Liangbing Hu

List of Publications by Year in Descending Order

404 papers	56,342 citations	124 h-index	230 g-index
425 ext. papers	67,107 ext. citations	16.8 avg, IF	8.06 L-index

#	Paper	IF	Citations
404	Rapid Synthesis of High-Entropy Oxide Microparticles.. *Small*, **2022**, e2104761	11	3
403	Multi-principal elemental intermetallic nanoparticles synthesized via a disorder-to-order transition.. *Science Advances*, **2022**, 8, eabm4322	14.3	5
402	Upscaling 3D Engineered Trees for Off-Grid Desalination.. *Environmental Science & Technology*, **2022**,	10.3	4
401	Boron-Nitride Nanosheet-Based Thermal Barrier Coating for Micro-Combustor Performance Improvement. *Journal of Energy Resources Technology, Transactions of the ASME*, **2022**, 144,	2.6	1
400	Ta□TiOx nanoparticles as radical scavengers to improve the durability of Fe□□ oxygen reduction catalysts. *Nature Energy*, **2022**, 7, 281-289	62.3	13
399	Rapid Pressureless Sintering of Glasses.. *Small*, **2022**, e2107951	11	1
398	High-entropy nanoparticles: Synthesis-structure-property relationships and data-driven discovery.. *Science*, **2022**, 376, eabn3103	33.3	19
397	Sustainable high-strength macrofibres extracted from natural bamboo. *Nature Sustainability*, **2022**, 5, 235-244	22.1	10
396	Engineered wood for a sustainable future. *Matter*, **2022**, 5, 1326-1329	12.7	1
395	Programmable heating and quenching for efficient thermochemical synthesis.. *Nature*, **2022**, 605, 470-476	50.4	3
394	A low-corrosivity structural timber. *Cell Reports Physical Science*, **2022**, 100921	6.1	0
393	Composition-dependent structure and properties of 5- and 15-element high-entropy alloy nanoparticles. *Cell Reports Physical Science*, **2021**, 2, 100641	6.1	1
392	Interface Engineering Between multi-elemental alloy Nanoparticles and Carbon Support Toward Stable Catalysts. *Advanced Materials*, **2021**, e2106436	24	4
391	Copper-coordinated cellulose ion conductors for solid-state batteries. *Nature*, **2021**, 598, 590-596	50.4	49
390	Lightweight, strong, moldable wood via cell wall engineering as a sustainable structural material. *Science*, **2021**, 374, 465-471	33.3	18
389	Alignment of Cellulose Nanofibers: Harnessing Nanoscale Properties to Macroscale Benefits. *ACS Nano*, **2021**, 15, 3646-3673	16.7	30
388	Advanced Nanowood Materials for the Water-Energy Nexus. *Advanced Materials*, **2021**, 33, e2001240	24	28

387	Nanoscale Ion Regulation in Wood-Based Structures and Their Device Applications. *Advanced Materials*, **2021**, 33, e2002890	24	24
386	Carbon-Supported High-Entropy Oxide Nanoparticles as Stable Electrocatalysts for Oxygen Reduction Reactions. *Advanced Functional Materials*, **2021**, 31, 2010561	15.6	21
385	Determining the three-dimensional atomic structure of an amorphous solid. *Nature*, **2021**, 592, 60-64	50.4	57
384	Strong, Hydrostable, and Degradable Straws Based on Cellulose-Lignin Reinforced Composites. *Small*, **2021**, 17, e2008011	11	22
383	A strong, biodegradable and recyclable lignocellulosic bioplastic. *Nature Sustainability*, **2021**, 4, 627-635	22.1	74
382	Cellulose Nanofiber Templating: Recent Advances in Functional Materials through Cellulose Nanofiber Templating (Adv. Mater. 12/2021). *Advanced Materials*, **2021**, 33, 2170094	24	
381	Rapid Synthesis and Sintering of Metals from Powders. *Advanced Science*, **2021**, 8, e2004229	13.6	5
380	Critical roles of pores and moisture in sustainable nanocellulose-based super-thermal insulators. *Matter*, **2021**, 4, 769-772	12.7	3
379	Ion-Conducting, Electron-Blocking Layer for High-Performance Solid Electrolytes. *Small Structures*, **2021**, 2, 2100014	8.7	11
378	Continuous Fly-Through High-Temperature Synthesis of Nanocatalysts. *Nano Letters*, **2021**, 21, 4517-4523	11.5	2
377	3D-Printed, High-Porosity, High-Strength Graphite Aerogel.. *Small Methods*, **2021**, 5, e2001188	12.8	5
376	3D Printed Graphene-Based 3000 K Probe. *Advanced Functional Materials*, **2021**, 31, 2102994	15.6	8
375	Extreme mixing in nanoscale transition metal alloys. *Matter*, **2021**, 4, 2340-2353	12.7	30
374	Amorphous-Carbon-Coated 3D Solid Electrolyte for an Electro-Chemomechanically Stable Lithium Metal Anode in Solid-State Batteries. *Nano Letters*, **2021**, 21, 6163-6170	11.5	3
373	Scalable Wood Hydrogel Membrane with Nanoscale Channels. *ACS Nano*, **2021**,	16.7	10
372	Cellulose Nanocomposites of Cellulose Nanofibers and Molecular Coils. *Journal of Composites Science*, **2021**, 5, 200	3	0
371	High-Temperature Ultrafast Sintering: Exploiting a New Kinetic Region to Fabricate Porous Solid-State Electrolyte Scaffolds. *Advanced Materials*, **2021**, 33, e2100726	24	8
370	Tailoring grain growth and densification toward a high-performance solid-state electrolyte membrane. *Materials Today*, **2021**, 42, 41-48	21.8	13

369	High-Entropy Metal Sulfide Nanoparticles Promise High-Performance Oxygen Evolution Reaction. *Advanced Energy Materials*, **2021**, 11, 2002887	21.8	67
368	Denary oxide nanoparticles as highly stable catalysts for methane combustion. *Nature Catalysis*, **2021**, 4, 62-70	36.5	45
367	Solar-assisted fabrication of large-scale, patternable transparent wood. *Science Advances*, **2021**, 7,	14.3	28
366	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
365	In Situ Lignin Modification toward Photonic Wood. *Advanced Materials*, **2021**, 33, e2001588	24	27
364	Rapid, Universal Surface Engineering of Carbon Materials via Microwave-Induced Carbothermal Shock. *Advanced Functional Materials*, **2021**, 31, 2010968	15.6	9
363	Recent Advances in Functional Materials through Cellulose Nanofiber Templating. *Advanced Materials*, **2021**, 33, e2005538	24	21
362	Developing fibrillated cellulose as a sustainable technological material. *Nature*, **2021**, 590, 47-56	50.4	213
361	Stamping Flexible Li Alloy Anodes. *Advanced Materials*, **2021**, 33, e2005305	24	16
360	A high-entropy phosphate catalyst for oxygen evolution reaction. *Nano Energy*, **2021**, 86, 106029	17.1	20
359	Scalable Synthesis of High Entropy Alloy Nanoparticles by Microwave Heating. *ACS Nano*, **2021**, 15, 14928-14937	16.4	71
358	In Situ Wood Delignification toward Sustainable Applications. *Accounts of Materials Research*, **2021**, 2, 606-620	7.5	14
357	Wood Ionic Cable. *Small*, **2021**, 17, e2008200	11	2
356	Tailoring the Local Environment of Platinum in Single-Atom Pt /CeO Catalysts for Robust Low-Temperature CO Oxidation. *Angewandte Chemie - International Edition*, **2021**, 60, 26054-26062	16.4	15
355	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. *Nature Communications*, **2020**, 11, 6373	17.4	20
354	A general method to synthesize and sinter bulk ceramics in seconds. *Science*, **2020**, 368, 521-526	33.3	153
353	Structure–property–function relationships of natural and engineered wood. *Nature Reviews Materials*, **2020**, 5, 642-666	73.3	220
352	Reversible Short-Circuit Behaviors in Garnet-Based Solid-State Batteries. *Advanced Energy Materials*, **2020**, 10, 2000702	21.8	31

351	Conductive Wood for High-Performance Structural Electromagnetic Interference Shielding. *Chemistry of Materials*, **2020**, 32, 5280-5289	9.6	52
350	Thermal Shock Synthesis of Nanocatalyst by 3D-Printed Miniaturized Reactors. *Small*, **2020**, 16, e2000509	11	9
349	Hierarchical Polyelemental Nanoparticles as Bifunctional Catalysts for Oxygen Evolution and Reduction Reactions. *Advanced Energy Materials*, **2020**, 10, 2001119	21.8	29
348	Wood Cellulose Paper for Solar Cells **2020**, 279-295		3
347	Computationally aided, entropy-driven synthesis of highly efficient and durable multi-elemental alloy catalysts. *Science Advances*, **2020**, 6, eaaz0510	14.3	60
346	Strong and Superhydrophobic Wood with Aligned Cellulose Nanofibers as a Waterproof Structural Material *Chinese Journal of Chemistry*, **2020**, 38, 823-829	4.9	9
345	Highly Efficient Water Treatment via a Wood-Based and Reusable Filter **2020**, 2, 430-437		24
344	Lignin-Based Direct Ink Printed Structural Scaffolds. *Small*, **2020**, 16, e1907212	11	20
343	Thermal Radiation Synthesis of Ultrafine Platinum Nanoclusters toward Methanol Oxidation. *Small Methods*, **2020**, 4, 2000265	12.8	6
342	Rapid Laser Pulse Synthesis of Supported Metal Nanoclusters with Kinetically Tunable Size and Surface Density for Electrocatalytic Hydrogen Evolution. *ACS Applied Nano Materials*, **2020**, 3, 2959-2968	5.6	5
341	Aerosol Synthesis of High Entropy Alloy Nanoparticles. *Langmuir*, **2020**, 36, 1985-1992	4	32
340	Holey three-dimensional wood-based electrode for vanadium flow batteries. *Energy Storage Materials*, **2020**, 27, 327-332	19.4	27
339	A Strong, Tough, and Scalable Structural Material from Fast-Growing Bamboo. *Advanced Materials*, **2020**, 32, e1906308	24	69
338	Fire-Resistant Structural Material Enabled by an Anisotropic Thermally Conductive Hexagonal Boron Nitride Coating. *Advanced Functional Materials*, **2020**, 30, 1909196	15.6	37
337	High-Performance, Scalable Wood-Based Filtration Device with a Reversed-Tree Design. *Chemistry of Materials*, **2020**, 32, 1887-1895	9.6	29
336	Predicting the flexural strength of Li-ion-conducting garnet type oxide for solid-state-batteries. *Journal of the American Ceramic Society*, **2020**, 103, 5186-5195	3.8	5
335	All-Natural, Degradable, Rolled-Up Straws Based on Cellulose Micro- and Nano-Hybrid Fibers. *Advanced Functional Materials*, **2020**, 30, 1910417	15.6	38
334	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. *Chemical Reviews*, **2020**, 120, 4257-4300	68.1	271

333	Rapid Processing of Whole Bamboo with Exposed, Aligned Nanofibrils toward a High-Performance Structural Material. *ACS Nano*, **2020**, 14, 5194-5202	16.7	36
332	Overcoming immiscibility toward bimetallic catalyst library. *Science Advances*, **2020**, 6, eaaz6844	14.3	42
331	Rapid, high-temperature microwave soldering toward a high-performance cathode/electrolyte interface. *Energy Storage Materials*, **2020**, 30, 385-391	19.4	24
330	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
329	A Clear, Strong, and Thermally Insulated Transparent Wood for Energy Efficient Windows. *Advanced Functional Materials*, **2020**, 30, 1907511	15.6	50
328	Continuous 2000 K droplet-to-particle synthesis. *Materials Today*, **2020**, 35, 106-114	21.8	18
327	An Energy-Efficient, Wood-Derived Structural Material Enabled by Pore Structure Engineering towards Building Efficiency. *Small Methods*, **2020**, 4, 1900747	12.8	28
326	Giant tunability of interlayer friction in graphite via ion intercalation. *Extreme Mechanics Letters*, **2020**, 35, 100616	3.9	4
325	Salinity-Gradient Power Generation with Ionized Wood Membranes. *Advanced Energy Materials*, **2020**, 10, 1902590	21.8	47
324	A Dynamic Gel with Reversible and Tunable Topological Networks and Performances. *Matter*, **2020**, 2, 390-403	12.7	98
323	A General Method for Regenerating Catalytic Electrodes. *Joule*, **2020**, 4, 2374-2386	27.8	9
322	Computation-Guided Synthesis of New Garnet-Type Solid-State Electrolytes via an Ultrafast Sintering Technique. *Advanced Materials*, **2020**, 32, e2005059	24	5
321	Continuous Synthesis of Hollow High-Entropy Nanoparticles for Energy and Catalysis Applications. *Advanced Materials*, **2020**, 32, e2002853	24	32
320	Printable, high-performance solid-state electrolyte films. *Science Advances*, **2020**, 6,	14.3	25
319	Towards a high-performance garnet-based solid-state Li metal battery: A perspective on recent advances. *Journal of Power Sources*, **2020**, 472, 228571	8.9	6
318	Scalable aesthetic transparent wood for energy efficient buildings. *Nature Communications*, **2020**, 11, 3836	17.4	71
317	Highly Elastic Hydrated Cellulosic Materials with Durable Compressibility and Tunable Conductivity. *ACS Nano*, **2020**,	16.7	35
316	Electrochemical measurement of serotonin by Au-CNT electrodes fabricated on microporous cell culture membranes. *Microsystems and Nanoengineering*, **2020**, 6, 90	7.7	9

315	High-Temperature Pulse Method for Nanoparticle Redispersion. *Journal of the American Chemical Society*, **2020**, 142, 17364-17371	16.4	10
314	A strong, flame-retardant, and thermally insulating wood laminate. *Chemical Engineering Journal*, **2020**, 383, 123109	14.7	27
313	High-throughput, combinatorial synthesis of multimetallic nanoclusters. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 6316-6322	11.5	50
312	Uniform, Scalable, High-Temperature Microwave Shock for Nanoparticle Synthesis through Defect Engineering. *Matter*, **2019**, 1, 759-769	12.7	34
311	A Highly Conductive Cationic Wood Membrane. *Advanced Functional Materials*, **2019**, 29, 1902772	15.6	42
310	Highly efficient decomposition of ammonia using high-entropy alloy catalysts. *Nature Communications*, **2019**, 10, 4011	17.4	168
309	Clear Wood toward High-Performance Building Materials. *ACS Nano*, **2019**, 13, 9993-10001	16.7	70
308	In situ TEM Observation of Nanoparticles Formation during Carbothermal Shock. *Microscopy and Microanalysis*, **2019**, 25, 1534-1535	0.5	
307	General, Vertical, Three-Dimensional Printing of Two-Dimensional Materials with Multiscale Alignment. *ACS Nano*, **2019**, 13, 12653-12661	16.7	49
306	Nature-Inspired Tri-Pathway Design Enabling High-Performance Flexible Li□O2 Batteries. *Advanced Energy Materials*, **2019**, 9, 1802964	21.8	74
305	Molecular partitioning in ternary solutions of cellulose. *Carbohydrate Polymers*, **2019**, 220, 157-162	10.3	3
304	Wood cellulose-based thin gel electrolyte with enhanced ionic conductivity. *MRS Communications*, **2019**, 9, 1015-1021	2.7	9
303	Facile, Solvent-Free Preparation of High Density, High Mass Loading Sulfur Cathodes Enabled by Dry-Pressable Holey Graphene Scaffolds. *Batteries and Supercaps*, **2019**, 2, 774-783	5.6	14
302	A silicon anode for garnet-based all-solid-state batteries: Interfaces and nanomechanics. *Energy Storage Materials*, **2019**, 21, 246-252	19.4	26
301	In situ iron coating on nanocatalysts for efficient and durable oxygen evolution reaction. *Nano Energy*, **2019**, 63, 103855	17.1	17
300	Electrochemical Stability of Garnet-Type Li7La2.75Ca0.25Zr1.75Nb0.25O12□with and without Atomic Layer Deposited-Al2O3□under CO2 and Humidity. *Journal of the Electrochemical Society*, **2019**, 166, A1844-A1852	3.9	18
299	Thermoelectric properties enhancement of p-type composite films using wood-based binder and mechanical pressing. *Scientific Reports*, **2019**, 9, 7869	4.9	6
298	A radiative cooling structural material. *Science*, **2019**, 364, 760-763	33.3	419

297	Selectively aligned cellulose nanofibers towards high-performance soft actuators. *Extreme Mechanics Letters*, **2019**, 29, 100463	3.9	37
296	A printed, recyclable, ultra-strong, and ultra-tough graphite structural material. *Materials Today*, **2019**, 30, 17-25	21.8	51
295	Thermally Conductive Reduced Graphene Oxide Thin Films for Extreme Temperature Sensors. *Advanced Functional Materials*, **2019**, 29, 1901388	15.6	35
294	A High-Performance Self-Regenerating Solar Evaporator for Continuous Water Desalination. *Advanced Materials*, **2019**, 31, e1900498	24	336
293	Scalable Dry Processing of Binder-Free Lithium-Ion Battery Electrodes Enabled by Holey Graphene. *ACS Applied Energy Materials*, **2019**, 2, 2990-2997	6.1	27
292	Cellulose ionic conductors with high differential thermal voltage for low-grade heat harvesting. *Nature Materials*, **2019**, 18, 608-613	27	187
291	Fly-through synthesis of nanoparticles on textile and paper substrates. *Nanoscale*, **2019**, 11, 6174-6181	7.7	11
290	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
289	Ultrahigh Tough, Super Clear, and Highly Anisotropic Nanofiber-Structured Regenerated Cellulose Films. *ACS Nano*, **2019**, 13, 4843-4853	16.7	97
288	Millisecond synthesis of CoS nanoparticles for highly efficient overall water splitting. *Nano Research*, **2019**, 12, 2259-2267	10	57
287	Bioinspired Solar-Heated Carbon Absorbent for Efficient Cleanup of Highly Viscous Crude Oil. *Advanced Functional Materials*, **2019**, 29, 1900162	15.6	64
286	Cellulose hydrogel as a flexible gel electrolyte layer. *MRS Communications*, **2019**, 9, 122-128	2.7	18
285	Challenges and Opportunities for Solar Evaporation. *Joule*, **2019**, 3, 683-718	27.8	420
284	A nanofluidic ion regulation membrane with aligned cellulose nanofibers. *Science Advances*, **2019**, 5, eaau4238	14.3	81
283	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. *Materials Today*, **2019**, 22, 50-57	21.8	147
282	All Natural, High Efficient Groundwater Extraction via Solar Steam/Vapor Generation. *Advanced Sustainable Systems*, **2019**, 3, 1800055	5.9	56
281	Nanocellulose-based films and their emerging applications. *Current Opinion in Solid State and Materials Science*, **2019**, 23, 100764	12	62
280	Flexible Solid-State Electrolyte with Aligned Nanostructures Derived from Wood **2019**, 1, 354-361		34

279	High temperature shockwave stabilized single atoms. *Nature Nanotechnology*, **2019**, 14, 851-857	28.7	159
278	Hydrophobic nanostructured wood membrane for thermally efficient distillation. *Science Advances*, **2019**, 5, eaaw3203	14.3	47
277	Stable Multimetallic Nanoparticles for Oxygen Electrocatalysis. *Nano Letters*, **2019**, 19, 5149-5158	11.5	59
276	Super Elastic and Thermally Insulating Carbon Aerogel: Go Tubular Like Polar Bear Hair. *Matter*, **2019**, 1, 36-38	12.7	7
275	Thick Electrode Batteries: Principles, Opportunities, and Challenges. *Advanced Energy Materials*, **2019**, 9, 1901457	21.8	221
274	Ultrafast, Controllable Synthesis of Sub-Nano Metallic Clusters through Defect Engineering. *ACS Applied Materials & Interfaces*, **2019**, 11, 29773-29779	9.5	14
273	Designing Textile Architectures for High Energy-Efficiency Human Body Sweat- and Cooling-Management. *Advanced Fiber Materials*, **2019**, 1, 61-70	10.9	25
272	Decoupling Ionic and Electronic Pathways in Low-Dimensional Hybrid Conductors. *Journal of the American Chemical Society*, **2019**, 141, 17830-17837	16.4	20
271	Flexible Garnet Solid-State Electrolyte Membranes Enabled by Tile-and-Grout Design. *ACS Energy Letters*, **2019**, 4, 2668-2674	20.1	33
270	Synthesis of Metal Oxide Nanoparticles by Rapid, High-Temperature 3D Microwave Heating. *Advanced Functional Materials*, **2019**, 29, 1904282	15.6	40
269	Precision Imprinted Nanostructural Wood. *Advanced Materials*, **2019**, 31, e1903270	24	20
268	Rapid, High-Temperature, In Situ Microwave Synthesis of Bulk Nanocatalysts. *Small*, **2019**, 15, e1904881	11	15
267	Single-digit-micrometer thickness wood speaker. *Nature Communications*, **2019**, 10, 5084	17.4	28
266	Strong, Water-Stable Ionic Cable from Bio-Hydrogel. *Chemistry of Materials*, **2019**, 31, 9288-9294	9.6	15
265	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
264	Dense, Self-Formed Char Layer Enables a Fire-Retardant Wood Structural Material. *Advanced Functional Materials*, **2019**, 29, 1807444	15.6	63
263	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
262	Overcoming Immiscibility via a Milliseconds-Long Shock□Synthesis toward Alloyed Nanoparticles. *Matter*, **2019**, 1, 1451-1453	12.7	4

261	Architecting a Floatable, Durable, and Scalable Steam Generator: Hydrophobic/Hydrophilic Bifunctional Structure for Solar Evaporation Enhancement. *Small Methods*, **2019**, 3, 1800176	12.8	54
260	Ultrahigh-temperature conversion of biomass to highly conductive graphitic carbon. *Carbon*, **2019**, 144, 241-248	10.4	28
259	A general, highly efficient, high temperature thermal pulse toward high performance solid state electrolyte. *Energy Storage Materials*, **2019**, 17, 234-241	19.4	30
258	An Electron/Ion Dual-Conductive Alloy Framework for High-Rate and High-Capacity Solid-State Lithium-Metal Batteries. *Advanced Materials*, **2019**, 31, e1804815	24	128
257	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
256	Nanocellulose-Enabled, All-Nanofiber, High-Performance Supercapacitor. *ACS Applied Materials & Interfaces*, **2019**, 11, 5919-5927	9.5	60
255	Nanomanufacturing of graphene nanosheets through nano-hole opening and closing. *Materials Today*, **2019**, 24, 26-32	21.8	32
254	Dramatic Enhancement of CO2 Photoreduction by Biodegradable Light-Management Paper. *Advanced Energy Materials*, **2018**, 8, 1703136	21.8	24
253	Necklace-Like Silicon Carbide and Carbon Nanocomposites Formed by Steady Joule Heating. *Small Methods*, **2018**, 2, 1700371	12.8	11
252	Transparent, Anisotropic Biofilm with Aligned Bacterial Cellulose Nanofibers. *Advanced Functional Materials*, **2018**, 28, 1707491	15.6	96
251	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
250	Anisotropic, lightweight, strong, and super thermally insulating nanowood with naturally aligned nanocellulose. *Science Advances*, **2018**, 4, eaar3724	14.3	204
249	Scalable and Sustainable Approach toward Highly Compressible, Anisotropic, Lamellar Carbon Sponge. *CheM*, **2018**, 4, 544-554	16.2	167
248	Flexible, Scalable, and Highly Conductive Garnet-Polymer Solid Electrolyte Templated by Bacterial Cellulose. *Advanced Energy Materials*, **2018**, 8, 1703474	21.8	117
247	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. *Energy Storage Materials*, **2018**, 14, 376-382	19.4	73
246	A self-buffering structure for application in high-performance sodium-ion batteries. *Energy Storage Materials*, **2018**, 15, 242-248	19.4	14
245	Lithium-ion conductive ceramic textile: A new architecture for flexible solid-state lithium metal batteries. *Materials Today*, **2018**, 21, 594-601	21.8	93
244	Thermoelectric properties and performance of flexible reduced graphene oxide films up to 3,000 K. *Nature Energy*, **2018**, 3, 148-156	62.3	69

243	Anisotropic, Mesoporous Microfluidic Frameworks with Scalable, Aligned Cellulose Nanofibers. *ACS Applied Materials & Interfaces*, **2018**, 10, 7362-7370	9.5	33
242	Extrusion-Based 3D Printing of Hierarchically Porous Advanced Battery Electrodes. *Advanced Materials*, **2018**, 30, e1705651	24	164
241	Tuning the High-Temperature Wetting Behavior of Metals toward Ultrafine Nanoparticles. *Angewandte Chemie - International Edition*, **2018**, 57, 2625-2629	16.4	5
240	Tuning the High-Temperature Wetting Behavior of Metals toward Ultrafine Nanoparticles. *Angewandte Chemie*, **2018**, 130, 2655-2659	3.6	0
239	Processing bulk natural wood into a high-performance structural material. *Nature*, **2018**, 554, 224-228	50.4	558
238	Highly Compressible, Anisotropic Aerogel with Aligned Cellulose Nanofibers. *ACS Nano*, **2018**, 12, 140-147	16.7	215
237	3D printed separator for the thermal management of high-performance Li metal anodes. *Energy Storage Materials*, **2018**, 12, 197-203	19.4	65
236	Carbothermal shock synthesis of high-entropy-alloy nanoparticles. *Science*, **2018**, 359, 1489-1494	33.3	560
235	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	11.5	178
234	3D-Printing Electrolytes for Solid-State Batteries. *Advanced Materials*, **2018**, 30, e1707132	24	142
233	Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries. *Advanced Energy Materials*, **2018**, 8, 1701963	21.8	125
232	Plasmonic Wood for High-Efficiency Solar Steam Generation. *Advanced Energy Materials*, **2018**, 8, 1701028	21.8	472
231	Hierarchically Porous, Ultrathick, "Breathable" Wood-Derived Cathode for Lithium-Oxygen Batteries. *Advanced Energy Materials*, **2018**, 8, 1701203	21.8	109
230	Isotropic Paper Directly from Anisotropic Wood: Top-Down Green Transparent Substrate Toward Biodegradable Electronics. *ACS Applied Materials & Interfaces*, **2018**, 10, 28566-28571	9.5	49
229	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
228	High-Temperature Atomic Mixing toward Well-Dispersed Bimetallic Electrocatalysts. *Advanced Energy Materials*, **2018**, 8, 1800466	21.8	24
227	3D Wettable Framework for Dendrite-Free Alkali Metal Anodes. *Advanced Energy Materials*, **2018**, 8, 1800635	21.8	155
226	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. *Energy Storage Materials*, **2018**, 15, 458-464	19.4	73

225	3D Microstructure Reconstruction and Characterization of Solid-State Electrolyte with Varying Porosity. *Microscopy and Microanalysis*, **2018**, 24, 814-815	0.5	
224	Muscle-Inspired Highly Anisotropic, Strong, Ion-Conductive Hydrogels. *Advanced Materials*, **2018**, 30, e1801934	24	257
223	A flexible solar-blind 2D boron nitride nanopaper-based photodetector with high thermal resistance. *Npj 2D Materials and Applications*, **2018**, 2,	8.8	46
222	Electrode Materials of Sodium-Ion Batteries toward Practical Application. *ACS Energy Letters*, **2018**, 3, 1604-1612	20.1	141
221	From Wood to Textiles: Top-Down Assembly of Aligned Cellulose Nanofibers. *Advanced Materials*, **2018**, 30, e1801347	24	75
220	Catalyst-Free Carbon Nanotube Growth in Confined Space High Temperature Gradient. *Research*, **2018**, 2018, 1793784	7.8	6
219	Lightweight, Mesoporous, and Highly Absorptive All-Nanofiber Aerogel for Efficient Solar Steam Generation. *ACS Applied Materials & Interfaces*, **2018**, 10, 1104-1112	9.5	227
218	Wood-Based Nanotechnologies toward Sustainability. *Advanced Materials*, **2018**, 30, 1703453	24	229
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