Jun Lu

List of Publications by Year in Descending Order

579 papers	51,144 citations	123 h-index	205 g-index
623 ext. papers	62,495 ext. citations	15.6 avg, IF	8.3 L-index

#	Paper	IF	Citations
579	Evidence of Morphological Change in Sulfur Cathodes upon Irradiation by Synchrotron X-rays. *ACS Energy Letters*, **2022**, 7, 577-582	20.1	1
578	A long-life lithium-oxygen battery via a molecular quenching/mediating mechanism.. *Science Advances*, **2022**, 8, eabm1899	14.3	9
577	Li2S Cathodes in LithiumSulfur Batteries. *Modern Aspects of Electrochemistry*, **2022**, 83-109		
576	Ultrafast Metal Electrodeposition Revealed by in-situ Optical Imaging and Theoretical Modeling towards Fast-charging Zn Battery Chemistry.. *Angewandte Chemie - International Edition*, **2022**,	16.4	9
575	High Nickel and No Cobalt-The Pursuit of Next-Generation Layered Oxide Cathodes.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	4
574	Atomistic Insights of Irreversible Li+ Intercalation in MnO2 Electrode. *Angewandte Chemie*, **2022**, 134, e202113420	3.6	1
573	Energy Spotlight. *ACS Energy Letters*, **2022**, 7, 1125-1127	20.1	
572	Ultrafast, Durable, and High-loading Polymer Anode for Aqueous Zinc-Ion Batteries and Supercapacitors.. *Advanced Materials*, **2022**, e2200077	24	10
571	On the Road to Sustainable Energy Storage Technologies: Synthesis of Anodes for Na-Ion Batteries from Biowaste. *Batteries*, **2022**, 8, 28	5.7	2
570	Transferring Liquid Metal to form a Hybrid Solid Electrolyte via a Wettability-Tuning Technology for Lithium Metal Anodes.. *Advanced Materials*, **2022**, e2200181	24	4
569	Regulation of Surface Defect Chemistry towards Stable Ni-rich Cathodes.. *Advanced Materials*, **2022**, e2200744	24	11
568	Enabling high energy lithium metal batteries via single-crystal Ni-rich cathode material co-doping strategy.. *Nature Communications*, **2022**, 13, 2319	17.4	9
567	Theory-guided experimental design in battery materials research.. *Science Advances*, **2022**, 8, eabm2422	14.3	9
566	Unravelling the Nature of the Intrinsic Complex Structure of Binary Phase Na-layered Oxides.. *Advanced Materials*, **2022**, e2202137	24	2
565	Catalytic materials for lithium-sulfur batteries: mechanisms, design strategies and future perspective. *Materials Today*, **2021**,	21.8	14
564	Atomistic Insights of Irreversible Li Intercalation in MnO Electrode. *Angewandte Chemie - International Edition*, **2021**,	16.4	1
563	Rational design of mechanically robust Ni-rich cathode materials via concentration gradient strategy. *Nature Communications*, **2021**, 12, 6024	17.4	21

562	Prelithiated Li-Enriched Gradient Interphase toward Practical High-Energy NMC Silicon Full Cell. *ACS Energy Letters*, **2021**, 6, 320-328	20.1	16
561	Rejuvenating dead lithium supply in lithium metal anodes by iodine redox. *Nature Energy*, **2021**, 6, 378-387	52.3	108
560	Whole-Voltage-Range Oxygen Redox in P2-Layered Cathode Materials for Sodium-Ion Batteries. *Advanced Materials*, **2021**, 33, e2008194	24	39
559	Process Engineering to Increase the Layered Phase Concentration in the Immediate Products of Flame Spray Pyrolysis. *ACS Applied Materials & Interfaces*, **2021**, 13, 26915-26923	9.5	6
558	Designing inorganic electrolytes for solid-state Li-ion batteries: A perspective of LGPS and garnet. *Materials Today*, **2021**, 50, 418-418	21.8	15
557	A universal method to fabricating porous carbon for Li-O2 battery. *Nano Energy*, **2021**, 82, 105782	17.1	14
556	Challenges and future perspectives on sodium and potassium ion batteries for grid-scale energy storage. *Materials Today*, **2021**, 50, 400-400	21.8	39
555	Understanding the Effect of Solid Electrocatalysts on Achieving Highly Energy-Efficient Lithium Oxygen Batteries. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100045	1.6	0
554	Nanotechnology for Sulfur Cathodes. *ACS Nano*, **2021**, 15, 8087-8094	16.7	8
553	Mesocrystallizing Nanograins for Enhanced Li+ Storage. *Advanced Energy Materials*, **2021**, 11, 2100503	21.8	3
552	Chemical Heterointerface Engineering on Hybrid Electrode Materials for Electrochemical Energy Storage.. *Small Methods*, **2021**, 5, e2100444	12.8	21
551	Structural Aspects of P2-Type Na0.67Mn0.6Ni0.2Li0.2O2 (MNL) Stabilization by Lithium Defects as a Cathode Material for Sodium-Ion Batteries. *Advanced Functional Materials*, **2021**, 31, 2102939	15.6	7
550	Burning magnesium in carbon dioxide for highly effective phosphate removal **2021**, 3, 330-337		1
549	Understanding the Gap between Academic Research and Industrial Requirements in Rechargeable Zinc-Ion Batteries. *Batteries and Supercaps*, **2021**, 4, 60-71	5.6	9
548	Revealing the Atomic Structures of Exposed Lateral Surfaces for Polymorphic Manganese Dioxide Nanowires. *Small Structures*, **2021**, 2, 2000091	8.7	7
547	In Situ Construction of Uniform and Robust Cathode Electrolyte Interphase for Li-Rich Layered Oxides. *Advanced Functional Materials*, **2021**, 31, 2009192	15.6	25
546	Counter-Intuitive Structural Instability Aroused by Transition Metal Migration in Polyanionic Sodium Ion Host. *Advanced Energy Materials*, **2021**, 11, 2003256	21.8	14
545	Biphasic P2/O3-NaLiMnFeO: a structural investigation. *Dalton Transactions*, **2021**, 50, 1357-1365	4.3	2

544	Visualizing Lithium Dendrite Formation within Solid-State Electrolytes. *ACS Energy Letters*, **2021**, 6, 451-458	20.1	31
543	Localized Polysulfide Injector for the Activation of Bulk Lithium Sulfide. *Journal of the American Chemical Society*, **2021**, 143, 2185-2189	16.4	14
542	Atomic/molecular layer deposition for energy storage and conversion. *Chemical Society Reviews*, **2021**, 50, 3889-3956	58.5	39
541	1000 Wh L lithium-ion batteries enabled by crosslink-shrunk tough carbon encapsulated silicon microparticle anodes. *National Science Review*, **2021**, 8, nwab012	10.8	16
540	Enabling stable and high-rate cycling of a Ni-rich layered oxide cathode for lithium-ion batteries by modification with an artificial Li+-conducting cathode-electrolyte interphase. *Journal of Materials Chemistry A*, **2021**, 9, 11623-11631	13	5
539	Understanding Co roles towards developing Co-free Ni-rich cathodes for rechargeable batteries. *Nature Energy*, **2021**, 6, 277-286	62.3	64
538	Correlating Catalyst Design and Discharged Product to Reduce Overpotential in Li-CO Batteries. *Small*, **2021**, 17, e2007760	11	8
537	Improved Sodiation Additive and Its Nuances in the Performance Enhancement of Sodium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 11814-11821	9.5	7
536	3d-Orbital Occupancy Regulated Ir-Co Atomic Pair Toward Superior Bifunctional Oxygen Electrocatalysis. *ACS Catalysis*, **2021**, 11, 8837-8846	13.1	26
535	Energy Spotlight. *ACS Energy Letters*, **2021**, 6, 2983-2984	20.1	
534	A synergistic exploitation to produce high-voltage quasi-solid-state lithium metal batteries. *Nature Communications*, **2021**, 12, 5746	17.4	17
533	Reaction inhomogeneity coupling with metal rearrangement triggers electrochemical degradation in lithium-rich layered cathode. *Nature Communications*, **2021**, 12, 5370	17.4	10
532	Surface lattice engineering for fine-tuned spatial configuration of nanocrystals. *Nature Communications*, **2021**, 12, 5661	17.4	4
531	(S)TEM-EELS as an advanced characterization technique for lithium-ion batteries. *Materials Chemistry Frontiers*, **2021**, 5, 5186-5193	7.8	5
530	Exploring new battery knowledge by advanced characterizing technologies. *Exploration*, **2021**, 1, 20210130		4
529	In Situ Formation of Polycyclic Aromatic Hydrocarbons as an Artificial Hybrid Layer for Lithium Metal Anodes.. *Nano Letters*, **2021**,	11.5	3
528	Understanding the Role of Lithium Iodide in Lithium-Oxygen Batteries. *Advanced Materials*, **2021**, e2106148	14	7
527	Recent progress and future perspectives of flexible metal-air batteries. *SmartMat*, **2021**, 2, 519-553	22.8	5

526	Direct observation of the formation and stabilization of metallic nanoparticles on carbon supports. *Nature Communications*, **2020**, 11, 6373	17.4	20
525	Titelbild: Cation Additive Enabled Rechargeable LiOH-Based Lithium□Oxygen Batteries (Angew. Chem. 51/2020). *Angewandte Chemie*, **2020**, 132, 22993-22993	3.6	
524	Beyond Volume Variation: Anisotropic and Protrusive Lithiation in Bismuth Nanowire. *ACS Nano*, **2020**, 14, 15669-15677	16.7	7
523	Fiber-Shaped Fluidic Nanogenerator with High Power Density for Self-Powered Integrated Electronics. *Cell Reports Physical Science*, **2020**, 1, 100175	6.1	5
522	Cation Additive Enabled Rechargeable LiOH-Based Lithium□Oxygen Batteries. *Angewandte Chemie*, **2020**, 132, 23178-23182	3.6	4
521	From Sodium-Oxygen to Sodium-Air Battery: Enabled by Sodium Peroxide Dihydrate. *Nano Letters*, **2020**, 20, 4681-4686	11.5	11
520	Theoretical Simulation and Modeling of Three-Dimensional Batteries. *Cell Reports Physical Science*, **2020**, 1, 100078	6.1	26
519	A Lithium Metal Anode Surviving Battery Cycling Above 200 □C. *Advanced Materials*, **2020**, 32, e2000952	24	18
518	Rational Design of a NiN Electrocatalyst to Accelerate Polysulfide Conversion in Lithium-Sulfur Batteries. *ACS Nano*, **2020**, 14, 6673-6682	16.7	103
517	Polyolefin-Based Janus Separator for Rechargeable Sodium Batteries. *Angewandte Chemie*, **2020**, 132, 16868-16877	3.6	3
516	Mesoporous PdAg Nanospheres for Stable Electrochemical CO Reduction to Formate. *Advanced Materials*, **2020**, 32, e2000992	24	83
515	Potassium-Ion Batteries: Surface Amorphization of Vanadium Dioxide (B) for K-Ion Battery (Adv. Energy Mater. 23/2020). *Advanced Energy Materials*, **2020**, 10, 2070103	21.8	10
514	Surface regulation enables high stability of single-crystal lithium-ion cathodes at high voltage. *Nature Communications*, **2020**, 11, 3050	17.4	97
513	Activating Li2S as the Lithium-Containing Cathode in Lithium□Sulfur Batteries. *ACS Energy Letters*, **2020**, 5, 2234-2245	20.1	59
512	A High-Rate Aqueous Proton Battery Delivering Power Below □78 □C via an Unfrozen Phosphoric Acid. *Advanced Energy Materials*, **2020**, 10, 2000968	21.8	64
511	Three-Dimensional Microbatteries beyond Lithium Ion. *Matter*, **2020**, 2, 1366-1376	12.7	54
510	Review□Polymer Electrolytes for Sodium Batteries. *Journal of the Electrochemical Society*, **2020**, 167, 070534	3.9	45
509	Rooting binder-free tin nanoarrays into copper substrate via tin-copper alloying for robust energy storage. *Nature Communications*, **2020**, 11, 1212	17.4	33

508	Toward Highly Selective Electrochemical CO Reduction using Metal-Free Heteroatom-Doped Carbon. *Advanced Science*, **2020**, 7, 2001002	13.6	21
507	An Iron-Decorated Carbon Aerogel for Rechargeable Flow and Flexible Zn-Air Batteries. *Advanced Materials*, **2020**, 32, e2002292	24	91
506	Oxygen-Based Anion Redox for Lithium Batteries. *Accounts of Chemical Research*, **2020**, 53, 1436-1444	24.3	12
505	Consolidating Lithiothermic-Ready Transition Metals for Li S-Based Cathodes. *Advanced Materials*, **2020**, 32, e2002403	24	34
504	Durian-Inspired Design of Bismuth-Antimony Alloy Arrays for Robust Sodium Storage. *ACS Nano*, **2020**, 14, 9117-9124	16.7	41
503	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. *Nature Reviews Materials*, **2020**, 5, 276-294	73.3	151
502	Optimization of oxygen electrode combined with soluble catalyst to enhance the performance of lithium□oxygen battery. *Energy Storage Materials*, **2020**, 28, 73-81	19.4	8
501	Solution Blowing Synthesis of Li-Conductive Ceramic Nanofibers. *ACS Applied Materials & Interfaces*, **2020**, 12, 16200-16208	9.5	12
500	Cationic and anionic redox in lithium-ion based batteries. *Chemical Society Reviews*, **2020**, 49, 1688-1705	58.5	84
499	Cobalt in lithium-ion batteries. *Science*, **2020**, 367, 979-980	33.3	132
498	High-Performance, Long-Life, Rechargeable Li-CO Batteries based on a 3D Holey Graphene Cathode Implanted with Single Iron Atoms. *Advanced Materials*, **2020**, 32, e1907436	24	71
497	ZnO Nanoparticles Photosensitization Using Ruthenium(II)-polypyridyl Isomeric Complexes. *ChemistrySelect*, **2020**, 5, 2528-2534	1.8	0
496	Accommodation of Silicon in an Interconnected Copper Network for Robust Li-Ion Storage. *Advanced Functional Materials*, **2020**, 30, 1910249	15.6	17
495	Highly Homogeneous Sodium Superoxide Growth in Na□O2 Batteries Enabled by a Hybrid Electrolyte. *ACS Energy Letters*, **2020**, 5, 903-909	20.1	8
494	Strain-Modulated Platinum-Palladium Nanowires for Oxygen Reduction Reaction. *Nano Letters*, **2020**, 20, 2416-2422	11.5	36
493	Fast-Charging and Ultrahigh-Capacity Lithium Metal Anode Enabled by Surface Alloying. *Advanced Energy Materials*, **2020**, 10, 1902343	21.8	47
492	Energy Spotlight. *ACS Energy Letters*, **2020**, 5, 1662-1664	20.1	2
491	Surface Amorphization of Vanadium Dioxide (B) for K-Ion Battery. *Advanced Energy Materials*, **2020**, 10, 2000717	21.8	67

490	An Extremely Fast Charging Li3V2(PO4)3 Cathode at a 4.8 V Cutoff Voltage for Li-Ion Batteries. *ACS Energy Letters*, **2020**, 5, 1763-1770	20.1	34
489	Electrolytes and Interphases in Sodium-Based Rechargeable Batteries: Recent Advances and Perspectives. *Advanced Energy Materials*, **2020**, 10, 2000093	21.8	107
488	Enhancing Oxygen Reduction Activity of Pt-based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. *Angewandte Chemie*, **2020**, 132, 18490-18504	3.6	5
487	Enhancing Oxygen Reduction Activity of Pt-based Electrocatalysts: From Theoretical Mechanisms to Practical Methods. *Angewandte Chemie - International Edition*, **2020**, 59, 18334-18348	16.4	73
486	Designing a hybrid electrode toward high energy density with a staged Li and PF deintercalation/intercalation mechanism. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 2815-2823	11.5	35
485	Synthesis of high-entropy alloy nanoparticles on supports by the fast moving bed pyrolysis. *Nature Communications*, **2020**, 11, 2016	17.4	61
484	Potassium Prussian blue-coated Li-rich cathode with enhanced lithium ion storage property. *Nano Energy*, **2020**, 75, 104942	17.1	15
483	New Concepts in Electrolytes. *Chemical Reviews*, **2020**, 120, 6783-6819	68.1	267
482	Switchable encapsulation of polysulfides in the transition between sulfur and lithium sulfide. *Nature Communications*, **2020**, 11, 845	17.4	51
481	Flexible metal–gas batteries: a potential option for next-generation power accessories for wearable electronics. *Energy and Environmental Science*, **2020**, 13, 1933-1970	35.4	67
480	Relating Catalysis between Fuel Cell and Metal-Air Batteries. *Matter*, **2020**, 2, 32-49	12.7	61
479	The importance of anode protection towards lithium oxygen batteries. *Journal of Materials Chemistry A*, **2020**, 8, 3563-3573	13	39
478	Precision AABB-type cyclocopolymers via alternating cyclocopolymerization of disiloxane-tethered divinyl monomers. *Polymer Chemistry*, **2020**, 11, 1171-1176	4.9	1
477	An Overview of Engineered Graphene-Based Cathodes: Boosting Oxygen Reduction and Evolution Reactions in Lithium- and Sodium-Oxygen Batteries. *ChemSusChem*, **2020**, 13, 1203-1225	8.3	8
476	Iron-Doped Sodium-Vanadium Fluorophosphates: NaVOFe(PO)F (Inorganic Chemistry, **2020**, 59, 854-862	5.1	8
475	A Triphasic Bifunctional Oxygen Electrocatalyst with Tunable and Synergetic Interfacial Structure for Rechargeable Zn-Air Batteries. *Advanced Energy Materials*, **2020**, 10, 1903003	21.8	42
474	Crystal-Growth-Dominated Fabrication of Metal–Organic Frameworks with Orderly Distributed Hierarchical Porosity. *Angewandte Chemie*, **2020**, 132, 2478-2485	3.6	1
473	Crystal-Growth-Dominated Fabrication of Metal-Organic Frameworks with Orderly Distributed Hierarchical Porosity. *Angewandte Chemie - International Edition*, **2020**, 59, 2457-2464	16.4	27

472	Reversible (De)Intercalation of Hydrated Zn2+ in Mg2+-Stabilized V2O5 Nanobelts with High Areal Capacity. *Advanced Energy Materials*, **2020**, 10, 2002293	21.8	36
471	Polycation ionic liquid tailored PEO-based solid polymer electrolytes for high temperature lithium metal batteries. *Energy Storage Materials*, **2020**, 33, 173-180	19.4	26
470	Functionalized separator for next-generation batteries. *Materials Today*, **2020**, 41, 143-155	21.8	27
469	FeP-decorated N,P Codoped Carbon Synthesized via Direct Biological Recycling for Endurable Sulfur Encapsulation. *ACS Central Science*, **2020**, 6, 1827-1834	16.8	13
468	Na-Ion Batteries□Approaching Old and New Challenges. *Advanced Energy Materials*, **2020**, 10, 2002055	21.8	71
467	Cation Additive Enabled Rechargeable LiOH-Based Lithium-Oxygen Batteries. *Angewandte Chemie - International Edition*, **2020**, 59, 22978-22982	16.4	14
466	Revitalising sodium□sulfur batteries for non-high-temperature operation: a crucial review. *Energy and Environmental Science*, **2020**, 13, 3848-3879	35.4	70
465	Lithium Metal Anodes: A Lithium Metal Anode Surviving Battery Cycling Above 200 □C (Adv. Mater. 29/2020). *Advanced Materials*, **2020**, 32, 2070218	24	2
464	Hydrous Nickel-Iron Turnbull's Blue as a High-Rate and Low-Temperature Proton Electrode. *ACS Applied Materials & Interfaces*, **2020**, 12, 9201-9208	9.5	24
463	Bipolar Electrodes for Next-Generation Rechargeable Batteries. *Advanced Science*, **2020**, 7, 2001207	13.6	20
462	Fluorinated co-solvent promises Li-S batteries under lean-electrolyte conditions. *Materials Today*, **2020**, 40, 63-71	21.8	30
461	Tailoring conductive networks within hollow carbon nanospheres to host phosphorus for advanced sodium ion batteries. *Nano Energy*, **2020**, 70, 104569	17.1	18
460	Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. *Chemical Society Reviews*, **2020**, 49, 5407-5445	58.5	121
459	Unraveling the Nature of Excellent Potassium Storage in Small-Molecule Se@Peapod-Like N-Doped Carbon Nanofibers. *Advanced Materials*, **2020**, 32, e2003879	24	47
458	Efficient Direct Recycling of Lithium-Ion Battery Cathodes by Targeted Healing. *Joule*, **2020**, 4, 2609-2626	37.8	62
457	Revealing nanoscale mineralization pathways of hydroxyapatite using in situ liquid cell transmission electron microscopy. *Science Advances*, **2020**, 6,	14.3	24
456	Analysis of the Stable Interphase Responsible for the Excellent Electrochemical Performance of Graphite Electrodes in Sodium-Ion Batteries. *Small*, **2020**, 16, e2003268	11	37
455	TEM Studies on the Role of Local Chemistry and Atomic Structure in Battery Materials. *Microscopy and Microanalysis*, **2020**, 26, 148-149	0.5	1

454	Structural Distortion Induced by Manganese Activation in a Lithium-Rich Layered Cathode. *Journal of the American Chemical Society*, **2020**, 142, 14966-14973	16.4	35
453	Zinc-Air Batteries: An Iron-Decorated Carbon Aerogel for Rechargeable Flow and Flexible Zn–Air Batteries (Adv. Mater. 32/2020). *Advanced Materials*, **2020**, 32, 2070241	24	
452	Rooting MnO2 into protonated g-C3N4 by intermolecular hydrogen bonding for endurable supercapacitance. *Nano Energy*, **2020**, 77, 105153	17.1	15
451	Electrochemical reduction of nitrate to ammonia via direct eight-electron transfer using a copper molecular solid catalyst. *Nature Energy*, **2020**, 5, 605-613	62.3	220
450	A Non-aqueous H PO Electrolyte Enables Stable Cycling of Proton Electrodes. *Angewandte Chemie - International Edition*, **2020**, 59, 22007-22011	16.4	13
449	A disordered rock salt anode for fast-charging lithium-ion batteries. *Nature*, **2020**, 585, 63-67	50.4	137
448	Singlet oxygen formation in Na O2 battery cathodes catalyzed by ammonium Br sted acid. *Journal of Electroanalytical Chemistry*, **2020**, 872, 114265	4.1	7
447	A Non-aqueous H3PO4 Electrolyte Enables Stable Cycling of Proton Electrodes. *Angewandte Chemie*, **2020**, 132, 22191-22195	3.6	7
446	Interfaces in rechargeable magnesium batteries. *Nanoscale Horizons*, **2020**, 5, 1467-1475	10.8	12
445	A Co- and Ni-Free P2/O3 Biphasic Lithium Stabilized Layered Oxide for Sodium-Ion Batteries and its Cycling Behavior. *Advanced Functional Materials*, **2020**, 30, 2003364	15.6	31
444	Lithiophilic 3D Porous CuZn Current Collector for Stable Lithium Metal Batteries. *ACS Energy Letters*, **2020**, 5, 180-186	20.1	91
443	Heterojunction Architecture of N-Doped WO3 Nanobundles with Ce2S3 Nanodots Hybridized on a Carbon Textile Enables a Highly Efficient Flexible Photocatalyst. *Advanced Functional Materials*, **2019**, 29, 1903490	15.6	140
442	Li CO2 Batteries: Bamboo-Like Nitrogen-Doped Carbon Nanotube Forests as Durable Metal-Free Catalysts for Self-Powered Flexible Li CO2 Batteries (Adv. Mater. 39/2019). *Advanced Materials*, **2019**, 31, 1970279	24	13
441	Silica Restricting the Sulfur Volatilization of Nickel Sulfide for High-Performance Lithium-Ion Batteries. *Advanced Energy Materials*, **2019**, 9, 1901153	21.8	64
440	Self-Destruction of Cancer Induced by Ag S Amorphous Nanodots. *Small*, **2019**, 15, e1902945	11	6
439	Challenges in Zinc Electrodes for Alkaline Zinc–Air Batteries: Obstacles to Commercialization. *ACS Energy Letters*, **2019**, 4, 2259-2270	20.1	147
438	Graphene as Vehicle for Ultrafast Lithium Ion Capacitor Development Based on Recycled Olive Pit Derived Carbons. *Journal of the Electrochemical Society*, **2019**, 166, A2840-A2848	3.9	4
437	Synthesis of calcium carbonate nanoparticles in erythrocytes enables efficient removal of extracellular lead ions. *Communications Chemistry*, **2019**, 2,	6.3	6

436	Carbon-pore-sheathed cobalt nanoseeds: An exceptional and durable bifunctional catalyst for zinc-air batteries. *Nano Energy*, **2019**, 65, 104051	17.1	33
435	Cross-linked beta alumina nanowires with compact gel polymer electrolyte coating for ultra-stable sodium metal battery. *Nature Communications*, **2019**, 10, 4244	17.4	128
434	Amorphous TiCu-Based Additives for Improving Hydrogen Storage Properties of Magnesium Hydride. *ACS Applied Materials & Interfaces*, **2019**, 11, 38868-38879	9.5	24
433	Energy Selects. *ACS Energy Letters*, **2019**, 4, 2569-2570	20.1	
432	Diffusion-free Grotthuss topochemistry for high-rate and long-life proton batteries. *Nature Energy*, **2019**, 4, 123-130	62.3	225
431	Trifunctional Electrode Additive for High Active Material Content and Volumetric Lithium-Ion Electrode Densities. *Advanced Energy Materials*, **2019**, 9, 1803390	21.8	20
430	Metal-organic framework-derived Nickel Cobalt oxysulfide nanocages as trifunctional electrocatalysts for high efficiency power to hydrogen. *Nano Energy*, **2019**, 58, 680-686	17.1	50
429	Isothermal hydrogenation kinetics of ball-milled nano-catalyzed magnesium hydride. *Materialia*, **2019**, 5, 100227	3.2	12
428	A versatile functionalized ionic liquid to boost the solution-mediated performances of lithium-oxygen batteries. *Nature Communications*, **2019**, 10, 602	17.4	90
427	Lithium-Ion Batteries: Interweaving 3D Network Binder for High-Areal-Capacity Si Anode through Combined Hard and Soft Polymers (Adv. Energy Mater. 3/2019). *Advanced Energy Materials*, **2019**, 9, 1970009	21.8	2
426	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. *Angewandte Chemie*, **2019**, 131, 9742-9747	3.6	47
425	Exploring the charge reactions in a Li□2 system with lithium oxide cathodes and nonaqueous electrolytes. *Journal of Materials Chemistry A*, **2019**, 7, 15615-15620	13	5
424	Insights into Structural Evolution of Lithium Peroxides with Reduced Charge Overpotential in Li□2 System. *Advanced Energy Materials*, **2019**, 9, 1900662	21.8	27
423	Structural defects on converted bismuth oxide nanotubes enable highly active electrocatalysis of carbon dioxide reduction. *Nature Communications*, **2019**, 10, 2807	17.4	252
422	R□ktitelbild: A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction (Angew. Chem. 28/2019). *Angewandte Chemie*, **2019**, 131, 9750-9750	3.6	1
421	Commercialization of Lithium Battery Technologies for Electric Vehicles. *Advanced Energy Materials*, **2019**, 9, 1900161	21.8	407
420	Advances in the development of power supplies for the Internet of Everything. *Informa□□ Mater□y*, **2019**, 1, 130-139	23.1	67
419	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 9640-9645	16.4	186

418	Lithium‐Sulfur Batteries: Deciphering the Reaction Mechanism of Lithium‐Sulfur Batteries by In Situ/Operando Synchrotron-Based Characterization Techniques (Adv. Energy Mater. 18/2019). *Advanced Energy Materials*, **2019**, 9, 1970062	21.8	1
417	Electrochemically primed functional redox mediator generator from the decomposition of solid state electrolyte. *Nature Communications*, **2019**, 10, 1890	17.4	35
416	Conductivity and lithiophilicity gradients guide lithium deposition to mitigate short circuits. *Nature Communications*, **2019**, 10, 1896	17.4	150
415	Ultra-fast NH4+ Storage: Strong H Bonding between NH4+ and Bi-layered V2O5. *CheM*, **2019**, 5, 1537-1551	16.2	90
414	Deciphering the Atomic Patterns Leading to MnO2 Polymorphism. *CheM*, **2019**, 5, 1793-1805	16.2	25
413	Exploring the rate dependence of phase evolution in P2-type Na2/3Mn0.8Fe0.1Ti0.1O2. *Journal of Materials Chemistry A*, **2019**, 7, 12115-12125	13	9
412	Oxygen Release Degradation in Li-Ion Battery Cathode Materials: Mechanisms and Mitigating Approaches. *Advanced Energy Materials*, **2019**, 9, 1900551	21.8	145
411	Sustainability-inspired cell design for a fully recyclable sodium ion battery. *Nature Communications*, **2019**, 10, 1965	17.4	52
410	Sacrificial template synthesis of hollow C@MoS2@PPy nanocomposites as anodes for enhanced sodium storage performance. *Nano Energy*, **2019**, 60, 362-370	17.1	72
409	In Situ Engineering of Intracellular Hemoglobin for Implantable High-Performance Biofuel Cells. *Angewandte Chemie - International Edition*, **2019**, 58, 6663-6668	16.4	15
408	Ultradispersed WxC nanoparticles enable fast polysulfide interconversion for high-performance Li-S batteries. *Nano Energy*, **2019**, 59, 636-643	17.1	64
407	Reverse Dual-Ion Battery via a ZnCl Water-in-Salt Electrolyte. *Journal of the American Chemical Society*, **2019**, 141, 6338-6344	16.4	210
406	Graphene Wrapped FeSe2 Nano-Microspheres with High Pseudocapacitive Contribution for Enhanced Na-Ion Storage. *Advanced Energy Materials*, **2019**, 9, 1900356	21.8	149
405	Polypyrrole-encapsulated amorphous Bi2S3 hollow sphere for long life sodium ion batteries and lithium‐sulfur batteries. *Journal of Materials Chemistry A*, **2019**, 7, 11370-11378	13	63
404	Redox mediators: a shuttle to efficacy in metal–O2 batteries. *Journal of Materials Chemistry A*, **2019**, 7, 8746-8764	13	39
403	Deciphering the Reaction Mechanism of Lithium‐Sulfur Batteries by In Situ/Operando Synchrotron-Based Characterization Techniques. *Advanced Energy Materials*, **2019**, 9, 1900148	21.8	60
402	Vanadium Oxide Pillared by Interlayer Mg2+ Ions and Water as Ultralong-Life Cathodes for Magnesium-Ion Batteries. *CheM*, **2019**, 5, 1194-1209	16.2	100
401	Magnetic Field‐Suppressed Lithium Dendrite Growth for Stable Lithium-Metal Batteries. *Advanced Energy Materials*, **2019**, 9, 1900260	21.8	123

400	In Situ Engineering of Intracellular Hemoglobin for Implantable High-Performance Biofuel Cells. *Angewandte Chemie*, **2019**, 131, 6735-6740	3.6	5
399	Anti-Oxygen Leaking LiCoO2. *Advanced Functional Materials*, **2019**, 29, 1901110	15.6	36
398	Real-Time TEM Study of Nanopore Evolution in Battery Materials and Their Suppression for Enhanced Cycling Performance. *Nano Letters*, **2019**, 19, 3074-3082	11.5	18
397	An Aqueous Dual-Ion Battery Cathode of Mn O via Reversible Insertion of Nitrate. *Angewandte Chemie - International Edition*, **2019**, 58, 5286-5291	16.4	57
396	Simultaneously Dual Modification of Ni-Rich Layered Oxide Cathode for High-Energy Lithium-Ion Batteries. *Advanced Functional Materials*, **2019**, 29, 1808825	15.6	287
395	Interlayer Material Selection for Lithium-Sulfur Batteries. *Joule*, **2019**, 3, 361-386	27.8	246
394	An Aqueous Dual-Ion Battery Cathode of Mn3O4 via Reversible Insertion of Nitrate. *Angewandte Chemie*, **2019**, 131, 5340-5345	3.6	5
393	Uncovering the Cu-driven electrochemical mechanism of transition metal chalcogenides based electrodes. *Energy Storage Materials*, **2019**, 16, 625-631	19.4	38
392	Bamboo-Like Nitrogen-Doped Carbon Nanotube Forests as Durable Metal-Free Catalysts for Self-Powered Flexible Li-CO Batteries. *Advanced Materials*, **2019**, 31, e1903852	24	84
391	Seeing the Weak Bonding. *Matter*, **2019**, 1, 304-305	12.7	
390	High temperature shockwave stabilized single atoms. *Nature Nanotechnology*, **2019**, 14, 851-857	28.7	159
389	Freestanding Polymer Crystalline Layers of Subnanometer Order. *Macromolecules*, **2019**, 52, 6018-6024	5.5	3
388	Top-Down Li Deposition Pathway Enabled by an Asymmetric Design for Li Composite Electrode. *Advanced Energy Materials*, **2019**, 9, 1901491	21.8	26
387	Manipulation of an ionic and electronic conductive interface for highly-stable high-voltage cathodes. *Nano Energy*, **2019**, 65, 103988	17.1	25
386	Reversible intercalation of methyl viologen as a dicationic charge carrier in aqueous batteries. *Nature Communications*, **2019**, 10, 3227	17.4	25
385	Controlling the Three-Phase Boundary in Na-Oxygen Batteries: The Synergy of Carbon Nanofibers and Ionic Liquid. *ChemSusChem*, **2019**, 12, 4054-4063	8.3	7
384	A Four-Electron Sulfur Electrode Hosting a Cu2+/Cu+ Redox Charge Carrier. *Angewandte Chemie*, **2019**, 131, 12770-12775	3.6	15
383	A Four-Electron Sulfur Electrode Hosting a Cu /Cu Redox Charge Carrier. *Angewandte Chemie - International Edition*, **2019**, 58, 12640-12645	16.4	32

382	Single-Atom-Thick Active Layers Realized in Nanolaminated Ti(AlCu)C and Its Artificial Enzyme Behavior. *ACS Nano*, **2019**, 13, 9198-9205	16.7	31
381	Tuning LiO Formation Routes by Facet Engineering of MnO Cathode Catalysts. *Journal of the American Chemical Society*, **2019**, 141, 12832-12838	16.4	62
380	Selective Growth of a Discontinuous Subnanometer Pd Film on Carbon Defects for Li□2 Batteries. *ACS Energy Letters*, **2019**, 4, 2782-2786	20.1	28
379	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. *Nature Communications*, **2019**, 10, 4721	17.4	91
378	Dendrite-Free Flexible Fiber-Shaped Zn Battery with Long Cycle Life in Water and Air. *Advanced Energy Materials*, **2019**, 9, 1901434	21.8	54
377	ZnS coating of cathode facilitates lean-electrolyte Li-S batteries **2019**, 1, 165-172		66
376	Demanding energy from carbon **2019**, 1, 8-12		97
375	Directed Self-Assembly of MOF-Derived Nanoparticles toward Hierarchical Structures for Enhanced Catalytic Activity in CO Oxidation. *Advanced Energy Materials*, **2019**, 9, 1901754	21.8	12
374	Zn Batteries: Dendrite-Free Flexible Fiber-Shaped Zn Battery with Long Cycle Life in Water and Air (Adv. Energy Mater. 41/2019). *Advanced Energy Materials*, **2019**, 9, 1970163	21.8	2
373	Formed IrLi Nanoparticles as Active Cathode Material in Li-Oxygen Batteries. *Journal of Physical Chemistry A*, **2019**, 123, 10047-10056	2.8	5
372	Boosting Cell Performance of LiNi Co Al O via Surface Structure Design. *Small*, **2019**, 15, e1904854	11	77
371	A Simple Electrode-Level Chemical Presodiation Route by Solution Spraying to Improve the Energy Density of Sodium-Ion Batteries. *Advanced Functional Materials*, **2019**, 29, 1903795	15.6	40
370	Bridging the academic and industrial metrics for next-generation practical batteries. *Nature Nanotechnology*, **2019**, 14, 200-207	28.7	255
369	An ethyl methyl sulfone co-solvent eliminates macroscopic morphological instabilities of lithium metal anode. *Chemical Communications*, **2019**, 55, 3387-3389	5.8	7
368	Automotive Li-Ion Batteries: Current Status and Future Perspectives. *Electrochemical Energy Reviews*, **2019**, 2, 1-28	29.3	396
367	Fundamental Understanding of Water-Induced Mechanisms in Li-O Batteries: Recent Developments and Perspectives. *Advanced Materials*, **2019**, 31, e1805602	24	31
366	Interweaving 3D Network Binder for High-Areal-Capacity Si Anode through Combined Hard and Soft Polymers. *Advanced Energy Materials*, **2019**, 9, 1802645	21.8	112
365	Enhanced lithium storage capability of FeF3□.33H2O single crystal with active insertion site exposed. *Nano Energy*, **2019**, 56, 884-892	17.1	28

364	In situ quantification of interphasial chemistry in Li-ion battery. *Nature Nanotechnology*, **2019**, 14, 50-56	28.7	235
363	The Absence and Importance of Operando Techniques for Metal-Free Catalysts. *Advanced Materials*, **2019**, 31, e1805609	24	18
362	A Quasi-Solid-State Flexible Fiber-Shaped Li-CO Battery with Low Overpotential and High Energy Efficiency. *Advanced Materials*, **2019**, 31, e1804439	24	91
361	Ordering Heterogeneity of [MnO6] Octahedra in Tunnel-Structured MnO2 and Its Influence on Ion Storage. *Joule*, **2019**, 3, 471-484	27.8	84
360	Encapsulating phosphorus inside carbon nanotubes via a solution approach for advanced lithium ion host. *Nano Energy*, **2019**, 58, 23-29	17.1	22
359	Electrochemically activated spinel manganese oxide for rechargeable aqueous aluminum battery. *Nature Communications*, **2019**, 10, 73	17.4	169
358	Heteroatom-Doped Porous Carbon Materials with Unprecedented High Volumetric Capacitive Performance. *Angewandte Chemie - International Edition*, **2019**, 58, 2397-2401	16.4	135
357	Heteroatom-Doped Porous Carbon Materials with Unprecedented High Volumetric Capacitive Performance. *Angewandte Chemie*, **2019**, 131, 2419-2423	3.6	17
356	Hard Carbon as Sodium-Ion Battery Anodes: Progress and Challenges. *ChemSusChem*, **2019**, 12, 133-144	8.3	152
355	Novel Lithium-Ion Capacitor Based on TiSb2 as Negative Electrode: The Role of Mass Ratio towards High Energy-to-Power Densities and Long Cyclability. *Batteries and Supercaps*, **2019**, 2, 153-159	5.6	10
354	Hierarchical design and development of nanostructured trifunctional catalysts for electrochemical oxygen and hydrogen reactions. *Nano Energy*, **2019**, 56, 724-732	17.1	31
353	Lithiation-Induced Non-Noble Metal Nanoparticles for Li-O Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 811-818	9.5	13
352	Native Vacancy Enhanced Oxygen Redox Reversibility and Structural Robustness. *Advanced Energy Materials*, **2019**, 9, 1803087	21.8	50
351	One-step nonlinear electrochemical synthesis of TexSy@PANI nanorod materials for Li-TexSy battery. *Energy Storage Materials*, **2019**, 16, 31-36	19.4	22
350	Fullerene-Based In Situ Doping of N and Fe into a 3D Cross-Like Hierarchical Carbon Composite for High-Performance Supercapacitors. *Advanced Energy Materials*, **2019**, 9, 1802928	21.8	69
349	Insights into the Na+ Storage Mechanism of Phosphorus-Functionalized Hard Carbon as Ultrahigh Capacity Anodes. *Advanced Energy Materials*, **2018**, 8, 1702781	21.8	124
348	Encapsulating Various Sulfur Allotropes within Graphene Nanocages for Long-Lasting Lithium Storage. *Advanced Functional Materials*, **2018**, 28, 1706443	15.6	54
347	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. *Electrochemical Energy Reviews*, **2018**, 1, 35-53	29.3	334

346	Elucidating anionic oxygen activity in lithium-rich layered oxides. *Nature Communications*, **2018**, 9, 947	17.4	181
345	High-Rate and Long-Term Cycle Stability of Li-S Batteries Enabled by LiS/TiO-Impregnated Hollow Carbon Nanofiber Cathodes. *ACS Applied Materials & Interfaces*, **2018**, 10, 16552-16560	9.5	27
344	Revisiting the Role of Polysulfides in Lithium-Sulfur Batteries. *Advanced Materials*, **2018**, 30, e1705590	24	291
343	Phosphorus: An Anode of Choice for Sodium-Ion Batteries. *ACS Energy Letters*, **2018**, 3, 1137-1144	20.1	104
342	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. *Advanced Energy Materials*, **2018**, 8, 1800266	21.8	226
341	Batteries and fuel cells for emerging electric vehicle markets. *Nature Energy*, **2018**, 3, 279-289	62.3	1176
340	Identification and Implications of Lithium Superoxide in Li□2 Batteries. *ACS Energy Letters*, **2018**, 3, 1105-1109	20.1	30
339	Effect of Componential Proportion in Bimetallic Electrocatalysts on the Aprotic Lithium-Oxygen Battery Performance. *Advanced Energy Materials*, **2018**, 8, 1703230	21.8	21
338	Chemisorption of polysulfides through redox reactions with organic molecules for lithium-sulfur batteries. *Nature Communications*, **2018**, 9, 705	17.4	159
337	Stabilization of a High-Capacity and High-Power Nickel-Based Cathode for Li-Ion Batteries. *CheM*, **2018**, 4, 690-704	16.2	85
336	Zinc□Air Batteries: Atomically Thin Mesoporous Co3O4 Layers Strongly Coupled with N-rGO Nanosheets as High-Performance Bifunctional Catalysts for 1D Knittable Zinc□Air Batteries (Adv. Mater. 4/2018). *Advanced Materials*, **2018**, 30, 1870027	24	2
335	Layered P2□3 sodium-ion cathodes derived from earth abundant elements. *Journal of Materials Chemistry A*, **2018**, 6, 3552-3559	13	52
334	Atomic Layer Co O Nanosheets: The Key to Knittable Zn-Air Batteries. *Small*, **2018**, 14, e1702987	11	51
333	High Volumetric Capacitance, Ultralong Life Supercapacitors Enabled by Waxberry-Derived Hierarchical Porous Carbon Materials. *Advanced Energy Materials*, **2018**, 8, 1702695	21.8	159
332	Efficient photocatalytic H2 production via rational design of synergistic spatially-separated dual cocatalysts modified Mn0.5Cd0.5S photocatalyst under visible light irradiation. *Chemical Engineering Journal*, **2018**, 337, 480-487	14.7	69
331	Lithium-Sulfur Batteries for Commercial Applications. *CheM*, **2018**, 4, 3-7	16.2	103
330	Modifying the ORR route by the addition of lithium and potassium salts in Na-O2 batteries. *Electrochimica Acta*, **2018**, 263, 102-109	6.7	10
329	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. *Journal of Physical Chemistry C*, **2018**, 122, 13508-13514	3.8	15

328	Electrochemical Lithium Doping Induced Property Changes In Halide Perovskite CsPbBr3 Crystal. *ACS Energy Letters*, **2018**, 3, 264-269	20.1	44
327	High-Capacity Sodium Peroxide Based Na□O2 Batteries with Low Charge Overpotential via a Nanostructured Catalytic Cathode. *ACS Energy Letters*, **2018**, 3, 276-277	20.1	11
326	Boosting Sodium Storage in TiO Nanotube Arrays through Surface Phosphorylation. *Advanced Materials*, **2018**, 30, 1704337	24	168
325	Synchrotron-Based X-ray Absorption Fine Structures, X-ray Diffraction, and X-ray Microscopy Techniques Applied in the Study of Lithium Secondary Batteries. *Small Methods*, **2018**, 2, 1700341	12.8	44
324	Operando liquid cell electron microscopy of discharge and charge kinetics in lithium-oxygen batteries. *Nano Energy*, **2018**, 49, 338-345	17.1	47
323	Site-Selective Catalysis of a Multifunctional Linear Molecule: The Steric Hindrance of Metal-Organic Framework Channels. *Advanced Materials*, **2018**, 30, e1800643	24	42
322	Cations controlled growth of □MnO2 crystals with tunable facets for electrochemical energy storage. *Nano Energy*, **2018**, 48, 301-311	17.1	32
321	From Charge Storage Mechanism to Performance: A Roadmap toward High Specific Energy Sodium-Ion Batteries through Carbon Anode Optimization. *Advanced Energy Materials*, **2018**, 8, 1703268	21.8	244
320	Dense Graphene Monolith for High Volumetric Energy Density Li□ Batteries. *Advanced Energy Materials*, **2018**, 8, 1703438	21.8	78
319	Energy-driven surface evolution in beta-MnO2 structures. *Nano Research*, **2018**, 11, 206-215	10	9
318	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. *Nature Energy*, **2018**, 3, 690-698	62.3	435
317	Designing MOFs-Derived FeS@Carbon Composites for High-Rate Sodium Ion Storage with Capacitive Contributions. *ACS Applied Materials & Interfaces*, **2018**, 10, 33097-33104	9.5	94
316	Li S- or S-Based Lithium-Ion Batteries. *Advanced Materials*, **2018**, 30, e1801190	24	39
315	Expanding Interlayer Spacing of Hard Carbon by Natural K Doping to Boost Na-Ion Storage. *ACS Applied Materials & Interfaces*, **2018**, 10, 27030-27038	9.5	64
314	Strong Graphene 3D Assemblies with High Elastic Recovery and Hardness. *Advanced Materials*, **2018** , 30, e1707424	24	18
313	Solid electrolytes and interfaces in all-solid-state sodium batteries: Progress and perspective. *Nano Energy*, **2018**, 52, 279-291	17.1	132
312	In situ study of nucleation and growth dynamics of Au nanoparticles on MoS nanoflakes. *Nanoscale*, **2018**, 10, 15809-15818	7.7	28
311	Elevated-Temperature 3D Printing of Hybrid Solid-State Electrolyte for Li-Ion Batteries. *Advanced Materials*, **2018**, 30, e1800615	24	102

310	Study of the Li-Oxygen Battery Discharging and Charging Process using In-situ TEM. *Microscopy and Microanalysis*, **2018**, 24, 328-329	0.5	2
309	A facile recovery process for cathodes from spent lithium iron phosphate batteries by using oxalic acid. *CSEE Journal of Power and Energy Systems*, **2018**, 4, 219-225	2.3	20
308	A Brief Review of Metallothermic Reduction Reactions for Materials Preparation. *Small Methods*, **2018**, 2, 1800062	12.8	23
307	Tunnel Intergrowth Structures in Manganese Dioxide and Their Influence on Ion Storage. *Microscopy and Microanalysis*, **2018**, 24, 1500-1501	0.5	
306	Seeding Iron Trifluoride Nanoparticles on Reduced Graphite Oxide for Lithium-Ion Batteries with Enhanced Loading and Stability. *ACS Applied Materials & Interfaces*, **2018**, 10, 29505-29510	9.5	11
305	Electrode Materials for Sodium-Ion Batteries: Considerations on Crystal Structures and Sodium Storage Mechanisms. *Electrochemical Energy Reviews*, **2018**, 1, 200-237	29.3	130
304	30 Years of Lithium-Ion Batteries. *Advanced Materials*, **2018**, 30, e1800561	24	1694
303	On the P2-NaCo(MnNi)yO Cathode Materials for Sodium-Ion Batteries: Synthesis, Electrochemical Performance, and Redox Processes Occurring during the Electrochemical Cycling. *ACS Applied Materials & Interfaces*, **2018**, 10, 488-501	9.5	24
302	Asymmetric K/Li-Ion Battery Based on Intercalation Selectivity. *ACS Energy Letters*, **2018**, 3, 65-71	20.1	27
301	Dissolution, migration, and deposition of transition metal ions in Li-ion batteries exemplified by Mn-based cathodes – a critical review. *Energy and Environmental Science*, **2018**, 11, 243-257	35.4	364
300	Textile Inspired Lithium-Oxygen Battery Cathode with Decoupled Oxygen and Electrolyte Pathways. *Advanced Materials*, **2018**, 30, 1704907	24	63
299	Short Hydrogen Bonds on Reconstructed Nanocrystal Surface Enhance Oxygen Evolution Activity. *ACS Catalysis*, **2018**, 8, 466-473	13.1	16
298	Two-Dimensional Unilamellar Cation-Deficient Metal Oxide Nanosheet Superlattices for High-Rate Sodium Ion Energy Storage. *ACS Nano*, **2018**, 12, 12337-12346	16.7	83
297	Protic and Aprotic Ionic Liquids in Combination with Hard Carbon for Lithium-Ion and Sodium-Ion Batteries. *Batteries and Supercaps*, **2018**, 1, 203-203	5.6	
296	A Lithium-Sulfur Battery using a 2D Current Collector Architecture with a Large-Sized Sulfur Host Operated under High Areal Loading and Low E/S Ratio. *Advanced Materials*, **2018**, 30, e1804271	24	61
295	High-Rate Performance and Ultralong Cycle Life Enabled by Hybrid Organic–Inorganic Vanadyl Ethylene Glycolate for Lithium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1801978	21.8	20
294	In Situ Transmission Electron Microscopy Explores a New Nanoscale Pathway for Direct Gypsum Formation in Aqueous Solution. *ACS Applied Nano Materials*, **2018**, 1, 5430-5440	5.6	15
293	The Recycling of Spent Lithium-Ion Batteries: a Review of Current Processes and Technologies. *Electrochemical Energy Reviews*, **2018**, 1, 461-482	29.3	131

292	Scalable Room-Temperature Synthesis of Multi-shelled Na3(VOPO4)2F Microsphere Cathodes. *Joule*, **2018**, 2, 2348-2363	27.8	80
291	Hybrid Li-Ion and Li-O2 Battery Enabled by Oxyhalogen-Sulfur Electrochemistry. *Joule*, **2018**, 2, 2381-2392	27.8	10
290	A room-temperature sodium-sulfur battery with high capacity and stable cycling performance. *Nature Communications*, **2018**, 9, 3870	17.4	247
289	Construction of Hierarchically Porous Nanoparticles@Metal-Organic Frameworks Composites by Inherent Defects for the Enhancement of Catalytic Efficiency. *Advanced Materials*, **2018**, 30, e1803263	24	68
288	Protic and Aprotic Ionic Liquids in Combination with Hard Carbon for Lithium-Ion and Sodium-Ion Batteries. *Batteries and Supercaps*, **2018**, 1, 204-208	5.6	12
287	Nitrogen and sulfur co-doped porous carbon sheets for energy storage and pH-universal oxygen reduction reaction. *Nano Energy*, **2018**, 54, 192-199	17.1	59
286	Selective CO2 Reduction on 2D Mesoporous Bi Nanosheets. *Advanced Energy Materials*, **2018**, 8, 1801536	21.8	168
285	Li–Air Batteries: Discharge Products **2018**, 41-63		
284	Understanding Thermodynamic and Kinetic Contributions in Expanding the Stability Window of Aqueous Electrolytes. *CheM*, **2018**, 4, 2872-2882	16.2	119
283	Zinc-Air Batteries: Atomic Layer Co3O4 Nanosheets: The Key to Knittable Zn–Air Batteries (Small 43/2018). *Small*, **2018**, 14, 1870200	11	3
282	Reaction: Freezing Electrochemical Interfaces for Robustness in Electron Microscopy. *CheM*, **2018**, 4, 2253-2254	16.2	5
281	Temperature-Sensitive Structure Evolution of Lithium-Manganese-Rich Layered Oxides for Lithium-Ion Batteries. *Journal of the American Chemical Society*, **2018**, 140, 15279-15289	16.4	108
280	Investigation of the Effect of Graphene-encapsulation on the O2 Release Phenomenon from LixCoO2, Studied by In-situ Heating STEM/EELS. *Microscopy and Microanalysis*, **2018**, 24, 1626-1627	0.5	
279	Electrocatalysis: Ultrafine Pt Nanoparticle-Decorated Pyrite-Type CoS2 Nanosheet Arrays Coated on Carbon Cloth as a Bifunctional Electrode for Overall Water Splitting (Adv. Energy Mater. 24/2018). *Advanced Energy Materials*, **2018**, 8, 1870110	21.8	8
278	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous Li–O2 Batteries: Recent Progress and Perspective. *Advanced Energy Materials*, **2018**, 8, 1800348	21.8	101
277	Recent Progress in Biomass-Derived Electrode Materials for High Volumetric Performance Supercapacitors. *Advanced Energy Materials*, **2018**, 8, 1801007	21.8	151
276	Chemical Immobilization and Conversion of Active Polysulfides Directly by Copper Current Collector: A New Approach to Enabling Stable Room-Temperature Li-S and Na-S Batteries. *Advanced Energy Materials*, **2018**, 8, 1800624	21.8	47
275	Ultrafine Pt Nanoparticle-Decorated Pyrite-Type CoS2 Nanosheet Arrays Coated on Carbon Cloth as a Bifunctional Electrode for Overall Water Splitting. *Advanced Energy Materials*, **2018**, 8, 1800935	21.8	217

274	Highly Efficient, Cost Effective, and Safe Sodiation Agent for High-Performance Sodium-Ion Batteries. *ChemSusChem*, **2018**, 11, 3286-3291	8.3	34
273	Impact of the Acid Treatment on Lignocellulosic Biomass Hard Carbon for Sodium-Ion Battery Anodes. *ChemSusChem*, **2018**, 11, 3276-3285	8.3	31
272	Atomically Thin Mesoporous Co O Layers Strongly Coupled with N-rGO Nanosheets as High-Performance Bifunctional Catalysts for 1D Knittable Zinc-Air Batteries. *Advanced Materials*, **2018**, 30, 1703657	24	233
271	Single lithium-ion conducting solid polymer electrolytes: advances and perspectives. *Chemical Society Reviews*, **2017**, 46, 797-815	58.5	611
270	Electrochemical Doping of Halide Perovskites with Ion Intercalation. *ACS Nano*, **2017**, 11, 1073-1079	16.7	85
269	Potassium Salts as Electrolyte Additives in Lithium□Oxygen Batteries. *Journal of Physical Chemistry C*, **2017**, 121, 3822-3829	3.8	25
268	Freestanding highly defect nitrogen-enriched carbon nanofibers for lithium ion battery thin-film anodes. *Journal of Materials Chemistry A*, **2017**, 5, 5532-5540	13	28
267	Bismuth chalcogenide compounds Bi2□ (X=O, S, Se): Applications in electrochemical energy storage. *Nano Energy*, **2017**, 34, 356-366	17.1	132
266	Kinetics Tuning the Electrochemistry of Lithium Dendrites Formation in Lithium Batteries through Electrolytes. *ACS Applied Materials & Interfaces*, **2017**, 9, 7003-7008	9.5	56
265	Regulating the spatial distribution of metal nanoparticles within metal-organic frameworks to enhance catalytic efficiency. *Nature Communications*, **2017**, 8, 14429	17.4	136
264	Exceptionally High Ionic Conductivity in Na P As S with Improved Moisture Stability for Solid-State Sodium-Ion Batteries. *Advanced Materials*, **2017**, 29, 1605561	24	122
263	Synergetic Effect of Ti and Oxygen Doping on Enhancing Photoelectrochemical and Photocatalytic Properties of TiO/g-CN Heterojunctions. *ACS Applied Materials & Interfaces*, **2017**, 9, 11577-11586	9.5	199
262	State-of-the-art characterization techniques for advanced lithium-ion batteries. *Nature Energy*, **2017**, 2,	62.3	251
261	Facet-Dependent Thermal Instability in LiCoO. *Nano Letters*, **2017**, 17, 2165-2171	11.5	73
260	Comprehensive Enhancement of Nanostructured Lithium-Ion Battery Cathode Materials via Conformal Graphene Dispersion. *Nano Letters*, **2017**, 17, 2539-2546	11.5	66
259	Depolarization effect to enhance the performance of lithium ions batteries. *Nano Energy*, **2017**, 33, 497-507	17.1	45
258	Understanding the charge/discharge mechanisms and passivation reactions in Na-O2 batteries. *Journal of Power Sources*, **2017**, 345, 237-246	8.9	18
257	Toward Highly Efficient Electrocatalyst for Li-O Batteries Using Biphasic N-Doping Cobalt@Graphene Multiple-Capsule Heterostructures. *Nano Letters*, **2017**, 17, 2959-2966	11.5	72

256	Open-Structured V2O5·nH2O Nanoflakes as Highly Reversible Cathode Material for Monovalent and Multivalent Intercalation Batteries. *Advanced Energy Materials*, **2017**, 7, 1602720	21.8	91
255	Revealing mechanism responsible for structural reversibility of single-crystal VO2 nanorods upon lithiation/delithiation. *Nano Energy*, **2017**, 36, 197-205	17.1	40
254	Lithium Superoxide Hydrolysis and Relevance to Li–O2 Batteries. *Journal of Physical Chemistry C*, **2017**, 121, 9657-9661	3.8	32
253	Architecture of Na-O2 battery deposits revealed by transmission X-ray microscopy. *Nano Energy*, **2017**, 37, 224-231	17.1	25
252	Metal–Air Batteries: Will They Be the Future Electrochemical Energy Storage Device of Choice?. *ACS Energy Letters*, **2017**, 2, 1370-1377	20.1	469
251	Sn Nanoparticles Encapsulated in 3D Nanoporous Carbon Derived from a Metal-Organic Framework for Anode Material in Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 17172-17177	9.5	70
250	Holey two-dimensional transition metal oxide nanosheets for efficient energy storage. *Nature Communications*, **2017**, 8, 15139	17.4	261
249	Mass and charge transport relevant to the formation of toroidal lithium peroxide nanoparticles in an aprotic lithium-oxygen battery: An experimental and theoretical modeling study. *Nano Research*, **2017**, 10, 4327-4336	10	9
248	Challenges and perspectives on high and intermediate-temperature sodium batteries. *Nano Research*, **2017**, 10, 4082-4114	10	68
247	Ultrathin Co3O4 Layers with Large Contact Area on Carbon Fibers as High-Performance Electrode for Flexible Zinc–Air Battery Integrated with Flexible Display. *Advanced Energy Materials*, **2017**, 7, 1700779	21.8	218
246	Sodium Peroxide Dihydrate or Sodium Superoxide: The Importance of the Cell Configuration for Sodium–Oxygen Batteries. *Small Methods*, **2017**, 1, 1700102	12.8	27
245	Improved Sodium-Ion Storage Performance of Ultrasmall Iron Selenide Nanoparticles. *Nano Letters*, **2017**, 17, 4137-4142	11.5	105
244	Two-Dimensional Holey CoO Nanosheets for High-Rate Alkali-Ion Batteries: From Rational Synthesis to in Situ Probing. *Nano Letters*, **2017**, 17, 3907-3913	11.5	134
243	Burning lithium in CS2 for high-performing compact Li2S–graphene nanocapsules for Li–S batteries. *Nature Energy*, **2017**, 2,	62.3	271
242	Advanced Lithium Batteries for Automobile Applications at ABAA-9. *ACS Energy Letters*, **2017**, 2, 1628-1631	20.1	2
241	3D Hierarchical nano-flake/micro-flower iron fluoride with hydration water induced tunnels for secondary lithium battery cathodes. *Nano Energy*, **2017**, 32, 10-18	17.1	55
240	Electrochemical Energy Storage and Conversion at EEST2016. *ACS Energy Letters*, **2017**, 2, 151-153	20.1	4
239	Polycation Binders: An Effective Approach toward Lithium Polysulfide Sequestration in Li–S Batteries. *ACS Energy Letters*, **2017**, 2, 2591-2597	20.1	39

238	Improving Na-O batteries with redox mediators. *Chemical Communications*, **2017**, 53, 12008-12011	5.8	26
237	Supported Cobalt Polyphthalocyanine for High-Performance Electrocatalytic CO2 Reduction. *CheM*, **2017**, 3, 652-664	16.2	260
236	Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. *Nature Communications*, **2017**, 8,	17.4	234
235	Mg-Ion Battery Electrode: An Organic Solid's Herringbone Structure Squeezed upon Mg-Ion Insertion. *Journal of the American Chemical Society*, **2017**, 139, 13031-13037	16.4	114
234	Lithium titanate hydrates with superfast and stable cycling in lithium ion batteries. *Nature Communications*, **2017**, 8, 627	17.4	88
233	Fast kinetics of magnesium monochloride cations in interlayer-expanded titanium disulfide for magnesium rechargeable batteries. *Nature Communications*, **2017**, 8, 339	17.4	220
232	Metal-Ion Batteries: Open-Structured V2O5□hH2O Nanoflakes as Highly Reversible Cathode Material for Monovalent and Multivalent Intercalation Batteries (Adv. Energy Mater. 14/2017). *Advanced Energy Materials*, **2017**, 7,	21.8	15
231	Defect Engineering of Chalcogen-Tailored Oxygen Electrocatalysts for Rechargeable Quasi-Solid-State Zinc-Air Batteries. *Advanced Materials*, **2017**, 29, 1702526	24	131
230	Na-Ion Batteries for Large Scale Applications: A Review on Anode Materials and Solid Electrolyte Interphase Formation. *Advanced Energy Materials*, **2017**, 7, 1700463	21.8	192
229	Identify the Removable Substructure in Carbon Activation. *Chemistry of Materials*, **2017**, 29, 7288-7295	9.6	38
228	Excess Li-Ion Storage on Reconstructed Surfaces of Nanocrystals To Boost Battery Performance. *Nano Letters*, **2017**, 17, 6018-6026	11.5	37
227	In Situ TEM Investigation of ZnO Nanowires during Sodiation and Lithiation Cycling. *Small Methods*, **2017**, 1, 1700202	12.8	35
226	A novel coronene//Na2Ti3O7 dual-ion battery. *Nano Energy*, **2017**, 40, 233-239	17.1	74
225	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. *Nature Energy*, **2017**, 2, 963-971	62.3	90
224	Amorphous MoS as the sulfur-equivalent cathode material for room-temperature Li-S and Na-S batteries. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 13091-13096	11.5	124
223	A Dicyclic Scaffold for Programmed Monocyclic and Polycyclic Polymer Architectures. *Macromolecules*, **2017**, 50, 8907-8915	5.5	12
222	Z-Scheme NiTiO/g-CN Heterojunctions with Enhanced Photoelectrochemical and Photocatalytic Performances under Visible LED Light Irradiation. *ACS Applied Materials & Interfaces*, **2017**, 9, 41120-41125	9.5	83
221	A three-dimensional hierarchical structure of cyclized-PAN/Si/Ni for mechanically stable silicon anodes. *Journal of Materials Chemistry A*, **2017**, 5, 24667-24676	13	24

220	Lithium Iron Orthosilicate Cathode: Progress and Perspectives. *ACS Energy Letters*, **2017**, 2, 1771-1781	20.1	52
219	Amorphous MoS3 Infiltrated with Carbon Nanotubes as an Advanced Anode Material of Sodium-Ion Batteries with Large Gravimetric, Areal, and Volumetric Capacities. *Advanced Energy Materials*, **2017** , 7, 1601602	21.8	119
218	Effective strategies for stabilizing sulfur for advanced lithium□sulfur batteries. *Journal of Materials Chemistry A*, **2017**, 5, 448-469	13	124
217	Synthesis of full concentration gradient cathode studied by high energy X-ray diffraction. *Nano Energy*, **2016**, 19, 522-531	17.1	50
216	Platinum-Coated Hollow Graphene Nanocages as Cathode Used in Lithium-Oxygen Batteries. *Advanced Functional Materials*, **2016**, 26, 7626-7633	15.6	75
215	In Operando XRD and TXM Study on the Metastable Structure Change of NaNi1/3Fe1/3Mn1/3O2 under Electrochemical Sodium-Ion Intercalation. *Advanced Energy Materials*, **2016**, 6, 1601306	21.8	95
214	Facile Synthesis of Boron-Doped rGO as Cathode Material for High Energy Li-O2 Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 23635-45	9.5	65
213	Crystallographic Evolution of P2 Na2/3Fe0.4Mn0.6O2 Electrodes during Electrochemical Cycling. *Chemistry of Materials*, **2016**, 28, 6342-6354	9.6	53
212	Structurally stable Mg-doped P2-Na2/3Mn1−□MgyO2 sodium-ion battery cathodes with high rate performance: insights from electrochemical, NMR and diffraction studies. *Energy and Environmental Science*, **2016**, 9, 3240-3251	35.4	200
211	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. *Nature Communications*, **2016**, 7, 13374	17.4	138
210	Tuning of Thermal Stability in Layered Li(NiMnCo)O. *Journal of the American Chemical Society*, **2016**, 138, 13326-13334	16.4	128
209	Silicon-based anodes for lithium-ion batteries: Effectiveness of materials synthesis and electrode preparation. *Nano Energy*, **2016**, 27, 359-376	17.1	297
208	Sea urchin-like NiCoO2@C nanocomposites for Li-ion batteries and supercapacitors. *Nano Energy*, **2016**, 27, 457-465	17.1	103
207	High Capacity of Hard Carbon Anode in Na-Ion Batteries Unlocked by POx Doping. *ACS Energy Letters*, **2016**, 1, 395-401	20.1	136
206	Freestanding three-dimensional core-shell nanoarrays for lithium-ion battery anodes. *Nature Communications*, **2016**, 7, 11774	17.4	124
205	Anion-redox nanolithia cathodes for Li-ion batteries. *Nature Energy*, **2016**, 1,	62.3	125
204	Polysulfides Capture-Copper Additive for Long Cycle Life Lithium Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 30248-30255	9.5	45
203	Protocol of Electrochemical Test and Characterization of Aprotic Li-O2 Battery. *Journal of Visualized Experiments*, **2016**,	1.6	2

202	An Effectively Activated Hierarchical Nano-/Microspherical Li1.2Ni0.2Mn0.6O2 Cathode for Long-Life and High-Rate Lithium-Ion Batteries. *ChemSusChem*, **2016**, 9, 728-35	8.3	52
201	Ultrafast and Highly Reversible Sodium Storage in Zinc-Antimony Intermetallic Nanomaterials. *Advanced Functional Materials*, **2016**, 26, 543-552	15.6	72
200	Kinetic Study of Parasitic Reactions in Lithium-Ion Batteries: A Case Study on LiNi(0.6)Mn(0.2)Co(0.2)O2. *ACS Applied Materials & Interfaces*, **2016**, 8, 3446-51	9.5	63
199	Dynamic study of (De)sodiation in alpha-MnO2 nanowires. *Nano Energy*, **2016**, 19, 382-390	17.1	44
198	Solar-powered electrochemical energy storage: an alternative to solar fuels. *Journal of Materials Chemistry A*, **2016**, 4, 2766-2782	13	92
197	Mg-Enriched Engineered Carbon from Lithium-Ion Battery Anode for Phosphate Removal. *ACS Applied Materials & Interfaces*, **2016**, 8, 2905-9	9.5	33
196	Solid-State Li-Ion Batteries Using Fast, Stable, Glassy Nanocomposite Electrolytes for Good Safety and Long Cycle-Life. *Nano Letters*, **2016**, 16, 1960-8	11.5	103
195	Sodium-Oxygen Battery: Steps Toward Reality. *Journal of Physical Chemistry Letters*, **2016**, 7, 1161-6	6.4	78
194	Understanding atomic scale phenomena within the surface layer of a long-term cycled 5 V spinel electrode. *Nano Energy*, **2016**, 19, 297-306	17.1	17
193	A lithium-oxygen battery based on lithium superoxide. *Nature*, **2016**, 529, 377-82	50.4	520
192	Insight into the Catalytic Mechanism of Bimetallic Platinum-Copper Core-Shell Nanostructures for Nonaqueous Oxygen Evolution Reactions. *Nano Letters*, **2016**, 16, 781-5	11.5	35
191	Atomistic Insights into the Oriented Attachment of Tunnel-Based Oxide Nanostructures. *ACS Nano*, **2016**, 10, 539-48	16.7	58
190	High-Performance P2-Phase Na2/3Mn0.8Fe0.1Ti0.1O2 Cathode Material for Ambient-Temperature Sodium-Ion Batteries. *Chemistry of Materials*, **2016**, 28, 106-116	9.6	166
189	Atomistic Exploration of the Surface-Sensitive Oriented Attachment Growth of a-MnCh Nanowires and the Formation of Defective Interface with 2□ and 2□ Tunnel Intergrowth. *Microscopy and Microanalysis*, **2016**, 22, 386-387	0.5	
188	Tuning the Mn Deposition on the Anode to Improve the Cycle Performance of the Mn-Based Lithium Ion Battery. *Advanced Materials Interfaces*, **2016**, 3, 1500856	4.6	22
187	High-Rate, Durable Sodium-Ion Battery Cathode Enabled by Carbon-Coated Micro-Sized Na3V2(PO4)3 Particles with Interconnected Vertical Nanowalls. *Advanced Materials Interfaces*, **2016**, 3, 1500740	4.6	39
186	Nitrogen-Doped Nanoporous Graphenic Carbon: An Efficient Conducting Support for O2 Cathode. *ChemNanoMat*, **2016**, 2, 692-697	3.5	31
185	Synthesis of Mg-Decorated Carbon Nanocomposites from MesoCarbon MicroBeads (MCMB) Graphite: Application for Wastewater Treatment. *ACS Omega*, **2016**, 1, 417-423	3.9	15

184	Microstructural Evolution in Transition-metal-oxide Cathode Materials for Lithium-Ion Batteries. *Microscopy and Microanalysis*, **2016**, 22, 1300-1301	0.5	2
183	The role of nanotechnology in the development of battery materials for electric vehicles. *Nature Nanotechnology*, **2016**, 11, 1031-1038	28.7	462
182	Enhanced photocatalytic and photoelectrochemical activities of reduced TiO2□/BiOCl heterojunctions. *Journal of Power Sources*, **2016**, 312, 12-22	8.9	44
181	Uniformly dispersed FeO x atomic clusters by pulsed arc plasma deposition: An efficient electrocatalyst for improving the performance of Li□O2 battery. *Nano Research*, **2016**, 9, 1913-1920	10	14
180	Ultrasonic-assisted pyrolyzation fabrication of reduced SnO2□ /g-C3N4 heterojunctions: Enhance photoelectrochemical and photocatalytic activity under visible LED light irradiation. *Nano Research*, **2016**, 9, 1969-1982	10	52
179	Conductive Polymer Binder-Enabled SiO-SnxCoyCz Anode for High-Energy Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 13373-7	9.5	20
178	Atomic Layer Deposition for Lithium-Based Batteries. *Advanced Materials Interfaces*, **2016**, 3, 1600564	4.6	59
177	Systematic study on the discharge product of Pt-based lithium oxygen batteries. *Journal of Power Sources*, **2016**, 332, 96-102	8.9	12
176	New Insights into the Instability of Discharge Products in Na-O2 Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 20120-7	9.5	56
175	Enhanced rate performance of LiNi0.5Mn1.5O4 fibers synthesized by electrospinning. *Nano Energy*, **2015**, 15, 616-624	17.1	23
174	Two-Dimensional, Ordered, Double Transition Metals Carbides (MXenes). *ACS Nano*, **2015**, 9, 9507-16	16.7	923
173	Study on the Catalytic Activity of Noble Metal Nanoparticles on Reduced Graphene Oxide for Oxygen Evolution Reactions in Lithium-Air Batteries. *Nano Letters*, **2015**, 15, 4261-8	11.5	123
172	In vivo integrity of polymer-coated gold nanoparticles. *Nature Nanotechnology*, **2015**, 10, 619-23	28.7	269
171	Improvement of Electrochemical Properties of Lithium□Oxygen Batteries Using a Silver Electrode. *Journal of Physical Chemistry C*, **2015**, 119, 15036-15040	3.8	22
170	Improve First-Cycle Efficiency and Rate Performance of Layered-Layered Li1.2Mn0.6Ni0.2O2 Using Oxygen Stabilizing Dopant. *ACS Applied Materials & Interfaces*, **2015**, 7, 16040-5	9.5	34
169	Design of surface protective layer of LiF/FeF3 nanoparticles in Li-rich cathode for high-capacity Li-ion batteries. *Nano Energy*, **2015**, 15, 164-176	17.1	129
168	Effect of different processes and Ti/Zn molar ratios on the structure, morphology, and enhanced photoelectrochemical and photocatalytic performance of Ti3+ self-doped titanium□inc hybrid oxides. *Journal of Power Sources*, **2015**, 285, 449-459	8.9	22
167	Theoretical Exploration of Various Lithium Peroxide Crystal Structures in a Li-Air Battery. *Energies*, **2015**, 8, 529-548	3.1	12

166	In-Situ-Reduced Synthesis of Ti□+ Self-Doped TiO⁄g-C₃N₄ Heterojunctions with High Photocatalytic Performance under LED Light Irradiation. *ACS Applied Materials & Interfaces*, **2015**, 7, 9023-30	9.5	422
165	Asynchronous Crystal Cell Expansion during Lithiation of K(+)-Stabilized □MnO2. *Nano Letters*, **2015**, 15, 2998-3007	11.5	137
164	Role of Cr3+/Cr6+ redox in chromium-substituted Li2MnO3□LiNi1/2Mn1/2O2 layered composite cathodes: electrochemistry and voltage fade. *Journal of Materials Chemistry A*, **2015**, 3, 9915-9924	13	29
163	Self-activation of cellulose: A new preparation methodology for activated carbon electrodes in electrochemical capacitors. *Nano Energy*, **2015**, 13, 709-717	17.1	77
162	Encapsulating micro-nano Si/SiO(x) into conjugated nitrogen-doped carbon as binder-free monolithic anodes for advanced lithium ion batteries. *Nanoscale*, **2015**, 7, 8023-34	7.7	73
161	Pd nanoparticles on ZnO-passivated porous carbon by atomic layer deposition: an effective electrochemical catalyst for Li-O2 battery. *Nanotechnology*, **2015**, 26, 164003	3.4	23
160	In Situ Analysis of Gas Generation in Lithium-Ion Batteries with Different Carbonate-Based Electrolytes. *ACS Applied Materials & Interfaces*, **2015**, 7, 22751-5	9.5	52
159	Stability of Catalyzed Magnesium Hydride Nanocrystalline During Hydrogen Cycling. Part II: Microstructure Evolution. *Journal of Physical Chemistry C*, **2015**, 119, 22272-22280	3.8	23
158	Review□Understanding and Mitigating Some of the Key Factors that Limit Non-Aqueous Lithium-Air Battery Performance. *Journal of the Electrochemical Society*, **2015**, 162, A2439-A2446	3.9	26
157	New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe3+/Fe4+ Redox in □NaFeO2. *Chemistry of Materials*, **2015**, 27, 6755-6764	9.6	114
156	□-Fe□□ Nanocrystalline Microspheres with Hybrid Behavior of Battery-Supercapacitor for Superior Lithium Storage. *ACS Applied Materials & Interfaces*, **2015**, 7, 26284-90	9.5	48
155	Reducing CO2 to dense nanoporous graphene by Mg/Zn for high power electrochemical capacitors. *Nano Energy*, **2015**, 11, 600-610	17.1	78
154	A comprehensive review of sodium layered oxides: powerful cathodes for Na-ion batteries. *Energy and Environmental Science*, **2015**, 8, 81-102	35.4	880
153	An experimental study of the (Ti□Al□V)□H phase diagram using in situ synchrotron XRD and TGA/DSC techniques. *Acta Materialia*, **2015**, 84, 29-41	8.4	65
152	Implications of the Unpaired Spins in Li□O2 Battery Chemistry and Electrochemistry: A Minireview. *ChemPlusChem*, **2015**, 80, 336-343	2.8	13
151	Microstructural Characterization of Air Electrode Architectures in Lithium-Oxygen Batteries. *Microscopy and Microanalysis*, **2015**, 21, 1373-1374	0.5	2
150	Carbon-Free Cathodes: A Step Forward in the Development of Stable Lithium-Oxygen Batteries. *ChemSusChem*, **2015**, 8, 3932-40	8.3	27
149	Progress in Mechanistic Understanding and Characterization Techniques of Li-S Batteries. *Advanced Energy Materials*, **2015**, 5, 1500408	21.8	321

148	Dimeric [Mo2S12]2□Cluster: A Molecular Analogue of MoS2 Edges for Superior Hydrogen-Evolution Electrocatalysis. *Angewandte Chemie*, **2015**, 127, 15396-15400	3.6	30
147	Scalable Preparation of Ternary Hierarchical Silicon Oxide-Nickel-Graphite Composites for Lithium-Ion Batteries. *ChemSusChem*, **2015**, 8, 4073-80	8.3	32
146	Lithium-Rich Nanoscale Li1.2Mn0.54Ni0.13Co0.13O2 Cathode Material Prepared by Co-Precipitation Combined Freeze Drying (CP□D) for Lithium-Ion Batteries. *Energy Technology*, **2015**, 3, 843-850	3.5	37
145	Dimeric [Mo2 S12](2-) Cluster: A Molecular Analogue of MoS2 Edges for Superior Hydrogen-Evolution Electrocatalysis. *Angewandte Chemie - International Edition*, **2015**, 54, 15181-5	16.4	128
144	Exploring Lithium-ion Battery Performance through in situ Characterization. *Microscopy and Microanalysis*, **2015**, 21, 1541-1542	0.5	
143	Electronic Structure of Sodium Superoxide Bulk, (100) Surface, and Clusters using Hybrid Density Functional: Relevance for Na-O2 Batteries. *Journal of Physical Chemistry Letters*, **2015**, 6, 2027-31	6.4	31
142	Phase Transformations and Formation of Ultra-Fine Microstructure During Hydrogen Sintering and Phase Transformation (HSPT) Processing of Ti-6Al-4V. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 5546-5560	2.3	28
141	Structural evolution during sodium deintercalation/intercalation in Na2/3[Fe1/2Mn1/2]O2. *Journal of Materials Chemistry A*, **2015**, 3, 6954-6961	13	84
140	Strong Lithium Polysulfide Chemisorption on Electroactive Sites of Nitrogen-Doped Carbon Composites For High-Performance Lithium□Sulfur Battery Cathodes. *Angewandte Chemie*, **2015**, 127, 4399-4403	3.6	165
139	Succinic acid-based leaching system: A sustainable process for recovery of valuable metals from spent Li-ion batteries. *Journal of Power Sources*, **2015**, 282, 544-551	8.9	239
138	Hard carbon originated from polyvinyl chloride nanofibers as high-performance anode material for Na-ion battery. *ACS Applied Materials & Interfaces*, **2015**, 7, 5598-604	9.5	183
137	Binder-free V2O5 cathode for greener rechargeable aluminum battery. *ACS Applied Materials & Interfaces*, **2015**, 7, 80-4	9.5	234
136	Demonstration of highly efficient lithium□sulfur batteries. *Journal of Materials Chemistry A*, **2015**, 3, 4170-4179	13	43
135	Interfacial effects on lithium superoxide disproportionation in Li-O□batteries. *Nano Letters*, **2015**, 15, 1041-6	11.5	77
134	Sulfur cathode based on layered carbon matrix for high-performance Li□S batteries. *Nano Energy*, **2015**, 12, 742-749	17.1	55
133	Strong lithium polysulfide chemisorption on electroactive sites of nitrogen-doped carbon composites for high-performance lithium-sulfur battery cathodes. *Angewandte Chemie - International Edition*, **2015**, 54, 4325-9	16.4	630
132	Anatase titania nanorods as an intercalation anode material for rechargeable sodium batteries. *Nano Letters*, **2014**, 14, 416-22	11.5	376
131	Synthesis and electrochemical performance of cathode material Li1.2Co0.13Ni0.13Mn0.54O2 from spent lithium-ion batteries. *Journal of Power Sources*, **2014**, 249, 28-34	8.9	80

130	Aprotic and aqueous Li-O batteries. *Chemical Reviews*, **2014**, 114, 5611-40	68.1	841
129	Nanocolumnar structured porous Cu-Sn thin film as anode material for lithium-ion batteries. *ACS Applied Materials & Interfaces*, **2014**, 6, 10877-85	9.5	42
128	In situ monitoring of discharge/charge processes in LiO2 batteries by electrochemical impedance spectroscopy. *Journal of Power Sources*, **2014**, 249, 110-117	8.9	43
127	Investigation of the Decomposition Mechanism of Lithium Bis(oxalate)borate (LiBOB) Salt in the Electrolyte of an Aprotic LiO2 Battery. *Energy Technology*, **2014**, 2, 348-354	3.5	11
126	Controllable crystalline preferred orientation in Li-Co-Ni-Mn oxide cathode thin films for all-solid-state lithium batteries. *Nanoscale*, **2014**, 6, 10611-22	7.7	35
125	A physical pulverization strategy for preparing a highly active composite of CoOx and crushed graphite for lithium-oxygen batteries. *ChemPhysChem*, **2014**, 15, 2070-6	3.2	10
124	Molecular-level insights into the reactivity of siloxane-based electrolytes at a lithium-metal anode. *ChemPhysChem*, **2014**, 15, 2077-83	3.2	9
123	Effect of the size-selective silver clusters on lithium peroxide morphology in lithium-oxygen batteries. *Nature Communications*, **2014**, 5, 4895	17.4	162
122	Free-standing hierarchically sandwich-type tungsten disulfide nanotubes/graphene anode for lithium-ion batteries. *Nano Letters*, **2014**, 14, 5899-904	11.5	243
121	Nanorod and nanoparticle shells in concentration gradient core-shell lithium oxides for rechargeable lithium batteries. *ChemSusChem*, **2014**, 7, 3295-303	8.3	15
120	Ultrasonic-assisted co-precipitation to synthesize lithium-rich cathode Li1.3Ni0.21Mn0.64O2+d materials for lithium-ion batteries. *Journal of Power Sources*, **2014**, 272, 922-928	8.9	19
119	High electrochemical performances of microsphere C-TiO anode for sodium-ion battery. *ACS Applied Materials & Interfaces*, **2014**, 6, 11295-301	9.5	187
118	Hydrogen Storage Properties of Magnesium Hydride with V-Based Additives. *Journal of Physical Chemistry C*, **2014**, 118, 21778-21784	3.8	27
117	Stable nanostructured cathode with polycrystalline Li-deficient Li0.28Co0.29Ni0.30Mn0.20O2 for lithium-ion batteries. *Nano Letters*, **2014**, 14, 1281-7	11.5	33
116	Electrocatalysts: Highly Efficient Non-Precious Metal Electrocatalysts Prepared from One-Pot Synthesized Zeolitic Imidazolate Frameworks (Adv. Mater. 7/2014). *Advanced Materials*, **2014**, 26, 1092-1092	24	1
115	An effective approach to protect lithium anode and improve cycle performance for Li-S batteries. *ACS Applied Materials & Interfaces*, **2014**, 6, 15542-9	9.5	143
114	Synthesis-microstructure-performance relationship of layered transition metal oxides as cathode for rechargeable sodium batteries prepared by high-temperature calcination. *ACS Applied Materials & Interfaces*, **2014**, 6, 17176-83	9.5	18
113	Layered P2/O3 Intergrowth Cathode: Toward High Power Na-Ion Batteries. *Advanced Energy Materials*, **2014**, 4, 1400458	21.8	146

112	Recovery of valuable metals from spent lithium-ion batteries by ultrasonic-assisted leaching process. *Journal of Power Sources*, **2014**, 262, 380-385	8.9	182
111	In situ X-ray diffraction study of dehydrogenation of MgH2 with Ti-based additives. *International Journal of Hydrogen Energy*, **2014**, 39, 5868-5873	6.7	28
110	Advanced Na[Ni0.25Fe0.5Mn0.25]O2/C-Fe3O4 sodium-ion batteries using EMS electrolyte for energy storage. *Nano Letters*, **2014**, 14, 1620-6	11.5	241
109	Thermodynamic Destabilization of Magnesium Hydride Using Mg-Based Solid Solution Alloys. *Journal of Physical Chemistry C*, **2014**, 118, 11526-11535	3.8	44
108	Highly efficient non-precious metal electrocatalysts prepared from one-pot synthesized zeolitic imidazolate frameworks. *Advanced Materials*, **2014**, 26, 1093-7	24	270
107	Rate-dependent, Li-ion insertion/deinsertion behavior of LiFePO4 cathodes in commercial 18650 LiFePO4 cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 3282-9	9.5	51
106	Electrodes: Layered P2/O3 Intergrowth Cathode: Toward High Power Na-Ion Batteries (Adv. Energy Mater. 17/2014). *Advanced Energy Materials*, **2014**, 4, n/a-n/a	21.8	5
105	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. *Nature Communications*, **2014**, 5, 5693	17.4	202
104	Insight into sulfur reactions in Li-S batteries. *ACS Applied Materials & Interfaces*, **2014**, 6, 21938-45	9.5	107
103	Organic-acid-assisted fabrication of low-cost Li-rich cathode material (Li[Li1/6Fe1/6Ni1/6Mn1/2]O2) for lithium-ion battery. *ACS Applied Materials & Interfaces*, **2014**, 6, 22305-15	9.5	28
102	R-MnO2 nanourchins: a promising catalyst in Li-O2 batteries. *Materials Research Society Symposia Proceedings*, **2014**, 1643, 1		1
101	The effect of chromium substitution on improving electrochemical performance of low-cost FeMn based Li-rich layered oxide as cathode material for lithium-ion batteries. *Journal of Power Sources*, **2014**, 245, 898-907	8.9	32
100	Update on Na-based battery materials. A growing research path. *Energy and Environmental Science*, **2013**, 6, 2312	35.4	781
99	Compatibility of lithium salts with solvent of the non-aqueous electrolyte in Li-O2 batteries. *Physical Chemistry Chemical Physics*, **2013**, 15, 5572-81	3.6	74
98	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. *Nature Communications*, **2013**, 4, 2383	17.4	355
97	Synthesis of porous carbon supported palladium nanoparticle catalysts by atomic layer deposition: application for rechargeable lithium-O2 battery. *Nano Letters*, **2013**, 13, 4182-9	11.5	170
96	RNA catalyses nuclear pre-mRNA splicing. *Nature*, **2013**, 503, 229-34	50.4	242
95	Graphene-based three-dimensional hierarchical sandwich-type architecture for high-performance Li/S batteries. *Nano Letters*, **2013**, 13, 4642-9	11.5	358

94	Mn(II) deposition on anodes and its effects on capacity fade in spinel lithium manganate-carbon systems. *Nature Communications*, **2013**, 4, 2437	17.4	315
93	High temperature sodium batteries: status, challenges and future trends. *Energy and Environmental Science*, **2013**, 6, 734	35.4	500
92	Effluent Particle Size and Permeability of Polyvinylchloride Membranes after Sodium Hypochlorite Exposure. *Journal of Environmental Engineering, ASCE*, **2013**, 139, 712-718	2	4
91	The effect of oxygen crossover on the anode of a Li-O(2) battery using an ether-based solvent: insights from experimental and computational studies. *ChemSusChem*, **2013**, 6, 51-5	8.3	202
90	Magnetism in lithium-oxygen discharge product. *ChemSusChem*, **2013**, 6, 1196-202	8.3	22
89	In situ fabrication of porous-carbon-supported □MnO2 nanorods at room temperature: application for rechargeable Li□O2 batteries. *Energy and Environmental Science*, **2013**, 6, 519	35.4	164
88	Effect of Ti Intermetallic Catalysts on Hydrogen Storage Properties of Magnesium Hydride. *Journal of Physical Chemistry C*, **2013**, 117, 12973-12980	3.8	112
87	Cathode Material with Nanorod Structure□An Application for Advanced High-Energy and Safe Lithium Batteries. *Chemistry of Materials*, **2013**, 25, 2109-2115	9.6	112
86	Synthesis and characterization of uniformly dispersed Fe3O4/Fe nanocomposite on porous carbon: application for rechargeable Li□O2 batteries. *RSC Advances*, **2013**, 3, 8276	3.7	52
85	Cation only conduction in new polymer□SiO2 nanohybrids: Na+ electrolytes. *Journal of Materials Chemistry A*, **2013**, 1, 8348	13	48
84	(De)lithiation mechanism of Li/SeS(x) (x = 0-7) batteries determined by in situ synchrotron X-ray diffraction and X-ray absorption spectroscopy. *Journal of the American Chemical Society*, **2013**, 135, 8047-56	16.4	268
83	Electrochemical Na Extraction/Insertion of Na3V2O2x(PO4)2F3□2x. *Chemistry of Materials*, **2013**, 25, 4917-4925	9.6	96
82	An approach to overcome first cycle irreversible capacity in P2-Na2/3[Fe1/2Mn1/2]O2. *Electrochemistry Communications*, **2013**, 37, 61-63	5.1	86
81	Thermodynamic and kinetic destabilization of magnesium hydride using Mg-In solid solution alloys. *Journal of the American Chemical Society*, **2013**, 135, 10982-5	16.4	83
80	Synthesis, Characterization, and Structural Modeling of High-Capacity, Dual Functioning MnO2 Electrode/Electrocatalysts for Li-O2 Cells. *Advanced Energy Materials*, **2013**, 3, 75-84	21.8	103
79	Recent Research Progress on Non-aqueous Lithium-Air Batteries from Argonne National Laboratory. *Energies*, **2013**, 6, 6016-6044	3.1	40
78	□MnO2 nanotubes: high surface area and enhanced lithium battery properties. *Chemical Communications*, **2012**, 48, 6945-7	5.8	152
77	Optical Sensing of Small Ions with Colloidal Nanoparticles. *Chemistry of Materials*, **2012**, 24, 738-745	9.6	52

76	Ascorbic-acid-assisted recovery of cobalt and lithium from spent Li-ion batteries. *Journal of Power Sources*, **2012**, 218, 21-27	8.9	259
75	General acid-base catalysis mediated by nucleobases in the hairpin ribozyme. *Journal of the American Chemical Society*, **2012**, 134, 16717-24	16.4	65
74	Na-ion batteries, recent advances and present challenges to become low cost energy storage systems. *Energy and Environmental Science*, **2012**, 5, 5884	35.4	2716
73	Mechanism of capacity fade of MCMB/Li1.1[Ni1/3Mn1/3Co1/3]0.9O2cell at elevated temperature and additives to improve its cycle life. *Journal of Materials Chemistry*, **2011**, 21, 17754		83
72	A disiloxane-functionalized phosphonium-based ionic liquid as electrolyte for lithium-ion batteries. *Chemical Communications*, **2011**, 47, 11969-71	5.8	22
71	Conversion of carbon dioxide to few-layer graphene. *Journal of Materials Chemistry*, **2011**, 21, 9491		213
70	Increased Stability Toward Oxygen Reduction Products for Lithium-Air Batteries with Oligoether-Functionalized Silane Electrolytes. *Journal of Physical Chemistry C*, **2011**, 115, 25535-25542	3.8	159
69	Tin(IV) sulfide: Novel nanocrystalline morphologies. *Inorganica Chimica Acta*, **2011**, 374, 627-631	2.7	20
68	Reaction Mechanisms in the Li3AlH6/LiBH4 and Al/LiBH4 Systems for Reversible Hydrogen Storage. Part 2: Solid-State NMR Studies. *Journal of Physical Chemistry C*, **2011**, 115, 6048-6056	3.8	35
67	Reaction Mechanisms in the Li3AlH6/LiBH4 and Al/LiBH4 Systems for Reversible Hydrogen Storage. Part 1: H Capacity and Role of Al. *Journal of Physical Chemistry C*, **2011**, 115, 6040-6047	3.8	19
66	A general and efficient approach for the construction of RNA oligonucleotides containing a 5'-phosphorothiolate linkage. *Nucleic Acids Research*, **2011**, 39, e31	20.1	14
65	Low-Temperature Synthesis of Superconducting NanocrystallineMgB2. *Journal of Nanomaterials*, **2010**, 2010, 1-5	3.2	5
64	Nucleobase-mediated general acid-base catalysis in the Varkud satellite ribozyme. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 11751-6	11.5	67
63	I2-Hydrosol-Seeded Growth of (I2)n-C-Codoped Meso/Nanoporous TiO2 for Visible Light-Driven Photocatalysis. *Journal of Physical Chemistry C*, **2010**, 114, 9510-9517	3.8	52
62	Visible-light-driven photocatalytic S- and C- codoped meso/nanoporous TiO2. *Energy and Environmental Science*, **2010**, 3, 1128	35.4	117
61	Hydrogenation of nanocrystalline Mg at room temperature in the presence of TiH(2). *Journal of the American Chemical Society*, **2010**, 132, 6616-7	16.4	110
60	Synthesis of supported platinum nanoparticles from Li-Pt solid solution. *Journal of the American Chemical Society*, **2010**, 132, 2151-3	16.4	15
59	Effect of milling intensity on the formation of LiMgN from the dehydrogenation of LiNH2MgH2 (1:1) mixture. *Journal of Power Sources*, **2010**, 195, 1992-1997	8.9	23

58	Effect of Milling Parameters on the Dehydrogenation Properties of the MgTiH System. *Journal of Physical Chemistry C*, **2009**, 113, 19344-19350	3.8	41
57	Hydrogen storage properties of nanosized MgH2-0.1TiH2 prepared by ultrahigh-energy-high-pressure milling. *Journal of the American Chemical Society*, **2009**, 131, 15843-52	16.4	219
56	Hydrogen Storage Properties of a Combined Li3AlH6-LiBH4 System. *Materials Research Society Symposia Proceedings*, **2008**, 1098, 1		
55	Hydrogen storage properties of the MgTiH system prepared by high-energy-high-pressure reactive milling. *Journal of Power Sources*, **2008**, 180, 491-497	8.9	74
54	The effect of heating rate on the reversible hydrogen storage based on reactions of Li3AlH6 with LiNH2. *Journal of Power Sources*, **2008**, 185, 1354-1358	8.9	8
53	Potential of Binary Lithium Magnesium Nitride for Hydrogen Storage Applications. *Journal of Physical Chemistry C*, **2007**, 111, 12129-12134	3.8	54
52	Potential and Reaction Mechanism of LiMgAlNH System for Reversible Hydrogen Storage. *Journal of Physical Chemistry C*, **2007**, 111, 16686-16692	3.8	23
51	New freeze-drying method for LiFePO4 synthesis. *Journal of Power Sources*, **2007**, 171, 879-885	8.9	63
50	A hybrid method for hydrogen storage and generation from water. *Journal of Power Sources*, **2007**, 172, 853-858	8.9	12
49	The Potential of Binary Lithium Magnesium Nitride - LiMgN for Hydrogen Storage Application. *Materials Research Society Symposia Proceedings*, **2007**, 1042, 1		
48	Structural properties of epitaxial δ-Al2O3 (111) thin films on 4H-SiC (0001). *Applied Physics Letters*, **2007**, 90, 061916	3.4	14
47	Engineering epitaxial δ-Al2O3 gate dielectric films on 4H-SiC. *Journal of Applied Physics*, **2007**, 102, 104112	2.5	20
46	Isostructural Cd3E2 (E = P, As) Microcrystals Prepared via a Hydrothermal Route. *Crystal Growth and Design*, **2006**, 6, 849-853	3.5	15
45	A dehydrogenation mechanism of metal hydrides based on interactions between Hdelta+ and H-. *Inorganic Chemistry*, **2006**, 45, 8749-54	5.1	44
44	A new Li-Al-N-H system for reversible hydrogen storage. *Journal of Physical Chemistry B*, **2006**, 110, 14236-9	3.4	50
43	Synthesis and Characterization of Nanoscaled Cerium (IV) Oxide via a Solid-State Mechanochemical Method. *Journal of the American Ceramic Society*, **2006**, 89, 842-847	3.8	20
42	Dehydrogenation of a combined LiAlH4/LiNH2 system. *Journal of Physical Chemistry B*, **2005**, 109, 20830-4	3.4	67
41	InP nanocrystals via surfactant-aided hydrothermal synthesis. *Journal of Applied Physics*, **2004**, 95, 3683-3688	2.5	33

40	Reduction of selenious acid induced by ultrasonic irradiation--formation of Se nanorods. *Ultrasonics Sonochemistry*, **2004**, 11, 307-10	8.9	9
39	Hydrothermal route to InAs semiconductor nanocrystals. *Inorganic Chemistry*, **2004**, 43, 4543-5	5.1	11
38	A Novel in situ Template-controlled Route to CuS Nanorods via Transition Metal Liquid Crystals. *Chemistry Letters*, **2003**, 32, 30-31	1.7	39
37	The Growth Process, Stability of GaP Nanocrystals and Formation of Ga3P Nanocrystals under Solvothermal Conditions in Benzene. *European Journal of Inorganic Chemistry*, **2003**, 2003, 1822-1827	2.3	12
36	Irradiation route to photoluminescent CdS?CdSe with core?shell nanostructures under ambient conditions. *Canadian Journal of Chemistry*, **2003**, 81, 381-384	0.9	3
35	Molecular Template Preparation of AgBiS2Nanowhiskers. *Chemistry Letters*, **2002**, 31, 612-613	1.7	20
34	A Chemical-Scissors-Assemble Route to Titanium Carbide Nanorods. *Chemistry Letters*, **2002**, 31, 820-821	1.7	8
33	Mild benzene-thermal route to GaP nanorods and nanospheres. *Inorganic Chemistry*, **2002**, 41, 1850-4	5.1	11
32	Aqueous synthesis of III-V semiconductor GaP and InP exhibiting pronounced quantum confinement. *Chemical Communications*, **2002**, 3064-5	5.8	49
31	A Novel Route to Multiwalled Carbon Nanotubes and Carbon Nanorods at Low Temperature. *Journal of Physical Chemistry B*, **2002**, 106, 933-937	3.4	78
30	Sonochemical synthesis and mechanistic study of copper selenides Cu(2-x)Se, beta-CuSe, and Cu(3)Se(2). *Inorganic Chemistry*, **2002**, 41, 387-92	5.1	149
29	Study of the dissolution behavior of selenium and tellurium in different solvents novel route to Se, Te tubular bulk single crystals. *Journal of Materials Chemistry*, **2002**, 12, 2755-2761		151
28	Low temperature interface-mineralizing route to hollow CuS, CdS, and NiS spheres. *Canadian Journal of Chemistry*, **2002**, 80, 263-268	0.9	22
27	Synthesis of closed PbS nanowires with regular geometric morphologies. *Journal of Materials Chemistry*, **2002**, 12, 403-405		198
26	Synthesis of rod-, twinrod-, and tetrapod-shaped CdS nanocrystals using a highly oriented solvothermal recrystallization technique. *Journal of Materials Chemistry*, **2002**, 12, 748-753		181
25	Thermic conversion of benzene into 6-phenylfulvene with high yield mediated by GaP nanocrystals. *Chemical Communications*, **2002**, 2880-1	5.8	9
24	Scission Template Transportation route to controllably synthesize CdIn2S4 nanorods. *Journal of Materials Chemistry*, **2002**, 12, 103-106		21
23	Synthesis of Novel Nickel Sulfide Layer-Rolled Structures. *Advanced Materials*, **2001**, 13, 1278	24	79

22	Metastable MnS Crystallites through Solvothermal Synthesis. *Chemistry of Materials*, **2001**, 13, 2169-2172	9.6	132
21	Potassium borohydride reducing route to phase-pure nanocrystalline InSb at low temperature. *Canadian Journal of Chemistry*, **2001**, 79, 127-130	0.9	6
20	Mild Hydrothermal-Reduction Synthesis and M□ssbauer Study of Low-Dimensional Iron Chalcogenide Microcrystals and Single Crystals. *Chemistry of Materials*, **2001**, 13, 3927-3932	9.6	33
19	Oleate vesicle template route to silver nanowires. *Journal of Materials Chemistry*, **2001**, 11, 1775-1777		53
18	A safe sonochemical route to iron, cobalt and nickel monoarsenides. *Journal of Materials Chemistry*, **2001**, 11, 3281-3284		14
17	Preparation, Characterization, and Catalytic Effect of CS2-Stabilized Silver Nanoparticles in Aqueous Solution. *Langmuir*, **2001**, 17, 3795-3799	4	51
16	Cu5.5FeS6.5 nanotubes□ new kind of ternary sulfide nanotube. *New Journal of Chemistry*, **2001**, 25, 1359-1361	3.6	12
15	Rigorous solutions of a particle in □potential fields in phase space. *Physical Chemistry Chemical Physics*, **2001**, 3, 1022-1026	3.6	4
14	In-situ interface self-assemblies of nanocrystalline Ag2E (E = S, Se, or Te)via chalcogen directional transfer agents. *Journal of Materials Chemistry*, **2001**, 11, 584-588		6
13	Simultaneous In Situ Formation of ZnS Nanowires in a Liquid Crystal Template by □Irradiation. *Chemistry of Materials*, **2001**, 13, 1213-1218	9.6	189
12	A Safe Low Temperature Route to Nanocrystalline Transition Metal Arsenides. *Chemistry Letters*, **2000**, 29, 114-115	1.7	0
11	Solvothermal Coordination□Reduction Route to □-NiSb Nanocrystals at Low Temperature. *Journal of Solid State Chemistry*, **2000**, 155, 42-45	3.3	8
10	Preparation and phase transformation of nanocrystalline copper sulfides (Cu9S8, Cu7S4 and CuS) at low temperature. *Journal of Materials Chemistry*, **2000**, 10, 2193-2196		156
9	CdS/CdSe core/sheath nanostructures obtained from CdS nanowires. *Chemical Communications*, **1999**, 1969-1970	5.8	27
8	A Safe Low Temperature Route to InAs Nanofibers. *Chemistry of Materials*, **1999**, 11, 2619-2622	9.6	27
7	Structure, Composition, Transport Properties, and Electrochemical Performance of the Electrode-Electrolyte Interphase in Non-Aqueous Na-Ion Batteries. *Advanced Materials Interfaces*,2101773	4.6	1
6	Unveiling the Role of Tetrabutylammonium and Cesium Bulky Cations in Enhancing Na-O 2 Battery Performance. *Advanced Energy Materials*,2102834	21.8	2
5	Hydrogen-Bonding Reinforced Flexible Composite Electrodes for Enhanced Energy Storage. *Advanced Functional Materials*,2108003	15.6	1

4	Intelligence-assisted predesign for the sustainable recycling of lithium-ion batteries and beyond. *Energy and Environmental Science*,	35.4	9
3	Nanostructured Carbon Composites from Cigarette Filter Wastes and Graphene Oxide Suitable as Electrodes for 3.4 V Supercapacitors. *Batteries and Supercaps*,	5.6	2
2	Wood Carbon Based Single-Atom Catalyst for Rechargeable Zn-Air Batteries. *ACS Energy Letters*,3624-3633	20.1	11
1	Single-Layer-Particle Electrode Design for Practical Fast-Charging Lithium-ion Batteries. *Advanced Materials*,2202892	24	4