Based Solar Steam Generation Device: Localized Heat, Rapid Water Transport. <i>Advanced Functional Materials</i> , 2018, 28, 1707134.	7.8	366
60	Progress in 3D Printing of Carbon Materials for Energy-Related Applications. <i>Advanced Materials</i> , 2017, 29, 1603486.	11.1	364
61	Highly Compressible, Anisotropic Aerogel with Aligned Cellulose Nanofibers. <i>ACS Nano</i> , 2018, 12, 140-147.	7.3	364
62	Tuning two-dimensional nanomaterials by intercalation: materials, properties and applications. <i>Chemical Society Reviews</i> , 2016, 45, 6742-6765.	18.7	363
63	Rich Mesostructures Derived from Natural Woods for Solar Steam Generation. <i>Joule</i> , 2017, 1, 588-599.	11.7	363
64	Wood-Based Nanotechnologies toward Sustainability. <i>Advanced Materials</i> , 2018, 30, 1703453.	11.1	359
65	A general method to synthesize and sinter bulk ceramics in seconds. <i>Science</i> , 2020, 368, 521-526.	6.0	357
66	Cellulose ionic conductors with high differential thermal voltage for low-grade heat harvesting. <i>Nature Materials</i> , 2019, 18, 608-613.	13.3	343
67	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. <i>Science Advances</i> , 2018, 4, eaar3724.	4.7	336
68	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1104-1112.	4.0	327
69	Graphene oxide-based evaporator with one-dimensional water transport enabling high-efficiency solar desalination. <i>Nano Energy</i> , 2017, 41, 201-209.	8.2	316
70	Natural Cellulose Fiber as Substrate for Supercapacitor. <i>ACS Nano</i> , 2013, 7, 6037-6046.	7.3	315
71	A Thermally Conductive Separator for Stable Li Metal Anodes. <i>Nano Letters</i> , 2015, 15, 6149-6154.	4.5	313
72	Ultrathin Surface Coating Enables the Stable Sodium Metal Anode. <i>Advanced Energy Materials</i> , 2017, 7, 1601526.	10.2	312

#	ARTICLE	IF	CITATIONS
73	Anomalous scaling law of strength and toughness of cellulose nanopaper. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8971-8976.	3.3	296
74	A strong, biodegradable and recyclable lignocellulosic bioplastic. Nature Sustainability, 2021, 4, 627-635.	11.5	291
75	Paper supercapacitors by a solvent-free drawing method. Energy and Environmental Science, 2011, 4, 3368.	15.6	290
76	Carbon nanotube-coated macroporous sponge for microbial fuel cell electrodes. Energy and Environmental Science, 2012, 5, 5265-5270.	15.6	284
77	Transient Electronics: Materials and Devices. Chemistry of Materials, 2016, 28, 3527-3539.	3.2	284
78	Biodegradable transparent substrates for flexible organic-light-emitting diodes. Energy and Environmental Science, 2013, 6, 2105.	15.6	281
79	High temperature shockwave stabilized single atoms. Nature Nanotechnology, 2019, 14, 851-857.	15.6	278
80	Nanocellulose as green dispersant for two-dimensional energy materials. Nano Energy, 2015, 13, 346-354.	8.2	270
81	3D-Printed All-Fiber Li-Ion Battery toward Wearable Energy Storage. Advanced Functional Materials, 2017, 27, 1703140.	7.8	270
82	Copper-coordinated cellulose ion conductors for solid-state batteries. Nature, 2021, 598, 590-596.	13.7	262
83	Three-Dimensional Printed Thermal Regulation Textiles. ACS Nano, 2017, 11, 11513-11520.	7.3	261
84	Ultra-Thick, Low-Tortuosity, and Mesoporous Wood Carbon Anode for High-Performance Sodium-Ion Batteries. Advanced Energy Materials, 2016, 6, 1600377.	10.2	257
85	High-Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. Advanced Energy Materials, 2018, 8, 1701616.	10.2	255
86	Nanocellulose toward Advanced Energy Storage Devices: Structure and Electrochemistry. Accounts of Chemical Research, 2018, 51, 3154-3165.	7.6	251
87	Continuous plating/stripping behavior of solid-state lithium metal anode in a 3D ion-conductive framework. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3770-3775.	3.3	250
88	Garnet Solid Electrolyte Protected Li-Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 18809-18815.	4.0	247
89	Scalable and Sustainable Approach toward Highly Compressible, Anisotropic, Lamellar Carbon Sponge. Chem, 2018, 4, 544-554.	5.8	246
90	Encapsulation of Metallic Na in an Electrically Conductive Host with Porous Channels as a Highly Stable Na Metal Anode. Nano Letters, 2017, 17, 3792-3797.	4.5	243

#	ARTICLE	IF	CITATIONS
91	Extrusion-Based 3D Printing of Hierarchically Porous Advanced Battery Electrodes. <i>Advanced Materials</i> , 2018, 30, e1705651.	11.1	241
92	High-entropy nanoparticles: Synthesis-structure-property relationships and data-driven discovery. <i>Science</i> , 2022, 376, eabn3103.	6.0	239
93	MWCNT/V ₂ O ₅ Core/Shell Sponge for High Areal Capacity and Power Density Li-Ion Cathodes. <i>ACS Nano</i> , 2012, 6, 7948-7955.	7.3	236
94	3D-Printing Electrolytes for Solid-State Batteries. <i>Advanced Materials</i> , 2018, 30, e1707132.	11.1	236
95	Transparent lithium-ion batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 13013-13018.	3.3	234
96	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. <i>Materials Today</i> , 2019, 22, 50-57.	8.3	233
97	Lithium-Ion Textile Batteries with Large Areal Mass Loading. <i>Advanced Energy Materials</i> , 2011, 1, 1012-1017.	10.2	230
98	Wood Composite as an Energy Efficient Building Material: Guided Sunlight Transmittance and Effective Thermal Insulation. <i>Advanced Energy Materials</i> , 2016, 6, 1601122.	10.2	228
99	Transient Behavior of the Metal Interface in Lithium Metal-Garnet Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14942-14947.	7.2	227
100	High-Entropy Metal Sulfide Nanoparticles Promise High-Performance Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2021, 11, 2002887.	10.2	226
101	Transparent nanopaper with tailored optical properties. <i>Nanoscale</i> , 2013, 5, 3787.	2.8	223
102	Transparent and haze wood composites for highly efficient broadband light management in solar cells. <i>Nano Energy</i> , 2016, 26, 332-339.	8.2	222
103	Silicon-Carbon Nanotube Coaxial Sponge as Li-Ion Anodes with High Areal Capacity. <i>Advanced Energy Materials</i> , 2011, 1, 523-527.	10.2	220
104	A Dynamic Gel with Reversible and Tunable Topological Networks and Performances. <i>Matter</i> , 2020, 2, 390-403.	5.0	216
105	Porous Amorphous FePO ₄ Nanoparticles Connected by Single-Wall Carbon Nanotubes for Sodium Ion Battery Cathodes. <i>Nano Letters</i> , 2012, 12, 5664-5668.	4.5	215
106	Electrode Materials of Sodium-Ion Batteries toward Practical Application. <i>ACS Energy Letters</i> , 2018, 3, 1604-1612.	8.8	214
107	Approaching the limits of transparency and conductivity in graphitic materials through lithium intercalation. <i>Nature Communications</i> , 2014, 5, 4224.	5.8	213
108	Scalable Holey Graphene Synthesis and Dense Electrode Fabrication toward High-Performance Ultracapacitors. <i>ACS Nano</i> , 2014, 8, 8255-8265.	7.3	212

#	ARTICLE	IF	CITATIONS
109	Highly Conductive, Lightweight, Low-Tortuosity Carbon Frameworks as Ultrathick 3D Current Collectors. <i>Advanced Energy Materials</i> , 2017, 7, 1700595.	10.2	210
110	Narrow bandgap semiconductor decorated wood membrane for high-efficiency solar-assisted water purification. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18839-18846.	5.2	208
111	Lignin as a Wood-Inspired Binder Enabled Strong, Water Stable, and Biodegradable Paper for Plastic Replacement. <i>Advanced Functional Materials</i> , 2020, 30, 1906307.	7.8	208
112	Interface Engineering for Garnet-Based Solid-State Lithium-Metal Batteries: Materials, Structures, and Characterization. <i>Advanced Materials</i> , 2018, 30, e1802068.	11.1	204
113	Anisotropic, Transparent Films with Aligned Cellulose Nanofibers. <i>Advanced Materials</i> , 2017, 29, 1606284.	11.1	202
114	A Strong, Tough, and Scalable Structural Material from Fast-Growing Bamboo. <i>Advanced Materials</i> , 2020, 32, e1906308.	11.1	202
115	A carbon-based 3D current collector with surface protection for Li metal anode. <i>Nano Research</i> , 2017, 10, 1356-1365.	5.8	200
116	Nanostructured paper for flexible energy and electronic devices. <i>MRS Bulletin</i> , 2013, 38, 320-325.	1.7	199
117	Aqueous supercapacitors on conductive cotton. <i>Nano Research</i> , 2010, 3, 452-458.	5.8	197
118	3D Wettable Framework for Dendrite-Free Alkali Metal Anodes. <i>Advanced Energy Materials</i> , 2018, 8, 1800635.	10.2	196
119	Reactivation of dissolved polysulfides in Li-S batteries based on atomic layer deposition of Al ₂ O ₃ in nanoporous carbon cloth. <i>Nano Energy</i> , 2013, 2, 1197-1206.	8.2	195
120	Determining the three-dimensional atomic structure of an amorphous solid. <i>Nature</i> , 2021, 592, 60-64.	13.7	193
121	Atomic-Layer-Deposition Oxide Nanogel for Sodium Ion Batteries. <i>Nano Letters</i> , 2014, 14, 139-147.	4.5	191
122	Flexible, Scalable, and Highly Conductive Garnet-Polymer Solid Electrolyte Templated by Bacterial Cellulose. <i>Advanced Energy Materials</i> , 2018, 8, 1703474.	10.2	189
123	An Electron/Ion Dual-Conductive Alloy Framework for High-Rate and High-Capacity Solid-State Lithium-Metal Batteries. <i>Advanced Materials</i> , 2019, 31, e1804815.	11.1	188
124	Reduced Graphene Oxide Films with Ultrahigh Conductivity as Li-Ion Battery Current Collectors. <i>Nano Letters</i> , 2016, 16, 3616-3623.	4.5	187
125	Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1701963.	10.2	186
126	Super-Strong, Super-Stiff Macrofibers with Aligned, Long Bacterial Cellulose Nanofibers. <i>Advanced Materials</i> , 2017, 29, 1702498.	11.1	185

#	ARTICLE	IF	CITATIONS
127	Printed energy storage devices by integration of electrodes and separators into single sheets of paper. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	184
128	Reduced graphene oxide film with record-high conductivity and mobility. <i>Materials Today</i> , 2018, 21, 186-192.	8.3	182
129	Scalable aesthetic transparent wood for energy efficient buildings. <i>Nature Communications</i> , 2020, 11, 3836.	5.8	180
130	A cellulose based hydrophilic, oleophobic hydrated filter for water/oil separation. <i>Chemical Communications</i> , 2014, 50, 13296-13299.	2.2	178
131	Three-Dimensional, Solid-State Mixed Electron-Ion Conductive Framework for Lithium Metal Anode. <i>Nano Letters</i> , 2018, 18, 3926-3933.	4.5	175
132	Ultrahigh Tough, Super Clear, and Highly Anisotropic Nanofiber-Structured Regenerated Cellulose Films. <i>ACS Nano</i> , 2019, 13, 4843-4853.	7.3	174
133	Optical haze of transparent and conductive silver nanowire films. <i>Nano Research</i> , 2013, 6, 461-468.	5.8	173
134	Flexible Batteries: From Mechanics to Devices. <i>ACS Energy Letters</i> , 2016, 1, 1065-1079.	8.8	170
135	Si nanoparticle-decorated Si nanowire networks for Li-ion battery anodes. <i>Chemical Communications</i> , 2011, 47, 367-369.	2.2	166
136	Conductive Cellulose Nanofiber Enabled Thick Electrode for Compact and Flexible Energy Storage Devices. <i>Advanced Energy Materials</i> , 2018, 8, 1802398.	10.2	163
137	Three-Dimensional Printable High-Temperature and High-Rate Heaters. <i>ACS Nano</i> , 2016, 10, 5272-5279.	7.3	161
138	Extreme Light Management in Mesoporous Wood Cellulose Paper for Optoelectronics. <i>ACS Nano</i> , 2016, 10, 1369-1377.	7.3	161
139	Hierarchically Porous, Ultrathick, "Breathable" Wood-Derived Cathode for Lithium-Oxygen Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1701203.	10.2	161
140	Solution Processed Boron Nitride Nanosheets: Synthesis, Assemblies and Emerging Applications. <i>Advanced Functional Materials</i> , 2017, 27, 1701450.	7.8	160
141	Low temperature carbonization of cellulose nanocrystals for high performance carbon anode of sodium-ion batteries. <i>Nano Energy</i> , 2017, 33, 37-44.	8.2	159
142	Computationally aided, entropy-driven synthesis of highly efficient and durable multi-elemental alloy catalysts. <i>Science Advances</i> , 2020, 6, eaaz0510.	4.7	158
143	<i>In Situ</i> Neutron Depth Profiling of Lithium Metal-Garnet Interfaces for Solid State Batteries. <i>Journal of the American Chemical Society</i> , 2017, 139, 14257-14264.	6.6	154
144	Denary oxide nanoparticles as highly stable catalysts for methane combustion. <i>Nature Catalysis</i> , 2021, 4, 62-70.	16.1	153

#	ARTICLE	IF	CITATIONS
145	Enabling High-Areal-Capacity Lithium-Sulfur Batteries: Designing Anisotropic and Low-Tortuosity Porous Architectures. <i>ACS Nano</i> , 2017, 11, 4801-4807.	7.3	151
146	Holey Graphene Nanomanufacturing: Structure, Composition, and Electrochemical Properties. <i>Advanced Functional Materials</i> , 2015, 25, 2920-2927.	7.8	150
147	A nanofluidic ion regulation membrane with aligned cellulose nanofibers. <i>Science Advances</i> , 2019, 5, eaau4238.	4.7	148
148	Carbonized-leaf Membrane with Anisotropic Surfaces for Sodium-ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 2204-2210.	4.0	146
149	FeS ₂ Nanoparticles Embedded in Reduced Graphene Oxide toward Robust, High-Performance Electrocatalysts. <i>Advanced Energy Materials</i> , 2017, 7, 1700482.	10.2	144
150	Transparent, Anisotropic Biofilm with Aligned Bacterial Cellulose Nanofibers. <i>Advanced Functional Materials</i> , 2018, 28, 1707491.	7.8	142
151	A perylene anhydride crystal as a reversible electrode for K-ion batteries. <i>Energy Storage Materials</i> , 2016, 2, 63-68.	9.5	141
152	Superflexible Wood. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 23520-23527.	4.0	141
153	Clear Wood toward High-Performance Building Materials. <i>ACS Nano</i> , 2019, 13, 9993-10001.	7.3	138
154	Lightweight, strong, moldable wood via cell wall engineering as a sustainable structural material. <i>Science</i> , 2021, 374, 465-471.	6.0	137
155	High Temperature Carbonized Grass as a High Performance Sodium Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 391-397.	4.0	136
156	3D-Printed Graphene Oxide Framework with Thermal Shock Synthesized Nanoparticles for Li- <i>CO</i> ₂ Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1805899.	7.8	135
157	Lithium-ion conductive ceramic textile: A new architecture for flexible solid-state lithium metal batteries. <i>Materials Today</i> , 2018, 21, 594-601.	8.3	134
158	Sustainable off-grid desalination of hypersaline waters using Janus wood evaporators. <i>Energy and Environmental Science</i> , 2021, 14, 5347-5357.	15.6	133
159	Ultrahigh-Capacity Lithium-Oxygen Batteries Enabled by Dry-Pressed Holey Graphene Air Cathodes. <i>Nano Letters</i> , 2017, 17, 3252-3260.	4.5	132
160	Silver nanowire transparent conducting paper-based electrode with high optical haze. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1248-1254.	2.7	131
161	Cellulose-Nanofiber-Enabled 3D Printing of a Carbon-Nanotube Microfiber Network. <i>Small Methods</i> , 2017, 1, 1700222.	4.6	130
162	Transient, <i>in situ</i> synthesis of ultrafine ruthenium nanoparticles for a high-rate Li- <i>CO</i> ₂ battery. <i>Energy and Environmental Science</i> , 2019, 12, 1100-1107.	15.6	129

#	ARTICLE	IF	CITATIONS
163	Dense, Self-Formed Char Layer Enables a Fire-Retardant Wood Structural Material. <i>Advanced Functional Materials</i> , 2019, 29, 1807444.	7.8	125
164	A Clear, Strong, and Thermally Insulated Transparent Wood for Energy Efficient Windows. <i>Advanced Functional Materials</i> , 2020, 30, 1907511.	7.8	124
165	Highly transparent paper with tunable haze for green electronics. <i>Energy and Environmental Science</i> , 2014, 7, 3313-3319.	15.6	123
166	Chemically Crushed Wood Cellulose Fiber towards High-Performance Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 23291-23296.	4.0	123
167	Ultra-fast self-assembly and stabilization of reactive nanoparticles in reduced graphene oxide films. <i>Nature Communications</i> , 2016, 7, 12332.	5.8	123
168	From Wood to Textiles: Top-Down Assembly of Aligned Cellulose Nanofibers. <i>Advanced Materials</i> , 2018, 30, e1801347.	11.1	121
169	Nature-Inspired Tri-Pathway Design Enabling High-Performance Flexible Li-O ₂ Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1802964.	10.2	121
170	High-throughput, combinatorial synthesis of multimetallic nanoclusters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 6316-6322.	3.3	119
171	Highly transparent and writable wood all-cellulose hybrid nanostructured paper. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6191.	2.7	117
172	Scalable, anisotropic transparent paper directly from wood for light management in solar cells. <i>Nano Energy</i> , 2017, 36, 366-373.	8.2	117
173	Flexible lithium-CO ₂ battery with ultrahigh capacity and stable cycling. <i>Energy and Environmental Science</i> , 2018, 11, 3231-3237.	15.6	117
174	Conductive Wood for High-Performance Structural Electromagnetic Interference Shielding. <i>Chemistry of Materials</i> , 2020, 32, 5280-5289.	3.2	117
175	Bioinspired Solar-Heated Carbon Absorbent for Efficient Cleanup of Highly Viscous Crude Oil. <i>Advanced Functional Materials</i> , 2019, 29, 1900162.	7.8	116
176	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. <i>Energy Storage Materials</i> , 2018, 14, 376-382.	9.5	114
177	Atomic Force Microscopy Studies on Molybdenum Disulfide Flakes as Sodium-Ion Anodes. <i>Nano Letters</i> , 2015, 15, 1018-1024.	4.5	113
178	Sustainable high-strength macrofibres extracted from natural bamboo. <i>Nature Sustainability</i> , 2022, 5, 235-244.	11.5	113
179	A High-Performance, Low-Tortuosity Wood-Carbon Monolith Reactor. <i>Advanced Materials</i> , 2017, 29, 1604257.	11.1	110
180	Nanocellulose-based films and their emerging applications. <i>Current Opinion in Solid State and Materials Science</i> , 2019, 23, 100764.	5.6	109

#	ARTICLE	IF	CITATIONS
181	All-Natural, Degradable, Rolled-Up Straws Based on Cellulose Micro- and Nano-Hybrid Fibers. <i>Advanced Functional Materials</i> , 2020, 30, 1910417.	7.8	109
182	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. <i>Energy Storage Materials</i> , 2018, 15, 458-464.	9.5	108
183	Alignment of Cellulose Nanofibers: Harnessing Nanoscale Properties to Macroscale Benefits. <i>ACS Nano</i> , 2021, 15, 3646-3673.	7.3	108
184	Solar-assisted fabrication of large-scale, patternable transparent wood. <i>Science Advances</i> , 2021, 7, .	4.7	107
185	Rapid Processing of Whole Bamboo with Exposed, Aligned Nanofibrils toward a High-Performance Structural Material. <i>ACS Nano</i> , 2020, 14, 5194-5202.	7.3	105
186	Overcoming immiscibility toward bimetallic catalyst library. <i>Science Advances</i> , 2020, 6, eaaz6844.	4.7	105
187	Strong transparent magnetic nanopaper prepared by immobilization of Fe ₃ O ₄ nanoparticles in a nanofibrillated cellulose network. <i>Journal of Materials Chemistry A</i> , 2013, 1, 15278.	5.2	104
188	Light management in plastic-paper hybrid substrate towards high-performance optoelectronics. <i>Energy and Environmental Science</i> , 2016, 9, 2278-2285.	15.6	103
189	Synergistic Ultrathin Functional Polymer-Coated Carbon Nanotube Interlayer for High Performance Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20092-20099.	4.0	102
190	Extreme mixing in nanoscale transition metal alloys. <i>Matter</i> , 2021, 4, 2340-2353.	5.0	102
191	General, Vertical, Three-Dimensional Printing of Two-Dimensional Materials with Multiscale Alignment. <i>ACS Nano</i> , 2019, 13, 12653-12661.	7.3	101
192	A high-entropy phosphate catalyst for oxygen evolution reaction. <i>Nano Energy</i> , 2021, 86, 106029.	8.2	100
193	Optical transmission enhancement through chemically tuned two-dimensional bismuth chalcogenide nanoplates. <i>Nature Communications</i> , 2014, 5, 5670.	5.8	99
194	Infrared transparent carbon nanotube thin films. <i>Applied Physics Letters</i> , 2009, 94, 081103.	1.5	98
195	Highly Elastic Hydrated Cellulosic Materials with Durable Compressibility and Tunable Conductivity. <i>ACS Nano</i> , 2020, 14, 16723-16734.	7.3	98
196	Self-Powered Human-Interactive Transparent Nanopaper Systems. <i>ACS Nano</i> , 2015, 9, 7399-7406.	7.3	97
197	Architecting a Floatable, Durable, and Scalable Steam Generator: Hydrophobic/Hydrophilic Bifunctional Structure for Solar Evaporation Enhancement. <i>Small Methods</i> , 2019, 3, 1800176.	4.6	97
198	Thermoelectric properties and performance of flexible reduced graphene oxide films up to 3,000 K. <i>Nature Energy</i> , 2018, 3, 148-156.	19.8	96

#	ARTICLE	IF	CITATIONS
199	Depolarized and Fully Active Cathode Based on $\text{Li}(\text{Ni}_{0.5}\text{Co}_{0.2}\text{Mn}_{0.3})\text{O}_2$ Embedded in Carbon Nanotube Network for Advanced Batteries. Nano Letters, 2014, 14, 4700-4706.	4.5	95
200	Hybridizing wood cellulose and graphene oxide toward high-performance fibers. NPG Asia Materials, 2015, 7, e150-e150.	3.8	95
201	3D printed separator for the thermal management of high-performance Li metal anodes. Energy Storage Materials, 2018, 12, 197-203.	9.5	95
202	Highly Conductive Microfiber of Graphene Oxide Templated Carbonization of Nanofibrillated Cellulose. Advanced Functional Materials, 2014, 24, 7366-7372.	7.8	94
203	Stable Multimetallic Nanoparticles for Oxygen Electrocatalysis. Nano Letters, 2019, 19, 5149-5158.	4.5	94
204	Fire-Resistant Structural Material Enabled by an Anisotropic Thermally Conductive Hexagonal Boron Nitride Coating. Advanced Functional Materials, 2020, 30, 1909196.	7.8	94
205	Continuous Synthesis of Hollow High-Entropy Nanoparticles for Energy and Catalysis Applications. Advanced Materials, 2020, 32, e2002853.	11.1	93
206	Ta-TiOx nanoparticles as radical scavengers to improve the durability of Fe-N-C oxygen reduction catalysts. Nature Energy, 2022, 7, 281-289.	19.8	93
207	Textile Inspired Lithium-Oxygen Battery Cathode with Decoupled Oxygen and Electrolyte Pathways. Advanced Materials, 2018, 30, 1704907.	11.1	92
208	Nanocellulose-Enabled, All-Nanofiber, High-Performance Supercapacitor. ACS Applied Materials & Interfaces, 2019, 11, 5919-5927.	4.0	91
209	Rapid Thermal Annealing of Cathode-Garnet Interface toward High-Temperature Solid State Batteries. Nano Letters, 2017, 17, 4917-4923.	4.5	89
210	Free-Standing $\text{Na}_{2/3}\text{Fe}_{1/2}\text{Mn}_{1/2}\text{O}_2$ @Graphene Film for a Sodium-Ion Battery Cathode. ACS Applied Materials & Interfaces, 2014, 6, 4242-4247.	4.0	88
211	Carbon Welding by Ultrafast Joule Heating. Nano Letters, 2016, 16, 7282-7289.	4.5	88
212	Fast and Scalable Printing of Large Area Monolayer Nanoparticles for Nanotexturing Applications. Nano Letters, 2010, 10, 2989-2994.	4.5	87
213	In Situ Investigations of LiMoS_2 with Planar Batteries. Advanced Energy Materials, 2015, 5, 1401742.	10.2	87
214	In Situ Lignin Modification toward Photonic Wood. Advanced Materials, 2021, 33, e2001588.	11.1	86
215	Carbon-Supported High-Entropy Oxide Nanoparticles as Stable Electrocatalysts for Oxygen Reduction Reactions. Advanced Functional Materials, 2021, 31, 2010561.	7.8	86
216	A gravure printed antenna on shape-stable transparent nanopaper. Nanoscale, 2014, 6, 9110.	2.8	85

#	ARTICLE	IF	CITATIONS
217	Synergistic protective effect of a BN-carbon separator for highly stable lithium sulfur batteries. <i>NPG Asia Materials</i> , 2017, 9, e375-e375.	3.8	85
218	Millisecond synthesis of CoS nanoparticles for highly efficient overall water splitting. <i>Nano Research</i> , 2019, 12, 2259-2267.	5.8	85
219	Scalable Synthesis of High Entropy Alloy Nanoparticles by Microwave Heating. <i>ACS Nano</i> , 2021, 15, 14928-14937.	7.3	85
220	Tailoring the Local Environment of Platinum in Single-Atom Pt ₁ /CeO ₂ Catalysts for Robust Low-Temperature CO Oxidation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26054-26062.	7.2	84
221	A printed, recyclable, ultra-strong, and ultra-tough graphite structural material. <i>Materials Today</i> , 2019, 30, 17-25.	8.3	83
222	Salinity-Gradient Power Generation with Ionized Wood Membranes. <i>Advanced Energy Materials</i> , 2020, 10, 1902590.	10.2	83
223	Hydrophobic nanostructured wood membrane for thermally efficient distillation. <i>Science Advances</i> , 2019, 5, eaaw3203.	4.7	81
224	Thermally Conductive Reduced Graphene Oxide Thin Films for Extreme Temperature Sensors. <i>Advanced Functional Materials</i> , 2019, 29, 1901388.	7.8	81
225	Strong, Hydrostable, and Degradable Straws Based on Cellulose-Lignin Reinforced Composites. <i>Small</i> , 2021, 17, e2008011.	5.2	81
226	Thermally conductive, dielectric PCMBoron nitride nanosheet composites for efficient electronic system thermal management. <i>Nanoscale</i> , 2016, 8, 19326-19333.	2.8	80
227	Highly Anisotropic Conductors. <i>Advanced Materials</i> , 2017, 29, 1703331.	11.1	80
228	<i>In Situ</i> Transmission Electron Microscopy Observation of Sodiation-Desodiation in a Long Cycle, High-Capacity Reduced Graphene Oxide Sodium-Ion Battery Anode. <i>Chemistry of Materials</i> , 2016, 28, 6528-6535.	3.2	79
229	Isotropic Paper Directly from Anisotropic Wood: Top-Down Green Transparent Substrate Toward Biodegradable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28566-28571.	4.0	79
230	<i>In Situ</i> Chainmail Catalyst Assembly in Low-Tortuosity, Hierarchical Carbon Frameworks for Efficient and Stable Hydrogen Generation. <i>Advanced Energy Materials</i> , 2018, 8, 1801289.	10.2	79
231	A Highly Conductive Cationic Wood Membrane. <i>Advanced Functional Materials</i> , 2019, 29, 1902772.	7.8	79
232	All Natural, High Efficient Groundwater Extraction via Solar Steam/Vapor Generation. <i>Advanced Sustainable Systems</i> , 2019, 3, 1800055.	2.7	78
233	Transient Rechargeable Batteries Triggered by Cascade Reactions. <i>Nano Letters</i> , 2015, 15, 4664-4671.	4.5	77
234	Atomic-Layer-Deposition Functionalized Carbonized Mesoporous Wood Fiber for High Sulfur Loading Lithium Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14801-14807.	4.0	77

#	ARTICLE	IF	CITATIONS
235	Using a fully recyclable dicarboxylic acid for producing dispersible and thermally stable cellulose nanomaterials from different cellulosic sources. <i>Cellulose</i> , 2017, 24, 2483-2498.	2.4	77
236	Reversible Short-Circuit Behaviors in Garnet-Based Solid-State Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000702.	10.2	77
237	Recent Advances in Functional Materials through Cellulose Nanofiber Templating. <i>Advanced Materials</i> , 2021, 33, e2005538.	11.1	77
238	Dry-Processed, Binder-Free Holey Graphene Electrodes for Supercapacitors with Ultrahigh Areal Loadings. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 29478-29485.	4.0	76
239	Garnet/polymer hybrid ion-conducting protective layer for stable lithium metal anode. <i>Nano Research</i> , 2017, 10, 4256-4265.	5.8	76
240	Nanoscale Ion Regulation in Wood-Based Structures and Their Device Applications. <i>Advanced Materials</i> , 2021, 33, e2002890.	11.1	75
241	Aerosol Synthesis of High Entropy Alloy Nanoparticles. <i>Langmuir</i> , 2020, 36, 1985-1992.	1.6	74
242	Stabilizing the Garnet Solid-Electrolyte/Polysulfide Interface in Li-S Batteries. <i>Chemistry of Materials</i> , 2017, 29, 8037-8041.	3.2	73
243	Nano-structured textiles as high-performance aqueous cathodes for microbial fuel cells. <i>Energy and Environmental Science</i> , 2011, 4, 1293.	15.6	72
244	Nanocellulose-based Translucent Diffuser for Optoelectronic Device Applications with Dramatic Improvement of Light Coupling. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26860-26864.	4.0	72
245	Flexible Solid-State Electrolyte with Aligned Nanostructures Derived from Wood. , 2019, 1, 354-361.		72
246	In Situ Wood Delignification toward Sustainable Applications. <i>Accounts of Materials Research</i> , 2021, 2, 606-620.	5.9	71
247	Two dimensional silicon nanowalls for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 6051-6057.	5.2	70
248	A silicon anode for garnet-based all-solid-state batteries: Interfaces and nanomechanics. <i>Energy Storage Materials</i> , 2019, 21, 246-252.	9.5	70
249	Charging sustainable batteries. <i>Nature Sustainability</i> , 2022, 5, 176-178.	11.5	70
250	Nonflammable electrolyte enhances battery safety. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3205-3206.	3.3	69
251	A strong, flame-retardant, and thermally insulating wood laminate. <i>Chemical Engineering Journal</i> , 2020, 383, 123109.	6.6	69
252	Rapid, in Situ Synthesis of High Capacity Battery Anodes through High Temperature Radiation-Based Thermal Shock. <i>Nano Letters</i> , 2016, 16, 5553-5558.	4.5	67

#	ARTICLE	IF	CITATIONS
253	Synthesis of Metal Oxide Nanoparticles by Rapid, High-Temperature 3D Microwave Heating. <i>Advanced Functional Materials</i> , 2019, 29, 1904282.	7.8	65
254	Selectively aligned cellulose nanofibers towards high-performance soft actuators. <i>Extreme Mechanics Letters</i> , 2019, 29, 100463.	2.0	65
255	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. <i>Nature Communications</i> , 2020, 11, 6373.	5.8	65
256	High-Performance, Scalable Wood-Based Filtration Device with a Reversed-Tree Design. <i>Chemistry of Materials</i> , 2020, 32, 1887-1895.	3.2	65
257	A flexible solar-blind 2D boron nitride nanopaper-based photodetector with high thermal resistance. <i>Npj 2D Materials and Applications</i> , 2018, 2, .	3.9	64
258	Lightweight, conductive hollow fibers from nature as sustainable electrode materials for microbial energy harvesting. <i>Nano Energy</i> , 2014, 10, 268-276.	8.2	63
259	Highly Conductive, Light Weight, Robust, Corrosion-Resistant, Scalable, All-Fiber Based Current Collectors for Aqueous Acidic Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702615.	10.2	63
260	Paper-Based Anti-Reflection Coatings for Photovoltaics. <i>Advanced Energy Materials</i> , 2014, 4, 1301804.	10.2	62
261	Fabrication of 3D Core-Shell Multiwalled Carbon Nanotube@RuO ₂ Lithium-Ion Battery Electrodes through a RuO ₂ Atomic Layer Deposition Process. <i>ACS Nano</i> , 2015, 9, 464-473.	7.3	62
262	One-Dimensional Silicon Nanostructures for Li Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 720-731.	2.1	61
263	Programmable heating and quenching for efficient thermochemical synthesis. <i>Nature</i> , 2022, 605, 470-476.	13.7	61
264	Metal current collector-free freestanding silicon-carbon 1D nanocomposites for ultralight anodes in lithium ion batteries. <i>Journal of Power Sources</i> , 2010, 195, 8311-8316.	4.0	60
265	Scalable Wood Hydrogel Membrane with Nanoscale Channels. <i>ACS Nano</i> , 2021, 15, 11244-11252.	7.3	60
266	Flexible, High Temperature, Planar Lighting with Large Scale Printable Nanocarbon Paper. <i>Advanced Materials</i> , 2016, 28, 4684-4691.	11.1	59
267	Advanced Nanowood Materials for the Water-Energy Nexus. <i>Advanced Materials</i> , 2021, 33, e2001240.	11.1	59
268	Oxidative Etching of Hexagonal Boron Nitride Toward Nanosheets with Defined Edges and Holes. <i>Scientific Reports</i> , 2015, 5, 14510.	1.6	58
269	Uniform, Scalable, High-Temperature Microwave Shock for Nanoparticle Synthesis through Defect Engineering. <i>Matter</i> , 2019, 1, 759-769.	5.0	58
270	Stamping Flexible Li Alloy Anodes. <i>Advanced Materials</i> , 2021, 33, e2005305.	11.1	58

#	ARTICLE	IF	CITATIONS
271	Interfacial Oxygen Stabilizes Composite Silicon Anodes. <i>Nano Letters</i> , 2015, 15, 703-708.	4.5	57
272	Electrochemical Intercalation of Lithium Ions into NbSe ₂ Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11390-11395.	4.0	56
273	Designing Textile Architectures for High Energy-Efficiency Human Body Sweat- and Cooling-Management. <i>Advanced Fiber Materials</i> , 2019, 1, 61-70.	7.9	56
274	Hydroxylated carbon nanotube enhanced sulfur cathodes for improved electrochemical performance of lithium-sulfur batteries. <i>Chemical Communications</i> , 2015, 51, 13682-13685.	2.2	55
275	Investigation of the Cathode-Catalyst-Electrolyte Interface in Aprotic Li-O ₂ Batteries. <i>Chemistry of Materials</i> , 2015, 27, 5305-5313.	3.2	55
276	Scalable Dry Processing of Binder-Free Lithium-Ion Battery Electrodes Enabled by Holey Graphene. <i>ACS Applied Energy Materials</i> , 2019, 2, 2990-2997.	2.5	55
277	A general, highly efficient, high temperature thermal pulse toward high performance solid state electrolyte. <i>Energy Storage Materials</i> , 2019, 17, 234-241.	9.5	55
278	Development, application and commercialization of transparent paper. <i>Translational Materials Research</i> , 2014, 1, 015004.	1.2	54
279	Flexible, Bio-Compatible Nanofluidic Ion Conductor. <i>Chemistry of Materials</i> , 2018, 30, 7707-7713.	3.2	54
280	Printable, high-performance solid-state electrolyte films. <i>Science Advances</i> , 2020, 6, .	4.7	54
281	Thermally Conductive, Electrical Insulating, Optically Transparent Bi-Layer Nanopaper. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 28838-28843.	4.0	53
282	A Solution-Processed High-Temperature, Flexible, Thin-Film Actuator. <i>Advanced Materials</i> , 2016, 28, 8618-8624.	11.1	53
283	Thermally Stable Cellulose Nanocrystals toward High-Performance 2D and 3D Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 28922-28929.	4.0	53
284	An Energy-Efficient, Wood-Derived Structural Material Enabled by Pore Structure Engineering towards Building Efficiency. <i>Small Methods</i> , 2020, 4, 1900747.	4.6	53
285	Mixed ionic-electronic conductor enabled effective cathode-electrolyte interface in all solid state batteries. <i>Nano Energy</i> , 2018, 50, 393-400.	8.2	52
286	Epitaxial Welding of Carbon Nanotube Networks for Aqueous Battery Current Collectors. <i>ACS Nano</i> , 2018, 12, 5266-5273.	7.3	51
287	Rapid, high-temperature microwave soldering toward a high-performance cathode/electrolyte interface. <i>Energy Storage Materials</i> , 2020, 30, 385-391.	9.5	51
288	Flexible Garnet Solid-State Electrolyte Membranes Enabled by Tile-and-Grout Design. <i>ACS Energy Letters</i> , 2019, 4, 2668-2674.	8.8	50

#	ARTICLE	IF	CITATIONS
289	Highly Efficient Water Treatment via a Wood-Based and Reusable Filter. , 2020, 2, 430-437.		50
290	A high-performance hydroxide exchange membrane enabled by Cu ²⁺ -crosslinked chitosan. Nature Nanotechnology, 2022, 17, 629-636.	15.6	50
291	Anisotropic, Mesoporous Microfluidic Frameworks with Scalable, Aligned Cellulose Nanofibers. ACS Applied Materials & Interfaces, 2018, 10, 7362-7370.	4.0	49
292	Holey three-dimensional wood-based electrode for vanadium flow batteries. Energy Storage Materials, 2020, 27, 327-332.	9.5	49
293	Multi-principal elemental intermetallic nanoparticles synthesized via a disorder-to-order transition. Science Advances, 2022, 8, eabm4322.	4.7	49
294	Solid Electrolyte Lithium Phosphous Oxynitride as a Protective Nanocladding Layer for 3D High-Capacity Conversion Electrodes. ACS Nano, 2016, 10, 2693-2701.	7.3	48
295	High temperature thermal management with boron nitride nanosheets. Nanoscale, 2018, 10, 167-173.	2.8	48
296	Ultrahigh-temperature conversion of biomass to highly conductive graphitic carbon. Carbon, 2019, 144, 241-248.	5.4	48
297	Nanomanufacturing of graphene nanosheets through nano-hole opening and closing. Materials Today, 2019, 24, 26-32.	8.3	48
298	All-Component Transient Lithium-Ion Batteries. Advanced Energy Materials, 2016, 6, 1502496.	10.2	47
299	Flash-induced reduced graphene oxide as a Sn anode host for high performance sodium ion batteries. Journal of Materials Chemistry A, 2016, 4, 18306-18313.	5.2	47
300	Sodium-Ion Intercalated Transparent Conductors with Printed Reduced Graphene Oxide Networks. Nano Letters, 2015, 15, 3763-3769.	4.5	46
301	Na Metal Anode: "Holy Grail" for Room-Temperature Na-Ion Batteries?. ACS Central Science, 2015, 1, 420-422.	5.3	46
302	Single-digit-micrometer thickness wood speaker. Nature Communications, 2019, 10, 5084.	5.8	45
303	Lignin-Based Direct Ink Printed Structural Scaffolds. Small, 2020, 16, e1907212.	5.2	45
304	Compressible, Dense, Three-Dimensional Holey Graphene Monolithic Architecture. ACS Nano, 2017, 11, 3189-3197.	7.3	44
305	High-Temperature Atomic Mixing toward Well-Dispersed Bimetallic Electrocatalysts. Advanced Energy Materials, 2018, 8, 1800466.	10.2	43
306	Continuous 2000 K droplet-to-particle synthesis. Materials Today, 2020, 35, 106-114.	8.3	43

#	ARTICLE	IF	CITATIONS
307	Encapsulation of S/SWNT with PANI Web for Enhanced Rate and Cycle Performance in Lithium Sulfur Batteries. <i>Scientific Reports</i> , 2015, 5, 8946.	1.6	42
308	Decoupling Ionic and Electronic Pathways in Low-Dimensional Hybrid Conductors. <i>Journal of the American Chemical Society</i> , 2019, 141, 17830-17837.	6.6	42
309	Rapid Synthesis of High-Entropy Oxide Microparticles. <i>Small</i> , 2022, 18, e2104761.	5.2	41
310	Weavable high-capacity electrodes. <i>Nano Energy</i> , 2013, 2, 987-994.	8.2	39
311	Highly compressible, binderless and ultrathick holey graphene-based electrode architectures. <i>Nano Energy</i> , 2017, 31, 386-392.	8.2	39
312	Hierarchical Polyelemental Nanoparticles as Bifunctional Catalysts for Oxygen Evolution and Reduction Reactions. <i>Advanced Energy Materials</i> , 2020, 10, 2001119.	10.2	39
313	Wood Nanomaterials and Nanotechnologies. <i>Advanced Materials</i> , 2021, 33, e2006207.	11.1	39
314	Ultrafast Sintering of Solid-State Electrolytes with Volatile Fillers. <i>ACS Energy Letters</i> , 2021, 6, 3753-3760.	8.8	39
315	A highly sensitive, highly transparent, gel-gated MoS ₂ phototransistor on biodegradable nanopaper. <i>Nanoscale</i> , 2016, 8, 14237-14242.	2.8	38
316	Toward stretchable batteries: 3D-printed deformable electrodes and separator enabled by nanocellulose. <i>Materials Today</i> , 2022, 54, 18-26.	8.3	35
317	<i>In Situ</i> High Temperature Synthesis of Single-Component Metallic Nanoparticles. <i>ACS Central Science</i> , 2017, 3, 294-301.	5.3	34
318	Solvo-thermal microwave-powered two-dimensional material exfoliation. <i>Chemical Communications</i> , 2016, 52, 5757-5760.	2.2	33
319	Tailoring grain growth and densification toward a high-performance solid-state electrolyte membrane. <i>Materials Today</i> , 2021, 42, 41-48.	8.3	32
320	Aqueous Gating of van der Waals Materials on Bilayer Nanopaper. <i>ACS Nano</i> , 2014, 8, 10606-10612.	7.3	31
321	Tunable Broadband Nanocarbon Transparent Conductor by Electrochemical Intercalation. <i>ACS Nano</i> , 2017, 11, 788-796.	7.3	31
322	A solid state energy storage device with supercapacitor-battery hybrid design. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15266-15272.	5.2	31
323	Precision Imprinted Nanostructural Wood. <i>Advanced Materials</i> , 2019, 31, e1903270.	11.1	31
324	Interface Engineering Between Multi-Elemental Alloy Nanoparticles and a Carbon Support Toward Stable Catalysts. <i>Advanced Materials</i> , 2022, 34, e2106436.	11.1	30

#	ARTICLE	IF	CITATIONS
325	Enhanced electrochemical stability of high-voltage LiNi _{0.5} Mn _{1.5} O ₄ cathode by surface modification using atomic layer deposition. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	29
326	Universal, In Situ Transformation of Bulky Compounds into Nanoscale Catalysts by High-Temperature Pulse. <i>Nano Letters</i> , 2017, 17, 5817-5822.	4.5	29
327	Dramatic Enhancement of CO ₂ Photoreduction by Biodegradable Light-Management Paper. <i>Advanced Energy Materials</i> , 2018, 8, 1703136.	10.2	29
328	Amorphous-Carbon-Coated 3D Solid Electrolyte for an Electro-Chemomechanically Stable Lithium Metal Anode in Solid-State Batteries. <i>Nano Letters</i> , 2021, 21, 6163-6170.	4.5	29
329	Ultrafast Microwave Nano-manufacturing of Fullerene-Like Metal Chalcogenides. <i>Scientific Reports</i> , 2016, 6, 22503.	1.6	28
330	Ultrafast, Controllable Synthesis of Sub-Nano Metallic Clusters through Defect Engineering. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29773-29779.	4.0	28
331	Rapid, High-Temperature, In Situ Microwave Synthesis of Bulk Nanocatalysts. <i>Small</i> , 2019, 15, e1904881.	5.2	28
332	High-Temperature Pulse Method for Nanoparticle Redispersion. <i>Journal of the American Chemical Society</i> , 2020, 142, 17364-17371.	6.6	28
333	Synthetic Crystals of Silver with Carbon: 3D Epitaxy of Carbon Nanostructures in the Silver Lattice. <i>Advanced Functional Materials</i> , 2015, 25, 4768-4777.	7.8	27
334	In Situ, Fast, High-Temperature Synthesis of Nickel Nanoparticles in Reduced Graphene Oxide Matrix. <i>Advanced Energy Materials</i> , 2017, 7, 1601783.	10.2	27
335	Super-Clear Nanopaper from Agro-Industrial Waste for Green Electronics. <i>Advanced Electronic Materials</i> , 2017, 3, 1600539.	2.6	27
336	Ion-Conducting, Electron-Blocking Layer for High-Performance Solid Electrolytes. <i>Small Structures</i> , 2021, 2, 2100014.	6.9	27
337	In situ iron coating on nanocatalysts for efficient and durable oxygen evolution reaction. <i>Nano Energy</i> , 2019, 63, 103855.	8.2	26
338	Upscaling 3D Engineered Trees for Off-Grid Desalination. <i>Environmental Science & Technology</i> , 2022, 56, 1289-1299.	4.6	26
339	Facile, Solvent-Free Preparation of High Density, High Mass Loading Sulfur Cathodes Enabled by Dry-Pressable Holey Graphene Scaffolds. <i>Batteries and Supercaps</i> , 2019, 2, 774-783.	2.4	25
340	Fly-through synthesis of nanoparticles on textile and paper substrates. <i>Nanoscale</i> , 2019, 11, 6174-6181.	2.8	25
341	Cellulose hydrogel as a flexible gel electrolyte layer. <i>MRS Communications</i> , 2019, 9, 122-128.	0.8	25
342	Strong, Water-Stable Ionic Cable from Bio-Hydrogel. <i>Chemistry of Materials</i> , 2019, 31, 9288-9294.	3.2	24

#	ARTICLE	IF	CITATIONS
343	High-Temperature Ultrafast Sintering: Exploiting a New Kinetic Region to Fabricate Porous Solid-State Electrolyte Scaffolds. <i>Advanced Materials</i> , 2021, 33, e2100726.	11.1	24
344	Role of mesoporosity in cellulose fibers for paper-based fast electrochemical energy storage. <i>Journal of Materials Chemistry A</i> , 2013, 1, 8201.	5.2	23
345	Scalable nanomanufacturing of surfactant-free carbon nanotube inks for spray coatings with high conductivity. <i>Nano Research</i> , 2015, 8, 2242-2250.	5.8	23
346	Rapid Synthesis and Sintering of Metals from Powders. <i>Advanced Science</i> , 2021, 8, e2004229.	5.6	23
347	Electrochemical Stability of Garnet-Type $\text{Li}_{0.7}\text{La}_{2.75}\text{Ca}_{0.25}\text{Zr}_{1.75}\text{Nb}_{0.25}\text{O}_{12}$ with and without Atomic Layer Deposited- Al_2O_3 under CO_2 and Humidity. <i>Journal of the Electrochemical Society</i> , 2019, 166, A1844-A1852.	1.3	22
348	Electrochemical measurement of serotonin by Au-CNT electrodes fabricated on microporous cell culture membranes. <i>Microsystems and Nanoengineering</i> , 2020, 6, 90.	3.4	22
349	Rapid, Universal Surface Engineering of Carbon Materials via Microwave-Induced Carbothermal Shock. <i>Advanced Functional Materials</i> , 2021, 31, 2010968.	7.8	22
350	Design of High Capacity Dissoluble Electrodes for All Transient Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1605724.	7.8	21
351	Holey Carbon Nanotubes from Controlled Air Oxidation. <i>Advanced Functional Materials</i> , 2017, 27, 1700762.	7.8	21
352	Inverted battery design as ion generator for interfacing with biosystems. <i>Nature Communications</i> , 2017, 8, 15609.	5.8	21
353	Thermal Shock Synthesis of Nanocatalyst by 3D-Printed Miniaturized Reactors. <i>Small</i> , 2020, 16, e2000509.	5.2	21
354	Strong and Superhydrophobic Wood with Aligned Cellulose Nanofibers as a Waterproof Structural Material. <i>Chinese Journal of Chemistry</i> , 2020, 38, 823-829.	2.6	21
355	3D-Printed, High-Porosity, High-Strength Graphite Aerogel. <i>Small Methods</i> , 2021, 5, e2001188.	4.6	21
356	Fabrication of Cellulose-Graphite Foam via Ion Cross-linking and Ambient-Drying. <i>Nano Letters</i> , 2022, 22, 3931-3938.	4.5	21
357	Rapid Pressureless Sintering of Glasses. <i>Small</i> , 2022, 18, e2107951.	5.2	20
358	Advanced Broadband Antireflection Coatings Based on Cellulose Microfiber Paper. <i>IEEE Journal of Photovoltaics</i> , 2015, 5, 577-583.	1.5	19
359	A conductive wood membrane anode improves effluent quality of microbial fuel cells. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 940-946.	1.2	19
360	A self-buffering structure for application in high-performance sodium-ion batteries. <i>Energy Storage Materials</i> , 2018, 15, 242-248.	9.5	19

#	ARTICLE	IF	CITATIONS
361	A bio-inspired, hierarchically porous structure with a decoupled fluidic transportation and evaporative pathway toward high-performance evaporation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9745-9752.	5.2	19
362	A paper-based electrostatic zipper actuator for printable robots. , 2014, , .		18
363	Improving the High-Voltage $\text{Li}_{2-x}\text{FeMn}_3\text{O}_8$ Cathode by Chlorine Doping. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10820-10825.	4.0	18
364	3D Printed Graphene-Based 3000 K Probe. <i>Advanced Functional Materials</i> , 2021, 31, 2102994.	7.8	18
365	Self-formed conductive nanofilaments in (Bi, Mn)O for ultralow-power memory devices. <i>Nano Energy</i> , 2015, 13, 283-290.	8.2	17
366	Necklace-Like Silicon Carbide and Carbon Nanocomposites Formed by Steady Joule Heating. <i>Small Methods</i> , 2018, 2, 1700371.	4.6	17
367	Super Elastic and Thermally Insulating Carbon Aerogel: Go Tubular Like Polar Bear Hair. <i>Matter</i> , 2019, 1, 36-38.	5.0	17
368	Shape-driven arrest of coffee stain effect drives the fabrication of carbon-nanotube-graphene-oxide inks for printing embedded structures and temperature sensors. <i>Nanoscale</i> , 2019, 11, 23402-23415.	2.8	16
369	Thermal Radiation Synthesis of Ultrafine Platinum Nanoclusters toward Methanol Oxidation. <i>Small Methods</i> , 2020, 4, 2000265.	4.6	16
370	A General Method for Regenerating Catalytic Electrodes. <i>Joule</i> , 2020, 4, 2374-2386.	11.7	15
371	Computation-Guided Synthesis of New Garnet-Type Solid-State Electrolytes via an Ultrafast Sintering Technique. <i>Advanced Materials</i> , 2020, 32, e2005059.	11.1	15
372	Engineered wood for a sustainable future. <i>Matter</i> , 2022, 5, 1326-1329.	5.0	14
373	Overcoming Immiscibility via a Milliseconds-Long "Shock" Synthesis toward Alloyed Nanoparticles. <i>Matter</i> , 2019, 1, 1451-1453.	5.0	13
374	Predicting the flexural strength of $\text{Li}_{1-x}\text{Ni}_x$ conducting garnet type oxide for solid-state batteries. <i>Journal of the American Ceramic Society</i> , 2020, 103, 5186-5195.	1.9	13
375	Continuous Fly-Through High-Temperature Synthesis of Nanocatalysts. <i>Nano Letters</i> , 2021, 21, 4517-4523.	4.5	13
376	Boron-doped few-walled carbon nanotubes: novel synthesis and properties. <i>Nanotechnology</i> , 2016, 27, 445601.	1.3	12
377	Transient Behavior of the Metal Interface in Lithium Metal-Garnet Batteries. <i>Angewandte Chemie</i> , 2017, 129, 15138-15143.	1.6	12
378	Towards a high-performance garnet-based solid-state Li metal battery: A perspective on recent advances. <i>Journal of Power Sources</i> , 2020, 472, 228571.	4.0	12

#	ARTICLE	IF	CITATIONS
379	Rapid Atomic Ordering Transformation toward Intermetallic Nanoparticles. <i>Nano Letters</i> , 2022, 22, 255-262.	4.5	12
380	Wood cellulose-based thin gel electrolyte with enhanced ionic conductivity. <i>MRS Communications</i> , 2019, 9, 1015-1021.	0.8	11
381	Cut-and-stack nanofiber paper toward fast transient energy storage. <i>Inorganic Chemistry Frontiers</i> , 2016, 3, 681-688.	3.0	10
382	Wood Ionic Cable. <i>Small</i> , 2021, 17, e2008200.	5.2	10
383	Ultrafast high-temperature sintering to avoid metal loss toward high-performance and scalable cermets. <i>Matter</i> , 2022, 5, 594-604.	5.0	10
384	Tuning the High-Temperature Wetting Behavior of Metals toward Ultrafine Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2625-2629.	7.2	9
385	Thermoelectric properties enhancement of p-type composite films using wood-based binder and mechanical pressing. <i>Scientific Reports</i> , 2019, 9, 7869.	1.6	8
386	Composition-dependent structure and properties of 5- and 15-element high-entropy alloy nanoparticles. <i>Cell Reports Physical Science</i> , 2021, 2, 100641.	2.8	8
387	Drop spreading on a superhydrophobic surface: pinned contact line and bending liquid surface. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 14442-14452.	1.3	7
388	Interaction between a water drop and holey graphene: retarded imbibition and generation of novel water-graphene wetting states. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 27421-27434.	1.3	7
389	One-Step, Catalyst-Free, Scalable in Situ Synthesis of Single-Crystal Aluminum Nanowires in Confined Graphene Space. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 6009-6014.	4.0	7
390	Tailoring the Local Environment of Platinum in Single-Atom Pt ₁ /CeO ₂ Catalysts for Robust Low-Temperature CO Oxidation. <i>Angewandte Chemie</i> , 2021, 133, 26258-26266.	1.6	7
391	Catalyst-Free <i>In Situ</i> Carbon Nanotube Growth in Confined Space <i>via</i> High Temperature Gradient. <i>Research</i> , 2018, 2018, 1793784.	2.8	7
392	Rapid Dissolving-Debonding Strategy for Optically Transparent Paper Production. <i>Scientific Reports</i> , 2016, 5, 17703.	1.6	6
393	Dynamics of a Water Nanodrop through a Holey Graphene Matrix: Role of Surface Functionalization, Capillarity, and Applied Forcing. <i>Journal of Physical Chemistry C</i> , 2018, 122, 12243-12250.	1.5	6
394	Giant tunability of interlayer friction in graphite via ion intercalation. <i>Extreme Mechanics Letters</i> , 2020, 35, 100616.	2.0	6
395	Rapid Laser Pulse Synthesis of Supported Metal Nanoclusters with Kinetically Tunable Size and Surface Density for Electrocatalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2020, 3, 2959-2968.	2.4	6
396	Target-Sintering of Single-Phase Bulk Intermetallics via a Fast-Heating-Induced Rapid Interdiffusion Mechanism. , 2022, 4, 480-486.		6

#	ARTICLE	IF	CITATIONS
397	Protection of boron nitride nanosheets by atomic layer deposition toward thermal energy management applications. <i>Nano Energy</i> , 2017, 40, 149-154.	8.2	5
398	Critical roles of pores and moisture in sustainable nanocellulose-based super-thermal insulators. <i>Matter</i> , 2021, 4, 769-772.	5.0	5
399	Molecular partitioning in ternary solutions of cellulose. <i>Carbohydrate Polymers</i> , 2019, 220, 157-162.	5.1	4
400	Wood Cellulose Paper for Solar Cells. , 2020, , 279-295.		4
401	Solar Cells: Paper-Based Anti-Reflection Coatings for Photovoltaics (<i>Adv. Energy Mater.</i> 9/2014). <i>Advanced Energy Materials</i> , 2014, 4, .	10.2	3
402	Nanocarbon Paper: Flexible, High Temperature, Planar Lighting with Large Scale Printable Nanocarbon Paper (<i>Adv. Mater.</i> 23/2016). <i>Advanced Materials</i> , 2016, 28, 4566-4566.	11.1	3
403	Cellulose Nanocomposites of Cellulose Nanofibers and Molecular Coils. <i>Journal of Composites Science</i> , 2021, 5, 200.	1.4	2
404	Boron-Nitride Nanosheet-Based Thermal Barrier Coating for Micro-Combustor Performance Improvement. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2022, 144, .	1.4	2
405	Shock synthesis by flash-thermal lamping. <i>Chem</i> , 2022, , .	5.8	2
406	A low-corrosivity structural timber. <i>Cell Reports Physical Science</i> , 2022, 3, 100921.	2.8	2
407	Modified coffee rings for 1-D electronics: Size considerations. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 646, 26-30.	0.4	1
408	Tuning the High-Temperature Wetting Behavior of Metals toward Ultrafine Nanoparticles. <i>Angewandte Chemie</i> , 2018, 130, 2655-2659.	1.6	1
409	Cellulose Nanofiber Templating: Recent Advances in Functional Materials through Cellulose Nanofiber Templating (<i>Adv. Mater.</i> 12/2021). <i>Advanced Materials</i> , 2021, 33, 2170094.	11.1	1
410	Frontispiece: Tailoring the Local Environment of Platinum in Single-Atom Pt ₁ /CeO ₂ Catalysts for Robust Low-Temperature CO Oxidation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, .	7.2	1
411	Synthetic Alloys: Synthetic Crystals of Silver with Carbon: 3D Epitaxy of Carbon Nanostructures in the Silver Lattice (<i>Adv. Funct. Mater.</i> 30/2015). <i>Advanced Functional Materials</i> , 2015, 25, 4746-4746.	7.8	0
412	3D Microstructure Reconstruction and Characterization of Solid-State Electrolyte with Varying Porosity. <i>Microscopy and Microanalysis</i> , 2018, 24, 814-815.	0.2	0
413	In situ TEM Observation of Nanoparticles Formation during Carbothermal Shock. <i>Microscopy and Microanalysis</i> , 2019, 25, 1534-1535.	0.2	0
414	Ion Transport and Regulation: Nanoscale Ion Regulation in Wood-Based Structures and Their Device Applications (<i>Adv. Mater.</i> 28/2021). <i>Advanced Materials</i> , 2021, 33, 2170221.	11.1	0

#	ARTICLE	IF	CITATIONS
415	Silver Nanowires. , 2016, , 1187-1203.		0
416	Frontispiz: Tailoring the Local Environment of Platinum in Single-Atom Pt ₁ /CeO ₂ Catalysts for Robust Low-Temperature CO Oxidation. Angewandte Chemie, 2021, 133, .	1.6	0