

Chongmin Wang

List of Publications by Year in descending order

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438
papers

51,626
citations

872

117
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1799

211
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440
all docs

440
docs citations

440
times ranked

38828
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-Assembled TiO ₂ –Graphene Hybrid Nanostructures for Enhanced Li-Ion Insertion. ACS Nano, 2009, 3, 907-914.	14.6	1,596
2	A Yolk-Shell Design for Stabilized and Scalable Li-Ion Battery Alloy Anodes. Nano Letters, 2012, 12, 3315-3321.	9.1	1,587
3	Single Atomic Iron Catalysts for Oxygen Reduction in Acidic Media: Particle Size Control and Thermal Activation. Journal of the American Chemical Society, 2017, 139, 14143-14149.	13.7	1,215
4	Mesoporous silicon sponge as an anti-pulverization structure for high-performance lithium-ion battery anodes. Nature Communications, 2014, 5, 4105.	12.8	1,160
5	Characterization and Properties of Metallic Iron Nanoparticles: XPS Spectroscopy, Electrochemistry, and Kinetics. Environmental Science & Technology, 2005, 39, 1221-1230.	10.0	865
6	Facile and controllable electrochemical reduction of graphene oxide and its applications. Journal of Materials Chemistry, 2010, 20, 743-748.	6.7	787
7	Formation of the Spinel Phase in the Layered Composite Cathode Used in Li-Ion Batteries. ACS Nano, 2013, 7, 760-767.	14.6	772
8	In Situ TEM of Two-Phase Lithiation of Amorphous Silicon Nanospheres. Nano Letters, 2013, 13, 758-764.	9.1	680
9	Intragranular cracking as a critical barrier for high-voltage usage of layer-structured cathode for lithium-ion batteries. Nature Communications, 2017, 8, 14101.	12.8	654
10	Lewis Acid–Base Interactions between Polysulfides and Metal Organic Framework in Lithium Sulfur Batteries. Nano Letters, 2014, 14, 2345-2352.	9.1	623
11	Monolithic solid–electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	39.5	621
12	Electrolyte design for LiF-rich solid–electrolyte interfaces to enable high-performance micro-sized alloy anodes for batteries. Nature Energy, 2020, 5, 386-397.	39.5	621
13	Enhanced activity and stability of Pt catalysts on functionalized graphene sheets for electrocatalytic oxygen reduction. Electrochemistry Communications, 2009, 11, 954-957.	4.7	615
14	Tailoring grain boundary structures and chemistry of Ni-rich layered cathodes for enhanced cycle stability of lithium-ion batteries. Nature Energy, 2018, 3, 600-605.	39.5	613
15	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	24.0	598
16	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. Advanced Functional Materials, 2013, 23, 929-946.	14.9	590
17	Studying the Kinetics of Crystalline Silicon Nanoparticle Lithiation with In Situ Transmission Electron Microscopy. Advanced Materials, 2012, 24, 6034-6041.	21.0	529
18	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. Nature Energy, 2019, 4, 551-559.	39.5	492

#	ARTICLE	IF	CITATIONS
19	Reversible planar gliding and microcracking in a single-crystalline Ni-rich cathode. <i>Science</i> , 2020, 370, 1313-1317.	12.6	472
20	Self-smoothing anode for achieving high-energy lithium metal batteries under realistic conditions. <i>Nature Nanotechnology</i> , 2019, 14, 594-601.	31.5	451
21	Controlling SEI Formation on SnSb@Porous Carbon Nanofibers for Improved Na Ion Storage. <i>Advanced Materials</i> , 2014, 26, 2901-2908.	21.0	441
22	High-Efficiency Lithium Metal Batteries with Fire-Retardant Electrolytes. <i>Joule</i> , 2018, 2, 1548-1558.	24.0	436
23	Glucose biosensor based on immobilization of glucose oxidase in platinum nanoparticles/graphene/chitosan nanocomposite film. <i>Talanta</i> , 2009, 80, 403-406.	5.5	416
24	Designing principle for Ni-rich cathode materials with high energy density for practical applications. <i>Nano Energy</i> , 2018, 49, 434-452.	16.0	400
25	Bismuth Nanoparticle Decorating Graphite Felt as a High-Performance Electrode for an All-Vanadium Redox Flow Battery. <i>Nano Letters</i> , 2013, 13, 1330-1335.	9.1	392
26	Stabilization of Electrocatalytic Metal Nanoparticles at Metal~Metal Oxide~Graphene Triple Junction Points. <i>Journal of the American Chemical Society</i> , 2011, 133, 2541-2547.	13.7	391
27	Li~and Mn~Rich Cathode Materials: Challenges to Commercialization. <i>Advanced Energy Materials</i> , 2017, 7, 1601284.	19.5	383
28	Highly durable graphene nanoplatelets supported Pt nanocatalysts for oxygen reduction. <i>Journal of Power Sources</i> , 2010, 195, 4600-4605.	7.8	378
29	General synthesis of complex nanotubes by gradient electrospinning and controlled pyrolysis. <i>Nature Communications</i> , 2015, 6, 7402.	12.8	370
30	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. <i>Joule</i> , 2019, 3, 1094-1105.	24.0	358
31	Corrosion/Fragmentation of Layered Composite Cathode and Related Capacity/Voltage Fading during Cycling Process. <i>Nano Letters</i> , 2013, 13, 3824-3830.	9.1	353
32	High-Performance Rh ₂ P Electrocatalyst for Efficient Water Splitting. <i>Journal of the American Chemical Society</i> , 2017, 139, 5494-5502.	13.7	343
33	SnO ₂ Quantum Dots@Graphene Oxide as a High~Rate and Long~Life Anode Material for Lithium~Ion Batteries. <i>Small</i> , 2016, 12, 588-594.	10.0	338
34	Functioning Mechanism of AlF ₃ Coating on the Li- and Mn-Rich Cathode Materials. <i>Chemistry of Materials</i> , 2014, 26, 6320-6327.	6.7	333
35	Harnessing the concurrent reaction dynamics in active Si and Ge to achieve high performance lithium-ion batteries. <i>Energy and Environmental Science</i> , 2018, 11, 669-681.	30.8	329
36	Advances in metal~organic framework coatings: versatile synthesis and broad applications. <i>Chemical Society Reviews</i> , 2020, 49, 3142-3186.	38.1	327

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37	<i>In Situ</i> TEM Study of Lithiation Behavior of Silicon Nanoparticles Attached to and Embedded in a Carbon Matrix. <i>ACS Nano</i> , 2012, 6, 8439-8447.	14.6	321
38	Injection of oxygen vacancies in the bulk lattice of layered cathodes. <i>Nature Nanotechnology</i> , 2019, 14, 602-608.	31.5	321
39	Ni/Li Disorder in Layered Transition Metal Oxide: Electrochemical Impact, Origin, and Control. <i>Accounts of Chemical Research</i> , 2019, 52, 2201-2209.	15.6	315
40	Thiophene hydrodesulfurization over nickel phosphide catalysts: effect of the precursor composition and support. <i>Journal of Catalysis</i> , 2005, 231, 300-313.	6.2	313
41	Structural and Chemical Evolution of Li- and Mn-Rich Layered Cathode Material. <i>Chemistry of Materials</i> , 2015, 27, 1381-1390.	6.7	311
42	Nitrogen-doped mesoporous carbon for energy storage in vanadium redox flow batteries. <i>Journal of Power Sources</i> , 2010, 195, 4375-4379.	7.8	306
43	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2019, 4, 896-902.	17.4	302
44	High Voltage Operation of Ni-Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. <i>Advanced Energy Materials</i> , 2018, 8, 1800297.	19.5	298
45	Hierarchical porous silicon structures with extraordinary mechanical strength as high-performance lithium-ion battery anodes. <i>Nature Communications</i> , 2020, 11, 1474.	12.8	298
46	Kinetics Tuning of Li-Ion Diffusion in Layered Li(Ni _x Mn _y Co _z)O ₂ . <i>Journal of the American Chemical Society</i> , 2015, 137, 8364-8367.	13.7	292
47	Balancing interfacial reactions to achieve long cycle life in high-energy lithium metal batteries. <i>Nature Energy</i> , 2021, 6, 723-732.	39.5	285
48	Hollow core-shell structured porous Si-C nanocomposites for Li-ion battery anodes. <i>Journal of Materials Chemistry</i> , 2012, 22, 11014.	6.7	280
49	Real-time mass spectrometric characterization of the solid electrolyte interphase of a lithium-ion battery. <i>Nature Nanotechnology</i> , 2020, 15, 224-230.	31.5	280
50	Nanorod Niobium Oxide as Powerful Catalysts for an All Vanadium Redox Flow Battery. <i>Nano Letters</i> , 2014, 14, 158-165.	9.1	279
51	High temperature shockwave stabilized single atoms. <i>Nature Nanotechnology</i> , 2019, 14, 851-857.	31.5	278
52	Mitigating Voltage Fade in Cathode Materials by Improving the Atomic Level Uniformity of Elemental Distribution. <i>Nano Letters</i> , 2014, 14, 2628-2635.	9.1	273
53	Tailoring Pore Size of Nitrogen-Doped Hollow Carbon Nanospheres for Confining Sulfur in Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2015, 5, 1401752.	19.5	273
54	Recent Progress in Understanding Solid Electrolyte Interphase on Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2021, 11, 2003092.	19.5	271

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55	Probing the Failure Mechanism of SnO ₂ Nanowires for Sodium-Ion Batteries. Nano Letters, 2013, 13, 5203-5211.	9.1	270
56	Hydrothermal Dehydration of Aqueous Fructose Solutions in a Closed System. Journal of Physical Chemistry C, 2007, 111, 15141-15145.	3.1	266
57	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.	9.1	266
58	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.	9.1	265
59	Evolution of Lattice Structure and Chemical Composition of the Surface Reconstruction Layer in Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ Cathode Material for Lithium Ion Batteries. Nano Letters, 2015, 15, 514-522.	9.1	261
60	Highly Reversible Mg Insertion in Nanostructured Bi for Mg Ion Batteries. Nano Letters, 2014, 14, 255-260.	9.1	257
61	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.	9.1	256
62	Highly Reversible Zinc-Ion Intercalation into Chevrel Phase Mo ₆ S ₈ Nanocubes and Applications for Advanced Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 13673-13677.	8.0	256
63	Synthesis and Li-Ion Insertion Properties of Highly Crystalline Mesoporous Rutile TiO ₂ . Chemistry of Materials, 2008, 20, 3435-3442.	6.7	254
64	Helical Crystalline SiC/SiO ₂ Core-Shell Nanowires. Nano Letters, 2002, 2, 941-944.	9.1	252
65	Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient High-Concentration Electrolyte Layer. Advanced Energy Materials, 2016, 6, 1502151.	19.5	236
66	Conflicting Roles of Nickel in Controlling Cathode Performance in Lithium Ion Batteries. Nano Letters, 2012, 12, 5186-5191.	9.1	231
67	Nanoscale silicon as anode for Li-ion batteries: The fundamentals, promises, and challenges. Nano Energy, 2015, 17, 366-383.	16.0	228
68	Direct Conversion of Bio-ethanol to Isobutene on Nanosized Zn _x Zr _y O _z Mixed Oxides with Balanced Acid-Base Sites. Journal of the American Chemical Society, 2011, 133, 11096-11099.	13.7	225
69	Morphology and Electronic Structure of the Oxide Shell on the Surface of Iron Nanoparticles. Journal of the American Chemical Society, 2009, 131, 8824-8832.	13.7	218
70	Inward lithium-ion breathing of hierarchically porous silicon anodes. Nature Communications, 2015, 6, 8844.	12.8	217
71	Effect of calcination temperature on the electrochemical properties of nickel-rich LiNi _{0.76} Mn _{0.14} Co _{0.10} O ₂ cathodes for lithium-ion batteries. Nano Energy, 2018, 49, 538-548.	16.0	213
72	Iron oxide-gold core-shell nanoparticles and thin film assembly. Journal of Materials Chemistry, 2005, 15, 1821.	6.7	211

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73	Origin of lithium whisker formation and growth under stress. <i>Nature Nanotechnology</i> , 2019, 14, 1042-1047.	31.5	211
74	Molecular structure and stability of dissolved lithium polysulfide species. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10923-10932.	2.8	210
75	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. <i>Nature Reviews Materials</i> , 2021, 6, 1036-1052.	48.7	201
76	Li ⁺ -Desolvation Dictating Lithium-Ion Battery's Low-Temperature Performances. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 42761-42768.	8.0	200
77	Coupling of electrochemically triggered thermal and mechanical effects to aggravate failure in a layered cathode. <i>Nature Communications</i> , 2018, 9, 2437.	12.8	200
78	Synthesis, Characterization, and Manipulation of Helical SiO ₂ Nanosprings. <i>Nano Letters</i> , 2003, 3, 577-580.	9.1	198
79	A facile approach using MgCl ₂ to formulate high performance Mg ²⁺ electrolytes for rechargeable Mg batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3430.	10.3	197
80	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.	7.1	191
81	Lithium Ion Battery Performance of Silicon Nanowires with Carbon Skin. <i>ACS Nano</i> , 2014, 8, 915-922.	14.6	185
82	Size-dependent dynamic structures of supported gold nanoparticles in CO oxidation reaction condition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7700-7705.	7.1	183
83	Tuning of Thermal Stability in Layered Li(Ni _x Mn _y Co _z)O ₂ . <i>Journal of the American Chemical Society</i> , 2016, 138, 13326-13334.	13.7	178
84	Insights on the Mechanism of Na-Ion Storage in Soft Carbon Anode. <i>Chemistry of Materials</i> , 2017, 29, 2314-2320.	6.7	177
85	High-Performance Silicon Anodes Enabled By Nonflammable Localized High-Concentration Electrolytes. <i>Advanced Energy Materials</i> , 2019, 9, 1900784.	19.5	175
86	Ethanol synthesis from syngas over Rh-based/SiO ₂ catalysts: A combined experimental and theoretical modeling study. <i>Journal of Catalysis</i> , 2010, 271, 325-342.	6.2	174
87	Nanoscale Phase Separation, Cation Ordering, and Surface Chemistry in Pristine Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ for Li-Ion Batteries. <i>Chemistry of Materials</i> , 2013, 25, 2319-2326.	6.7	173
88	Preparation of Ultrafine Chalcopyrite Nanoparticles via the Photochemical Decomposition of Molecular Single-Source Precursors. <i>Nano Letters</i> , 2006, 6, 1218-1223.	9.1	164
89	Revealing the Atomic Restructuring of Pt-Co Nanoparticles. <i>Nano Letters</i> , 2014, 14, 3203-3207.	9.1	162
90	Fe(II)-Catalyzed Recrystallization of Goethite Revisited. <i>Environmental Science & Technology</i> , 2014, 48, 11302-11311.	10.0	160

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91	Revealing the reaction mechanisms of Li ⁺ /O ₂ batteries using environmental transmission electron microscopy. <i>Nature Nanotechnology</i> , 2017, 12, 535-539.	31.5	160
92	Advanced Electrolytes for Fast-Charging High-Voltage Lithium-Ion Batteries in Wide-Temperature Range. <i>Advanced Energy Materials</i> , 2020, 10, 2000368.	19.5	159
93	A Direct Route toward Assembly of Nanoparticle-Carbon Nanotube Composite Materials. <i>Langmuir</i> , 2004, 20, 6019-6025.	3.5	158
94	Tuning the Solid Electrolyte Interphase for Selective Li ⁺ - and Na ⁺ -Ion Storage in Hard Carbon. <i>Advanced Materials</i> , 2017, 29, 1606860.	21.0	157
95	The effect of metallic coatings and crystallinity on the volume expansion of silicon during electrochemical lithiation/delithiation. <i>Nano Energy</i> , 2012, 1, 401-410.	16.0	156
96	Strategies towards enabling lithium metal in batteries: interphases and electrodes. <i>Energy and Environmental Science</i> , 2021, 14, 5289-5314.	30.8	156
97	Wide-Temperature Electrolytes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18826-18835.	8.0	150
98	How to Obtain Reproducible Results for Lithium Sulfur Batteries?. <i>Journal of the Electrochemical Society</i> , 2013, 160, A2288-A2292.	2.9	149
99	Regulated Breathing Effect of Silicon Negative Electrode for Dramatically Enhanced Performance of Li-Ion Battery. <i>Advanced Functional Materials</i> , 2015, 25, 1426-1433.	14.9	149
100	Atomic Layer Deposition of the Solid Electrolyte Garnet Li ₇ La ₃ Zr ₂ O ₁₂ . <i>Chemistry of Materials</i> , 2017, 29, 3785-3792.	6.7	149
101	Progressive growth of the solid-electrolyte interphase towards the Si anode interior causes capacity fading. <i>Nature Nanotechnology</i> , 2021, 16, 1113-1120.	31.5	147
102	Atomic Resolution Structural and Chemical Imaging Revealing the Sequential Migration of Ni, Co, and Mn upon the Battery Cycling of Layered Cathode. <i>Nano Letters</i> , 2017, 17, 3946-3951.	9.1	143
103	Nitrogen-doped graphitized carbon shell encapsulated NiFe nanoparticles: A highly durable oxygen evolution catalyst. <i>Nano Energy</i> , 2017, 39, 245-252.	16.0	143
104	Design of porous Si/graphite electrodes with long cycle stability and controlled swelling. <i>Energy and Environmental Science</i> , 2017, 10, 1427-1434.	30.8	140
105	High-quality mesoporous graphene particles as high-energy and fast-charging anodes for lithium-ion batteries. <i>Nature Communications</i> , 2019, 10, 1474.	12.8	140
106	Probing the Degradation Mechanisms in Electrolyte Solutions for Li-Ion Batteries by in Situ Transmission Electron Microscopy. <i>Nano Letters</i> , 2014, 14, 1293-1299.	9.1	137
107	Low-solvation electrolytes for high-voltage sodium-ion batteries. <i>Nature Energy</i> , 2022, 7, 718-725.	39.5	137
108	Electronic Origin for the Phase Transition from Amorphous Li ₁₅ Si ₄ to Crystalline Li ₁₅ Si ₄ . <i>ACS Nano</i> , 2013, 7, 6303-6309.	14.6	135

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109	Germanium as a Sodium Ion Battery Material: <i>In Situ</i> TEM Reveals Fast Sodiation Kinetics with High Capacity. <i>Chemistry of Materials</i> , 2016, 28, 1236-1242.	6.7	134
110	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	131
111	Probing the Degradation Mechanism of Li_2MnO_3 Cathode for Li-Ion Batteries. <i>Chemistry of Materials</i> , 2015, 27, 975-982.	6.7	130
112	One-Pot Process for Hydrodeoxygenation of Lignin to Alkanes Using Ru-Based Bimetallic and Bifunctional Catalysts Supported on Zeolite Y. <i>ChemSusChem</i> , 2017, 10, 1846-1856.	6.8	127
113	Tin-graphene tubes as anodes for lithium-ion batteries with high volumetric and gravimetric energy densities. <i>Nature Communications</i> , 2020, 11, 1374.	12.8	127
114	Factors affecting the battery performance of anthraquinone-based organic cathode materials. <i>Journal of Materials Chemistry</i> , 2012, 22, 4032.	6.7	126
115	Composition-Controlled Synthesis of Bimetallic Gold-Silver Nanoparticles. <i>Langmuir</i> , 2004, 20, 11240-11246.	3.5	125
116	Atomic to Nanoscale Investigation of Functionalities of an Al_2O_3 Coating Layer on a Cathode for Enhanced Battery Performance. <i>Chemistry of Materials</i> , 2016, 28, 857-863.	6.7	125
117	Yolk-shell structured Sb@C anodes for high energy Na-ion batteries. <i>Nano Energy</i> , 2017, 40, 504-511.	16.0	123
118	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li LiCoO_2 Batteries. <i>Advanced Materials</i> , 2020, 32, e2004898.	21.0	123
119	Fluorescent dye encapsulated ZnO particles with cell-specific toxicity for potential use in biomedical applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2009, 20, 11-22.	3.6	121
120	Nanocomposite polymer electrolyte for rechargeable magnesium batteries. <i>Nano Energy</i> , 2015, 12, 750-759.	16.0	121
121	Surface-Coating Regulated Lithiation Kinetics and Degradation in Silicon Nanowires for Lithium Ion Battery. <i>ACS Nano</i> , 2015, 9, 5559-5566.	14.6	118
122	Rock-Salt Growth-Induced (003) Cracking in a Layered Positive Electrode for Li-Ion Batteries. <i>ACS Energy Letters</i> , 2017, 2, 2607-2615.	17.4	116
123	Lattice doping regulated interfacial reactions in cathode for enhanced cycling stability. <i>Nature Communications</i> , 2019, 10, 3447.	12.8	116
124	Dual phase $\text{Li}_4\text{Ti}_5\text{O}_{12}$ - TiO_2 nanowire arrays as integrated anodes for high-rate lithium-ion batteries. <i>Nano Energy</i> , 2014, 9, 383-391.	16.0	114
125	Graphene Oxide Wrapped Amorphous Copper Vanadium Oxide with Enhanced Capacitive Behavior for High-Rate and Long-Life Lithium-Ion Battery Anodes. <i>Advanced Science</i> , 2015, 2, 1500154.	11.2	114
126	Surface Coating Constraint Induced Self-Discharging of Silicon Nanoparticles as Anodes for Lithium Ion Batteries. <i>Nano Letters</i> , 2015, 15, 7016-7022.	9.1	113

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127	In situ transmission electron microscopy and spectroscopy studies of interfaces in Li ion batteries: Challenges and opportunities. <i>Journal of Materials Research</i> , 2010, 25, 1541-1547.	2.6	112
128	Nanosheet-structured LiV ₃ O ₈ with high capacity and excellent stability for high energy lithium batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 10077.	6.7	112
129	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. <i>ACS Energy Letters</i> , 2019, 4, 2529-2534.	17.4	112
130	Atomic-Resolution Visualization of Distinctive Chemical Mixing Behavior of Ni, Co, and Mn with Li in Layered Lithium Transition-Metal Oxide Cathode Materials. <i>Chemistry of Materials</i> , 2015, 27, 5393-5401.	6.7	108
131	In situ transmission electron microscopy and spectroscopy studies of rechargeable batteries under dynamic operating conditions: A retrospective and perspective view. <i>Journal of Materials Research</i> , 2015, 30, 326-339.	2.6	108
132	Following the Transient Reactions in Lithium-Sulfur Batteries Using an In Situ Nuclear Magnetic Resonance Technique. <i>Nano Letters</i> , 2015, 15, 3309-3316.	9.1	107
133	Toward the Solution Synthesis of the Tetrahedral Au ₂₀ Cluster. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12259-12263.	2.6	106
134	Atomic origins of water-vapour-promoted alloy oxidation. <i>Nature Materials</i> , 2018, 17, 514-518.	27.5	106
135	Template free synthesis of LiV ₃ O ₈ nanorods as a cathode material for high-rate secondary lithium batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 1153-1161.	6.7	105
136	Electrochemical Kinetics and Performance of Layered Composite Cathode Material Li[Li _{0.2} Ni _{0.2} Mn _{0.6}]O ₂ . <i>Journal of the Electrochemical Society</i> , 2013, 160, A2212-A2219.	2.9	104
137	Enhanced Cycling Stability of Rechargeable Li-O ₂ Batteries Using High-Concentration Electrolytes. <i>Advanced Functional Materials</i> , 2016, 26, 605-613.	14.9	104
138	Complete Decomposition of Li ₂ CO ₃ in Li-O ₂ Batteries Using Ir/B ₄ C as Noncarbon-Based Oxygen Electrode. <i>Nano Letters</i> , 2017, 17, 1417-1424.	9.1	104
139	The role of H ₂ O in the carbonation of forsterite in supercritical CO ₂ . <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1081-1092.	4.6	103
140	Direction-specific van der Waals attraction between rutile TiO ₂ nanocrystals. <i>Science</i> , 2017, 356, 434-437.	12.6	103
141	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. <i>ACS Catalysis</i> , 2019, 9, 8712-8718.	11.2	103
142	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.	9.1	102
143	Ni and Co Segregations on Selective Surface Facets and Rational Design of Layered Lithium Transition-Metal Oxide Cathodes. <i>Advanced Energy Materials</i> , 2016, 6, 1502455.	19.5	100
144	<i>In Situ</i> Transmission Electron Microscopy Probing of Native Oxide and Artificial Layers on Silicon Nanoparticles for Lithium Ion Batteries. <i>ACS Nano</i> , 2014, 8, 11816-11823.	14.6	99

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145	Iron Atom Exchange between Hematite and Aqueous Fe(II). <i>Environmental Science & Technology</i> , 2015, 49, 8479-8486.	10.0	99
146	Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of Salt Solvent Coordination for LiO_2 Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1602605.	19.5	99
147	A Micrometer-Sized Silicon/Carbon Composite Anode Synthesized by Impregnation of Petroleum Pitch in Nanoporous Silicon. <i>Advanced Materials</i> , 2021, 33, e2103095.	21.0	99
148	Revisit Carbon/Sulfur Composite for Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1624-A1628.	2.9	98
149	Highly Reversible Sodium Ion Batteries Enabled by Stable Electrolyte-Electrode Interphases. <i>ACS Energy Letters</i> , 2020, 5, 3212-3220.	17.4	97
150	Mechanical mismatch-driven rippling in carbon-coated silicon sheets for stress-resilient battery anodes. <i>Nature Communications</i> , 2018, 9, 2924.	12.8	94
151	Electronegative guests in CoSb_3 . <i>Energy and Environmental Science</i> , 2016, 9, 2090-2098.	30.8	93
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