

Xue-Qiang Zhang

List of Publications by Citations

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640
papers

69,863
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140
h-index

245
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709
ext. papers

84,291
ext. citations

12.5
avg, IF

8.78
L-index

#	Paper	IF	Citations
640	Toward Safe Lithium Metal Anode in Rechargeable Batteries: A Review. <i>Chemical Reviews</i> , 2017 , 117, 10403-10473	68.1	2918
639	Advanced Asymmetric Supercapacitors Based on Ni(OH) ₂ /Graphene and Porous Graphene Electrodes with High Energy Density. <i>Advanced Functional Materials</i> , 2012 , 22, 2632-2641	15.6	1668
638	Scalable synthesis of hierarchically structured carbon nanotube-graphene fibres for capacitive energy storage. <i>Nature Nanotechnology</i> , 2014 , 9, 555-62	28.7	1161
637	A three-dimensional carbon nanotube/graphene sandwich and its application as electrode in supercapacitors. <i>Advanced Materials</i> , 2010 , 22, 3723-8	24	1092
636	Powering Lithium-Sulfur Battery Performance by Propelling Polysulfide Redox at Sulfiphilic Hosts. <i>Nano Letters</i> , 2016 , 16, 519-27	11.5	1055
635	Review on High-Loading and High-Energy Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1700260	21.8	1010
634	A Review of Solid Electrolyte Interphases on Lithium Metal Anode. <i>Advanced Science</i> , 2016 , 3, 1500213	13.6	962
633	Nanostructured Metal Oxides and Sulfides for Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2017 , 29, 1601759	24	911
632	Fluoroethylene Carbonate Additives to Render Uniform Li Deposits in Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2017 , 27, 1605989	15.6	878
631	Lithiophilic Sites in Doped Graphene Guide Uniform Lithium Nucleation for Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 7764-7768	16.4	760
630	Dendrite-Free Lithium Deposition Induced by Uniformly Distributed Lithium Ions for Efficient Lithium Metal Batteries. <i>Advanced Materials</i> , 2016 , 28, 2888-95	24	699
629	A Review of Electrocatalytic Reduction of Dinitrogen to Ammonia under Ambient Conditions. <i>Advanced Energy Materials</i> , 2018 , 8, 1800369	21.8	619
628	Permselective graphene oxide membrane for highly stable and anti-self-discharge lithium-sulfur batteries. <i>ACS Nano</i> , 2015 , 9, 3002-11	16.7	605
627	Highly efficient metal-free growth of nitrogen-doped single-walled carbon nanotubes on plasma-etched substrates for oxygen reduction. <i>Journal of the American Chemical Society</i> , 2010 , 132, 15127-9	16.4	563
626	Unstacked double-layer templated graphene for high-rate lithium-sulphur batteries. <i>Nature Communications</i> , 2014 , 5, 3410	17.4	551
625	Ionic shield for polysulfides towards highly-stable lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2014 , 7, 347-353	35.4	547
624	Nanocarbon for Oxygen Reduction Electrocatalysis: Dopants, Edges, and Defects. <i>Advanced Materials</i> , 2017 , 29, 1604103	24	544

623	The road for nanomaterials industry: a review of carbon nanotube production, post-treatment, and bulk applications for composites and energy storage. <i>Small</i> , 2013 , 9, 1237-65	11	543
622	Spatially Confined Hybridization of Nanometer-Sized NiFe Hydroxides into Nitrogen-Doped Graphene Frameworks Leading to Superior Oxygen Evolution Reactivity. <i>Advanced Materials</i> , 2015 , 27, 4516-4522	24	533
621	Hierarchical NiMn Layered Double Hydroxide/Carbon Nanotubes Architecture with Superb Energy Density for Flexible Supercapacitors. <i>Advanced Functional Materials</i> , 2014 , 24, 2938-2946	15.6	532
620	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> , 2014 , 10, 2251-9	11	525
619	Topological Defects in Metal-Free Nanocarbon for Oxygen Electrocatalysis. <i>Advanced Materials</i> , 2016 , 28, 6845-51	24	522
618	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> , 2017 , 114, 11069-11074	11.5	515
617	Design Principles for Heteroatom-Doped Nanocarbon to Achieve Strong Anchoring of Polysulfides for Lithium-Sulfur Batteries. <i>Small</i> , 2016 , 12, 3283-91	11	515
616	Prestoring Lithium into Stable 3D Nickel Foam Host as Dendrite-Free Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2017 , 27, 1700348	15.6	500
615	Conductive Nanostructured Scaffolds Render Low Local Current Density to Inhibit Lithium Dendrite Growth. <i>Advanced Materials</i> , 2016 , 28, 2155-62	24	498
614	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> , 2014 , 26, 6100-5	24	492
613	Multi-functional separator/interlayer system for high-stable lithium-sulfur batteries: Progress and prospects. <i>Energy Storage Materials</i> , 2015 , 1, 127-145	19.4	491
612	Hierarchical Nanocomposites Derived from Nanocarbons and Layered Double Hydroxides - Properties, Synthesis, and Applications. <i>Advanced Functional Materials</i> , 2012 , 22, 675-694	15.6	477
611	Defect Engineering toward Atomic Co-N -C in Hierarchical Graphene for Rechargeable Flexible Solid Zn-Air Batteries. <i>Advanced Materials</i> , 2017 , 29, 1703185	24	473
610	Graphene/single-walled carbon nanotube hybrids: one-step catalytic growth and applications for high-rate Li-S batteries. <i>ACS Nano</i> , 2012 , 6, 10759-69	16.7	462
609	A review of flexible lithium-sulfur and analogous alkali metal-chalcogen rechargeable batteries. <i>Chemical Society Reviews</i> , 2017 , 46, 5237-5288	58.5	461
608	Nanoarchitected Graphene/CNT@Porous Carbon with Extraordinary Electrical Conductivity and Interconnected Micro/Mesopores for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2014 , 24, 2772-2781	15.6	452
607	Enhanced Electrochemical Kinetics on Conductive Polar Mediators for Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 12990-12995	16.4	442
606	Coralloid Carbon Fiber-Based Composite Lithium Anode for Robust Lithium Metal Batteries. <i>Joule</i> , 2018 , 2, 764-777	27.8	435

605	Hierarchical Free-Standing Carbon-Nanotube Paper Electrodes with Ultrahigh Sulfur-Loading for Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2014 , 24, 6105-6112	15.6	432
604	A Cooperative Interface for Highly Efficient Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2016 , 28, 9551-9558	21.5	431
603	Carbon nitride with simultaneous porous network and O-doping for efficient solar-energy-driven hydrogen evolution. <i>Nano Energy</i> , 2015 , 12, 646-656	17.1	420
602	Implantable Solid Electrolyte Interphase in Lithium-Metal Batteries. <i>Chem</i> , 2017 , 2, 258-270	16.2	411
601	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5301-5305	16.4	402
600	A review of rechargeable batteries for portable electronic devices. <i>Information Materials</i> , 2019 , 1, 6-32	23.1	400
599	Recent Advances in Energy Chemistry between Solid-State Electrolyte and Safe Lithium-Metal Anodes. <i>Chem</i> , 2019 , 5, 74-96	16.2	383
598	A Review of Precious-Metal-Free Bifunctional Oxygen Electrocatalysts: Rational Design and Applications in Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1803329	15.6	368
597	Artificial Soft/Rigid Protective Layer for Dendrite-Free Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2018 , 28, 1705838	15.6	355
596	Conductive and Catalytic Triple-Phase Interfaces Enabling Uniform Nucleation in High-Rate Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2019 , 9, 1802768	21.8	347
595	A general approach to cobalt-based homobimetallic phosphide ultrathin nanosheets for highly efficient oxygen evolution in alkaline media. <i>Energy and Environmental Science</i> , 2017 , 10, 893-899	35.4	342
594	Advanced Micro/Nanostructures for Lithium Metal Anodes. <i>Advanced Science</i> , 2017 , 4, 1600445	13.6	338
593	Multiscale Principles To Boost Reactivity in Gas-Involving Energy Electrocatalysis. <i>Accounts of Chemical Research</i> , 2018 , 51, 881-889	24.3	335
592	Lithium Bond Chemistry in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 8178-8182	16.4	332
591	Open-Ended, N-Doped Carbon Nanotube/Graphene Hybrid Nanostructures as High-Performance Catalyst Support. <i>Advanced Functional Materials</i> , 2011 , 21, 999-1006	15.6	331
590	Aligned carbon nanotube/sulfur composite cathodes with high sulfur content for lithium-sulfur batteries. <i>Nano Energy</i> , 2014 , 4, 65-72	17.1	328
589	Synchronous immobilization and conversion of polysulfides on a VO ₂ /N binary host targeting high sulfur load Li-S batteries. <i>Energy and Environmental Science</i> , 2018 , 11, 2620-2630	35.4	327
588	Popcorn Inspired Porous Macrocellular Carbon: Rapid Puffing Fabrication from Rice and Its Applications in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1701110	21.8	317

587	Nanostructured energy materials for electrochemical energy conversion and storage: A review. <i>Journal of Energy Chemistry</i> , 2016 , 25, 967-984	12	316
586	Structural evolution during annealing of thermally reduced graphene nanosheets for application in supercapacitors. <i>Carbon</i> , 2012 , 50, 3572-3584	10.4	312
585	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> , 2014 , 1, 1400227	4.6	311
584	A Bimetallic Zn/Fe Polyphthalocyanine-Derived Single-Atom Fe-N Catalytic Site: A Superior Trifunctional Catalyst for Overall Water Splitting and Zn-Air Batteries. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 8614-8618	16.4	305
583	Artificial Interphases for Highly Stable Lithium Metal Anode. <i>Matter</i> , 2019 , 1, 317-344	12.7	303
582	Toward Full Exposure of Active Sites: Nanocarbon Electrocatalyst with Surface Enriched Nitrogen for Superior Oxygen Reduction and Evolution Reactivity. <i>Advanced Functional Materials</i> , 2014 , 24, 5956-5961	15.6	300
581	Towards High-Safe Lithium Metal Anodes: Suppressing Lithium Dendrites via Tuning Surface Energy. <i>Advanced Science</i> , 2017 , 4, 1600168	13.6	298
580	CaO-Templated Growth of Hierarchical Porous Graphene for High-Power Lithium-Sulfur Battery Applications. <i>Advanced Functional Materials</i> , 2016 , 26, 577-585	15.6	294
579	Carbon nanotube mass production: principles and processes. <i>ChemSusChem</i> , 2011 , 4, 864-89	8.3	288
578	Dual-Layered Film Protected Lithium Metal Anode to Enable Dendrite-Free Lithium Deposition. <i>Advanced Materials</i> , 2018 , 30, e1707629	24	278
577	Rational Integration of Polypropylene/Graphene Oxide/Nafion as Ternary-Layered Separator to Retard the Shuttle of Polysulfides for Lithium-Sulfur Batteries. <i>Small</i> , 2016 , 12, 381-9	11	267
576	Lithiophilicity chemistry of heteroatom-doped carbon to guide uniform lithium nucleation in lithium metal anodes. <i>Science Advances</i> , 2019 , 5, eaau7728	14.3	266
575	Ternary Hybrids of Amorphous Nickel Hydroxide/Carbon Nanotube-Conducting Polymer for Supercapacitors with High Energy Density, Excellent Rate Capability, and Long Cycle Life. <i>Advanced Functional Materials</i> , 2015 , 25, 1063-1073	15.6	264
574	Dual-Phase Lithium Metal Anode Containing a Polysulfide-Induced Solid Electrolyte Interphase and Nanostructured Graphene Framework for Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2015 , 9, 6373-82	16.7	261
573	Nanodiamonds suppress the growth of lithium dendrites. <i>Nature Communications</i> , 2017 , 8, 336	17.4	257
572	Growth of half-meter long carbon nanotubes based on Schulz-Flory distribution. <i>ACS Nano</i> , 2013 , 7, 6156-617	16.7	255
571	Bifunctional Transition Metal Hydroxysulfides: Room-Temperature Sulfurization and Their Applications in Zn-Air Batteries. <i>Advanced Materials</i> , 2017 , 29, 1702327	24	252
570	Janus Separator of Polypropylene-Supported Cellular Graphene Framework for Sulfur Cathodes with High Utilization in Lithium-Sulfur Batteries. <i>Advanced Science</i> , 2016 , 3, 1500268	13.6	251

569	Lithium Nitrate Solvation Chemistry in Carbonate Electrolyte Sustains High-Voltage Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 14055-14059	16.4	249
568	Aromatic sulfide, sulfoxide, and sulfone mediated mesoporous carbon monolith for use in supercapacitor. <i>Nano Energy</i> , 2012 , 1, 624-630	17.1	248
567	An Armored Mixed Conductor Interphase on a Dendrite-Free Lithium-Metal Anode. <i>Advanced Materials</i> , 2018 , 30, e1804461	24	246
566	Superlubricity in centimetres-long double-walled carbon nanotubes under ambient conditions. <i>Nature Nanotechnology</i> , 2013 , 8, 912-6	28.7	243
565	High-Performance All-Solid-State Lithium-Sulfur Batteries Enabled by Amorphous Sulfur-Coated Reduced Graphene Oxide Cathodes. <i>Advanced Energy Materials</i> , 2017 , 7, 1602923	21.8	241
564	The gap between long lifespan Li-S coin and pouch cells: The importance of lithium metal anode protection. <i>Energy Storage Materials</i> , 2017 , 6, 18-25	19.4	240
563	Fabrication and electrochemical performances of hierarchical porous Ni(OH) ₂ nanoflakes anchored on graphene sheets. <i>Journal of Materials Chemistry</i> , 2012 , 22, 11494		240
562	Hierarchically aminated graphene honeycombs for electrochemical capacitive energy storage. <i>Journal of Materials Chemistry</i> , 2012 , 22, 14076		239
561	Annealing a graphene oxide film to produce a free standing high conductive graphene film. <i>Carbon</i> , 2012 , 50, 659-667	10.4	236
560	An ion redistributor for dendrite-free lithium metal anodes. <i>Science Advances</i> , 2018 , 4, eaat3446	14.3	231
559	Sulfide solid electrolytes for all-solid-state lithium batteries: Structure, conductivity, stability and application. <i>Energy Storage Materials</i> , 2018 , 14, 58-74	19.4	228
558	A Bifunctional Perovskite Promoter for Polysulfide Regulation toward Stable Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2018 , 30, 1705219	24	228
557	A review of nanocarbons in energy electrocatalysis: Multifunctional substrates and highly active sites. <i>Journal of Energy Chemistry</i> , 2017 , 26, 1077-1093	12	220
556	A porphyrin covalent organic framework cathode for flexible Zn-air batteries. <i>Energy and Environmental Science</i> , 2018 , 11, 1723-1729	35.4	219
555	Combining theory and experiment in lithium-sulfur batteries: Current progress and future perspectives. <i>Materials Today</i> , 2019 , 22, 142-158	21.8	217
554	Controlled functionalization of carbonaceous fibers for asymmetric solid-state micro-supercapacitors with high volumetric energy density. <i>Advanced Materials</i> , 2014 , 26, 6790-7	24	217
553	Regulating the Inner Helmholtz Plane for Stable Solid Electrolyte Interphase on Lithium Metal Anodes. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9422-9429	16.4	216
552	Li ₂ S ₅ -based ternary-salt electrolyte for robust lithium metal anode. <i>Energy Storage Materials</i> , 2016 , 3, 77-84	19.4	215

551	Implanting Atomic Cobalt within Mesoporous Carbon toward Highly Stable Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2019 , 31, e1903813	24	215
550	Fluorinated Solid-Electrolyte Interphase in High-Voltage Lithium Metal Batteries. <i>Joule</i> , 2019 , 3, 2647-2661	17.8	214
549	Exceptional catalytic effects of black phosphorus quantum dots in shuttling-free lithium sulfur batteries. <i>Nature Communications</i> , 2018 , 9, 4164	17.4	210
548	Coordination Tunes Selectivity: Two-Electron Oxygen Reduction on High-Loading Molybdenum Single-Atom Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 9171-9176	16.4	206
547	Entrapment of sulfur in hierarchical porous graphene for lithium-sulfur batteries with high rate performance from 40 to 60°C. <i>Nano Energy</i> , 2013 , 2, 314-321	17.1	204
546	Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3779-3783	16.4	204
545	3D TiC/C Core/Shell Nanowire Skeleton for Dendrite-Free and Long-Life Lithium Metal Anode. <i>Advanced Energy Materials</i> , 2018 , 8, 1702322	21.8	204
544	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> , 2017 , 2, 795-801	20.1	203
543	A Review of Functional Binders in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1802107	21.8	203
542	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> , 2016 , 327, 212-220	8.9	201
541	Designing host materials for sulfur cathodes: from physical confinement to surface chemistry. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11018-20	16.4	196
540	Expediting redox kinetics of sulfur species by atomic-scale electrocatalysts in lithium-sulfur batteries. <i>Information Materials</i> , 2019 , 1, 533-541	23.1	196
539	Macroporous 'bubble' graphene film via template-directed ordered-assembly for high rate supercapacitors. <i>Chemical Communications</i> , 2012 , 48, 7149-51	5.8	193
538	3D Carbonaceous Current Collectors: The Origin of Enhanced Cycling Stability for High-Sulfur-Loading Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2016 , 26, 6351-6358	15.6	191
537	A Perspective toward Practical Lithium-Sulfur Batteries. <i>ACS Central Science</i> , 2020 , 6, 1095-1104	16.8	184
536	Rationalizing Electrocatalysis of Li-S Chemistry by Mediator Design: Progress and Prospects. <i>Advanced Energy Materials</i> , 2020 , 10, 1901075	21.8	184
535	Framework-Porphyrin-Derived Single-Atom Bifunctional Oxygen Electrocatalysts and their Applications in Zn-Air Batteries. <i>Advanced Materials</i> , 2019 , 31, e1900592	24	179
534	Intercalated Electrolyte with High Transference Number for Dendrite-Free Solid-State Lithium Batteries. <i>Advanced Functional Materials</i> , 2019 , 29, 1901047	15.6	178

533	Lithiophilic LiC Layers on Carbon Hosts Enabling Stable Li Metal Anode in Working Batteries. <i>Advanced Materials</i> , 2019 , 31, e1807131	24	177
532	Regulating Anions in the Solvation Sheath of Lithium Ions for Stable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2019 , 4, 411-416	20.1	176
531	Synthesis of biodiesel from cottonseed oil and methanol using a carbon-based solid acid catalyst. <i>Fuel Processing Technology</i> , 2009 , 90, 1002-1008	7.2	175
530	Lithium matrix composite anode protected by a solid electrolyte layer for stable lithium metal batteries. <i>Journal of Energy Chemistry</i> , 2019 , 37, 29-34	12	175
529	Porphyrin-Derived Graphene-Based Nanosheets Enabling Strong Polysulfide Chemisorption and Rapid Kinetics in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1800849	21.8	172
528	Review Li Metal Anode in Working Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6058-A6072	3.9	172
527	A Polysulfide-Immobilizing Polymer Retards the Shuttling of Polysulfide Intermediates in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2018 , 30, e1804581	24	168
526	Perspectives for restraining harsh lithium dendrite growth: Towards robust lithium metal anodes. <i>Energy Storage Materials</i> , 2018 , 15, 148-170	19.4	166
525	Controlling Dendrite Growth in Solid-State Electrolytes. <i>ACS Energy Letters</i> , 2020 , 5, 833-843	20.1	165
524	Sulfurized solid electrolyte interphases with a rapid Li ⁺ diffusion on dendrite-free Li metal anodes. <i>Energy Storage Materials</i> , 2018 , 10, 199-205	19.4	165
523	Healing High-Loading Sulfur Electrodes with Unprecedented Long Cycling Life: Spatial Heterogeneity Control. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8458-8466	16.4	163
522	Dual-Phase Single-Ion Pathway Interfaces for Robust Lithium Metal in Working Batteries. <i>Advanced Materials</i> , 2019 , 31, e1808392	24	162
521	Direct observation of graphene growth and associated copper substrate dynamics by in situ scanning electron microscopy. <i>ACS Nano</i> , 2015 , 9, 1506-19	16.7	161
520	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> , 2010 , 132, 14739-41	16.4	161
519	A Toolbox for Lithium-Sulfur Battery Research: Methods and Protocols. <i>Small Methods</i> , 2017 , 1, 1700134	12.8	160
518	Electronic and Ionic Channels in Working Interfaces of Lithium Metal Anodes. <i>ACS Energy Letters</i> , 2018 , 3, 1564-1570	20.1	158
517	Catalytic self-limited assembly at hard templates: a mesoscale approach to graphene nanoshells for lithium-sulfur batteries. <i>ACS Nano</i> , 2014 , 8, 11280-9	16.7	156
516	Rational design of two-dimensional nanomaterials for lithium-sulfur batteries. <i>Energy and Environmental Science</i> , 2020 , 13, 1049-1075	35.4	156

515	Interconnected carbon nanotube/graphene nanosphere scaffolds as free-standing paper electrode for high-rate and ultra-stable lithium-sulfur batteries. <i>Nano Energy</i> , 2015 , 11, 746-755	17.1	154
514	Binder-free activated carbon/carbon nanotube paper electrodes for use in supercapacitors. <i>Nano Research</i> , 2011 , 4, 870-881	10	154
513	Fast Charging Lithium Batteries: Recent Progress and Future Prospects. <i>Small</i> , 2019 , 15, e1805389	11	151
512	Electrosynthesis of Hydrogen Peroxide Synergistically Catalyzed by Atomic Co-N-C Sites and Oxygen Functional Groups in Noble-Metal-Free Electrocatalysts. <i>Advanced Materials</i> , 2019 , 31, e1808173 ²⁴	13.4	149
511	High-defect hydrophilic carbon cuboids anchored with Co/CoO nanoparticles as highly efficient and ultra-stable lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 10166-10173	13	149
510	Superstrong ultralong carbon nanotubes for mechanical energy storage. <i>Advanced Materials</i> , 2011 , 23, 3387-91	24	148
509	A promising PEO/LAGP hybrid electrolyte prepared by a simple method for all-solid-state lithium batteries. <i>Solid State Ionics</i> , 2016 , 295, 65-71	3.3	147
508	Columnar Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14207-14211	16.4	146
507	Enhanced Electrochemical Kinetics and Polysulfide Traps of Indium Nitride for Highly Stable Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2018 , 12, 9578-9586	16.7	146
506	Hierarchical Graphene-Carbon Fiber Composite Paper as a Flexible Lateral Heat Spreader. <i>Advanced Functional Materials</i> , 2014 , 24, 4222-4228	15.6	145
505	Intrinsic Electrocatalytic Activity Regulation of M-N-C Single-Atom Catalysts for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 4448-4463	16.4	145
504	A Nanosized CoNi Hydroxide@Hydroxysulfide Core-Shell Heterostructure for Enhanced Oxygen Evolution. <i>Advanced Materials</i> , 2019 , 31, e1805658	24	144
503	Advances in Interfaces between Li Metal Anode and Electrolyte. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1701097	4.6	144
502	Atomic Modulation and Structure Design of Carbons for Bifunctional Electrocatalysis in Metal-Air Batteries. <i>Advanced Materials</i> , 2019 , 31, e1803800	24	141
501	Nitrogen doped holey graphene as an efficient metal-free multifunctional electrochemical catalyst for hydrazine oxidation and oxygen reduction. <i>Nanoscale</i> , 2013 , 5, 3457-64	7.7	140
500	Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 734-737	16.4	140
499	High-performance flexible lithium-ion electrodes based on robust network architecture. <i>Energy and Environmental Science</i> , 2012 , 5, 6845	35.4	137
498	Monolithic-structured ternary hydroxides as freestanding bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 7245-7250	13	135

497	Towards stable lithium-sulfur batteries: Mechanistic insights into electrolyte decomposition on lithium metal anode. <i>Energy Storage Materials</i> , 2017 , 8, 194-201	19.4	133
496	A compact inorganic layer for robust anode protection in lithium-sulfur batteries. <i>Information Materials</i> , 2020 , 2, 379-388	23.1	133
495	Dendrite-free lithium metal anodes: stable solid electrolyte interphases for high-efficiency batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 7207-7209	13	132
494	Three-dimensional hierarchically ordered porous carbons with partially graphitic nanostructures for electrochemical capacitive energy storage. <i>ChemSusChem</i> , 2012 , 5, 563-71	8.3	132
493	3D Mesoporous van der Waals Heterostructures for Trifunctional Energy Electrocatalysis. <i>Advanced Materials</i> , 2018 , 30, 1705110	24	132
492	Scaled-up fabrication of porous-graphene-modified separators for high-capacity lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2017 , 7, 56-63	19.4	131
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