

Status and challenges in enabling the lithium metal electrode in low-cost rechargeable batteries

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Stress-driven lithium dendrite growth mechanism and dendrite mitigation by electroplating on soft substrates. <i>Nature Energy</i> , 2018, 3, 227-235.	19.8	353
2	Large-scale synthesis of high-quality lithium-graphite hybrid anodes for mass-controllable and cycling-stable lithium metal batteries. <i>Energy Storage Materials</i> , 2018, 15, 31-36.	9.5	59
3	Suppressing Li Dendrite Formation in $\text{Li}_2\text{S-P}_2\text{S}_5$ Solid Electrolyte by LiI Incorporation. <i>Advanced Energy Materials</i> , 2018, 8, 1703644.	10.2	303
4	A deeply rechargeable zinc anode with pomegranate-inspired nanostructure for high-energy aqueous batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21933-21940.	5.2	61
5	Atomic layer deposition and first principles modeling of glassy Li_3BO_3 - Li_2CO_3 electrolytes for solid-state Li metal batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19425-19437.	5.2	48
6	Lithium Metal Penetration Induced by Electrodeposition through Solid Electrolytes: Example in Single-Crystal $\text{Li}_6\text{La}_3\text{ZrTaO}_{12}$ Garnet. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3648-A3655.	1.3	172
7	Before Li Ion Batteries. <i>Chemical Reviews</i> , 2018, 118, 11433-11456.	23.0	1,492
8	Interactions between Lithium Growths and Nanoporous Ceramic Separators. <i>Joule</i> , 2018, 2, 2434-2449.	11.7	180
9	Architected Macroporous Polyelectrolytes That Suppress Dendrite Formation during High-Rate Lithium Metal Electrodeposition. <i>Macromolecules</i> , 2018, 51, 7666-7671.	2.2	9
10	Activate metallic copper as high-capacity cathode for lithium-ion batteries via nanocomposite technology. <i>Nano Energy</i> , 2018, 54, 59-65.	8.2	22
11	Langmuir-Blodgett artificial solid-electrolyte interphases for practical lithium metal batteries. <i>Nature Energy</i> , 2018, 3, 889-898.	19.8	347
12	Interface Engineering for Garnet-Based Solid-State Lithium-Metal Batteries: Materials, Structures, and Characterization. <i>Advanced Materials</i> , 2018, 30, e1802068.	11.1	204
13	Approaches toward lithium metal stabilization. <i>MRS Bulletin</i> , 2018, 43, 752-758.	1.7	12
14	Grain Boundary Softening: A Potential Mechanism for Lithium Metal Penetration through Stiff Solid Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 38151-38158.	4.0	132
15	Flexible and stable high-energy lithium-sulfur full batteries with only 100% oversized lithium. <i>Nature Communications</i> , 2018, 9, 4480.	5.8	193
16	Measuring the Coulombic Efficiency of Lithium Metal Cycling in Anode-Free Lithium Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3321-A3325.	1.3	97
17	Effect of the Electrolyte on the Cycling Efficiency of Lithium-Limited Cells and their Morphology Studied Through in Situ Optical Imaging. <i>ACS Applied Energy Materials</i> , 2018, 1, 5830-5835.	2.5	30
18	Li_3BO_3 - Li_2CO_3 : Rationally Designed Buffering Phase for Sulfide All-Solid-State Li-Ion Batteries. <i>Chemistry of Materials</i> , 2018, 30, 8190-8200.	3.2	162

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19	Chemically impregnated NiO catalyst for molten electrolyte based gas-tank-free Li O ₂ battery. Journal of Power Sources, 2018, 402, 68-74.	4.0	11
20	Cobalt nickel nitride coated by a thin carbon layer anchoring on nitrogen-doped carbon nanotube anodes for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 19853-19862.	5.2	38
21	A large deformation elastic-viscoplastic model for lithium. Extreme Mechanics Letters, 2018, 24, 21-29.	2.0	46
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23	A Scalable Approach to Dendrite-Free Lithium Anodes via Spontaneous Reduction of Spray-Coated Graphene Oxide Layers. Advanced Materials, 2018, 30, e1801213.	11.1	204
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27	Supramolecular Self-Assembly of Methylated Rotaxanes for Solid Polymer Electrolyte Application. ACS Macro Letters, 2018, 7, 881-885.	2.3	46
28	Diagnosis of failure modes for all-solid-state Li-ion batteries enabled by three-electrode cells. Journal of Materials Chemistry A, 2018, 6, 14867-14875.	5.2	44
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34	Machine Learning Enabled Computational Screening of Inorganic Solid Electrolytes for Suppression of Dendrite Formation in Lithium Metal Anodes. ACS Central Science, 2018, 4, 996-1006.	5.3	158
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38	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. <i>Materials Today</i> , 2019, 22, 50-57.	8.3	233
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40	The Regulating Role of Carbon Nanotubes and Graphene in Lithium-Ion and Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2019, 31, e1800863.	11.1	339
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47	Boosting the Reversibility of Sodium Metal Anode via Heteroatom-Doped Hollow Carbon Fibers. <i>Small</i> , 2019, 15, e1902688.	5.2	76
48	Uniform Li deposition by regulating the initial nucleation barrier via a simple liquid-metal coating for a dendrite-free Li-metal anode. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18861-18870.	5.2	93
49	Long cycle life and dendrite-free lithium morphology in anode-free lithium pouch cells enabled by a dual-salt liquid electrolyte. <i>Nature Energy</i> , 2019, 4, 683-689.	19.8	603
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81	Enabling reversible redox reactions in electrochemical cells using protected LiAl intermetallics as lithium metal anodes. <i>Science Advances</i> , 2019, 5, eaax5587.	4.7	84
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114	Effects of technology parameters on stress in silicon-graphite based multilayer electrodes for lithium ion batteries. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 345501.	1.3	4
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134	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. <i>Joule</i> , 2019, 3, 1094-1105.	11.7	358
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149	Designing Li-protective layer via SOCl ₂ additive for stabilizing lithium-sulfur battery. <i>Energy Storage Materials</i> , 2019, 18, 222-228.	9.5	84
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