Chaoji Chen

List of Publications by Year in Descending Order

142 papers	14,451 citations	67 h-index	119 g-index
150 ext. papers	18,869 ext. citations	16.7 avg, IF	6.99 L-index

#	Paper	IF	Citations
142	Janus Fibrous Mats Based Suspended Type Evaporator for Salt Resistant Solar Desalination and Salt Recovery.. *Small*, **2022**, e2107156	11	6
141	Potential of Zero Charge Regulating Highly Selective Removal of Nitrate Anions through Capacitive Deionization. *Chemical Engineering Journal*, **2022**, 136287	14.7	0
140	Sustainable high-strength macrofibres extracted from natural bamboo. *Nature Sustainability*, **2022**, 5, 235-244	22.1	10
139	A low-corrosivity structural timber. *Cell Reports Physical Science*, **2022**, 100921	6.1	0
138	A Stiffness-Switchable, Biomimetic Smart Material Enabled by Supramolecular Reconfiguration.. *Advanced Materials*, **2021**, e2107857	24	11
137	Extremely strong and tough chitosan films mediated by unique hydrated chitosan crystal structures. *Materials Today*, **2021**, 51, 27-27	21.8	5
136	Lightweight, strong, moldable wood via cell wall engineering as a sustainable structural material. *Science*, **2021**, 374, 465-471	33.3	18
135	Nanoscale Ion Regulation in Wood-Based Structures and Their Device Applications. *Advanced Materials*, **2021**, 33, e2002890	24	24
134	A strong, biodegradable and recyclable lignocellulosic bioplastic. *Nature Sustainability*, **2021**, 4, 627-635	22.1	74
133	Continuous Fly-Through High-Temperature Synthesis of Nanocatalysts. *Nano Letters*, **2021**, 21, 4517-4523	11.5	2
132	Reed Leaves Inspired Silica Nanofibrous Aerogels with Parallel-Arranged Vessels for Salt-Resistant Solar Desalination. *ACS Nano*, **2021**,	16.7	28
131	3D-Printed, High-Porosity, High-Strength Graphite Aerogel.. *Small Methods*, **2021**, 5, e2001188	12.8	5
130	Scalable Wood Hydrogel Membrane with Nanoscale Channels. *ACS Nano*, **2021**,	16.7	10
129	Tailoring grain growth and densification toward a high-performance solid-state electrolyte membrane. *Materials Today*, **2021**, 42, 41-48	21.8	13
128	Solar-assisted fabrication of large-scale, patternable transparent wood. *Science Advances*, **2021**, 7,	14.3	28
127	A bio-inspired, hierarchically porous structure with a decoupled fluidic transportation and evaporative pathway toward high-performance evaporation. *Journal of Materials Chemistry A*, **2021**, 9, 9745-9752	13	2
126	In Situ Lignin Modification toward Photonic Wood. *Advanced Materials*, **2021**, 33, e2001588	24	27

125	Developing fibrillated cellulose as a sustainable technological material. *Nature*, **2021**, 590, 47-56	50.4	213
124	Stamping Flexible Li Alloy Anodes. *Advanced Materials*, **2021**, 33, e2005305	24	16
123	Scalable Synthesis of High Entropy Alloy Nanoparticles by Microwave Heating. *ACS Nano*, **2021**, 15, 14928-14937	16.7	171
122	In Situ Wood Delignification toward Sustainable Applications. *Accounts of Materials Research*, **2021**, 2, 606-620	7.5	14
121	Wood Ionic Cable. *Small*, **2021**, 17, e2008200	11	2
120	Structure□Property□Function relationships of natural and engineered wood. *Nature Reviews Materials*, **2020**, 5, 642-666	73.3	220
119	Conductive Wood for High-Performance Structural Electromagnetic Interference Shielding. *Chemistry of Materials*, **2020**, 32, 5280-5289	9.6	52
118	Thermal Shock Synthesis of Nanocatalyst by 3D-Printed Miniaturized Reactors. *Small*, **2020**, 16, e2000502	11	9
117	Strong and Superhydrophobic Wood with Aligned Cellulose Nanofibers as a Waterproof Structural Material□*Chinese Journal of Chemistry*, **2020**, 38, 823-829	4.9	9
116	Highly Efficient Water Treatment via a Wood-Based and Reusable Filter **2020**, 2, 430-437		24
115	Holey three-dimensional wood-based electrode for vanadium flow batteries. *Energy Storage Materials*, **2020**, 27, 327-332	19.4	27
114	A Strong, Tough, and Scalable Structural Material from Fast-Growing Bamboo. *Advanced Materials*, **2020**, 32, e1906308	24	69
113	Fire-Resistant Structural Material Enabled by an Anisotropic Thermally Conductive Hexagonal Boron Nitride Coating. *Advanced Functional Materials*, **2020**, 30, 1909196	15.6	37
112	High-Performance, Scalable Wood-Based Filtration Device with a Reversed-Tree Design. *Chemistry of Materials*, **2020**, 32, 1887-1895	9.6	29
111	All-Natural, Degradable, Rolled-Up Straws Based on Cellulose Micro- and Nano-Hybrid Fibers. *Advanced Functional Materials*, **2020**, 30, 1910417	15.6	38
110	Rapid Processing of Whole Bamboo with Exposed, Aligned Nanofibrils toward a High-Performance Structural Material. *ACS Nano*, **2020**, 14, 5194-5202	16.7	36
109	Lignin as a Wood-Inspired Binder Enabled Strong, Water Stable, and Biodegradable Paper for Plastic Replacement. *Advanced Functional Materials*, **2020**, 30, 1906307	15.6	87
108	A Clear, Strong, and Thermally Insulated Transparent Wood for Energy Efficient Windows. *Advanced Functional Materials*, **2020**, 30, 1907511	15.6	50

107	An Energy-Efficient, Wood-Derived Structural Material Enabled by Pore Structure Engineering towards Building Efficiency. *Small Methods*, **2020**, 4, 1900747	12.8	28
106	Salinity-Gradient Power Generation with Ionized Wood Membranes. *Advanced Energy Materials*, **2020**, 10, 1902590	21.8	47
105	A Dynamic Gel with Reversible and Tunable Topological Networks and Performances. *Matter*, **2020**, 2, 390-403	12.7	98
104	Scalable aesthetic transparent wood for energy efficient buildings. *Nature Communications*, **2020**, 11, 3836	17.4	71
103	Highly Elastic Hydrated Cellulosic Materials with Durable Compressibility and Tunable Conductivity. *ACS Nano*, **2020**,	16.7	35
102	A strong, flame-retardant, and thermally insulating wood laminate. *Chemical Engineering Journal*, **2020**, 383, 123109	14.7	27
101	Uniform, Scalable, High-Temperature Microwave Shock for Nanoparticle Synthesis through Defect Engineering. *Matter*, **2019**, 1, 759-769	12.7	34
100	A Highly Conductive Cationic Wood Membrane. *Advanced Functional Materials*, **2019**, 29, 1902772	15.6	42
99	Clear Wood toward High-Performance Building Materials. *ACS Nano*, **2019**, 13, 9993-10001	16.7	70
98	General, Vertical, Three-Dimensional Printing of Two-Dimensional Materials with Multiscale Alignment. *ACS Nano*, **2019**, 13, 12653-12661	16.7	49
97	Nature-Inspired Tri-Pathway Design Enabling High-Performance Flexible Li–O2 Batteries. *Advanced Energy Materials*, **2019**, 9, 1802964	21.8	74
96	A radiative cooling structural material. *Science*, **2019**, 364, 760-763	33.3	419
95	Selectively aligned cellulose nanofibers towards high-performance soft actuators. *Extreme Mechanics Letters*, **2019**, 29, 100463	3.9	37
94	A printed, recyclable, ultra-strong, and ultra-tough graphite structural material. *Materials Today*, **2019**, 30, 17-25	21.8	51
93	A High-Performance Self-Regenerating Solar Evaporator for Continuous Water Desalination. *Advanced Materials*, **2019**, 31, e1900498	24	336
92	Nature-inspired salt resistant bimodal porous solar evaporator for efficient and stable water desalination. *Energy and Environmental Science*, **2019**, 12, 1558-1567	35.4	269
91	Bioinspired Solar-Heated Carbon Absorbent for Efficient Cleanup of Highly Viscous Crude Oil. *Advanced Functional Materials*, **2019**, 29, 1900162	15.6	64
90	Challenges and Opportunities for Solar Evaporation. *Joule*, **2019**, 3, 683-718	27.8	420

89	A nanofluidic ion regulation membrane with aligned cellulose nanofibers. *Science Advances*, **2019**, 5, eaau4238	14.3	81
88	All Natural, High Efficient Groundwater Extraction via Solar Steam/Vapor Generation. *Advanced Sustainable Systems*, **2019**, 3, 1800055	5.9	56
87	Nanocellulose-based films and their emerging applications. *Current Opinion in Solid State and Materials Science*, **2019**, 23, 100764	12	62
86	Flexible Solid-State Electrolyte with Aligned Nanostructures Derived from Wood **2019**, 1, 354-361		34
85	Super Elastic and Thermally Insulating Carbon Aerogel: Go Tubular Like Polar Bear Hair. *Matter*, **2019**, 1, 36-38	12.7	7
84	Thick Electrode Batteries: Principles, Opportunities, and Challenges. *Advanced Energy Materials*, **2019**, 9, 1901457	21.8	221
83	Decoupling Ionic and Electronic Pathways in Low-Dimensional Hybrid Conductors. *Journal of the American Chemical Society*, **2019**, 141, 17830-17837	16.4	20
82	Synthesis of Metal Oxide Nanoparticles by Rapid, High-Temperature 3D Microwave Heating. *Advanced Functional Materials*, **2019**, 29, 1904282	15.6	40
81	Precision Imprinted Nanostructural Wood. *Advanced Materials*, **2019**, 31, e1903270	24	20
80	Single-digit-micrometer thickness wood speaker. *Nature Communications*, **2019**, 10, 5084	17.4	28
79	Strong, Water-Stable Ionic Cable from Bio-Hydrogel. *Chemistry of Materials*, **2019**, 31, 9288-9294	9.6	15
78	Transient, in situ synthesis of ultrafine ruthenium nanoparticles for a high-rate Li□O2 battery. *Energy and Environmental Science*, **2019**, 12, 1100-1107	35.4	77
77	Dense, Self-Formed Char Layer Enables a Fire-Retardant Wood Structural Material. *Advanced Functional Materials*, **2019**, 29, 1807444	15.6	63
76	Shape-driven arrest of coffee stain effect drives the fabrication of carbon-nanotube-graphene-oxide inks for printing embedded structures and temperature sensors. *Nanoscale*, **2019**, 11, 23402-23415	7.7	7
75	Architecting a Floatable, Durable, and Scalable Steam Generator: Hydrophobic/Hydrophilic Bifunctional Structure for Solar Evaporation Enhancement. *Small Methods*, **2019**, 3, 1800176	12.8	54
74	One-Step, Catalyst-Free, Scalable in Situ Synthesis of Single-Crystal Aluminum Nanowires in Confined Graphene Space. *ACS Applied Materials & Interfaces*, **2019**, 11, 6009-6014	9.5	6
73	Nanocellulose-Enabled, All-Nanofiber, High-Performance Supercapacitor. *ACS Applied Materials & Interfaces*, **2019**, 11, 5919-5927	9.5	60
72	Transparent, Anisotropic Biofilm with Aligned Bacterial Cellulose Nanofibers. *Advanced Functional Materials*, **2018**, 28, 1707491	15.6	96

71	Scalable and Highly Efficient Mesoporous Wood-Based Solar Steam Generation Device: Localized Heat, Rapid Water Transport. *Advanced Functional Materials*, **2018**, 28, 1707134	15.6	254
70	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. *Science Advances*, **2018**, 4, eaar3724	14.3	204
69	Scalable and Sustainable Approach toward Highly Compressible, Anisotropic, Lamellar Carbon Sponge. *CheM*, **2018**, 4, 544-554	16.2	167
68	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. *Energy Storage Materials*, **2018**, 14, 376-382	19.4	73
67	Sandwich-like Ni2P nanoarray/nitrogen-doped graphene nanoarchitecture as a high-performance anode for sodium and lithium ion batteries. *Energy Storage Materials*, **2018**, 15, 234-241	19.4	122
66	A self-buffering structure for application in high-performance sodium-ion batteries. *Energy Storage Materials*, **2018**, 15, 242-248	19.4	14
65	Anisotropic, Mesoporous Microfluidic Frameworks with Scalable, Aligned Cellulose Nanofibers. *ACS Applied Materials & Interfaces*, **2018**, 10, 7362-7370	9.5	33
64	Processing bulk natural wood into a high-performance structural material. *Nature*, **2018**, 554, 224-228	50.4	558
63	Highly Compressible, Anisotropic Aerogel with Aligned Cellulose Nanofibers. *ACS Nano*, **2018**, 12, 140-147	16.7	215
62	Hierarchically Porous, Ultrathick, "Breathable" Wood-Derived Cathode for Lithium-Oxygen Batteries. *Advanced Energy Materials*, **2018**, 8, 1701203	21.8	109
61	In Situ "Chainmail Catalyst" Assembly in Low-Tortuosity, Hierarchical Carbon Frameworks for Efficient and Stable Hydrogen Generation. *Advanced Energy Materials*, **2018**, 8, 1801289	21.8	44
60	3D Wettable Framework for Dendrite-Free Alkali Metal Anodes. *Advanced Energy Materials*, **2018**, 8, 1802635	21.8	155
59	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. *Energy Storage Materials*, **2018**, 15, 458-464	19.4	73
58	Muscle-Inspired Highly Anisotropic, Strong, Ion-Conductive Hydrogels. *Advanced Materials*, **2018**, 30, e1801934	24	257
57	From Wood to Textiles: Top-Down Assembly of Aligned Cellulose Nanofibers. *Advanced Materials*, **2018**, 30, e1801347	24	75
56	Catalyst-Free Carbon Nanotube Growth in Confined Space High Temperature Gradient. *Research*, **2018**, 2018, 1793784	7.8	6
55	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. *ACS Applied Materials & Interfaces*, **2018**, 10, 1104-1112	9.5	227
54	High-Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. *Advanced Energy Materials*, **2018**, 8, 1701616	21.8	174

53	Textile Inspired Lithium-Oxygen Battery Cathode with Decoupled Oxygen and Electrolyte Pathways. *Advanced Materials*, **2018**, 30, 1704907	24	63
52	Flexible lithium□CO2 battery with ultrahigh capacity and stable cycling. *Energy and Environmental Science*, **2018**, 11, 3231-3237	35.4	74
51	Nanocellulose toward Advanced Energy Storage Devices: Structure and Electrochemistry. *Accounts of Chemical Research*, **2018**, 51, 3154-3165	24.3	152
50	3D-Printed Graphene Oxide Framework with Thermal Shock Synthesized Nanoparticles for Li-CO2 Batteries. *Advanced Functional Materials*, **2018**, 28, 1805899	15.6	95
49	Conductive Cellulose Nanofiber Enabled Thick Electrode for Compact and Flexible Energy Storage Devices. *Advanced Energy Materials*, **2018**, 8, 1802398	21.8	108
48	Narrow bandgap semiconductor decorated wood membrane for high-efficiency solar-assisted water purification. *Journal of Materials Chemistry A*, **2018**, 6, 18839-18846	13	121
47	Sandwich-like NiP nanoarray/nitrogen-doped graphene nanoarchitecture as a high-performance anode for sodium and lithium ion batteries. *Data in Brief*, **2018**, 20, 1999-2002	1.2	9
46	Facile synthesis of bimodal porous graphitic carbon nitride nanosheets as efficient photocatalysts for hydrogen evolution. *Nano Energy*, **2018**, 50, 376-382	17.1	40
45	Three-Dimensional, Solid-State Mixed Electron-Ion Conductive Framework for Lithium Metal Anode. *Nano Letters*, **2018**, 18, 3926-3933	11.5	108
44	All-wood, low tortuosity, aqueous, biodegradable supercapacitors with ultra-high capacitance. *Energy and Environmental Science*, **2017**, 10, 538-545	35.4	451
43	Coordination of Surface-Induced Reaction and Intercalation: Toward a High-Performance Carbon Anode for Sodium-Ion Batteries. *Advanced Science*, **2017**, 4, 1600500	13.6	64
42	A carbon-based 3D current collector with surface protection for Li metal anode. *Nano Research*, **2017**, 10, 1356-1365	10	139
41	Granadilla-Inspired Structure Design for Conversion/Alloy-Reaction Electrode with Integrated Lithium Storage Behaviors. *ACS Applied Materials & Interfaces*, **2017**, 9, 15470-15476	9.5	11
40	Scalable, anisotropic transparent paper directly from wood for light management in solar cells. *Nano Energy*, **2017**, 36, 366-373	17.1	90
39	Enabling High-Areal-Capacity Lithium-Sulfur Batteries: Designing Anisotropic and Low-Tortuosity Porous Architectures. *ACS Nano*, **2017**, 11, 4801-4807	16.7	113
38	Highly Conductive, Lightweight, Low-Tortuosity Carbon Frameworks as Ultrathick 3D Current Collectors. *Advanced Energy Materials*, **2017**, 7, 1700595	21.8	156
37	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	11.5	191
36	3D-Printed, All-in-One Evaporator for High-Efficiency Solar Steam Generation under 1 Sun Illumination. *Advanced Materials*, **2017**, 29, 1700981	24	387

35	Nitrogen-rich hard carbon as a highly durable anode for high-power potassium-ion batteries. *Energy Storage Materials*, **2017**, 8, 161-168	19.4	316
34	High Performance, Flexible, Solid-State Supercapacitors Based on a Renewable and Biodegradable Mesoporous Cellulose Membrane. *Advanced Energy Materials*, **2017**, 7, 1700739	21.8	141
33	Highly Flexible and Efficient Solar Steam Generation Device. *Advanced Materials*, **2017**, 29, 1701756	24	424
32	Phase control of TiO2 nanobelts by microwave irradiation as anode materials with tunable Li-diffusion kinetics. *Materials Research Bulletin*, **2017**, 96, 365-371	5.1	13
31	High-capacity, low-tortuosity, and channel-guided lithium metal anode. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 3584-3589	11.5	331
30	Three-Dimensional Printed Thermal Regulation Textiles. *ACS Nano*, **2017**, 11, 11513-11520	16.7	165
29	A strategy of selective and dendrite-free lithium deposition for lithium batteries. *Nano Energy*, **2017**, 42, 262-268	17.1	75
28	Highly Anisotropic Conductors. *Advanced Materials*, **2017**, 29, 1703331	24	57
27	Cellulose-Nanofiber-Enabled 3D Printing of a Carbon-Nanotube Microfiber Network. *Small Methods* , **2017**, 1, 1700222	12.8	89
26	3D-Printed All-Fiber Li-Ion Battery toward Wearable Energy Storage. *Advanced Functional Materials*, **2017**, 27, 1703140	15.6	184
25	Graphene oxide-based evaporator with one-dimensional water transport enabling high-efficiency solar desalination. *Nano Energy*, **2017**, 41, 201-209	17.1	226
24	Superflexible Wood. *ACS Applied Materials & Interfaces*, **2017**, 9, 23520-23527	9.5	88
23	In Operando Mechanism Analysis on Nanocrystalline Silicon Anode Material for Reversible and Ultrafast Sodium Storage. *Advanced Materials*, **2017**, 29, 1604708	24	75
22	TiN as a simple and efficient polysulfide immobilizer for lithium–sulfur batteries. *Journal of Materials Chemistry A*, **2016**, 4, 17711-17717	13	122
21	Integrated Intercalation-Based and Interfacial Sodium Storage in Graphene-Wrapped Porous Li4Ti5O12 Nanofibers Composite Aerogel. *Advanced Energy Materials*, **2016**, 6, 1600322	21.8	127
20	NASICON-Structured NaTi2(PO4)3@C Nanocomposite as the Low Operation-Voltage Anode Material for High-Performance Sodium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 2238-46	9.5	124
19	A Hierarchical N/S-Codoped Carbon Anode Fabricated Facilely from Cellulose/Polyaniline Microspheres for High-Performance Sodium-Ion Batteries. *Advanced Energy Materials*, **2016**, 6, 1501929	21.8	378
18	Binding TiO2-B nanosheets with N-doped carbon enables highly durable anodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 8172-8179	13	43

17	Rational synthesis of carbon-coated hollow Ge nanocrystals with enhanced lithium-storage properties. *Nanoscale*, **2016**, 8, 12215-20	7.7	19
16	Synthesis of Hierarchically Porous Sandwich-Like Carbon Materials for High-Performance Supercapacitors. *Chemistry - A European Journal*, **2016**, 22, 16863-16871	4.8	36
15	Na(+) intercalation pseudocapacitance in graphene-coupled titanium oxide enabling ultra-fast sodium storage and long-term cycling. *Nature Communications*, **2015**, 6, 6929	17.4	834
14	Flexible membranes of MoS2/C nanofibers by electrospinning as binder-free anodes for high-performance sodium-ion batteries. *Scientific Reports*, **2015**, 5, 9254	4.9	235
13	Architectural design and phase engineering of N/B-codoped TiO2(B)/anatase nanotube assemblies for high-rate and long-life lithium storage. *Journal of Materials Chemistry A*, **2015**, 3, 22591-22598	13	46
12	3D interconnected porous NiMoO4 nanoplate arrays on Ni foam as high-performance binder-free electrode for supercapacitors. *Journal of Materials Chemistry A*, **2015**, 3, 22081-22087	13	81
11	Self-assembled 3D hierarchical sheaf-like Nb3O7(OH) nanostructures with enhanced photocatalytic activity. *Nanoscale*, **2015**, 7, 1963-9	7.7	20
10	Flexible and Binder-Free Electrodes of Sb/rGO and Na3V2(PO4)3/rGO Nanocomposites for Sodium-Ion Batteries. *Small*, **2015**, 11, 3822-9	11	164
9	Bismuth oxyiodide nanosheets: a novel high-energy anode material for lithium-ion batteries. *Chemical Communications*, **2015**, 51, 2798-801	5.8	41
8	Biomaterial-assisted synthesis of AgCl@Ag concave cubes with efficient visible-light-driven photocatalytic activity. *CrystEngComm*, **2014**, 16, 649-653	3.3	24
7	Highly porous Li 4 Ti 5 O 12 /C nanofibers for ultrafast electrochemical energy storage. *Nano Energy* , **2014**, 10, 163-171	17.1	150
6	Controllable growth of TiO2-B nanosheet arrays on carbon nanotubes as a high-rate anode material for lithium-ion batteries. *Carbon*, **2014**, 69, 302-310	10.4	71
5	Microwave-assisted synthesis of self-assembled BiO1.84H0.08 hierarchical nanostructures as a new photocatalyst. *Applied Surface Science*, **2014**, 319, 244-249	6.7	13
4	TiO2-B nanosheets/anatase nanocrystals co-anchored on nanoporous graphene: in situ reduction-hydrolysis synthesis and their superior rate performance as an anode material. *Chemistry - A European Journal*, **2014**, 20, 1383-8	4.8	53
3	Facile fabrication of CuO nanosheets on Cu substrate as anode materials for electrochemical energy storage. *Journal of Alloys and Compounds*, **2014**, 586, 208-215	5.7	72
2	Conformal N-doped carbon on nanoporous TiO2 spheres as a high-performance anode material for lithium-ion batteries. *Journal of Materials Chemistry A*, **2013**, 1, 10375	13	103
1	Ionic-Liquid-Assisted Synthesis of Self-Assembled TiO2-B Nanosheets under Microwave Irradiation and Their Enhanced Lithium Storage Properties. *European Journal of Inorganic Chemistry*, **2013**, 2013, 5320-5328	2.3	28