Self-healing SEI enables full-cell cycling of a silicon-maj efficiency exceeding 99.9%

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Citation Report

#	Article	IF	CITATIONS
1	Synthesis of porous Si/graphite/carbon nanotubes@C composites as a practical high-capacity anode for lithium-ion batteries. Materials Letters, 2017, 199, 84-87.	1.3	40
2	Metal organic frameworks with immobilized nanoparticles: Synthesis and applications in photocatalytic hydrogen generation and energy storage. Materials Research Bulletin, 2017, 96, 385-394.	2.7	50
3	Amorphous titanium oxide passivated lithium titanium phosphate electrode for high stable aqueous lithium ion batteries with oxygen tolerance. Electrochimica Acta, 2017, 246, 720-729.	2.6	23
4	Oxide Film Efficiently Suppresses Dendrite Growth in Aluminum-Ion Battery. ACS Applied Materials & Interfaces, 2017, 9, 22628-22634.	4.0	106
5	A Rechargeable Liâ€CO ₂ Battery with a Gel Polymer Electrolyte. Angewandte Chemie - International Edition, 2017, 56, 9126-9130.	7.2	154
6	A Rechargeable Li O ₂ Battery with a Gel Polymer Electrolyte. Angewandte Chemie, 2017, 129, 9254-9258.	1.6	22
7	Si alloy/graphite coating design as anode for Li-ion batteries with high volumetric energy density. Electrochimica Acta, 2017, 254, 123-129.	2.6	12
8	Advances in Structure and Property Optimizations of Battery Electrode Materials. Joule, 2017, 1, 522-547.	11.7	219
9	Recent progress of analysis techniques for silicon-based anode of lithium-ion batteries. Current Opinion in Electrochemistry, 2017, 6, 77-83.	2.5	16
10	Artificial interphase engineering of electrode materials to improve the overall performance of lithium-ion batteries. Nano Research, 2017, 10, 4115-4138.	5.8	43
11	Effects of the Formulations of Siliconâ€Based Composite Anodes on their Mechanical, Storage, and Electrochemical Properties. ChemSusChem, 2017, 10, 4080-4089.	3.6	12
12	Confronting Issues of the Practical Implementation of Si Anode in High-Energy Lithium-Ion Batteries. Joule, 2017, 1, 47-60.	11.7	329
13	Challenges and Recent Progress in the Development of Si Anodes for Lithiumâ€lon Battery. Advanced Energy Materials, 2017, 7, 1700715.	10.2	709
14	Electrochemically anodized porous silicon: Towards simple and affordable anode material for Li-ion batteries. Scientific Reports, 2017, 7, 7880.	1.6	48
15	A high-performance sodium-ion battery enhanced by macadamia shell derived hard carbon anode. Nano Energy, 2017, 39, 489-498.	8.2	172
16	Facile synthesis of carbon-mediated porous nanocrystallite anatase TiO 2 for improved sodium insertion capabilities as an anode for sodium-ion batteries. Journal of Power Sources, 2017, 362, 283-290.	4.0	27
17	Nitrogen-Doped Carbon for Sodium-Ion Battery Anode by Self-Etching and Graphitization of Bimetallic MOF-Based Composite. CheM, 2017, 3, 152-163.	5.8	228
18	Designed construction of yolk–shell structured trimanganese tetraoxide nanospheres via polar solvent-assisted etching and biomass-derived activated porous carbon materials for high-performance asymmetric supercapacitors, lournal of Materials Chemistry A, 2017, 5, 15808-15821.	5.2	57

#	Article	IF	CITATIONS
19	Coralloid-like Nanostructured c-nSi/SiO _{<i>x</i>} @C _{<i>y</i>} Anodes for High Performance Lithium Ion Battery. ACS Applied Materials & Interfaces, 2017, 9, 28464-28472.	4.0	54
20	Air-Stable Porous Fe ₂ N Encapsulated in Carbon Microboxes with High Volumetric Lithium Storage Capacity and a Long Cycle Life. Nano Letters, 2017, 17, 5740-5746.	4.5	132
21	Rigid Polyimide Buffering Layer Enabling Silicon Nanoparticles Prolonged Cycling Life for Lithium Storage. ACS Applied Energy Materials, 2018, 1, 948-955.	2.5	12
22	Horsetail-derived Si@N-doped carbon as low-cost and long cycle life anode for Li-ion half/full cells. Electrochimica Acta, 2018, 264, 173-182.	2.6	61
23	Graphene nanosheets and polyacrylic acid grafted silicon composite anode for lithium ion batteries. Journal of Power Sources, 2018, 391, 41-50.	4.0	21
24	TiO2 coated Si/C interconnected microsphere with stable framework and interface for high-rate lithium storage. Chemical Engineering Journal, 2018, 347, 214-222.	6.6	89
25	In situ constructed Ag/C conductive network enhancing the C-rate performance of Si based anode. Journal of Energy Storage, 2018, 17, 102-108.	3.9	11
26	Efficient conversion of sand to nano-silicon and its energetic Si-C composite anode design for high volumetric capacity lithium-ion battery. Journal of Power Sources, 2018, 382, 56-68.	4.0	48
27	Evolving affinity between Coulombic reversibility and hysteretic phase transformations in nano-structured silicon-based lithium-ion batteries. Nature Communications, 2018, 9, 479.	5.8	73
28	Milled flake graphite/plasma nano-silicon@carbon composite with void sandwich structure for high performance as lithium ion battery anode at high temperature. Carbon, 2018, 130, 433-440.	5.4	114
29	Caging tin oxide in three-dimensional graphene networks for superior volumetric lithium storage. Nature Communications, 2018, 9, 402.	5.8	227
30	Synthesis of triblock copolymer polydopamine-polyacrylic-polyoxyethylene with excellent performance as a binder for silicon anode lithium-ion batteries. RSC Advances, 2018, 8, 4604-4609.	1.7	31
31	Modulation of solid electrolyte interphase of lithium-ion batteries by LiDFOB and LiBOB electrolyte additives. Applied Surface Science, 2018, 441, 265-271.	3.1	73
32	Fluorine-donating electrolytes enable highly reversible 5-V-class Li metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1156-1161.	3.3	512
33	Multi-channel and porous SiO@N-doped C rods as anodes for high-performance lithium-ion batteries. Applied Surface Science, 2018, 439, 336-342.	3.1	35
34	Enhanced Ion Conductivity in Conducting Polymer Binder for Highâ€Performance Silicon Anodes in Advanced Lithiumâ€lon Batteries. Advanced Energy Materials, 2018, 8, 1702314.	10.2	258
35	Enhanced capacity of chemically bonded phosphorus/carbon composite as an anode material for potassium-ion batteries. Journal of Power Sources, 2018, 378, 460-467.	4.0	155
36	A Novel Approach to Realize Siâ€Based Porous Wireâ€Inâ€Tube Nanostructures for Highâ€Performance Lithiumâ€Ion Batteries. Small, 2018, 14, e1800615.	5.2	8

ARTICLE IF CITATIONS # Stabilization of planar tetra-coordinate silicon in a 2D-layered extended system and design of a 37 2.8 41 high-capacity anode material for Li-ion batteries. Nanoscale, 2018, 10, 10450-10458. Li7P3S11 solid electrolyte coating silicon for high-performance lithium-ion batteries. Electrochimica 2.6 Acta, 2018, 276, 325-332. Rigid TiO_{2â[^]x}coated mesoporous hollow Si nanospheres with high structure stability for 39 1.7 10 lithium-ion battery anodes. RSC Advances, 2018, 8, 15094-15101. Thermal Lithiated-TiO₂: A Robust and Electron-Conducting Protection Layer for Li–Si 4.0 Alloy Anode. ACS Applied Materials & amp; Interfaces, 2018, 10, 12750-12758. Crosslinked carboxymethyl cellulose-sodium borate hybrid binder for advanced silicon anodes in 41 4.8 38 lithium-ion batteries. Chinese Chemical Letters, 2018, 29, 1773-1776. Self-polymerized hollow Mo-dopamine complex-induced functional MoSe₂/N-doped carbon electrodes with enhanced lithium/sodium storage properties. Inorganic Chemistry Frontiers, 2018, 5, 1026-1032. Rationally Designed Silicon Nanostructures as Anode Material for Lithiumâ€ion Batteries. Advanced 43 1.6 97 Engineering Materials, 2018, 20, 1700591. Ultrafine Nickelâ€Nanoparticleâ€Enabled SiO₂ Hierarchical Hollow Spheres for 44 Highâ€Performance Lithium Storage. Advanced Functional Materials, 2018, 28, 1704561. Enhanced Capacity and Rate Capability of Nitrogen/Oxygen Dualâ€Doped Hard Carbon in Capacitive 45 11.1 650 Potassiumâ€lon Storage. Advanced Materials, 2018, 30, 1700104. Chemomechanical behaviors of layered cathode materials in alkali metal ion batteries. Journal of 5.2 139 Materials Chemistry A, 2018, 6, 21859-21884. Porous Si@C ball-in-ball hollow spheres for lithium-ion capacitors with improved energy and power 47 5.2 52 densities. Journal of Materials Chemistry A, 2018, 6, 21098-21103. Surface Gradient Ti-Doped MnO₂ Nanowires for High-Rate and Long-Life Lithium Battery. ACS Applied Materials & amp; Interfaces, 2018, 10, 44376-44384. Aligning academia and industry for unified battery performance metrics. Nature Communications, 49 5.8 244 2018, 9, 5262. Double core-shell of Si@PANI@TiO2 nanocomposite as anode for lithium-ion batteries with enhanced 3.8 electrochemical performance. International Journal of Hydrogen Energy, 2018, 43, 20843-20852. Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity 51 4.5 121 Anodes for Lithium-Ion Batteries. Nano Letters, 2018, 18, 7060-7065. Lithium cobaltate: a novel host material enables high-rate and stable lithium–sulfur batteries. Rare Metals, 2018, 37, 929-935. Double-coated Si-based composite composed with carbon layer and graphene sheets with void spaces 53 2.6 34 for lithium-ion batteries. Electrochimica Acta, 2018, 288, 134-143. 54 Leveraging Titanium to Enable Silicon Anodes in Lithiumâ€Ion Batteries. Small, 2018, 14, e1802051.

#	ARTICLE Superior full-cell cycling and rate performance achieved by carbon coated hollow Fe3O4	IF	CITATIONS
55	nanoellipsoids for lithium ion battery. Electrochimica Acta, 2018, 288, 71-81.	2.6	24
56	A novel approach to synthesize micrometer-sized porous silicon as a high performance anode for lithium-ion batteries. Nano Energy, 2018, 50, 589-597.	8.2	191
57	A high-tap-density nanosphere-assembled microcluster to simultaneously enable high gravimetric, areal and volumetric capacities: a case study of TiO ₂ anode. Journal of Materials Chemistry A, 2018, 6, 11916-11928.	5.2	10
58	Surface Modification of Silicon Nanoparticles by an "Ink―Layer for Advanced Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 19639-19648.	4.0	25
59	Reaction-Ball-Milling-Driven Surface Coating Strategy to Suppress Pulverization of Microparticle Si Anodes. ACS Applied Materials & Interfaces, 2018, 10, 20591-20598.	4.0	34
60	A novel textile-like carbon wrapping for high-performance silicon anodes in lithium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 12475-12483.	5.2	42
61	Synergistic double-shell coating of graphene and Li4SiO4 on silicon for high performance lithium-ion battery application. Diamond and Related Materials, 2018, 88, 60-66.	1.8	11
62	SiO ₂ â€Enhanced Structural Stability and Strong Adhesion with a New Binder of Konjac Glucomannan Enables Stable Cycling of Silicon Anodes for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1800434.	10.2	135
63	Putting Nanoarmors on Yolk–Shell Si@C Nanoparticles: A Reliable Engineering Way To Build Better Si-Based Anodes for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 24157-24163.	4.0	46
64	Uniform yolk-shell Fe3O4@nitrogen-doped carbon composites with superior electrochemical performance for lithium-ion batteries. Electrochimica Acta, 2018, 282, 595-601.	2.6	32
65	A Quadrupleâ€Hydrogenâ€Bonded Supramolecular Binder for Highâ€Performance Silicon Anodes in Lithiumâ€Ion Batteries. Small, 2018, 14, e1801189.	5.2	171
66	Facile synthesis ofÂN,O-codoped hard carbon on the kilogram scale for fast capacitive sodium storage. Journal of Materials Chemistry A, 2018, 6, 16465-16474.	5.2	50
67	Pentafluorophenyl Isocyanate as an Effective Electrolyte Additive for Improved Performance of Silicon-Based Lithium-Ion Full Cells. ACS Applied Materials & Interfaces, 2018, 10, 28187-28198.	4.0	49
68	Mechanical mismatch-driven rippling in carbon-coated silicon sheets for stress-resilient battery anodes. Nature Communications, 2018, 9, 2924.	5.8	94
69	One‣tep Construction of N,P odoped Porous Carbon Sheets/CoP Hybrids with Enhanced Lithium and Potassium Storage. Advanced Materials, 2018, 30, e1802310.	11.1	376
70	Reduced expansion and improved full-cell cycling of a SnO _x #C embedded structure for lithium-ion batteries. Journal of Materials Chemistry A, 2018, 6, 15738-15746.	5.2	9
71	Dispersion-strengthened microparticle silicon composite with high anti-pulverization capability for Li-ion batteries. Energy Storage Materials, 2018, 14, 279-288.	9.5	45
72	Enhanced lithium storage properties of graphene-based metal oxides by coating with amorphous TiO2 nanofilms. Journal of Alloys and Compounds, 2018, 769, 293-300.	2.8	9

#	Article	IF	CITATIONS
73	Hierarchical Carbon-Coated Ball-Milled Silicon: Synthesis and Applications in Free-Standing Electrodes and High-Voltage Full Lithium-Ion Batteries. ACS Nano, 2018, 12, 6280-6291.	7.3	99
74	Electrochemical reconstruction induced high electrochemical performance of Co3O4/reduced graphene oxide for lithium ion batteries. Journal of Alloys and Compounds, 2018, 764, 80-87.	2.8	28
75	Developing Highâ€Performance Lithium Metal Anode in Liquid Electrolytes: Challenges and Progress. Advanced Materials, 2018, 30, e1706375.	11.1	335
76	Realizing stable lithium and sodium storage with high areal capacity using novel nanosheet-assembled compact CaV4O9 microflowers. Nano Energy, 2018, 50, 606-614.	8.2	47
77	Strategies toward Highâ€Performance Cathode Materials for Lithium–Oxygen Batteries. Small, 2018, 14, e1800078.	5.2	86
78	A flexible micro/nanostructured Si microsphere cross-linked by highly-elastic carbon nanotubes toward enhanced lithium ion battery anodes. Energy Storage Materials, 2019, 17, 93-100.	9.5	113
79	Porous nanocomposite anodes of silicon/iron silicide/3D carbon network for lithium-ion batteries. Journal of Alloys and Compounds, 2019, 770, 369-376.	2.8	16
80	Multiscale Buffering Engineering in Silicon–Carbon Anode for Ultrastable Li-Ion Storage. ACS Nano, 2019, 13, 10179-10190.	7.3	73
81	Nanoscale silicon-based actuators with extremely large actuation strain and extremely low driving voltage. Extreme Mechanics Letters, 2019, 31, 100534.	2.0	3
82	Dual Bond Enhanced Multidimensional Constructed Composite Silicon Anode for High-Performance Lithium Ion Batteries. ACS Nano, 2019, 13, 8854-8864.	7.3	91
83	Highâ€Performance Silicon Anodes Enabled By Nonflammable Localized High oncentration Electrolytes. Advanced Energy Materials, 2019, 9, 1900784.	10.2	175
84	Nitrogen Plasma-Treated Core–Bishell Si@SiO _{<i>x</i>} @TiO _{2â~δ} : Nanoparticles with Significantly Improved Lithium Storage Performance. ACS Applied Materials & Interfaces, 2019, 11, 27658-27666.	4.0	44
85	Performance and failure analysis of full cell lithium ion battery with LiNi0.8Co0.15Al0.05O2 and silicon electrodes. Journal of Power Sources, 2019, 437, 226884.	4.0	25
86	Structure design and mechanism analysis of silicon anode for lithium-ion batteries. Science China Materials, 2019, 62, 1515-1536.	3.5	80
87	Nanosized Si particles with rich surface organic functional groups as high-performance Li-battery anodes. Electrochimica Acta, 2019, 320, 134625.	2.6	16
88	Silicon Carbide as a Protective Layer to Stabilize Si-Based Anodes by Inhibiting Chemical Reactions. Nano Letters, 2019, 19, 5124-5132.	4.5	91
89	Double-shelled microscale porous Si anodes for stable lithium-ion batteries. Journal of Power Sources, 2019, 436, 226794.	4.0	24
90	The influence of FEC on the solvation structure and reduction reaction of LiPF6/EC electrolytes and its implication for solid electrolyte interphase formation. Nano Energy, 2019, 64, 103881.	8.2	239

#	Article	IF	CITATIONS
91	Artificial Solid Electrolyte Interphase Coating to Reduce Lithium Trapping in Silicon Anode for High Performance Lithiumâ€lon Batteries. Advanced Materials Interfaces, 2019, 6, 1901187.	1.9	54
92	Selfâ€Healable Solid Polymeric Electrolytes for Stable and Flexible Lithium Metal Batteries. Angewandte Chemie - International Edition, 2019, 58, 18146-18149.	7.2	128
93	Trifluoropropylene Carbonateâ€Driven Interface Regulation Enabling Greatly Enhanced Lithium Storage Durability of Siliconâ€Based Anodes. Advanced Functional Materials, 2019, 29, 1906548.	7.8	49
94	Selfâ€Healable Solid Polymeric Electrolytes for Stable and Flexible Lithium Metal Batteries. Angewandte Chemie, 2019, 131, 18314-18317.	1.6	13
95	Snâ€Alloy Foil Electrode with Mechanical Prelithiation: Fullâ€Cell Performance up to 200 Cycles. Advanced Energy Materials, 2019, 9, 1902150.	10.2	37
96	Callium Nitride Nanoparticles Embedded in a Carbon Nanofiber Anode for Ultralong-Cycle-Life Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 44263-44269.	4.0	19
97	Green <i>in Situ</i> Growth Solid Electrolyte Interphase Layer with High Rebound Resilience for Long-Life Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2019, 11, 43200-43205.	4.0	22
98	Morphology Reshaping Enabling Selfâ€Densification of Manganese Oxide Hybrid Materials for Highâ€Density Lithium Storage Anodes. Advanced Functional Materials, 2019, 29, 1907154.	7.8	82
99	Enhanced Stability Lithium-Ion Battery Based on Optimized Graphene/Si Nanocomposites by Templated Assembly. ACS Omega, 2019, 4, 18195-18202.	1.6	20
100	Highlighting the Importance of Full-Cell Testing for High Performance Anode Materials Comprising Li Alloying Nanowires. Journal of the Electrochemical Society, 2019, 166, A2784-A2790.	1.3	4
101	Largely Improved Battery Performance Using a Microsized Silicon Skeleton Caged by Polypyrrole as Anode. ACS Nano, 2019, 13, 12032-12041.	7.3	64
102	Designing superior solid electrolyte interfaces on silicon anodes for high-performance lithium-ion batteries. Nanoscale, 2019, 11, 19086-19104.	2.8	103
103	Si anode for next-generation lithium-ion battery. Current Opinion in Electrochemistry, 2019, 18, 46-54.	2.5	48
104	Biomass-Derived Carbon Paper to Sandwich Magnetite Anode for Long-Life Li-Ion Battery. ACS Nano, 2019, 13, 11901-11911.	7.3	82
105	Improved cycling performances of binder-free macroporous silicon Li-ion negative electrodes using room temperature ionic liquid electrolyte. Journal of Solid State Electrochemistry, 2019, 23, 937-941.	1.2	7
106	Spinel (Ni0.4Co0.4Mn0.2)3O4 nanoparticles as conversion-type anodes for Li- and Na-ion batteries. Ceramics International, 2019, 45, 7552-7559.	2.3	17
107	Phase boundary-enhanced Ni ₃ N–Co ₃ N@CNT composite materials for lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 1779-1784.	5.2	51
108	First-principles molecular dynamics study on ultrafast potassium ion transport in silicon anode. Journal of Power Sources, 2019, 415, 119-125.	4.0	36

#	Article	IF	CITATIONS
109	MXene/Si@SiO _{<i>x</i>} @C Layer-by-Layer Superstructure with Autoadjustable Function for Superior Stable Lithium Storage. ACS Nano, 2019, 13, 2167-2175.	7.3	154
110	Necklace-like Si@C nanofibers as robust anode materials for high performance lithium ion batteries. Science Bulletin, 2019, 64, 261-269.	4.3	63
111	Dimethylacrylamide, a novel electrolyte additive, can improve the electrochemical performances of silicon anodes in lithium-ion batteries. RSC Advances, 2019, 9, 435-443.	1.7	25
112	Confining Silicon Nanoparticles within Freestanding Multichannel Carbon Fibers for High-Performance Li-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5214-5218.	2.5	17
113	Fabrication of Lamellar Nanosphere Structure for Effective Stressâ€Management in Largeâ€Volumeâ€Variation Anodes of Highâ€Energy Lithiumâ€Ion Batteries. Advanced Materials, 2019, 31, e1900970.	11.1	52
114	High-performance silicon-carbon anode material via aerosol spray drying and magnesiothermic reduction. Nano Energy, 2019, 63, 103845.	8.2	57
115	Towards high energy density lithium battery anodes: silicon and lithium. Chemical Science, 2019, 10, 7132-7148.	3.7	134
116	Double-shelled yolk-shell Si@C microspheres based electrochemical sensor for determination of cadmium and lead ions. Analytica Chimica Acta, 2019, 1078, 32-41.	2.6	24
117	A new family of cation-disordered Zn(Cu)–Si–P compounds as high-performance anodes for next-generation Li-ion batteries. Energy and Environmental Science, 2019, 12, 2286-2297.	15.6	53
118	Roll-to-roll prelithiation of Sn foil anode suppresses gassing and enables stable full-cell cycling of lithium ion batteries. Energy and Environmental Science, 2019, 12, 2991-3000.	15.6	147
119	Improving Cycling Performance of Si-Based Lithium Ion Batteries Anode with Se-Loaded Carbon Coating. ACS Applied Energy Materials, 2019, 2, 5124-5132.	2.5	15
120	Effect of Collector Roughness on Properties of Amorphous Silicon Thinâ€Film Anodes. ChemElectroChem, 2019, 6, 3039-3042.	1.7	5
121	Recent Progress in Advanced Characterization Methods for Siliconâ€Based Lithiumâ€lon Batteries. Small Methods, 2019, 3, 1900158.	4.6	30
122	Effect of the Carbon Source on Facile Synthesized Si/Graphite Composites and their Electrochemical Performance. International Journal of Electrochemical Science, 2019, , 5331-5343.	0.5	3
123	Electrophoretic Deposition of Tin Sulfide Nanocubes as Highâ€Performance Lithiumâ€Ion Battery Anodes. ChemElectroChem, 2019, 6, 3049-3056.	1.7	18
124	Li-Ions Transport Promoting and Highly Stable Solid–Electrolyte Interface on Si in Multilayer Si/C through Thickness Control. ACS Nano, 2019, 13, 5602-5610.	7.3	42
125	Layer-by-layer printing of multi-layered heterostructures using Li4Ti5O12 and Si for high power Li-ion storage. Nano Energy, 2019, 61, 96-103.	8.2	30
126	Rational Design of the Robust Janus Shell on Silicon Anodes for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 17375-17383.	4.0	49

#	Article	IF	CITATIONS
127	Porous Si/C microspheres decorated with stable outer carbon interphase and inner interpenetrated Si@C channels for enhanced lithium storage. Carbon, 2019, 149, 664-671.	5.4	49
128	Nitrogen-doped carbon coated SnO2 nanoparticles embedded in a hierarchical porous carbon framework for high-performance lithium-ion battery anodes. Journal of Power Sources, 2019, 428, 44-52.	4.0	73
129	Elucidating the interfacial evolution and anisotropic dynamics on silicon anodes in lithium-ion batteries. Nano Energy, 2019, 61, 304-310.	8.2	27
130	3D δ-MnO2 nanostructure with ultralarge mesopores as high-performance lithium-ion battery anode fabricated via colloidal solution combustion synthesis. Journal of Power Sources, 2019, 421, 162-168.	4.0	48
132	In Situ Subangstromâ€Thick Organic Engineering Enables Monoâ€scale, Ultrasmall ZnO Nanocrystals for a High Initial Coulombic Efficiency, Fully Reversible Conversion, and Cycleâ€Stable Liâ€Ion Storage. Advanced Energy Materials, 2019, 9, 1900426.	10.2	110
133	Carbon-based materials for lithium-ion capacitors. Materials Chemistry Frontiers, 2019, 3, 1265-1279.	3.2	94
134	Facile synthesizing silicon waste/carbon composites via rapid thermal process for lithium-ion battery anode. Journal of Alloys and Compounds, 2019, 791, 19-29.	2.8	19
135	Strategies for improving the storage performance of silicon-based anodes in lithium-ion batteries. Nano Research, 2019, 12, 1739-1749.	5.8	79
136	Analysis of the effect of applying external mechanical pressure on next generation silicon alloy lithium-ion cells. Electrochimica Acta, 2019, 306, 387-395.	2.6	52
138	An affordable manufacturing method to boost the initial Coulombic efficiency of disproportionated SiO lithium-ion battery anodes. Journal of Power Sources, 2019, 426, 116-123.	4.0	53
139	Scalable synthesis of ant-nest-like bulk porous silicon for high-performance lithium-ion battery anodes. Nature Communications, 2019, 10, 1447.	5.8	494
140	Improving the electrochemical cycling performance of anode materials via facile in situ surface deposition of a solid electrolyte layer. Journal of Power Sources, 2019, 424, 150-157.	4.0	24
141	Nitrogen and Phosphorus Dual-Doped Multilayer Graphene as Universal Anode for Full Carbon-Based Lithium and Potassium Ion Capacitors. Nano-Micro Letters, 2019, 11, 30.	14.4	120
142	Full-Cell Cycling of a Self-Supporting Aluminum Foil Anode with a Phosphate Conversion Coating. ACS Applied Materials & Interfaces, 2019, 11, 15656-15661.	4.0	27
143	A water-soluble binary conductive binder for Si anode lithium ion battery. Electrochimica Acta, 2019, 305, 555-562.	2.6	39
144	Neuron like Si-carbon nanotubes composite as a high-rate anode of lithium ion batteries. Journal of Alloys and Compounds, 2019, 787, 928-934.	2.8	32
145	Minimized Volume Expansion in Hierarchical Porous Silicon upon Lithiation. ACS Applied Materials & Interfaces, 2019, 11, 13257-13263.	4.0	51
146	High-performance sodium-ion batteries with a hard carbon anode: transition from the half-cell to full-cell perspective. Nanoscale, 2019, 11, 22196-22205.	2.8	75

#	Article	IF	CITATIONS
147	Engineering of carbon and other protective coating layers for stabilizing silicon anode materials. , 2019, 1, 219-245.		94
148	Supremely elastic gel polymer electrolyte enables a reliable electrode structure for silicon-based anodes. Nature Communications, 2019, 10, 5586.	5.8	80
149	From sand to fast and stable silicon anode: Synthesis of hollow Si@void@C yolk–shell microspheres by aluminothermic reduction for lithium storage. Chinese Chemical Letters, 2019, 30, 610-617.	4.8	25
150	Superior electrochemical performance of sodium-ion full-cell using poplar wood derived hard carbon anode. Energy Storage Materials, 2019, 18, 269-279.	9.5	94
151	Recent Advances on Selfâ€Healing Materials and Batteries. ChemElectroChem, 2019, 6, 1605-1622.	1.7	41
152	Conjugated Microporous Polymers with Tunable Electronic Structure for High-Performance Potassium-Ion Batteries. ACS Nano, 2019, 13, 745-754.	7.3	162
153	Interweaving 3D Network Binder for Highâ€Arealâ€Capacity Si Anode through Combined Hard and Soft Polymers. Advanced Energy Materials, 2019, 9, 1802645.	10.2	181
154	A Novel Multielement, Multiphase, and Bâ€Containing SiO <i>_x</i> Composite as a Stable Anode Material for Liâ€Ion Batteries. Advanced Materials Interfaces, 2019, 6, 1801631.	1.9	32
155	A comparative electrochemical investigation and an effective promotion towards electrochemical performance of MnCO3 aggregates. Chemical Engineering Journal, 2019, 360, 553-561.	6.6	20
156	The Impact of Initial SEI Formation Conditions on Strainâ€Induced Capacity Losses in Silicon Electrodes. Advanced Energy Materials, 2019, 9, 1803066.	10.2	35
157	Scalable Synthesis of an Artificial Polydopamine Solidâ€Electrolyteâ€Interfaceâ€Assisted 3D rGO/Fe ₃ O ₄ @PDA Hydrogel for a Highly Stable Anode with Enhanced Lithiumâ€Ionâ€Storage Properties. ChemElectroChem, 2019, 6, 1069-1077.	1.7	8
158	High-performance lithium-ion battery anodes based on Mn3O4/nitrogen-doped porous carbon hybrid structures. Journal of Alloys and Compounds, 2019, 775, 51-58.	2.8	31
159	Electrolytes for Rechargeable Lithium–Air Batteries. Angewandte Chemie - International Edition, 2020, 59, 2974-2997.	7.2	187
160	Elektrolyte für wiederaufladbare Lithium‣uftâ€Batterien. Angewandte Chemie, 2020, 132, 2994-3019.	1.6	18
161	Integration of Graphite and Silicon Anodes for the Commercialization of Highâ€Energy Lithiumâ€lon Batteries. Angewandte Chemie - International Edition, 2020, 59, 110-135.	7.2	460
162	Graphit―undâ€&iliciumâ€Anoden für Lithiumionen―Hochenergiebatterien. Angewandte Chemie, 2020, 132, 112-138.	1.6	23
163	Facile preparation of core-shell Si@Li4Ti5O12 nanocomposite as large-capacity lithium-ion battery anode. Journal of Energy Chemistry, 2020, 40, 89-98.	7.1	37
164	Interconnected structure Si@TiO2-B/CNTs composite anode applied for high-energy lithium-ion batteries. Applied Surface Science, 2020, 500, 144026.	3.1	33

ARTICLE IF CITATIONS One-step synthesis of spherical Si/C composites with onion-like buffer structure as high-performance 9.5 141 165 anodes for lithium-ion batteries. Energy Storage Materials, 2020, 24, 312-318. Development and application of self-healing materials in smart batteries and supercapacitors. 6.6 Chemical Engineering Journal, 2020, 380, 122565. Electrochemical performance enhancement of porous Si lithium-ion battery anode by integrating with 167 2.6 39 optimized carbonaceous materials. Electrochimica Acta, 2020, 337, 135687. FSI-inspired solvent and "full fluorosulfonyl―electrolyte for 4 V class lithium-metal batteries. 168 198 Energy and Environmental Science, 2020, 13, 212-220. Nano-silicon @ soft carbon embedded in graphene scaffold: High-performance 3D free-standing anode 169 4.0 76 for lithium-ion batteries. Journal of Power Sources, 2020, 450, 227692. Materials and electrode engineering of high capacity anodes in lithium ion batteries. Journal of Power Sources, 2020, 450, 227697. 4.0 Self-healing and high stretchable polymer electrolytes based on ionic bonds with high conductivity 171 4.0 49 for lithium batteries. Journal of Power Sources, 2020, 450, 227629. Driven by electricity: multilayered GO-Fe3O4@PDA-PAM flake assembled micro flower-like anode for 3.1 high-performance lithium ion batteries. Applied Surface Science, 2020, 499, 143934. Tailoring Electrolyte Additives with Synergistic Functional Moieties for Silicon Negative 173 Electrode-Based Lithium Ion Batteries: A Čase Study on Lactic Acid <i>O</i>-Carboxyanhydride. 3.2 31 Chemistry of Materials, 2020, 32, 173-185. Toward understanding the interaction within Silicon-based anodes for stable lithium storage. 174 6.6 Chemical Engineering Journal, 2020, 385, 123821. Strategic Pore Architecture for Accommodating Volume Change from High Si Content in Lithiumâ€Ion 175 10.2 50 Battery Anodes. Advanced Energy Materials, 2020, 10, 1903400. Dramatic improvement enabled by incorporating thermal conductive TiN into Si-based anodes for 9.5 lithium ion batteries. Energy Storáge Materials, 2020, 29, 367-376. Lithium metal electrode protected by stiff and tough self-compacting separator. Nano Energy, 2020, 69, 177 8.2 25 104399. Silicon Nanoparticles Preparation by Induction Plasma Technology for Li-ion Batteries Anode Material. Silicon, 2020, 12, 2259-2269. 178 1.8 Recycling silicon-based industrial waste as sustainable sources of Si/SiO2 composites for 179 4.0 68 high-performance Li-ion battery anodes. Journal of Power Sources, 2020, 449, 227513. A conductive self-healing hydrogel binder for high-performance silicon anodes in lithium-ion 79 batteries. Journal of Power Sources, 2020, 449, 227472. Structural Engineering of SnS₂ Encapsulated in Carbon Nanoboxes for Highâ€Performance 181 5.2120 Sodium/Potassiumâ€Ion Batteries Anodes. Small, 2020, 16, e2005023. Lithium-ion batteries – Current state of the art and anticipated developments. Journal of Power Sources, 2020, 479, 228708.

#	Article	IF	CITATIONS
183	Titanium Monoxide-Stabilized Silicon Nanoparticles with a Litchi-like Structure as an Advanced Anode for Li-ion Batteries. ACS Applied Materials & amp; Interfaces, 2020, 12, 48467-48475.	4.0	29
184	Review of Emerging Concepts in SEI Analysis and Artificial SEI Membranes for Lithium, Sodium, and Potassium Metal Battery Anodes. Advanced Energy Materials, 2020, 10, 2002297.	10.2	292
185	Controlling Ion Coordination Structure and Diffusion Kinetics for Optimized Electrode-Electrolyte Interphases and High-Performance Si Anodes. Chemistry of Materials, 2020, 32, 8956-8964.	3.2	24
186	Mechanoelectrochemical issues involved in current lithium-ion batteries. Nanoscale, 2020, 12, 20100-20117.	2.8	9
187	Unveiling the intrinsic reaction between silicon-graphite composite anode and ionic liquid electrolyte in lithium-ion battery. Journal of Power Sources, 2020, 473, 228481.	4.0	19
188	Hollow N-doped carbon nanofibers provide superior potassium-storage performance. Nanoscale Advances, 2020, 2, 4187-4198.	2.2	11
189	Facile preparation of void-buffered Si@TiO2/C microspheres for high-capacity lithium ion battery anodes. Electrochimica Acta, 2020, 337, 135841.	2.6	23
190	One-Step Low-Temperature Molten Salt Synthesis of Two-Dimensional Si@SiO <i>_x</i> @C Hybrids for High-Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 55844-55855.	4.0	36
191	True Meaning of Pseudocapacitors and Their Performance Metrics: Asymmetric versus Hybrid Supercapacitors. Small, 2020, 16, e2002806.	5.2	405
192	Recent Advances in Atomic-scale Storage Mechanism Studies of Two-dimensional Nanomaterials for Rechargeable Batteries Beyond Li-ion. Chemical Research in Chinese Universities, 2020, 36, 560-583.	1.3	14
193	Improving the rate capability of a SiOx/graphite anode by adding LiNO3. Progress in Natural Science: Materials International, 2020, 30, 321-327.	1.8	18
194	Calenderingâ€Compatible Macroporous Architecture for Silicon–Graphite Composite toward Highâ€Energy Lithiumâ€Ion Batteries. Advanced Materials, 2020, 32, e2003286.	11.1	111
195	Stabilized Coâ€Free Liâ€Rich Oxide Cathode Particles with An Artificial Surface Prereconstruction. Advanced Energy Materials, 2020, 10, 2001120.	10.2	74
196	Dual Buffering Inverse Design of Threeâ€Dimensional Grapheneâ€Supported Snâ€TiO 2 Anodes for Durable Lithiumâ€Ion Batteries. Small, 2020, 16, 2004861.	5.2	13
197	Exploiting Selfâ€Healing in Lithium Batteries: Strategies for Nextâ€Generation Energy Storage Devices. Advanced Energy Materials, 2020, 10, 2002815.	10.2	38
198	Enhancement of lithium storage capacity and rate performance of Se-modified MnO/Mn3O4 hybrid anode material via pseudocapacitive behavior. Transactions of Nonferrous Metals Society of China, 2020, 30, 1904-1915.	1.7	17
199	Critical barriers to the large scale commercialization of silicon-containing batteries. Nanoscale Advances, 2020, 2, 4368-4389.	2.2	18
200	Diatomiteâ€Derived Hierarchical Porous Crystallineâ€AmorphousNetwork for Highâ€Performance and Sustainable Si Anodes. Advanced Functional Materials, 2020, 30, 2005956.	7.8	36

#	Article	IF	CITATIONS
201	Realizing High Volumetric Lithium Storage by Compact and Mechanically Stable Anode Designs. ACS Energy Letters, 2020, 5, 1986-1995.	8.8	72
202	Sacrificial Poly(propylene carbonate) Membrane for Dispersing Nanoparticles and Preparing Artificial Solid Electrolyte Interphase on Li Metal Anode. ACS Applied Materials & Interfaces, 2020, 12, 27087-27094.	4.0	8
203	Gradient-morph LiCoO ₂ single crystals with stabilized energy density above 3400 W h L ^{â^1} . Energy and Environmental Science, 2020, 13, 1865-1878.	15.6	118
204	Interface-Amorphized Ti ₃ C ₂ @Si/SiO <i>_x</i> @TiO ₂ Anodes with Sandwiched Structures and Stable Lithium Storage. ACS Applied Materials & Interfaces, 2020, 12, 24796-24805.	4.0	51
205	Towards a High-Power Si@graphite Anode for Lithium Ion Batteries through a Wet Ball Milling Process. Molecules, 2020, 25, 2494.	1.7	31
206	Waste glass microfiber filter-derived fabrication of fibrous yolk-shell structured silicon/carbon composite freestanding electrodes for lithium-ion battery anodes. Journal of Power Sources, 2020, 468, 228407.	4.0	28
207	Recent Advancements and Perspective of High-Performance Printed Power Sources with Multiple Form Factors. Electrochemical Energy Reviews, 2020, 3, 581-612.	13.1	26
208	Building a Cycle-Stable Fe–Si Alloy/Carbon Nanocomposite Anode for Li-Ion Batteries through a Covalent-Bonding Method. ACS Applied Materials & Interfaces, 2020, 12, 30503-30509.	4.0	34
209	Suppressing the Side Reaction by a Selective Blocking Layer to Enhance the Performance of Si-Based Anodes. Nano Letters, 2020, 20, 5176-5184.	4.5	39
210	Mechanically Reinforced Localized Structure Design to Stabilize Solid–Electrolyte Interface of the Composited Electrode of Si Nanoparticles and TiO ₂ Nanotubes. Small, 2020, 16, e2002094.	5.2	41
211	Hierarchical porous silicon structures with extraordinary mechanical strength as high-performance lithium-ion battery anodes. Nature Communications, 2020, 11, 1474.	5.8	298
212	Phosphorusâ€Functionalized Fe 2 VO 4 /Nitrogenâ€Doped Carbon Mesoporous Nanowires with Exceptional Lithium Storage Performance. ChemElectroChem, 2020, 7, 2395-2403.	1.7	9
213	The rational design of carbon coated Fe2(MoO4)3 nanosheets for lithium-ion storage with high initial coulombic efficiency and long cycle life. Nanoscale Advances, 2020, 2, 1646-1653.	2.2	2
214	Simultaneously pre-alloying and artificial solid electrolyte interface towards highly stable aluminum anode for high-performance Li hybrid capacitor. Energy Storage Materials, 2020, 28, 357-363.	9.5	50
215	Lithium-conducting covalent-organic-frameworks as artificial solid-electrolyte-interphase on silicon anode for high performance lithium ion batteries. Nano Energy, 2020, 72, 104657.	8.2	93
216	Operando Acoustic Monitoring of SEI Formation and Long-Term Cycling in NMC/SiGr Composite Pouch Cells. Journal of the Electrochemical Society, 2020, 167, 020517.	1.3	36
217	In Situ Transformed Solid Electrolyte Interphase by Implanting a 4-Vinylbenzoic Acid Nanolayer on the Natural Graphite Surface. ACS Applied Materials & Interfaces, 2020, 12, 33408-33420.	4.0	7
218	<i>In Situ</i> Synthesis of VO ₂ Embedded in Graphite/Si as a High Performance Anode for Lithium-Ion Batteries. Materials Science Forum, 0, 999, 3-12.	0.3	1

#	Article	IF	CITATIONS
219	Siliconâ€Based Selfâ€Assemblies for High Volumetric Capacity Liâ€Ion Batteries via Effective Stress Management. Advanced Functional Materials, 2020, 30, 2002980.	7.8	76
220	Hollow multishelled structures revive high energy density batteries. Nanoscale Horizons, 2020, 5, 1287-1292.	4.1	31
221	Silicon Anodes for Highâ€Performance Storage Devices: Structural Design, Material Compounding, Advances in Electrolytes and Binders. ChemNanoMat, 2020, 6, 720-738.	1.5	24
222	High-performance boron-doped silicon micron-rod anode fabricated using a mass-producible lithography method for a lithium ion battery. Journal of Power Sources, 2020, 454, 227931.	4.0	25
223	Nanostructured Silicon as Potential Anode Material for Li-Ion Batteries. Molecules, 2020, 25, 891.	1.7	15
224	Evaluating the capacity ratio and prelithiation strategies for extending cyclability in porous silicon composite anodes and lithium iron phosphate cathodes for high capacity lithium-ion batteries. Journal of Energy Storage, 2020, 28, 101268.	3.9	31
225	Analysis of Scale-up Parameters in 3D Silicon-Nanowire Lithium-Battery Anodes. Journal of the Electrochemical Society, 2020, 167, 050511.	1.3	15
226	Controlled synthesis of copper reinforced nanoporous silicon microsphere with boosted electrochemical performance. Journal of Power Sources, 2020, 455, 227967.	4.0	15
227	Guidelines and trends for next-generation rechargeable lithium and lithium-ion batteries. Chemical Society Reviews, 2020, 49, 1569-1614.	18.7	1,326
228	Volume expansion restriction effects of thick TiO2/C hybrid coatings on micro-sized SiOx anode materials. Chemical Engineering Journal, 2020, 387, 124106.	6.6	37
229	Stress-relieving defects enable ultra-stable silicon anode for Li-ion storage. Nano Energy, 2020, 70, 104568.	8.2	72
230	The Role of Balancing Nanostructured Silicon Anodes and NMC Cathodes in Lithium-Ion Full-Cells with High Volumetric Energy Density. Journal of the Electrochemical Society, 2020, 167, 020516.	1.3	46
231	Ultrahigh and Durable Volumetric Lithium/Sodium Storage Enabled by a Highly Dense Graphene-Encapsulated Nitrogen-Doped Carbon@Sn Compact Monolith. Nano Letters, 2020, 20, 2034-2046.	4.5	74
232	K ₂ Ti ₆ O ₁₃ /carbon core–shell nanorods as a superior anode material for high-rate potassium-ion batteries. Nanoscale, 2020, 12, 11427-11434.	2.8	14
233	Preparation of nanoporous Sn-doped TiO2 anode material for lithium-ion batteries by a simple dealloying method. Ionics, 2020, 26, 4363-4372.	1.2	8
234	MXene Frameworks Promote the Growth and Stability of LiF-Rich Solid–Electrolyte Interphases on Silicon Nanoparticle Bundles. ACS Applied Materials & Interfaces, 2020, 12, 18541-18550.	4.0	44
235	Surpassing lithium metal rechargeable batteries with self-supporting Li–Sn–Sb foil anode. Nano Energy, 2020, 74, 104815.	8.2	28
236	A practical phosphorus-based anode material for high-energy lithium-ion batteries. Nano Energy, 2020, 74, 104849.	8.2	56

#	Article	IF	CITATIONS
237	Influence of oxygen content on the electrochemical behavior of SiOx@C anodes for Li-ion battery. Composites Communications, 2021, 23, 100544.	3.3	16
238	Si nanoparticles confined within a conductive 2D porous Cu-based metal–organic framework (Cu3(HITP)2) as potential anodes for high-capacity Li-ion batteries. Chemical Engineering Journal, 2021, 405, 126963.	6.6	46
239	Enhancing lithium storage performance by strongly binding silicon nanoparticles sandwiching between spherical graphene. Applied Surface Science, 2021, 539, 148191.	3.1	20
240	Mild strategy for generating rich void space for nano-Si/C composites to accommodate the large volume expansion during alloying/dealloying for lithium-ion batteries. Journal of Alloys and Compounds, 2021, 857, 157530.	2.8	10
241	A general strategy for enabling Fe3O4 with enhanced lithium storage performance: Synergy between yolk-shell nanostructures and doping-free carbon. Electrochimica Acta, 2021, 367, 137464.	2.6	21
242	A review on the failure and regulation of solid electrolyte interphase in lithium batteries. Journal of Energy Chemistry, 2021, 59, 306-319.	7.1	183
243	Overcoming the fundamental challenge of PVDF binder use with silicon anodes with a super-molecular nano-layer. Journal of Materials Chemistry A, 2021, 9, 1541-1551.	5.2	45
244	Autonomous Strategies for Improved Performance and Reliability of Liâ€lon Batteries. Advanced Energy Materials, 2021, 11, 2003139.	10.2	20
245	Micro-structured lepidocrocite-type H1.07Ti1.73O4 as anode for lithium-ion batteries with an ultrahigh rate and long-term cycling performance. Rare Metals, 2021, 40, 1391-1401.	3.6	12
246	Enhanced lithium storage performance of porous Si/C composite anodes using a recrystallized NaCl template. Dalton Transactions, 2021, 50, 2815-2823.	1.6	4
247	Scalable and controllable fabrication of CNTs improved yolk-shelled Si anodes with advanced in operando mechanical quantification. Energy and Environmental Science, 2021, 14, 3502-3509.	15.6	45
248	Polymers in Lithiumâ€lon and Lithium Metal Batteries. Advanced Energy Materials, 2021, 11, 2003239.	10.2	160
249	Reversible Silicon Anodes with Long Cycles by Multifunctional Volumetric Buffer Layers. ACS Applied Materials & Interfaces, 2021, 13, 4093-4101.	4.0	34
250	Strategic synthesis of sponge-like structured SiO _{<i>x</i>} @C@CoO multifunctional composites for high-performance and stable lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 18440-18453.	5.2	22
251	PANI-based conductive polymer composites as water-soluble binders for nano-silicon anodes in lithium-ion batteries. Ionics, 2021, 27, 587-597.	1.2	1
252	Amorphous silicon from low-temperature reduction of silica in the molten salts and its lithium-storage performance. Chinese Chemical Letters, 2021, 32, 598-603.	4.8	8
253	Lithium-Ion Capacitors: A Review of Design and Active Materials. Energies, 2021, 14, 979.	1.6	41
254	Amorphous Carbon Nano-Interface-Modified Aluminum Anodes for High-Performance Dual-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 3710-3717.	3.2	22

#	Article	IF	CITATIONS
255	A carboxymethyl vegetable gum as a robust water soluble binder for silicon anodes in lithium-ion batteries. Journal of Power Sources, 2021, 489, 229530.	4.0	31
256	Recent Advances in Siliconâ€Based Electrodes: From Fundamental Research toward Practical Applications. Advanced Materials, 2021, 33, e2004577.	11.1	168
257	From scaled-up production of silicon-graphene nanocomposite to the realization of an ultra-stable full-cell Li-ion battery. 2D Materials, 2021, 8, 035014.	2.0	15
258	Improved cycling performance of SiOx/MgO/Mg2SiO4/C composite anode materials for lithium-ion battery. Applied Surface Science, 2021, 546, 148814.	3.1	21
259	Solid Electrolyte Interphase Layer Formation during Lithiation of Single-Crystal Silicon Electrodes with a Protective Aluminum Oxide Coating. ACS Applied Materials & Interfaces, 2021, 13, 21241-21249.	4.0	5
260	Stable Hollowâ€Structured Silicon Suboxideâ€Based Anodes toward Highâ€Performance Lithiumâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2101796.	7.8	127
261	Challenges and Recent Progress on Siliconâ€Based Anode Materials for Nextâ€Generation Lithiumâ€Ion Batteries. Small Structures, 2021, 2, 2100009.	6.9	117
262	Interfacial Engineering of Bifunctional Niobium (V)â€Based Heterostructure Nanosheet Toward High Efficiency Leanâ€Electrolyte Lithium–Sulfur Full Batteries. Advanced Functional Materials, 2021, 31, 2102314.	7.8	93
263	Feigned death induced by partial delithiation in silicon composite electrodes. Journal of Power Sources, 2021, 495, 229763.	4.0	5
264	In situ formation of ionically conductive nanointerphase on Si particles for stable battery anode. Science China Chemistry, 2021, 64, 1417-1425.	4.2	28
265	Interfaces in Solid Electrolyte Interphase: Implications for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2021, 125, 11301-11309.	1.5	22
266	Establishing the Preferential Adsorption of Anionâ€Dominated Solvation Structures in the Electrolytes for Highâ€Energyâ€Density Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2011109.	7.8	37
267	Air‧table Li <i>_x</i> Al Foil as Free‧tanding Electrode with Improved Electrochemical Ductility by Shotâ€Peening Treatment. Advanced Functional Materials, 2021, 31, 2100978.	7.8	17
268	Inorganic-organic competitive coating strategy derived uniform hollow gradient-structured ferroferric oxide-carbon nanospheres for ultra-fast and long-term lithium-ion battery. Nature Communications, 2021, 12, 2973.	5.8	62
269	Bioinspired Energy Storage and Harvesting Devices. Advanced Materials Technologies, 2021, 6, 2001301.	3.0	11
270	Regulating adhesion of solid-electrolyte interphase to silicon via covalent bonding strategy towards high Coulombic-efficiency anodes. Nano Energy, 2021, 84, 105935.	8.2	24
271	High-stability Mn–Co–Ni ternary metal oxide microspheres as conversion-type anodes for sodium-ion batteries. Ceramics International, 2021, 47, 17540-17549.	2.3	7
272	<i>In Situ</i> Formed Weave Cage-Like Nanostructure Wrapped Mesoporous Micron Silicon Anode for Enhanced Stable Lithium-Ion Battery. ACS Applied Materials & amp; Interfaces, 2021, 13, 29726-29736.	4.0	22

#	Article	IF	CITATIONS
273	Synthesis and Surface Engineering of Composite Anodes by Coating Thin-Layer Silicon on Carbon Cloth for Lithium Storage with High Stability and Performance. ACS Applied Energy Materials, 2021, 4, 6982-6990.	2.5	6
274	Advances in Si and SiC Materials for Highâ€Performance Supercapacitors toward Integrated Energy Storage Systems. Small, 2021, 17, e2101775.	5.2	30
275	Boosting the cell performance of the SiO _{<i>x</i>} @C anode material via rational design of a Siâ€valence gradient. , 2022, 4, 129-141.		22
276	Electrolyte Design Enabling a Highâ€Safety and Highâ€Performance Si Anode with a Tailored Electrode–Electrolyte Interphase. Advanced Materials, 2021, 33, e2103178.	11.1	135
277	Stressâ€Regulation Design of Lithium Alloy Electrode toward Stable Battery Cycling. Energy and Environmental Materials, 2023, 6, .	7.3	11
278	Engineering the Si Anode Interface via Particle Surface Modification: Embedded Organic Carbonates Lead to Enhanced Performance. ACS Applied Energy Materials, 2021, 4, 8193-8200.	2.5	11
279	A submicron Si@C core-shell intertwined with carbon nanowires and graphene nanosheet as a high-performance anode material for lithium ion battery. Energy Storage Materials, 2021, 39, 1-10.	9.5	72
280	Compact energy storage enabled by graphenes: Challenges, strategies and progress. Materials Today, 2021, 51, 552-565.	8.3	42
281	Commercializationâ€Driven Electrodes Design for Lithium Batteries: Basic Guidance, Opportunities, and Perspectives. Small, 2021, 17, e2102233.	5.2	38
282	Dual-carbon-confined hydrangea-like SiO cluster for high-performance and stable lithium ion batteries. Journal of Industrial and Engineering Chemistry, 2021, 101, 397-404.	2.9	12
283	Stabilizing Lithium Metal Anodes by a Self-Healable and Li-Regulating Interlayer. ACS Applied Materials & Interfaces, 2021, 13, 44983-44990.	4.0	17
284	<i>Operando</i> Terahertz Spectroscopy of Solid Electrolyte Interphase Evolution on Silicon Anodes. Batteries and Supercaps, 2022, 5, .	2.4	4
285	A Study to Explore the Suitability of LiNi0.8Co0.15Al0.05O2/Silicon@Graphite Cells for High-Power Lithium-Ion Batteries. International Journal of Molecular Sciences, 2021, 22, 10331.	1.8	3
286	Mechanical prelithiation of Sn/C@ZrO2 yolk-shell anode for full cell cycling. Materials Chemistry and Physics, 2022, 276, 125303.	2.0	2
287	Microscale Silicon-Based Anodes: Fundamental Understanding and Industrial Prospects for Practical High-Energy Lithium-Ion Batteries. ACS Nano, 2021, 15, 15567-15593.	7.3	146
288	1-Aminopyrene-modified functionalized carbon nanotubes wrapped with silicon as a high-performance lithium-ion battery anode. Solid State Ionics, 2021, 369, 115724.	1.3	8
289	Recent progress and perspectives on silicon anode: Synthesis and prelithiation for LIBs energy storage. Journal of Energy Chemistry, 2022, 64, 615-650.	7.1	127
290	Preparation of SiO @TiO2@N-doped carbon composite using chitin as carbon precursor for high-performance lithium storage. Journal of Alloys and Compounds, 2022, 891, 162076.	2.8	11

#	ARTICLE Construction of SiO /nitrogen-doped carbon superstructures derived from rice husks for boosted	IF	CITATIONS
291	lithium storage. Journal of Colloid and Interface Science, 2022, 606, 784-792.	5.0	30
292	Advanced silicon-based electrodes for high-energy lithium-ion batteries. , 2022, , 411-456.		0
293	Status and challenges facing representative anode materials for rechargeable lithium batteries. Journal of Energy Chemistry, 2022, 66, 260-294.	7.1	149
294	Expandable crosslinked polymer coatings on silicon nanoparticle anode toward high-rate and long-cycle-life lithium-ion battery. Applied Surface Science, 2022, 571, 151294.	3.1	15
295	SEI layer and impact on Si-anodes for Li-ion batteries. , 2022, , 183-263.		4
296	Nanoscale anodes for rechargeable batteries: Fundamentals and design principles. , 2021, , 91-157.		2
297	Scalable synthesis of silicon nanoplate-decorated graphite for advanced lithium-ion battery anodes. Nanoscale, 2021, 13, 2820-2824.	2.8	12
298	Recent advances in prelithiation materials and approaches for lithium-ion batteries and capacitors. Energy Storage Materials, 2020, 32, 497-516.	9.5	125
299	Modification based on primary particle level to improve the electrochemical performance of SiO -based anode materials. Journal of Power Sources, 2020, 467, 228301.	4.0	33
300	An integral interface with dynamically stable evolution on micron-sized SiOx particle anode. Nano Energy, 2020, 74, 104890.	8.2	84
301	In-Situ Polymerized Binder: A Three-in-One Design Strategy for All-Integrated SiO <i>_{<i>x</i>}</i> Anode with High Mass Loading in Lithium Ion Batteries. ACS Energy Letters, 2021, 6, 290-297.	8.8	92
302	The Progress and Prospect of Tunable Organic Molecules for Organic Lithium-Ion Batteries. ACS Nano, 2021, 15, 47-80.	7.3	130
303	Challenges and prospects of nanosized silicon anodes in lithium-ion batteries. Nanotechnology, 2021, 32, 042002.	1.3	95
304	Confined interfacial assembly of controlled Li2Ti3O7 building blocks and Si nanoparticles in Lithium-ion batteries. Energy Storage Materials, 2022, 44, 239-249.	9.5	13
305	SnS nanoparticles as an artificial solid electrolyte interphase and effective conductive additive in silicon anodes. Electrochimica Acta, 2021, 399, 139375.	2.6	2
306	One-step synthesis of interface-coupled Si@SiOX@C from whole rice-husks for high-performance lithium storage. Electrochimica Acta, 2022, 402, 139556.	2.6	25
307	Transition metal catalysis in lithium-ion batteries studied by operando magnetometry. Chinese Journal of Catalysis, 2022, 43, 158-166.	6.9	8
308	Facile fabrication of hierarchical porous silicon/N-doped carbon composites via biomass fermentation treatment for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2022, 898, 162781.	2.8	10

#	Article	IF	CITATIONS
309	Anode Material Options Toward 500 Wh kg ^{â^'1} Lithium–Sulfur Batteries. Advanced Science, 2022, 9, e2103910.	5.6	63
310	A Review of Performance Attenuation and Mitigation Strategies of Lithiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, 2107769.	7.8	43
311	Nitrogen Plasma-Assisted Functionalization of Silicon/Graphite Anodes to Enable Fast Kinetics. ACS Applied Materials & Interfaces, 2022, 14, 5237-5246.	4.0	14
312	Ultrasmall metal (Fe, Co, Ni) nanoparticles strengthen silicon oxide embedded nitrogen-doped carbon superstructures for long-cycle-life Li-ion-battery anodes. Chemical Engineering Journal, 2022, 432, 134413.	6.6	23
313	Toward Highly Stable Anode for Secondary Batteries: Employing TiO ₂ Shell as Elastic Buffering Marix for FeO <i>_x</i> Nanoparticles. Small, 2022, 18, e2105713.	5.2	11
314	Sustainable silicon anodes facilitated via a doubleâ€layer interface engineering: Inner SiO _{<i>x</i>} combined with outer nitrogen and boron coâ€doped carbon. , 2022, 4, 399-410.		35
315	Yolk–Shell Antimony/Carbon: Scalable Synthesis and Structural Stability Study in Sodium Ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	14
316	Ultrathin Si Nanosheets Dispersed in Graphene Matrix Enable Stable Interface and High Rate Capability of Anode for Lithiumâ€ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	67
317	Extraction of silicon in the form of nanoparticles and nanorods from coal fly ash. , 2022, , 451-474.		1
318	One-Step, Vacuum-Assisted Construction of Micrometer-Sized Nanoporous Silicon Confined by Uniform Two-Dimensional N-Doped Carbon toward Advanced Li Ion and MXene-Based Li Metal Batteries. ACS Nano, 2022, 16, 4560-4577.	7.3	75
319	Robust interphase on both anode and cathode enables stable aqueous lithium-ion battery with coulombic efficiency exceeding 99%. Energy Storage Materials, 2022, 46, 577-582.	9.5	14
320	Recent progress and future perspective on practical silicon anode-based lithium ion batteries. Energy Storage Materials, 2022, 46, 482-502.	9.5	206
321	Micrometer‧ized SiMg <i>_y</i> O <i>_x</i> with Stable Internal Structure Evolution for Highâ€Performance Liâ€Ion Battery Anodes. Advanced Materials, 2022, 34, e2200672.	11.1	83
322	To achieve controlled specific capacities of silicon-based anodes for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2022, 905, 164189.	2.8	14
323	In situ TEM visualization of LiF nanosheet formation on the cathode-electrolyte interphase (CEI) in liquid-electrolyte lithium-ion batteries. Matter, 2022, 5, 1235-1250.	5.0	56
324	Influence of Additives on the Electrochemical and Interfacial Properties of SiO _{<i>x</i>} -Based Anode Materials for Lithium–Sulfur Batteries. Langmuir, 2022, 38, 2423-2434.	1.6	6
325	Focusing on the Subsequent Coulombic Efficiencies of SiO _{<i>x</i>} : Initial High-Temperature Charge after Over-Capacity Prelithiation for High-Efficiency SiO _{<i>x</i>} -Based Full-Cell Battery. ACS Applied Materials & Interfaces, 2022, 14, 14284-14292.	4.0	22
326	Metallurgy of aluminum-inspired formation of aluminosilicate-coated nanosilicon for lithium-ion battery anode. Rare Metals, 2022, 41, 1880-1888.	3.6	12

#	Article	IF	CITATIONS
327	In Situ Growth of W2C/WS2 with Carbon-Nanotube Networks for Lithium-Ion Storage. Nanomaterials, 2022, 12, 1003.	1.9	8
328	<i>In Situ</i> Construction of a Multifunctional Interface Regulator with Amino-Modified Conjugated Diene toward High-Rate and Long-Cycle Silicon Anodes. ACS Applied Materials & Interfaces, 2022, 14, 13317-13325.	4.0	19
329	Progress and perspectives on two-dimensional silicon anodes for lithium-ion batteries. ChemPhysMater, 2023, 2, 1-19.	1.4	5
330	Pre-Lithiation Strategies and Energy Density Theory of Lithium-Ion and Beyond Lithium-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 040532.	1.3	7
331	Mitigating irreversible capacity loss for higher-energy lithium batteries. Energy Storage Materials, 2022, 48, 44-73.	9.5	25
332	Restructuring NiO to LiNiO2: Ultrastable and reversible anodes for lithium-ion batteries. Chemical Engineering Journal, 2022, 437, 135292.	6.6	14
333	Mesoporous nitrogen-doped carbon MnO2 multichannel nanotubes with high performance for Li-ion batteries. Nano Energy, 2022, 97, 107235.	8.2	24
334	Alternative Layered-Structure SiCu Composite Anodes for High-Capacity Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 740-749.	2.5	9
335	Fast-Charging Anode Materials and Novel Nanocomposite Design of Rice Husk-Derived SiO ₂ and Sn Nanoparticles Self-Assembled on TiO ₂ (B) Nanorods for Lithium-Ion Storage Applications. ACS Omega, 2022, 7, 1357-1367.	1.6	9
336	Si@C/TiO ₂ @C/Hollow-C Nanocomposite as a Lithium-Ion Battery Anode Produced by Refining Silicon and Ti–6Al–4V Residuals. ACS Applied Energy Materials, 2021, 4, 14526-14536.	2.5	6
337	Fundamental Understanding and Construction of Solid tate Liâ^'Air Batteries. Small Science, 2022, 2, .	5.8	17
338	New insight into effects of higher upper cutoff voltage on the cycling performance of graphiteâ€SiO _x /Liâ€rich layered oxide pouchâ€type batteries. Energy Technology, 0, , .	1.8	0
339	Battery degradation prediction against uncertain future conditions with recurrent neural network enabled deep learning. Energy Storage Materials, 2022, 50, 139-151.	9.5	61
340	Recent Research Progress of Siliconâ€Based Anode Materials for Lithiumâ€ion Batteries. ChemistrySelect, 2022, 7, .	0.7	15
341	Dynamics of Polymer Nanocapsule Buckling and Collapse Revealed by <i>In Situ</i> Liquid-Phase TEM. Langmuir, 2022, 38, 7168-7178.	1.6	5
342	An interconnected and scalable hollow Si-C nanospheres/graphite composite for high-performance lithium-ion batteries. Journal of Colloid and Interface Science, 2022, 624, 555-563.	5.0	29
343	Strategy for enhanced performance of silicon nanoparticle anodes for lithium-ion batteries. RSC Advances, 2022, 12, 17889-17897.	1.7	4
344	Synergistic protection of Si anode based on multi-dimensional graphitic carbon skeletons. Nano Research, 2022, 15, 8146-8155.	5.8	15

#	Article	IF	CITATIONS
345	Highly Densified Fractureâ€Free Siliconâ€Based Electrode for High Energy Lithiumâ€Ion Batteries. Batteries and Supercaps, 2022, 5, .	2.4	6
346	Integrating SEI into Layered Conductive Polymer Coatings for Ultrastable Silicon Anodes. Advanced Materials, 2022, 34, .	11.1	70
347	<scp>Highâ€Energy</scp> Lithiumâ€Ion Batteries: Recent Progress and a Promising Future in Applications. Energy and Environmental Materials, 2023, 6, .	7.3	77
348	Alloyâ€Type Anodes for Highâ€Performance Rechargeable Batteries. Angewandte Chemie, 2022, 134, .	1.6	2
349	Chemomechanics of Rechargeable Batteries: Status, Theories, and Perspectives. Chemical Reviews, 2022, 122, 13043-13107.	23.0	59
350	Alloyâ€Type Anodes for Highâ€Performance Rechargeable Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	61
351	Fabrication and electrochemical performance of Si-based porous electrodes for thin-film lithium-ion batteries. Electrochimica Acta, 2022, 428, 140909.	2.6	1
352	Strengthening the Interfacial Stability of the Silicon-Based Electrode via an Electrolyte Additive─Allyl Phenyl Sulfone. ACS Applied Materials & Interfaces, 2022, 14, 38281-38290.	4.0	13
353	A Webâ€like Threeâ€dimensional Binder for Silicon Anode in Lithiumâ€ion Batteries. Energy and Environmental Materials, 2024, 7, .	7.3	4
354	Designer Cathode Additive for Stable Interphases on High-Energy Anodes. Journal of the American Chemical Society, 2022, 144, 15100-15110.	6.6	12
355	In-Situ Assembled Multilevel Si-Based Anode with Enhanced Synergistic Coupling for Long-Cycling Lithium-Ion Battery. SSRN Electronic Journal, 0, , .	0.4	0
356	Confining MoS ₂ nanodots in compact layered graphene blocks for high volumetric capacity, fast, and stable sodium storage. Journal of Materials Chemistry A, 2022, 10, 22638-22644.	5.2	6
357	Leveraging Advanced X-ray Imaging for Sustainable Battery Design. ACS Energy Letters, 2022, 7, 3151-3176.	8.8	10
358	Highly aligned lithiophilic electrospun nanofiber membrane for the multiscale suppression of Li dendrite growth. EScience, 2022, 2, 655-665.	25.0	25
359	Novel two-dimensional SiC2 monolayer with potential as a superior anode for sodium-ion batteries. Journal of Materials Science, 2022, 57, 18406-18416.	1.7	1
360	Graphene oxide microrolls as high- content Si carriers boosting Li-ion storage. Chemical Engineering Journal, 2023, 452, 139586.	6.6	10
361	Optimization of graphite/silicon-based composite electrodes for lithium ion batteries regarding the interdependencies of active and inactive materials. Journal of Power Sources, 2022, 552, 232252.	4.0	5
362	High-rate formation protocol enables a high ionic conductivity SEI for sodium-ion batteries. Journal of Power Sources, 2023, 554, 232298.	4.0	10

#	Article	IF	CITATIONS
363	Interfacial fluoride engineering enabled robust LiF-rich solid electrolyte interphase to reduce active lithium loss in rechargeable lithium battery. Chemical Engineering Journal, 2023, 454, 140397.	6.6	6
364	Micron SiOx encapsulated into amorphous B, N Co-doped carbon nanotube network for high-capacity and long-durable Li-ion half/full batteries. Chemical Engineering Journal, 2023, 455, 140820.	6.6	5
365	Reevaluating Flexible Lithium-Ion Batteries from the Insights of Mechanics and Electrochemistry. Electrochemical Energy Reviews, 2022, 5, .	13.1	11
367	Heterogeneous isomorphism hollow SiGe nanospheres with porous carbon reinforcing for superior electrochemical lithium storage. Journal of Energy Chemistry, 2023, 79, 222-231.	7.1	8
368	Dual-Salt Localized High-Concentration Electrolyte for Long Cycle Life Silicon-Based Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2023, 15, 3586-3598.	4.0	12
369	Hierarchical Nanoflowerâ€ike MoO ₂ @C Composites as Anode for Stable Liâ€ion Storage. Energy Technology, 0, , 2201283.	1.8	0
370	Novel-designed cobweb-like binder by "four-in-one―strategy for high performance SiO anode. Chemical Engineering Journal, 2023, 458, 141387.	6.6	1
371	Prefabrication of "Trinity―Functional Binary Layers on a Silicon Surface to Develop High-Performance Lithium-Ion Batteries. ACS Nano, 2023, 17, 2669-2678.	7.3	11
372	Modified preparation of Si@C@TiO ₂ porous microspheres as anodes for high-performance lithium-ion batteries. Dalton Transactions, 2023, 52, 2463-2471.	1.6	7
373	Ionic liquids self-assembly preparation of binder-free composites anode with well-dispersed Si nanoparticles on CNTs networks for lithium-ion batteries. Applied Surface Science, 2023, 618, 156655.	3.1	10
374	A self-sacrificing strategy to fabricate a fluorine-modified integrated silicon/carbon anode for high-performance lithium-ion batteries. New Journal of Chemistry, 2023, 47, 6191-6200.	1.4	1
375	Cycle-stable Si-based composite anode for lithium-ion batteries enabled by the synergetic combination of mixed lithium phosphates and void-preserving F-doped carbon. Materials Today Nano, 2023, 22, 100322.	2.3	7
376	Exploration and Application of Selfâ€Healing Strategies in Lithium Batteries. Advanced Functional Materials, 2023, 33, .	7.8	13
377	Multi-chain hydrophobic polymer protective layer with high elasticity for stable lithium metal anode. Journal of Materials Science, 2023, 58, 2713-2720.	1.7	1
378	Link between anisotropic electrochemistry and surface transformations at singleâ€crystal silicon electrodes: Implications for lithiumâ€ion batteries. Natural Sciences, 2023, 3, .	1.0	3
379	Dendrimer Based Binders Enable Stable Operation of Silicon Microparticle Anodes in Lithiumâ€ion Batteries. Small, 2023, 19, .	5.2	4
380	TiO2-Coated Silicon Nanoparticle Core-Shell Structure for High-Capacity Lithium-Ion Battery Anode Materials. Nanomaterials, 2023, 13, 1144.	1.9	3
381	A hierarchical SiO2-microsphere-graphene host enabling superior long-term cycling for lithium-metal anodes. Journal of Alloys and Compounds, 2023, 955, 169949.	2.8	2

	CITATION R	CITATION REPORT	
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411	Exploring More Functions in Binders for Lithium Batteries. Electrochemical Energy Reviews, 2023, 6, .	13.1	3
419	Advancing sustainable end-of-life strategies for photovoltaic modules with silicon reclamation for lithium-ion battery anodes. Green Chemistry, 2024, 26, 3688-3697.	4.6	Ο