

Wu Xu

List of Publications by Year in descending order

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papers

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21252
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonsacrificial Additive for Tuning the Cathode–Electrolyte Interphase of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 4111-4118.	4.0	8
2	Sulfone-based electrolytes for high energy density lithium-ion batteries. Journal of Power Sources, 2022, 527, 231171.	4.0	21
3	Facile Dual-Protection Layer and Advanced Electrolyte Enhancing Performances of Cobalt-free/Nickel-rich Cathodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 17405-17414.	4.0	8
4	Austen Angell's legacy in electrolyte research. Journal of Non-Crystalline Solids: X, 2022, 14, 100088.	0.5	4
5	Electrolytes for high-voltage lithium batteries. Trends in Chemistry, 2022, 4, 627-642.	4.4	25
6	(Digital Presentation) Effects of Solvents and Additives in Non-Conventional Liquid Electrolytes for Lithium-Ion Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 193-193.	0.0	0
7	Development of Anode-Free Metal Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 36-36.	0.0	0
8	Effects of Fluorinated Diluents in Localized High-Concentration Electrolytes for Lithium–Oxygen Batteries. Advanced Functional Materials, 2021, 31, 2002927.	7.8	39
9	Optimization of fluorinated orthoformate based electrolytes for practical high-voltage lithium metal batteries. Energy Storage Materials, 2021, 34, 76-84.	9.5	65
10	Electrolytes for Lithium-Ion and Lithium Metal Batteries. , 2021, , .		0
11	Review—Localized High-Concentration Electrolytes for Lithium Batteries. Journal of the Electrochemical Society, 2021, 168, 010522.	1.3	257
12	Strategies towards enabling lithium metal in batteries: interphases and electrodes. Energy and Environmental Science, 2021, 14, 5289-5314.	15.6	156
13	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	131
14	Electrolyte Regulating toward Stabilization of Cobalt-Free Ultrahigh-Nickel Layered Oxide Cathode in Lithium-Ion Batteries. ACS Energy Letters, 2021, 6, 1324-1332.	8.8	53
15	Advanced Low-Flammable Electrolytes for Stable Operation of High-Voltage Lithium-Ion Batteries. Angewandte Chemie, 2021, 133, 13109-13116.	1.6	16
16	Advanced Low-Flammable Electrolytes for Stable Operation of High-Voltage Lithium-Ion Batteries. Angewandte Chemie - International Edition, 2021, 60, 12999-13006.	7.2	70
17	Stabilizing ultrahigh-nickel layered oxide cathodes for high-voltage lithium metal batteries. Materials Today, 2021, 44, 15-24.	8.3	53
18	Optimization of Magnesium-Doped Lithium Metal Anode for Lithium Metal Batteries: Simulation and Experiment. ECS Meeting Abstracts, 2021, MA2021-01, 392-392.	0.0	0

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19	Effects of Non-Solvating Fluorinated Solvents in Localized High-Concentration Electrolytes for Lithium Metal Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 465-465.	0.0	0
20	A Stable Li Metal Anode with Electrochemically Treated Poly(ethylene oxide) Coating for Lithium Oxygen Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 402-402.	0.0	0
21	Advanced Electrolyte Stabilizing Ultrahigh-Nickel Layered Oxide Cathode in High-Voltage Lithium Metal Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 393-393.	0.0	0
22	(Invited) Extend Calendar Life of Si Based Li-Ion Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 112-112.	0.0	0
23	Current Density Induced Microstructure Evolution on Li Dendrite and Solid Electrolyte Interphase Revealed By Cryogenic Transmission Electron Microscopy. ECS Meeting Abstracts, 2021, MA2021-01, 379-379.	0.0	1
24	Optimization of Magnesium-Doped Lithium Metal Anode for High Performance Lithium Metal Batteries through Modeling and Experiment. Angewandte Chemie, 2021, 133, 16642-16649.	1.6	5
25	A review on the stability and surface modification of layered transition-metal oxide cathodes. Materials Today, 2021, 46, 155-182.	8.3	132
26	Balancing interfacial reactions to achieve long cycle life in high-energy lithium metal batteries. Nature Energy, 2021, 6, 723-732.	19.8	285
27	Optimization of Magnesium-Doped Lithium Metal Anode for High Performance Lithium Metal Batteries through Modeling and Experiment. Angewandte Chemie - International Edition, 2021, 60, 16506-16513.	7.2	28
28	A Polymer-in-Salt Electrolyte with Enhanced Oxidative Stability for Lithium Metal Polymer Batteries. ACS Applied Materials & Interfaces, 2021, 13, 31583-31593.	4.0	28
29	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	23.3	201
30	Stable Solid Electrolyte Interphase Layer Formed by Electrochemical Pretreatment of Gel Polymer Coating on Li Metal Anode for Lithium-Oxygen Batteries. ACS Energy Letters, 2021, 6, 3321-3331.	8.8	17
31	Toward the Practical Use of Cobalt-Free Lithium-Ion Batteries by an Advanced Ether-Based Electrolyte. ACS Applied Materials & Interfaces, 2021, 13, 44339-44347.	4.0	24
32	Nonflammable nonaqueous electrolytes for lithium batteries. Current Opinion in Electrochemistry, 2021, 30, 100781.	2.5	3
33	Recent Progress in Understanding Solid Electrolyte Interphase on Lithium Metal Anodes. Advanced Energy Materials, 2021, 11, 2003092.	10.2	271
34	High Efficiency, Low Polysulfides Solubility Electrolytes for Lithium Sulfur Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 53-53.	0.0	0
35	Low-Flammable Electrolytes for Stable Operation of High Energy-Density Lithium-Ion Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 262-262.	0.0	0
36	Stability of Li Metal Anode and Calendar Life of Lithium Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 92-92.	0.0	0

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37	Atomic to Nanoscale Origin of Vinylene Carbonate Enhanced Cycling Stability of Lithium Metal Anode Revealed by Cryo-Transmission Electron Microscopy. <i>Nano Letters</i> , 2020, 20, 418-425.	4.5	102
38	Unravelling high-temperature stability of lithium-ion battery with lithium-rich oxide cathode in localized high-concentration electrolyte. <i>Journal of Power Sources Advances</i> , 2020, 5, 100024.	2.6	23
39	Enabling Ether-Based Electrolytes for Long Cycle Life of Lithium-Ion Batteries at High Charge Voltage. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 54893-54903.	4.0	35
40	Lithium Metal Anodes with Nonaqueous Electrolytes. <i>Chemical Reviews</i> , 2020, 120, 13312-13348.	23.0	393
41	In-situ TEM Coupled with AFM Cantilever for Direct Observation of Li Dendrite Nucleation and Growth Under Stress. <i>Microscopy and Microanalysis</i> , 2020, 26, 3038-3039.	0.2	0
42	Role of inner solvation sheath within salt-solvent complexes in tailoring electrode/electrolyte interphases for lithium metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 28603-28613.	3.3	191
43	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li ₂ /LiCoO ₂ Batteries. <i>Advanced Materials</i> , 2020, 32, e2004898.	11.1	123
44	Optimized Electrolyte with High Electrochemical Stability and Oxygen Solubility for Lithium-Oxygen and Lithium-Air Batteries. <i>ACS Energy Letters</i> , 2020, 5, 2182-2190.	8.8	45
45	Sweeping potential regulated structural and chemical evolution of solid-electrolyte interphase on Cu and Li as revealed by cryo-TEM. <i>Nano Energy</i> , 2020, 76, 105040.	8.2	16
46	Optimized Al Doping Improves Both Interphase Stability and Bulk Structural Integrity of Ni-Rich NMC Cathode Materials. <i>ACS Applied Energy Materials</i> , 2020, 3, 3369-3377.	2.5	66
47	Current Density Regulated Atomic to Nanoscale Process on Li Deposition and Solid Electrolyte Interphase Revealed by Cryogenic Transmission Electron Microscopy. <i>ACS Nano</i> , 2020, 14, 8766-8775.	7.3	54
48	Real-time mass spectrometric characterization of the solid-electrolyte interphase of a lithium-ion battery. <i>Nature Nanotechnology</i> , 2020, 15, 224-230.	15.6	280
49	Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. <i>ACS Nano</i> , 2020, 14, 4601-4608.	7.3	61
50	High-Power Lithium Metal Batteries Enabled by High-Concentration Acetonitrile-Based Electrolytes with Vinylene Carbonate Additive. <i>Advanced Functional Materials</i> , 2020, 30, 2001285.	7.8	121
51	Advanced Electrolytes for Fast-Charging High-Voltage Lithium-Ion Batteries in Wide Temperature Range. <i>Advanced Energy Materials</i> , 2020, 10, 2000368.	10.2	159
52	(Invited) Enhancing Oxygen Stability in High-Nickel Cobalt-Free Layered Oxide Cathode Materials By Three-Dimensional Targeted Doping. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 140-140.	0.0	0
53	(Invited) Localized High Concentration Electrolytes for Li Metal and Li Ion Batteries. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 255-255.	0.0	0
54	(Invited) Directions of High Energy Batteries and Status of Battery500 Consortium. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 29-29.	0.0	0

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55	(Invited) Designing New Electrolytes for High-Energy Lithium Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 856-856.	0.0	0
56	Enhanced High-Temperature Stability of Li-Ion Battery with Li-Rich Oxide Cathode By Localized High-Concentration Electrolyte. ECS Meeting Abstracts, 2020, MA2020-02, 149-149.	0.0	0
57	Ether-Based Electrolytes Enabling Long-Stability High-Voltage Lithium-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 791-791.	0.0	0
58	Enhanced Electrode/Electrolyte Interphases in Fluorinated Orthoformate Electrolytes for Stable High-Voltage Lithium Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 686-686.	0.0	0
59	(Invited) Highly-Stable Li Ion Batteries Based on Porous Si Anode and Localized High Concentration Electrolytes. ECS Meeting Abstracts, 2020, MA2020-02, 23-23.	0.0	0
60	Applications of XPS in the characterization of Battery materials. Journal of Electron Spectroscopy and Related Phenomena, 2019, 231, 2-10.	0.8	101
61	Atomic Structure of Electrochemically Deposited Lithium Metal and Its Solid Electrolyte Interphases Revealed by Cryo-electron Microscopy. Microscopy and Microanalysis, 2019, 25, 2220-2221.	0.2	8
62	High-Performance Silicon Anodes Enabled By Nonflammable Localized High-Concentration Electrolytes. Advanced Energy Materials, 2019, 9, 1900784.	10.2	175
63	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	11.7	598
64	Enhanced Stability of Li Metal Anodes by Synergetic Control of Nucleation and the Solid Electrolyte Interphase. Advanced Energy Materials, 2019, 9, 1901764.	10.2	108
65	Polymer-Quasi-Ionic Liquid-Electrolytes for High-Voltage Lithium Metal Batteries. Advanced Energy Materials, 2019, 9, 1902108.	10.2	65
66	Origin of lithium whisker formation and growth under stress. Nature Nanotechnology, 2019, 14, 1042-1047.	15.6	211
67	Monolithic solid-electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	19.8	621
68	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. ACS Energy Letters, 2019, 4, 2529-2534.	8.8	112
69	Constructing Robust Electrode/Electrolyte Interphases to Enable Wide Temperature Applications of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 21496-21505.	4.0	44
70	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. Nature Energy, 2019, 4, 551-559.	19.8	492
71	Self-smoothing anode for achieving high-energy lithium metal batteries under realistic conditions. Nature Nanotechnology, 2019, 14, 594-601.	15.6	451
72	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. ACS Energy Letters, 2019, 4, 896-902.	8.8	302

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73	Highly Stable Oxygen Electrodes Enabled by Catalyst Redistribution through an In Situ Electrochemical Method. <i>Advanced Energy Materials</i> , 2019, 9, 1803598.	10.2	6
74	Pathways for practical high-energy long-cycling lithium metal batteries. <i>Nature Energy</i> , 2019, 4, 180-186.	19.8	2,101
75	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. <i>Joule</i> , 2019, 3, 1094-1105.	11.7	358
76	A highly stable host for lithium metal anode enabled by Li ₉ Al ₄ -Li ₃ N-AlN structure. <i>Nano Energy</i> , 2019, 59, 110-119.	8.2	39
77	Highly efficient Ru/B ₄ C multifunctional oxygen electrode for rechargeable Li O ₂ batteries. <i>Journal of Power Sources</i> , 2019, 413, 11-19.	4.0	28
78	New Electrolyte for Li Metal Batteries with High Voltage NMC811 Electrode. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
79	Effects of Separators on Lithium Metal Batteries. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
80	Enabling High-Energy Lithium Metal Batteries through Electrolyte Strategy. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
81	Detrimental Effects of Chemical Cross-Talk in Rechargeable Lithium Metal Batteries. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
82	(Invited) Electrolytes for Wide-Temperature Application Range of Lithium Ion Batteries. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
83	The Fundamental Mechanism behind the Stability of Li Metal Anodes in Non-Aqueous Electrolytes. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
84	Hybrid Polymer Electrolytes for Lithium Metal Batteries. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
85	High Performance Silicon Anodes Enabled By Nonflammable Localized High Concentration Electrolytes. <i>ECS Meeting Abstracts</i> , 2019, MA2019-02, 229-229.	0.0	1
86	Extending Cycle Life and Safety of Si Based High Energy Li Ion Batteries Using Localized High Concentration Electrolytes. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
87	Stability of polymeric separators in lithium metal batteries in a low voltage environment. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5006-5015.	5.2	31
88	Advancing Lithium Metal Batteries. <i>Joule</i> , 2018, 2, 833-845.	11.7	1,052
89	Investigation of Ion-Solvent Interactions in Nonaqueous Electrolytes Using in Situ Liquid SIMS. <i>Analytical Chemistry</i> , 2018, 90, 3341-3348.	3.2	41
90	Dendrite-Free and Performance-Enhanced Lithium Metal Batteries through Optimizing Solvent Compositions and Adding Combinational Additives. <i>Advanced Energy Materials</i> , 2018, 8, 1703022.	10.2	123

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91	Effects of Imide-Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2469-2479.	4.0	110
92	Enhanced Cyclability of Lithium-Oxygen Batteries with Electrodes Protected by Surface Films Induced via In Situ Electrochemical Process. <i>Advanced Energy Materials</i> , 2018, 8, 1702340.	10.2	38
93	Enhanced Stability of Lithium Metal Anode by using a 3D Porous Nickel Substrate. <i>ChemElectroChem</i> , 2018, 5, 761-769.	1.7	58
94	Simultaneous Stabilization of $\text{LiNi}_{0.76}\text{Mn}_{0.14}\text{Co}_{0.10}\text{O}_2$ Cathode and Lithium Metal Anode by Lithium Bis(oxalato)borate as Additive. <i>ChemSusChem</i> , 2018, 11, 2211-2220.	3.6	89
95	High Voltage Operation of Ni-Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. <i>Advanced Energy Materials</i> , 2018, 8, 1800297.	10.2	298
96	High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes. <i>Advanced Materials</i> , 2018, 30, e1706102.	11.1	761
97	A bifunctional electrolyte additive for separator wetting and dendrite suppression in lithium metal batteries. <i>Electrochimica Acta</i> , 2018, 270, 62-69.	2.6	31
98	One dimensional and coaxial polyaniline@tin dioxide@multi-wall carbon nanotube as advanced conductive additive free anode for lithium ion battery. <i>Chemical Engineering Journal</i> , 2018, 334, 162-171.	6.6	63
99	Accurate Determination of Coulombic Efficiency for Lithium Metal Anodes and Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702097.	10.2	704
100	Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. <i>Joule</i> , 2018, 2, 110-124.	11.7	280
101	Guided Lithium Metal Deposition and Improved Lithium Coulombic Efficiency through Synergistic Effects of LiAsF_6 and Cyclic Carbonate Additives. <i>ACS Energy Letters</i> , 2018, 3, 14-19.	8.8	161
102	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2018, 3, 2921-2930.	8.8	89
103	Direct Visualization of Li Dendrite Effect on LiCoO_2 Cathode by In Situ TEM. <i>Small</i> , 2018, 14, e1803108.	5.2	34
104	The Effect of Solvent on the Capacity Retention in a Germanium Anode for Lithium Ion Batteries. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2018, 15, .	1.1	4
105	Electrode Edge Effects and the Failure Mechanism of Lithium-Metal Batteries. <i>ChemSusChem</i> , 2018, 11, 3821-3828.	3.6	35
106	High-Efficiency Lithium Metal Batteries with Fire-Retardant Electrolytes. <i>Joule</i> , 2018, 2, 1548-1558.	11.7	436
107	Lithium-Metal Batteries: High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes (<i>Adv. Mater.</i> 21/2018). <i>Advanced Materials</i> , 2018, 30, 1870144.	11.1	4
108	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. <i>Nature Energy</i> , 2018, 3, 739-746.	19.8	767

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109	A Localized High-Concentration Electrolyte with Optimized Solvents and Lithium Difluoro(oxalate)borate Additive for Stable Lithium Metal Batteries. ACS Energy Letters, 2018, 3, 2059-2067.	8.8	257
110	Lithium Difluorophosphate as a Dendrite-Suppressing Additive for Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2018, 10, 22201-22209.	4.0	143
111	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. Chem, 2018, 4, 1877-1892.	5.8	628
112	B4C as a stable non-carbon-based oxygen electrode material for lithium-oxygen batteries. Nano Energy, 2017, 33, 195-204.	8.2	65
113	Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of Salt Solvent Coordination for Li-O ₂ Batteries. Advanced Energy Materials, 2017, 7, 1602605.	10.2	99
114	Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. Nature Energy, 2017, 2, .	19.8	1,048
115	Complete Decomposition of Li ₂ CO ₃ in Li-O ₂ Batteries Using Ir/B ₄ C as Noncarbon-Based Oxygen Electrode. Nano Letters, 2017, 17, 1417-1424.	4.5	104
116	Effects of Solvent Composition on Liquid Range, Glass Transition, and Conductivity of Electrolytes of a (Li, Cs)PF ₆ Salt in EC-PC-EMC Solvents. Journal of Physical Chemistry C, 2017, 121, 11178-11183.	1.5	17
117	Wide-Temperature Electrolytes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 18826-18835.	4.0	150
118	Revealing the reaction mechanisms of Li-O ₂ batteries using environmental transmission electron microscopy. Nature Nanotechnology, 2017, 12, 535-539.	15.6	160
119	Imaging Electrochemical Processes in Li Batteries by Operando STEM. Microscopy and Microanalysis, 2017, 23, 1970-1971.	0.2	1
120	New Insights on the Structure of Electrochemically Deposited Lithium Metal and Its Solid Electrolyte Interphases via Cryogenic TEM. Nano Letters, 2017, 17, 7606-7612.	4.5	308
121	Temperature Dependence of the Oxygen Reduction Mechanism in Nonaqueous Li-O ₂ Batteries. ACS Energy Letters, 2017, 2, 2525-2530.	8.8	30
122	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. Advanced Functional Materials, 2017, 27, 1704391.	7.8	141
123	Lithium-Oxygen Batteries: Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of Salt Solvent Coordination for Li-O ₂ Batteries (Adv. Energy Mater. 14/2017). Advanced Energy Materials, 2017, 7, .	10.2	11
124	Li ⁺ -Desolvation Dictating Lithium-Ion Battery's Low-Temperature Performances. ACS Applied Materials & Interfaces, 2017, 9, 42761-42768.	4.0	200
125	Lithium Metal Anodes and Rechargeable Lithium Metal Batteries. Springer Series in Materials Science, 2017, , .	0.4	70
126	Characterization and Modeling of Lithium Dendrite Growth. Springer Series in Materials Science, 2017, , 5-43.	0.4	9

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127	High Coulombic Efficiency of Lithium Plating/Stripping and Lithium Dendrite Prevention. Springer Series in Materials Science, 2017, , 45-152.	0.4	3
128	Application of Lithium Metal Anodes. Springer Series in Materials Science, 2017, , 153-188.	0.4	1
129	Enhanced Cycling Stability of Rechargeable Li^{+} Batteries Using High-Concentration Electrolytes. Advanced Functional Materials, 2016, 26, 605-613.	7.8	104
130	Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient High-Concentration Electrolyte Layer. Advanced Energy Materials, 2016, 6, 1502151.	10.2	236
131	Lithium Metal Batteries: Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient High-Concentration Electrolyte Layer (Adv. Energy Mater. 8/2016). Advanced Energy Materials, 2016, 6, .	10.2	1
132	Electrochemically Formed Ultrafine Metal Oxide Nanocatalysts for High-Performance Lithium-Oxygen Batteries. Nano Letters, 2016, 16, 4932-4939.	4.5	62
133	Effect of the Anion Activity on the Stability of Li Metal Anodes in Lithium-Sulfur Batteries. Advanced Functional Materials, 2016, 26, 3059-3066.	7.8	117
134	Enhanced charging capability of lithium metal batteries based on lithium bis(trifluoromethanesulfonyl)imide-lithium bis(oxalato)borate dual-salt electrolytes. Journal of Power Sources, 2016, 318, 170-177.	4.0	186
135	A High-Current, Stable Nonaqueous Organic Redox Flow Battery. ACS Energy Letters, 2016, 1, 705-711.	8.8	202
136	Anode-Free Rechargeable Lithium Metal Batteries. Advanced Functional Materials, 2016, 26, 7094-7102.	7.8	495
137	The Impact of Li Grain Size on Coulombic Efficiency in Li Batteries. Scientific Reports, 2016, 6, 34267.	1.6	67
138	Understanding the Effect of Additives in Li-ion and Li-Sulfur Batteries by Operando ec- (S)TEM. Microscopy and Microanalysis, 2016, 22, 22-23.	0.2	5
139	Ultrathin $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Nanosheets as Anode Materials for Lithium and Sodium Storage. ACS Applied Materials & Interfaces, 2016, 8, 16718-16726.	4.0	87
140	Effects of Propylene Carbonate Content in CsPF ₆ -Containing Electrolytes on the Enhanced Performances of Graphite Electrode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 5715-5722.	4.0	43
141	In situ ⁷ Li and ¹³³ Cs nuclear magnetic resonance investigations on the role of Cs ⁺ additive in lithium-metal deposition process. Journal of Power Sources, 2016, 304, 51-59.	4.0	20
142	Anion-Tunable Properties and Electrochemical Performance of Functionalized Ferrocene Compounds. Scientific Reports, 2015, 5, 14117.	1.6	62
143	Radical Compatibility with Nonaqueous Electrolytes and Its Impact on an All-Organic Redox Flow Battery. Angewandte Chemie - International Edition, 2015, 54, 8684-8687.	7.2	271
144	In...Situ-Crown ZnCo ₂ O ₄ on Single-Walled Carbon Nanotubes as Air Electrode Materials for Rechargeable Lithium-Oxygen Batteries. ChemSusChem, 2015, 8, 3697-3703.	3.6	34

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145	Dendrite-free Li deposition using trace-amounts of water as an electrolyte additive. Nano Energy, 2015, 15, 135-144.	8.2	297
146	Discharge Performance of Li ⁺ Batteries Using a Multiscale Modeling Approach. Journal of Physical Chemistry C, 2015, 119, 14851-14860.	1.5	29
147	Batteries: Towards High-Performance Nonaqueous Redox Flow Electrolyte Via Ionic Modification of Active Species (Adv. Energy Mater. 1/2015). Advanced Energy Materials, 2015, 5, .	10.2	2
148	Observation and Quantification of Nanoscale Processes in Lithium Batteries by Operando Electrochemical (S)TEM. Nano Letters, 2015, 15, 2168-2173.	4.5	264
149	High rate and stable cycling of lithium metal anode. Nature Communications, 2015, 6, 6362.	5.8	1,954
150	Enhanced performance of Li LiFePO ₄ cells using CsPF ₆ as an electrolyte additive. Journal of Power Sources, 2015, 293, 1062-1067.	4.0	29
151	Organic Cathode Materials for Rechargeable Batteries. Green Energy and Technology, 2015, , 637-671.	0.4	7
152	Anodes for Rechargeable Lithium-Sulfur Batteries. Advanced Energy Materials, 2015, 5, 1402273.	10.2	423
153	In Situ Mass Spectrometric Determination of Molecular Structural Evolution at the Solid Electrolyte Interphase in Lithium-Ion Batteries. Nano Letters, 2015, 15, 6170-6176.	4.5	73
154	The Role of Cesium Cation in Controlling Interphasial Chemistry on Graphite Anode in Propylene Carbonate-Rich Electrolytes. ACS Applied Materials & Interfaces, 2015, 7, 20687-20695.	4.0	41
155	Towards High-Performance Nonaqueous Redox Flow Electrolyte Via Ionic Modification of Active Species. Advanced Energy Materials, 2015, 5, 1400678.	10.2	181
156	Dendrimer-Encapsulated Ruthenium Oxide Nanoparticles as Catalysts in Lithium-Oxygen Batteries. Advanced Functional Materials, 2014, 24, 7510-7519.	7.8	59
157	TEMPO-Based Catholyte for High-Energy Density Nonaqueous Redox Flow Batteries. Advanced Materials, 2014, 26, 7649-7653.	11.1	387
158	Dendrite-Free Lithium Deposition with Self-Aligned Nanorod Structure. Nano Letters, 2014, 14, 6889-6896.	4.5	326
159	<i>In-Situ</i> Electrochemical Transmission Electron Microscopy for Battery Research. Microscopy and Microanalysis, 2014, 20, 484-492.	0.2	45
160	Reduction Mechanism of Fluoroethylene Carbonate for Stable Solid-Electrolyte Interphase Film on Silicon Anode. ChemSusChem, 2014, 7, 549-554.	3.6	126
161	Effects of Cesium Cations in Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. Journal of Physical Chemistry C, 2014, 118, 4043-4049.	1.5	117
162	High-performance anode based on porous Co ₃ O ₄ nanodiscs. Journal of Power Sources, 2014, 255, 125-129.	4.0	67

#	ARTICLE	IF	CITATIONS
163	Optimized Operating Range for Large-Format LiFePO ₄ /Graphite Batteries. Journal of the Electrochemical Society, 2014, 161, A336-A341.	1.3	53
164	Mixed salts of LiTFSI and LiBOB for stable LiFePO ₄ -based batteries at elevated temperatures. Journal of Materials Chemistry A, 2014, 2, 2346.	5.2	85
165	Lithium metal anodes for rechargeable batteries. Energy and Environmental Science, 2014, 7, 513-537.	15.6	3,665
166	Formation of Interfacial Layer and Long-Term Cyclability of Li ⁺ O ₂ Batteries. ACS Applied Materials & Interfaces, 2014, 6, 14141-14151.	4.0	44
167	The Mechanisms of Oxygen Reduction and Evolution Reactions in Nonaqueous Lithium ⁺ Oxygen Batteries. ChemSusChem, 2014, 7, 2436-2440.	3.6	62
168	Lewis Acid ⁺ Base Interactions between Polysulfides and Metal Organic Framework in Lithium Sulfur Batteries. Nano Letters, 2014, 14, 2345-2352.	4.5	623
169	Probing the Degradation Mechanisms in Electrolyte Solutions for Li-Ion Batteries by in Situ Transmission Electron Microscopy. Nano Letters, 2014, 14, 1293-1299.	4.5	137
170	Direct Observation of Li ₂ O ₂ Nucleation and Growth with In-Situ Liquid ec-(S)TEM. Microscopy and Microanalysis, 2014, 20, 1608-1609.	0.2	0
171	Direct Observation of Electrolyte Degradation Mechanisms in Li-Ion Batteries. Microscopy and Microanalysis, 2014, 20, 1624-1625.	0.2	0
172	An Electrically Switchable Metal-Organic Framework. Scientific Reports, 2014, 4, 6114.	1.6	70
173	Primary Lithium Air Batteries. , 2014, , 255-289.		2
174	Making Li ⁺ Air Batteries Rechargeable: Material Challenges. Advanced Functional Materials, 2013, 23, 987-1004.	7.8	477
175	Advanced intermediate-temperature Na ⁺ S battery. Energy and Environmental Science, 2013, 6, 299-306.	15.6	149
176	Demonstration of an Electrochemical Liquid Cell for Operando Transmission Electron Microscopy Observation of the Lithiation/Delithiation Behavior of Si Nanowire Battery Anodes. Nano Letters, 2013, 13, 6106-6112.	4.5	265
177	Electrocatalytic properties of poly(3,4-ethylenedioxythiophene) (PEDOT) in Li-O ₂ battery. Electrochemistry Communications, 2013, 29, 63-66.	2.3	36
178	Stability of polymer binders in Li ⁺ O ₂ batteries. Journal of Power Sources, 2013, 243, 899-907.	4.0	102
179	Simply AlF ₃ -treated Li ₄ Ti ₅ O ₁₂ composite anode materials for stable and ultrahigh power lithium-ion batteries. Journal of Power Sources, 2013, 236, 169-174.	4.0	51
180	Effects of Electrolyte Salts on the Performance of Li ⁺ O ₂ Batteries. Journal of Physical Chemistry C, 2013, 117, 2635-2645.	1.5	204

#	ARTICLE	IF	CITATIONS
181	Surface and structural stabilities of carbon additives in high voltage lithium ion batteries. Journal of Power Sources, 2013, 227, 211-217.	4.0	55
182	Dendrite-Free Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. Journal of the American Chemical Society, 2013, 135, 4450-4456.	6.6	1,736
183	Effects of Carbonate Solvents and Lithium Salts on Morphology and Coulombic Efficiency of Lithium Electrode. Journal of the Electrochemical Society, 2013, 160, A1894-A1901.	1.3	260
184	In-Situ TEM Study of Phase Transformation and Structural Evolution of Si-C Nanocomposite Anode for Lithium Ion Battery. Microscopy and Microanalysis, 2012, 18, 1320-1321.	0.2	0
185	In Situ TEM Investigation of Congruent Phase Transition and Structural Evolution of Nanostructured Silicon/Carbon Anode for Lithium Ion Batteries. Nano Letters, 2012, 12, 1624-1632.	4.5	256
186	<i>In Situ</i> TEM Study of Lithiation Behavior of Silicon Nanoparticles Attached to and Embedded in a Carbon Matrix. ACS Nano, 2012, 6, 8439-8447.	7.3	321
187	H ⁺ diffusion and electrochemical stability of Li _{1+x+y} Al _x Ti ₂ ^z Si _y P ₃ ^w O ₁₂ glass in aqueous Li/air battery electrolytes. Journal of Power Sources, 2012, 214, 292-297.	4.0	27
188	The stability of organic solvents and carbon electrode in nonaqueous Li-O ₂ batteries. Journal of Power Sources, 2012, 215, 240-247.	4.0	197
189	Factors affecting the battery performance of anthraquinone-based organic cathode materials. Journal of Materials Chemistry, 2012, 22, 4032.	6.7	126
190	Anthraquinone with tailored structure for a nonaqueous metal-organic redox flow battery. Chemical Communications, 2012, 48, 6669.	2.2	217
191	Conductive Rigid Skeleton Supported Silicon as High-Performance Li-Ion Battery Anodes. Nano Letters, 2012, 12, 4124-4130.	4.5	160
192	Polyanion Type Cathodes for Stationary Lithium Ion Batteries. ECS Meeting Abstracts, 2012, , .	0.0	0
193	Effects of cell positive cans and separators on the performance of high-voltage Li-ion batteries. Journal of Power Sources, 2012, 213, 160-168.	4.0	44
194	Hollow core-shell structured porous Si-C nanocomposites for Li-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 11014.	6.7	280
195	Enhanced performance of graphite anode materials by AlF ₃ coating for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 12745.	6.7	129
196	Reinvestigation on the state-of-the-art nonaqueous carbonate electrolytes for 5V Li-ion battery applications. Journal of Power Sources, 2012, 213, 304-316.	4.0	69
197	Template free synthesis of LiV ₃ O ₈ nanorods as a cathode material for high-rate secondary lithium batteries. Journal of Materials Chemistry, 2011, 21, 1153-1161.	6.7	105
198	Nanosheet-structured LiV ₃ O ₈ with high capacity and excellent stability for high energy lithium batteries. Journal of Materials Chemistry, 2011, 21, 10077.	6.7	112

#	ARTICLE	IF	CITATIONS
199	In Situ Transmission Electron Microscopy Observation of Microstructure and Phase Evolution in a SnO ₂ Nanowire during Lithium Intercalation. Nano Letters, 2011, 11, 1874-1880.	4.5	266
200	Thermal stability and phase transformation of electrochemically charged/discharged LiMnPO ₄ cathode for Li-ion batteries. Energy and Environmental Science, 2011, 4, 4560.	15.6	107
201	Electrochemical performances of LiMnPO ₄ synthesized from non-stoichiometric Li/Mn ratio. Physical Chemistry Chemical Physics, 2011, 13, 18099.	1.3	31
202	Hierarchically Porous Graphene as a Lithium-Air Battery Electrode. Nano Letters, 2011, 11, 5071-5078.	4.5	943
203	Reaction mechanisms for the limited reversibility of Li-O ₂ chemistry in organic carbonate electrolytes. Journal of Power Sources, 2011, 196, 9631-9639.	4.0	198
204	Preparation and electrochemical investigation of Li ₂ CoPO ₄ F cathode material for lithium-ion batteries. Journal of Power Sources, 2011, 196, 2241-2245.	4.0	58
205	Investigation on the charging process of Li ₂ O ₂ -based air electrodes in Li-O ₂ batteries with organic carbonate electrolytes. Journal of Power Sources, 2011, 196, 3894-3899.	4.0	229
206	Investigation of the rechargeability of Li-O ₂ batteries in non-aqueous electrolyte. Journal of Power Sources, 2011, 196, 5674-5678.	4.0	197
207	In Situ Observation of the Electrochemical Lithiation of a Single SnO ₂ Nanowire Electrode. Science, 2010, 330, 1515-1520.	6.0	1,430
208	Effect of entropy change of lithium intercalation in cathodes and anodes on Li-ion battery thermal management. Journal of Power Sources, 2010, 195, 3720-3729.	4.0	313
209	Ambient operation of Li/Air batteries. Journal of Power Sources, 2010, 195, 4332-4337.	4.0	189
210	Oxygen-selective immobilized liquid membranes for operation of lithium-air batteries in ambient air. Journal of Power Sources, 2010, 195, 7438-7444.	4.0	96
211	A three-dimensional macroporous Cu/SnO ₂ composite anode sheet prepared via a novel method. Journal of Power Sources, 2010, 195, 7403-7408.	4.0	44
212	Nano-structured Li ₃ V ₂ (PO ₄) ₃ /carbon composite for high-rate lithium-ion batteries. Electrochemistry Communications, 2010, 12, 1674-1677.	2.3	173
213	In situ transmission electron microscopy and spectroscopy studies of interfaces in Li ion batteries: Challenges and opportunities. Journal of Materials Research, 2010, 25, 1541-1547.	1.2	112
214	Synthesis and Characterization of Lithium Manganese Phosphate by a Precipitation Method. Journal of the Electrochemical Society, 2010, 157, A142.	1.3	76
215	An Approach to Make Macroporous Metal Sheets as Current Collectors for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2010, 157, A765.	1.3	35
216	High Capacity Pouch-Type Li-Air Batteries. Journal of the Electrochemical Society, 2010, 157, A760.	1.3	67

#	ARTICLE	IF	CITATIONS
217	Crown Ethers in Nonaqueous Electrolytes for Lithium/Air Batteries. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, A48.	2.2	82
218	Air Dehydration Membranes for Nonaqueous Lithium-Air Batteries. <i>Journal of the Electrochemical Society</i> , 2010, 157, A940.	1.3	63
219	Effects of Nonaqueous Electrolytes on the Performance of Lithium/Air Batteries. <i>Journal of the Electrochemical Society</i> , 2010, 157, A219.	1.3	148
220	Optimization of Air Electrode for Li/Air Batteries. <i>Journal of the Electrochemical Society</i> , 2010, 157, A487.	1.3	308
221	Hybrid Air-Electrode for Li/Air Batteries. <i>Journal of the Electrochemical Society</i> , 2010, 157, A294.	1.3	50
222	Stabilization of Silicon Anode for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2010, 157, A1047.	1.3	108
223	Optimization of Nonaqueous Electrolytes for Primary Lithium/Air Batteries Operated in Ambient Environment. <i>Journal of the Electrochemical Society</i> , 2009, 156, A773.	1.3	166
224	Vibrational Spectroscopy and ab Initio Studies of Lithium Bis(oxalato)borate (LiBOB) in Different Solvents. <i>Journal of Physical Chemistry A</i> , 2006, 110, 11467-11472.	1.1	50
225	LiMOB, an Unsymmetrical Nonaromatic Orthoborate Salt for Nonaqueous Solution Electrochemical Applications. <i>Journal of the Electrochemical Society</i> , 2004, 151, A632.	1.3	47
226	Polymer electrolytes from plasticized polyMOBs and their gel forms. <i>Electrochimica Acta</i> , 2003, 48, 2029-2035.	2.6	13
227	“PolyMOB” lithium salt complexes: from salt-in-polymer to polymer-in-salt electrolytes. <i>Electrochimica Acta</i> , 2003, 48, 2037-2045.	2.6	47
228	Anion-trapping and polyanion electrolytes based on acid-in-chain borate polymers. <i>Electrochimica Acta</i> , 2003, 48, 2255-2266.	2.6	29
229	Ionic Liquids: Ion Mobilities, Glass Temperatures, and Fragilities. <i>Journal of Physical Chemistry B</i> , 2003, 107, 6170-6178.	1.2	960
230	Solvent-Free Electrolytes with Aqueous Solution-Like Conductivities. <i>Science</i> , 2003, 302, 422-425.	6.0	506
231	Ionic Liquids of Chelated Orthoborates as Model Ionic Glassformers. <i>Journal of Physical Chemistry B</i> , 2003, 107, 11749-11756.	1.2	217
232	Structures of Orthoborate Anions and Physical Properties of Their Lithium Salt Nonaqueous Solutions. <i>Journal of the Electrochemical Society</i> , 2003, 150, E74.	1.3	49
233	Ionic Liquids by Proton Transfer: % Vapor Pressure, Conductivity, and the Relevance of pK_a from Aqueous Solutions. <i>Journal of the American Chemical Society</i> , 2003, 125, 15411-15419.	6.6	841
234	Novel Polyanionic Solid Electrolytes with Weak Coulomb Traps and Controllable Caps and Spacers. <i>Chemistry of Materials</i> , 2002, 14, 401-409.	3.2	67

#	ARTICLE	IF	CITATIONS
235	LiBOB as Salt for Lithium-Ion Batteries: A Possible Solution for High Temperature Operation. <i>Electrochemical and Solid-State Letters</i> , 2002, 5, A26.	2.2	358
236	Preparation and characterization of novel polyMOB-polyanionic solid electrolytes with weak coulomb traps. <i>Solid State Ionics</i> , 2002, 147, 295-301.	1.3	45
237	Weakly Coordinating Anions, and the Exceptional Conductivity of Their Nonaqueous Solutions. <i>Electrochemical and Solid-State Letters</i> , 2001, 4, E1.	2.2	269
238	High Li ⁺ Self-Diffusivity and Transport Number in Novel Electrolyte Solutions. <i>Journal of the Electrochemical Society</i> , 2001, 148, A1352.	1.3	70
239	Ionic Conductivity and Electrochemical Stability of Poly[oligo(ethylene glycol)oxalate] ⁻ Lithium Salt Complexes. <i>Chemistry of Materials</i> , 2001, 13, 575-580.	3.2	53
240	LiBOB and Its Derivatives: Weakly Coordinating Anions, and the Exceptional Conductivity of Their Nonaqueous Solutions [<i>Electrochem. Solid-State Lett.</i> , 4, E1 (2001)]. <i>Electrochemical and Solid-State Letters</i> , 2001, 4, L3.	2.2	19
241	Polyanionic electrolytes with high alkali ion conductivity. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 8235-8243.	0.7	9
242	A Fusible Orthoborate Lithium Salt with High Conductivity in Solutions. <i>Electrochemical and Solid-State Letters</i> , 1999, 3, 366.	2.2	59
243	Microporous Polymeric Composite Electrolytes from Microemulsion Polymerization. <i>Langmuir</i> , 1999, 15, 4812-4819.	1.6	15
244	Novel Alternating Comblike Copolymer Electrolytes with Single Lithium Ionic Conduction. <i>Chemistry of Materials</i> , 1998, 10, 1951-1957.	3.2	32
245	Electrochromic Effect of Vinyl Viologenacetate Copolyether Solid Electrolyte. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 1993, 30, 373-383.	1.2	3
246	Systematic Evaluation of Carbon Hosts for High-Energy Rechargeable Lithium-Metal Batteries. <i>ACS Energy Letters</i> , 0, , 1550-1559.	8.8	20
247	Enabling High-Voltage Lithium Metal Batteries Under Practical Conditions. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0