

Jun Lu

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Na-ion batteries, recent advances and present challenges to become low cost energy storage systems. <i>Energy and Environmental Science</i> , 2012 , 5, 5884	35.4	2716
578	30 Years of Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018 , 30, e1800561	24	1694
577	Batteries and fuel cells for emerging electric vehicle markets. <i>Nature Energy</i> , 2018 , 3, 279-289	62.3	1176
576	Two-Dimensional, Ordered, Double Transition Metals Carbides (MXenes). <i>ACS Nano</i> , 2015 , 9, 9507-16	16.7	923
575	A comprehensive review of sodium layered oxides: powerful cathodes for Na-ion batteries. <i>Energy and Environmental Science</i> , 2015 , 8, 81-102	35.4	880
574	Aprotic and aqueous Li-O ₂ batteries. <i>Chemical Reviews</i> , 2014 , 114, 5611-40	68.1	841
573	Update on Na-based battery materials. A growing research path. <i>Energy and Environmental Science</i> , 2013 , 6, 2312	35.4	781
572	Strong lithium polysulfide chemisorption on electroactive sites of nitrogen-doped carbon composites for high-performance lithium-sulfur battery cathodes. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 4325-9	16.4	630
571	Single lithium-ion conducting solid polymer electrolytes: advances and perspectives. <i>Chemical Society Reviews</i> , 2017 , 46, 797-815	58.5	611
570	A lithium-oxygen battery based on lithium superoxide. <i>Nature</i> , 2016 , 529, 377-82	50.4	520
569	High temperature sodium batteries: status, challenges and future trends. <i>Energy and Environmental Science</i> , 2013 , 6, 734	35.4	500
568	Metal-Air Batteries: Will They Be the Future Electrochemical Energy Storage Device of Choice?. <i>ACS Energy Letters</i> , 2017 , 2, 1370-1377	20.1	469
567	The role of nanotechnology in the development of battery materials for electric vehicles. <i>Nature Nanotechnology</i> , 2016 , 11, 1031-1038	28.7	462
566	Evolution of redox couples in Li- and Mn-rich cathode materials and mitigation of voltage fade by reducing oxygen release. <i>Nature Energy</i> , 2018 , 3, 690-698	62.3	435
565	In-Situ-Reduced Synthesis of Ti ^{IV} -Self-Doped TiO ₂ /g-C ₃ N ₄ Heterojunctions with High Photocatalytic Performance under LED Light Irradiation. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 9023-30	9.5	422
564	Commercialization of Lithium Battery Technologies for Electric Vehicles. <i>Advanced Energy Materials</i> , 2019 , 9, 1900161	21.8	407
563	Automotive Li-Ion Batteries: Current Status and Future Perspectives. <i>Electrochemical Energy Reviews</i> , 2019 , 2, 1-28	29.3	396

562	Anatase titania nanorods as an intercalation anode material for rechargeable sodium batteries. <i>Nano Letters</i> , 2014 , 14, 416-22	11.5	376
561	Dissolution, migration, and deposition of transition metal ions in Li-ion batteries exemplified by Mn-based cathodes – a critical review. <i>Energy and Environmental Science</i> , 2018 , 11, 243-257	35.4	364
560	Graphene-based three-dimensional hierarchical sandwich-type architecture for high-performance Li/S batteries. <i>Nano Letters</i> , 2013 , 13, 4642-9	11.5	358
559	A nanostructured cathode architecture for low charge overpotential in lithium-oxygen batteries. <i>Nature Communications</i> , 2013 , 4, 2383	17.4	355
558	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. <i>Electrochemical Energy Reviews</i> , 2018 , 1, 35-53	29.3	334
557	Progress in Mechanistic Understanding and Characterization Techniques of Li-S Batteries. <i>Advanced Energy Materials</i> , 2015 , 5, 1500408	21.8	321
556	Mn(II) deposition on anodes and its effects on capacity fade in spinel lithium manganate-carbon systems. <i>Nature Communications</i> , 2013 , 4, 2437	17.4	315
555	Silicon-based anodes for lithium-ion batteries: Effectiveness of materials synthesis and electrode preparation. <i>Nano Energy</i> , 2016 , 27, 359-376	17.1	297
554	Revisiting the Role of Polysulfides in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2018 , 30, e1705590	24	291
553	Simultaneously Dual Modification of Ni-Rich Layered Oxide Cathode for High-Energy Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2019 , 29, 1808825	15.6	287
552	Burning lithium in CS ₂ for high-performing compact Li ₂ S/graphene nanocapsules for LiS batteries. <i>Nature Energy</i> , 2017 , 2,	62.3	271
551	Highly efficient non-precious metal electrocatalysts prepared from one-pot synthesized zeolitic imidazolate frameworks. <i>Advanced Materials</i> , 2014 , 26, 1093-7	24	270
550	In vivo integrity of polymer-coated gold nanoparticles. <i>Nature Nanotechnology</i> , 2015 , 10, 619-23	28.7	269
549	(De)lithiation mechanism of Li/SeS(x) (x = 0-7) batteries determined by in situ synchrotron X-ray diffraction and X-ray absorption spectroscopy. <i>Journal of the American Chemical Society</i> , 2013 , 135, 8047-56	16.4	268
548	New Concepts in Electrolytes. <i>Chemical Reviews</i> , 2020 , 120, 6783-6819	68.1	267
547	Holey two-dimensional transition metal oxide nanosheets for efficient energy storage. <i>Nature Communications</i> , 2017 , 8, 15139	17.4	261
546	Supported Cobalt Polyphthalocyanine for High-Performance Electrocatalytic CO ₂ Reduction. <i>Chem</i> , 2017 , 3, 652-664	16.2	260
545	Ascorbic-acid-assisted recovery of cobalt and lithium from spent Li-ion batteries. <i>Journal of Power Sources</i> , 2012 , 218, 21-27	8.9	259

544	Bridging the academic and industrial metrics for next-generation practical batteries. <i>Nature Nanotechnology</i> , 2019 , 14, 200-207	28.7	255
543	Structural defects on converted bismuth oxide nanotubes enable highly active electrocatalysis of carbon dioxide reduction. <i>Nature Communications</i> , 2019 , 10, 2807	17.4	252
542	State-of-the-art characterization techniques for advanced lithium-ion batteries. <i>Nature Energy</i> , 2017 , 2,	62.3	251
541	A room-temperature sodium-sulfur battery with high capacity and stable cycling performance. <i>Nature Communications</i> , 2018 , 9, 3870	17.4	247
540	Interlayer Material Selection for Lithium-Sulfur Batteries. <i>Joule</i> , 2019 , 3, 361-386	27.8	246
539	From Charge Storage Mechanism to Performance: A Roadmap toward High Specific Energy Sodium-Ion Batteries through Carbon Anode Optimization. <i>Advanced Energy Materials</i> , 2018 , 8, 1703268	21.8	244
538	Free-standing hierarchically sandwich-type tungsten disulfide nanotubes/graphene anode for lithium-ion batteries. <i>Nano Letters</i> , 2014 , 14, 5899-904	11.5	243
537	RNA catalyses nuclear pre-mRNA splicing. <i>Nature</i> , 2013 , 503, 229-34	50.4	242
536	Advanced Na[Ni _{0.25} Fe _{0.5} Mn _{0.25}]O ₂ /C-Fe ₃ O ₄ sodium-ion batteries using EMS electrolyte for energy storage. <i>Nano Letters</i> , 2014 , 14, 1620-6	11.5	241
535	Succinic acid-based leaching system: A sustainable process for recovery of valuable metals from spent Li-ion batteries. <i>Journal of Power Sources</i> , 2015 , 282, 544-551	8.9	239
534	In situ quantification of interphasial chemistry in Li-ion battery. <i>Nature Nanotechnology</i> , 2019 , 14, 50-56	28.7	235
533	Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. <i>Nature Communications</i> , 2017 , 8,	17.4	234
532	Binder-free V ₂ O ₅ cathode for greener rechargeable aluminum battery. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 80-4	9.5	234
531	Atomically Thin Mesoporous Co O Layers Strongly Coupled with N-rGO Nanosheets as High-Performance Bifunctional Catalysts for 1D Knittable Zinc-Air Batteries. <i>Advanced Materials</i> , 2018 , 30, 1703657	24	233
530	Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. <i>Advanced Energy Materials</i> , 2018 , 8, 1800266	21.8	226
529	Diffusion-free Grotthuss topochemistry for high-rate and long-life proton batteries. <i>Nature Energy</i> , 2019 , 4, 123-130	62.3	225
528	Fast kinetics of magnesium monochloride cations in interlayer-expanded titanium disulfide for magnesium rechargeable batteries. <i>Nature Communications</i> , 2017 , 8, 339	17.4	220
527	Electrochemical reduction of nitrate to ammonia via direct eight-electron transfer using a copper-molecular solid catalyst. <i>Nature Energy</i> , 2020 , 5, 605-613	62.3	220

- 526 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
- 525 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
- 524 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
- 523 Conversion of carbon dioxide to few-layer graphene. *Journal of Materials Chemistry*, **2011**, 21, 9491 213
- 522 Reverse Dual-Ion Battery via a ZnCl₂ Water-in-Salt Electrolyte. *Journal of the American Chemical Society*, **2019**, 141, 6338-6344 16.4 210
- 521 The effect of oxygen crossover on the anode of a Li-O₂ battery using an ether-based solvent: insights from experimental and computational studies. *ChemSusChem*, **2013**, 6, 51-5 8.3 202
- 520 Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. *Nature Communications*, **2014**, 5, 5693 17.4 202
- 519 Structurally stable Mg-doped P₂-Na₂/3Mn¹⁺Mg_yO₂ 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
- 518 Synergetic Effect of Ti and Oxygen Doping on Enhancing Photoelectrochemical and Photocatalytic Properties of TiO₂/g-CN Heterojunctions. *ACS Applied Materials & Interfaces*, **2017**, 9, 11577-11586 9.5 199
- 517 Synthesis of closed PbS nanowires with regular geometric morphologies. *Journal of Materials Chemistry*, **2002**, 12, 403-405 198
- 516 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
- 515 Simultaneous In Situ Formation of ZnS Nanowires in a Liquid Crystal Template by γ -Irradiation. *Chemistry of Materials*, **2001**, 13, 1213-1218 9.6 189
- 514 High electrochemical performances of microsphere C-TiO₂ anode for sodium-ion battery. *ACS Applied Materials & Interfaces*, **2014**, 6, 11295-301 9.5 187
- 513 A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 9640-9645 16.4 186
- 512 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
- 511 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
- 510 Elucidating anionic oxygen activity in lithium-rich layered oxides. *Nature Communications*, **2018**, 9, 947 17.4 181
- 509 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

508	Synthesis of porous carbon supported palladium nanoparticle catalysts by atomic layer deposition: application for rechargeable lithium-O ₂ battery. <i>Nano Letters</i> , 2013 , 13, 4182-9	11.5	170
507	Electrochemically activated spinel manganese oxide for rechargeable aqueous aluminum battery. <i>Nature Communications</i> , 2019 , 10, 73	17.4	169
506	Boosting Sodium Storage in TiO Nanotube Arrays through Surface Phosphorylation. <i>Advanced Materials</i> , 2018 , 30, 1704337	24	168
505	Selective CO ₂ Reduction on 2D Mesoporous Bi Nanosheets. <i>Advanced Energy Materials</i> , 2018 , 8, 1801536	21.8	168
504	High-Performance P2-Phase Na _{2/3} Mn _{0.8} Fe _{0.1} Ti _{0.1} O ₂ Cathode Material for Ambient-Temperature Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2016 , 28, 106-116	9.6	166
503	Strong Lithium Polysulfide Chemisorption on Electroactive Sites of Nitrogen-Doped Carbon Composites For High-Performance Lithium-Sulfur Battery Cathodes. <i>Angewandte Chemie</i> , 2015 , 127, 4399-4403	3.6	165
502	In situ fabrication of porous-carbon-supported MnO ₂ nanorods at room temperature: application for rechargeable LiO ₂ batteries. <i>Energy and Environmental Science</i> , 2013 , 6, 519	35.4	164
501	Effect of the size-selective silver clusters on lithium peroxide morphology in lithium-oxygen batteries. <i>Nature Communications</i> , 2014 , 5, 4895	17.4	162
500	Chemisorption of polysulfides through redox reactions with organic molecules for lithium-sulfur batteries. <i>Nature Communications</i> , 2018 , 9, 705	17.4	159
499	High Volumetric Capacitance, Ultralong Life Supercapacitors Enabled by Waxberry-Derived Hierarchical Porous Carbon Materials. <i>Advanced Energy Materials</i> , 2018 , 8, 1702695	21.8	159
498	High temperature shockwave stabilized single atoms. <i>Nature Nanotechnology</i> , 2019 , 14, 851-857	28.7	159
497	Increased Stability Toward Oxygen Reduction Products for Lithium-Air Batteries with Oligoether-Functionalized Silane Electrolytes. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 25535-25542	3.8	159
496	Preparation and phase transformation of nanocrystalline copper sulfides (Cu ₉ S ₈ , Cu ₇ S ₄ and CuS) at low temperature. <i>Journal of Materials Chemistry</i> , 2000 , 10, 2193-2196		156
495	MnO ₂ nanotubes: high surface area and enhanced lithium battery properties. <i>Chemical Communications</i> , 2012 , 48, 6945-7	5.8	152
494	Hard Carbon as Sodium-Ion Battery Anodes: Progress and Challenges. <i>ChemSusChem</i> , 2019 , 12, 133-144	8.3	152
493	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. <i>Nature Reviews Materials</i> , 2020 , 5, 276-294	73.3	151
492	Study of the dissolution behavior of selenium and tellurium in different solvents—novel route to Se, Te tubular bulk single crystals. <i>Journal of Materials Chemistry</i> , 2002 , 12, 2755-2761		151
491	Recent Progress in Biomass-Derived Electrode Materials for High Volumetric Performance Supercapacitors. <i>Advanced Energy Materials</i> , 2018 , 8, 1801007	21.8	151

490	Conductivity and lithiophilicity gradients guide lithium deposition to mitigate short circuits. <i>Nature Communications</i> , 2019 , 10, 1896	17.4	150
489	Graphene Wrapped FeSe ₂ Nano-Microspheres with High Pseudocapacitive Contribution for Enhanced Na-Ion Storage. <i>Advanced Energy Materials</i> , 2019 , 9, 1900356	21.8	149
488	Sonochemical synthesis and mechanistic study of copper selenides Cu(2-x)Se, beta-CuSe, and Cu(3)Se(2). <i>Inorganic Chemistry</i> , 2002 , 41, 387-92	5.1	149
487	Challenges in Zinc Electrodes for Alkaline Zinc-Air Batteries: Obstacles to Commercialization. <i>ACS Energy Letters</i> , 2019 , 4, 2259-2270	20.1	147
486	Layered P2/O3 Intergrowth Cathode: Toward High Power Na-Ion Batteries. <i>Advanced Energy Materials</i> , 2014 , 4, 1400458	21.8	146
485	Oxygen Release Degradation in Li-Ion Battery Cathode Materials: Mechanisms and Mitigating Approaches. <i>Advanced Energy Materials</i> , 2019 , 9, 1900551	21.8	145
484	An effective approach to protect lithium anode and improve cycle performance for Li-S batteries. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 15542-9	9.5	143
483	Heterojunction Architecture of N-Doped WO ₃ Nanobundles with Ce ₂ S ₃ Nanodots Hybridized on a Carbon Textile Enables a Highly Efficient Flexible Photocatalyst. <i>Advanced Functional Materials</i> , 2019 , 29, 1903490	15.6	140
482	The influence of large cations on the electrochemical properties of tunnel-structured metal oxides. <i>Nature Communications</i> , 2016 , 7, 13374	17.4	138
481	Asynchronous Crystal Cell Expansion during Lithiation of K(+)-Stabilized δ -MnO ₂ . <i>Nano Letters</i> , 2015 , 15, 2998-3007	11.5	137
480	A disordered rock salt anode for fast-charging lithium-ion batteries. <i>Nature</i> , 2020 , 585, 63-67	50.4	137
479	Regulating the spatial distribution of metal nanoparticles within metal-organic frameworks to enhance catalytic efficiency. <i>Nature Communications</i> , 2017 , 8, 14429	17.4	136
478	High Capacity of Hard Carbon Anode in Na-Ion Batteries Unlocked by PO _x Doping. <i>ACS Energy Letters</i> , 2016 , 1, 395-401	20.1	136
477	Heteroatom-Doped Porous Carbon Materials with Unprecedented High Volumetric Capacitive Performance. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 2397-2401	16.4	135
476	Two-Dimensional Holey CoO Nanosheets for High-Rate Alkali-Ion Batteries: From Rational Synthesis to in Situ Probing. <i>Nano Letters</i> , 2017 , 17, 3907-3913	11.5	134
475	Bismuth chalcogenide compounds Bi ₂ B (X=O, S, Se): Applications in electrochemical energy storage. <i>Nano Energy</i> , 2017 , 34, 356-366	17.1	132
474	Cobalt in lithium-ion batteries. <i>Science</i> , 2020 , 367, 979-980	33.3	132
473	Solid electrolytes and interfaces in all-solid-state sodium batteries: Progress and perspective. <i>Nano Energy</i> , 2018 , 52, 279-291	17.1	132

- 472 Metastable MnS Crystallites through Solvothermal Synthesis. *Chemistry of Materials*, **2001**, 13, 2169-2170.6 132
- 471 Defect Engineering of Chalcogen-Tailored Oxygen Electrocatalysts for Rechargeable Quasi-Solid-State Zinc-Air Batteries. *Advanced Materials*, **2017**, 29, 1702526 24 131
- 470 The Recycling of Spent Lithium-Ion Batteries: a Review of Current Processes and Technologies. *Electrochemical Energy Reviews*, **2018**, 1, 461-482 29.3 131
- 469 Electrode Materials for Sodium-Ion Batteries: Considerations on Crystal Structures and Sodium Storage Mechanisms. *Electrochemical Energy Reviews*, **2018**, 1, 200-237 29.3 130
- 468 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
- 467 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
- 466 Tuning of Thermal Stability in Layered Li(NiMnCo)O. *Journal of the American Chemical Society*, **2016**, 138, 13326-13334 16.4 128
- 465 Dimeric [Mo₂S₁₂]⁽²⁻⁾ Cluster: A Molecular Analogue of MoS₂ Edges for Superior Hydrogen-Evolution Electrocatalysis. *Angewandte Chemie - International Edition*, **2015**, 54, 15181-5 16.4 128
- 464 Anion-redox nanolithia cathodes for Li-ion batteries. *Nature Energy*, **2016**, 1, 62.3 125
- 463 Insights into the Na⁺ Storage Mechanism of Phosphorus-Functionalized Hard Carbon as Ultrahigh Capacity Anodes. *Advanced Energy Materials*, **2018**, 8, 1702781 21.8 124
- 462 Freestanding three-dimensional core-shell nanoarrays for lithium-ion battery anodes. *Nature Communications*, **2016**, 7, 11774 17.4 124
- 461 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
- 460 Effective strategies for stabilizing sulfur for advanced lithium-sulfur batteries. *Journal of Materials Chemistry A*, **2017**, 5, 448-469 13 124
- 459 Magnetic Field-Suppressed Lithium Dendrite Growth for Stable Lithium-Metal Batteries. *Advanced Energy Materials*, **2019**, 9, 1900260 21.8 123
- 458 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
- 457 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
- 456 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
- 455 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

454	Understanding Thermodynamic and Kinetic Contributions in Expanding the Stability Window of Aqueous Electrolytes. <i>Chem</i> , 2018 , 4, 2872-2882	16.2	119
453	Visible-light-driven photocatalytic S- and C- codoped meso/nanoporous TiO ₂ . <i>Energy and Environmental Science</i> , 2010 , 3, 1128	35.4	117
452	New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe ³⁺ /Fe ⁴⁺ Redox in NaFeO ₂ . <i>Chemistry of Materials</i> , 2015 , 27, 6755-6764	9.6	114
451	Mg-Ion Battery Electrode: An Organic Solid's Herringbone Structure Squeezed upon Mg-Ion Insertion. <i>Journal of the American Chemical Society</i> , 2017 , 139, 13031-13037	16.4	114
450	Effect of Ti Intermetallic Catalysts on Hydrogen Storage Properties of Magnesium Hydride. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 12973-12980	3.8	112
449	Cathode Material with Nanorod Structure—An Application for Advanced High-Energy and Safe Lithium Batteries. <i>Chemistry of Materials</i> , 2013 , 25, 2109-2115	9.6	112
448	Interweaving 3D Network Binder for High-Areal-Capacity Si Anode through Combined Hard and Soft Polymers. <i>Advanced Energy Materials</i> , 2019 , 9, 1802645	21.8	112
447	Hydrogenation of nanocrystalline Mg at room temperature in the presence of TiH ₂ . <i>Journal of the American Chemical Society</i> , 2010 , 132, 6616-7	16.4	110
446	Rejuvenating dead lithium supply in lithium metal anodes by iodine redox. <i>Nature Energy</i> , 2021 , 6, 378-387	37.3	108
445	Temperature-Sensitive Structure Evolution of Lithium-Manganese-Rich Layered Oxides for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2018 , 140, 15279-15289	16.4	108
444	Electrolytes and Interphases in Sodium-Based Rechargeable Batteries: Recent Advances and Perspectives. <i>Advanced Energy Materials</i> , 2020 , 10, 2000093	21.8	107
443	Insight into sulfur reactions in Li-S batteries. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 21938-45	9.5	107
442	Improved Sodium-Ion Storage Performance of Ultrasmall Iron Selenide Nanoparticles. <i>Nano Letters</i> , 2017 , 17, 4137-4142	11.5	105
441	Phosphorus: An Anode of Choice for Sodium-Ion Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 1137-1144	20.1	104
440	Rational Design of a NiN Electrocatalyst to Accelerate Polysulfide Conversion in Lithium-Sulfur Batteries. <i>ACS Nano</i> , 2020 , 14, 6673-6682	16.7	103
439	Lithium-Sulfur Batteries for Commercial Applications. <i>Chem</i> , 2018 , 4, 3-7	16.2	103
438	Sea urchin-like NiCoO ₂ @C nanocomposites for Li-ion batteries and supercapacitors. <i>Nano Energy</i> , 2016 , 27, 457-465	17.1	103
437	Solid-State Li-Ion Batteries Using Fast, Stable, Glassy Nanocomposite Electrolytes for Good Safety and Long Cycle-Life. <i>Nano Letters</i> , 2016 , 16, 1960-8	11.5	103

436	Synthesis, Characterization, and Structural Modeling of High-Capacity, Dual Functioning MnO ₂ Electrode/Electrocatalysts for Li-O ₂ Cells. <i>Advanced Energy Materials</i> , 2013 , 3, 75-84	21.8	103
435	Elevated-Temperature 3D Printing of Hybrid Solid-State Electrolyte for Li-Ion Batteries. <i>Advanced Materials</i> , 2018 , 30, e1800615	24	102
434	Fundamental Understanding and Material Challenges in Rechargeable Nonaqueous LiO ₂ Batteries: Recent Progress and Perspective. <i>Advanced Energy Materials</i> , 2018 , 8, 1800348	21.8	101
433	Vanadium Oxide Pillared by Interlayer Mg ²⁺ Ions and Water as Ultralong-Life Cathodes for Magnesium-Ion Batteries. <i>Chem</i> , 2019 , 5, 1194-1209	16.2	100
432	Surface regulation enables high stability of single-crystal lithium-ion cathodes at high voltage. <i>Nature Communications</i> , 2020 , 11, 3050	17.4	97
431	Demanding energy from carbon 2019 , 1, 8-12		97
430	Electrochemical Na Extraction/Insertion of Na ₃ V ₂ O ₂ x(PO ₄) ₂ F ₃ Δx. <i>Chemistry of Materials</i> , 2013 , 25, 4917-4925	9.6	96
429	In Operando XRD and TXM Study on the Metastable Structure Change of NaNi _{1/3} Fe _{1/3} Mn _{1/3} O ₂ under Electrochemical Sodium-Ion Intercalation. <i>Advanced Energy Materials</i> , 2016 , 6, 1601306	21.8	95
428	Designing MOFs-Derived FeS@Carbon Composites for High-Rate Sodium Ion Storage with Capacitive Contributions. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33097-33104	9.5	94
427	Solar-powered electrochemical energy storage: an alternative to solar fuels. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 2766-2782	13	92
426	Open-Structured V ₂ O ₅ ·nH ₂ O Nanoflakes as Highly Reversible Cathode Material for Monovalent and Multivalent Intercalation Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1602720	21.8	91
425	An Iron-Decorated Carbon Aerogel for Rechargeable Flow and Flexible Zn-Air Batteries. <i>Advanced Materials</i> , 2020 , 32, e2002292	24	91
424	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. <i>Nature Communications</i> , 2019 , 10, 4721	17.4	91
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