

# High electronic conductivity as the origin of lithium dendrite-free electrolytes

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Fundamentals of inorganic solid-state electrolytes for batteries. <i>Nature Materials</i> , 2019, 18, 1278-1291.	13.3	1,341
2	Practical evaluation of energy densities for sulfide solid-state batteries. <i>ETransportation</i> , 2019, 1, 100010.	6.8	114
3	A high performance all solid state lithium sulfur battery with lithium thiophosphate solid electrolyte. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24173-24179.	5.2	70
4	Interfacial Electronic Properties Dictate Li Dendrite Growth in Solid Electrolytes. <i>Chemistry of Materials</i> , 2019, 31, 7351-7359.	3.2	165
5	Liquid-involved synthesis and processing of sulfide-based solid electrolytes, electrodes, and all-solid-state batteries. <i>Materials Today Nano</i> , 2019, 8, 100048.	2.3	49
6	Critical stripping current leads to dendrite formation on plating in lithium anode solid electrolyte cells. <i>Nature Materials</i> , 2019, 18, 1105-1111.	13.3	592
7	An Airâ€Stable and Dendriteâ€Free Li Anode for Highly Stable Allâ€Solidâ€State Sulfideâ€Based Li Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902125.	10.2	133
8	In-situ visualization of lithium plating in all-solid-state lithium-metal battery. <i>Nano Energy</i> , 2019, 63, 103895.	8.2	109
9	Theoretical Insights into Li-Ion Transport in LiTa <sub>2</sub> PO <sub>8</sub> . <i>Journal of Physical Chemistry C</i> , 2019, 123, 19282-19287.	1.5	24
10	Constructing Multifunctional Interphase between Li <sub>1.4</sub> Al <sub>0.4</sub> Ti <sub>1.6</sub> (PO <sub>4</sub> ) <sub>3</sub> and Li Metal by Magnetron Sputtering for Highly Stable Solidâ€State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901604.	10.2	189
11	Chemo-Mechanical Challenges in Solid-State Batteries. <i>Trends in Chemistry</i> , 2019, 1, 845-857.	4.4	158
12	Strainâ€Stabilized Ceramicâ€Sulfide Electrolytes. <i>Small</i> , 2019, 15, e1901470.	5.2	57
13	Lithium-Metal Growth Kinetics on LLZO Garnet-Type Solid Electrolytes. <i>Joule</i> , 2019, 3, 2030-2049.	11.7	292
14	Alkali-Metal Anodes: From Lab to Market. <i>Joule</i> , 2019, 3, 2334-2363.	11.7	247
15	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. <i>Angewandte Chemie</i> , 2019, 131, 16579-16584.	1.6	92
16	Waterâ€Mediated Synthesis of a Superionic Halide Solid Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16427-16432.	7.2	232
17	Inside or Outside: Origin of Lithium Dendrite Formation of All Solidâ€State Electrolytes. <i>Advanced Energy Materials</i> , 2019, 9, 1902123.	10.2	76
18	Challenges and development of composite solid-state electrolytes for high-performance lithium ion batteries. <i>Journal of Power Sources</i> , 2019, 441, 227175.	4.0	168

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20	Argyrodite Solid Electrolyte with a Stable Interface and Superior Dendrite Suppression Capability Realized by ZnO Co-Doping. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 40808-40816.	4.0	89
21	Hot Formation for Improved Low Temperature Cycling of Anode-Free Lithium Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3342-A3347.	1.3	88
22	Nanoscaled Lithium Powders with Protection of Ionic Liquid for Highly Stable Rechargeable Lithium Metal Batteries. <i>Advanced Science</i> , 2019, 6, 1901776.	5.6	42
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27	Dendrite nucleation in lithium-conductive ceramics. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 20354-20359.	1.3	53
28	Dynamic Lithium Distribution upon Dendrite Growth and Shorting Revealed by Operando Neutron Imaging. <i>ACS Energy Letters</i> , 2019, 4, 2402-2408.	8.8	65
29	A bird's-eye view of Li-stuffed garnet-type Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> ceramic electrolytes for advanced all-solid-state Li batteries. <i>Energy and Environmental Science</i> , 2019, 12, 2957-2975.	15.6	336
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34	Theoretical formulation of Na <sub>3</sub> AO <sub>4</sub> X (A = S/Se, X = F/Cl) as high-performance solid electrolytes for all-solid-state sodium batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 21985-21996.	5.2	25
35	Recent advances in nanostructured electrode-electrolyte design for safe and next-generation electrochemical energy storage. <i>Materials Today Nano</i> , 2019, 8, 100057.	2.3	31
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56	Nitriding-Interface-Regulated Lithium Plating Enables Flame-Retardant Electrolytes for High-Voltage Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2019, 131, 7884-7889.	1.6	47
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#	ARTICLE	IF	CITATIONS
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858	Grain Boundary Characterization and Potential Percolation of the Solid Electrolyte LLZO. <i>Batteries</i> , 2023, 9, 222.	2.1	4
859	Transient Polarization and Dendrite Initiation Dynamics in Ceramic Electrolytes. <i>ACS Energy Letters</i> , 2023, 8, 2141-2149.	8.8	4
860	New Concepts and Tools. , 2023, , 714-764.		0
862	Effect of the $\text{Li}_2\text{O}\cdot\text{B}_2\text{O}_3\cdot\text{Li}_2\text{SO}_4$ Amorphous Boundary Layer on the Ionic Conductivity and Humidity Stability of the $\text{LiTa}_2\text{PO}_8$ Solid Electrolyte. <i>ACS Applied Energy Materials</i> , 2023, 6, 4810-4816.	2.5	2
863	Theoretical study of Li-ion migration in perovskite-type $\text{AVO}_3$ (A = Ca, La, Ce, and $\text{La}_{0.75}\text{Ca}_{0.25}$ ) with DFT+U methods. <i>Materials Today Communications</i> , 2023, 35, 106029.	0.9	0
864	Lithium Plating and Stripping: Toward Anode-Free Solid-State Batteries. <i>Advanced Energy and Sustainability Research</i> , 0, , .	2.8	2
865	Tailoring Conversion-Reaction-Induced Alloy Interlayer for Dendrite-Free Sulfide-Based All-Solid-State Lithium-Metal Battery. <i>Advanced Science</i> , 2023, 10, .	5.6	8
866	Air-stable iodized-oxychloride argyrodite sulfide and anionic swap on the practical potential window for all-solid-state lithium-metal batteries. <i>Nano Energy</i> , 2023, 112, 108471.	8.2	11
873	Unique Li deposition behavior in $\text{Li}_3\text{PS}_4$ solid electrolyte observed <i>via</i> operando X-ray computed tomography. <i>Chemical Communications</i> , 0, , .	2.2	0
895	State-of-the-Art of Solid-State Electrolytes on the Road Map of Solid-State Lithium Metal Batteries for E-Mobility. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 7927-7964.	3.2	4
900	Insights into interfacial physiochemistry in sulfide solid-state batteries: a review. <i>Materials Chemistry Frontiers</i> , 2023, 7, 4810-4832.	3.2	4
901	Recent progress and strategic perspectives of inorganic solid electrolytes: fundamentals, modifications, and applications in sodium metal batteries. <i>Chemical Society Reviews</i> , 2023, 52, 4933-4995.	18.7	23
920	Ion Migration Mechanism Study of Hydroborate/Carborate Electrolytes for All-Solid-State Batteries. <i>Electrochemical Energy Reviews</i> , 2023, 6, .	13.1	1
928	Reinforcing ionic conductivity and alleviating dendrite propagation of dense cubic $\text{Ga}_{0.3}\text{Li}_{6.1}\text{La}_3\text{Zr}_2\text{O}_{12}$ <i>via</i> two-step sintering. <i>Journal of Materials Chemistry A</i> , 2023, 11, 20408-20422.	5.2	1
929	A review of polymers in sulfide-based hybrid solid-state electrolytes for all-solid-state lithium batteries. <i>Materials Chemistry Frontiers</i> , 0, , .	3.2	1
933	Garnet-type solid-state electrolytes: crystal structure, interfacial challenges and controlling strategies. <i>Rare Metals</i> , 2023, 42, 3177-3200.	3.6	2
964	Indirect Measurement Method of Energy Storage Lithium-Ion Battery Electro-Chemical Parameters. , 2023, , .		0

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985	From Liquid to Solid-State Lithium Metal Batteries: Fundamental Issues and Recent Developments. Nano-Micro Letters, 2024, 16, .	14.4	1
1008	Designing electrolytes and interphases for high-energy lithium batteries. Nature Reviews Chemistry, 2024, 8, 30-44.	13.8	5
1015	Mechanism and solutions of lithium dendrite growth in lithium metal batteries. Materials Chemistry Frontiers, 2024, 8, 1282-1299.	3.2	1
1027	Strategies to regulate the interface between Li metal anodes and all-solid-state electrolytes. Materials Chemistry Frontiers, 2024, 8, 1421-1450.	3.2	0
1061	Optimization strategies for key interfaces of LLZO-based solid-state lithium metal batteries. Materials Chemistry Frontiers, 0, , .	3.2	0
1063	Recent advances in electrolyte molecular design for alkali metal batteries. Chemical Science, 2024, 15, 4238-4274.	3.7	0