

# Ying Shirley Meng

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1886365/publications.pdf>

Version: 2024-02-01

278  
papers

34,123  
citations

2538

96  
h-index

3997

176  
g-index

284  
all docs

284  
docs citations

284  
times ranked

24635  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrodes with High Power and High Capacity for Rechargeable Lithium Batteries. <i>Science</i> , 2006, 311, 977-980.	6.0	2,369
2	Pathways for practical high-energy long-cycling lithium metal batteries. <i>Nature Energy</i> , 2019, 4, 180-186.	19.8	2,101
3	Quantifying inactive lithium in lithium metal batteries. <i>Nature</i> , 2019, 572, 511-515.	13.7	852
4	Layered SnS <sub>2</sub> -Reduced Graphene Oxide Composite "A High-Capacity, High-Rate, and Long-Cycle Life Sodium-Ion Battery Anode Material. <i>Advanced Materials</i> , 2014, 26, 3854-3859.	11.1	744
5	Identifying surface structural changes in layered Li-excess nickel manganese oxides in high voltage lithium ion batteries: A joint experimental and theoretical study. <i>Energy and Environmental Science</i> , 2011, 4, 2223.	15.6	728
6	Interfaces and Interphases in All-Solid-State Batteries with Inorganic Solid Electrolytes. <i>Chemical Reviews</i> , 2020, 120, 6878-6933.	23.0	676
7	Lithium Diffusion in Graphitic Carbon. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1176-1180.	2.1	662
8	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. <i>CheM</i> , 2018, 4, 1877-1892.	5.8	628
9	Recent progress in cathode materials research for advanced lithium ion batteries. <i>Materials Science and Engineering Reports</i> , 2012, 73, 51-65.	14.8	595
10	Gas-solid interfacial modification of oxygen activity in layered oxide cathodes for lithium-ion batteries. <i>Nature Communications</i> , 2016, 7, 12108.	5.8	531
11	An advanced cathode for Na-ion batteries with high rate and excellent structural stability. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3304.	1.3	501
12	First principles computational materials design for energy storage materials in lithium ion batteries. <i>Energy and Environmental Science</i> , 2009, 2, 589.	15.6	456
13	Narrowing the Gap between Theoretical and Practical Capacities in Li-Ion Layered Oxide Cathode Materials. <i>Advanced Energy Materials</i> , 2017, 7, 1602888.	10.2	455
14	Identifying the Critical Role of Li Substitution in P2-Na <sub>x</sub> [Li <sub>y</sub> Ni <sub>z</sub> Mn <sub>1-y-z</sub> ]O <sub>2</sub> (0 < x < 1, 0 < y < 1, 0 < z < 1) Intercalation Cathode Materials for High-Energy Na-Ion Batteries. <i>Chemistry of Materials</i> , 2014, 26, 1260-1269.	3.2	417
15	Carbon-free high-loading silicon anodes enabled by sulfide solid electrolytes. <i>Science</i> , 2021, 373, 1494-1499.	6.0	393
16	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. <i>Chemical Reviews</i> , 2017, 117, 13123-13186.	23.0	390
17	From nanoscale interface characterization to sustainable energy storage using all-solid-state batteries. <i>Nature Nanotechnology</i> , 2020, 15, 170-180.	15.6	378
18	Chemical composition mapping with nanometre resolution by soft X-ray microscopy. <i>Nature Photonics</i> , 2014, 8, 765-769.	15.6	371

#	ARTICLE	IF	CITATIONS
19	Exploring Oxygen Activity in the High Energy P2-Type $\text{Na}_{0.78}\text{Ni}_{0.23}\text{Mn}_{0.69}\text{O}_2$ Cathode Material for Na-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2017, 139, 4835-4845.	6.6	363
20	The Effect of Fluoroethylene Carbonate as an Additive on the Solid Electrolyte Interphase on Silicon Lithium-Ion Electrodes. <i>Chemistry of Materials</i> , 2015, 27, 5531-5542.	3.2	347
21	A Symmetric $\text{RuO}_2 \cdot \text{RuO}_2$ Supercapacitor Operating at 1.6 V by Using a Neutral Aqueous Electrolyte. <i>Electrochemical and Solid-State Letters</i> , 2012, 15, A60.	2.2	340
22	Key Issues Hindering a Practical Lithium-Metal Anode. <i>Trends in Chemistry</i> , 2019, 1, 152-158.	4.4	328
23	Stack Pressure Considerations for Room-Temperature All-Solid-State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 1903253.	10.2	327
24	Bisalt ether electrolytes: a pathway towards lithium metal batteries with Ni-rich cathodes. <i>Energy and Environmental Science</i> , 2019, 12, 780-794.	15.6	310
25	Topological defect dynamics in operando battery nanoparticles. <i>Science</i> , 2015, 348, 1344-1347.	6.0	309
26	New Insights on the Structure of Electrochemically Deposited Lithium Metal and Its Solid Electrolyte Interphases via Cryogenic TEM. <i>Nano Letters</i> , 2017, 17, 7606-7612.	4.5	308
27	Wearable thermoelectrics for personalized thermoregulation. <i>Science Advances</i> , 2019, 5, eaaw0536.	4.7	299
28	Performance and design considerations for lithium excess layered oxide positive electrode materials for lithium ion batteries. <i>Energy and Environmental Science</i> , 2016, 9, 1931-1954.	15.6	295
29	Elucidating Reversible Electrochemical Redox of $\text{Li}_6\text{PS}_5\text{Cl}$ Solid Electrolyte. <i>ACS Energy Letters</i> , 2019, 4, 2418-2427.	8.8	288
30	Cation Ordering in Layered $\text{O}_3 \text{Li}[\text{Ni}_x\text{Li}_{1/3-2x/3}\text{Mn}_{2/3-x/3}]\text{O}_2$ ( $0 \leq x \leq 1/2$ ) Compounds. <i>Chemistry of Materials</i> , 2005, 17, 2386-2394.	3.2	283
31	Nucleation of dislocations and their dynamics in layered oxide cathode materials during battery charging. <i>Nature Energy</i> , 2018, 3, 641-647.	19.8	281
32	In Situ STEM-EELS Observation of Nanoscale Interfacial Phenomena in All-Solid-State Batteries. <i>Nano Letters</i> , 2016, 16, 3760-3767.	4.5	278
33	Liquefied gas electrolytes for electrochemical energy storage devices. <i>Science</i> , 2017, 356, .	6.0	271
34	Sodium-Ion Batteries Paving the Way for Grid Energy Storage. <i>Advanced Energy Materials</i> , 2020, 10, 2001274.	10.2	265
35	Reusable Oxidation Catalysis Using Metal-Monocatecholato Species in a Robust Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2014, 136, 4965-4973.	6.6	264
36	Efficient Direct Recycling of Lithium-Ion Battery Cathodes by Targeted Healing. <i>Joule</i> , 2020, 4, 2609-2626.	11.7	260

#	ARTICLE	IF	CITATIONS
37	A carbonate-free, sulfone-based electrolyte for high-voltage Li-ion batteries. <i>Materials Today</i> , 2018, 21, 341-353.	8.3	258
38	Homogenized halides and alkali cation segregation in alloyed organic-inorganic perovskites. <i>Science</i> , 2019, 363, 627-631.	6.0	258
39	Correlation Between Oxygen Vacancy, Microstrain, and Cation Distribution in Lithium-Excess Layered Oxides During the First Electrochemical Cycle. <i>Chemistry of Materials</i> , 2013, 25, 1621-1629.	3.2	242
40	Role of 4- <i>tert</i> -Butylpyridine as a Hole Transport Layer Morphological Controller in Perovskite Solar Cells. <i>Nano Letters</i> , 2016, 16, 5594-5600.	4.5	241
41	Uncovering the roles of oxygen vacancies in cation migration in lithium excess layered oxides. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 14665-14668.	1.3	240
42	Moving beyond 99.9% Coulombic efficiency for lithium anodes in liquid electrolytes. <i>Nature Energy</i> , 2021, 6, 951-960.	19.8	237
43	Combined economic and technological evaluation of battery energy storage for grid applications. <i>Nature Energy</i> , 2019, 4, 42-50.	19.8	231
44	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 0, , 1399-1404.	8.8	228
45	First-Principles Investigation of the Li <sup>+</sup> Fe <sup>2+</sup> F Phase Diagram and Equilibrium and Nonequilibrium Conversion Reactions of Iron Fluorides with Lithium. <i>Chemistry of Materials</i> , 2008, 20, 5274-5283.	3.2	219
46	All-Printed, Stretchable Zn-Ag <sub>2</sub> O Rechargeable Battery via Hyperelastic Binder for Self-Powering Wearable Electronics. <i>Advanced Energy Materials</i> , 2017, 7, 1602096.	10.2	212
47	Pressure-tailored lithium deposition and dissolution in lithium metal batteries. <i>Nature Energy</i> , 2021, 6, 987-994.	19.8	208
48	Room-Temperature All-solid-state Rechargeable Sodium-ion Batteries with a Cl-doped Na <sub>3</sub> PS <sub>4</sub> Superionic Conductor. <i>Scientific Reports</i> , 2016, 6, 33733.	1.6	205
49	Unveiling the Role of tBP-LiTFSI Complexes in Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2018, 140, 16720-16730.	6.6	193
50	Pressure effects on sulfide electrolytes for all solid-state batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5049-5055.	5.2	191
51	Ambient-Pressure Relithiation of Degraded Li <sub>x</sub> Ni <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> (0 < x < 1) Tj ETQq1 10.2 189 <i>Advanced Energy Materials</i> , 2019, 9, 1900454.	10.2	189
52	Investigating the Energy Storage Mechanism of SnS <sub>2</sub> -rGO Composite Anode for Advanced Na-Ion Batteries. <i>Chemistry of Materials</i> , 2015, 27, 5633-5640.	3.2	184
53	High-Efficiency Lithium-Metal Anode Enabled by Liquefied Gas Electrolytes. <i>Joule</i> , 2019, 3, 1986-2000.	11.7	183
54	Phase Stability of Nickel Hydroxides and Oxyhydroxides. <i>Journal of the Electrochemical Society</i> , 2006, 153, A210.	1.3	175

#	ARTICLE	IF	CITATIONS
55	Insights into the Performance Limits of the $\text{Li}_7\text{P}_3\text{S}_{11}$ Superionic Conductor: A Combined First-Principles and Experimental Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 7843-7853.	4.0	169
56	MIL-101(Fe) as a lithium-ion battery electrode material: a relaxation and intercalation mechanism during lithium insertion. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4738-4744.	5.2	168
57	Spectrum-Dependent Spiro-OMeTAD Oxidization Mechanism in Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 24791-24798.	4.0	168
58	Self-standing porous $\text{LiMn}_2\text{O}_4$ nanowall arrays as promising cathodes for advanced 3D microbatteries and flexible lithium-ion batteries. <i>Nano Energy</i> , 2016, 22, 475-482.	8.2	166
59	Phase Transitions and High-Voltage Electrochemical Behavior of $\text{LiCoO}_2$ Thin Films Grown by Pulsed Laser Deposition. <i>Journal of the Electrochemical Society</i> , 2007, 154, A337.	1.3	162
60	Glassy Li metal anode for high-performance rechargeable Li batteries. <i>Nature Materials</i> , 2020, 19, 1339-1345.	13.3	162
61	Ultrathin $\text{Al}_2\text{O}_3$ Coatings for Improved Cycling Performance and Thermal Stability of $\text{LiNi}_0.5\text{Co}_0.2\text{Mn}_0.3\text{O}_2$ Cathode Material. <i>Electrochimica Acta</i> , 2016, 203, 154-161.	2.6	155
62	Improvement of the Cathode Electrolyte Interphase on $\text{P}_2\text{-Na}_{2/3}\text{Ni}_{1/3}\text{Mn}_{2/3}\text{O}_2$ by Atomic Layer Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 26518-26530.	4.0	154
63	Interface Limited Lithium Transport in Solid-State Batteries. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 298-303.	2.1	148
64	Elucidating the Phase Transformation of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Lithiation at the Nanoscale. <i>ACS Nano</i> , 2016, 10, 4312-4321.	7.3	144
65	A monoclinic polymorph of sodium birnessite for ultrafast and ultrastable sodium ion storage. <i>Nature Communications</i> , 2018, 9, 5100.	5.8	142
66	Revisiting the origin of cycling enhanced capacity of $\text{Fe}_3\text{O}_4$ based nanostructured electrode for lithium ion batteries. <i>Nano Energy</i> , 2017, 41, 426-433.	8.2	136
67	Unveiling the Stable Nature of the Solid Electrolyte Interphase between Lithium Metal and LiPON via Cryogenic Electron Microscopy. <i>Joule</i> , 2020, 4, 2484-2500.	11.7	136
68	A review on the stability and surface modification of layered transition-metal oxide cathodes. <i>Materials Today</i> , 2021, 46, 155-182.	8.3	132
69	Understanding $\text{Na}_2\text{Ti}_3\text{O}_7$ as an ultra-low voltage anode material for a Na-ion battery. <i>Chemical Communications</i> , 2014, 50, 12564-12567.	2.2	130
70	Durable high-rate capability $\text{Na}_{0.44}\text{MnO}_2$ cathode material for sodium-ion batteries. <i>Nano Energy</i> , 2016, 27, 602-610.	8.2	126
71	Recent Advances in First Principles Computational Research of Cathode Materials for Lithium-Ion Batteries. <i>Accounts of Chemical Research</i> , 2013, 46, 1171-1180.	7.6	125
72	Divalent-doped $\text{Na}_3\text{Zr}_2\text{Si}_2\text{P}_2\text{O}_{12}$ sodium superionic conductor: Improving the ionic conductivity via simultaneously optimizing the phase and chemistry of the primary and secondary phases. <i>Journal of Power Sources</i> , 2017, 347, 229-237.	4.0	122

#	ARTICLE	IF	CITATIONS
73	Revealing Nanoscale Solid-Solid Interfacial Phenomena for Long-Life and High-Energy All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2019, 11, 43138-43145.	4.0	122
74	Perspective—Fluorinating Interphases. Journal of the Electrochemical Society, 2019, 166, A5184-A5186.	1.3	122
75	Understanding the Crystal Structure of Layered LiNi <sub>0.5</sub> Mn <sub>0.5</sub> O <sub>2</sub> by Electron Diffraction and Powder Diffraction Simulation. Electrochemical and Solid-State Letters, 2004, 7, A155.	2.2	121
76	A review on mechanistic understanding of MnO <sub>2</sub> in aqueous electrolyte for electrical energy storage systems. International Materials Reviews, 2020, 65, 356-387.	9.4	121
77	Structural and electrochemical properties of Gd-doped Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> as anode material with improved rate capability for lithium-ion batteries. Journal of Power Sources, 2015, 280, 355-362.	4.0	120
78	Liquefied gas electrolytes for wide-temperature lithium metal batteries. Energy and Environmental Science, 2020, 13, 2209-2219.	15.6	120
79	Three-dimensional nanoscale characterisation of materials by atom probe tomography. International Materials Reviews, 2018, 63, 68-101.	9.4	119
80	Role of Polyacrylic Acid (PAA) Binder on the Solid Electrolyte Interphase in Silicon Anodes. Chemistry of Materials, 2019, 31, 2535-2544.	3.2	119
81	Cryogenic Electron Microscopy for Characterizing and Diagnosing Batteries. Joule, 2018, 2, 2225-2234.	11.7	118
82	Electrochemical Properties of Nonstoichiometric LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Thin-Film Electrodes Prepared by Pulsed Laser Deposition. Journal of the Electrochemical Society, 2007, 154, A737.	1.3	117
83	Electrochemical properties of tin oxide anodes for sodium-ion batteries. Journal of Power Sources, 2015, 284, 287-295.	4.0	117
84	Exploiting Mechanistic Solvation Kinetics for Dual-Graphite Batteries with High Power Output at Extremely Low Temperature. Angewandte Chemie - International Edition, 2019, 58, 18892-18897.	7.2	117
85	Effect of Multiple Cation Electrolyte Mixtures on Rechargeable Zn-MnO <sub>2</sub> Alkaline Battery. Chemistry of Materials, 2016, 28, 4536-4545.	3.2	116
86	Lithium Lanthanum Titanium Oxides: A Fast Ionic Conductive Coating for Lithium-Ion Battery Cathodes. Chemistry of Materials, 2012, 24, 2744-2751.	3.2	115
87	A stable cathode-solid electrolyte composite for high-voltage, long-cycle-life solid-state sodium-ion batteries. Nature Communications, 2021, 12, 1256.	5.8	110
88	Frontiers of <i>in situ</i> electron microscopy. MRS Bulletin, 2015, 40, 12-18.	1.7	109
89	Effect of Surface Modification on Nano-Structured LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Spinel Materials. ACS Applied Materials & Interfaces, 2015, 7, 16231-16239.	4.0	108
90	Probing the electrode/electrolyte interface in the lithium excess layered oxide Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> . Physical Chemistry Chemical Physics, 2013, 15, 11128.	1.3	107

#	ARTICLE	IF	CITATIONS
91	Cryogenic Focused Ion Beam Characterization of Lithium Metal Anodes. ACS Energy Letters, 2019, 4, 489-493.	8.8	106
92	Direct evidence for high Na <sup>+</sup> mobility and high voltage structural processes in P2-Na <sub>x</sub> [Li <sub>y</sub> Ni <sub>z</sub> Mn <sub>1-y-z</sub> ]O <sub>2</sub> (x, y, z ≈ 1) cathodes from solid-state NMR and DFT calculations. Journal of Materials Chemistry A, 2017, 5, 4129-4143.	5.2	105
93	Self-branched $\delta$ -MnO <sub>2</sub> / $\beta$ -MnO <sub>2</sub> heterojunction nanowires with enhanced pseudocapacitance. Materials Horizons, 2017, 4, 415-422.	6.4	105
94	Understanding the Electrochemical Mechanisms Induced by Gradient Mg <sup>2+</sup> Distribution of Na-Rich Na <sub>3+x</sub> V <sub>2</sub> PO <sub>4</sub> ·Mg <sub>x</sub> (PO <sub>4</sub> ) <sub>3</sub> /C <sup>3.2</sup> for Sodium Ion Batteries. Chemistry of Materials, 2018, 30, 2498-2505.	3.2	102
95	Local structure adaptability through multi cations for oxygen redox accommodation in Li-Rich layered oxides. Energy Storage Materials, 2020, 24, 384-393.	9.5	101
96	Electrochemical and thermal properties of P2-type Na <sub>2/3</sub> Fe <sub>1/3</sub> Mn <sub>2/3</sub> O <sub>2</sub> for Na-ion batteries. Journal of Power Sources, 2014, 264, 235-239.	4.0	100
97	Dependence on Crystal Size of the Nanoscale Chemical Phase Distribution and Fracture in Li <sub>x</sub> FePO <sub>4</sub> . Nano Letters, 2015, 15, 4282-4288.	4.5	99
98	Operando Lithium Dynamics in the Li-Rich Layered Oxide Cathode Material via Neutron Diffraction. Advanced Energy Materials, 2016, 6, 1502143.	10.2	98
99	Understanding and Controlling Anionic Electrochemical Activity in High-Capacity Oxides for Next Generation Li-ion Batteries. Chemistry of Materials, 2017, 29, 908-915.	3.2	97
100	Enabling Thin and Flexible Solid-State Composite Electrolytes by the Scalable Solution Process. ACS Applied Energy Materials, 2019, 2, 6542-6550.	2.5	96
101	Single Particle Nanomechanics in Operando Batteries via Lensless Strain Mapping. Nano Letters, 2014, 14, 5123-5127.	4.5	94
102	Pushing the limit of 3d transition metal-based layered oxides that use both cation and anion redox for energy storage. Nature Reviews Materials, 2022, 7, 522-540.	23.3	92
103	Synthesis-Structure-Property Relations in Layered, $\delta$ -Li-excess Oxides Electrode Materials Li <sub>1/3-2x/3</sub> Ni <sub>x</sub> Mn <sub>2/3-x/3</sub> O <sub>2</sub> (x=1/3, 1/4, and 1/5). Journal of the Electrochemical Society, 2010, 157, A1202.	1.3	88
104	Understanding the Role of NH <sub>4</sub> F and Al <sub>2</sub> O <sub>3</sub> Surface Co-modification on Lithium-Excess Layered Oxide Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> . ACS Applied Materials & Interfaces, 2015, 7, 19189-19200.	4.0	87
105	Nanoconfined Iron Oxychloride Material as a High-Performance Cathode for Rechargeable Chloride Ion Batteries. ACS Energy Letters, 2017, 2, 2341-2348.	8.8	87
106	New Insights into the Interphase between the Na Metal Anode and Sulfide Solid-State Electrolytes: A Joint Experimental and Computational Study. ACS Applied Materials & Interfaces, 2018, 10, 10076-10086.	4.0	86
107	Urea-based hydrothermal synthesis of LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> cathode material for Li-ion battery. Journal of Power Sources, 2018, 394, 114-121.	4.0	86
108	Improved electrochemical performance of tin-sulfide anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 16971-16977.	5.2	83

#	ARTICLE	IF	CITATIONS
109	Effects of cathode electrolyte interfacial (CEI) layer on long term cycling of all-solid-state thin-film batteries. <i>Journal of Power Sources</i> , 2016, 324, 342-348.	4.0	82
110	RECENT ADVANCES IN SODIUM INTERCALATION POSITIVE ELECTRODE MATERIALS FOR SODIUM ION BATTERIES. <i>Functional Materials Letters</i> , 2013, 06, 1330001.	0.7	79
111	In-situ neutron diffraction study of the $x\text{Li}_2\text{MnO}_3 \cdot (1-x)\text{LiMO}_2$ ( $x=0.5$ ; $M=\text{Ni, Mn, Co}$ ) layered oxide compounds during electrochemical cycling. <i>Journal of Power Sources</i> , 2013, 240, 772-778.	4.0	79
112	High Performance Printed AgO-Zn Rechargeable Battery for Flexible Electronics. <i>Joule</i> , 2021, 5, 228-248.	11.7	78
113	TiO <sub>2</sub> flakes as anode materials for Li-ion-batteries. <i>Journal of Power Sources</i> , 2012, 207, 166-172.	4.0	77
114	Identifying the Distribution of Al <sup>3+</sup> in Li <sub>0.8</sub> Co <sub>0.15</sub> Al <sub>0.05</sub> O <sub>2</sub> . <i>Chemistry of Materials</i> , 2016, 28, 8170-8180.	3.2	77
115	Effect of Morphology and Manganese Valence on the Voltage Fade and Capacity Retention of Li <sub>2/3</sub> Ni <sub>1/3</sub> Mn <sub>1/3</sub> O <sub>2</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 18868-18877.	4.0	76
116	Advanced analytical electron microscopy for lithium-ion batteries. <i>NPG Asia Materials</i> , 2015, 7, e193-e193.	3.8	76
117	Role of Crystal Symmetry in the Reversibility of Stacking-Sequence Changes in Layered Intercalation Electrodes. <i>Nano Letters</i> , 2017, 17, 7789-7795.	4.5	76
118	Electrochemical performance and interfacial investigation on Si composite anode for lithium ion batteries in full cell. <i>Journal of Power Sources</i> , 2017, 359, 173-181.	4.0	69
119	Nonequilibrium Structural Dynamics of Nanoparticles in Li <sub>1/2</sub> Mn <sub>3/2</sub> O <sub>4</sub> Cathode under Operando Conditions. <i>Nano Letters</i> , 2014, 14, 5295-5300.	4.5	67
120	Bridging nano- and microscale X-ray tomography for battery research by leveraging artificial intelligence. <i>Nature Nanotechnology</i> , 2022, 17, 446-459.	15.6	66
121	Probing the Mechanism of Sodium Ion Insertion into Copper Antimony Cu <sub>2</sub> Sb Anodes. <i>Journal of Physical Chemistry C</i> , 2014, 118, 7856-7864.	1.5	64
122	Effects of laser energy and wavelength on the analysis of LiFePO <sub>4</sub> using laser assisted atom probe tomography. <i>Ultramicroscopy</i> , 2015, 148, 57-66.	0.8	64
123	KN95 and N95 Respirators Retain Filtration Efficiency despite a Loss of Dipole Charge during Decontamination. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 54473-54480.	4.0	63
124	Enabling the Low-Temperature Cycling of NMC   Graphite Pouch Cells with an Ester-Based Electrolyte. <i>ACS Energy Letters</i> , 2021, 6, 2016-2023.	8.8	63
125	In situ X-ray diffraction study of the lithium excess layered oxide compound Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> during electrochemical cycling. <i>Solid State Ionics</i> , 2012, 207, 44-49.	1.3	62
126	Dense Stacking Porous Conjugated Polymer as Reactive Type Host for High Performance Lithium Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11359-11369.	7.2	62



#	ARTICLE	IF	CITATIONS
127	Interphase control for high performance lithium metal batteries using ether aided ionic liquid electrolyte. <i>Energy and Environmental Science</i> , 2022, 15, 1907-1919.	15.6	62
128	Enhancing the electrochemical performance of Li-rich layered oxide Li <sub>1.13</sub> Ni <sub>0.3</sub> Mn <sub>0.57</sub> O <sub>2</sub> via WO <sub>3</sub> doping and accompanying spontaneous surface phase formation. <i>Journal of Power Sources</i> , 2018, 375, 21-28.	4.0	61
129	Role of electrolyte in stabilizing hard carbon as an anode for rechargeable sodium-ion batteries with long cycle life. <i>Energy Storage Materials</i> , 2021, 42, 78-87.	9.5	61
130	Revisiting Discharge Mechanism of CF <sub>x</sub> as a High Energy Density Cathode Material for Lithium Primary Battery. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	61
131	Achieving high efficiency and cyclability in inexpensive soluble lead flow batteries. <i>Energy and Environmental Science</i> , 2013, 6, 1573.	15.6	60
132	Structural insights into composition design of Li-rich layered cathode materials for high-energy rechargeable battery. <i>Materials Today</i> , 2021, 51, 15-26.	8.3	60
133	Fire-extinguishing, recyclable liquefied gas electrolytes for temperature-resilient lithium-metal batteries. <i>Nature Energy</i> , 2022, 7, 548-559.	19.8	60
134	Direct Visualization of the Solid Electrolyte Interphase and Its Effects on Silicon Electrochemical Performance. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600438.	1.9	59
135	Nanosheet-assembled hierarchical Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> microspheres for high-volumetric-density and high-rate Li-ion battery anode. <i>Energy Storage Materials</i> , 2019, 21, 361-371.	9.5	57
136	Intercalation and Conversion Reactions of Nanosized $\hat{I}^2$ -MnO <sub>2</sub> Cathode in the Secondary Zn/MnO <sub>2</sub> Alkaline Battery. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11177-11185.	1.5	56
137	Revisiting the conversion reaction voltage and the reversibility of the CuF <sub>2</sub> electrode in Li-ion batteries. <i>Nano Research</i> , 2017, 10, 4232-4244.	5.8	55
138	Enabling high areal capacity for Co-free high voltage spinel materials in next-generation Li-ion batteries. <i>Journal of Power Sources</i> , 2020, 473, 228579.	4.0	55
139	Role of LiCoO <sub>2</sub> Surface Terminations in Oxygen Reduction and Evolution Kinetics. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 1357-1362.	2.1	54
140	Single-step synthesis of highly conductive Na <sub>3</sub> PS <sub>4</sub> solid electrolyte for sodium all solid-state batteries. <i>Journal of Power Sources</i> , 2019, 435, 126623.	4.0	54
141	High rate delithiation behaviour of LiFePO <sub>4</sub> studied by quick X-ray absorption spectroscopy. <i>Chemical Communications</i> , 2012, 48, 11537.	2.2	53
142	All-Sputtered, Superior Power Density Thin-Film Solid Oxide Fuel Cells with a Novel Nanofibrous Ceramic Cathode. <i>Nano Letters</i> , 2020, 20, 2943-2949.	4.5	53
143	Fabrication of High-Quality Thin Solid-State Electrolyte Films Assisted by Machine Learning. <i>ACS Energy Letters</i> , 0, , 1639-1648.	8.8	53
144	Conversion mechanism of nickel fluoride and NiO-doped nickel fluoride in Li ion batteries. <i>Electrochimica Acta</i> , 2012, 59, 213-221.	2.6	48

#	ARTICLE	IF	CITATIONS
145	Identifying the chemical and structural irreversibility in $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ as a model compound for classical layered intercalation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4189-4198.	5.2	48
146	Effective Upcycling of Graphite Anode: Healing and Doping Enabled Direct Regeneration. <i>Journal of the Electrochemical Society</i> , 2020, 167, 160511.	1.3	48
147	Deposition of ZnO on bismuth species towards a rechargeable Zn-based aqueous battery. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 26376-26382.	1.3	46
148	<i>In situ</i> formed polymer gel electrolytes for lithium batteries with inherent thermal shutdown safety features. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16984-16991.	5.2	46
149	Porous manganese oxide generated from lithiation/delithiation with improved electrochemical oxidation for supercapacitors. <i>Journal of Materials Chemistry</i> , 2011, 21, 15521.	6.7	45
150	Synthesis of $\text{LiNi}_{1-x}\text{Fe}_x\text{PO}_4$ solid solution as cathode materials for lithium ion batteries. <i>Electrochimica Acta</i> , 2013, 108, 827-832.	2.6	45
151	<i>In situ</i> TEM observation of the electrochemical lithiation of N-doped anatase $\text{TiO}_2$ nanotubes as anodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 20651-20657.	5.2	45
152	Thermodynamics of Antisite Defects in Layered NMC Cathodes: Systematic Insights from High-Precision Powder Diffraction Analyses. <i>Chemistry of Materials</i> , 2020, 32, 1002-1010.	3.2	44
153	<i>Ab initio</i> study of sodium ordering in $\text{Na}_{0.75}\text{CoO}_2$ and its relation to $\text{Co}^{3+}$ and $\text{Co}^{4+}$ charge ordering. <i>Physical Review B</i> , 2005, 72, .	1.1	43
154	Reciprocal Salt Flux Growth of $\text{LiFePO}_4$ Single Crystals with Controlled Defect Concentrations. <i>Chemistry of Materials</i> , 2013, 25, 4574-4584.	3.2	43
155	Experimental and Computational Evaluation of a Sodium-Rich Anti-Perovskite for Solid State Electrolytes. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2165-A2171.	1.3	43
156	Nonequilibrium Pathways during Electrochemical Phase Transformations in Single Crystals Revealed by Dynamic Chemical Imaging at Nanoscale Resolution. <i>Advanced Energy Materials</i> , 2015, 5, 1402040.	10.2	42
157	Tuning Internal Strain in Metal-Organic Frameworks via Vapor Phase Infiltration for $\text{CO}_2$ Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4572-4580.	7.2	42
158	Sub-nanometer confinement enables facile condensation of gas electrolyte for low-temperature batteries. <i>Nature Communications</i> , 2021, 12, 3395.	5.8	42
159	Nanoscale strain mapping in battery nanostructures. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	41
160	Structure and Solution Dynamics of Lithium Methyl Carbonate as a Protective Layer For Lithium Metal. <i>ACS Applied Energy Materials</i> , 2018, 1, 1864-1869.	2.5	41
161	Investigating dry room compatibility of sulfide solid-state electrolytes for scalable manufacturing. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7155-7164.	5.2	41
162	Engineering Three-Dimensionally Electrodeposited Si-on-Ni Inverse Opal Structure for High Volumetric Capacity Li-Ion Microbattery Anode. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 9842-9849.	4.0	40

#	ARTICLE	IF	CITATIONS
163	In situ strain evolution during a disconnection event in a battery nanoparticle. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 10551-10555.	1.3	40
164	Sensitivity and Limitations of Structures from X-ray and Neutron-Based Diffraction Analyses of Transition Metal Oxide Lithium-Battery Electrodes. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1802-A1811.	1.3	40
165	Electrochemical reaction and surface chemistry for performance enhancement of a Si composite anode using a bis(fluorosulfonyl)imide-based ionic liquid. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15117-15125.	5.2	39
166	Internal-short-mitigating current collector for lithium-ion battery. <i>Journal of Power Sources</i> , 2017, 349, 84-93.	4.0	39
167	Enhancing the Ion Transport in $\text{LiMn}_{1.5}\text{Ni}_{0.5}\text{O}_4$ by Altering the Particle Wulff Shape via Anisotropic Surface Segregation. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36745-36754.	4.0	39
168	Self-Healing and Anti- $\text{CO}_2$ Hydrogels for Flexible Solid-State Zinc-Air Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 12033-12041.	4.0	39
169	Synthesis and electrochemical properties of layered $\text{LiNi}_2/3\text{Sb}_1/3\text{O}_2$ . <i>Journal of Power Sources</i> , 2007, 173, 550-555.	4.0	38
170	Electrodeposited three-dimensional $\text{Ni@Si}$ nanocable arrays as high performance anodes for lithium ion batteries. <i>Nanoscale</i> , 2013, 5, 10376.	2.8	38
171	Elucidating the Effect of Borate Additive in High-Voltage Electrolyte for $\text{Li}$ -Rich Layered Oxide Materials. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	38
172	Predicting Calendar Aging in Lithium Metal Secondary Batteries: The Impacts of Solid Electrolyte Interphase Composition and Stability. <i>Advanced Energy Materials</i> , 2018, 8, 1801427.	10.2	37
173	Metastability and Reversibility of Anionic Redox-Based Cathode for High-Energy Rechargeable Batteries. <i>Cell Reports Physical Science</i> , 2020, 1, 100028.	2.8	37
174	Conformal three-dimensional interphase of Li metal anode revealed by low-dose cryoelectron microscopy. <i>Matter</i> , 2021, 4, 3741-3752.	5.0	37
175	Exploring Li substituted O3-structured layered oxides $\text{NaLi}_x\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$ ( $x = 0.07, 0.13$ , and 1). <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 13-16.	2.3	36
176	White-light emission of blue-luminescent graphene quantum dots by europium (III) complex incorporation. <i>Carbon</i> , 2017, 124, 479-485.	5.4	36
177	How Bulk Sensitive is Hard X-ray Photoelectron Spectroscopy: Accounting for the Cathode-Electrolyte Interface when Addressing Oxygen Redox. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 2106-2112.	2.1	36
178	Thin Solid Electrolyte Layers Enabled by Nanoscopic Polymer Binding. <i>ACS Energy Letters</i> , 2020, 5, 955-961.	8.8	36
179	In situ non-aqueous nucleation and growth of next generation rare-earth-free permanent magnets. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1070-1076.	1.3	34
180	Edge-Propagation Discharge Mechanism in $\text{CF}_x$ Batteries—A First-Principles and Experimental Study. <i>Chemistry of Materials</i> , 2021, 33, 1760-1770.	3.2	34

#	ARTICLE	IF	CITATIONS
181	Distinction between Intrinsic and X-ray-Induced Oxidized Oxygen States in Li-Rich 3d Layered Oxides and $\text{LiAlO}_2$ . <i>Journal of Physical Chemistry C</i> , 2019, 123, 13201-13207.	1.5	33
182	Enabling a Co-Free, High-Voltage $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode in All-Solid-State Batteries with a Halide Electrolyte. <i>ACS Energy Letters</i> , 2022, 7, 2531-2539.	8.8	33
183	Sustainable design of fully recyclable all solid-state batteries. <i>MRS Energy &amp; Sustainability</i> , 2020, 7, 1.	1.3	32
184	Electrochemical Properties of Nanostructured $\text{Al}_{1-x}\text{Cu}_x$ Alloys as Anode Materials for Rechargeable Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2008, 155, A615.	1.3	31
185	Cluster expansion and optimization of thermal conductivity in SiGe nanowires. <i>Physical Review B</i> , 2010, 81, .	1.1	31
186	High pressure driven structural and electrochemical modifications in layered lithium transition metal intercalation oxides. <i>Energy and Environmental Science</i> , 2012, 5, 6214.	15.6	31
187	Intrinsic Surface Stability in $\text{LiMn}_2\text{Ni}_x\text{O}_4$ ( $x = 0.45, 0.5$ ) High Voltage Spinel Materials for Lithium Ion Batteries. <i>Electrochemical and Solid-State Letters</i> , 2012, 15, A72.	2.2	30
188	Self-Assembled Framework Formed During Lithiation of $\text{SnS}_2$ Nanoplates Revealed by in Situ Electron Microscopy. <i>Accounts of Chemical Research</i> , 2017, 50, 1513-1520.	7.6	29
189	Virtual Texture Generated Using Elastomeric Conductive Block Copolymer in a Wireless Multimodal Haptic Glove. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000018.	3.3	29
190	Advanced Characterization Techniques for Overcoming Challenges of Perovskite Solar Cell Materials. <i>Advanced Energy Materials</i> , 2021, 11, 2001753.	10.2	29
191	Nanostructure Transformation as a Signature of Oxygen Redox in Li-Rich 3d and 4d Cathodes. <i>Journal of the American Chemical Society</i> , 2021, 143, 5763-5770.	6.6	29
192	New insights into the electrochemical performance of $\text{Li}_2\text{MnSiO}_4$ : effect of cationic substitutions. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6004-6011.	5.2	27
193	Nano-Ceramic Cathodes via Co-sputtering of Gd-Ce Alloy and Lanthanum Strontium Cobaltite for Low-Temperature Thin-Film Solid Oxide Fuel Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 8135-8142.	2.5	27
194	Regeneration of degraded Li-rich layered oxide materials through heat treatment-induced transition metal reordering. <i>Energy Storage Materials</i> , 2021, 35, 99-107.	9.5	27
195	Exploiting Mechanistic Solvation Kinetics for Dual-Graphite Batteries with High Power Output at Extremely Low Temperature. <i>Angewandte Chemie</i> , 2019, 131, 19068-19073.	1.6	26
196	Effect of Metal Electrodes on Aging-Induced Performance Recovery in Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 48497-48504.	4.0	26
197	A Facile, Dry-Processed Lithium Borate-Based Cathode Coating for Improved All-Solid-State Battery Performance. <i>Journal of the Electrochemical Society</i> , 2020, 167, 130516.	1.3	26
198	Investigation of Anatase- $\text{TiO}_2$ as an Efficient Electrode Material for Magnesium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2368-A2370.	1.3	25

#	ARTICLE	IF	CITATIONS
199	Ionotactile Stimulation: Nonvolatile Ionic Gels for Human-Machine Interfaces. ACS Omega, 2018, 3, 662-666.	1.6	24
200	Evidence for a conducting surface ground state in high-quality single crystalline FeSi. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8558-8562.	3.3	24
201	Enhancing the Electrochemical Performance of Lithium-Excess Layered Oxide $\text{Li}_{1.13}\text{Ni}_{0.3}\text{Mn}_{0.57}\text{O}_2$ via a Facile Nanoscale Surface Modification. Journal of the Electrochemical Society, 2016, 163, A971-A973.	1.3	23
202	A closed-host bi-layer dense/porous solid electrolyte interphase for enhanced lithium-metal anode stability. Materials Today, 2021, 49, 48-58.	8.3	22
203	Artificial cathode electrolyte interphase for improving high voltage cycling stability of thick electrode with Co-free 5 V spinel oxides. Energy Storage Materials, 2022, 49, 77-84.	9.5	22
204	Perspective: Design of cathode materials for sustainable sodium-ion batteries. MRS Energy & Sustainability, 2022, 9, 183-197.	1.3	22
205	Effects of Angular Fillers on Thermal Runaway of Lithium-Ion Battery. Journal of Materials Science and Technology, 2016, 32, 1117-1121.	5.6	21
206	Modified Coprecipitation Synthesis of Mesostructure-Controlled Li-Rich Layered Oxides for Minimizing Voltage Degradation. ACS Applied Energy Materials, 2018, 1, 3369-3376.	2.5	21
207	Local Structure of Glassy Lithium Phosphorus Oxynitride Thin Films: A Combined Experimental and Ab Initio Approach. Angewandte Chemie - International Edition, 2020, 59, 22185-22193.	7.2	21
208	Structural and Electrochemical Properties of $\text{LiNi}_{0.5}\text{Mn}_{0.5}\text{O}_2$ Thin-Film Electrodes Prepared by Pulsed Laser Deposition. Journal of the Electrochemical Society, 2010, 157, A348.	1.3	20
209	In Situ Analytical Electron Microscopy for Probing Nanoscale Electrochemistry. Electrochemical Society Interface, 2011, 20, 49-53.	0.3	20
210	Whither Mn Oxidation in Mn-Rich Alkali-Excess Cathodes?. ACS Energy Letters, 2021, 6, 1055-1064.	8.8	20
211	Investigating Degradation Modes in Zn-AgO Aqueous Batteries with In Situ X-Ray Micro Computed Tomography. Advanced Energy Materials, 2021, 11, 2101327.	10.2	20
212	Leveraging cryogenic electron microscopy for advancing battery design. Matter, 2022, 5, 26-42.	5.0	20
213	Exothermic behaviors of mechanically abused lithium-ion batteries with dibenzylamine. Journal of Power Sources, 2016, 326, 514-521.	4.0	19
214	Experimental considerations to study Li-excess disordered rock salt cathode materials. Journal of Materials Chemistry A, 2021, 9, 1720-1732.	5.2	19
215	Using high-HFP content cathode binder for mitigation of heat generation of lithium-ion battery. International Journal of Energy Research, 2017, 41, 2430-2438.	2.2	18
216	Mitigating oxygen release in anionic-redox-active cathode materials by cationic substitution through rational design. Journal of Materials Chemistry A, 2018, 6, 24651-24659.	5.2	18

#	ARTICLE	IF	CITATIONS
217	Extending the limits of powder diffraction analysis: Diffraction parameter space, occupancy defects, and atomic form factors. <i>Review of Scientific Instruments</i> , 2018, 89, 093002.	0.6	18
218	A Safer, Wide-Temperature Liquefied Gas Electrolyte Based on Difluoromethane. <i>Journal of Power Sources</i> , 2021, 493, 229668.	4.0	18
219	<i>In situ</i> and <i>operando</i> probing of solid–solid interfaces in electrochemical devices. <i>MRS Bulletin</i> , 2018, 43, 768-774.	1.7	17
220	Introduction: Beyond Li-Ion Battery Chemistry. <i>Chemical Reviews</i> , 2020, 120, 6327-6327.	23.0	17
221	Impacts of the Hole Transport Layer Deposition Process on Buried Interfaces in Perovskite Solar Cells. <i>Cell Reports Physical Science</i> , 2020, 1, 100103.	2.8	17
222	Fast Diagnosis of Failure Mechanisms and Lifetime Prediction of Li Metal Batteries. <i>Small Methods</i> , 2021, 5, e2000807.	4.6	17
223	Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 6454-6465.	2.5	17
224	Role of Amines in Thermal-Runaway-Mitigating Lithium-Ion Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 30956-30963.	4.0	16
225	Tuning Internal Strain in Metal–Organic Frameworks via Vapor Phase Infiltration for CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , 2020, 132, 4602-4610.	1.6	16
226	The Negative Impact of Transition Metal Migration on Oxygen Redox Activity of Layered Cathode Materials for Na-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 040539.	1.3	16
227	Transport and mechanical aspects of all-solid-state lithium batteries. <i>Materials Today Physics</i> , 2022, 24, 100679.	2.9	16
228	Effect of Ni/Mn Ordering on Elementary Polarizations of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Spinel and Its Nanostructured Electrode. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1482-A1488.	1.3	15
229	Understanding improved electrochemical properties of NiO-doped NiF <sub>2</sub> –C composite conversion materials by X-ray absorption spectroscopy and pair distribution function analysis. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3095.	1.3	15
230	High Pressure Effect on Structural and Electrochemical Properties of Anionic Redox-Based Lithium Transition Metal Oxides. <i>Matter</i> , 2021, 4, 164-181.	5.0	15
231	Unraveling the Stable Cathode Electrolyte Interface in all Solid–State Thin–Film Battery Operating at 5ÂV. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	15
232	Hybrid Li-Ion and Li-O <sub>2</sub> Battery Enabled by Oxyhalogen-Sulfur Electrochemistry. <i>Joule</i> , 2018, 2, 2381-2392.	11.7	14
233	Quantifying lithium loss in amorphous silicon thin-film anodes via titration-gas chromatography. <i>Cell Reports Physical Science</i> , 2021, 2, 100597.	2.8	14
234	Comprehensive study of a versatile polyol synthesis approach for cathode materials for Li-ion batteries. <i>Nano Research</i> , 2019, 12, 2238-2249.	5.8	13

#	ARTICLE	IF	CITATIONS
235	Meso-Structure Controlled Synthesis of Sodium Iron-Manganese Oxides Cathode for Low-Cost Na-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A2528-A2535.	1.3	12
236	Imaging Real-Time Amorphization of Hybrid Perovskite Solar Cells under Electrical Biasing. <i>ACS Energy Letters</i> , 2021, 6, 3530-3537.	8.8	12
237	Internal short circuit mitigation of high-voltage lithium-ion batteries with functional current collectors. <i>RSC Advances</i> , 2017, 7, 45662-45667.	1.7	11
238	New insights into Li distribution in the superionic argyrodite $\text{Li}_6\text{PS}_5\text{Cl}$ . <i>Chemical Communications</i> , 2021, 57, 10787-10790.	2.2	11
239	Sodium Manganese Oxide Thin Films as Cathodes for Na-Ion Batteries. <i>ECS Transactions</i> , 2014, 58, 47-57.	0.3	10
240	Thin-film electrochemical sensor electrode for rapid evaluation of electrolytic conductivity, cyclic voltammetry, and temperature measurements. <i>Journal of Applied Electrochemistry</i> , 2016, 46, 59-67.	1.5	10
241	Quantification of lithium inventory loss in micro silicon anode via titration-gas chromatography. <i>Journal of Power Sources</i> , 2022, 531, 231327.	4.0	10
242	Preparation of Mesoporous Si@PAN Electrodes for Li-Ion Batteries via the In-Situ Polymerization of PAN. <i>ECS Electrochemistry Letters</i> , 2015, 4, A33-A36.	1.9	8
243	Effects of macromolecular configuration of thermally sensitive binder in lithium-ion battery. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45078.	1.3	7
244	Could Irradiation Introduce Oxidized Oxygen Signals in Resonant Inelastic X-ray Scattering of Battery Electrodes?. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1138-1143.	2.1	7
245	Three-dimensional nanocable arrays with a copper core and cupric oxide shell for high power lithium ion batteries. <i>RSC Advances</i> , 2013, 3, 11586.	1.7	6
246	Focused Ion Beam Fabrication of LiPON-based Solid-state Lithium-ion Nanobatteries for In Situ Testing. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	6
247	Electrochemical Utilization of Iron IV in the $\text{Li}_{1.3}\text{Fe}_{0.4}\text{Nb}_{0.3}\text{O}_2$ Disordered Rocksalt Cathode. <i>Batteries and Supercaps</i> , 2021, 4, 771-777.	2.4	6
248	Insights into the Fast Sodium Conductor NASICON and the Effects of $\text{Mg}^{2+}$ Doping on $\text{Na}^{+}$ Conductivity. <i>Chemistry of Materials</i> , 2021, 33, 8768-8774.	3.2	5
249	Disorder Dynamics in Battery Nanoparticles During Phase Transitions Revealed by Operando Single-Particle Diffraction. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	5
250	Effects of electrode pattern on thermal runaway of lithium-ion battery. <i>International Journal of Damage Mechanics</i> , 2018, 27, 74-81.	2.4	4
251	Quantitative Specifications to Avoid Degradation during E-Beam and Induced Current Microscopy of Halide Perovskite Devices. <i>Journal of Physical Chemistry C</i> , 2020, 124, 18961-18967.	1.5	4
252	Structure and Dynamics in $\text{Mg}^{2+}$ -Stabilized $\hat{\text{I}}^3\text{-Na}_3\text{PO}_4$ . <i>Journal of the American Chemical Society</i> , 2021, 143, 17079-17089.	6.6	4

#	ARTICLE	IF	CITATIONS
253	Correction to Insights into the Performance Limits of the Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> Superionic Conductor: A Combined First-Principles and Experimental Study. ACS Applied Materials & Interfaces, 2018, 10, 10598-10598.	4.0	3
254	Local Structure of Glassy Lithium Phosphorus Oxynitride Thin Films: A Combined Experimental and Ab Initio Approach. Angewandte Chemie, 2020, 132, 22369-22377.	1.6	3
255	Sputtered Thin-Film Solid Oxide Fuel Cells. ECS Transactions, 2021, 103, 67-71.	0.3	3
256	Publisher's Note: Electrochemical Properties of Nanostructured Al <sub>1-x</sub> Cu <sub>x</sub> Alloys as Anode Materials for Rechargeable Lithium-Ion Batteries [J. Electrochem. Soc., 155, A615 (2008)]. Journal of the Electrochemical Society, 2008, 155, S10.	1.3	2
257	Introduction and Foreword to Focus Issue on Intercalation Compounds for Rechargeable Batteries. Journal of the Electrochemical Society, 2013, 160, Y2-Y3.	1.3	2
258	Public trust in science: Climate, energy and public health. MRS Energy & Sustainability, 2021, 8, 41.	1.3	2
259	Insight into Designing High-Energy, High-Power Cathode Material for Lithium Ion Batteries. ECS Electrochemistry Letters, 2014, 3, A72-A75.	1.9	1
260	Energy Spotlight. ACS Energy Letters, 2019, 4, 2763-2769.	8.8	1
261	Unveiling the Stable Nature of LiPON-associated Electrode/Electrolyte Interphases via Cryogenic Electron Microscopy. Microscopy and Microanalysis, 2021, 27, 3324-3327.	0.2	1
262	Structure-Selective Operando X-ray Spectroscopy. ACS Energy Letters, 2022, 7, 261-266.	8.8	1
263	Morphological and Chemical Evolution of Silicon Nanocomposite during Cycling. Microscopy and Microanalysis, 2016, 22, 1334-1335.	0.2	0
264	Advancing In situ Analytical Electron Microscopy for Probing Dynamic Nano-Scale Solid State Electrochemistry. Microscopy and Microanalysis, 2017, 23, 1962-1963.	0.2	0
265	Batteries: Predicting Calendar Aging in Lithium Metal Secondary Batteries: The Impacts of Solid Electrolyte Interphase Composition and Stability (Adv. Energy Mater. 26/2018). Advanced Energy Materials, 2018, 8, 1870117.	10.2	0
266	In Situ Analytical Electron Microscopy and Cryogenic Electron Microscopy for Characterizing Nanoscale Materials in Electrochemical Process. Microscopy and Microanalysis, 2019, 25, 1856-1857.	0.2	0
267	Development of a Versatile, High-Performance Solid Oxide Fuel Cell Stack Technology. ECS Transactions, 2019, 91, 133-138.	0.3	0
268	Cryogenic imaging and spectroscopic study of electrochemically formed solid interphases - from nano to meso scale.. Microscopy and Microanalysis, 2021, 27, 1246-1246.	0.2	0
269	(Invited) Mitigating Oxygen Release in Anionic-Redox-Active Cathode Materials By Cationic Substitution through Rational Design. ECS Meeting Abstracts, 2019, .	0.0	0
270	(Invited) Room Temperature All Solid State Sodium Batteries Based on Glassy Electrolytes. ECS Meeting Abstracts, 2019, .	0.0	0



#	ARTICLE	IF	CITATIONS
271	(Invited) From Liquified Gas Electrolytes to Solid State Electrolytes - Fast Ion Conduction at Extreme Temperatures. ECS Meeting Abstracts, 2019, , .	0.0	0
272	Elucidating the Redox Mechanism of Battery Cathode Materials Made from Earth-Abundant Elements. ECS Meeting Abstracts, 2020, MA2020-01, 242-242.	0.0	0
273	(Invited) All Solid-State Batteries: Synthesis, Interfacial Engineering and Recycling. ECS Meeting Abstracts, 2020, MA2020-01, 286-286.	0.0	0
274	(Invited) Local Structure of Glassy Lithium Phosphorus Oxynitride (LION) Thin Films and Their Interphases with Lithium Metal Anode. ECS Meeting Abstracts, 2020, MA2020-02, 677-677.	0.0	0
275	Three-Dimensional Imaging and Interface Analysis of Battery Materials Via Plasma FIB-SEM. ECS Meeting Abstracts, 2020, MA2020-02, 150-150.	0.0	0
276	(Invited) Recent Progress on Solid State Batteries - Challenges and Opportunities. ECS Meeting Abstracts, 2020, MA2020-02, 1020-1020.	0.0	0
277	Solid State Batteries â€“ Chemistry, Electrochemistry and Mechanical Concerns. ECS Meeting Abstracts, 2022, MA2022-01, 1628-1628.	0.0	0
278	(Invited) Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. ECS Meeting Abstracts, 2022, MA2022-01, 1172-1172.	0.0	0