Effect of Initial State of Lithium on the Propensity for D Study

Journal of the Electrochemical Society 164, A180-A189 DOI: 10.1149/2.0661702jes

Citation Report

#	Article	IF	Citations
1	Lithium dendrite growth mechanisms in liquid electrolytes. Nano Energy, 2017, 41, 552-565.	8.2	137
2	Toward Safe Lithium Metal Anode in Rechargeable Batteries: A Review. Chemical Reviews, 2017, 117, 10403-10473.	23.0	4,365
3	Lithium dendrite growth mechanisms in polymer electrolytes and prevention strategies. Physical Chemistry Chemical Physics, 2017, 19, 20493-20505.	1.3	242
4	Recent progress and perspective on lithium metal anode protection. Energy Storage Materials, 2018, 14, 199-221.	9.5	195
5	Dendrite formation in silicon anodes of lithium-ion batteries. RSC Advances, 2018, 8, 5255-5267.	1.7	55
6	Effect of nanopatterning on mechanical properties of Lithium anode. Scientific Reports, 2018, 8, 2514.	1.6	33
7	A computational investigation of thermal effect on lithium dendrite growth. Energy Conversion and Management, 2018, 161, 193-204.	4.4	61
8	A Material Perspective of Rechargeable Metallic Lithium Anodes. Advanced Energy Materials, 2018, 8, 1702296.	10.2	95
9	Large-scale synthesis of high-quality lithium-graphite hybrid anodes for mass-controllable and cycling-stable lithium metal batteries. Energy Storage Materials, 2018, 15, 31-36.	9.5	59
10	Recent development in lithium metal anodes of liquid-state rechargeable batteries. Journal of Alloys and Compounds, 2018, 730, 135-149.	2.8	44
11	3D TiC/C Core/Shell Nanowire Skeleton for Dendriteâ€Free and Longâ€Life Lithium Metal Anode. Advanced Energy Materials, 2018, 8, 1702322.	10.2	237
12	Growth of Lithium Dendrites and Globules through a Solid Block Copolymer Electrolyte as a Function of Current Density. Journal of Physical Chemistry C, 2018, 122, 26797-26804.	1.5	49
13	Mechanism Explaining the Onset Time of Dendritic Lithium Electrodeposition via Considerations of the Li ⁺ Transport within the Solid Electrolyte Interphase. Journal of the Electrochemical Society, 2018, 165, D696-D703.	1.3	32
14	Interactions between Lithium Growths and Nanoporous Ceramic Separators. Joule, 2018, 2, 2434-2449.	11.7	180
15	Three-dimensional ordered macroporous Cu current collector for lithium metal anode: Uniform nucleation by seed crystal. Journal of Power Sources, 2018, 403, 82-89.	4.0	50
16	Computational Modeling of Morphology Evolution in Metal-Based Battery Electrodes. , 2018, , 1-27.		2
17	Grain Boundary Softening: A Potential Mechanism for Lithium Metal Penetration through Stiff Solid Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 38151-38158.	4.0	132
18	Mesoscale Complexations in Lithium Electrodeposition. ACS Applied Materials & Interfaces, 2018, 10, 26320-26327.	4.0	61

TATION REDO

#	Article	IF	CITATIONS
19	<i>In Situ</i> Observation of Lithium Dendrite of Different Graphite Electrodes. ECS Transactions, 2018, 85, 347-356.	0.3	8
20	Unlocking the Energy Capabilities of Lithium Metal Electrode with Solid-State Electrolytes. Joule, 2018, 2, 1674-1689.	11.7	212
21	Straw–Brick‣ike Carbon Fiber Cloth/Lithium Composite Electrode as an Advanced Lithium Metal Anode. Small Methods, 2018, 2, 1800035.	4.6	106
22	Impact of External Pressure and Electrolyte Transport Properties on Lithium Dendrite Growth. Journal of the Electrochemical Society, 2018, 165, A2654-A2666.	1.3	95
23	Developing Highâ€Performance Lithium Metal Anode in Liquid Electrolytes: Challenges and Progress. Advanced Materials, 2018, 30, e1706375.	11.1	335
24	Superlithiophilic Amorphous SiO ₂ –TiO ₂ Distributed into Porous Carbon Skeleton Enabling Uniform Lithium Deposition for Stable Lithium Metal Batteries. Advanced Science, 2019, 6, 1900943.	5.6	96
25	Recent advances in understanding dendrite growth on alkali metal anodes. EnergyChem, 2019, 1, 100003.	10.1	146
26	Li _{0.35} La _{0.55} TiO ₃ Nanofibers Enhanced Poly(vinylidene) Tj ETQq1 1 0.784 & Interfaces, 2019, 11, 42206-42213.	314 rgBT 4.0	Overlock 10 98
27	Rethinking How External Pressure Can Suppress Dendrites in Lithium Metal Batteries. Journal of the Electrochemical Society, 2019, 166, A3639-A3652.	1.3	113
28	Factors That Control the Formation of Dendrites and Other Morphologies on Lithium Metal Anodes. Frontiers in Energy Research, 2019, 7, .	1.2	103
29	Electrochemical Kinetics of Lithium Plating and Stripping in Solid Polymer Electrolytes: Pulsed Voltammetry. Journal of the Electrochemical Society, 2019, 166, A297-A304.	1.3	13
30	Mechanical Stress Induced Current Focusing and Fracture in Grain Boundaries. Journal of the Electrochemical Society, 2019, 166, A1752-A1762.	1.3	78
31	The Challenge of Lithium Metal Anodes for Practical Applications. Small Methods, 2019, 3, 1800551.	4.6	74
32	Electro–Chemo–Mechanical Issues at the Interfaces in Solid‣tate Lithium Metal Batteries. Advanced Functional Materials, 2019, 29, 1900950.	7.8	124
33	Communication—Implications of Local Current Density Variations on Lithium Plating Affected by Cathode Particle Size. Journal of the Electrochemical Society, 2019, 166, A667-A669.	1.3	28
34	Metal Electrode Surfaces Can Roughen Despite the Constraint of a Stiff Electrolyte. Journal of the Electrochemical Society, 2019, 166, A984-A995.	1.3	23
35	Prospect of Thermal Shock Induced Healing of Lithium Dendrite. ACS Energy Letters, 2019, 4, 1012-1019.	8.8	59
36	Electrochemomechanics of lithium dendrite growth. Energy and Environmental Science, 2019, 12, 3595-3607.	15.6	177

#	Article	IF	CITATIONS
37	Harnessing the unique properties of 2D materials for advanced lithium–sulfur batteries. Nanoscale Horizons, 2019, 4, 77-98.	4.1	79
38	High Interfacial-Energy Interphase Promoting Safe Lithium Metal Batteries. Journal of the American Chemical Society, 2020, 142, 2438-2447.	6.6	195
39	Copper decorated ultralight 3D carbon skeleton derived from soybean oil for dendrite-free Li metal anode. Chemical Engineering Journal, 2020, 391, 123516.	6.6	26
40	Nacreâ€Inspired Composite Electrolytes for Loadâ€Bearing Solidâ€State Lithiumâ€Metal Batteries. Advanced Materials, 2020, 32, e1905517.	11.1	100
41	Lithiophilic surface treatment of metal- and metallic compound-based frameworks by gas nitriding for lithium metal batteries. Journal of Power Sources, 2020, 477, 228776.	4.0	20
42	A widely applicable strategy to convert fabrics into lithiophilic textile current collector for dendrite-free and high-rate capable lithium metal anode. Chemical Engineering Journal, 2020, 388, 124256.	6.6	27
43	A New General Paradigm for Understanding and Preventing Li Metal Penetration through Solid Electrolytes. Joule, 2020, 4, 2599-2608.	11.7	71
44	Effect of salt concentration profiles on protrusion growth in lithium-polymer‑lithium cells. Solid State Ionics, 2020, 358, 115517.	1.3	13
45	Performance and behavior of LLZO-based composite polymer electrolyte for lithium metal electrode with high capacity utilization. Nano Energy, 2020, 77, 105196.	8.2	32
46	Uncovering the Relationship between Diameter and Height of Electrodeposited Lithium Protrusions in a Rigid Electrolyte. ACS Applied Energy Materials, 2020, 3, 9645-9655.	2.5	13
47	Stabilizing Dendritic Electrodeposition by Limiting Spatial Dimensions in Nanostructured Electrolytes. ACS Energy Letters, 2020, 5, 2889-2896.	8.8	13
48	Mechanical Deformation of Lithium-Ion Pouch Cells under In-Plane Loads—Part I: Experimental Investigation. Journal of the Electrochemical Society, 2020, 167, 090533.	1.3	33
49	Molar Volume Mismatch: A Malefactor for Irregular Metallic Electrodeposition with Solid Electrolytes. Journal of the Electrochemical Society, 2020, 167, 082510.	1.3	44
50	CHAIN: Cyber Hierarchy and Interactional Network Enabling Digital Solution for Battery Full-Lifespan Management. Matter, 2020, 3, 27-41.	5.0	110
51	Comprehensive Review of Polymer Architecture for All-Solid-State Lithium Rechargeable Batteries. Materials, 2020, 13, 2488.	1.3	25
52	Amide-Based Interface Layer with High Toughness In Situ Building on the Li Metal Anode. ACS Applied Materials & amp; Interfaces, 2020, 12, 25826-25831.	4.0	6
53	Regulating electrodeposition morphology of lithium: towards commercially relevant secondary Li metal batteries. Chemical Society Reviews, 2020, 49, 2701-2750.	18.7	310
54	Interfaces and Interphases in All-Solid-State Batteries with Inorganic Solid Electrolytes. Chemical Reviews, 2020, 120, 6878-6933.	23.0	676

#	Article	IF	CITATIONS
55	Recent advances in the mitigation of dendrites in lithium-metal batteries. Journal of Applied Physics, 2020, 128, .	1.1	14
56	An Analysis of Solid-State Electrodeposition-Induced Metal Plastic Flow and Predictions of Stress States in Solid Ionic Conductor Defects. Journal of the Electrochemical Society, 2020, 167, 020534.	1.3	49
57	Pressure-Driven Interface Evolution in Solid-State Lithium Metal Batteries. Cell Reports Physical Science, 2020, 1, 100012.	2.8	117
58	Understanding Zn Electrodeposits Morphology in Secondary Batteries Using Phase-Field Model. Journal of the Electrochemical Society, 2020, 167, 060503.	1.3	28
59	Modeling the chemo-mechanical behavior of all-solid-state batteries: a review Meccanica, 2021, 56, 1523-1554.	1.2	41
60	Lithium/Sulfide Allâ€Solidâ€State Batteries using Sulfide Electrolytes. Advanced Materials, 2021, 33, e2000751.	11.1	356
61	Energetics Dictates Deposition at Metal/Solid Electrolyte Interfaces. Journal of Physical Chemistry C, 2021, 125, 2221-2229.	1.5	3
62	From Dendrites to Hemispheres: Changing Lithium Deposition by Highly Ordered Charge Transfer Channels. ACS Applied Materials & Interfaces, 2021, 13, 6249-6256.	4.0	10
63	Solid Polymer Electrolytes with High Conductivity and Transference Number of Li lons for Liâ€Based Rechargeable Batteries. Advanced Science, 2021, 8, 2003675.	5.6	172
64	Designing inorganic electrolytes for solid-state Li-ion batteries: A perspective of LGPS and garnet. Materials Today, 2021, 50, 418-441.	8.3	59
65	Pressure-Driven and Creep-Enabled Interface Evolution in Sodium Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 26533-26541.	4.0	12
66	Effects of Optimized Electrode Surface Roughness and Solid Electrolyte Interphase on Lithium Dendrite Growth. Energy Technology, 2021, 9, 2000968.	1.8	12
67	Evolution of Protrusions on Lithium Metal Anodes Stabilized by a Solid Block Copolymer Electrolyte Studied Using Time-Resolved X-ray Tomography. ACS Applied Materials & Interfaces, 2021, 13, 27006-27018.	4.0	11
68	Current status and future directions of all-solid-state batteries with lithium metal anodes, sulfide electrolytes, and layered transition metal oxide cathodes. Nano Energy, 2021, 87, 106081.	8.2	55
69	Growth Mechanism of Micro/Nano Metal Dendrites and Cumulative Strategies for Countering Its Impacts in Metal Ion Batteries: A Review. Nanomaterials, 2021, 11, 2476.	1.9	33
70	Anisotropic mass transport using ionic liquid crystalline electrolytes to suppress lithium dendrite growth. Sustainable Energy and Fuels, 2021, 5, 1488-1497.	2.5	9
71	Computational Modeling of Morphology Evolution in Metal-Based Battery Electrodes. , 2020, , 1193-1219.		1
72	Cell failures of all-solid-state lithium metal batteries with inorganic solid electrolytes: Lithium dendrites. Energy Storage Materials, 2020, 33, 309-328.	9.5	63

#	Article	IF	CITATIONS
73	The role of mechanical pressure on dendritic surface toward stable lithium metal anode. Nano Energy, 2020, 77, 105098.	8.2	27
74	Concentration polarization and metal dendrite initiation in isolated electrolyte microchannels. Energy and Environmental Science, 2020, 13, 3504-3513.	15.6	40
77	Stiffer is Not Necessarily Better: Requirements Analysis for Binary Solid Polymer Electrolytes that Ensure Stable Lithium Metal Electrodes. Journal of the Electrochemical Society, 2020, 167, 130525.	1.3	6
78	Modification of Lithium Electrodeposition Behavior by Variation of Electrode Distance. SSRN Electronic Journal, 0, , .	0.4	0
79	Effect of Electrochemical and Mechanical Properties of Sei on Dendritic Growth During Lithium Deposition on Lithium Metal Electrode. SSRN Electronic Journal, 0, , .	0.4	0
80	Assessment of the mechanical suppression of nonuniform electrodeposition in lithium metal batteries. Physical Chemistry Chemical Physics, 2022, 24, 11086-11095.	1.3	3
81	Review on Modeling for Chemo-mechanical Behavior at Interfaces of All-Solid-State Lithium-Ion Batteries and Beyond. ACS Omega, 2022, 7, 6455-6462.	1.6	12
83	Laplace-Fourier transform solution to the electrochemical kinetics of a symmetric lithium cell affected by interface conformity. Journal of Power Sources, 2022, 531, 231305.	4.0	9
84	Modification of lithium electrodeposition behavior by variation of electrode distance. Journal of Power Sources, 2022, 532, 231338.	4.0	11
85	Effect of Yield Stress on Stability of Block Copolymer Electrolytes against Lithium Metal Electrodes. ACS Applied Energy Materials, 2022, 5, 852-861.	2.5	8
87	Early Failure of Lithium–Sulfur Batteries at Practical Conditions: Crosstalk between Sulfur Cathode and Lithium Anode. Advanced Science, 2022, 9, e2201640.	5.6	12
88	Overlimiting ion transport dynamic toward Sand's time in solid polymer electrolytes. Materials Today Energy, 2022, 27, 101037.	2.5	4
89	Chemomechanics: Friend or foe of the "AND problem―of solid-state batteries?. Current Opinion in Solid State and Materials Science, 2022, 26, 101002.	5.6	5
90	Modification of solid electrolyte interphase on deposited lithium metal by large separation between the electrodes in ether-based electrolytes. Journal of Solid State Electrochemistry, 2022, 26, 2005-2011.	1.2	3
91	Recent Developments in Polymeric Composites for Solid-State Batteries. ACS Symposium Series, 0, , 167-200.	0.5	1
92	Residual Stress-Tailored Lithium Deposition and Dissolution Behaviors for Safe Lithium Metal Anode. SSRN Electronic Journal, 0, , .	0.4	0
93	Phase-Field Simulation and Machine Learning Study of the Effects of Elastic and Plastic Properties of Electrodes and Solid Polymer Electrolytes on the Suppression of Li Dendrite Growth. ACS Applied Materials & amp; Interfaces, 2022, 14, 30658-30671.	4.0	12
94	Thioâ€∤LISICON and LGPSâ€Type Solid Electrolytes for Allâ€Solidâ€State Lithiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	35

#	Article	IF	CITATIONS
95	Polyurethane-Based Gel Electrolyte for Application in Flexible Electrochromic Devices. Polymers, 2022, 14, 2636.	2.0	4
96	Residual stress-tailored lithium deposition and dissolution behaviors for safe lithium metal anode. Journal of Alloys and Compounds, 2022, 927, 166776.	2.8	1
97	Effect of electrochemical and mechanical properties of SEI on dendritic growth during lithium deposition on lithium metal electrode. Journal of Power Sources, 2022, 545, 231898.	4.0	4
98	Effect of external pressure and internal stress on battery performance and lifespan. Energy Storage Materials, 2022, 52, 395-429.	9.5	49
99	Recent advances in dendrite-free lithium metal anodes for high-performance batteries. Physical Chemistry Chemical Physics, 2022, 24, 19996-20011.	1.3	34
100	Pressure-Driven Contact Mechanics Evolution of Cathode Interfaces in Lithium Batteries. Acta Mechanica Solida Sinica, 2023, 36, 65-75.	1.0	2
101	Interface functionalization of composite electrolyte by Lix-CeO2 layer on the surface of Li6.4La3Zr1.4Ta0.6O12. Electrochimica Acta, 2022, 435, 141366.	2.6	0
102	Models for the Interplay of Mechanics, Electrochemistry, Thermodynamics, and Kinetics in Lithium-Ion Batteries. Applied Mechanics Reviews, 2023, 75, .	4.5	5
103	Understanding Lithium Dendrite Suppression by Hybrid Composite Separators: Indentation Measurements Informed by <i>Operando</i> X-ray Computed Tomography. ACS Applied Materials & Interfaces, 2023, 15, 8492-8501.	4.0	3
104	A continuum electro-chemo-mechanical gradient theory coupled with damage: Application to Li-metal filament growth in all-solid-state batteries. Journal of the Mechanics and Physics of Solids, 2023, 174, 105252.	2.3	6
105	Modeling How Interface Geometry and Mechanical Stress Affect Li Metal/Solid Electrolyte Current Distributions. Journal of the Electrochemical Society, 2023, 170, 020524.	1.3	1
106	Reaction Current Heterogeneity at the Interface between a Lithium Electrode and Polymer/Ceramic Composite Electrolytes. ACS Applied Energy Materials, 2023, 6, 2160-2177.	2.5	6
107	Interfacial Issues and Modification of Solid Electrolyte Interphase for Li Metal Anode in Liquid and Solid Electrolytes. Advanced Energy Materials, 2023, 13, .	10.2	34
115	Understanding and Controlling Lithium Morphology in Solid Polymer and Gel Polymer Systems: Mechanisms, Strategies, and Gaps. Materials Advances, 0, , .	2.6	Ο