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## Promises and challenges of nanomaterials for lithium-based rechargeable batteries

DOI: 10.1038/nenergy.2016.71  
Nature Energy, 2016, 1, .

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**Version:** 2024-04-28

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1233	All-Integrated Bifunctional Separator for Li Dendrite Detection via Novel Solution Synthesis of a Thermostable Polyimide Separator. <b>2016</b> , 138, 11044-50		143
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1063	Stress self-relaxation arising from diffusion-induced creep in bilayer lithium-ion battery electrode. <b>2018</b> , 150, 164-167	13
1062	A Review: Enhanced Anodes of Li/Na-Ion Batteries Based on Yolk-Shell Structured Nanomaterials. <b>2018</b> , 10, 40	62
1061	Sustainable Preparation of LiNi <sub>1/3</sub> Co <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> /V <sub>2</sub> O <sub>5</sub> Cathode Materials by Recycling Waste Materials of Spent Lithium-Ion Battery and Vanadium-Bearing Slag. <b>2018</b> , 6, 5797-5805	41
1060	Chlorophenolic Compounds Degradation Based on Electrolyte-Free Electrochemical Cells. <b>2018</b> , 6, 4516-4520	1
1059	From Charge Storage Mechanism to Performance: A Roadmap toward High Specific Energy Sodium-Ion Batteries through Carbon Anode Optimization. <b>2018</b> , 8, 1703268	244
1058	Crumpled Graphene Balls Stabilized Dendrite-free Lithium Metal Anodes. <b>2018</b> , 2, 184-193	241
1057	A general prelithiation approach for group IV elements and corresponding oxides. <b>2018</b> , 10, 275-281	56
1056	Strategies for improving the lithium-storage performance of 2D nanomaterials. <b>2018</b> , 5, 389-416	85

1055	Micro/nano-structured FeS <sub>2</sub> for high energy efficiency rechargeable Li-FeS <sub>2</sub> battery. <b>2018</b> , 334, 725-731	30
1054	Mesoporous TiNb <sub>2</sub> O <sub>7</sub> microspheres as high performance anode materials for lithium-ion batteries with high-rate capability and long cycle-life. <b>2018</b> , 259, 20-27	57
1053	Two-dimensional metal oxide nanosheets for rechargeable batteries. <b>2018</b> , 27, 117-127	83
1052	One-dimensional coaxial Sb and carbon fibers with enhanced electrochemical performance for sodium-ion batteries. <b>2018</b> , 428, 448-454	30
1051	In situ carbon nanotube clusters grown from three-dimensional porous graphene networks as efficient sulfur hosts for high-rate ultra-stable LiS batteries. <b>2018</b> , 11, 1731-1743	36
1050	Grain-boundary-rich mesoporous NiTiO <sub>3</sub> micro-prism as high tap-density, super rate and long life anode for sodium and lithium ion batteries. <b>2018</b> , 13, 329-339	24
1049	Vertically Aligned MoS <sub>2</sub> Nanosheets Patterned on Electrochemically Exfoliated Graphene for High-Performance Lithium and Sodium Storage. <b>2018</b> , 8, 1702254	234
1048	Colloidal paradigm in supercapattery electrode systems. <b>2018</b> , 29, 024003	26
1047	Reduction Depth Dependent Structural Reversibility of Sn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> . <b>2018</b> , 1, 129-133	1
1046	Ag-Doped PEDOT:PSS/CNT composites for thin-film all-solid-state supercapacitors with a stretchability of 480%. <b>2018</b> , 6, 941-947	82
1045	Advances in Interfaces between Li Metal Anode and Electrolyte. <b>2018</b> , 5, 1701097	144
1044	Growth of defect-engineered graphene on manganese oxides for Li-ion storage. <b>2018</b> , 12, 110-118	21
1043	A Flexible Solid Electrolyte Interphase Layer for Long-Life Lithium Metal Anodes. <b>2018</b> , 57, 1505-1509	438
1042	A novel bismuth-based anode material with a stable alloying process by the space confinement of an in situ conversion reaction for a rechargeable magnesium ion battery. <b>2018</b> , 54, 1714-1717	31
1041	Aerosol-Spray Pyrolysis toward Preparation of Nanostructured Materials for Batteries and Supercapacitors. <b>2018</b> , 2, 1700272	35
1040	Suppressing the effect of lithium dendritic growth by the addition of magnesium bis(trifluoromethanesulfonyl)amide. <b>2018</b> , 20, 1127-1133	10
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1038	Robust Pinhole-free LiN Solid Electrolyte Grown from Molten Lithium. <b>2018</b> , 4, 97-104	130

1037	Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. <b>2018</b> , 2, 110-124	194
1036	General oriented assembly of uniform carbon-confined metal oxide nanodots on graphene for stable and ultrafast lithium storage. <b>2018</b> , 5, 78-85	32
1035	Synthesis of TiN nanostructures by Mg-assisted nitriding TiO <sub>2</sub> in N <sub>2</sub> for lithium ion storage. <b>2018</b> , 336, 12-19	27
1034	Ultrathin phyllosilicate nanosheets as anode materials with superior rate performance for lithium ion batteries. <b>2018</b> , 6, 1397-1402	16
1033	Scalable and general synthesis of spinel manganese-based cathodes with hierarchical yolk@shell structure and superior lithium storage properties. <b>2018</b> , 11, 246-253	13
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1030	Engineering Titanium Dioxide Nanostructures for Enhanced Lithium-Ion Storage. <b>2018</b> , 140, 16676-16684	53
1029	Mechanistic Origin of the High Performance of Yolk@Shell BiS@N-Doped Carbon Nanowire Electrodes. <b>2018</b> , 12, 12597-12611	166
1028	Status, promises, and challenges of nanocomposite solid-state electrolytes for safe and high performance lithium batteries. <b>2018</b> , 4, 1-16	127
1027	Detailed Characterization of the Surface and Growth Mechanism of Monodisperse NiSn Nanoparticles. <b>2018</b> , 3, 16924-16933	5
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1023	Redox Cycling in Individually Encapsulated Attoliter-Volume Nanopores. <b>2018</b> , 12, 12923-12931	11
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1020	Facile synthesis of Nb <sub>2</sub> O <sub>5</sub> /carbon nanocomposites as advanced anode materials for lithium-ion batteries. <b>2018</b> , 292, 63-71	50

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979	Nonaqueous arylated quinone catholytes for lithium-organic flow batteries. <b>2018</b> , 6, 14761-14768	7
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913	Polypropylene Carbonate-Based Adaptive Buffer Layer for Stable Interfaces of Solid Polymer Lithium Metal Batteries. <b>2019</b> , 11, 27906-27912	17
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901	Cobalt oxide nanoparticles anchored on discharged-graphene film for lithium-ion battery. <b>2019</b> , 340, 115006	4
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718	Confined seeds derived sodium titanate/graphene composite with synergistic storage ability toward high performance sodium ion capacitors. <b>2020</b> , 379, 122418	18
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713	Photo cured 3D porous silica-carbon (SiO <sub>2</sub> /C) membrane as anode material for high performance rechargeable Li-ion batteries. <b>2020</b> , 812, 152127	15
712	A high strength triboelectric nanogenerator based on rigid-flexible coupling design for energy storage system. <b>2020</b> , 67, 104259	24
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412	Recent Advances on Electrospun Nanofiber Materials for Post-lithium Ion Batteries. <b>2021</b> , 3, 275	11
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402	Layered Intercalation Materials. <b>2021</b> , 33, e2004557	37
401	Hierarchical Carbon Shell Compositing Microscale Silicon Skeleton as High-Performance Anodes for Lithium-Ion Batteries. <b>2021</b> , 4, 4976-4985	4
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397	Exploiting Supramolecular Dynamics in Metal-Phenolic Networks to Generate Metal-Oxide and Metal-Carbon Networks. <b>2021</b> , 133, 14707-14715	4
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393	Redistributing Li-ion flux and homogenizing Li-metal growth by N-doped hierarchically porous membranes for dendrite-free Lithium metal batteries. <b>2021</b> , 37, 233-242	18
392	Application of Supra Molecular Immaterialness Adsorbent in Indoor Volatile Organic Compounds Control in Hot and Humid Areas. <b>2021</b> , 216, 231-246	
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389	Structurally stabilized lithium-metal anode via surface chemistry engineering. <b>2021</b> , 37, 315-324	21
388	Solvent-Free Encapsulation of Ultrafine SnO <sub>2</sub> Nanoparticles in N-Doped Carbon for High-Capacity and Durable Lithium Storage. <b>2021</b> , 4, 6277-6283	3
387	Optical lithium sensors. <b>2021</b> , 435, 213801	5
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