Woodâ€Inspired Highâ€Performance Ultrathick Bulk B

Advanced Materials

30, e1706745

DOI: 10.1002/adma.201706745

Citation Report

#	Article	IF	Citations
1	Woodâ€Derived Hierarchically Porous Electrodes for Highâ€Performance Allâ€Solidâ€State Supercapacitors. Advanced Functional Materials, 2018, 28, 1806207.	7.8	170
2	Opportunities for Rechargeable Solid-State Batteries Based on Li-Intercalation Cathodes. Joule, 2018, 2, 2208-2224.	11.7	153
3	Nanocellulose toward Advanced Energy Storage Devices: Structure and Electrochemistry. Accounts of Chemical Research, 2018, 51, 3154-3165.	7.6	251
4	Conductive Cellulose Nanofiber Enabled Thick Electrode for Compact and Flexible Energy Storage Devices. Advanced Energy Materials, 2018, 8, 1802398.	10.2	163
5	The synthesis, characterization and electrochemical performance of hollow sandwich microtubules composed of ultrathin Co₃O₄ nanosheets and porous carbon using a bio-template. Journal of Materials Chemistry A, 2018, 6, 18987-18993.	5.2	24
6	Three-dimensional carbon nanosheets derived from micro-morphologically regulated biomass for ultrahigh-performance supercapacitors. Carbon, 2019, 153, 707-716.	5.4	61
7	Structural Rigging of Lignin Precursors for Customized Porous and Grapheneâ€Like Carbons towards Enhanced Supercapacitive Performance in Aqueous and Nonâ€Aqueous Electrolytes. ChemElectroChem, 2019, 6, 3949-3958.	1.7	4
8	Thick Electrode Batteries: Principles, Opportunities, and Challenges. Advanced Energy Materials, 2019, 9, 1901457.	10.2	407
9	Bioinspired Unidirectional Silk Fibroinâ€“Silver Compound Nanowire Composite Scaffold via Interfaceâ€Mediated In Situ Synthesis. Angewandte Chemie - International Edition, 2019, 58, 14152-14156.	7.2	19
10	Bioinspired Unidirectional Silk Fibroinâ€“Silver Compound Nanowire Composite Scaffold via Interfaceâ€Mediated In Situ Synthesis. Angewandte Chemie, 2019, 131, 14290-14294.	1.6	7
11	Effective Recycling of the Whole Cathode in Spent Lithium Ion Batteries: From the Widely Used Oxides to High-Energy/Stable Phosphates. ACS Sustainable Chemistry and Engineering, 0, , .	3.2	9
12	Synthesis of Metal Oxide Nanoparticles by Rapid, Highâ€Temperature 3D Microwave Heating. Advanced Functional Materials, 2019, 29, 1904282.	7.8	65
13	Biomaterials for Highâ€Energy Lithiumâ€Based Batteries: Strategies, Challenges, and Perspectives. Advanced Energy Materials, 2019, 9, 1901774.	10.2	73
14	Promoting Transport Kinetics in Li-Ion Battery with Aligned Porous Electrode Architectures. Nano Letters, 2019, 19, 8255-8261.	4.5	104
15	Ultralight carbon aerogel with tubular structures and N-containing sandwich-like wall from kapok fibers for supercapacitor electrode materials. Journal of Power Sources, 2019, 438, 227030.	4.0	50
16	Low-tortuosity and graded lithium ion battery cathodes by ice templating. Journal of Materials Chemistry A, 2019, 7, 21421-21431.	5.2	77
17	Ultrahighâ€Capacity and Fireâ€Resistant LiFePO₄â€Based Composite Cathodes for Advanced Lithiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1802930.	10.2	114
18	Fabrication of three-dimensional microtubular kapok fiber carbon aerogel/RuO2 composites for supercapacitors. Electrochimica Acta, 2019, 300, 225-234.	2.6	52

#	Article	IF	Citations
19	Natureâ€Inspired Triâ€Pathway Design Enabling Highâ€Performance Flexible Liâ€“O₂ Batteries. Advanced Energy Materials, 2019, 9, 1802964.	10.2	121
20	Additive Manufacturing of 3Dâ€Architected Multifunctional Metal Oxides. Advanced Materials, 2019, 31, e1901345.	11.1	68
21	Woodâ€Derived Materials for Advanced Electrochemical Energy Storage Devices. Advanced Functional Materials, 2019, 29, 1902255.	7.8	157
22	Vertically-aligned nanostructures for electrochemical energy storage. Nano Research, 2019, 12, 2002-2017.	5.8	45
23	Mold-casting prepared free-standing activated carbon electrodes for capacitive deionization. Carbon, 2019, 149, 627-636.	5.4	32
24	Sandwich, Verticalâ€Channeled Thick Electrodes with High Rate and Cycle Performance. Advanced Functional Materials, 2019, 29, 1809196.	7.8	76
25	Solvothermal alcoholysis synthesis of hierarchically porous TiO2-carbon tubular composites as high-performance anodes for lithium-ion batteries. Electrochimica Acta, 2019, 308, 253-262.	2.6	17
26	A Directional Strain Sensor Based on Anisotropic Microhoneycomb Cellulose Nanofiberâ€Carbon Nanotube Hybrid Aerogels Prepared by Unidirectional Freeze Drying. Small, 2019, 15, e1805363.	5.2	73
27	Hierarchical 3D electrodes for electrochemical energy storage. Nature Reviews Materials, 2019, 4, 45-60.	23.3	554
28	Bio-inspired low-tortuosity carbon host for high-performance lithium-metal anode. National Science Review, 2019, 6, 247-256.	4.6	57
29	Nanocellulose-Enabled, All-Nanofiber, High-Performance Supercapacitor. ACS Applied Materials & Interfaces, 2019, 11, 5919-5927.	4.0	91
30	Multi-walled carbon nanotube interlayers with controllable thicknesses for high-capacity and long-life lithium metal anodes. Journal of Power Sources, 2019, 412, 170-179.	4.0	41
31	Accordion-like stretchable Li-ion batteries with high energy density. Energy Storage Materials, 2019, 17, 136-142.	9.5	57
32	Electrode Degradation in Lithium-Ion Batteries. ACS Nano, 2020, 14, 1243-1295.	7.3	484
33	Ultra-thick electrodes based on activated wood-carbon towards high-performance quasi-solid-state supercapacitors. Physical Chemistry Chemical Physics, 2020, 22, 2073-2080.	1.3	45
34	Probing transport limitations in thick sintered battery electrodes with neutron imaging. Molecular Systems Design and Engineering, 2020, 5, 245-256.	1.7	32
35	Blow-Spinning Enabled Precise Doping and Coating for Improving High-Voltage Lithium Cobalt Oxide Cathode Performance. Nano Letters, 2020, 20, 677-685.	4.5	49
36	Porous Cu Film Enables Thick Slurry-Cast Anodes with Enhanced Charge Transfer Efficiency for High-Performance Li-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 47623-47633.	4.0	4

#	Article	IF	Citations
37	Wood-Inspired Compressible, Mesoporous, and Multifunctional Carbon Aerogel by a Dual-Activation Strategy from Cellulose. ACS Sustainable Chemistry and Engineering, 2020, 8, 11114-11122.	3.2	31
38	A widely applicable strategy to convert fabrics into lithiophilic textile current collector for dendrite-free and high-rate capable lithium metal anode. Chemical Engineering Journal, 2020, 388, 124256.	6.6	27
39	Eco-Friendly Bioinspired Interface Design for High-Performance Cellulose Nanofibril/Carbon Nanotube Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 55527-55535.	4.0	21
40	Poplar branch bio-template synthesis of mesoporous hollow Co3O4 hierarchical architecture as an anode for long-life lithium ion batteries. Ceramics International, 2020, 46, 29033-29040.	2.3	29
41	Construction of N-doped carbon nanotube encapsulated active nanoparticles in hierarchically porous carbonized wood frameworks to boost the oxygen evolution reaction. Applied Catalysis B: Environmental, 2020, 279, 119367.	10.8	65
42	Highly Elastic Hydrated Cellulosic Materials with Durable Compressibility and Tunable Conductivity. ACS Nano, 2020, 14, 16723-16734.	7.3	98
43	Nanoscale Ion Regulation in Woodâ€Based Structures and Their Device Applications. Advanced Materials, 2021, 33, e2002890.	11.1	75
44	Bicontinuous phase separation of lithium-ion battery electrodes for ultrahigh areal loading. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21155-21161.	3.3	42
45	Woodâ€Derived Carbon Materials and Lightâ€Emitting Materials. Advanced Materials, 2021, 33, e2000596.	11.1	75
46	Hierarchical graphene-scaffolded mesoporous germanium dioxide nanostructure for high-performance flexible lithium-ion batteries. Energy Storage Materials, 2020, 29, 198-206.	9.5	12
47	Anisotropic, low-tortuosity and ultra-thick red P@C-Wood electrodes for sodium-ion batteries. Nanoscale, 2020, 12, 14642-14650.	2.8	40
48	A â€œTrojan Horseâ€•Camouflage Strategy for Highâ€Performance Cellulose Paper and Separators. Advanced Functional Materials, 2020, 30, 2002169.	7.8	42
49	Carbon Nanofibers Prepared from Solar Pyrolysis of Pinewood as Binder-free Electrodes for Flexible Supercapacitors. Cell Reports Physical Science, 2020, 1, 100079.	2.8	15
50	Why Celluloseâ€Based Electrochemical Energy Storage Devices?. Advanced Materials, 2021, 33, e2000892.	11.1	125
51	Low Tortuous, Highly Conductive, and High-Areal-Capacity Battery Electrodes Enabled by Through-thickness Aligned Carbon Fiber Framework. Nano Letters, 2020, 20, 5504-5512.	4.5	64
52	Semiâ€Flooded Sulfur Cathode with Ultralean Absorbed Electrolyte in Liâ€“S Battery. Advanced Science, 2020, 7, 1903168.	5.6	40
53	A holocellulose framework with anisotropic microchannels for directional assembly of copper sulphide nanoparticles for multifunctional applications. Chemical Engineering Journal, 2020, 393, 124637.	6.6	28
54	Functionalized Well-Aligned Channels Derived from Wood as a Convection-Enhanced Electrode for Aqueous Flow Batteries. ACS Applied Energy Materials, 2020, 3, 6249-6257.	2.5	19

#	Article	IF	Citations
55	Green Bio-template Fabrication of Fe Derivatives@Carbon Composites and Porous Carbon Sheets toward Advanced Li-Ion Capacitors as Low-Cost Electrodes. ACS Applied Energy Materials, 2020, 3, 7159-7166.	2.5	8
56	Photoresponsive wood composite for photoluminescence and ultraviolet absorption. Construction and Building Materials, 2020, 261, 119984.	3.2	14
57	Recent advances of thermal safety of lithium ion battery for energy storage. Energy Storage Materials, 2020, 31, 195-220.	9.5	262
58	Regulated lithium ionic flux through well-aligned channels for lithium dendrite inhibition in solid-state batteries. Energy Storage Materials, 2020, 31, 344-351.	9.5	48
59	Holey three-dimensional wood-based electrode for vanadium flow batteries. Energy Storage Materials, 2020, 27, 327-332.	9.5	49
60	Three-dimensional cathode with periodically aligned microchannels for improving volumetric energy density of lithium-ion batteries. Journal of Power Sources, 2020, 451, 227764.	4.0	16
61	Understanding Thickness-Dependent Transport Kinetics in Nanosheet-Based Battery Electrodes. Chemistry of Materials, 2020, 32, 1684-1692.	3.2	68
62	Walnut wood-derived hierarchically 3D self-assembly of (a%Ceâ€“Mn)yAl2â^'yOx and rapid diffusion character of straight micron channel during hot coal gas desulfurization. Chemical Engineering Journal, 2020, 393, 124761.	6.6	9
63	3D highly oriented metal foam: a competitive self-supporting anode for high-performance lithium-ion batteries. Journal of Materials Science, 2020, 55, 11462-11476.	1.7	8
64	Multiscale Understanding and Architecture Design of High Energy/Power Lithiumâ€Ion Battery Electrodes. Advanced Energy Materials, 2021, 11, 2000808.	10.2	143
65	Hydrogelâ€Based Additive Manufacturing of Lithium Cobalt Oxide. Advanced Materials Technologies, 2021, 6, 2000791.	3.0	17
66	3D Architected Carbon Electrodes for Energy Storage. Advanced Energy Materials, 2021, 11, 2002637.	10.2	39
67	Mechanically stiff and high-areal-performance integrated all-in-wood supercapacitors with electroactive biomass-based hydrogel. Cellulose, 2021, 28, 389-404.	2.4	17
68	Fabrication of Co3O4/polyaniline-based carbon electrode for high-performance supercapacitor. Journal of Alloys and Compounds, 2021, 863, 158071.	2.8	27
69	All-carbon-frameworks enabled thick electrode with exceptional high-areal-capacity for Li-Ion storage. Carbon, 2021, 174, 1-9.	5.4	160
70	The Insights of Lithium Metal Plating/Stripping in Porous Hosts: Progress and Perspectives. Energy Technology, 2021, 9, 2000700.	1.8	38
71	Wood-derived electrode supporting CVD-grown ReS2 for efficient and stable hydrogen production. Journal of Materials Science, 2021, 56, 1551-1560.	1.7	16
72	Improving high rate cycling limitations of thick sintered battery electrodes by mitigating molecular transport limitations through modifying electrode microstructure and electrolyte conductivity. Molecular Systems Design and Engineering, 2021, 6, 708-712.	1.7	16

#	Article	IF	Citations
73	Biomass-derived tubular carbon materials: progress in synthesis and applications. Journal of Materials Chemistry A, 2021, 9, 13822-13850.	5.2	31
74	In Situ Lignin Modification toward Photonic Wood. Advanced Materials, 2021, 33, e2001588.	11.1	86
75	Tortuosity Modulation toward Highâ€Energy and Highâ€Power Lithium Metal Batteries. Advanced Energy Materials, 2021, 11, 2003663.	10.2	46
76	Design Strategies of 3D Carbonâ€Based Electrodes for Charge/Ion Transport in Lithium Ion Battery and Sodium Ion Battery. Advanced Functional Materials, 2021, 31, 2010041.	7.8	99
77	Controllable Design Coupled with Finite Element Analysis of Lowâ€Tortuosity Electrode Architecture for Advanced Sodiumâ€Ion Batteries with Ultraâ€High Mass Loading. Advanced Energy Materials, 2021, 11, 2003725.	10.2	34
78	High-Mass-Loading Electrodes for Advanced Secondary Batteries and Supercapacitors. Electrochemical Energy Reviews, 2021, 4, 382-446.	13.1	181
79	Bioselective Synthesis of a Porous Carbon Collector for High-Performance Sodium-Metal Anodes. Journal of the American Chemical Society, 2021, 143, 3280-3283.	6.6	55
80	Scalable Manufacture of Highâ€Performance Battery Electrodes Enabled by a Templateâ€Free Method. Small Methods, 2021, 5, e2100280.	4.6	24
81	Thick electrode with thickness-independent capacity enabled by assembled two-dimensional porous nanosheets. Energy Storage Materials, 2021, 36, 265-271.	9.5	30
83	Aligned Carbonâ€Based Electrodes for Fastâ€Charging Batteries: A Review. Small, 2021, 17, e2007676.	5.2	30
84	From Fundamental Understanding to Engineering Design of Highâ€Performance Thick Electrodes for Scalable Energyâ€Storage Systems. Advanced Materials, 2021, 33, e2101275.	11.1	89
85	High rate capability composite particles with root-inspired hierarchical channel structure. Journal of Power Sources, 2021, 494, 229777.	4.0	1
86	3D printingâ€enabled advanced electrode architecture design. , 2021, 3, 424-439.		82
87	Sustainable Cellulose-Nanofiber-Based Hydrogels. ACS Nano, 2021, 15, 7889-7898.	7.3	84
88	Pore Microstructure Impacts on Lithium Ion Transport and Rate Capability of Thick Sintered Electrodes. Journal of the Electrochemical Society, 2021, 168, 060550.	1.3	24
89	Boosted Storage Kinetics in Thick Hierarchical Microâ€“Nano Carbon Architectures for High Areal Capacity Liâ€Ion Batteries. Energy and Environmental Materials, 2022, 5, 1251-1259.	7.3	31
90	Tunable Porous Electrode Architectures for Enhanced Li-Ion Storage Kinetics in Thick Electrodes. Nano Letters, 2021, 21, 5896-5904.	4.5	66
91	Nano-pom-pom multiphasic MoS2 grown on carbonized wood as electrode for efficient hydrogen evolution in acidic and alkaline media. International Journal of Hydrogen Energy, 2021, 46, 28087-28097.	3.8	22

#	Article	IF	Citations
92	Gifts from Nature: Bioâ€Inspired Materials for Rechargeable Secondary Batteries. Advanced Materials, 2021, 33, e2006019.	11.1	30
93	Commercializationâ€Driven Electrodes Design for Lithium Batteries: Basic Guidance, Opportunities, and Perspectives. Small, 2021, 17, e2102233.	5.2	38
94	Ultrahigh-Capacity and Scalable Architected Battery Electrodes via Tortuosity Modulation. ACS Nano, 2021, 15, 19109-19118.	7.3	48
95	Carbonized wood cell chamber-reduced graphene oxide@PVA flexible conductive material for supercapacitor, strain sensing and moisture-electric generation applications. Chemical Engineering Journal, 2021, 418, 129518.	6.6	72
96	Graphene analogue metal organic framework withÂsuperior capacity and rate capability as an anode forÂlithium ion batteries. Electrochimica Acta, 2021, 389, 138750.	2.6	26
97	Electrode Architecture Design to Promote Chargeâ€Transport Kinetics in Highâ€Loading and Highâ€Energy Lithiumâ€Based Batteries. Small Methods, 2021, 5, e2100518.	4.6	27
98	Biomimetic Woodâ€Inspired Batteries: Fabrication, Electrochemical Performance, and Sustainability within a Circular Perspective. Advanced Sustainable Systems, 2021, 5, 2100236.	2.7	8
99	Innovative nanomaterials for energy storage: Moving towardÂnature-inspired systems. Current Opinion in Green and Sustainable Chemistry, 2021, 32, 100520.	3.2	5
100	An effective approach to improve electrochemical performance of thick electrodes. Ionics, 2021, 27, 1261-1270.	1.2	7
101	Eco-friendly and sustainable processing of wood-based materials. Green Chemistry, 2021, 23, 2198-2232.	4.6	48
102	Biomass-based materials for green lithium secondary batteries. Energy and Environmental Science, 2021, 14, 1326-1379.	15.6	157
103	A top-down approach making cellulose carbonaceous aerogel/MnO₂ ultrathick bulk electrodes with high mass loading for supercapacitors. Materials Chemistry Frontiers, 2021, 5, 7892-7902.	3.2	10
104	Nanocelluloseâ€based polymer composites for energy applicationsâ€”A review. Journal of Applied Polymer Science, 2020, 137, 48959.	1.3	96
105	Fundamental understanding of electrochemical catalytic performance of carbonized natural wood: wood species and carbonization temperature. Sustainable Energy and Fuels, 2021, 5, 6077-6084.	2.5	9
106	Woodâ€Derived Monolithic Ultrathick Porous Carbon Electrodes Filled with Reduced Graphene Oxide for Highâ€Performance Supercapacitors with Ultrahigh Areal Capacitances. ChemElectroChem, 2021, 8, 4328-4336.	1.7	9
107	Transport In and Optimization of Aligned-Channel Li-Ion Electrode Architectures. Journal of the Electrochemical Society, 2021, 168, 100536.	1.3	4
108	Unveiling low-tortuous effect on electrochemical performance toward ultrathick LiFePO4 electrode with 100ÂmgÂcmâ^'2 area loading. Journal of Power Sources, 2021, 515, 230588.	4.0	22
109	High-capacity, low-tortuosity LiFePO4-Based composite cathode enabled by self-supporting structure combined with laser drilling technology. Chemical Engineering Journal, 2022, 430, 132810.	6.6	12

#	Article	IF	Citations
110	Building Efficient Ion Pathway in Highly Densified Thick Electrodes with High Gravimetric and Volumetric Energy Densities. Nano Letters, 2021, 21, 9339-9346.	4.5	31
111	Wood for Application in Electrochemical Energy Storage Devices. Cell Reports Physical Science, 2021, 2, 100654.	2.8	12
112	Hierarchically porous biochar derived from orthometric integration of wooden and bacterial celluloses for high-performance electromagnetic wave absorption. Composites Science and Technology, 2022, 218, 109184.	3.8	18
113	Superior high-temperature rate performance of LiFePO4 cathode: The stabilizing effect of a multicomponent gel biopolymer binder. Journal of Power Sources, 2022, 521, 230955.	4.0	10
114	Reviewâ€"Nanomaterials Green Synthesis for High-Performance Secondary Rechargeable Batteries: Approaches, Challenges, and Perspectives. Journal of the Electrochemical Society, 2022, 169, 010534.	1.3	4
115	A family of MOFs@Wood-Derived hierarchical porous composites as freestanding thick electrodes of solid supercapacitors with enhanced areal capacitances and energy densities. Materials Today Energy, 2022, 24, 100951.	2.5	28
116	Chinese ink enabled natural wood for moist-induced electricity generation. Journal of Materials Research and Technology, 2022, 17, 1822-1830.	2.6	12
117	High power density & energy density Li-ion battery with aluminum foam enhanced electrode: Fabrication and simulation. Journal of Power Sources, 2022, 524, 230977.	4.0	8
118	Fabricating ultrathick, dense electrodes for compact rechargeable batteries with ultrahigh areal and volumetric capacity. Journal of Power Sources, 2022, 523, 231046.	4.0	6
119	Wood-based micro-spring composite elastic material with excellent electrochemical performance, high elasticity and elastic recovery rate applied in supercapacitors and sensors. Industrial Crops and Products, 2022, 178, 114565.	2.5	23
120	Thick Electrode Design for Facile Electron and Ion Transport: Architectures, Advanced Characterization, and Modeling. Accounts of Materials Research, 2022, 3, 472-483.	5.9	23
121	High performance supercapacitors assembled with hierarchical porous carbonized wood electrode prepared through self-activation. Industrial Crops and Products, 2022, 181, 114802.	2.5	26
122	Bioâ€Inspired Computational Design of Vascularized Electrodes for Highâ€Performance Fastâ€Charging Batteries Optimized by Deep Learning. Advanced Energy Materials, 2022, 12, .	10.2	9
123	Design of Scalable, Next-Generation Thick Electrodes: Opportunities and Challenges. ACS Nano, 2021, 15, 18624-18632.	7.3	54
124	Low Tortuosity and Reinforced Concrete Type Ultraâ€Thick Electrode for Practical Lithiumâ€"Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	7.8	33
125	Hiveâ€Inspired Multifunctional Woodâ€Nanotechnologyâ€Derived Membranes with a Doubleâ€Layer Conductive Network Structure for Flexible Electronics. Advanced Materials Interfaces, 2022, 9, .	1.9	7
126	Allâ€inâ€One Structured Lithiumâ€Metal Battery. Advanced Science, 2022, , 2200547.	5.6	5
127	3D Correlative Imaging of Lithium Ion Concentration in a Vertically Oriented Electrode Microstructure with a Density Gradient. Advanced Science, 2022, 9, e2105723.	5.6	6

#	Article	IF	Citations
128	A Flexible Single-Ion Gel Electrolyte with a Multiscale Channel for the High-Performance Lithium Metal Batteries. , 2022, 4, 944-952.		5
129	Bioinspired Robust Mechanical Properties for Advanced Materials. Small Structures, 2022, 3, .	6.9	17
130	Redox-homogeneous, gel electrolyte-embedded high-mass-loading cathodes for high-energy lithium metal batteries. Nature Communications, 2022, 13, 2541.	5.8	22
131	Gradient Design for Highâ€Energy and Highâ€Power Batteries. Advanced Materials, 2022, 34, .	11.1	53
132	Hierarchically porous wood aerogel/polypyrrole(PPy) composite thick electrode for supercapacitor. Chemical Engineering Journal, 2022, 446, 137331.	6.6	39
133	Free-standing ultrathick LiMn2O4@single-wall carbon nanotubes electrode with high areal capacity. Journal of Energy Chemistry, 2022, 73, 452-459.	7.1	7
134	Wood Biochar Monolith-Based Approach to Increasing the Volumetric Energy Density of Supercapacitor. Industrial & Engineering Chemistry Research, 2022, 61, 7891-7901.	1.8	10
135	Rational design of freestanding and high-performance thick electrode from carbon foam modified with polypyrrole/polydopamine for supercapacitors. Chemical Engineering Journal, 2022, 447, 137562.	6.6	28
136	Utilizing native lignin as redox-active material in conductive wood for electronic and energy storage applications. Journal of Materials Chemistry A, 2022, 10, 15677-15688.	5.2	11
137	Rational Design of Woodâ€Structured Thick Electrode for Electrochemical Energy Storage. Advanced Functional Materials, 2022, 32, .	7.8	33
138	Residual steam/CH4 reforming strategy over pinewood-derived 10Ni-xNb2O5-yCaO/Al2O3 for in situ desulfurization from industrial raw syngas. Applied Surface Science, 2022, 600, 154141.	3.1	2
139	Visualization of concentration polarization in thick electrodes. Energy Storage Materials, 2022, 51, 476-485.	9.5	25
140	Low-tortuosity, hierarchical porous structure Co₃O₄@carbonized wood integrated electrode for lithium-ion battery. Applied Physics Letters, 2022, 121, 063901.	1.5	3
141	Tortuosity Engineering for Improved Charge Storage Kinetics in High-Areal-Capacity Battery Electrodes. Nano Letters, 2022, 22, 6700-6708.	4.5	17
142	Mechanics-based design of lithium-ion batteries: a perspective. Physical Chemistry Chemical Physics, 2022, 24, 29279-29297.	1.3	5
143	Evaluation of physical and electrochemical performances of hardwood and softwood derived activated carbons for supercapacitor application. Materials Science for Energy Technologies, 2022, 5, 353-365.	1.0	2
144	Roadmap on Li-ion battery manufacturing research. JPhys Energy, 2022, 4, 042006.	2.3	17
145	Bio-template synthesis of LiVO3 anode material for high-rate and long-life lithium-ion batteries. Ionics, 2022, 28, 4959-4966.	1.2	4

#	Article	IF	Citations
146	Toward Highâ€Arealâ€Capacity Electrodes for Lithium and Sodium Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	28
147	Unraveling the Effects of Hierarchical Bimodal Microscale Porosity on Thick Electrodes. Journal of Physical Chemistry C, 2022, 126, 15135-15143.	1.5	4
148	Matrix-Directed Mineralization for Bulk Structural Materials. Journal of the American Chemical Society, 2022, 144, 18175-18194.	6.6	25
149	Smart Manufacturing Processes of Low-Tortuous Structures for High-Rate Electrochemical Energy Storage Devices. Micromachines, 2022, 13, 1534.	1.4	1
150	Low Tortuosity 3Dâ€Printed Structures Enhance Reaction Kinetics in Electrochemical Energy Storage and Electrocatalysis. Small Structures, 2022, 3, .	6.9	6
151	Insights into architecture, design and manufacture of electrodes for lithium-ion batteries. Materials and Design, 2022, 223, 111208.	3.3	20
152	Perspectives on strategies and techniques for building robust thick electrodes for lithium-ion batteries. Journal of Power Sources, 2022, 551, 232176.	4.0	19
153	Energy Storage Applications. Nanoscience and Technology, 2023, , 237-265.	1.5	0
154	Stable cycling of high-density three-dimensional sintered LiCoO2 plate cathodes. Journal of Power Sources, 2022, 551, 232223.	4.0	0
155	Carbonized wood impregnated with bimetallic nanoparticles as a monolithic continuous-flow microreactor for the reduction of 4-nitrophenol. Journal of Hazardous Materials, 2023, 443, 130270.	6.5	15
156	Wood-derived scaffolds decorating with nickel cobalt phosphate nanosheets and carbon nanotubes used as monolithic electrodes for assembling high-performance asymmetric supercapacitor. Chemical Engineering Journal, 2023, 454, 140453.	6.6	20
157	Opening twisted polymer chains for simultaneously high printability and battery fast-charge. Energy Storage Materials, 2023, 55, 42-54.	9.5	3
158	Structured Electrode Additive Manufacturing for Lithium-Ion Batteries. Nano Letters, 2022, 22, 9462-9469.	4.5	3
159	Wood-derived density-adjustable hierarchical porous carbon frameworks for high-performance lithium-sulfur batteries. Materials Letters, 2023, 331, 133537.	1.3	2
160	Chemistryâ€“mechanicsâ€“geometry coupling in positive electrode materials: a scale-bridging perspective for mitigating degradation in lithium-ion batteries through materials design. Chemical Science, 2023, 14, 458-484.	3.7	8
161	Pulsed laser 3D-micro/nanostructuring of materials for electrochemical energy storage and conversion. Progress in Materials Science, 2023, 133, 101052.	16.0	13
162	Are Three-Dimensional Batteries Beneficial? Analyzing Historical Data to Elucidate Performance Advantages. ACS Energy Letters, 2023, 8, 296-305.	8.8	5
163	Correlative full field X-ray compton scattering imaging and X-ray computed tomography for in situ observation of Li ion batteries. Materials Today Energy, 2023, 31, 101224.	2.5	3

#	Article	IF	Citations
164	Strong, flexible and UV-shielding composite polyvinyl alcohol films with wood cellulose skeleton and lignin nanoparticles. International Journal of Biological Macromolecules, 2023, 232, 123105.	3.6	10
165	In situ modulation of Pt-Ni heterocatalysts on highly graphitized wood-derived carbon platform to boost hydrogen production. Chemical Engineering Journal, 2023, 456, 141117.	6.6	3
166	Manufacturing Waterâ€Based Lowâ€Tortuosity Electrodes for Fastâ€Charge through Pattern Integrated Stamping. Energy and Environmental Materials, 2023, 6, .	7.3	2
167	Exploring the effect of lignin on the chemical structure and microstructure of Chinese fir wood by segmental delignification. Wood Science and Technology, 0, , .	1.4	4
168	Recent advances in wood-derived monolithic carbon materials: Synthesis approaches, modification methods and environmental applications. Chemical Engineering Journal, 2023, 463, 142332.	6.6	40
169	Enhanced electrochemical and thermal behavior of lithium-ion batteries with ultrathick electrodes via oriented pores. Applied Thermal Engineering, 2023, 228, 120555.	3.0	1
170	A facile â€œthick to thinâ€•strategy for integrating high volumetric energy density and excellent flexibility into MXene/wood free-standing electrode for supercapacitors. Chemical Engineering Journal, 2023, 460, 141733.	6.6	5
171	Electron and Ion Transport in Lithium and Lithium-Ion Battery Negative and Positive Composite Electrodes. Chemical Reviews, 2023, 123, 1327-1363.	23.0	62
172	Strategies and Challenge of Thick Electrodes for Energy Storage: A Review. Batteries, 2023, 9, 151.	2.1	8
173	Recent advances in wood-based electrode materials for supercapacitors. Green Chemistry, 2023, 25, 3322-3353.	4.6	14
174	Ion Conductivity Simulation Research of Lithium Battery Based on COMSOL. Modeling and Simulation, 2023, 12, 1344-1353.	0.0	0
175	Fundamental Understanding and Facing Challenges in Structural Design of Porous Siâ€Based Anodes for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2023, 33, .	7.8	45
183	Bioinspired designs in active metal-based batteries. Nano Research, 2024, 17, 587-601.	5.8	1
191	Exploring More Functions in Binders for Lithium Batteries. Electrochemical Energy Reviews, 2023, 6, .	13.1	3