

# Jia-Qi Huang

## List of Publications by Citations

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papers

34,551  
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97  
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179  
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370  
ext. papers

42,053  
ext. citations

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L-index

#	Paper	IF	Citations
329	Powering Lithium-Sulfur Battery Performance by Propelling Polysulfide Redox at Sulfiphilic Hosts. <i>Nano Letters</i> , <b>2016</b> , 16, 519-27	11.5	1055
328	Review on High-Loading and High-Energy Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700260	21.8	1010
327	Nanostructured Metal Oxides and Sulfides for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2017</b> , 29, 1601759	24	911
326	Dendrite-Free Lithium Deposition Induced by Uniformly Distributed Lithium Ions for Efficient Lithium Metal Batteries. <i>Advanced Materials</i> , <b>2016</b> , 28, 2888-95	24	699
325	Permselective graphene oxide membrane for highly stable and anti-self-discharge lithium-sulfur batteries. <i>ACS Nano</i> , <b>2015</b> , 9, 3002-11	16.7	605
324	Unstacked double-layer templated graphene for high-rate lithium-sulphur batteries. <i>Nature Communications</i> , <b>2014</b> , 5, 3410	17.4	551
323	Ionic shield for polysulfides towards highly-stable lithium-sulfur batteries. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 347-353	35.4	547
322	The road for nanomaterials industry: a review of carbon nanotube production, post-treatment, and bulk applications for composites and energy storage. <i>Small</i> , <b>2013</b> , 9, 1237-65	11	543
321	Nitrogen-doped graphene/carbon nanotube hybrids: in situ formation on bifunctional catalysts and their superior electrocatalytic activity for oxygen evolution/reduction reaction. <i>Small</i> , <b>2014</b> , 10, 2251-9	11	525
320	An anion-immobilized composite electrolyte for dendrite-free lithium metal anodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 11069-11074	11.5	515
319	Design Principles for Heteroatom-Doped Nanocarbon to Achieve Strong Anchoring of Polysulfides for Lithium-Sulfur Batteries. <i>Small</i> , <b>2016</b> , 12, 3283-91	11	515
318	Conductive Nanostructured Scaffolds Render Low Local Current Density to Inhibit Lithium Dendrite Growth. <i>Advanced Materials</i> , <b>2016</b> , 28, 2155-62	24	498
317	Nitrogen-doped aligned carbon nanotube/graphene sandwiches: facile catalytic growth on bifunctional natural catalysts and their applications as scaffolds for high-rate lithium-sulfur batteries. <i>Advanced Materials</i> , <b>2014</b> , 26, 6100-5	24	492
316	Multi-functional separator/interlayer system for high-stable lithium-sulfur batteries: Progress and prospects. <i>Energy Storage Materials</i> , <b>2015</b> , 1, 127-145	19.4	491
315	Hierarchical Nanocomposites Derived from Nanocarbons and Layered Double Hydroxides - Properties, Synthesis, and Applications. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 675-694	15.6	477
314	Graphene/single-walled carbon nanotube hybrids: one-step catalytic growth and applications for high-rate Li-S batteries. <i>ACS Nano</i> , <b>2012</b> , 6, 10759-69	16.7	462
313	A review of flexible lithium-sulfur and analogous alkali metal-chalcogen rechargeable batteries. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 5237-5288	58.5	461

312	Nanoarchitected Graphene/CNT@Porous Carbon with Extraordinary Electrical Conductivity and Interconnected Micro/Mesopores for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2772-2781	15.6	452
311	Enhanced Electrochemical Kinetics on Conductive Polar Mediators for Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 12990-12995	16.4	442
310	Hierarchical Free-Standing Carbon-Nanotube Paper Electrodes with Ultrahigh Sulfur-Loading for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 6105-6112	15.6	432
309	A Cooperative Interface for Highly Efficient Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2016</b> , 28, 9551-9558	15.58	431
308	Direct growth of graphene/hexagonal boron nitride stacked layers. <i>Nano Letters</i> , <b>2011</b> , 11, 2032-7	11.5	413
307	Implantable Solid Electrolyte Interphase in Lithium-Metal Batteries. <i>Chem</i> , <b>2017</b> , 2, 258-270	16.2	411
306	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 5301-5305	16.4	402
305	A review of rechargeable batteries for portable electronic devices. <i>Information Materials</i> , <b>2019</b> , 1, 6-32	23.1	400
304	Artificial Soft/Rigid Protective Layer for Dendrite-Free Lithium Metal Anode. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705838	15.6	355
303	Conductive and Catalytic Triple-Phase Interfaces Enabling Uniform Nucleation in High-Rate Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1802768	21.8	347
302	Lithium Bond Chemistry in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 8178-8182	16.4	332
301	Aligned carbon nanotube/sulfur composite cathodes with high sulfur content for lithium-sulfur batteries. <i>Nano Energy</i> , <b>2014</b> , 4, 65-72	17.1	328
300	Strongly Coupled Interfaces between a Heterogeneous Carbon Host and a Sulfur-Containing Guest for Highly Stable Lithium-Sulfur Batteries: Mechanistic Insight into Capacity Degradation. <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, 1400227	4.6	311
299	Artificial Interphases for Highly Stable Lithium Metal Anode. <i>Matter</i> , <b>2019</b> , 1, 317-344	12.7	303
298	Toward Full Exposure of Active Sites: Nanocarbon Electrocatalyst with Surface Enriched Nitrogen for Superior Oxygen Reduction and Evolution Reactivity. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 5956-5961	15.6	300
297	Carbon nanotube mass production: principles and processes. <i>ChemSusChem</i> , <b>2011</b> , 4, 864-89	8.3	288
296	Beyond lithium ion batteries: Higher energy density battery systems based on lithium metal anodes. <i>Energy Storage Materials</i> , <b>2018</b> , 12, 161-175	19.4	284
295	Dual-Layered Film Protected Lithium Metal Anode to Enable Dendrite-Free Lithium Deposition. <i>Advanced Materials</i> , <b>2018</b> , 30, e1707629	24	278

294	Rational Integration of Polypropylene/Graphene Oxide/Nafion as Ternary-Layered Separator to Retard the Shuttle of Polysulfides for Lithium-Sulfur Batteries. <i>Small</i> , <b>2016</b> , 12, 381-9	11	267
293	Dual-Phase Lithium Metal Anode Containing a Polysulfide-Induced Solid Electrolyte Interphase and Nanostructured Graphene Framework for Lithium-Sulfur Batteries. <i>ACS Nano</i> , <b>2015</b> , 9, 6373-82	16.7	261
292	Janus Separator of Polypropylene-Supported Cellular Graphene Framework for Sulfur Cathodes with High Utilization in Lithium-Sulfur Batteries. <i>Advanced Science</i> , <b>2016</b> , 3, 1500268	13.6	251
291	Lithium Nitrate Solvation Chemistry in Carbonate Electrolyte Sustains High-Voltage Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 14055-14059	16.4	249
290	An Armored Mixed Conductor Interphase on a Dendrite-Free Lithium-Metal Anode. <i>Advanced Materials</i> , <b>2018</b> , 30, e1804461	24	246
289	The gap between long lifespan Li-S coin and pouch cells: The importance of lithium metal anode protection. <i>Energy Storage Materials</i> , <b>2017</b> , 6, 18-25	19.4	240
288	Annealing a graphene oxide film to produce a free standing high conductive graphene film. <i>Carbon</i> , <b>2012</b> , 50, 659-667	10.4	236
287	Lithium-Sulfur Batteries under Lean Electrolyte Conditions: Challenges and Opportunities. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 12636-12652	16.4	230
286	A Bifunctional Perovskite Promoter for Polysulfide Regulation toward Stable Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705219	24	228
285	Regulating the Inner Helmholtz Plane for Stable Solid Electrolyte Interphase on Lithium Metal Anodes. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 9422-9429	16.4	216
284	Li2S5-based ternary-salt electrolyte for robust lithium metal anode. <i>Energy Storage Materials</i> , <b>2016</b> , 3, 77-84	19.4	215
283	Implanting Atomic Cobalt within Mesoporous Carbon toward Highly Stable Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903813	24	215
282	Entrapment of sulfur in hierarchical porous graphene for lithium-sulfur batteries with high rate performance from 40 to 60°C. <i>Nano Energy</i> , <b>2013</b> , 2, 314-321	17.1	204
281	Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 3779-3783	16.4	204
280	An Analogous Periodic Law for Strong Anchoring of Polysulfides on Polar Hosts in Lithium Sulfur Batteries: S- or Li-Binding on First-Row Transition-Metal Sulfides?. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 795-801	20.1	203
279	A Review of Functional Binders in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1802107	21.8	203
278	Lithium metal protection through in-situ formed solid electrolyte interphase in lithium-sulfur batteries: The role of polysulfides on lithium anode. <i>Journal of Power Sources</i> , <b>2016</b> , 327, 212-220	8.9	201
277	Heterogeneous/Homogeneous Mediators for High-Energy-Density Lithium-Sulfur Batteries: Progress and Prospects. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1707536	15.6	197

276	Expediting redox kinetics of sulfur species by atomic-scale electrocatalysts in lithium-sulfur batteries. <i>Information Materials</i> , <b>2019</b> , 1, 533-541	23.1	196
275	3D Carbonaceous Current Collectors: The Origin of Enhanced Cycling Stability for High-Sulfur-Loading Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 6351-6358	15.6	191
274	A Perspective toward Practical Lithium-Sulfur Batteries. <i>ACS Central Science</i> , <b>2020</b> , 6, 1095-1104	16.8	184
273	Lithiophilic LiC Layers on Carbon Hosts Enabling Stable Li Metal Anode in Working Batteries. <i>Advanced Materials</i> , <b>2019</b> , 31, e1807131	24	177
272	Regulating Anions in the Solvation Sheath of Lithium Ions for Stable Lithium Metal Batteries. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 411-416	20.1	176
271	Lithium-metal matrix composite anode protected by a solid electrolyte layer for stable lithium metal batteries. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 37, 29-34	12	175
270	Porphyrin-Derived Graphene-Based Nanosheets Enabling Strong Polysulfide Chemisorption and Rapid Kinetics in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800849	21.8	172
269	Review of Li Metal Anode in Working Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, A6058-A6072	3.9	172
268	Controlling Dendrite Growth in Solid-State Electrolytes. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 833-843	20.1	165
267	Sulfurized solid electrolyte interphases with a rapid Li <sup>+</sup> diffusion on dendrite-free Li metal anodes. <i>Energy Storage Materials</i> , <b>2018</b> , 10, 199-205	19.4	165
266	Healing High-Loading Sulfur Electrodes with Unprecedented Long Cycling Life: Spatial Heterogeneity Control. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 8458-8466	16.4	163
265	Dual-Phase Single-Ion Pathway Interfaces for Robust Lithium Metal in Working Batteries. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808392	24	162
264	Embedded high density metal nanoparticles with extraordinary thermal stability derived from guest-host mediated layered double hydroxides. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 14739-41	16.4	161
263	A Toolbox for Lithium-Sulfur Battery Research: Methods and Protocols. <i>Small Methods</i> , <b>2017</b> , 1, 1700134	12.8	160
262	Catalytic self-limited assembly at hard templates: a mesoscale approach to graphene nanoshells for lithium-sulfur batteries. <i>ACS Nano</i> , <b>2014</b> , 8, 11280-9	16.7	156
261	Rational design of two-dimensional nanomaterials for lithium-sulfur batteries. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 1049-1075	35.4	156
260	Interconnected carbon nanotube/graphene nanosphere scaffolds as free-standing paper electrode for high-rate and ultra-stable lithium-sulfur batteries. <i>Nano Energy</i> , <b>2015</b> , 11, 746-755	17.1	154
259	Binder-free activated carbon/carbon nanotube paper electrodes for use in supercapacitors. <i>Nano Research</i> , <b>2011</b> , 4, 870-881	10	154

258	Fast Charging Lithium Batteries: Recent Progress and Future Prospects. <i>Small</i> , <b>2019</b> , 15, e1805389	11	151
257	Columnar Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 14207-14211	16.4	146
256	Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 734-737	16.4	140
255	Towards stable lithium-sulfur batteries: Mechanistic insights into electrolyte decomposition on lithium metal anode. <i>Energy Storage Materials</i> , <b>2017</b> , 8, 194-201	19.4	133
254	A compact inorganic layer for robust anode protection in lithium-sulfur batteries. <i>Information Materials</i> , <b>2020</b> , 2, 379-388	23.1	133
253	Scaled-up fabrication of porous-graphene-modified separators for high-capacity lithium-sulfur batteries. <i>Energy Storage Materials</i> , <b>2017</b> , 7, 56-63	19.4	131
252	A review on energy chemistry of fast-charging anodes. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 3806-3833	58.5	131
251	Aligned sulfur-coated carbon nanotubes with a polyethylene glycol barrier at one end for use as a high efficiency sulfur cathode. <i>Carbon</i> , <b>2013</b> , 58, 99-106	10.4	131
250	Dendrite-free nanostructured anode: entrapment of lithium in a 3D fibrous matrix for ultra-stable lithium-sulfur batteries. <i>Small</i> , <b>2014</b> , 10, 4257-63	11	130
249	A Sustainable Solid Electrolyte Interphase for High-Energy-Density Lithium Metal Batteries Under Practical Conditions. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 3252-3257	16.4	127
248	Recent Advances in Energy Chemical Engineering of Next-Generation Lithium Batteries. <i>Engineering</i> , <b>2018</b> , 4, 831-847	9.7	116
247	Toward Critical Electrode/Electrolyte Interfaces in Rechargeable Batteries. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909887	15.6	114
246	Polysulfide shuttle control: Towards a lithium-sulfur battery with superior capacity performance up to 1000 cycles by matching the sulfur/electrolyte loading. <i>Journal of Power Sources</i> , <b>2014</b> , 253, 263-268	8.9	113
245	3D Mesoporous Graphene: CVD Self-Assembly on Porous Oxide Templates and Applications in High-Stable Li-S Batteries. <i>Small</i> , <b>2015</b> , 11, 5243-52	11	110
244	Plating/Stripping Behavior of Actual Lithium Metal Anode. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1902254	21.8	109
243	Hierarchical Composites of Single/Double-Walled Carbon Nanotubes Interlinked Flakes from Direct Carbon Deposition on Layered Double Hydroxides. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 677-685	15.6	109
242	Liquid phase therapy to solid electrolyte-electrode interface in solid-state Li metal batteries: A review. <i>Energy Storage Materials</i> , <b>2020</b> , 24, 75-84	19.4	109
241	A Quinonoid-Imine-Enriched Nanostructured Polymer Mediator for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606802	24	107

240	The Radical Pathway Based on a Lithium-Metal-Compatible High-Dielectric Electrolyte for Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 16732-16736	16.4	107
239	Electrochemical Phase Evolution of Metal-Based Pre-Catalysts for High-Rate Polysulfide Conversion. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 9011-9017	16.4	106
238	The catalytic pathways of hydrohalogenation over metal-free nitrogen-doped carbon nanotubes. <i>ChemSusChem</i> , <b>2014</b> , 7, 723-8	8.3	106
237	Regulating Interfacial Chemistry in Lithium-Ion Batteries by a Weakly Solvating Electrolyte*. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 4090-4097	16.4	106
236	Enhanced Electrochemical Kinetics on Conductive Polar Mediators for Lithium Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 13184-13189	3.6	104
235	Towards high purity graphene/single-walled carbon nanotube hybrids with improved electrochemical capacitive performance. <i>Carbon</i> , <b>2013</b> , 54, 403-411	10.4	100
234	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 5399-5403	3.6	97
233	Recent advances in understanding dendrite growth on alkali metal anodes. <i>EnergyChem</i> , <b>2019</b> , 1, 100003	36.9	97
232	Hierarchical vine-tree-like carbon nanotube architectures: In-situ CVD self-assembly and their use as robust scaffolds for lithium-sulfur batteries. <i>Advanced Materials</i> , <b>2014</b> , 26, 7051-8	24	97
231	Sulfur Redox Reactions at Working Interfaces in Lithium Sulfur Batteries: A Perspective. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1802046	4.6	95
230	Vertically aligned carbon nanotube arrays grown on a lamellar catalyst by fluidized bed catalytic chemical vapor deposition. <i>Carbon</i> , <b>2009</b> , 47, 2600-2610	10.4	94
229	Advanced energy materials for flexible batteries in energy storage: A review. <i>SmartMat</i> , <b>2020</b> , 1,	22.8	93
228	Effective exposure of nitrogen heteroatoms in 3D porous graphene framework for oxygen reduction reaction and lithium sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2018</b> , 27, 167-175	12	90
227	Carbon-nanotube-array double helices. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 3642-5	16.4	90
226	Lithium Nitrate Solvation Chemistry in Carbonate Electrolyte Sustains High-Voltage Lithium Metal Batteries. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 14251-14255	3.6	87
225	Radial growth of vertically aligned carbon nanotube arrays from ethylene on ceramic spheres. <i>Carbon</i> , <b>2008</b> , 46, 1152-1158	10.4	87
224	Alloy Anodes for Rechargeable Alkali-Metal Batteries: Progress and Challenge <b>2019</b> , 1, 217-229		85
223	Redox Comediation with Organopolysulfides in Working Lithium-Sulfur Batteries. <i>CheM</i> , <b>2020</b> , 6, 3297-3301	36.1	84

222	The formation of strong-couple interactions between nitrogen-doped graphene and sulfur/lithium (poly)sulfides in lithium-sulfur batteries. <i>2D Materials</i> , <b>2015</b> , 2, 014011	5.9	83
221	Toward Practical High-Energy Batteries: A Modular-Assembled Oval-Like Carbon Microstructure for Thick Sulfur Electrodes. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700598	24	82
220	Synchronous Growth of Vertically Aligned Carbon Nanotubes with Pristine Stress in the Heterogeneous Catalysis Process. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 14638-14643	3.8	82
219	Perspective on the critical role of interface for advanced batteries. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 47, 217-220	12	82
218	Three-dimensional aluminum foam/carbon nanotube scaffolds as long- and short-range electron pathways with improved sulfur loading for high energy density lithium-sulfur batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 261, 264-270	8.9	79
217	A review of solid electrolytes for safe lithium-sulfur batteries. <i>Science China Chemistry</i> , <b>2017</b> , 60, 1508-1526	26	79
216	Electrochemical Diagram of an Ultrathin Lithium Metal Anode in Pouch Cells. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902785	24	78
215	Flexible all-carbon interlinked nanoarchitectures as cathode scaffolds for high-rate lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 10869-10875	13	78
214	100 mm long, semiconducting triple-walled carbon nanotubes. <i>Advanced Materials</i> , <b>2010</b> , 22, 1867-71	24	78
213	The feasibility of producing MWCNT paper and strong MWCNT film from VACNT array. <i>Applied Physics A: Materials Science and Processing</i> , <b>2008</b> , 92, 531-539	2.6	78
212	Mass production of aligned carbon nanotube arrays by fluidized bed catalytic chemical vapor deposition. <i>Carbon</i> , <b>2010</b> , 48, 1196-1209	10.4	77
211	Review of nanostructured current collectors in lithium-sulfur batteries. <i>Nano Research</i> , <b>2017</b> , 10, 4027-4054	27	74
210	Critical Current Density in Solid-State Lithium Metal Batteries: Mechanism, Influences, and Strategies. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2009925	15.6	74
209	A Review of Advanced Energy Materials for Magnesium-Sulfur Batteries. <i>Energy and Environmental Materials</i> , <b>2018</b> , 1, 100-112	13	74
208	Inhibiting Solvent Co-Intercalation in a Graphite Anode by a Localized High-Concentration Electrolyte in Fast-Charging Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 3402-3406	16.4	73
207	Cathode materials based on carbon nanotubes for high-energy-density lithium-sulfur batteries. <i>Carbon</i> , <b>2014</b> , 75, 161-168	10.4	72
206	Hydrothermal synthesis of porous phosphorus-doped carbon nanotubes and their use in the oxygen reduction reaction and lithium-sulfur batteries. <i>New Carbon Materials</i> , <b>2016</b> , 31, 352-362	4.4	71
205	A perspective on sustainable energy materials for lithium batteries. <i>SusMat</i> , <b>2021</b> , 1, 38-50		69

204	Composite Cathodes Containing SWCNT@S Coaxial Nanocables: Facile Synthesis, Surface Modification, and Enhanced Performance for Li-Ion Storage. <i>Particle and Particle Systems Characterization</i> , <b>2013</b> , 30, 158-165	3.1	68
203	Current-density dependence of Li <sub>2</sub> S/Li <sub>2</sub> S <sub>2</sub> growth in lithium-sulfur batteries. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 2976-2982	35.4	67
202	Layered double hydroxides as catalysts for the efficient growth of high quality single-walled carbon nanotubes in a fluidized bed reactor. <i>Carbon</i> , <b>2010</b> , 48, 3260-3270	10.4	67
201	A Supramolecular Capsule for Reversible Polysulfide Storage/Delivery in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 16223-16227	16.4	66
200	Towards full demonstration of high areal loading sulfur cathode in lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 39, 17-22	12	66
199	Lithium-Anode Protection in Lithium-Sulfur Batteries. <i>Trends in Chemistry</i> , <b>2019</b> , 1, 693-704	14.8	65
198	Beaver-dam-like membrane: A robust and sulphophilic MgBO <sub>2</sub> (OH)/CNT/PP nest separator in Li-S batteries. <i>Energy Storage Materials</i> , <b>2017</b> , 8, 153-160	19.4	63
197	Sulfur Nanodots Stitched in 2D "Bubble-Like" Interconnected Carbon Fabric as Reversibility-Enhanced Cathodes for Lithium-Sulfur Batteries. <i>ACS Nano</i> , <b>2017</b> , 11, 4694-4702	16.7	62
196	Designing solid-state interfaces on lithium-metal anodes: a review. <i>Science China Chemistry</i> , <b>2019</b> , 62, 1286-1299	7.9	61
195	Improvement of oil adsorption performance by a sponge-like natural vermiculite-carbon nanotube hybrid. <i>Applied Clay Science</i> , <b>2011</b> , 53, 1-7	5.2	61
194	An Organodiselenide Comediator to Facilitate Sulfur Redox Kinetics in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2021</b> , 33, e2007298	24	61
193	3D Hierarchical Porous Graphene-Based Energy Materials: Synthesis, Functionalization, and Application in Energy Storage and Conversion. <i>Electrochemical Energy Reviews</i> , <b>2019</b> , 2, 332-371	29.3	59
192	Towards Stable Lithium-Sulfur Batteries with a Low Self-Discharge Rate: Ion Diffusion Modulation and Anode Protection. <i>ChemSusChem</i> , <b>2015</b> , 8, 2892-901	8.3	59
191	A review on the failure and regulation of solid electrolyte interphase in lithium batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 59, 306-319	12	59
190	Dictating High-Capacity Lithium-Sulfur Batteries through Redox-Mediated Lithium Sulfide Growth. <i>Small Methods</i> , <b>2020</b> , 4, 1900344	12.8	58
189	Identifying the Critical Anion-Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithium-Metal Anode Interface. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 4215-4220	16.4	58
188	Dramatic enhancements in toughness of polyimide nanocomposite via long-CNT-induced long-range creep. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 7050		57
187	Electrolyte Regulation towards Stable Lithium-Metal Anodes in Lithium-Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 10732-10745	16.4	56

186	Recent progress on biomass-derived ecomaterials toward advanced rechargeable lithium batteries. <i>EcoMat</i> , <b>2020</b> , 2, e12019	9.4	55
185	Reactivity enhancement of N-CNTs in green catalysis of C <sub>2</sub> H <sub>2</sub> hydrochlorination by a Cu catalyst. <i>RSC Advances</i> , <b>2014</b> , 4, 7766-7769	3.7	55
184	BMnO <sub>2</sub> nanofibers/carbon nanotubes hierarchically assembled microspheres: Approaching practical applications of high-performance aqueous Zn-ion batteries. <i>Journal of Power Sources</i> , <b>2019</b> , 443, 227244	8.9	54
183	Lithium-Sulfur Batteries: Dendrite-Free Nanostructured Anode: Entrapment of Lithium in a 3D Fibrous Matrix for Ultra-Stable Lithium-Sulfur Batteries (Small 21/2014). <i>Small</i> , <b>2014</b> , 10, 4222-4222	11	53
182	Mass transportation mechanism in electric-biased carbon nanotubes. <i>Nano Letters</i> , <b>2010</b> , 10, 4309-15	11.5	53
181	Shielding Polysulfide Intermediates by an Organosulfur-Containing Solid Electrolyte Interphase on the Lithium Anode in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2020</b> , 32, e2003012	24	53
180	Dry spinning yarns from vertically aligned carbon nanotube arrays produced by an improved floating catalyst chemical vapor deposition method. <i>Carbon</i> , <b>2010</b> , 48, 2855-2861	10.4	52
179	Non-Solvating and Low-Dielectricity Cosolvent for Anion-Derived Solid Electrolyte Interphases in Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 11442-11447	16.4	52
178	A bifunctional ethylene-vinyl acetate copolymer protective layer for dendrites-free lithium metal anodes. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 48, 203-207	12	51
177	Rapid Lithium Diffusion in Order@Disorder Pathways for Fast-Charging Graphite Anodes. <i>Small Structures</i> , <b>2020</b> , 1, 2000010	8.7	51
176	Lithium Bond Chemistry in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 8290-8294	3.6	50
175	Regulation of carbon distribution to construct high-sulfur-content cathode in lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 56, 203-208	12	49
174	Safe Lithium-Metal Anodes for Li <sub>2</sub> O <sub>2</sub> Batteries: From Fundamental Chemistry to Advanced Characterization and Effective Protection. <i>Batteries and Supercaps</i> , <b>2019</b> , 2, 638-658	5.6	48
173	Calendering of free-standing electrode for lithium-sulfur batteries with high volumetric energy density. <i>Carbon</i> , <b>2017</b> , 111, 493-501	10.4	48
172	In situ regulated solid electrolyte interphase via reactive separators for highly efficient lithium metal batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 30, 27-33	19.4	46
171	Thickening and Homogenizing Aqueous Electrolyte towards Highly Efficient and Stable Zn Metal Batteries. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, A1211-A1216	3.9	45
170	Promoting the sulfur redox kinetics by mixed organodiselenides in high-energy-density lithium-sulfur batteries. <i>EScience</i> , <b>2021</b> , 1, 44-44		45
169	A Coaxial-Interweaved Hybrid Lithium Metal Anode for Long-Lifespan Lithium Metal Batteries. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901932	21.8	44

168	Process intensification by CO <sub>2</sub> for high quality carbon nanotube forest growth: Double-walled carbon nanotube convexity or single-walled carbon nanotube bowls?. <i>Nano Research</i> , <b>2009</b> , 2, 872-881	10	43
167	Hierarchical Carbon Nanotube/Carbon Black Scaffolds as Short- and Long-Range Electron Pathways with Superior Li-Ion Storage Performance. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2014</b> , 2, 200-206	8.3	42
166	Robust growth of herringbone carbon nanofibers on layered double hydroxide derived catalysts and their applications as anodes for Li-ion batteries. <i>Carbon</i> , <b>2013</b> , 62, 393-404	10.4	42
165	Anomalous high capacitance in a coaxial single nanowire capacitor. <i>Nature Communications</i> , <b>2012</b> , 3, 879-881	17.4	42
164	Improved interfacial electronic contacts powering high sulfur utilization in all-solid-state lithium-sulfur batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 25, 436-442	19.4	42
163	Waterproof lithium metal anode enabled by cross-linking encapsulation. <i>Science Bulletin</i> , <b>2020</b> , 65, 909-916	16.6	41
162	Liquefied petroleum gas containing sulfur as the carbon source for carbon nanotube forests. <i>Carbon</i> , <b>2008</b> , 46, 291-296	10.4	41
161	Interface enhanced well-dispersed Co <sub>9</sub> S <sub>8</sub> nanocrystals as an efficient polysulfide host in lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 48, 109-115	12	41
160	Self-organization of nitrogen-doped carbon nanotubes into double-helix structures. <i>Carbon</i> , <b>2012</b> , 50, 5323-5330	10.4	40
159	A Sustainable Solid Electrolyte Interphase for High-Energy-Density Lithium Metal Batteries Under Practical Conditions. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 3278-3283	3.6	40
158	The origin of sulfuryl-containing components in SEI from sulfate additives for stable cycling of ultrathin lithium metal anodes. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 47, 128-131	12	40
157	Advanced Electrode Materials in Lithium Batteries: Retrospect and Prospect. <i>Energy Material Advances</i> , <b>2021</b> , 2021, 1-15	1	40
156	Nitrogen-doped herringbone carbon nanofibers with large lattice spacings and abundant edges: Catalytic growth and their applications in lithium ion batteries and oxygen reduction reactions. <i>Catalysis Today</i> , <b>2015</b> , 249, 244-251	5.3	39
155	Columnar Lithium Metal Anodes. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 14395-14399	3.6	38
154	Hierarchical nanostructured composite cathode with carbon nanotubes as conductive scaffold for lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2013</b> , 22, 341-346	12	38
153	The reduction of interfacial transfer barrier of Li ions enabled by inorganics-rich solid-electrolyte interphase. <i>Energy Storage Materials</i> , <b>2020</b> , 28, 401-406	19.4	38
152	Chemically derived graphene-metal oxide hybrids as electrodes for electrochemical energy storage: pre-graphenization or post-graphenization?. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 13947		37
151	Electrolyte Structure of Lithium Polysulfides with Anti-Reductive Solvent Shells for Practical Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 15503-15509	16.4	37

150	Toward the Scale-Up of Solid-State Lithium Metal Batteries: The Gaps between Lab-Level Cells and Practical Large-Format Batteries. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002360	21.8	37
149	Recent advances in energy chemistry of precious-metal-free catalysts for oxygen electrocatalysis. <i>Chinese Chemical Letters</i> , <b>2018</b> , 29, 1757-1767	8.1	37
148	Two-dimensional vermiculite separator for lithium sulfur batteries. <i>Chinese Chemical Letters</i> , <b>2017</b> , 28, 2235-2238	8.1	36
147	Space confinement and rotation stress induced self-organization of double-helix nanostructure: a nanotube twist with a moving catalyst head. <i>ACS Nano</i> , <b>2012</b> , 6, 4520-9	16.7	35
146	Coupled process of plastics pyrolysis and chemical vapor deposition for controllable synthesis of vertically aligned carbon nanotube arrays. <i>Applied Physics A: Materials Science and Processing</i> , <b>2010</b> , 100, 533-540	2.6	35
145	Regulating Interfacial Chemistry in Lithium-Ion Batteries by a Weakly Solvating Electrolyte**. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 4136-4143	3.6	35
144	Monodisperse embedded nanoparticles derived from an atomic metal-dispersed precursor of layered double hydroxide for architected carbon nanotube formation. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 1686	13	34
143	Metal/nanocarbon layer current collectors enhanced energy efficiency in lithium-sulfur batteries. <i>Science Bulletin</i> , <b>2017</b> , 62, 1267-1274	10.6	34
142	Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 3819-3823	3.6	34
141	Graphene-based Fe-coordinated framework porphyrin as an interlayer for lithium-sulfur batteries. <i>Materials Chemistry Frontiers</i> , <b>2019</b> , 3, 615-619	7.8	33
140	Analyzing Energy Materials by Cryogenic Electron Microscopy. <i>Advanced Materials</i> , <b>2020</b> , 32, e1908293	24	33
139	The release of free standing vertically-aligned carbon nanotube arrays from a substrate using CO <sub>2</sub> oxidation. <i>Carbon</i> , <b>2010</b> , 48, 1441-1450	10.4	33
138	Semi-Immobilized Molecular Electrocatalysts for High-Performance Lithium-Sulfur Batteries. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 19865-19872	16.4	33
137	Lithium-Sulfur Batteries: Review on High-Loading and High-Energy Lithium-Sulfur Batteries (Adv. Energy Mater. 24/2017). <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1770141	21.8	32
136	Efficient synthesis of aligned nitrogen-doped carbon nanotubes in a fluidized-bed reactor. <i>Catalysis Today</i> , <b>2012</b> , 186, 83-92	5.3	32
135	Modulating the diameter of carbon nanotubes in array form via floating catalyst chemical vapor deposition. <i>Applied Physics A: Materials Science and Processing</i> , <b>2009</b> , 94, 853-860	2.6	32
134	Lithium-Sulfur Batteries: Heterogeneous/Homogeneous Mediators for High-Energy-Density Lithium-Sulfur Batteries: Progress and Prospects (Adv. Funct. Mater. 38/2018). <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1870269	15.6	32
133	A review of the large-scale production of carbon nanotubes: The practice of nanoscale process engineering. <i>Science Bulletin</i> , <b>2012</b> , 57, 157-166		31

132	Hydrothermal evolution, optical and electrochemical properties of hierarchical porous hematite nanoarchitectures. <i>Nanoscale Research Letters</i> , <b>2013</b> , 8, 2	5	31
131	Thermally Stable and Nonflammable Electrolytes for Lithium Metal Batteries: Progress and Perspectives. <i>Small Science</i> , <b>2021</b> , 1, 2100058		31
130	Transition metal coordinated framework porphyrin for electrocatalytic oxygen reduction. <i>Chinese Chemical Letters</i> , <b>2019</b> , 30, 911-914	8.1	30
129	Integrated lithium metal anode protected by composite solid electrolyte film enables stable quasi-solid-state lithium metal batteries. <i>Chinese Chemical Letters</i> , <b>2020</b> , 31, 2339-2342	8.1	29
128	The influence of formation temperature on the solid electrolyte interphase of graphite in lithium ion batteries. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 49, 335-338	12	29
127	Synthesis of high quality single-walled carbon nanotubes on natural sepiolite and their use for phenol absorption. <i>Carbon</i> , <b>2011</b> , 49, 1568-1580	10.4	29
126	The Boundary of Lithium Plating in Graphite Electrode for Safe Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 13007-13012	16.4	29
125	A two-step shearing strategy to disperse long carbon nanotubes from vertically aligned multiwalled carbon nanotube arrays for transparent conductive films. <i>Langmuir</i> , <b>2010</b> , 26, 2798-804	4	28
124	Nucleation and Growth Mechanism of Anion-Derived Solid Electrolyte Interphase in Rechargeable Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 8521-8525	16.4	28
123	Carbon materials for traffic power battery. <i>ETransportation</i> , <b>2019</b> , 2, 100033	12.7	28
122	Crosstalk shielding of transition metal ions for long cycling lithium metal batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 4283-4289	13	27
121	Redox mediator assists electron transfer in lithium-sulfur batteries with sulfurized polyacrylonitrile cathodes. <i>EcoMat</i> , <b>2021</b> , 3, e12066	9.4	27
120	Slurry-Coated Sulfur/Sulfide Cathode with Li Metal Anode for All-Solid-State Lithium-Sulfur Pouch Cells. <i>Batteries and Supercaps</i> , <b>2020</b> , 3, 596-603	5.6	26
119	Spatial and Kinetic Regulation of Sulfur Electrochemistry on Semi-Immobilized Redox Mediators in Working Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 17670-17675	16.4	26
118	A review of naturally derived nanostructured materials for safe lithium metal batteries. <i>Materials Today Nano</i> , <b>2019</b> , 8, 100049	9.7	26
117	TEM observations of buckling and fracture modes for compressed thick multiwall carbon nanotubes. <i>Carbon</i> , <b>2011</b> , 49, 206-213	10.4	26
116	Unlocking the Failure Mechanism of Solid State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100748	10.4	26
115	In Situ Monitoring the Role of Working Metal Catalyst Nanoparticles for Ultrahigh Purity Single-Walled Carbon Nanotubes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 5066-5073	15.6	25

114	Stretchable single-walled carbon nanotube double helices derived from molybdenum-containing layered double hydroxides. <i>Carbon</i> , <b>2011</b> , 49, 2148-2152	10.4	25
113	Large scale production of carbon nanotube arrays on the sphere surface from liquefied petroleum gas at low cost. <i>Science Bulletin</i> , <b>2007</b> , 52, 2896-2902		25
112	Direct Intermediate Regulation Enabled by Sulfur Containers in Working Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 22150-22155	16.4	25
111	The Radical Pathway Based on a Lithium-Metal-Compatible High-Dielectric Electrolyte for Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 16974-16978	3.6	25
110	Nonuniform Redistribution of Sulfur and Lithium upon Cycling: Probing the Origin of Capacity Fading in Lithium-Sulfur Pouch Cells. <i>Energy Technology</i> , <b>2019</b> , 7, 1900111	3.5	24
109	Interfacial redox behaviors of sulfide electrolytes in fast-charging all-solid-state lithium metal batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 31, 267-273	19.4	24
108	4.5 V High-Voltage Rechargeable Batteries Enabled by the Reduction of Polarization on the Lithium Metal Anode. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 15235-15238	16.4	24
107	Review on Advanced Functional Separators for Lithium-Sulfur Batteries. <i>Acta Chimica Sinica</i> , <b>2017</b> , 75, 173	3.3	24
106	Stable Anion-Derived Solid Electrolyte Interphase in Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 22683-22687	16.4	24
105	Fluffy carbon nanotubes produced by shearing vertically aligned carbon nanotube arrays. <i>Carbon</i> , <b>2009</b> , 47, 538-541	10.4	23
104	The carrier transition from Li atoms to Li vacancies in solid-state lithium alloy anodes. <i>Science Advances</i> , <b>2021</b> , 7, eabi5520	14.3	23
103	Evaluation on a 400 Wh kg <sup>-1</sup> lithium-sulfur pouch cell. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 66, 24-29	12	23
102	Mesoporous Graphene Hosts for Dendrite-Free Lithium Metal Anode in Working Rechargeable Batteries. <i>Transactions of Tianjin University</i> , <b>2020</b> , 26, 127-134	2.9	22
101	Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 742-745	3.6	22
100	A Self-Limited Free-Standing Sulfide Electrolyte Thin Film for All-Solid-State Lithium Metal Batteries. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101985	15.6	22
99	Electrochemical Phase Evolution of Metal-Based Pre-Catalysts for High-Rate Polysulfide Conversion. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 9096-9102	3.6	21
98	Ion-exchange synthesis of high-energy-density prussian blue analogues for sodium ion battery cathodes with fast kinetics and long durability. <i>Journal of Power Sources</i> , <b>2019</b> , 436, 226868	8.9	21
97	Inhibiting Solvent Co-Intercalation in a Graphite Anode by a Localized High-Concentration Electrolyte in Fast-Charging Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 3444-3448	3.6	21

96	Ultrastable Zinc Anodes Enabled by Anti-Dehydration Ionic Liquid Polymer Electrolyte for Aqueous Zn Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 4008-4016	9.5	21
95	Formation mechanism of the solid electrolyte interphase in different ester electrolytes. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 19664-19668	13	21
94	Advanced electrode processing of lithium ion batteries: A review of powder technology in battery fabrication. <i>Particuology</i> , <b>2021</b> , 57, 56-71	2.8	21
93	Carbon-Nanotube-Array Double Helices. <i>Angewandte Chemie</i> , <b>2010</b> , 122, 3724-3727	3.6	20
92	The Insights of Lithium Metal Plating/Stripping in Porous Hosts: Progress and Perspectives. <i>Energy Technology</i> , <b>2021</b> , 9, 2000700	3.5	20
91	Solvent-Engineered Scalable Production of Polysulfide-Blocking Shields to Enhance Practical Lithium-Sulfur Batteries. <i>Small Methods</i> , <b>2018</b> , 2, 1800100	12.8	20
90	The direct dispersion of granular agglomerated carbon nanotubes in bismaleimide by high pressure homogenization for the production of strong composites. <i>Powder Technology</i> , <b>2012</b> , 217, 477-481	5.2	19
89	Advanced materials from natural materials: synthesis of aligned carbon nanotubes on wollastonites. <i>ChemSusChem</i> , <b>2010</b> , 3, 453-9	8.3	19
88	Metal-organic framework-derived hierarchical CoO@MnCoO nanocubes with enhanced electrocatalytic activity for Na-O batteries. <i>Nanoscale</i> , <b>2019</b> , 11, 5285-5294	7.7	19
87	A Supramolecular Capsule for Reversible Polysulfide Storage/Delivery in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 16441-16445	3.6	18
86	N-Methyl-2-pyrrolidone-assisted solvothermal synthesis of nanosize orthorhombic lithium iron phosphate with improved Li-storage performance. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 18908		18
85	Preferential growth of short aligned, metallic-rich single-walled carbon nanotubes from perpendicular layered double hydroxide film. <i>Nanoscale</i> , <b>2012</b> , 4, 2470-7	7.7	18
84	Rational recipe for bulk growth of graphene/carbon nanotube hybrids: New insights from in-situ characterization on working catalysts. <i>Carbon</i> , <b>2015</b> , 95, 292-301	10.4	17
83	Multi-Directional Growth of Aligned Carbon Nanotubes Over Catalyst Film Prepared by Atomic Layer Deposition. <i>Nanoscale Research Letters</i> , <b>2010</b> , 5, 1555-60	5	17
82	Selective Synthesis of Single/Double/Multi-walled Carbon Nanotubes on MgO-Supported Fe Catalyst. <i>Chinese Journal of Catalysis</i> , <b>2008</b> , 29, 1138-1144	11.3	17
81	Electrolyte Regulation towards Stable Lithium-Metal Anodes in Lithium-Sulfur Batteries with Sulfurized Polyacrylonitrile Cathodes. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 10821-10834	3.6	17
80	Lithium-Schwefel-Batterien mit Magerelektrolyt: Herausforderungen und Perspektiven. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 12736-12753	3.6	17
79	Competitive Solid-Electrolyte Interphase Formation on Working Lithium Anodes. <i>Trends in Chemistry</i> , <b>2021</b> , 3, 5-14	14.8	17

78	Patterning of hydrophobic three-dimensional carbon nanotube architectures by a pattern transfer approach. <i>Nanoscale</i> , <b>2010</b> , 2, 1401-4	7.7	16
77	Designing and Demystifying the Lithium Metal Interface toward Highly Reversible Batteries. <i>Advanced Materials</i> , <b>2021</b> , e2105962	24	16
76	Enhanced growth of carbon nanotube bundles in a magnetically assisted fluidized bed chemical vapor deposition. <i>Carbon</i> , <b>2016</b> , 108, 404-411	10.4	16
75	A metal nitride interlayer for long life lithium sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 29, 1-2	12	15
74	Controllable bulk growth of few-layer graphene/single-walled carbon nanotube hybrids containing Fe@C nanoparticles in a fluidized bed reactor. <i>Carbon</i> , <b>2014</b> , 67, 554-563	10.4	15
73	Comparison of vertically aligned carbon nanotube array intercalated production among vermiculites in fixed and fluidized bed reactors. <i>Powder Technology</i> , <b>2010</b> , 198, 285-291	5.2	15
72	Long lifespan and high-rate Zn anode boosted by 3D porous structure and conducting network. <i>Journal of Power Sources</i> , <b>2020</b> , 479, 228808	8.9	15
71	Dry electrode technology, the rising star in solid-state battery industrialization. <i>Matter</i> , <b>2022</b> , 5, 876-898	12.7	14
70	An encapsulating lithium-polysulfide electrolyte for practical lithium-sulfur batteries. <i>Chem</i> , <b>2022</b> ,	16.2	13
69	Mechanism understanding for stripping electrochemistry of Li metal anode. <i>SusMat</i> , <b>2021</b> , 1, 506-536		13
68	Anode Material Options Toward 500 Wh kg Lithium-Sulfur Batteries. <i>Advanced Science</i> , <b>2021</b> , 9, e2103910	10.6	13
67	Fabrication of double- and multi-walled carbon nanotube transparent conductive films by filtration-transfer process and their property improvement by acid treatment. <i>Applied Physics A: Materials Science and Processing</i> , <b>2011</b> , 103, 403-411	2.6	12
66	Substrate morphology induced self-organization into carbon nanotube arrays, ropes, and agglomerates. <i>Nanotechnology</i> , <b>2008</b> , 19, 435602	3.4	12
65	Quantitative kinetic analysis on oxygen reduction reaction: A perspective. <i>Nano Materials Science</i> , <b>2021</b> , 3, 313-318	10.2	12
64	Stable Anion-Derived Solid Electrolyte Interphase in Lithium Metal Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 22865	3.6	12
63	Reclaiming Inactive Lithium with a Triiodide/Iodide Redox Couple for Practical Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 22990-22995	16.4	12
62	Towards Practical High-Energy-Density Lithium-Sulfur Pouch Cells: A Review.. <i>Advanced Materials</i> , <b>2022</b> , e2201555	24	12
61	Toward Practical All-solid-state Batteries with Sulfide Electrolyte: A Review. <i>Chemical Research in Chinese Universities</i> , <b>2020</b> , 36, 377-385	2.2	11

60	Surface Redox-Active Organosulfur-Tethered Carbon Nanotubes for High Power and Long Cyclability of Na/Organosulfur Hybrid Energy Storage. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 280-289	20.1	11
59	An Ultrastable Na-Zn Solid-State Hybrid Battery Enabled by a Robust Dual-Cross-linked Polymer Electrolyte. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 17583-17591	9.5	10
58	SYNTHESIS OF SINGLE-WALLED CARBON NANOTUBES FROM LIQUEFIED PETROLEUM GAS. <i>Nano</i> , <b>2008</b> , 03, 95-100	1.1	10
57	Identifying the Critical Anion/ Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithium-Metal Anode Interface. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 4261-4266	3.6	10
56	Deciphering the Effect of Electrical Conductivity of Hosts on Lithium Deposition in Composite Lithium Metal Anodes. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101654	21.8	10
55	Polar interaction of polymer host/solvent enables stable solid electrolyte interphase in composite lithium metal anodes. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 64, 172-178	12	10
54	Review on nanomaterials for next-generation batteries with lithium metal anodes. <i>Nano Select</i> , <b>2020</b> , 1, 94-110	3.1	9
53	Large scale intercalated growth of short aligned carbon nanotubes among vermiculite layers in a fluidized bed reactor. <i>Journal of Physics and Chemistry of Solids</i> , <b>2010</b> , 71, 624-626	3.9	9
52	Carbon nanofiber microspheres obtained from ethylene using FeCl <sub>3</sub> as the catalyst precursor. <i>Materials Letters</i> , <b>2008</b> , 62, 3149-3151	3.3	9
51	Non-Solvating and Low-Dielectricity Cosolvent for Anion-Derived Solid Electrolyte Interphases in Lithium Metal Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 11543-11548	3.6	9
50	Failure Mechanism of Lithiophilic Sites in Composite Lithium Metal Anode under Practical Conditions. <i>Advanced Energy Materials</i> , <b>2022</b> , 12, 2103291	21.8	9
49	Anode-Free Solid-State Lithium Batteries: A Review. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2201044	21.8	9
48	Lithium Metal Anodes: Dual-Layered Film Protected Lithium Metal Anode to Enable Dendrite-Free Lithium Deposition (Adv. Mater. 25/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870181	24	8
47	Electrodes: Hierarchical Free-Standing Carbon-Nanotube Paper Electrodes with Ultrahigh Sulfur-Loading for Lithium-Sulfur Batteries (Adv. Funct. Mater. 39/2014). <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 6244-6244	15.6	8
46	Dead lithium formation in lithium metal batteries: A phase field model. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 11, 1201-1206	12	8
45	Very fast growth of millimeter-tall aligned carbon nanotubes between two stacked substrates coated with a metal catalyst. <i>Carbon</i> , <b>2011</b> , 49, 1395-1400	10.4	7
44	A Toolbox of Reference Electrodes for Lithium Batteries. <i>Advanced Functional Materials</i> , <b>2022</b> , 32, 21084496	4.96	7
43	Surface Gelation on Disulfide Electrocatalysts in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 1639-1644	16.4	7

42	High-valence sulfur-containing species in solid electrolyte interphase stabilizes lithium metal anodes in lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 68, 300-305	12	6
41	Direct Intermediate Regulation Enabled by Sulfur Containers in Working Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 22334-22339	3.6	6
40	Nucleation and Growth Mechanism of Anion-Derived Solid Electrolyte Interphase in Rechargeable Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 8602-8606	3.6	6
39	Multiscale understanding of high-energy cathodes in solid-state batteries: from atomic scale to macroscopic scale <b>2022</b> , 1, 012101		5
38	Lithium-Sulfur Batteries: An Organodiselenide Comediator to Facilitate Sulfur Redox Kinetics in Lithium-Sulfur Batteries (Adv. Mater. 13/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170100	24	5
37	Continuous Conductive Networks Built by Prussian Blue Cubes and Mesoporous Carbon Lead to Enhanced Sodium-Ion Storage Performances. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 38202-38212	9.5	5
36	Regulating Solvation Structure in Nonflammable Amide-Based Electrolytes for Long-Cycling and Safe Lithium Metal Batteries. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2200139	21.8	5
35	?????????????. <i>Scientia Sinica Chimica</i> , <b>2013</b> , 43, 641-666	1.6	4
34	Role of Lithiophilic Metal Sites in Lithium Metal Anodes. <i>Energy &amp; Fuels</i> , <b>2021</b> , 35, 12746-12752	4.1	4
33	Spatial and Kinetic Regulation of Sulfur Electrochemistry on Semi-Immobilized Redox Mediators in Working Batteries. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 17823-17828	3.6	3
32	4.5 V High-Voltage Rechargeable Batteries Enabled by the Reduction of Polarization on the Lithium Metal Anode. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 15379-15382	3.6	3
31	Carbon: Nanoarchitected Graphene/CNT@Porous Carbon with Extraordinary Electrical Conductivity and Interconnected Micro/Mesopores for Lithium-Sulfur Batteries (Adv. Funct. Mater. 19/2014). <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2920-2920	15.6	3
30	Lithium-Sulfur Batteries: Hierarchical Vine-Tree-Like Carbon Nanotube Architectures: In-Situ CVD Self-Assembly and Their Use as Robust Scaffolds for Lithium-Sulfur Batteries (Adv. Mater. 41/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 6986-6986	24	3
29	Lithium-Sulfur Batteries: Nitrogen-Doped Aligned Carbon Nanotube/Graphene Sandwiches: Facile Catalytic Growth on Bifunctional Natural Catalysts and Their Applications as Scaffolds for High-Rate Lithium-Sulfur Batteries (Adv. Mater. 35/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 6199-6199	24	3
28	Ether-compatible lithium sulfur batteries with robust performance via selenium doping. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 46, 199-201	12	3
27	A perspective on energy chemistry of low-temperature lithium metal batteries <b>2022</b> , 1, 72-81		3
26	Lithium-Sulfur Batteries: A Cooperative Interface for Highly Efficient Lithium-Sulfur Batteries (Adv. Mater. 43/2016). <i>Advanced Materials</i> , <b>2016</b> , 28, 9550-9550	24	2
25	Flexible Electrodes for Lithium-Sulfur Batteries <b>2018</b> , 155-181		2

24	Inspirations from Chinese Ancient Wisdom: Strategies toward Stable Interfaces in Batteries. <i>Matter</i> , <b>2019</b> , 1, 300-301	12.7	2
23	A generalizable, data-driven online approach to forecast capacity degradation trajectory of lithium batteries. <i>Journal of Energy Chemistry</i> , <b>2022</b> , 68, 548-555	12	2
22	Liquid Phase Therapy with Localized High-Concentration Electrolytes for Solid-State Li Metal Pouch Cells. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , <b>2020</b> , 2005003-0	3.8	2
21	Research Progress of Solid Electrolyte Interphase in Lithium Batteries. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , <b>2020</b> , 2010076-0	3.8	2
20	Stable interfaces constructed by concentrated ether electrolytes to render robust lithium metal batteries. <i>Chinese Journal of Chemical Engineering</i> , <b>2021</b> , 37, 152-152	3.2	2
19	The Boundary of Lithium Plating in Graphite Electrode for Safe Lithium-Ion Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 13117-13122	3.6	2
18	Reclaiming Inactive Lithium with a Triiodide/Iodide Redox Couple for Practical Lithium Metal Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 23172	3.6	2
17	Advances in carbon materials for stable lithium metal batteries. <i>New Carbon Materials</i> , <b>2022</b> , 37, 1-24	4.4	2
16	Full-Range Redox Mediation on Sulfur Redox Kinetics for High-Performance Lithium-Sulfur Batteries. <i>Batteries and Supercaps</i> , <b>2022</b> , 5,	5.6	2
15	Lithium-Metal Anodes: Dual-Phase Single-Ion Pathway Interfaces for Robust Lithium Metal in Working Batteries (Adv. Mater. 19/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970135	24	1
14	R&Ktitelbild: Electrochemical Phase Evolution of Metal-Based Pre-Catalysts for High-Rate Polysulfide Conversion (Angew. Chem. 23/2020). <i>Angewandte Chemie</i> , <b>2020</b> , 132, 9278-9278	3.6	1
13	Lithium Anodes: Conductive Nanostructured Scaffolds Render Low Local Current Density to Inhibit Lithium Dendrite Growth (Adv. Mater. 11/2016). <i>Advanced Materials</i> , <b>2016</b> , 28, 2090-2090	24	1
12	Frontispiece: Surface Gelation on Disulfide Electrocatalysts in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2022</b> , 61,	16.4	1
11	Designing and Demystifying the Lithium Metal Interface toward Highly Reversible Batteries (Adv. Mater. 52/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170413	24	1
10	Electrolyte Structure of Lithium Polysulfides with Anti-Reductive Solvent Shells for Practical Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 15631-15637	3.6	1
9	Frontispiz: Enhanced Electrochemical Kinetics on Conductive Polar Mediators for Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2016</b> , 128,	3.6	1
8	Frontispiece: Enhanced Electrochemical Kinetics on Conductive Polar Mediators for Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55,	16.4	1
7	Innentitelbild: Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal (Angew. Chem. 12/2019). <i>Angewandte Chemie</i> , <b>2019</b> , 131, 3692-3692	3.6	1

- 6 Innenrücktitelbild: A Sustainable Solid Electrolyte Interphase for High-Energy-Density Lithium Metal Batteries Under Practical Conditions (Angew. Chem. 8/2020). *Angewandte Chemie*, **2020**, 132, 3363-3363 3.6
- 5 Innentitelbild: Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode (Angew. Chem. 3/2018). *Angewandte Chemie*, **2018**, 130, 606-606 3.6
- 4 Innentitelbild: 4.5 V High-Voltage Rechargeable Batteries Enabled by the Reduction of Polarization on the Lithium Metal Anode (Angew. Chem. 43/2019). *Angewandte Chemie*, **2019**, 131, 15306-15306 3.6
- 3 Large scale synthesis of vertical aligned CNT array on irregular quartz particles. *Materials Research Society Symposia Proceedings*, **2008**, 1081, 1
- 2 Rücktitelbild: Identifying the Critical Anion-Cation Coordination to Regulate the Electric Double Layer for an Efficient Lithium-Metal Anode Interface (Angew. Chem. 8/2021). *Angewandte Chemie*, **2021**, 133, 4428-4428 3.6
- 1 Rücktitelbild: Lithium Nitrate Solvation Chemistry in Carbonate Electrolyte Sustains High-Voltage Lithium Metal Batteries (Angew. Chem. 43/2018). *Angewandte Chemie*, **2018**, 130, 14488-14488 3.6