

Stable cycling of double-walled silicon nanotube battery solidâ€“electrolyte interphase control

Nature Nanotechnology

7, 310-315

DOI: [10.1038/nnano.2012.35](https://doi.org/10.1038/nnano.2012.35)

Citation Report

#	ARTICLE	IF	CITATIONS
5	Electrochemically Controlled Nanopore and Crystal Structure Evolution in Zinc Oxide Nanorods. Journal of the Electrochemical Society, 2012, 159, A2143-A2147.	1.3	9
6	Binder-Free and Carbon-Free Nanoparticle Batteries: A Method for Nanoparticle Electrodes without Polymeric Binders or Carbon Black. Nano Letters, 2012, 12, 5122-5130.	4.5	128
7	Anisotropic Volume Expansion of Crystalline Silicon during Electrochemical Lithium Insertion: An Atomic Level Rationale. Nano Letters, 2012, 12, 5342-5347.	4.5	116
8	Three-Dimensionally Engineered Porous Silicon Electrodes for Li Ion Batteries. Nano Letters, 2012, 12, 6060-6065.	4.5	143
9	Tuning luminescence properties of silicon nanocrystals by lithium doping. Journal of Applied Physics, 2012, 112, .	1.1	16
10	Spin-coated silicon nanoparticle/graphene electrode as a binder-free anode for high-performance lithium-ion batteries. Nano Research, 2012, 5, 845-853.	5.8	117
11	Diffusion of Lithium in Bulk Amorphous Silicon: A Theoretical Study. Journal of Physical Chemistry C, 2012, 116, 22212-22216.	1.5	156
12	Reaction Front Evolution during Electrochemical Lithiation of Crystalline Silicon Nanopillars. Israel Journal of Chemistry, 2012, 52, 1118-1123.	1.0	18
13	Self-supporting Co ₃ O ₄ with lemongrass-like morphology as a high-performance anode material for lithium ion batteries. Journal of Materials Chemistry, 2012, 22, 17429.	6.7	75
14	Roll up nanowire battery from silicon chips. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15168-15173.	3.3	118
15	Significantly increased cycling performance of novel self-matrix NiSnO ₃ anode in lithium ion battery application. RSC Advances, 2012, 2, 6150.	1.7	43
16	Layered Titanium Disilicide Stabilized by Oxide Coating for Highly Reversible Lithium Insertion and Extraction. ACS Nano, 2012, 6, 8114-8119.	7.3	9
17	Reactive Flow in Silicon Electrodes Assisted by the Insertion of Lithium. Nano Letters, 2012, 12, 4397-4403.	4.5	160
18	In Situ TEM Study of Lithiation Behavior of Silicon Nanoparticles Attached to and Embedded in a Carbon Matrix. ACS Nano, 2012, 6, 8439-8447.	7.3	321
19	Studying the Kinetics of Crystalline Silicon Nanoparticle Lithiation with In Situ Transmission Electron Microscopy. Advanced Materials, 2012, 24, 6034-6041.	11.1	529
20	High power rechargeable batteries. Current Opinion in Solid State and Materials Science, 2012, 16, 186-198.	5.6	176
21	Conductive Rigid Skeleton Supported Silicon as High-Performance Li-Ion Battery Anodes. Nano Letters, 2012, 12, 4124-4130.	4.5	160
22	Superior long-term cycling stability of SnO ₂ nanoparticle/multiwalled carbon nanotube heterostructured electrodes for Li-ion rechargeable batteries. Nanotechnology, 2012, 23, 465402.	1.3	22

#	ARTICLE	IF	CITATIONS
23	Alumina-coated silicon-based nanowire arrays for high quality Li-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 24618.	6.7	116
24	The Role of Nanotechnology in Automotive Industries. , 0, , .		17
25	Influences of Gold, Binder and Electrolyte on Silicon Nanowire Performance in Li-Ion Batteries. Journal of Physical Chemistry C, 2012, 116, 18079-18086.	1.5	79
26	A Yolk-Shell Design for Stabilized and Scalable Li-Ion Battery Alloy Anodes. Nano Letters, 2012, 12, 3315-3321.	4.5	1,587
27	Highly reversible and ultra-fast lithium storage in mesoporous graphene-based TiO ₂ /SnO ₂ hybrid nanosheets. Energy and Environmental Science, 2013, 6, 2447.	15.6	161
28	Li diffusion through doped and defected graphene. Physical Chemistry Chemical Physics, 2013, 15, 15128.	1.3	86
29	Silicon nanowires for Li-based battery anodes: a review. Journal of Materials Chemistry A, 2013, 1, 9566.	5.2	311
30	Hollow Porous SiO ₂ Nanocubes Towards High-performance Anodes for Lithium-ion Batteries. Scientific Reports, 2013, 3, 1568.	1.6	344
31	High-performance Si anodes with a highly conductive and thermally stable titanium silicide coating layer. RSC Advances, 2013, 3, 2538.	1.7	41
32	Managing voids of Si anodes in lithium ion batteries. Nanoscale, 2013, 5, 8864.	2.8	52
33	Aligned Carbon Nanotube@Silicon Sheets: A Novel Nanoarchitecture for Flexible Lithium Ion Battery Electrodes. Advanced Materials, 2013, 25, 5109-5114.	11.1	232
34	Graphene encapsulated and SiC reinforced silicon nanowires as an anode material for lithium ion batteries. Nanoscale, 2013, 5, 8689.	2.8	56
35	Graphene-Encapsulated Si on Ultrathin Graphite Foam as Anode for High Capacity Lithium-Ion Batteries. Advanced Materials, 2013, 25, 4673-4677.	11.1	320
36	25th Anniversary Article: Understanding the Lithiation of Silicon and Other Alloying Anodes for Lithium-Ion Batteries. Advanced Materials, 2013, 25, 4966-4985.	11.1	1,233
37	Yolk-Shell, Hollow, and Single-Crystalline ZnCo ₂ O ₄ Powders: Preparation Using a Simple One-Pot Process and Application in Lithium-Ion Batteries. ChemSusChem, 2013, 6, 2111-2116.	3.6	133
38	Surface effects on the structure and lithium behavior in lithiated silicon: A first principles study. Surface Science, 2013, 612, 16-23.	0.8	30
39	Facile Synthesis of Ultrathin ZnO Nanotubes with Well-Organized Hexagonal Nanowalls and Sealed Layouts: Applications for Lithium Ion Battery Anodes. Journal of Physical Chemistry C, 2013, 117, 1037-1043.	1.5	95
40	Facile fabrication of Si mesoporous nanowires for high-capacity and long-life lithium storage. Nanoscale, 2013, 5, 10623.	2.8	28

#	ARTICLE	IF	CITATIONS
41	Large-Area Free-Standing Ultrathin Single-Crystal Silicon as Processable Materials. <i>Nano Letters</i> , 2013, 13, 4393-4398.	4.5	152
42	Self-Assembled Fe ₃ O ₄ Nanoparticle Clusters as High-Performance Anodes for Lithium Ion Batteries via Geometric Confinement. <i>Nano Letters</i> , 2013, 13, 4249-4256.	4.5	334
43	Silicon-containing anodes with low accumulated irreversible capacity for lithium-ion batteries. <i>Russian Journal of Applied Chemistry</i> , 2013, 86, 703-712.	0.1	4
44	Electrodeposited three-dimensional Ni@Si nanocable arrays as high performance anodes for lithium ion batteries. <i>Nanoscale</i> , 2013, 5, 10376.	2.8	38
45	Strain-Driven Formation of Multilayer Graphene/GeO ₂ Tubular Nanostructures as High-Capacity and Very Long-Life Anodes for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2013, 3, 1269-1274.	10.2	67
46	A current-sensor electrochemical device for accurate gas diffusivity measurement in fuel cells. <i>Journal of Power Sources</i> , 2013, 232, 93-98.	4.0	9
47	Organic Li ₄ C ₈ H ₂ O ₆ Nanosheets for Lithium-Ion Batteries. <i>Nano Letters</i> , 2013, 13, 4404-4409.	4.5	352
48	Mesoporous Nano-Si Anode for Li-Ion Batteries Produced by Magnesium-Mechanochemical Reduction of Amorphous SiO ₂ . <i>Energy Technology</i> , 2013, 1, 327-331.	1.8	16
49	Sn@SnOx/C nanocomposites prepared by oxygen plasma-assisted milling as cyclic durable anodes for lithium ion batteries. <i>Journal of Power Sources</i> , 2013, 242, 114-121.	4.0	94
50	Improving the cyclability and rate capability of carbon nanofiber anodes through in-site generation of SiOx-rich overlayers. <i>Electrochimica Acta</i> , 2013, 108, 196-202.	2.6	15
51	2-(triphenylphosphoranylidene) succinic anhydride as a new electrolyte additive to improve high temperature cycle performance of LiMn2O4/graphite Li-ion batteries. <i>Electrochimica Acta</i> , 2013, 102, 97-103.	2.6	20
52	Rice husks as a sustainable source of nanostructured silicon for high performance Li-ion battery anodes. <i>Scientific Reports</i> , 2013, 3, 1919.	1.6	409
53	Probing the Failure Mechanism of SnO ₂ Nanowires for Sodium-Ion Batteries. <i>Nano Letters</i> , 2013, 13, 5203-5211.	4.5	270
54	From nanoscience to solutions in electrochemical energy storage. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013, 31, .	0.9	16
55	In Situ Formed Si Nanoparticle Network with Micron-Sized Si Particles for Lithium-Ion Battery Anodes. <i>Nano Letters</i> , 2013, 13, 5397-5402.	4.5	83
56	Leaf-like Graphene Oxide with a Carbon Nanotube Midrib and Its Application in Energy Storage Devices. <i>Advanced Functional Materials</i> , 2013, 23, 4840-4846.	7.8	11
57	Tailoring Lithiation Behavior by Interface and Bandgap Engineering at the Nanoscale. <i>Nano Letters</i> , 2013, 13, 4876-4883.	4.5	51
58	Hierarchical Hollow Spheres of Fe ₂ O ₃ @Polyaniline for Lithium Ion Battery Anodes. <i>Advanced Materials</i> , 2013, 25, 6250-6255.	11.1	311

#	ARTICLE	IF	CITATIONS
59	High Volumetric Capacity Silicon-Based Lithium Battery Anodes by Nanoscale System Engineering. Nano Letters, 2013, 13, 5578-5584.	4.5	170
60	Demonstration of an Electrochemical Liquid Cell for Operando Transmission Electron Microscopy Observation of the Lithiation/Delithiation Behavior of Si Nanowire Battery Anodes. Nano Letters, 2013, 13, 6106-6112.	4.5	265
61	Enhanced Electrochemical Performance of Three-Dimensional Ni/Si Nanocable Arrays as a Li-Ion Battery Anode by Nitrogen Doping in the Si Shell. ACS Applied Materials & Interfaces, 2013, 5, 12190-12196.	4.0	11
62	Self-healing chemistry enables the stable operation of silicon microparticle anodes for high-energy lithium-ion batteries. Nature Chemistry, 2013, 5, 1042-1048.	6.6	1,031
63	Enhanced Lithium Ion Battery Cycling of Silicon Nanowire Anodes by Template Growth to Eliminate Silicon Underlayer Islands. Nano Letters, 2013, 13, 5740-5747.	4.5	105
64	Covalent Bond Glued Sulfur Nanosheet-Based Cathode Integration for Long-Cycle-Life Li-S Batteries. Nano Letters, 2013, 13, 6244-6250.	4.5	99
65	Nanoscroll Buffered Hybrid Nanostructural VO ₂ (B) Cathodes for High-Rate and Long-Life Lithium Storage. Advanced Materials, 2013, 25, 2969-2973.	11.1	207
66	Structural transformation of macroporous silicon anodes as a result of cyclic lithiation processes. Semiconductors, 2013, 47, 1275-1281.	0.2	6
67	Processing of Silicon Anodes by Aerosol Jet Printing. ECS Transactions, 2013, 45, 29-34.	0.3	0
68	Interface Chemistry Guided Long-Cycle-Life Li-S Battery. Nano Letters, 2013, 13, 4206-4211.	4.5	125
69	Supercritically exfoliated ultrathin vanadium pentoxide nanosheets with high rate capability for lithium batteries. Physical Chemistry Chemical Physics, 2013, 15, 16828.	1.3	74
70	Effect of polyimide binder on electrochemical characteristics of surface-modified silicon anode for lithium ion batteries. Journal of Power Sources, 2013, 244, 521-526.	4.0	142
71	Mesoporous silicon@carbon composites via nanoparticle-seeded dispersion polymerization and their application as lithium-ion battery anode materials. Journal of Materials Chemistry A, 2013, 1, 5709.	5.2	24
72	Effect of CVD carbon coatings on Si@CNF composite as anode for lithium-ion batteries. Nano Energy, 2013, 2, 976-986.	8.2	129
73	Fabrication and electrochemical performance of Sn-Based nanocomposite fibers via electrospinning. Electronic Materials Letters, 2013, 9, 775-777.	1.0	4
74	Effect of oxide layer thickness to nano-Si anode for Li-ion batteries. RSC Advances, 2013, 3, 9408.	1.7	34
75	Silicon nanowire lithium-ion battery anodes with ALD deposited TiN coatings demonstrate a major improvement in cycling performance. Journal of Materials Chemistry A, 2013, 1, 12850.	5.2	114
76	High-performance hollow sulfur nanostructured battery cathode through a scalable, room temperature, one-step, bottom-up approach. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7148-7153.	3.3	359

#	ARTICLE	IF	CITATIONS
77	ALD TiO ₂ coated silicon nanowires for lithium ion battery anodes with enhanced cycling stability and coulombic efficiency. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13646.	1.3	156
78	Template-free synthesized Ni nanofoams as nanostructured current collectors for high-performance electrodes in lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 10002.	5.2	36
79	A PEO-assisted electrospun silicon-graphene composite as an anode material for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9019.	5.2	69
80	A higher-order beam model for tubes. <i>European Journal of Mechanics, A/Solids</i> , 2013, 38, 12-19.	2.1	72
81	Carbon coated hollow Na ₂ FePO ₄ F spheres for Na-ion battery cathodes. <i>Journal of Power Sources</i> , 2013, 223, 62-67.	4.0	134
82	Micro-sized Si-C Composite with Interconnected Nanoscale Building Blocks as High-Performance Anodes for Practical Application in Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2013, 3, 295-300.	10.2	412
83	Natural gas storage on silicon, carbon, and silicon carbide nanotubes: a combined quantum mechanics and grand canonical Monte Carlo simulation study. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	12
84	A Nickel-Gold Bilayer Catalyst Engineering Technique for Self-Assembled Growth of Highly Ordered Silicon Nanotubes (SiNT). <i>Nano Letters</i> , 2013, 13, 889-897.	4.5	27
85	One-dimensional/two-dimensional hybridization for self-supported binder-free silicon-based lithium ion battery anodes. <i>Nanoscale</i> , 2013, 5, 1470.	2.8	80
86	Silicon-Graphene Composite Anodes for High-Energy Lithium Batteries. <i>Energy Technology</i> , 2013, 1, 77-84.	1.8	18
87	Hierarchical SiO _x nanoconifers for Li-ion battery anodes with structural stability and kinetic enhancement. <i>Journal of Power Sources</i> , 2013, 229, 229-233.	4.0	56
88	A high-rate germanium-particle slurry cast Li-ion anode with high Coulombic efficiency and long cycle life. <i>Journal of Power Sources</i> , 2013, 238, 123-136.	4.0	90
89	Preparation of porous SnO ₂ helical nanotubes and SnO ₂ sheets. <i>Materials Chemistry and Physics</i> , 2013, 140, 249-254.	2.0	13
90	Growth of nickel phosphide films as anodes for lithium-ion batteries: Based on a novel method for synthesis of nickel films using ionic liquids. <i>Electrochimica Acta</i> , 2013, 112, 212-220.	2.6	26
91	An Approach to Probe Solid Electrolyte Interface on Si Anode by ³¹ P MAS NMR. <i>ECS Electrochemistry Letters</i> , 2013, 2, A115-A117.	1.9	6
92	Effect of nitrogen on the electrochemical performance of core-shell structured Si/C nanocomposites as anode materials for Li-ion batteries. <i>Electrochimica Acta</i> , 2013, 89, 394-399.	2.6	57
93	In-situ observation of one silicon particle during the first charging. <i>Journal of Power Sources</i> , 2013, 243, 630-634.	4.0	36
94	Thin and flexible silicon anode based on integrated macroporous silicon film onto electrodeposited copper current collector. <i>Journal of Power Sources</i> , 2013, 242, 166-170.	4.0	29

#	ARTICLE	IF	CITATIONS
95	Elastic moduli of polycrystalline Li ₁₅ Si ₄ produced in lithium ion batteries. <i>Journal of Power Sources</i> , 2013, 242, 732-735.	4.0	36
96	Improving high-capacity Li _{1.2} Ni _{0.15} Mn _{0.55} Co _{0.1} O ₂ -based lithium-ion cells by modifying the positive electrode with alumina. <i>Journal of Power Sources</i> , 2013, 233, 346-357.	4.0	139
98	Highly reversible lithium storage in Si (core)@hollow carbon nanofibers (sheath) nanocomposites. <i>Nanoscale</i> , 2013, 5, 2647.	2.8	60
99	Adaptable Silicon@Carbon Nanocables Sandwiched between Reduced Graphene Oxide Sheets as Lithium Ion Battery Anodes. <i>ACS Nano</i> , 2013, 7, 1437-1445.	7.3	392
100	Nanomaterials for energy conversion and storage. <i>Chemical Society Reviews</i> , 2013, 42, 3127.	18.7	1,356
101	Nanoporous silicon networks as anodes for lithium ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 440-443.	1.3	65
102	Template-free synthesis of mesoporous Co ₃ O ₄ with controlled morphologies for lithium ion batteries. <i>RSC Advances</i> , 2013, 3, 4212.	1.7	34
103	Spray Drying Method for Large-Scale and High-Performance Silicon Negative Electrodes in Li-Ion Batteries. <i>Nano Letters</i> , 2013, 13, 2092-2097.	4.5	237
104	Role of the LiPF ₆ Salt for the Long-Term Stability of Silicon Electrodes in Li-Ion Batteries @ A Photoelectron Spectroscopy Study. <i>Chemistry of Materials</i> , 2013, 25, 394-404.	3.2	241
105	Mussel-Inspired Adhesive Binders for High-Performance Silicon Nanoparticle Anodes in Lithium Ion Batteries. <i>Advanced Materials</i> , 2013, 25, 1571-1576.	11.1	532
106	Adsorption and Diffusion of Lithium on Layered Silicon for Li-Ion Storage. <i>Nano Letters</i> , 2013, 13, 2258-2263.	4.5	377
107	Lithium Transport through Nanosized Amorphous Silicon Layers. <i>Nano Letters</i> , 2013, 13, 1237-1244.	4.5	45
108	Interface Chemistry Engineering for Stable Cycling of Reduced GO/SnO ₂ Nanocomposites for Lithium Ion Battery. <i>Nano Letters</i> , 2013, 13, 1711-1716.	4.5	278
109	Thermodynamics of Electrochemical Lithium Storage. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4998-5026.	7.2	181
110	V ₂ O ₅ quantum dots/graphene hybrid nanocomposite with stable cyclability for advanced lithium batteries. <i>Nano Energy</i> , 2013, 2, 916-922.	8.2	76
111	Contact-Engineered and Void-Involved Silicon/Carbon Nanohybrids as Lithium Ion Battery Anodes. <i>Advanced Materials</i> , 2013, 25, 3560-3565.	11.1	227
112	Graphene@Network-Backboned Architectures for High-Performance Lithium Storage. <i>Advanced Materials</i> , 2013, 25, 3979-3984.	11.1	253
113	Preparation of 3D nanoporous copper-supported cuprous oxide for high-performance lithium ion battery anodes. <i>Nanoscale</i> , 2013, 5, 1917.	2.8	91

#	ARTICLE	IF	CITATIONS
114	In Situ TEM of Two-Phase Lithiation of Amorphous Silicon Nanospheres. <i>Nano Letters</i> , 2013, 13, 758-764.	4.5	680
115	Template-free bottom-up synthesis of yolk-shell vanadium oxide as high performance cathode for lithium ion batteries. <i>Chemical Communications</i> , 2013, 49, 1536.	2.2	58
116	Crab Shells as Sustainable Templates from Nature for Nanostructured Battery Electrodes. <i>Nano Letters</i> , 2013, 13, 3385-3390.	4.5	208
117	Naturally Rolled Up C/Si/C Trilayer Nanomembranes as Stable Anodes for Lithium Ion Batteries with Remarkable Cycling Performance. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 2326-2330.	7.2	181
118	Tin Anode for Sodium-Ion Batteries Using Natural Wood Fiber as a Mechanical Buffer and Electrolyte Reservoir. <i>Nano Letters</i> , 2013, 13, 3093-3100.	4.5	556
119	Critical Thickness of SiO ₂ Coating Layer on Core@Shell Bulk@Nanowire Si Anode Materials for Li-ion Batteries. <i>Advanced Materials</i> , 2013, 25, 4498-4503.	11.1	231
120	Improved Performances of Nanosilicon Electrodes Using the Salt LiFSI: A Photoelectron Spectroscopy Study. <i>Journal of the American Chemical Society</i> , 2013, 135, 9829-9842.	6.6	275
121	Concentration-Dependent Ordering of Lithiated Amorphous TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 3834-3845.	1.5	18
122	A photo-cross-linkable polymeric binder for silicon anodes in lithium ion batteries. <i>RSC Advances</i> , 2013, 3, 12625.	1.7	53
123	Rational Design of Anode Materials Based on Group IVA Elements (Si, Ge, and Sn) for Lithium Ion Batteries. <i>Chemistry - an Asian Journal</i> , 2013, 8, 1948-1958.	1.7	181
124	Lithium alloys and metal oxides as high-capacity anode materials for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2013, 575, 246-256.	2.8	233
125	Amorphous silicon nanotubes via galvanic displacement deposition. <i>Electrochemistry Communications</i> , 2013, 34, 134-137.	2.3	33
126	Synthesis of Amorphous FeOOH/Reduced Graphene Oxide Composite by Infrared Irradiation and Its Superior Lithium Storage Performance. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10145-10150.	4.0	52
127	A graphene-wrapped silver porous silicon composite with enhanced electrochemical performance for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13648.	5.2	74
128	Enhanced cycling performance of Si/C composite prepared by spray-drying as anode for Li-ion batteries. <i>Powder Technology</i> , 2013, 249, 105-109.	2.1	22
129	First-principles approaches to simulate lithiation in silicon electrodes. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2013, 21, 074001.	0.8	32
130	Recycling rice husks for high-capacity lithium battery anodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12229-12234.	3.3	256
131	Intertwined Network of Si/C Nanocables and Carbon Nanotubes as Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 6467-6472.	4.0	50

#	ARTICLE	IF	CITATIONS
132	Reduction Mechanisms of Ethylene Carbonate on Si Anodes of Lithium-Ion Batteries: Effects of Degree of Lithiation and Nature of Exposed Surface. ACS Applied Materials & Interfaces, 2013, 5, 13457-13465.	4.0	68
133	Morphological Evolution of Carbon Nanofibers Encapsulating SnCo Alloys and Its Effect on Growth of the Solid Electrolyte Interphase Layer. ACS Nano, 2013, 7, 7330-7341.	7.3	58
134	Si Encapsulating Hollow Carbon Electrodes via Electroless Etching for Lithium-Ion Batteries. Advanced Energy Materials, 2013, 3, 206-212.	10.2	113
135	Optimal Conditions for Fast Charging and Long Cycling Stability of Silicon Microwire Anodes for Lithium Ion Batteries, and Comparison with the Performance of Other Si Anode Concepts. Energies, 2013, 6, 5145-5156.	1.6	30
136	Anisotropic Compositional Expansion and Chemical Potential for Amorphous Lithiated Silicon under Stress Tensor. Scientific Reports, 2013, 3, 1615.	1.6	41
137	On Plastic Deformation and Fracture in Si Films during Electrochemical Lithiation/Delithiation Cycling. Journal of the Electrochemical Society, 2013, 160, A1885-A1893.	1.3	73
138	Directed Transport as a Route to Improved Performance in Micropore-Modified Encapsulated Multilayer Silicon Electrodes. Journal of the Electrochemical Society, 2013, 160, A1746-A1752.	1.3	1
139	Fe ₂ O ₃ Nanoparticles Wrapped in Multi-walled Carbon Nanotubes With Enhanced Lithium Storage Capability. Scientific Reports, 2013, 3, 3392.	1.6	96
140	Photoluminescence Studies of Li-Doped Si Nanocrystals. Nanomaterials and Nanotechnology, 2013, 3, 14.	1.2	0
142	Large-Scale Synthesis of Interconnected Si/SiO ₂ Nanowire Anodes for Rechargeable Lithium-Ion Batteries. ChemSusChem, 2013, 6, 1153-1157.	3.6	26
143	Influence of Silicon Nanoscale Building Blocks Size and Carbon Coating on the Performance of Micro-Sized Si-C Composite Li-Ion Anodes. Advanced Energy Materials, 2013, 3, 1507-1515.	10.2	169
144	Nano Dimensionality: A Way towards Better Li-Ion Storage. Nanoscience and Nanotechnology - Asia, 2013, 3, 21-35.	0.3	16
145	Si-Based Anode Materials for Li-Ion Batteries: A Mini Review. Nano-Micro Letters, 2014, 6, 347-358.	14.4	339
146	Silicon/carbon composite microspheres with hierarchical core-shell structure as anode for lithium ion batteries. Electrochemistry Communications, 2014, 49, 98-102.	2.3	52
147	Facile and Scalable Synthesis of Silicon-Based Nanocomposites with Slitlike Nanopores: A Solid-State Exfoliation Reaction Using Layered CaSi ₂ . Chemistry - an Asian Journal, 2014, 9, 3130-3135.	1.7	17
148	Structure Sensitivity in the Decomposition of Ethylene Carbonate on Si Anodes. ChemPhysChem, 2014, 15, 3950-3954.	1.0	11
149	Structured Carbon Nanotube/Silicon Nanoparticle Anode Architecture for High Performance Lithium-Ion Batteries. Materials Research Society Symposia Proceedings, 2014, 1643, 1.	0.1	0
150	Inorganic & organic materials for rechargeable Li batteries with multi-electron reaction. Science China Materials, 2014, 57, 42-58.	3.5	78

#	ARTICLE	IF	CITATIONS
151	Colloidal Nanocrystals of Lithiated Groupâ€¦14 Elements. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 14527-14532.	7.2	9
153	<i>In Situ</i> Study of Thermal Stability of Copper Oxide Nanowires at Anaerobic Environment. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-6.	1.5	7
154	Silicon-Encapsulated Hollow Carbon Nanofiber Networks as Binder-Free Anodes for Lithium Ion Battery. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-10.	1.5	12
155	Highâ€Capacity Anode Materials for Lithiumâ€Ion Batteries: Choice of Elements and Structures for Active Particles. <i>Particle and Particle Systems Characterization</i> , 2014, 31, 317-336.	1.2	583
156	Macroporous Fe ₃ O ₄ /Carbon Composite Microspheres with a Short Li ⁺ Diffusion Pathway for the Fast Charge/Discharge of Lithium Ion Batteries. <i>Chemistry - A European Journal</i> , 2014, 20, 11078-11083.	1.7	36
157	Multilayered Si Nanoparticle/Reduced Graphene Oxide Hybrid as a Highâ€Performance Lithiumâ€Ion Battery Anode. <i>Advanced Materials</i> , 2014, 26, 758-764.	11.1	387
158	Nanowires for High-Performance Li-Ion Battery Electrodes. <i>RSC Smart Materials</i> , 2014, , 363-399.	0.1	0
159	Pore Volume (Porosity) in Porous Silicon. , 2014, , 135-142.		2
160	Role of Surface Oxides in the Formation of Solidâ€Electrolyte Interphases at Silicon Electrodes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 21510-21524.	4.0	110
161	Systematic Molecularâ€Level Design of Binders Incorporating Meldrum's Acid for Silicon Anodes in Lithium Rechargeable Batteries. <i>Advanced Materials</i> , 2014, 26, 7979-7985.	11.1	155
162	Mechanical properties of Si _{1-x} thin films at different stages of electrochemical Li insertion. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 2650-2656.	0.8	13
163	<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.	7.3	99
164	Electrochemical characteristics of plasma-etched black silicon as anodes for Li-ion batteries. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, 061202.	0.9	8
165	Scalable Fracture-free SiOC Glass Coating for Robust Silicon Nanoparticle Anodes in Lithium Secondary Batteries. <i>Nano Letters</i> , 2014, 14, 7120-7125.	4.5	94
166	Nanostructured transition metal sulfides for lithium ion batteries: Progress and challenges. <i>Nano Today</i> , 2014, 9, 604-630.	6.2	545
167	Ultrahigh Rate Capabilities of Lithiumâ€Ion Batteries from 3D Ordered Hierarchically Porous Electrodes with Entrapped Active Nanoparticles Configuration. <i>Advanced Materials</i> , 2014, 26, 1296-1303.	11.1	138
168	Electrochemical Cycling of Sodiumâ€Filled Silicon Clathrate. <i>ChemElectroChem</i> , 2014, 1, 347-353.	1.7	29
169	A chemo-mechanical model of lithiation in silicon. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 70, 349-361.	2.3	181

#	ARTICLE	IF	CITATIONS
170	Electrochemically induced and orientation dependent crack propagation in single crystal silicon. <i>Journal of Power Sources</i> , 2014, 267, 739-743.	4.0	21
171	Improving the Energy Storage Performance of Graphene through Insertion of Pristine CNTs and Ordered Mesoporous Carbon Coating. <i>ChemElectroChem</i> , 2014, 1, 772-778.	1.7	43
172	Rigid bolaform surfactant templated mesoporous silicon nanofibers as anode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19855-19860.	5.2	18
173	Many-body effects in semiconducting single-wall silicon nanotubes. <i>Beilstein Journal of Nanotechnology</i> , 2014, 5, 19-25.	1.5	5
174	Synthesis of porous microspheres composed of graphitized carbon@amorphous silicon/carbon layers as high performance anode materials for Li-ion batteries. <i>RSC Advances</i> , 2014, 4, 55010-55015.	1.7	6
175	Facile synthesis of scalable pore-containing silicon/nitrogen-rich carbon composites from waste contact mass of organosilane industry as anode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20213-20220.	5.2	38
176	Investigation of Initial Lithiation of Silicon (100) Using Solid-State ⁷ Li NMR. <i>Journal of the Electrochemical Society</i> , 2014, 161, A915-A919.	1.3	4
177	Silicon-Based Nanomaterials for Lithium-Ion Batteries: A Review. <i>Advanced Energy Materials</i> , 2014, 4, 1300882.	10.2	1,250
178	New Insights in to the Lithium Storage Mechanism in Polymer Derived SiOC Anode Materials. <i>Electrochimica Acta</i> , 2014, 119, 78-85.	2.6	99
179	Si-Carbon Composite Nanofibers with Good scalability and Favorable Architecture for Highly Reversible Lithium Storage and Superb Kinetics. <i>Electrochimica Acta</i> , 2014, 118, 100-105.	2.6	8
180	High performance amorphous-Si@SiO ₂ /C composite anode materials for Li-ion batteries derived from ball-milling and in situ carbonization. <i>Journal of Power Sources</i> , 2014, 256, 190-199.	4.0	208
181	Coaxial electrospun Si/C@C core-shell composite nanofibers as binder-free anodes for lithium-ion batteries. <i>Solid State Ionics</i> , 2014, 258, 67-73.	1.3	37
182	Microstructural evolution induced by micro-cracking during fast lithiation of single-crystalline silicon. <i>Journal of Power Sources</i> , 2014, 265, 160-165.	4.0	38
183	Tuning three-dimensional TiO ₂ nanotube electrode to achieve high utilization of Ti substrate for lithium storage. <i>Electrochimica Acta</i> , 2014, 133, 570-577.	2.6	36
184	Fabrication of Sn film via magnetron sputtering towards understanding electrochemical behavior in lithium-ion battery application. <i>Electrochimica Acta</i> , 2014, 123, 144-150.	2.6	35
185	The electrochemical reaction of lithium with high-capacity dense sputtered carbon. <i>Carbon</i> , 2014, 74, 249-254.	5.4	12
186	Hierarchical nanowires for high-performance electrochemical energy storage. <i>Frontiers of Physics</i> , 2014, 9, 303-322.	2.4	20
187	Nanoflakes-Assembled Three-Dimensional Hollow Porous V ₂ O ₅ as Lithium Storage Cathodes with High-Rate Capacity. <i>Small</i> , 2014, 10, 3032-3037.	5.2	90

#	ARTICLE	IF	CITATIONS
188	Reduction Mechanism of Fluoroethylene Carbonate for Stable Solidâ€“Electrolyte Interphase Film on Silicon Anode. <i>ChemSusChem</i> , 2014, 7, 549-554.	3.6	126
189	New Siâ€“Oâ€“C composite film anode materials for LIB by electrodeposition. <i>Journal of Materials Chemistry A</i> , 2014, 2, 883-896.	5.2	34
190	A pomegranate-inspired nanoscale design for large-volume-change lithium battery anodes. <i>Nature Nanotechnology</i> , 2014, 9, 187-192.	15.6	2,109
191	Interface Chemistry Engineering of Proteinâ€“Directed SnO ₂ Nanocrystalâ€“Based Anode for Lithiumâ€“Ion Batteries with Improved Performance. <i>Small</i> , 2014, 10, 998-1007.	5.2	35
192	Nanomaterials for electrochemical energy storage. <i>Frontiers of Physics</i> , 2014, 9, 323-350.	2.4	86
193	Synthesis of porous CoFe ₂ O ₄ octahedral structures and studies on electrochemical Li storage behavior. <i>Electrochimica Acta</i> , 2014, 116, 164-169.	2.6	31
194	Porous silica and carbon derived materials from rice husk pyrolysis char. <i>Microporous and Mesoporous Materials</i> , 2014, 188, 46-76.	2.2	202
195	Mesoporous silicon: A new route to fabricate siliconâ€“based nanotubes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1525-1530.	0.8	6
196	Review on recent progress of nanostructured anode materials for Li-ion batteries. <i>Journal of Power Sources</i> , 2014, 257, 421-443.	4.0	1,794
197	From Si wafers to cheap and efficient Si electrodes for Li-ion batteries. <i>Journal of Power Sources</i> , 2014, 256, 32-36.	4.0	34
198	Silicon Decorated Cone Shaped Carbon Nanotube Clusters for Lithium Ion Battery Anodes. <i>Small</i> , 2014, 10, 3389-3396.	5.2	65
199	Controllable Synthesis of Hollow Si Anode for Longâ€“Cycleâ€“Life Lithiumâ€“Ion Batteries. <i>Advanced Materials</i> , 2014, 26, 4326-4332.	11.1	193
200	One-Dimensional Nanomaterials for Energy Applications. , 2014, , 75-120.		6
201	Production and Storage of Energy with One-Dimensional Semiconductor Nanostructures. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2014, 39, 109-153.	6.8	9
202	Siliconâ€“Rich Carbon Hybrid Nanofibers from Waterâ€“Based Spinning: The Synergy Between Silicon and Carbon for Liâ€“Ion Battery Anode Application. <i>ChemElectroChem</i> , 2014, 1, 220-226.	1.7	24
203	A Highâ€“Energy Liâ€“Ion Battery Using a Siliconâ€“Based Anode and a Nanoâ€“Structured Layered Composite Cathode. <i>Advanced Functional Materials</i> , 2014, 24, 3036-3042.	7.8	139
204	The influence of carrier density and doping type on lithium insertion and extraction processes at silicon surfaces. <i>Electrochimica Acta</i> , 2014, 135, 356-367.	2.6	26
205	Chemical Expansion: Implications for Electrochemical Energy Storage and Conversion Devices. <i>Annual Review of Materials Research</i> , 2014, 44, 205-239.	4.3	188

#	ARTICLE	IF	CITATIONS
206	The Effects of Different Core-Shell Structures on the Electrochemical Performances of Si-Ge Nanorod Arrays as Anodes for Micro-Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 5884-5890.	4.0	49
207	Controlled synthesis of yolk-mesoporous shell Si@SiO ₂ nanohybrid designed for high performance Li ion battery. <i>RSC Advances</i> , 2014, 4, 20814-20820.	1.7	32
208	Scalable Synthesis of Interconnected Porous Silicon/Carbon Composites by the Rochow Reaction as High-Performance Anodes of Lithium Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5165-5169.	7.2	175
209	Hierarchically Designed SiO _x /SiO _y Bilayer Nanomembranes as Stable Anodes for Lithium Ion Batteries. <i>Advanced Materials</i> , 2014, 26, 4527-4532.	11.1	141
210	A Three-Dimensionally Interconnected Carbon Nanotube-Conducting Polymer Hydrogel Network for High-Performance Flexible Battery Electrodes. <i>Advanced Energy Materials</i> , 2014, 4, 1400207.	10.2	280
211	Magnetic sputtered amorphous Si/C multilayer thin films as anode materials for lithium ion batteries. <i>Journal of Power Sources</i> , 2014, 247, 78-83.	4.0	64
212	Hydrogen Silsequioxane-Derived Si/SiO _x Nanospheres for High-Capacity Lithium Storage Materials. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 9608-9613.	4.0	93
213	Electrodes engineering of high power, long life and excellent cycling stability for rechargeable lithium batteries. <i>Nano Energy</i> , 2014, 3, 16-25.	8.2	18
214	Facile synthesis of Si nanoparticles using magnesium silicide reduction and its carbon composite as a high-performance anode for Li ion batteries. <i>Journal of Power Sources</i> , 2014, 252, 144-149.	4.0	44
215	N-doped graphitic self-encapsulation for high performance silicon anodes in lithium-ion batteries. <i>Energy and Environmental Science</i> , 2014, 7, 621-626.	15.6	137
216	High-purity iron pyrite (FeS ₂) nanowires as high-capacity nanostructured cathodes for lithium-ion batteries. <i>Nanoscale</i> , 2014, 6, 2112-2118.	2.8	149
217	Improving the performance of silicon anode in lithium-ion batteries by Cu ₂ O coating layer. <i>Journal of Applied Electrochemistry</i> , 2014, 44, 353-360.	1.5	14
218	Hyperbranched β -Cyclodextrin Polymer as an Effective Multidimensional Binder for Silicon Anodes in Lithium Rechargeable Batteries. <i>Nano Letters</i> , 2014, 14, 864-870.	4.5	277
219	3D Amorphous Silicon on Nanopillar Copper Electrodes as Anodes for High-Rate Lithium-Ion Batteries. <i>ACS Nano</i> , 2014, 8, 1907-1912.	7.3	96
220	Hydrogen storage on silicon, carbon, and silicon carbide nanotubes: A combined quantum mechanics and grand canonical Monte Carlo simulation study. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 1719-1731.	3.8	40
221	Micro-sized silicon-carbon composites composed of carbon-coated sub-10 nm Si primary particles as high-performance anode materials for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 1257-1262.	5.2	165
222	A silicon nanowire-reduced graphene oxide composite as a high-performance lithium ion battery anode material. <i>Nanoscale</i> , 2014, 6, 3353.	2.8	71
223	Hierarchical 3D mesoporous silicon@graphene nanoarchitectures for lithium ion batteries with superior performance. <i>Nano Research</i> , 2014, 7, 85-94.	5.8	163

#	ARTICLE	IF	CITATIONS
224	Enhanced cycling stability of silicon anode by in situ polymerization of poly(aniline-co-pyrrole). RSC Advances, 2014, 4, 54134-54139.	1.7	11
225	Diffusion-Induced Stresses in Transversely Isotropic Cylindrical Electrodes of Lithium-Ion Batteries. Journal of the Electrochemical Society, 2014, 161, A2243-A2249.	1.3	20
226	One-Nanometer Precision Control of Al ₂ O ₃ Nanoshells through a Solution-Based Synthesis Route. Angewandte Chemie - International Edition, 2014, 53, 12776-12780.	7.2	95
227	Unravelling the Correlation between the Aspect Ratio of Nanotubular Structures and Their Electrochemical Performance To Achieve High-Rate and Long-Life Lithium-Ion Batteries. Angewandte Chemie - International Edition, 2014, 53, 13488-13492.	7.2	172
228	Stable Cycling of Fe ₂ O ₃ Nanorice as an Anode through Electrochemical Porousness and the Solid-Electrolyte Interphase Thermolysis Approach. ChemPlusChem, 2014, 79, 143-150.	1.3	14
229	Alloy Negative Electrodes for Li-Ion Batteries. Chemical Reviews, 2014, 114, 11444-11502.	23.0	1,675
230	Pore Volume (Porosity) in Porous Silicon. , 2014, , 1-7.		0
231	One-Nanometer Precision Control of Al ₂ O ₃ Nanoshells through a Solution-Based Synthesis Route. Angewandte Chemie, 2014, 126, 12990-12994.	1.6	18
232	Metallic BSi ₃ Silicene: A Promising High Capacity Anode Material for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 25836-25843.	1.5	62
233	A Rapid, Solvent-Free Protocol for the Synthesis of Germanium Nanowire Lithium-Ion Anodes with a Long Cycle Life and High Rate Capability. ACS Applied Materials & Interfaces, 2014, 6, 18800-18807.	4.0	50
234	Novel mesoporous Si@C microspheres as anodes for lithium-ion batteries. Physical Chemistry Chemical Physics, 2014, 16, 4135.	1.3	87
235	Nanocavity-engineered Si/multi-functional carbon nanofiber composite anodes with exceptional high-rate capacities. Journal of Materials Chemistry A, 2014, 2, 17944-17951.	5.2	42
236	Microemulsion-based synthesis and electrochemical evaluation of different nanostructures of LiCoO ₂ prepared through sacrificial nanowire templates. Nanoscale, 2014, 6, 860-866.	2.8	21
237	Electrochemical Nanowire Devices for Energy Storage. IEEE Nanotechnology Magazine, 2014, 13, 10-15.	1.1	9
238	Nanofibrous silicon/carbon composite sheet derived from cellulose substance as free-standing lithium-ion battery anodes. RSC Advances, 2014, 4, 33981-33985.	1.7	24
239	Enhancement of electrochemical performance of silicon nanowires by homostructured interface used as anode materials for lithium ion batteries. RSC Advances, 2014, 4, 57430-57435.	1.7	7
240	A facile and inexpensive approach to improve the performance of silicon film as an anode for lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 14817.	5.2	12
241	Graphene wrapping as a protective clamping layer anchored to carbon nanofibers encapsulating Si nanoparticles for a Li-ion battery anode. Nanoscale, 2014, 6, 12718-12726.	2.8	47

#	ARTICLE	IF	CITATIONS
242	A unique hollow Li ₃ VO ₄ /carbon nanotube composite anode for high rate long-life lithium-ion batteries. <i>Nanoscale</i> , 2014, 6, 11072-11077.	2.8	96
243	Engineered Si Electrode Nanoarchitecture: A Scalable Postfabrication Treatment for the Production of Next-Generation Li-Ion Batteries. <i>Nano Letters</i> , 2014, 14, 277-283.	4.5	116
244	A facile synthesis of a novel mesoporous Ge@C sphere anode with stable and high capacity for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 17107-17114.	5.2	180
245	Low temperature chemical reduction of fusional sodium metasilicate nonahydrate into a honeycomb porous silicon nanostructure. <i>Chemical Communications</i> , 2014, 50, 6856.	2.2	25
246	Hollow nano silicon prepared by a controlled template direction and magnesiothermic reduction reaction as anode for lithium ion batteries. <i>New Journal of Chemistry</i> , 2014, 38, 4177.	1.4	9
247	Exceptional electrochemical performance of porous TiO ₂ @carbon nanofibers for lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3875-3880.	5.2	71
248	Si-based nanocomposites derived from layered CaSi ₂ : influence of synthesis conditions on the composition and anode performance in Li ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 12501-12506.	5.2	23
249	Highly porous structure strategy to improve the SnO ₂ electrode performance for lithium-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4115.	1.3	47
250	Mesoporous composite cathode materials prepared from inverse micelle structures for high performance lithium ion batteries. <i>RSC Advances</i> , 2014, 4, 11598.	1.7	13
251	Mesoporous carbon/silicon composite anodes with enhanced performance for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 9751-9757.	5.2	78
252	Mesoporous VO ₂ nanowires with excellent cycling stability and enhanced rate capability for lithium batteries. <i>RSC Advances</i> , 2014, 4, 33332-33337.	1.7	47
253	Copper@silicon core-shell nanotube arrays for free-standing lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2014, 2, 15294.	5.2	48
254	Facile synthesis of a mesoporous Co ₃ O ₄ network for Li-storage via thermal decomposition of an amorphous metal complex. <i>Nanoscale</i> , 2014, 6, 12476-12481.	2.8	53
255	Si nanotubes ALD coated with TiO ₂ , TiN or Al ₂ O ₃ as high performance lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2504-2516.	5.2	139
256	Comparative Study of Fluoroethylene Carbonate and Vinylene Carbonate for Silicon Anodes in Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2014, 161, A1933-A1938.	1.3	225
257	Subeutectic Growth of Single-Crystal Silicon Nanowires Grown on and Wrapped with Graphene Nanosheets: High-Performance Anode Material for Lithium-Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 13757-13764.	4.0	45
258	Enhanced Light Absorption of Silicon Nanotube Arrays for Organic/Inorganic Hybrid Solar Cells. <i>Advanced Materials</i> , 2014, 26, 3445-3450.	11.1	72
259	A multilayer Si/CNT coaxial nanofiber LIB anode with a high areal capacity. <i>Energy and Environmental Science</i> , 2014, 7, 655-661.	15.6	174

#	ARTICLE	IF	CITATIONS
260	Composites of graphene and encapsulated silicon for practically viable high-performance lithium-ion batteries. <i>Nano Research</i> , 2014, 7, 1429-1438.	5.8	35
261	Uniform Carbon Coating on Silicon Nanoparticles by Dynamic CVD Process for Electrochemical Lithium Storage. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 12697-12704.	1.8	49
262	Si-SiO _x -Cristobalite/Graphite Composite as Anode for Li-ion Batteries. <i>Electrochimica Acta</i> , 2014, 142, 11-17.	2.6	20
263	Gas Transport in Solid Oxide Fuel Cells. <i>SpringerBriefs in Energy</i> , 2014, , .	0.2	30
264	Nanowire Electrodes for Electrochemical Energy Storage Devices. <i>Chemical Reviews</i> , 2014, 114, 11828-11862.	23.0	617
265	Activation with Li Enables Facile Sodium Storage in Germanium. <i>Nano Letters</i> , 2014, 14, 5873-5882.	4.5	116
266	Water-Soluble Conductive Composite Binder Containing PEDOT:PSS as Conduction Promoting Agent for Si Anode of Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2014, 1, 1679-1687.	1.7	87
267	High-Performance Hybrid Supercapacitor Enabled by a High-Rate Si-based Anode. <i>Advanced Functional Materials</i> , 2014, 24, 7433-7439.	7.8	208
268	Superfine TiO ₂ /SnO ₂ /Carbon Hybrid Nanocomposite with Greatly Enhanced Electrochemical Properties. <i>Electrochimica Acta</i> , 2014, 147, 603-609.	2.6	12
269	Facile synthesis of CuO nanoneedle electrodes for high-performance lithium-ion batteries. <i>Materials Chemistry and Physics</i> , 2014, 148, 411-415.	2.0	22
270	Advances and challenges for flexible energy storage and conversion devices and systems. <i>Energy and Environmental Science</i> , 2014, 7, 2101.	15.6	767
271	Graphitic Carbon Nitride Nanotubes As Li-Ion Battery Materials: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9318-9323.	1.5	62
273	Bulk-Nanoporous-Silicon Negative Electrode with Extremely High Cyclability for Lithium-Ion Batteries Prepared Using a Top-Down Process. <i>Nano Letters</i> , 2014, 14, 4505-4510.	4.5	208
274	Ultrathin Two-Dimensional Atomic Crystals as Stable Interfacial Layer for Improvement of Lithium Metal Anode. <i>Nano Letters</i> , 2014, 14, 6016-6022.	4.5	656
275	Control of Interfacial Layers for High-Performance Porous Si Lithium-Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 16360-16367.	4.0	25
276	Sulfur Cathodes with Hydrogen Reduced Titanium Dioxide Inverse Opal Structure. <i>ACS Nano</i> , 2014, 8, 5249-5256.	7.3	297
277	Intercalated SiO ₂ &Si/Carbon Composite for High Capacity Li Ion Battery Anodes. <i>Electrochimica Acta</i> , 2014, 141, 226-233.	2.6	13
278	Self-adaptive strain-relaxation optimization for high-energy lithium storage material through crumpling of graphene. <i>Nature Communications</i> , 2014, 5, 4565.	5.8	139

#	ARTICLE	IF	CITATIONS
279	An ideal polymeric C60 coating on a Si electrode for durable Li-ion batteries. <i>Carbon</i> , 2014, 77, 1140-1147.	5.4	19
280	Crystalline red phosphorus incorporated with porous carbon nanofibers as flexible electrode for high performance lithium-ion batteries. <i>Carbon</i> , 2014, 78, 455-462.	5.4	146
281	Nanoporous polymer scaffold-embedded nonwoven composite separator membranes for high-rate lithium-ion batteries. <i>RSC Advances</i> , 2014, 4, 54312-54321.	1.7	15
283	Low-cost carbon-silicon nanocomposite anodes for lithium ion batteries. <i>Nanoscale Research Letters</i> , 2014, 9, 360.	3.1	22
284	Interpenetrated Gel Polymer Binder for High-Performance Silicon Anodes in Lithium-ion Batteries. <i>Advanced Functional Materials</i> , 2014, 24, 5904-5910.	7.8	459
285	In Situ Atomic Force Microscopy Study of Initial Solid Electrolyte Interphase Formation on Silicon Electrodes for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 6672-6686.	4.0	113
286	Surface Binding of Polypyrrole on Porous Silicon Hollow Nanospheres for Li-ion Battery Anodes with High Structure Stability. <i>Advanced Materials</i> , 2014, 26, 6145-6150.	11.1	244
287	Formation of Stable Phosphorus-Carbon Bond for Enhanced Performance in Black Phosphorus Nanoparticle-Graphite Composite Battery Anodes. <i>Nano Letters</i> , 2014, 14, 4573-4580.	4.5	764
288	Novel Pyrolyzed Polyaniline-Grafted Silicon Nanoparticles Encapsulated in Graphene Sheets As Li-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 5996-6002.	4.0	114
290	Silicon Nanowire Degradation and Stabilization during Lithium Cycling by SEI Layer Formation. <i>Nano Letters</i> , 2014, 14, 3088-3095.	4.5	89
291	VO ₂ Nanowires Assembled into Hollow Microspheres for High-Rate and Long-Life Lithium Batteries. <i>Nano Letters</i> , 2014, 14, 2873-2878.	4.5	244
292	Inverse Opal-Inspired, Nanoscaffold Battery Separators: A New Membrane Opportunity for High-Performance Energy Storage Systems. <i>Nano Letters</i> , 2014, 14, 4438-4448.	4.5	77
293	Mesoporous silicon sponge as an anti-pulverization structure for high-performance lithium-ion battery anodes. <i>Nature Communications</i> , 2014, 5, 4105.	5.8	1,160
294	A path-independent integral for fracture of solids under combined electrochemical and mechanical loadings. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 71, 1-14.	2.3	42
295	Artificial Solid Electrolyte Interphase To Address the Electrochemical Degradation of Silicon Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 10083-10088.	4.0	141
296	Facile fabrication of yolk-shell structured porous Si-C microspheres as effective anode materials for Li-ion batteries. <i>RSC Advances</i> , 2014, 4, 71-75.	1.7	85
297	Anisotropic Lithiation Onset in Silicon Nanoparticle Anode Revealed by <i>in Situ</i> Graphene Liquid Cell Electron Microscopy. <i>ACS Nano</i> , 2014, 8, 7478-7485.	7.3	103
298	Oxidation pathways towards Si amorphous layers or nanocrystalline powders as Li-ion batteries anodes. <i>Materials for Renewable and Sustainable Energy</i> , 2014, 3, 1.	1.5	29

#	ARTICLE	IF	CITATIONS
299	Silicon-containing anodes with high capacity loading for lithium-ion batteries. Russian Journal of Electrochemistry, 2014, 50, 537-547.	0.3	6
300	Carbon nanofibers containing Si nanoparticles and graphene-covered Ni for high performance anodes in Li ion batteries. RSC Advances, 2014, 4, 22359-22366.	1.7	37
301	Fe ₃ O ₄ -decorated hollow graphene balls prepared by spray pyrolysis process for ultrafast and long cycle-life lithium ion batteries. Carbon, 2014, 79, 58-66.	5.4	71
302	Surface Coating Mediated Swelling and Fracture of Silicon Nanowires during Lithiation. ACS Nano, 2014, 8, 9427-9436.	7.3	48
303	Sodium Ion Diffusion in Al ₂ O ₃ : A Distinct Perspective Compared with Lithium Ion Diffusion. Nano Letters, 2014, 14, 6559-6563.	4.5	91
304	Si ₇ Ti ₄ Ni ₄ as a buffer material for Si and its electrochemical study for lithium ion batteries. Journal of Power Sources, 2014, 246, 729-735.	4.0	25
305	Hierarchical Porous Framework of Si-Based Electrodes for Minimal Volumetric Expansion. Advanced Materials, 2014, 26, 3520-3525.	11.1	47
306	Hydrothermal exfoliated molybdenum disulfide nanosheets as anode material for lithium ion batteries. Journal of Energy Chemistry, 2014, 23, 207-212.	7.1	36
307	Nanostructured silicon spheres prepared by a controllable magnesiothermic reduction as anode for lithium ion batteries. Electrochimica Acta, 2014, 135, 94-100.	2.6	74
308	Anisotropic compositional expansion in elastoplastic materials and corresponding chemical potential: Large-strain formulation and application to amorphous lithiated silicon. Journal of the Mechanics and Physics of Solids, 2014, 69, 84-111.	2.3	35
309	Ultrafine Au nanoparticles decorated NiCo ₂ O ₄ nanotubes as anode material for high-performance supercapacitor and lithium-ion battery applications. Nano Energy, 2014, 7, 114-123.	8.2	192
310	Recent advances in lithium-sulfur batteries. Journal of Power Sources, 2014, 267, 770-783.	4.0	367
311	Evaluating Si-Based Materials for Li-Ion Batteries in Commercially Relevant Negative Electrodes. Journal of the Electrochemical Society, 2014, 161, A783-A791.	1.3	151
312	Fe ₂ O ₃ -multi-shelled hollow microspheres for lithium ion battery anodes with superior capacity and charge retention. Energy and Environmental Science, 2014, 7, 632-637.	15.6	630
313	High-Performance Germanium Nanowire-Based Lithium-Ion Battery Anodes Extending over 1000 Cycles Through in Situ Formation of a Continuous Porous Network. Nano Letters, 2014, 14, 716-723.	4.5	317
314	Driving change in the battery industry. Nature Nanotechnology, 2014, 9, 327-328.	15.6	44
315	Chamber-confined silicon-carbon nanofiber composites for prolonged cycling life of Li-ion batteries. Nanoscale, 2014, 6, 7489-7495.	2.8	60
316	High-performance self-organized Si nanocomposite anode for lithium-ion batteries. Journal of Energy Chemistry, 2014, 23, 291-300.	7.1	10

#	ARTICLE	IF	CITATIONS
317	Chemically activated graphene/porous Si@SiO _x composite as anode for lithium ion batteries. <i>Materials Chemistry and Physics</i> , 2014, 147, 528-534.	2.0	19
318	Dual conductive network-enabled graphene/Si@C composite anode with high areal capacity for lithium-ion batteries. <i>Nano Energy</i> , 2014, 6, 211-218.	8.2	155
319	Recent advances in the Si-based nanocomposite materials as high capacity anode materials for lithium ion batteries. <i>Materials Today</i> , 2014, 17, 285-297.	8.3	140
320	High areal capacity, micrometer-scale amorphous Si film anode based on nanostructured Cu foil for Li-ion batteries. <i>Journal of Power Sources</i> , 2014, 267, 629-634.	4.0	31
321	Robustness of amorphous silicon during the initial lithiation/delithiation cycle. <i>Journal of Power Sources</i> , 2014, 258, 253-259.	4.0	56
322	Electrochemical characteristics of amorphous silicon thin film electrode with fluoroethylene carbonate additive. <i>Current Applied Physics</i> , 2014, 14, 596-602.	1.1	33
323	Effect of fluoroethylene carbonate on electrochemical battery performance and the surface chemistry of amorphous MoO ₂ lithium-ion secondary battery negative electrodes. <i>Electrochimica Acta</i> , 2014, 132, 338-346.	2.6	42
324	Enhancement of the Cyclability of a Si/Graphite@Graphene composite as anode for Lithium-ion batteries. <i>Electrochimica Acta</i> , 2014, 116, 230-236.	2.6	95
325	Silicon Nanostructures-Graphene Nanocomposites. <i>Advances in Chemical and Materials Engineering Book Series</i> , 2014, , 176-195.	0.2	0
327	Long-range, low-cost electric vehicles enabled by robust energy storage. <i>MRS Energy & Sustainability</i> , 2015, 2, 1.	1.3	27
328	Advanced Materials for Lithium-Ion Batteries. <i>Electrochemical Energy Storage and Conversion</i> , 2015, , 79-142.	0.0	0
329	Three-Dimensional Interconnected Network of Graphene-Wrapped Silicon/Carbon Nanofiber Hybrids for Binder-Free Anodes in Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2015, 2, 1699-1706.	1.7	44
330	Type I Clathrates as Novel Silicon Anodes: An Electrochemical and Structural Investigation. <i>Advanced Science</i> , 2015, 2, 1500057.	5.6	30
332	Breathing silicon anodes for durable high-power operations. <i>Scientific Reports</i> , 2015, 5, 14433.	1.6	51
333	The roles of lithium-philic giant nitrogen-doped graphene in protecting micron-sized silicon anode from fading. <i>Scientific Reports</i> , 2015, 5, 15665.	1.6	42
334	Young's modulus of [111] germanium nanowires. <i>APL Materials</i> , 2015, 3, 116101.	2.2	10
335	Preparation of porous Si and TiO ₂ nanofibres using a sulphur templating method for lithium storage. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 877-881.	0.8	20
336	SiO _x Nanodandelion by Laser Ablation for Anode of Lithium-Ion Battery. <i>Small</i> , 2015, 11, 6009-6012.	5.2	33

#	ARTICLE	IF	CITATIONS
338	Energy Storage Materials from Nature through Nanotechnology: A Sustainable Route from Reed Plants to a Silicon Anode for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9632-9636.	7.2	245
339	Reconstruction of Pyrolyzed Bacterial Cellulose (PBC)-Based Three-Dimensional Conductive Network for Silicon Lithium Battery Anodes. <i>ChemElectroChem</i> , 2015, 2, 1238-1242.	1.7	7
340	Core/shell silicon/polyaniline particles via in-flight plasma-induced polymerization. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 314009.	1.3	11
341	Enhanced Secondary Battery Anodes Based on Si and Fe ₃ O ₄ Nanoparticle Infilled Monodisperse Carbon Starburst Colloidal Crystals. <i>Particle and Particle Systems Characterization</i> , 2015, 32, 928-933.	1.2	3
342	Suppressing Vertical Displacement of Lithiated Silicon Particles in High Volumetric Capacity Battery Electrodes. <i>ChemElectroChem</i> , 2015, 2, 1090-1095.	1.7	36
343	Si-CNT/rGO Nanoheterostructures as High-Performance Lithium-Ion-Battery Anodes. <i>ChemElectroChem</i> , 2015, 2, 1983-1990.	1.7	33
344	Hierarchical SnO ₂ /Carbon Nanofibrous Composite Derived from Cellulose Substance as Anode Material for Lithium-Ion Batteries. <i>Chemistry - A European Journal</i> , 2015, 21, 16195-16202.	1.7	67
345	From Commercial Sponge Toward 3D Graphene-Silicon Networks for Superior Lithium Storage. <i>Advanced Energy Materials</i> , 2015, 5, 1500289.	10.2	114
347	Nanoscience Supporting the Research on the Negative Electrodes of Li-Ion Batteries. <i>Nanomaterials</i> , 2015, 5, 2279-2301.	1.9	17
349	First-Principles Investigation of Adsorption and Diffusion of Ions on Pristine, Defective and B-doped Graphene. <i>Materials</i> , 2015, 8, 6163-6178.	1.3	42
350	Advanced Nanomaterials for Energy-Related Applications. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-2.	1.5	3
351	Tissue-like Silicon Nanowires-Based Three-Dimensional Anodes for High-Capacity Lithium Ion Batteries. <i>Nano Letters</i> , 2015, 15, 3907-3916.	4.5	111
352	One-Step Synthesis of Si@C Nanoparticles by Laser Pyrolysis: High-Capacity Anode Material for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 6637-6644.	4.0	98
353	Understanding the Effect of Different Polymeric Surfactants on Enhancing the Silicon/Reduced Graphene Oxide Anode Performance. <i>Journal of Physical Chemistry C</i> , 2015, 119, 5848-5854.	1.5	83
354	Capacity retention behavior and morphology evolution of Si _x Ge _{1-x} nanoparticles as lithium-ion battery anode. <i>Nanotechnology</i> , 2015, 26, 255702.	1.3	13
355	Diffusion-deformation theory for amorphous silicon anodes: The role of plastic deformation on electrochemical performance. <i>International Journal of Solids and Structures</i> , 2015, 67-68, 283-296.	1.3	102
356	High-performance Si-based 3D Cu nanostructured electrode assembly for rechargeable lithium batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11912-11919.	5.2	36
357	Hollow Sn-Ni nanoparticles coated with ion-conductive polyethylene oxide as anodes for lithium ion batteries with superior cycling stability. <i>RSC Advances</i> , 2015, 5, 40807-40812.	1.7	4

#	ARTICLE	IF	CITATIONS
358	Facile method for investigating electrochemically induced products in films deposited directly on grids as working electrodes. <i>Materials Letters</i> , 2015, 157, 1-3.	1.3	1
359	Mesoscale Origin of the Enhanced Cycling-Stability of the Si-Conductive Polymer Anode for Li-ion Batteries. <i>Scientific Reports</i> , 2014, 4, 3684.	1.6	43
360	Advances on the use of diazonium chemistry for functionalization of materials used in energy storage systems. <i>Carbon</i> , 2015, 92, 362-381.	5.4	132
361	Mitigating mechanical failure of crystalline silicon electrodes for lithium batteries by morphological design. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 17718-17728.	1.3	25
362	Advances and challenges of sodium ion batteries as post lithium ion batteries. <i>RSC Advances</i> , 2015, 5, 53129-53154.	1.7	288
363	Height reversal of Si micro dot and well patterns during Si nanowire formation by Ag-assisted chemical etching. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 055203.	0.8	2
364	Three-Dimensional Crumpled Reduced Graphene Oxide/MoS ₂ Nanoflowers: A Stable Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 12625-12630.	4.0	183
365	Classy Metal Alloy Nanofiber Anodes Employing Graphene Wrapping Layer: Toward Ultralong-Cycle-Life Lithium-Ion Batteries. <i>ACS Nano</i> , 2015, 9, 6717-6727.	7.3	55
366	High-performance electrospun nanostructured composite fiber anodes for lithium-ion batteries. , 2015, , 662-689.		2
367	Concrete-inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. <i>Carbon</i> , 2015, 93, 59-67.	5.4	78
368	High-performance electrode materials for lithium-ion batteries for electric vehicles. , 2015, , 191-241.		9
369	Failure modes of hollow core-shell structural active materials during the lithiation-delithiation process. <i>Journal of Power Sources</i> , 2015, 290, 114-122.	4.0	76
370	Low-Cost Synthesis of Porous Silicon via Ferrite-Assisted Chemical Etching and Their Application as Si-Based Anodes for Li-Ion Batteries. <i>Advanced Electronic Materials</i> , 2015, 1, 1400059.	2.6	18
371	High-performance silicon-based multicomponent battery anodes produced via synergistic coupling of multifunctional coating layers. <i>Energy and Environmental Science</i> , 2015, 8, 2075-2084.	15.6	146
372	A hybrid Si@FeSi _y /SiO _x anode structure for high performance lithium-ion batteries via ammonia-assisted one-pot synthesis. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10767-10776.	5.2	50
373	General synthesis of complex nanotubes by gradient electrospinning and controlled pyrolysis. <i>Nature Communications</i> , 2015, 6, 7402.	5.8	370
374	Salami-like Electrospun Si Nanoparticle-ITO Composite Nanofibers with Internal Conductive Pathways for use as Anodes for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 27234-27241.	4.0	14
375	Embedded system and application aware design of deregulated energy delivery systems. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
376	Inward lithium-ion breathing of hierarchically porous silicon anodes. <i>Nature Communications</i> , 2015, 6, 8844.	5.8	217
377	Electrochemical cell parameters of poly(ethylene oxide)/(KClO ₃ +NaNO ₃) composites as polymer electrolyte in secondary solid-state batteries. <i>Ionics</i> , 2015, 21, 3193-3199.	1.2	2
378	Three-dimensional porous V ₂ O ₅ hierarchical octahedrons with adjustable pore architectures for long-life lithium batteries. <i>Nano Research</i> , 2015, 8, 481-490.	5.8	74
379	Novel hybrid Si film/carbon nanofibers as anode materials in lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 1947-1952.	5.2	28
380	Revisit of metallothermic reduction for macroporous Si: compromise between capacity and volume expansion for practical Li-ion battery. <i>Nano Energy</i> , 2015, 12, 161-168.	8.2	62
381	Dual-functional gum arabic binder for silicon anodes in lithium ion batteries. <i>Nano Energy</i> , 2015, 12, 178-185.	8.2	236
382	Hollow carbon nanospheres/silicon/alumina core-shell film as an anode for lithium-ion batteries. <i>Scientific Reports</i> , 2015, 5, 7659.	1.6	85
383	High-Areal Capacity Silicon Electrodes with Low-Cost Silicon Particles Based on Spatial Control of Self-Healing Binder. <i>Advanced Energy Materials</i> , 2015, 5, 1401826.	10.2	207
384	Atomic-layer-deposition alumina induced carbon on porous Ni _x Co _{1-x} O nanonets for enhanced pseudocapacitive and Li-ion storage performance. <i>Nanotechnology</i> , 2015, 26, 014001.	1.3	21
385	Conductive framework supported high rate performance of SnO ₂ hollow nanofibers for lithium battery anodes. <i>Electrochimica Acta</i> , 2015, 161, 1-9.	2.6	22
386	Nanoflake-Assembled Hierarchical Na ₃ V ₂ (PO ₄) ₃ /C Microflowers: Superior Li Storage Performance and Insertion/Extraction Mechanism. <i>Advanced Energy Materials</i> , 2015, 5, 1401963.	10.2	169
387	Preparation of porous silicon/carbon microspheres as high performance anode materials for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 5859-5865.	5.2	60
388	Ternary SnO ₂ @PANI/rGO nanohybrids as excellent anode materials for lithium-ion batteries. <i>Electrochimica Acta</i> , 2015, 157, 205-210.	2.6	27
389	Cycling strategies for optimizing silicon nanowires performance as negative electrode for lithium battery. <i>Electrochimica Acta</i> , 2015, 157, 218-224.	2.6	24
390	Towards Scalable Binderless Electrodes: Carbon Coated Silicon Nanofiber Paper via Mg Reduction of Electrospun SiO ₂ Nanofibers. <i>Scientific Reports</i> , 2015, 5, 8246.	1.6	69
391	Spray pyrolysis of yolk-shell particles and their use for anodes in lithium-ion batteries. <i>Electrochemistry Communications</i> , 2015, 53, 1-5.	2.3	12
392	Critical roles of binders and formulation at multiscales of silicon-based composite electrodes. <i>Journal of Power Sources</i> , 2015, 280, 533-549.	4.0	201
393	Cost-Effective Scalable Synthesis of Mesoporous Germanium Particles via a Redox-Transmetalation Reaction for High-Performance Energy Storage Devices. <i>ACS Nano</i> , 2015, 9, 2203-2212.	7.3	59

#	ARTICLE	IF	CITATIONS
394	Atomistic Observation of the Lithiation and Delithiation Behaviors of Silicon Nanowires Using Reactive Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3447-3455.	1.5	56
395	Preparation of Nanocrystalline Silicon from SiCl_4 at 200°C in Molten Salt for High-Performance Anodes for Lithium Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3822-3825.	7.2	154
396	Analysis of the Deterioration Mechanism of Si Electrode as a Li-Ion Battery Anode Using Raman Microspectroscopy. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2975-2982.	1.5	56
397	In situ synthesis of GeO_2 /reduced graphene oxide composite on Ni foam substrate as a binder-free anode for high-capacity lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 1619-1623.	5.2	83
398	Mechanically and Chemically Robust Sandwich-Structured C@Si@C Nanotube Array Li-Ion Battery Anodes. <i>ACS Nano</i> , 2015, 9, 1985-1994.	7.3	119
399	Synthesis of Polymer Electrolytes Based on Poly(ethylene oxide) and an Anion-Stabilizing Hard Polymer for Enhancing Conductivity and Cation Transport. <i>ACS Macro Letters</i> , 2015, 4, 225-230.	2.3	58
400	Three-Dimensional Interconnected Vanadium Pentoxide Nanonetwork Cathode for High-Rate Long-Life Lithium Batteries. <i>Small</i> , 2015, 11, 2654-2660.	5.2	59
401	Electrospun core-shell silicon/carbon fibers with an internal honeycomb-like conductive carbon framework as an anode for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7112-7120.	5.2	99
402	Sandwich Nanoarchitecture of Si/Reduced Graphene Oxide Bilayer Nanomembranes for Li-Ion Batteries with Long Cycle Life. <i>ACS Nano</i> , 2015, 9, 1198-1205.	7.3	137
403	Approaching the Downsizing Limit of Silicon for Surface-Controlled Lithium Storage. <i>Advanced Materials</i> , 2015, 27, 1526-1532.	11.1	110
404	Composites of porous Co_3O_4 grown on Li_2MnO_3 microspheres as cathode materials for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 4840-4845.	5.2	45
405	Novel Polygonal Vanadium Oxide Nanoscrolls as Stable Cathode for Lithium Storage. <i>Advanced Functional Materials</i> , 2015, 25, 1773-1779.	7.8	54
406	Silicene, a promising new 2D material. <i>Progress in Surface Science</i> , 2015, 90, 46-83.	3.8	221
407	Fabricating high performance lithium-ion batteries using bionanotechnology. <i>Nanoscale</i> , 2015, 7, 3356-3372.	2.8	39
408	Interfacial Oxygen Stabilizes Composite Silicon Anodes. <i>Nano Letters</i> , 2015, 15, 703-708.	4.5	57
409	A Peanut Shell Inspired Scalable Synthesis of Three-Dimensional Carbon Coated Porous Silicon Particles as an Anode for Lithium-Ion Batteries. <i>Electrochimica Acta</i> , 2015, 156, 11-19.	2.6	54
410	Ultra-High Capacity Lithium-Ion Batteries with Hierarchical CoO Nanowire Clusters as Binder Free Electrodes. <i>Advanced Functional Materials</i> , 2015, 25, 1082-1089.	7.8	237
411	Development of Sustainable Rapid Microwave Assisted Process for Extracting Nanoporous Si from Earth Abundant Agricultural Residues and Their Carbon-based Nanohybrids for Lithium Energy Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 224-236.	3.2	83

#	ARTICLE	IF	CITATIONS
412	High yield fabrication of hollow vesica-like silicon based on the Kirkendall effect and its application to energy storage. <i>Nanoscale</i> , 2015, 7, 3440-3444.	2.8	51
413	Stable silicon-ionic liquid interface for next-generation lithium-ion batteries. <i>Nature Communications</i> , 2015, 6, 6230.	5.8	212
414	All-in-one assembly based on 3D-intertangled and cross-jointed architectures of Si/Cu 1D-nanowires for lithium ion batteries. <i>Scientific Reports</i> , 2015, 5, 8623.	1.6	16
415	Branched Artificial Nanofinger Arrays by Mesoporous Interfacial Atomic Rearrangement. <i>Journal of the American Chemical Society</i> , 2015, 137, 4260-4266.	6.6	30
416	Monodisperse Porous Silicon Spheres as Anode Materials for Lithium Ion Batteries. <i>Scientific Reports</i> , 2015, 5, 8781.	1.6	116
417	Nonfilling Carbon Coating of Porous Silicon Micrometer-Sized Particles for High-Performance Lithium Battery Anodes. <i>ACS Nano</i> , 2015, 9, 2540-2547.	7.3	433
418	MOF-directed templating synthesis of a porous multicomponent dodecahedron with hollow interiors for enhanced lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8483-8488.	5.2	178
419	Layer-stacked cobalt ferrite (CoFe ₂ O ₄) mesoporous platelets for high-performance lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6990-6997.	5.2	111
420	Si nanoparticles adhering to a nitrogen-rich porous carbon framework and its application as a lithium-ion battery anode material. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18190-18197.	5.2	53
421	Silicon oxide-on-graphite planar composite synthesized using a microwave-assisted coating method for use as a fast-charging lithium-ion battery anode. <i>Journal of Power Sources</i> , 2015, 296, 314-317.	4.0	17
422	Anomalous Stagewise Lithiation of Gold-Coated Silicon Nanowires: A Combined In Situ Characterization and First-Principles Study. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 16976-16983.	4.0	9
423	The critical contribution of unzipped graphene nanoribbons to scalable silicon-carbon fiber anodes in rechargeable Li-ion batteries. <i>Nano Energy</i> , 2015, 16, 446-457.	8.2	30
424	Uniformly dispersed silicon nanoparticle/carbon nanosphere composites as highly stable lithium-ion battery electrodes. <i>RSC Advances</i> , 2015, 5, 17424-17428.	1.7	12
425	Alloy-Based Anode Materials. <i>Green Energy and Technology</i> , 2015, , 189-229.	0.4	3
426	Polyhedral MnO nanocrystals anchored on reduced graphene oxide as an anode material with superior lithium storage capability. <i>Ceramics International</i> , 2015, 41, 10680-10688.	2.3	13
427	Dual-Size Silicon Nanocrystal-Embedded SiO _x Nanocomposite as a High-Capacity Lithium Storage Material. <i>ACS Nano</i> , 2015, 9, 7690-7696.	7.3	107
428	Kinetics and fracture resistance of lithiated silicon nanostructure pairs controlled by their mechanical interaction. <i>Nature Communications</i> , 2015, 6, 7533.	5.8	107
429	Fabrication and structural optimization of porous single-crystal Fe ₂ O ₃ microrices for high-performance lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 16544-16550.	5.2	29

#	ARTICLE	IF	CITATIONS
430	Highly Adhesive and Soluble Copolyimide Binder: Improving the Long-Term Cycle Life of Silicon Anodes in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 14851-14858.	4.0	96
431	Important Role of Functional Groups for Sodium Ion Intercalation in Expanded Graphite. <i>Chemistry of Materials</i> , 2015, 27, 5402-5406.	3.2	79
432	Facile approach to prepare porous GeO ₂ /SnO ₂ nanofibers via a single spinneret electrospinning technique as anodes for Lithium-ion batteries. <i>Ceramics International</i> , 2015, 41, 10308-10313.	2.3	23
433	A Calculation Model to Assess Two Irreversible Capacities Evolved in Silicon Negative Electrodes. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1579-A1584.	1.3	19
434	Three-dimensional SnO ₂ @TiO ₂ double-shell nanotubes on carbon cloth as a flexible anode for lithium-ion batteries. <i>Nanotechnology</i> , 2015, 26, 274002.	1.3	33
435	A high tap density secondary silicon particle anode fabricated by scalable mechanical pressing for lithium-ion batteries. <i>Energy and Environmental Science</i> , 2015, 8, 2371-2376.	15.6	397
436	Silicon carbide-free graphene growth on silicon for lithium-ion battery with high volumetric energy density. <i>Nature Communications</i> , 2015, 6, 7393.	5.8	449
437	Controlled synthesis of zinc cobalt sulfide nanostructures in oil phase and their potential applications in electrochemical energy storage. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11462-11470.	5.2	113
438	High yield and low-cost ball milling synthesis of nano-flake Si@SiO ₂ with small crystalline grains and abundant grain boundaries as a superior anode for Li-ion batteries. <i>Journal of Alloys and Compounds</i> , 2015, 639, 27-35.	2.8	31
439	In situ growth of three-dimensional graphene coatings on arbitrary-shaped micro/nano materials and its mechanism studies. <i>Carbon</i> , 2015, 92, 84-95.	5.4	17
440	Preparation of graphene supported porous Si@C ternary composites and their electrochemical performance as high capacity anode materials for Li-ion batteries. <i>Ceramics International</i> , 2015, 41, 8533-8540.	2.3	28
441	A General Salt-Templating Method To Fabricate Vertically Aligned Graphitic Carbon Nanosheets and Their Metal Carbide Hybrids for Superior Lithium Ion Batteries and Water Splitting. <i>Journal of the American Chemical Society</i> , 2015, 137, 5480-5485.	6.6	310
442	One-minute deposition of micrometre-thick porous Si@Cu anodes with compositional gradients on Cu current collectors for lithium secondary batteries. <i>Journal of Power Sources</i> , 2015, 286, 540-550.	4.0	11
443	Semiconductor nanowire battery electrodes. , 2015, , 441-469.		1
444	A reaction-controlled diffusion model for the lithiation of silicon in lithium-ion batteries. <i>Extreme Mechanics Letters</i> , 2015, 4, 61-75.	2.0	22
445	A nanocomposite of Li ₂ MnO ₃ coated by FePO ₄ as cathode material for lithium ion batteries. <i>Journal of Power Sources</i> , 2015, 287, 416-421.	4.0	52
446	Reduction chemical reaction synthesized scalable 3D porous silicon/carbon hybrid architectures as anode materials for lithium ion batteries with enhanced electrochemical performance. <i>RSC Advances</i> , 2015, 5, 35598-35607.	1.7	29
447	Characteristics of a Graphene Nanoplatelet Anode in Advanced Lithium-Ion Batteries Using Ionic Liquid Added by a Carbonate Electrolyte. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500085.	1.9	23

#	ARTICLE	IF	CITATIONS
448	A Novel Phase of $\text{Li}_{15}\text{Si}_4$ Synthesized under Pressure. <i>Advanced Energy Materials</i> , 2015, 5, 1500214.	10.2	14
449	Mesoporous silicon/carbon hybrids with ordered pore channel retention and tunable carbon incorporated content as high performance anode materials for lithium-ion batteries. <i>Energy</i> , 2015, 85, 159-166.	4.5	39
450	Diffusion-induced stress and delamination of layered electrode plates with composition-gradient. <i>Mechanics of Materials</i> , 2015, 91, 351-362.	1.7	31
451	Nanoengineered three-dimensional hybrid $\text{Fe}_2\text{O}_3@\text{PPy}$ nanotube arrays with enhanced electrochemical performances as lithium-ion anodes. <i>Journal of Materials Science</i> , 2015, 50, 5504-5513.	1.7	23
452	Complete magnesiothermic reduction reaction of vertically aligned mesoporous silica channels to form pure silicon nanoparticles. <i>Scientific Reports</i> , 2015, 5, 9014.	1.6	63
453	Self-assembled graphene-constructed hollow Fe_2O_3 spheres with controllable size for high lithium storage. <i>RSC Advances</i> , 2015, 5, 21740-21744.	1.7	13
454	Physico-Chemical and Electrochemical Properties of Si-Ti-Ni Alloy Modified with poly(3,4-ethylenedioxythiophene). <i>Electrochimica Acta</i> , 2015, 165, 247-254.	2.6	3
455	Interfacial stabilizing effect of ZnO on Si anodes for lithium ion battery. <i>Nano Energy</i> , 2015, 13, 620-625.	8.2	88
456	Stabilized titanium nitride nanowire supported silicon core-shell nanorods as high capacity lithium-ion anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12476-12481.	5.2	19
457	A Sulfur Cathode with Pomegranate-Like Cluster Structure. <i>Advanced Energy Materials</i> , 2015, 5, 1500211.	10.2	122
458	General method to predict voltage-dependent ionic conduction in a solid electrolyte coating on electrodes. <i>Physical Review B</i> , 2015, 91, .	1.1	141
459	Surface Modification of Silicon Anodes for Durable and High-Energy Lithium-Ion Batteries. <i>Israel Journal of Chemistry</i> , 2015, 55, 558-569.	1.0	21
460	Interconnected TiO_x /carbon hybrid framework incorporated silicon for stable lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12709-12717.	5.2	27
461	Nanoporous silicon prepared through air-oxidation demagnesiumation of Mg_2Si and properties of its lithium ion batteries. <i>Chemical Communications</i> , 2015, 51, 7230-7233.	2.2	61
462	Metal-assisted chemical etching of silicon and the behavior of nanoscale silicon materials as Li-ion battery anodes. <i>Nano Research</i> , 2015, 8, 1395-1442.	5.8	106
463	Advanced Multiphase Silicon-Based Anodes for High-Energy-Density Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1072-A1079.	1.3	18
464	Polymer Nanofiber-Guided Uniform Lithium Deposition for Battery Electrodes. <i>Nano Letters</i> , 2015, 15, 2910-2916.	4.5	495
465	SiO_2 -confined silicon/carbon nanofiber composites as an anode for lithium-ion batteries. <i>RSC Advances</i> , 2015, 5, 34744-34751.	1.7	20

#	ARTICLE	IF	CITATIONS
466	On the interaction of water-soluble binders and nano silicon particles: alternative binder towards increased cycling stability at elevated temperatures. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 5632-5641.	1.3	33
468	Anodes for Rechargeable Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2015, 5, 1402273.	10.2	423
469	Integration of Si in a metal foam current collector for stable electrochemical cycling in Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10114-10118.	5.2	21
471	Hollow Structured Silicon Anodes with Stabilized Solid Electrolyte Interphase Film for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 23501-23506.	4.0	45
472	A three layer design with mesoporous silica encapsulated by a carbon core and shell for high energy lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 22739-22749.	5.2	79
473	Nanoscale silicon as anode for Li-ion batteries: The fundamentals, promises, and challenges. <i>Nano Energy</i> , 2015, 17, 366-383.	8.2	228
474	Insight into the loading temperature of sulfur on sulfur/carbon cathode in lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2015, 185, 62-68.	2.6	31
475	Si nanoparticles-nested inverse opal carbon supports for highly stable lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23684-23689.	5.2	31
476	Simultaneous Purification and Perforation of Low-Grade Si Sources for Lithium-Ion Battery Anode. <i>Nano Letters</i> , 2015, 15, 7742-7747.	4.5	62
477	Challenges in Accommodating Volume Change of Si Anodes for Li-Ion Batteries. <i>ChemElectroChem</i> , 2015, 2, 1645-1651.	1.7	204
478	Self-assembled asymmetric membrane containing micron-size germanium for high capacity lithium ion batteries. <i>RSC Advances</i> , 2015, 5, 92878-92884.	1.7	15
479	Evidence of covalent synergy in silicon-sulfur-graphene yielding highly efficient and long-life lithium-ion batteries. <i>Nature Communications</i> , 2015, 6, 8597.	5.8	163
480	Electrochemical Charge Transfer Reaction Kinetics at the Silicon-Liquid Electrolyte Interface. <i>Journal of the Electrochemical Society</i> , 2015, 162, A7129-A7134.	1.3	49
481	Scalable Production of Si Nanoparticles Directly from Low Grade Sources for Lithium-Ion Battery Anode. <i>Nano Letters</i> , 2015, 15, 5750-5754.	4.5	119
482	<i>In Situ</i> Activation of Nitrogen-Doped Graphene Anchored on Graphite Foam for a High-Capacity Anode. <i>ACS Nano</i> , 2015, 9, 8609-8616.	7.3	116
483	A Revival of Waste: Atmospheric Pressure Nitrogen Plasma Jet Enhanced Jumbo Silicon/Silicon Carbide Composite in Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 28166-28176.	4.0	30
484	Unravelling the Impact of Reaction Paths on Mechanical Degradation of Intercalation Cathodes for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2015, 137, 13732-13735.	6.6	61
485	Influence of microstructure on electrochemical properties of Si/C multilayer thin-film anodes deposited using a sputtering method. <i>Materials Letters</i> , 2015, 160, 210-212.	1.3	9

#	ARTICLE	IF	CITATIONS
486	Physically Cross-linked Polymer Binder Induced by Reversible Acid-Base Interaction for High-Performance Silicon Composite Anodes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 23545-23553.	4.0	88
487	Review Nano-Silicon/Carbon Composite Anode Materials Towards Practical Application for Next Generation Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A2509-A2528.	1.3	289
488	Applications of zero-valent silicon nanostructures in biomedicine. <i>Nanomedicine</i> , 2015, 10, 2553-2571.	1.7	26
489	Interaction between dislocation mechanics on diffusion induced stress and electrochemical reaction in a spherical lithium ion battery electrode. <i>RSC Advances</i> , 2015, 5, 74835-74843.	1.7	17
490	Cu ₃ Si@Si core-shell nanoparticles synthesized using a solid-state reaction and their performance as anode materials for lithium ion batteries. <i>Nanoscale</i> , 2015, 7, 15075-15079.	2.8	50
492	SEI-component formation on sub 5 nm sized silicon nanoparticles in Li-ion batteries: the role of electrode preparation, FEC addition and binders. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24956-24967.	1.3	129
493	Analysis of lithium ion concentration and stress in the solid electrolyte interphase on the graphite anode. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23565-23572.	1.3	22
494	Investigation into diffusion induced plastic deformation behavior in hollow lithium ion battery electrode revealed by analytical model and atomistic simulation. <i>Electrochimica Acta</i> , 2015, 178, 597-607.	2.6	25
495	Graphene as an Interfacial Layer for Improving Cycling Performance of Si Nanowires in Lithium-Ion Batteries. <i>Nano Letters</i> , 2015, 15, 6658-6664.	4.5	69
496	Electronic properties and lithium storage capacities of two-dimensional transition-metal nitride monolayers. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21486-21493.	5.2	79
497	Hybrid Cellular Nanosheets for High-Performance Lithium-Ion Battery Anodes. <i>Journal of the American Chemical Society</i> , 2015, 137, 11954-11961.	6.6	114
498	A phosphorene-graphene hybrid material as a high-capacity anode for sodium-ion batteries. <i>Nature Nanotechnology</i> , 2015, 10, 980-985.	15.6	1,287
499	Porous Carbon Spheres Doped with Fe ₃ C as an Anode for High-Rate Lithium-ion Batteries. <i>Electrochimica Acta</i> , 2015, 180, 78-85.	2.6	45
500	Amorphous cobalt silicate nanobelts@carbon composites as a stable anode material for lithium ion batteries. <i>Chemical Science</i> , 2015, 6, 6908-6915.	3.7	69
501	Hollow Silicon Nanostructures via the Kirkendall Effect. <i>Nano Letters</i> , 2015, 15, 6914-6918.	4.5	67
502	Porous Silicon Nanotube Arrays as Anode Material for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 20495-20498.	4.0	86
503	Phase field modeling of silicon nanowire based lithium ion battery composite electrode. <i>Electrochimica Acta</i> , 2015, 186, 542-551.	2.6	31
504	Copper Silicate Hydrate Hollow Spheres Constructed by Nanotubes Encapsulated in Reduced Graphene Oxide as Long-Life Lithium-Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26572-26578.	4.0	82

#	ARTICLE	IF	CITATIONS
505	Multi-dimensional construction of a novel active yolk@conductive shell nanofiber web as a self-standing anode for high-performance lithium-ion batteries. <i>Nanoscale</i> , 2015, 7, 19930-19934.	2.8	13
506	Synergistically engineered self-standing silicon/carbon composite arrays as high performance lithium battery anodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 494-498.	5.2	26
507	Tailoring Hollow Silicon@Carbon Nanocomposites As High-Performance Anodes in Secondary Lithium-Based Batteries through Economical Chemistry. <i>Chemistry of Materials</i> , 2015, 27, 37-43.	3.2	42
508	A first principle study of encapsulated and functionalized silicon nanotube of chirality (6,6) with monoatomically thin metal wires of Ag, Au and Cu. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2015, 68, 1-7.	1.3	4
509	Multilayered silicon embedded porous carbon/graphene hybrid film as a high performance anode. <i>Carbon</i> , 2015, 84, 434-443.	5.4	144
510	Experimental Validation of the Elimination of Dendrite Short-Circuit Failure in Secondary Lithium-Metal Convection Cell Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A262-A268.	1.3	72
511	Hydrothermal synthesis of nano-silicon from a silica sol and its use in lithium ion batteries. <i>Nano Research</i> , 2015, 8, 1497-1504.	5.8	62
512	Manganese Oxide/Carbon Yolk@Shell Nanorod Anodes for High Capacity Lithium Batteries. <i>Nano Letters</i> , 2015, 15, 738-744.	4.5	345
513	Toward High Cycle Efficiency of Silicon-Based Negative Electrodes by Designing the Solid Electrolyte Interphase. <i>Advanced Energy Materials</i> , 2015, 5, 1401398.	10.2	72
514	Pyrolytic carbon-coated Si nanoparticles on elastic graphene framework as anode materials for high-performance lithium-ion batteries. <i>Carbon</i> , 2015, 82, 161-167.	5.4	105
515	Nanostructured anode materials for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 2454-2484.	5.2	690
516	Superior Lithium-Ion Storage Properties of Si-Based Composite Powders with Unique Si@Carbon@Void@Graphene Configuration. <i>Chemistry - A European Journal</i> , 2015, 21, 2076-2082.	1.7	23
517	Stable Cycling of SiO ₂ Nanotubes as High-Performance Anodes for Lithium-Ion Batteries. <i>Scientific Reports</i> , 2014, 4, 4605.	1.6	179
518	Mesoporous silicon negative electrode for thin film lithium-ion microbatteries. <i>Journal of Power Sources</i> , 2015, 274, 693-700.	4.0	26
519	Synthesis of graphene-like MoS ₂ nanowall/graphene nanosheet hybrid materials with high lithium storage performance. <i>Catalysis Today</i> , 2015, 246, 165-171.	2.2	35
520	Graphene and carbon nanotube (CNT) in MEMS/NEMS applications. <i>Microelectronic Engineering</i> , 2015, 132, 192-206.	1.1	191
521	Self-assembled three-dimensional mesoporous ZnFe ₂ O ₄ -graphene composites for lithium ion batteries with significantly enhanced rate capability and cycling stability. <i>Journal of Power Sources</i> , 2015, 275, 769-776.	4.0	81
522	Ultrathin sandwich-like MoS ₂ @N-doped carbon nanosheets for anodes of lithium ion batteries. <i>Nanoscale</i> , 2015, 7, 324-329.	2.8	99

#	ARTICLE	IF	CITATIONS
523	Recycled diesel carbon nanoparticles for nanostructured battery anodes. Journal of Power Sources, 2015, 275, 26-31.	4.0	6
524	Highly uniform silicon nanoparticle/porous carbon nanofiber hybrids towards free-standing high-performance anodes for lithium-ion batteries. Carbon, 2015, 82, 337-345.	5.4	117
525	A Bendable Li-ion Battery with a Nano-Hairy Electrode: Direct Integration Scheme on the Polymer Substrate. Advanced Energy Materials, 2015, 5, 1400611.	10.2	19
526	Reduced graphene oxide/porous Si composite as anode for high-performance lithium ion batteries. Ionics, 2015, 21, 617-622.	1.2	13
527	3D Si/C Fiber Paper Electrodes Fabricated Using a Combined Electrospray/Electrospinning Technique for Li-ion Batteries. Advanced Energy Materials, 2015, 5, 1400753.	10.2	247
528	Scalable Synthesis of Nano-Silicon from Beach Sand for Long Cycle Life Li-ion Batteries. Scientific Reports, 2014, 4, 5623.	1.6	179
529	Mechanical behavior of electrochemically lithiated silicon. Journal of Power Sources, 2015, 273, 41-51.	4.0	118
530	In Situ Measurement of Solid Electrolyte Interphase Evolution on Silicon Anodes Using Atomic Force Microscopy. Advanced Energy Materials, 2016, 6, 1600099.	10.2	81
531	LiTi ₂ (PO ₄) ₃ /C Anode Material with a Spindle-Like Morphology for Batteries with High Rate Capability and Improved Cycle Life. ChemElectroChem, 2016, 3, 1157-1169.	1.7	19
532	Porous Silicon@Polythiophene Core-Shell Nanospheres for Lithium-ion Batteries. Particle and Particle Systems Characterization, 2016, 33, 75-81.	1.2	13
533	Hollow Silica Spheres Embedded in a Porous Carbon Matrix and Its Superior Performance as the Anode for Lithium-ion Batteries. Particle and Particle Systems Characterization, 2016, 33, 110-117.	1.2	57
534	Spectroscopic Insight into Li-ion Batteries during Operation: An Alternative Infrared Approach. Advanced Energy Materials, 2016, 6, 1501768.	10.2	44
535	Moisture Battery Formed by Direct Contact of Magnesium with Foamed Polyaniline. Angewandte Chemie - International Edition, 2016, 55, 1805-1809.	7.2	31
536	The Electrochemistry with Lithium versus Sodium of Selenium Confined To Slit Micropores in Carbon. Nano Letters, 2016, 16, 4560-4568.	4.5	140
537	Cellulose-Rich Nanofiber-Based Functional Nanoarchitectures. Advanced Materials, 2016, 28, 1143-1158.	11.1	112
538	Free-Standing Graphene-Encapsulated Silicon Nanoparticle Aerogel as an Anode for Lithium Ion Batteries. ChemNanoMat, 2016, 2, 671-674.	1.5	29
539	Wet-Chemical Processing of Phosphorus Composite Nanosheets for High-Rate and High-Capacity Lithium-ion Batteries. Advanced Energy Materials, 2016, 6, 1502409.	10.2	211
540	Characterization and Optimization of Silicon Nanoparticle Anodes. Electrochemistry, 2016, 84, 243-253.	0.6	2

#	ARTICLE	IF	CITATIONS
541	A Comprehensive Study on Rechargeable Energy Storage Technologies. Journal of Electrochemical Energy Conversion and Storage, 2016, 13, .	1.1	25
542	First principles and experimental studies of empty Si ₄₆ as anode materials for Li-ion batteries. Journal of Materials Research, 2016, 31, 3657-3665.	1.2	13
543	Discovery and application of exemplary models of innovation. MRS Bulletin, 2016, 41, 479-487.	1.7	0
544	Electrochemical properties of polydopamine coated Ti-Si alloy anodes for Li-ion batteries. Electrochimica Acta, 2016, 222, 1200-1209.	2.6	15
545	Local Transmittance Measurements as Large Area Diagnostic Tool for the Optimization of Porous Si Foils for Li-Ion Battery Anodes. Journal of the Electrochemical Society, 2016, 163, A3036-A3045.	1.3	4
546	Ultrathin MoS ₂ @C layered structure as an anode of lithium ion battery. MRS Advances, 2016, 1, 1021-1027.	0.5	2
547	Silicon clathrates for lithium ion batteries: A perspective. Applied Physics Reviews, 2016, 3, .	5.5	20
548	Instantaneous formation of SiO _x nanocomposite for high capacity lithium ion batteries by enhanced disproportionation reaction during plasma spray physical vapor deposition. Science and Technology of Advanced Materials, 2016, 17, 744-752.	2.8	17
550	Mechanical measurements on lithium phosphorous oxynitride coated silicon thin film electrodes for lithium-ion batteries during lithiation and delithiation. Applied Physics Letters, 2016, 109, .	1.5	23
551	Freestanding Flexible Si Nanoparticles@Multiwalled Carbon Nanotubes Composite Anodes for Li-Ion Batteries and Their Prelithiation by Stabilized Li Metal Powder. Journal of Electrochemical Energy Conversion and Storage, 2016, 13, .	1.1	15
552	Numerical Modeling of Fracture-Resistant Sn Micropillars as Anode for Lithium Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 6953-6962.	1.5	32
553	The applications of carbon nanotubes and graphene in advanced rechargeable lithium batteries. Journal of Materials Chemistry A, 2016, 4, 8932-8951.	5.2	114
554	In situ characterization of electrochemical processes in one dimensional nanomaterials for energy storages devices. Nano Energy, 2016, 24, 165-188.	8.2	97
555	Si@Cu alloy nanowires grown by oblique angle deposition as a stable negative electrode for Li-ion batteries. Journal of Materials Science, 2016, 51, 6207-6219.	1.7	12
556	High-energy-density lithium-ion battery using a carbon-nanotube@Si composite anode and a compositionally graded Li[Ni _{0.85} Co _{0.05} Mn _{0.10}]O ₂ cathode. Energy and Environmental Science, 2016, 9, 2152-2158.	15.6	269
557	Surface engineering of nanomaterials for improved energy storage – A review. Chemical Engineering Science, 2016, 154, 3-19.	1.9	49
558	Growth dynamics of solid electrolyte interphase layer on SnO ₂ nanotubes realized by graphene liquid cell electron microscopy. Nano Energy, 2016, 25, 154-160.	8.2	63
559	Failure Prediction of High-Capacity Electrode Materials in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2016, 163, A1157-A1163.	1.3	46

#	ARTICLE	IF	CITATIONS
560	Scalable synthesis of core-shell structured SiO _x /nitrogen-doped carbon composite as a high-performance anode material for lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 318, 184-191.	4.0	133
561	Impact of the Slurry pH on the Expansion/Contraction Behavior of Silicon/Carbon/Carboxymethylcellulose Electrodes for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2016, 163, A1020-A1026.	1.3	44
562	Optimized Silicon Electrode Architecture, Interface, and Microgeometry for Next-Generation Lithium-Ion Batteries. <i>Advanced Materials</i> , 2016, 28, 188-193.	11.1	37
563	Molecular grafting on silicon anodes: artificial Solid-Electrolyte Interphase and surface stabilization. <i>Electrochimica Acta</i> , 2016, 201, 70-77.	2.6	20
564	Heterostructure composites of rGO/GeO ₂ /PANI with enhanced performance for Li ion battery anode material. <i>Journal of Power Sources</i> , 2016, 306, 791-800.	4.0	38
565	Cross-linked aluminum dioxybenzene coating for stabilization of silicon electrodes. <i>Nano Energy</i> , 2016, 22, 202-210.	8.2	30
566	The mechanics of large-volume-change transformations in high-capacity battery materials. <i>Extreme Mechanics Letters</i> , 2016, 9, 480-494.	2.0	101
567	An efficient route to Cu ₂ O nanorod array film for high-performance Li-ion batteries. <i>Thin Solid Films</i> , 2016, 608, 79-87.	0.8	16
568	High Voltage Li-Ion Battery Using Exfoliated Graphite/Graphene Nanosheets Anode. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10850-10857.	4.0	66
569	Carbon-coated silicon nanoparticle-embedded carbon sphere assembly electrodes with enhanced performance for lithium-ion batteries. <i>RSC Advances</i> , 2016, 6, 38012-38017.	1.7	7
570	Ultrafine Si/C-graphite composite anode materials with improved cyclic performance. <i>Materials Letters</i> , 2016, 178, 252-255.	1.3	8
571	Lithium ion batteries made of electrodes with 99wt% active materials and 1wt% carbon nanotubes without binder or metal foils. <i>Journal of Power Sources</i> , 2016, 321, 155-162.	4.0	33
572	Core-Shell Sn-Cu-Alloy@Carbon Nanorods to Array as Three-Dimensional Anode by Nanoelectrodeposition for High-Performance Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 12221-12227.	4.0	51
573	Synthesis, Properties, and Applications of Hollow Micro-/Nanostructures. <i>Chemical Reviews</i> , 2016, 116, 10983-11060.	23.0	1,215
574	Bacteria Absorption-Based Mn ₂ P ₂ O ₇ @Carbon@Reduced Graphene Oxides for High-Performance Lithium-Ion Battery Anodes. <i>ACS Nano</i> , 2016, 10, 5516-5524.	7.3	81
575	Evaluating silicene as a potential cathode host to immobilize polysulfides in lithium-sulfur batteries. <i>Journal of Coordination Chemistry</i> , 2016, 69, 2090-2105.	0.8	37
576	Facile synthesis of multilayer-like Si thin film as high-performance anode materials for lithium-ion batteries. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	6
577	Electrochemical performance and surface chemistry of nanoparticle Si@SiO ₂ Li-ion battery anode in LiPF ₆ -based electrolyte. <i>Electrochimica Acta</i> , 2016, 208, 109-119.	2.6	28

#	ARTICLE	IF	CITATIONS
578	Carbon-coated Si/graphite composites with combined electrochemical properties for high-energy-density lithium-ion batteries. <i>Ionics</i> , 2016, 22, 1847-1853.	1.2	12
579	Understanding surface reactivity of Si electrodes in Li-ion batteries by in operando scanning electrochemical microscopy. <i>Chemical Communications</i> , 2016, 52, 6825-6828.	2.2	37
580	Tuning the field distribution and fabrication of an Al@ZnO core-shell nanostructure for a SPR-based fiber optic phenyl hydrazine sensor. <i>Nanotechnology</i> , 2016, 27, 215501.	1.3	15
581	The importance of covalent coupling in the synthesis of high performance composite anodes for lithium ion batteries. <i>RSC Advances</i> , 2016, 6, 45519-45524.	1.7	8
582	Enhanced electrochemical performance promoted by monolayer graphene and void space in silicon composite anode materials. <i>Nano Energy</i> , 2016, 27, 647-657.	8.2	61
583	Energy Storage Performance Enhancement by Surface Engineering of Electrode Materials. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600430.	1.9	17
584	Influence of graphene oxide on electrochemical performance of Si anode material for lithium-ion batteries. <i>Journal of Energy Chemistry</i> , 2016, 25, 817-824.	7.1	20
585	Phosphorus-Rich Copper Phosphide Nanowires for Field-Effect Transistors and Lithium-Ion Batteries. <i>ACS Nano</i> , 2016, 10, 8632-8644.	7.3	79
586	Three-dimensional SnO ₂ /carbon on Cu foam for high-performance lithium ion battery anodes. <i>Nanotechnology</i> , 2016, 27, 415401.	1.3	7
587	Cu-Li ₂ O@Si core-shell nanowall arrays: Facile voltage-controlled synthesis and enhanced lithium-storage capabilities. <i>Journal of Alloys and Compounds</i> , 2016, 689, 56-62.	2.8	2
588	In-situ environmental scanning electron microscopy for probing the properties of advanced energy materials. <i>International Journal of Nanomanufacturing</i> , 2016, 12, 264.	0.3	2
589	Understanding the role of mechanics in energy materials: A perspective. <i>Extreme Mechanics Letters</i> , 2016, 9, 347-352.	2.0	47
590	Double-plasma enhanced carbon shield for spatial/interfacial controlled electrodes in lithium ion batteries via micro-sized silicon from wafer waste. <i>Journal of Power Sources</i> , 2016, 331, 198-207.	4.0	7
591	Rational design of three-dimensional macroporous silicon as high performance Li-ion battery anodes with long cycle life. <i>Journal of Power Sources</i> , 2016, 331, 76-81.	4.0	59
592	Layered amorphous silicon as negative electrodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 332, 290-298.	4.0	30
593	Rosin-Embedded Poly(acrylic acid) Binder for Silicon/Graphite Negative Electrode. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 6362-6370.	3.2	22
594	Mesoporous Amorphous Silicon: A Simple Synthesis of a High-Rate and Long-Life Anode Material for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14063-14066.	7.2	164
595	An examination of the cycling performance and failure mechanisms in mechanically alloyed composites containing antimony metal, iron oxide, and carbon black. <i>Electrochimica Acta</i> , 2016, 217, 292-298.	2.6	3

#	ARTICLE	IF	CITATIONS
596	Stable freestanding Li-ion battery cathodes by in situ conformal coating of conducting polypyrrole on NiS-carbon nanofiber films. <i>Journal of Power Sources</i> , 2016, 331, 360-365.	4.0	44
597	Semimicro-size agglomerate structured silicon-carbon composite as an anode material for high performance lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 334, 128-136.	4.0	47
598	Polymeric iron(III) acetate derived hierarchical maghemite microstructures assembled by porous nanobelts for improved lithium storage performances. <i>Synthetic Metals</i> , 2016, 221, 284-290.	2.1	1
599	Synthesis of Si/TiO ₂ core-shell nanoparticles as anode material for high performance lithium ion batteries. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12813-12819.	1.1	17
600	In situ rapid growth of fluorescent silicon nanoparticles at room temperature and under atmospheric pressure. <i>Chemical Communications</i> , 2016, 52, 13444-13447.	2.2	14
601	Precise Perforation and Scalable Production of Si Particles from Low-Grade Sources for High-Performance Lithium Ion Battery Anodes. <i>Nano Letters</i> , 2016, 16, 7210-7215.	4.5	105
602	Mesoporous Amorphous Silicon: A Simple Synthesis of a High-Rate and Long-Life Anode Material for Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2016, 128, 14269-14272.	1.6	37
603	Composite Gel Polymer Electrolyte Based on Poly(vinylidene fluoride-hexafluoropropylene) (PVDF-HFP) with Modified Aluminum-Doped Lithium Lanthanum Titanate (A-LLTO) for High-Performance Lithium Rechargeable Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20710-20719.	4.0	125
604	Silica Wastes to High-Performance Lithium Storage Materials: A Rational Designed Al ₂ O ₃ Coating Assisted Magnesiothermic Process. <i>Small</i> , 2016, 12, 5281-5287.	5.2	57
605	A high energy asymmetric supercapacitor based on flower-like CoMoO ₄ /MnO ₂ heterostructures and activated carbon. <i>Electrochimica Acta</i> , 2016, 213, 663-671.	2.6	62
606	Investigation of the chemo-mechanical coupling in lithiation/delithiation of amorphous Si through simulations of Si thin films and Si nanospheres. <i>Journal of Power Sources</i> , 2016, 326, 365-376.	4.0	27
607	Nanocomb Architecture Design Using Germanium Selenide as High-Performance Lithium Storage Material. <i>Chemistry of Materials</i> , 2016, 28, 6146-6151.	3.2	37
608	Scalable synthesis of a novel structured graphite/silicon/pyrolyzed-carbon composite as anode material for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2016, 688, 1072-1079.	2.8	44
609	Electron Transport and Electrolyte Reduction in the Solid-Electrolyte Interphase of Rechargeable Lithium Ion Batteries with Silicon Anodes. <i>Journal of Physical Chemistry C</i> , 2016, 120, 17978-17988.	1.5	37
610	Towards flexible binderless anodes: silicon/carbon fabrics via double-nozzle electrospinning. <i>Chemical Communications</i> , 2016, 52, 11398-11401.	2.2	52
611	Cobalt silicate hierarchical hollow spheres for lithium-ion batteries. <i>Nanotechnology</i> , 2016, 27, 365401.	1.3	21
612	Rapid, in Situ Synthesis of High Capacity Battery Anodes through High Temperature Radiation-Based Thermal Shock. <i>Nano Letters</i> , 2016, 16, 5553-5558.	4.5	67
613	Mechanics-based optimization of yolk-shell carbon-coated silicon nanoparticle as electrode materials for high-capacity lithium ion battery. <i>Composites Communications</i> , 2016, 1, 1-5.	3.3	22

#	ARTICLE	IF	CITATIONS
614	Quantum electrodynamical theory of high-efficiency excitation energy transfer in laser-driven nanostructure systems. <i>Physical Review B</i> , 2016, 94, .	1.1	11
615	Recent progress of silicon composites as anode materials for secondary batteries. <i>RSC Advances</i> , 2016, 6, 87778-87790.	1.7	61
616	Tuning the Outward to Inward Swelling in Lithiated Silicon Nanotubes via Surface Oxide Coating. <i>Nano Letters</i> , 2016, 16, 5815-5822.	4.5	45
617	Hollow Silicon Nanospheres Encapsulated with a Thin Carbon Shell: An Electrochemical Study. <i>Electrochimica Acta</i> , 2016, 215, 126-141.	2.6	62
618	Li ₃ PO ₄ Matrix Enables a Long Cycle Life and High Energy Efficiency Bismuth-Based Battery. <i>Nano Letters</i> , 2016, 16, 5875-5882.	4.5	37
619	Preparation of Amorphous SiOC Ceramic Powders through Precursor Polymer Pyrolysis. <i>Key Engineering Materials</i> , 2016, 697, 27-32.	0.4	3
620	Nanostructured energy materials for electrochemical energy conversion and storage: A review. <i>Journal of Energy Chemistry</i> , 2016, 25, 967-984.	7.1	409
621	In Situ Environmental TEM in Imaging Gas and Liquid Phase Chemical Reactions for Materials Research. <i>Advanced Materials</i> , 2016, 28, 9686-9712.	11.1	124
622	Ethylene Carbonate Reduction on Lithiated Surfaces of Hydroxylated Amorphous Silicon Dioxide. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2197-A2202.	1.3	7
623	Metal Chelation Assisted In Situ Migration and Functionalization of Catalysts on Peapod-Like Hollow SnO ₂ toward a Superior Chemical Sensor. <i>Small</i> , 2016, 12, 5989-5997.	5.2	61
624	Silicon-based anodes for lithium-ion batteries: Effectiveness of materials synthesis and electrode preparation. <i>Nano Energy</i> , 2016, 27, 359-376.	8.2	415
625	Wood-Derived Materials for Green Electronics, Biological Devices, and Energy Applications. <i>Chemical Reviews</i> , 2016, 116, 9305-9374.	23.0	1,110
626	Atomic-Scale Control of Silicon Expansion Space as Ultrastable Battery Anodes. <i>ACS Nano</i> , 2016, 10, 8243-8251.	7.3	128
627	Carbon nanotubes in Li-ion batteries: A review. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2016, 213, 12-40.	1.7	127
628	The Mechanical Behavior During (De)lithiation of Coated Silicon Nanoparticles as Anode Material for Lithium-ion Batteries Studied By In-Situ Transmission Electron Microscopy. <i>Energy Technology</i> , 2016, 4, 1005-1012.	1.8	14
629	Assessing Charge Contribution from Thermally Treated Ni Foam as Current Collectors for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2016, 163, A1805-A1811.	1.3	14
630	Scalable preparation of silicon@graphite/carbon microspheres as high-performance lithium-ion battery anode materials. <i>RSC Advances</i> , 2016, 6, 69882-69888.	1.7	32
631	Mechanics of high-capacity electrodes in lithium-ion batteries. <i>Chinese Physics B</i> , 2016, 25, 014601.	0.7	10

#	ARTICLE	IF	CITATIONS
632	Graphene Sandwiched Mesosstructured Li-ion Battery Electrodes. <i>Advanced Materials</i> , 2016, 28, 7696-7702.	11.1	86
633	A novel method to synthesize SnP ₂ O ₇ spherical particles for lithium-ion battery anode. <i>Ionics</i> , 2016, 22, 2315-2319.	1.2	11
634	Synthesis of free-standing MnO ₂ /reduced graphene oxide membranes and electrochemical investigation of their performances as anode materials for half and full lithium-ion batteries. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	0.8	9
635	Modulation of Crystal Surface and Lattice by Doping: Achieving Ultrafast Metal-Ion Insertion in Anatase TiO ₂ . <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 29186-29193.	4.0	23
636	Failure mechanisms of single-crystal silicon electrodes in lithium-ion batteries. <i>Nature Communications</i> , 2016, 7, 11886.	5.8	211
637	SiO _x and carbon double-layer coated Si nanorods as anode materials for lithium-ion batteries. <i>RSC Advances</i> , 2016, 6, 101008-101015.	1.7	10
638	Superstructure ZrV ₂ O ₇ nanofibres: thermal expansion, electronic and lithium storage properties. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 32160-32168.	1.3	8
639	Hollow Nanotubes of N-Doped Carbon on CoS. <i>Angewandte Chemie</i> , 2016, 128, 16063-16066.	1.6	14
640	Hollow Nanotubes of N-Doped Carbon on CoS. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15831-15834.	7.2	130
641	Facile, Water-Based, Direct-Deposit Fabrication of Hybrid Silicon Assemblies for Scalable and High-Performance Li-ion Battery Anodes. <i>Electrochimica Acta</i> , 2016, 222, 946-955.	2.6	5
642	In situ Scanning Electron Microscopy of Silicon Anode Reactions in Lithium-Ion Batteries during Charge/Discharge Processes. <i>Scientific Reports</i> , 2016, 6, 36153.	1.6	65
643	Poly (acrylic acid sodium) grafted carboxymethyl cellulose as a high performance polymer binder for silicon anode in lithium ion batteries. <i>Scientific Reports</i> , 2016, 6, 19583.	1.6	140
644	Multiscale Hyperporous Silicon Flake Anodes for High Initial Coulombic Efficiency and Cycle Stability. <i>ACS Nano</i> , 2016, 10, 10589-10597.	7.3	95
645	Effect of pore structures on the electrochemical performance of porous silicon synthesized from magnesiothermic reduction of biosilica. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2016, 31, 965-971.	0.4	7
646	5L-Scale Magnesio-Milling Reduction of Nanostructured SiO ₂ for High Capacity Silicon Anodes in Lithium-Ion Batteries. <i>Nano Letters</i> , 2016, 16, 7261-7269.	4.5	67
647	Core-shell rGO/SnO ₂ @CF with wrinkled surface used as structural anode material: high tensile strength and electrochemical stability. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18524-18531.	5.2	24
648	Nanoscale Chemical Evolution of Silicon Negative Electrodes Characterized by Low-Loss STEM-EELS. <i>Nano Letters</i> , 2016, 16, 7381-7388.	4.5	45
649	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. <i>Nature Energy</i> , 2016, 1, .	19.8	609

#	ARTICLE	IF	CITATIONS
650	Promises and challenges of nanomaterials for lithium-based rechargeable batteries. <i>Nature Energy</i> , 2016, 1, .	19.8	1,388
651	High Area Capacity Lithium-Sulfur Full-cell Battery with Prelithiated Silicon Nanowire-Carbon Anodes for Long Cycling Stability. <i>Scientific Reports</i> , 2016, 6, 27982.	1.6	69
652	Tin nanoparticles as an effective conductive additive in silicon anodes. <i>Scientific Reports</i> , 2016, 6, 30952.	1.6	21
653	Size and Composition Effects in Sb-Carbon Nanocomposites for Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 30152-30164.	4.0	63
654	A novel Si/Sn composite with entangled ribbon structure as anode materials for lithium ion battery. <i>Scientific Reports</i> , 2016, 6, 29356.	1.6	35
655	Carbon-coated Si micrometer particles binding to reduced graphene oxide for a stable high-capacity lithium-ion battery anode. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17757-17763.	5.2	25
656	High crystalline carbon network of Si/C nanofibers obtained from the embedded pitch and its contribution to Li ion kinetics. <i>Electrochimica Acta</i> , 2016, 220, 511-516.	2.6	15
657	Fluid-like Surface Layer and Its Flow Characteristics in Glassy Nanotubes. <i>Nano Letters</i> , 2016, 16, 7545-7550.	4.5	7
658	Theoretical study of SET operation in carbon nanotube memory cell. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 04EE03.	0.8	0
659	A Stretchable Graphitic Carbon/Si Anode Enabled by Conformal Coating of a Self-Healing Elastic Polymer. <i>Advanced Materials</i> , 2016, 28, 2455-2461.	11.1	197
660	Moisture Battery Formed by Direct Contact of Magnesium with Foamed Polyaniline. <i>Angewandte Chemie</i> , 2016, 128, 1837-1841.	1.6	11
661	Silicon Asymmetric Membranes for Efficient Lithium Storage: A Scalable Method. <i>Energy Technology</i> , 2016, 4, 502-509.	1.8	7
662	Facile Fabrication of Silicon Nanotube Arrays and Their Application in Lithium-Ion Batteries. <i>Advanced Engineering Materials</i> , 2016, 18, 1349-1353.	1.6	25
663	Nanostructured Silicon Anodes for High-Performance Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2016, 26, 647-678.	7.8	261
664	Cluster-Inspired Design of High-Capacity Anode for Li-Ion Batteries. <i>ACS Energy Letters</i> , 2016, 1, 202-208.	8.8	23
665	Silicon Diphosphide: A Si-Based Three-Dimensional Crystalline Framework as a High-Performance Li-Ion Battery Anode. <i>ACS Nano</i> , 2016, 10, 5701-5709.	7.3	81
666	Aluminothermic reduction enabled synthesis of silicon hollow microspheres from commercialized silica nanoparticles for superior lithium storage. <i>Chemical Communications</i> , 2016, 52, 8401-8404.	2.2	48
667	Ionic Liquid-Organic Carbonate Electrolyte Blends To Stabilize Silicon Electrodes for Extending Lithium Ion Battery Operability to 100 °C. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15242-15249.	4.0	51

#	ARTICLE	IF	CITATIONS
668	Silicon Framework-Based Lithium Silicides at High Pressures. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16761-16767.	4.0	17
669	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. <i>Electrochimica Acta</i> , 2016, 211, 982-988.	2.6	30
670	Flexible sulfur wires (Flex-SWs) – A new versatile platform for lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2016, 212, 286-293.	2.6	12
671	Electrospun carbon-based nanostructured electrodes for advanced energy storage – A review. <i>Energy Storage Materials</i> , 2016, 5, 58-92.	9.5	178
672	Silicon nanoparticles embedded in a porous carbon matrix as a high-performance anode for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11381-11387.	5.2	86
673	Zinc Pyrovanadate Nanoplates Embedded in Graphene Networks with Enhanced Electrochemical Performance. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 2992-2999.	1.8	47
674	Facial Synthesis of Three-Dimensional Cross-Linked Cage for High-Performance Lithium Storage. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15279-15287.	4.0	37
675	Carbothermic reduction synthesis of red phosphorus-filled 3D carbon material as a high-capacity anode for sodium ion batteries. <i>Energy Storage Materials</i> , 2016, 4, 130-136.	9.5	167
676	In-situ synthesis of interconnected SWCNT/OMC framework on silicon nanoparticles for high performance lithium-ion batteries. <i>Green Energy and Environment</i> , 2016, 1, 91-99.	4.7	28
677	Hollow Si/C composite as anode material for high performance lithium-ion battery. <i>Powder Technology</i> , 2016, 299, 178-184.	2.1	34
678	Nitrogen-doped Carbon Coated Porous Silicon as High Performance Anode Material for Lithium-Ion Batteries. <i>Electrochimica Acta</i> , 2016, 209, 299-307.	2.6	52
679	High throughput combinatorial analysis of mechanical and electrochemical properties of Li[Ni Co Mn]O ₂ cathode. <i>Extreme Mechanics Letters</i> , 2016, 9, 439-448.	2.0	28
680	Designing self-standing silicon-copper composite helices as anodes for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2016, 677, 228-236.	2.8	21
681	Solid Electrolyte Interphase Growth and Capacity Loss in Silicon Electrodes. <i>Journal of the American Chemical Society</i> , 2016, 138, 7918-7931.	6.6	189
682	Design of an ultra-durable silicon-based battery anode material with exceptional high-temperature cycling stability. <i>Nano Energy</i> , 2016, 26, 192-199.	8.2	40
683	Na ₂ Ge ₄ O ₉ nanoparticles encapsulated in 3D carbon networks with long-term stability and superior rate capability in lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 10552-10557.	5.2	35
684	High Anodic Performance of Co 1,3,5-Benzenetricarboxylate Coordination Polymers for Li-Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15352-15360.	4.0	181
685	Reversible lithium storage in manganese and cobalt 1,2,4,5-benzenetetracarboxylate metal-organic framework with high capacity. <i>RSC Advances</i> , 2016, 6, 61319-61324.	1.7	45

#	ARTICLE	IF	CITATIONS
686	Synthesis of nano-sized silicon from natural halloysite clay and its high performance as anode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 324, 33-40.	4.0	76
687	Highly Connected Silicon-Copper Alloy Mixture Nanotubes as High-Rate and Durable Anode Materials for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2016, 26, 524-531.	7.8	110
688	Heterogeneous WS ₂ /WO ₃ Thorn-Bush Nanofiber Electrodes for Sodium-Ion Batteries. <i>ACS Nano</i> , 2016, 10, 3257-3266.	7.3	121
689	Gelatin assisted wet chemistry synthesis of high quality \hat{I}^2 -FeOOH nanorods anchored on graphene nanosheets with superior lithium-ion battery application. <i>RSC Advances</i> , 2016, 6, 17504-17509.	1.7	23
690	Ultrafast and reversible electrochemical lithiation of InAs nanowires observed by in-situ transmission electron microscopy. <i>Nano Energy</i> , 2016, 20, 194-201.	8.2	19
691	Study of lithiation mechanisms of high performance carbon-coated Si anodes by in-situ microscopy. <i>Energy Storage Materials</i> , 2016, 3, 45-54.	9.5	47
692	The Effects of Cross-Linking in a Supramolecular Binder on Cycle Life in Silicon Microparticle Anodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 2318-2324.	4.0	90
693	In-Situ Crafting of ZnFe ₂ O ₄ Nanoparticles Impregnated within Continuous Carbon Network as Advanced Anode Materials. <i>ACS Nano</i> , 2016, 10, 2728-2735.	7.3	192
694	Study of lithium diffusivity in amorphous silicon via finite element analysis. <i>Journal of Power Sources</i> , 2016, 307, 77-85.	4.0	48
695	A novel synthesis of carbon nanotubes directly from an indecomposable solid carbon source for electrochemical applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2137-2146.	5.2	59
696	A Deep Reduction and Partial Oxidation Strategy for Fabrication of Mesoporous Si Anode for Lithium Ion Batteries. <i>ACS Nano</i> , 2016, 10, 2295-2304.	7.3	121
697	Carbon-coated silicon nanotube arrays on carbon cloth as a hybrid anode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 307, 410-415.	4.0	39
698	Silicon as a potential anode material for Li-ion batteries: where size, geometry and structure matter. <i>Nanoscale</i> , 2016, 8, 74-103.	2.8	559
699	Preparation of three-dimensional nanoporous Si using dealloying by metallic melt and application as a lithium-ion rechargeable battery negative electrode. <i>Journal of Power Sources</i> , 2016, 306, 8-16.	4.0	81
700	Highly Conductive Cu Nanoneedle-Array Supported Silicon Film for High-Performance Lithium Ion Battery Anodes. <i>Journal of the Electrochemical Society</i> , 2016, 163, A380-A384.	1.3	6
701	A honeycomb-cobweb inspired hierarchical core-shell structure design for electrospun silicon/carbon fibers as lithium-ion battery anodes. <i>Carbon</i> , 2016, 98, 582-591.	5.4	128
702	Chemical doping of a core-shell silicon nanoparticles@polyaniline nanocomposite for the performance enhancement of a lithium ion battery anode. <i>Nanoscale</i> , 2016, 8, 1280-1287.	2.8	69
703	Bimetallic coordination polymer as a promising anode material for lithium-ion batteries. <i>Chemical Communications</i> , 2016, 52, 2035-2038.	2.2	65

#	ARTICLE	IF	CITATIONS
704	Well-constructed silicon-based materials as high-performance lithium-ion battery anodes. <i>Nanoscale</i> , 2016, 8, 701-722.	2.8	113
705	In situ measurement of lithiation-induced stress in silicon nanoparticles using micro-Raman spectroscopy. <i>Nano Energy</i> , 2016, 22, 105-110.	8.2	111
706	High Stability Induced by the TiN/Ti Interlayer in Three-Dimensional Si/Ge Nanorod Arrays as Anode in Micro Lithium Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 7806-7810.	4.0	19
707	Analytical Model on Stress-Regulated Lithiation Kinetics and Fracture of Si-C Yolk-Shell Anodes for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2016, 163, A940-A946.	1.3	10
708	Solvent-free electrospinning of UV curable polymer microfibers. <i>RSC Advances</i> , 2016, 6, 29423-29427.	1.7	26
709	Failure mechanics of a wrinkling thin film anode on a substrate under cyclic charging and discharging. <i>Extreme Mechanics Letters</i> , 2016, 8, 273-282.	2.0	24
710	Silicon nano-trees as high areal capacity anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , 2016, 316, 1-7.	4.0	38
711	Performance Enhancement of Silicon Alloy-Based Anodes Using Thermally Treated Poly(amide imide) as a Polymer Binder for High Performance Lithium-Ion Batteries. <i>Langmuir</i> , 2016, 32, 3300-3307.	1.6	46
712	One-Dimensional Fluorescent Silicon Nanorods Featuring Ultrahigh Photostability, Favorable Biocompatibility, and Excitation Wavelength-Dependent Emission Spectra. <i>Journal of the American Chemical Society</i> , 2016, 138, 4824-4831.	6.6	88
713	Carbon-coated mesoporous silicon microsphere anodes with greatly reduced volume expansion. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6098-6106.	5.2	81
714	Carbon coating may expedite the fracture of carbon-coated silicon core-shell nanoparticles during lithiation. <i>Nanoscale</i> , 2016, 8, 5254-5259.	2.8	50
715	Latest development of nanostructured Si/C materials for lithium anode studies and applications. <i>Energy Storage Materials</i> , 2016, 4, 1-14.	9.5	101
716	Mechanical stresses and crystallization of lithium phosphorous oxynitride-coated germanium electrodes during lithiation and delithiation. <i>Journal of Power Sources</i> , 2016, 306, 817-825.	4.0	17
717	Design of Nanostructured Heterogeneous Solid Ionic Coatings through a Multiscale Defect Model. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 5687-5693.	4.0	53
718	Connecting the irreversible capacity loss in Li-ion batteries with the electronic insulating properties of solid electrolyte interphase (SEI) components. <i>Journal of Power Sources</i> , 2016, 309, 221-230.	4.0	182
719	Sandwich-structured graphite-metallic silicon@C nanocomposites for Li-ion batteries. <i>Electrochimica Acta</i> , 2016, 191, 299-306.	2.6	23
720	Voltage hysteresis of lithium ion batteries caused by mechanical stress. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 4721-4727.	1.3	152
721	Polythiophene-coated nano-silicon composite anodes with enhanced performance for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1331-1336.	1.2	16

#	ARTICLE	IF	CITATIONS
722	A Core-Shell Si@NiSi ₂ /Ni/C Nanocomposite as an Anode Material for Lithium-ion Batteries. <i>Electrochimica Acta</i> , 2016, 192, 303-309.	2.6	36
723	Silicon/Carbon Nanotube/BaTiO ₃ Nanocomposite Anode: Evidence for Enhanced Lithium-Ion Mobility Induced by the Local Piezoelectric Potential. <i>ACS Nano</i> , 2016, 10, 2617-2627.	7.3	81
724	Synthesis of Ultrathin Si Nanosheets from Natural Clays for Lithium-Ion Battery Anodes. <i>ACS Nano</i> , 2016, 10, 2843-2851.	7.3	274
725	A pinecone-inspired nanostructure design for long-cycle and high performance Si anodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 5395-5401.	5.2	12
726	Classical molecular dynamics and quantum ab-initio studies on lithium-intercalation in interconnected hollow spherical nano-spheres of amorphous silicon. <i>Journal of Alloys and Compounds</i> , 2016, 665, 165-172.	2.8	5
727	Hollow Cobalt Selenide Microspheres: Synthesis and Application as Anode Materials for Na-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 6449-6456.	4.0	130
728	Silicon nanoparticles grown on a reduced graphene oxide surface as high-performance anode materials for lithium-ion batteries. <i>RSC Advances</i> , 2016, 6, 25159-25166.	1.7	25
729	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2862-2867.	3.3	755
730	Dependency of Electrochemical Performances of Silicon Lithium-Ion Batteries on Glycosidic Linkages of Polysaccharide Binders. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4042-4047.	4.0	56
731	A Commercial Conducting Polymer as Both Binder and Conductive Additive for Silicon Nanoparticle-Based Lithium-Ion Battery Negative Electrodes. <i>ACS Nano</i> , 2016, 10, 3702-3713.	7.3	394
732	Atomic-Level Understanding toward a High-Capacity and High-Power Silicon Oxide (SiO) Material. <i>Journal of Physical Chemistry C</i> , 2016, 120, 886-892.	1.5	105
733	NiSi _x /a-Si Nanowires with Interfacial a-Ge as Anodes for High-Rate Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 673-679.	4.0	11
734	Effect of silicon configurations on the mechanical integrity of silicon-carbon nanotube heterostructured anode for lithium ion battery: A computational study. <i>Journal of Power Sources</i> , 2016, 304, 373-383.	4.0	21
735	Engineered nanomembranes for smart energy storage devices. <i>Chemical Society Reviews</i> , 2016, 45, 1308-1330.	18.7	167
736	A stable nanoporous silicon anode prepared by modified magnesiothermic reactions. <i>Nano Energy</i> , 2016, 20, 68-75.	8.2	65
737	Controlled Prelithiation of Silicon Monoxide for High Performance Lithium-Ion Rechargeable Full Cells. <i>Nano Letters</i> , 2016, 16, 282-288.	4.5	386
738	Integrating Si nanoscale building blocks into micro-sized materials to enable practical applications in lithium-ion batteries. <i>Nanoscale</i> , 2016, 8, 1834-1848.	2.8	38
739	Flexible conductive nanocellulose combined with silicon nanoparticles and polyaniline. <i>Carbohydrate Polymers</i> , 2016, 140, 43-50.	5.1	36

#	ARTICLE	IF	CITATIONS
740	Highly Stable Silicon@Carbon@Nitrogen Composite Anodes from Silsesquiazane for Rechargeable Lithium-Ion Battery. <i>Journal of Materials Science and Technology</i> , 2016, 32, 195-199.	5.6	16
741	Si nanoparticles/graphene composite membrane for high performance silicon anode in lithium ion batteries. <i>Carbon</i> , 2016, 98, 373-380.	5.4	109
742	Preparation and characterization of core@shell structure Si/C composite with multiple carbon phases as anode materials for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2016, 658, 91-97.	2.8	71
743	Strategies to succeed in improving the lithium-ion storage properties of silicon nanomaterials. <i>Journal of Materials Chemistry A</i> , 2016, 4, 32-50.	5.2	130
744	Carbon-coated porous silicon composites as high performance Li-ion battery anode materials: can the production process be cheaper and greener?. <i>Journal of Materials Chemistry A</i> , 2016, 4, 552-560.	5.2	88
745	High Ionic Conductivity of Composite Solid Polymer Electrolyte via In Situ Synthesis of Monodispersed SiO ₂ Nanospheres in Poly(ethylene oxide). <i>Nano Letters</i> , 2016, 16, 459-465.	4.5	791
746	Porous Fe ₂ O ₃ /ZnO composite derived from MOFs as an anode material for lithium ion batteries. <i>Ceramics International</i> , 2016, 42, 1044-1049.	2.3	31
747	Lithium Batteries. , 2016, , .		114
748	Anodes for Li-Ion Batteries. , 2016, , 323-429.		1
749	Recent advances in electrospun carbon nanofibers and their application in electrochemical energy storage. <i>Progress in Materials Science</i> , 2016, 76, 319-380.	16.0	579
750	Highly cross-linked Cu/a-Si core@shell nanowires for ultra-long cycle life and high rate lithium batteries. <i>Nanoscale</i> , 2016, 8, 2613-2619.	2.8	33
751	Nano/micro-structured silicon@carbon composite with buffer void as anode material for lithium ion battery. <i>Ceramics International</i> , 2016, 42, 589-597.	2.3	8
752	TEM in situ lithiation of tin nanoneedles for battery applications. <i>Journal of Materials Science</i> , 2016, 51, 589-602.	1.7	19
753	Mesoporous Germanium Anode Materials for Lithium-Ion Battery with Exceptional Cycling Stability in Wide Temperature Range. <i>Small</i> , 2017, 13, 1603045.	5.2	65
754	Si@Ge, Ge@Sn Based Anode Materials for Lithium-Ion Batteries: From Structure Design to Electrochemical Performance. <i>Small Methods</i> , 2017, 1, 1600037.	4.6	237
755	A reduced graphene oxide-encapsulated phosphorus/carbon composite as a promising anode material for high-performance sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 3683-3690.	5.2	54
756	Porous One-Dimensional Nanomaterials: Design, Fabrication and Applications in Electrochemical Energy Storage. <i>Advanced Materials</i> , 2017, 29, 1602300.	11.1	615
757	Polymer-Templated Formation of Polydopamine-Coated SnO ₂ Nanocrystals: Anodes for Cyclable Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2017, 129, 1895-1898.	1.6	26

#	ARTICLE	IF	CITATIONS
758	Polymer-templated Formation of Polydopamine-coated SnO ₂ Nanocrystals: Anodes for Cyclable Lithium-ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 1869-1872.	7.2	260
759	Large-scale production of silicon nanoparticles@graphene embedded in nanotubes as ultra-robust battery anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4809-4817.	5.2	61
760	Achieving Ni ₃ V ₂ O ₈ amorphous wire encapsulated in crystalline tube nanostructure as anode materials for lithium ion batteries. <i>Nano Energy</i> , 2017, 33, 138-145.	8.2	103
761	Self-sacrificed synthesis of carbon-coated SiO _x nanowires for high capacity lithium ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4183-4189.	5.2	112
762	Self-healing SEI enables full-cell cycling of a silicon-majority anode with a coulombic efficiency exceeding 99.9%. <i>Energy and Environmental Science</i> , 2017, 10, 580-592.	15.6	421
763	Unveiling the Critical Role of Polymeric Binders for Silicon Negative Electrodes in Lithium-Ion Full Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 3562-3569.	4.0	55
764	Porous Sandwiched Graphene/Silicon Anodes for Lithium Storage. <i>Electrochimica Acta</i> , 2017, 229, 445-451.	2.6	74
765	The prospects of phosphorene as an anode material for high-performance lithium-ion batteries: a fundamental study. <i>Nanotechnology</i> , 2017, 28, 075401.	1.3	48
766	Regulating Li deposition at artificial solid electrolyte interphases. <i>Journal of Materials Chemistry A</i> , 2017, 5, 3483-3492.	5.2	258
767	Solution Synthesis of Iodine-Doped Red Phosphorus Nanoparticles for Lithium-Ion Battery Anodes. <i>Nano Letters</i> , 2017, 17, 1240-1247.	4.5	113
768	Surface Coating Constraint Induced Anisotropic Swelling of Silicon in Si@Void@SiO _x Nanowire Anode for Lithium-ion Batteries. <i>Small</i> , 2017, 13, 1603754.	5.2	49
769	Convertibility of Anode Electrode with Microsized Wafer Scraps via Carbon Veil with Plasma Technique. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 1784-1793.	3.2	4
770	Hollow multicomponent zeolitic imidazolate frameworks-derived 3NiO·2Ni ₃ /2Co ₁ /2ZnO ₄ for high rate lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 703, 148-155.	2.8	8
771	Ultrafast, Highly Reversible, and Cycle-stable Lithium Storage Boosted by Pseudocapacitance in Sn-based Alloying Anodes. <i>Advanced Materials</i> , 2017, 29, 1606499.	11.1	102
772	Review of Nanotechnology for Anode Materials in Batteries. , 2017, , 45-82.		10
773	Filter paper derived nanofibrous silica-carbon composite as anodic material with enhanced lithium storage performance. <i>Chemical Engineering Journal</i> , 2017, 317, 673-686.	6.6	60
775	Research progress regarding Si-based anode materials towards practical application in high energy density Li-ion batteries. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1691-1708.	3.2	277
776	Amorphous nanosized silicon with hierarchically porous structure for high-performance lithium ion batteries. <i>Energy Storage Materials</i> , 2017, 7, 203-208.	9.5	37

#	ARTICLE	IF	CITATIONS
777	MoS ₂ nanosheets supported on reduced carboxylic multi-walled carbon nanotubes: An advanced catalyst for the hydrogen evolution reaction. <i>Microelectronic Engineering</i> , 2017, 176, 89-93.	1.1	10
778	Nano-grained SnO ₂ /Li ₄ Ti ₅ O ₁₂ composite hollow fibers via sol-gel/ electrospinning as anode material for Li-ion batteries. <i>Materials Today Energy</i> , 2017, 4, 14-24.	2.5	18
779	Nanospherical solid electrolyte interface layer formation in binder-free carbon nanotube aerogel/Si nanohybrids to provide lithium-ion battery anodes with a long-cycle life and high capacity. <i>Nanoscale</i> , 2017, 9, 4713-4720.	2.8	26
780	Stabilized lithium-ion battery anode performance by calcium-bridging of two dimensional siloxene layers. <i>Dalton Transactions</i> , 2017, 46, 3655-3660.	1.6	15
781	Convex and Concave Square Arrays of Vertical SnO ₂ Nanowire Bundles toward Lithium-ion Storage Electrodes. <i>Energy Technology</i> , 2017, 5, 1507-1513.	1.8	12
782	First-principles investigation of adsorption and diffusion of Li on doped silicenes: Prospective materials for lithium-ion batteries. <i>Materials Chemistry and Physics</i> , 2017, 192, 125-130.	2.0	26
783	Fabrication of C/SiO _{1.5} nanospheres by emulsion polymerization of twin monomer for high-performance lithium-ion battery anode. <i>Journal of Alloys and Compounds</i> , 2017, 701, 487-493.	2.8	4
784	Cu ₃ Si-doped porous-silicon particles prepared by simplified chemical vapor deposition method as anode material for high-rate and long-cycle lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 701, 425-432.	2.8	42
785	Two-Fold Anisotropy Governs Morphological Evolution and Stress Generation in Sodiated Black Phosphorus for Sodium Ion Batteries. <i>Nano Letters</i> , 2017, 17, 2299-2306.	4.5	48
786	Imaging Liquid Processes Using Open Cells in the TEM, SEM, and Beyond. , 0, , 56-77.		1
787	Facile synthesis of ultrasmall Si particles embedded in carbon framework using Si-carbon integration strategy with superior lithium ion storage performance. <i>Chemical Engineering Journal</i> , 2017, 319, 1-8.	6.6	36
788	Nanostructured silicon/silicide/carbon composite anodes with controllable voids for Li-ion batteries. <i>Materials and Design</i> , 2017, 120, 230-237.	3.3	14
789	Delicate Structural Control of Siâ€“SiO _x â€“C Composite via High-Speed Spray Pyrolysis for Li-Ion Battery Anodes. <i>Nano Letters</i> , 2017, 17, 1870-1876.	4.5	156
790	Synthesis of binder-like molecules covalently linked to silicon nanoparticles and application as anode material for lithium-ion batteries without the use of electrolyte additives. <i>Journal of Power Sources</i> , 2017, 345, 190-201.	4.0	39
791	A Novel Ultrafast Rechargeable Multi-ions Battery. <i>Advanced Materials</i> , 2017, 29, 1606349.	11.1	97
792	A comparative investigation of different chemical treatments on SiO anode materials for lithium-ion batteries: towards long-term stability. <i>RSC Advances</i> , 2017, 7, 4501-4509.	1.7	21
793	<i>In Situ</i> Formation of Stable Interfacial Coating for High Performance Lithium Metal Anodes. <i>Chemistry of Materials</i> , 2017, 29, 3572-3579.	3.2	105
794	Flexible Liâ€“CO ₂ Batteries with Liquid-Free Electrolyte. <i>Angewandte Chemie</i> , 2017, 129, 5879-5883.	1.6	29

#	ARTICLE	IF	CITATIONS
795	Flexible Li ⁺ CO ₂ Batteries with Liquid-Free Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5785-5789.	7.2	156
796	Fabrication of TiO ₂ coated porous CoMn ₂ O ₄ submicrospheres for advanced lithium-ion anodes. <i>RSC Advances</i> , 2017, 7, 21214-21220.	1.7	13
797	Li-insertion/extraction properties of three-dimensional Sn electrode prepared by facile electrodeposition method. <i>Journal of Applied Electrochemistry</i> , 2017, 47, 727-734.	1.5	8
798	Silicon Derived from Glass Bottles as Anode Materials for Lithium Ion Full Cell Batteries. <i>Scientific Reports</i> , 2017, 7, 917.	1.6	47
799	Granadilla-Inspired Structure Design for Conversion/Alloy-Reaction Electrode with Integrated Lithium Storage Behaviors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15470-15476.	4.0	11
800	One-to-One Comparison of Graphite-Blended Negative Electrodes Using Silicon Nanolayer-Embedded Graphite versus Commercial Benchmarking Materials for High-Energy Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1700071.	10.2	100
801	Facile Formation of a Solid Electrolyte Interface as a Smart Blocking Layer for High-Stability Sulfur Cathode. <i>Advanced Materials</i> , 2017, 29, 1700273.	11.1	83
802	Geometric design of micron-sized crystalline silicon anodes through in situ observation of deformation and fracture behaviors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12793-12802.	5.2	38
803	A Flexible Solid Composite Electrolyte with Vertically Aligned and Connected Ion-Conducting Nanoparticles for Lithium Batteries. <i>Nano Letters</i> , 2017, 17, 3182-3187.	4.5	403
804	Scalable Production of the Silicon-Tin Yin-Yang Hybrid Structure with Graphene Coating for High Performance Lithium-Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15388-15393.	4.0	36
805	Three-dimensional stable lithium metal anode with nanoscale lithium islands embedded in ionically conductive solid matrix. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4613-4618.	3.3	285
806	Healable Transparent Electronic Devices. <i>Advanced Functional Materials</i> , 2017, 27, 1606339.	7.8	118
807	Three-dimensional holey-graphene/niobia composite architectures for ultrahigh-rate energy storage. <i>Science</i> , 2017, 356, 599-604.	6.0	1,229
808	A critical SiO _x layer on Si porous structures to construct highly-reversible anode materials for lithium-ion batteries. <i>Chemical Communications</i> , 2017, 53, 6101-6104.	2.2	42
809	Self-adaptive Si/reduced graphene oxide scrolls for high-performance Li-ion battery anodes. <i>Carbon</i> , 2017, 120, 397-404.	5.4	51
810	Effect of electron beam irradiation on the capacity fading of hydride-terminated silicon nanocrystal based anode materials for lithium ion batteries. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 53, 82-92.	2.9	14
811	Three-Dimensional Porous Si and SiO ₂ with In Situ Decorated Carbon Nanotubes As Anode Materials for Li-ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 17807-17813.	4.0	62
812	Facile fabrication of ZnO-CuO porous hybrid microspheres as lithium ion battery anodes with enhanced cyclability. <i>Rare Metals</i> , 2017, 36, 403-410.	3.6	9

#	ARTICLE	IF	CITATIONS
813	Supersonic cold spraying of titania nanoparticles on reduced graphene oxide for lithium ion battery anodes. <i>Journal of Alloys and Compounds</i> , 2017, 715, 161-169.	2.8	16
814	Study of Lithium Silicide Nanoparticles as Anode Materials for Advanced Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 16071-16080.	4.0	47
815	Mesoporous Silicon Hollow Nanocubes Derived from Metal-Organic Framework Template for Advanced Lithium-Ion Battery Anode. <i>ACS Nano</i> , 2017, 11, 4808-4815.	7.3	181
816	Tunable construction of multi-shell hollow SiO ₂ microspheres with hierarchically porous structure as high-performance anodes for lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2017, 323, 252-259.	6.6	74
817	Biomass-derived carbon/silicon three-dimensional hierarchical nanostructure as anode material for lithium ion batteries. <i>Materials Research Bulletin</i> , 2017, 96, 340-346.	2.7	35
818	Design of porous Si/graphite electrodes with long cycle stability and controlled swelling. <i>Energy and Environmental Science</i> , 2017, 10, 1427-1434.	15.6	140
819	Photovoltaic Monocrystalline Silicon Waste-Derived Hierarchical Silicon/Flake Graphite/Carbon Composite as Low-Cost and High-Capacity Anode for Lithium-Ion Batteries. <i>ChemistrySelect</i> , 2017, 2, 3479-3489.	0.7	22
820	Electrochemomechanical degradation of high-capacity battery electrode materials. <i>Progress in Materials Science</i> , 2017, 89, 479-521.	16.0	144
821	Porous Fe ₂ O ₃ Nanoframeworks Encapsulated within Three-Dimensional Graphene as High-Performance Flexible Anode for Lithium-Ion Battery. <i>ACS Nano</i> , 2017, 11, 5140-5147.	7.3	421
822	Thermal Induced Strain Relaxation of 1D Iron Oxide for Solid Electrolyte Interphase Control and Lithium Storage Improvement. <i>Advanced Energy Materials</i> , 2017, 7, 1601582.	10.2	73
823	Solvent-free electrospinning: opportunities and challenges. <i>Polymer Chemistry</i> , 2017, 8, 333-352.	1.9	65
824	Fine-tunable plasma nano-machining for fabrication of 3D hollow nanostructures: SERS application. <i>Nanotechnology</i> , 2017, 28, 315301.	1.3	7
825	A high-performance Li-ion anode from direct deposition of Si nanoparticles. <i>Nano Energy</i> , 2017, 38, 477-485.	8.2	67
826	Flower-like carbon with embedded silicon nano particles as an anode material for Li-ion batteries. <i>RSC Advances</i> , 2017, 7, 30032-30037.	1.7	17
827	Structural and optical properties of alumina passivated amorphous Si slanted columnar thin films during electrochemical Li-ion intercalation and deintercalation observed by in situ generalized spectroscopic ellipsometry. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, 031401.	0.6	0
828	Ion Diffusivity through the Solid Electrolyte Interphase in Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, E3159-E3170.	1.3	108
829	Antipulverization Electrode Based on Low-Carbon Triple-Shelled Superstructures for Lithium-Ion Batteries. <i>Advanced Materials</i> , 2017, 29, 1701494.	11.1	92
830	Two-dimensional sandwich-like Ag coated silicon-graphene-silicon nanostructures for superior lithium storage. <i>Applied Surface Science</i> , 2017, 425, 614-621.	3.1	18

#	ARTICLE	IF	CITATIONS
831	SnO ₂ modified Li ₄ Ti ₅ O ₁₂ as a high performance lithium-ion battery material. <i>Materials Letters</i> , 2017, 205, 150-154.	1.3	4
832	A Lithium Amide-Borohydride Solid-State Electrolyte with Lithium-Ion Conductivities Comparable to Liquid Electrolytes. <i>Advanced Energy Materials</i> , 2017, 7, 1700294.	10.2	95
833	Understanding the influence of electrolyte additives on the electrochemical performance and morphology evolution of silicon nanowire based lithium-ion battery anodes. <i>Journal of Power Sources</i> , 2017, 359, 601-610.	4.0	84
834	Tailoring the morphological properties of anodized Ti ₃ SiC ₂ for better power density of Li-ion microbatteries. <i>Electrochemistry Communications</i> , 2017, 81, 29-33.	2.3	15
835	Cross-linking of polymer and ionic liquid as high-performance gel electrolyte for flexible solid-state supercapacitors. <i>Electrochimica Acta</i> , 2017, 244, 112-118.	2.6	68
836	Energy storage mechanism in aqueous fiber-shaped Li-ion capacitors based on aligned hydrogenated-Li ₄ Ti ₅ O ₁₂ nanowires. <i>Nanoscale</i> , 2017, 9, 8192-8199.	2.8	26
837	High-Rate and Long-Cycle Silicon/Porous Nitrogen-Doped Carbon Anode via a Low-Cost Facile Pre-Template-Coating Approach for Li-ion Batteries. <i>Electrochimica Acta</i> , 2017, 245, 14-24.	2.6	46
838	Conductive and Porous Silicon Nanowire Anodes for Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1564-A1568.	1.3	30
839	Lithium Ion Breathable Electrodes with 3D Hierarchical Architecture for Ultrastable and High-Capacity Lithium Storage. <i>Advanced Functional Materials</i> , 2017, 27, 1700447.	7.8	91
840	Paper-Based Electrodes for Flexible Energy Storage Devices. <i>Advanced Science</i> , 2017, 4, 1700107.	5.6	361
841	High-performance reduced graphene oxide/red phosphorous composites anodes for lithium batteries and soft X-ray near-edge structure studies. <i>Canadian Journal of Chemistry</i> , 2017, 95, 1178-1182.	0.6	2
842	A SiO ₂ -Based Anode in a High-Voltage Lithium-Ion Battery. <i>ChemElectroChem</i> , 2017, 4, 2164-2168.	1.7	28
843	Sea Sand-Derived Magnesium Silicide as a Reactive Precursor for Silicon-Based Composite Electrodes of Lithium-Ion Battery. <i>Electrochimica Acta</i> , 2017, 245, 893-901.	2.6	13
844	An <i>in situ</i> -Fabricated Composite Polymer Electrolyte Containing Large-Anion Lithium Salt for All-Solid-State LiFePO ₄ /Li Batteries. <i>ChemElectroChem</i> , 2017, 4, 2293-2299.	1.7	14
845	Environmental Friendly Scalable Production of Colloidal 2D Titanium Carbonitride MXene with Minimized Nanosheets Restacking for Excellent Cycle Life Lithium-Ion Batteries. <i>Electrochimica Acta</i> , 2017, 235, 690-699.	2.6	186
846	Amorphous TiO ₂ Shells: A Vital Elastic Buffering Layer on Silicon Nanoparticles for High-Performance and Safe Lithium Storage. <i>Advanced Materials</i> , 2017, 29, 1700523.	11.1	342
847	How to improve the stability and rate performance of lithium-ion batteries with transition metal oxide anodes. <i>Journal of Materials Research</i> , 2017, 32, 16-36.	1.2	36
848	Silicon and Carbon Nanocomposite Spheres with Enhanced Electrochemical Performance for Full Cell Lithium Ion Batteries. <i>Scientific Reports</i> , 2017, 7, 44838.	1.6	61

#	ARTICLE	IF	CITATIONS
849	Composites of Piezoelectric Materials and Silicon as Anodes for Lithium-ion Batteries. <i>ChemElectroChem</i> , 2017, 4, 1523-1527.	1.7	9
850	A new approach for compensating the irreversible capacity loss of high-energy Si/C LiNi _{0.5} Mn _{1.5} O ₄ lithium-ion batteries. <i>Journal of Power Sources</i> , 2017, 351, 35-44.	4.0	80
851	Chitosan: A N-doped carbon source of silicon-based anode material for lithium ion batteries. <i>Ionics</i> , 2017, 23, 2311-2318.	1.2	13
852	Metal-organic framework-templated two-dimensional hybrid bimetallic metal oxides with enhanced lithium/sodium storage capability. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13983-13993.	5.2	150
853	Hierarchical columnar silicon anode structures for high energy density lithium sulfur batteries. <i>Journal of Power Sources</i> , 2017, 351, 183-191.	4.0	38
854	Silicon-Core-Shell Hollow Nanotubular Configuration High-Performance Lithium-Ion Anodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9662-9671.	1.5	29
855	Dichlorosilane-derived nano-silicon inside hollow carbon spheres as a high-performance anode for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9262-9271.	5.2	28
856	Novel hybrid Si nanocrystals embedded in a conductive SiO _x @C matrix from one single precursor as a high performance anode material for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7026-7034.	5.2	55
857	The Impact of Encapsulation on Lithium Transport and Cycling Performance for Silicon Electrodes on Aligned Carbon Nanotube Substrates. <i>Journal of the Electrochemical Society</i> , 2017, 164, A848-A858.	1.3	2
858	Dual-Functionalized Double Carbon Shells Coated Silicon Nanoparticles for High Performance Lithium-ion Batteries. <i>Advanced Materials</i> , 2017, 29, 1605650.	11.1	325
859	Microstructure dynamics of rechargeable battery materials studied by advanced transmission electron microscopy. <i>NPG Asia Materials</i> , 2017, 9, e360-e360.	3.8	20
860	Extensively interconnected silicon nanoparticles via carbon network derived from ultrathin cellulose nanofibers as high performance lithium ion battery anodes. <i>Carbon</i> , 2017, 118, 8-17.	5.4	58
861	The synergistic effects of combining the high energy mechanical milling and wet milling on Si negative electrode materials for lithium ion battery. <i>Journal of Power Sources</i> , 2017, 349, 111-120.	4.0	30
862	Molecular dynamics simulations of the first charge of a Li-ion-Si-anode nanobattery. <i>Journal of Molecular Modeling</i> , 2017, 23, 120.	0.8	26
863	Effects of solid polymer electrolyte coating on the composition and morphology of the solid electrolyte interphase on Sn anodes. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 955-966.	1.2	6
864	Tailored Li ₂ S-P ₂ S ₅ glass-ceramic electrolyte by MoS ₂ doping, possessing high ionic conductivity for all-solid-state lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2829-2834.	5.2	158
865	Carbon-Assisted Technique to Modify the Surface of Recycled Silicon/Silicon Carbide Composite for Lithium-ion Batteries. <i>Energy Technology</i> , 2017, 5, 1415-1422.	1.8	7
866	A Well-Defined Silicon Nanocone-Carbon Structure for Demonstrating Exclusive Influences of Carbon Coating on Silicon Anode of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 2806-2814.	4.0	29

#	ARTICLE	IF	CITATIONS
867	High-Performance Polycrystalline Ge Microwire Film Anodes for Li Ion Batteries. <i>ACS Energy Letters</i> , 2017, 2, 238-243.	8.8	31
868	Insights into solid electrolyte interphase formation on alternative anode materials in lithium-ion batteries. <i>Journal of Applied Electrochemistry</i> , 2017, 47, 249-259.	1.5	17
869	Significance of ferroelectric polarization in poly (vinylidene difluoride) binder for high-rate Li-ion diffusion. <i>Nano Energy</i> , 2017, 32, 255-262.	8.2	61
870	The growth model and electronic properties of single- and double-walled zigzag silicon nanotubes: Depending on the structures. <i>Chemical Physics</i> , 2017, 483-484, 156-164.	0.9	11
871	Atomic Insights into the Enhanced Surface Stability in High Voltage Cathode Materials by Ultrathin Coating. <i>Advanced Functional Materials</i> , 2017, 27, 1602873.	7.8	37
872	Smart combination of three-dimensional-flower-like MoS ₂ nanospheres/interconnected carbon nanotubes for application in supercapacitor with enhanced electrochemical performance. <i>Journal of Alloys and Compounds</i> , 2017, 696, 900-906.	2.8	89
873	Recent Progress on Spray Pyrolysis for High Performance Electrode Materials in Lithium and Sodium Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1601578.	10.2	120
874	High-Performance Aluminum-Ion Battery with CuS@C Microsphere Composite Cathode. <i>ACS Nano</i> , 2017, 11, 469-477.	7.3	388
875	Earth Abundant Fe/Mn-Based Layered Oxide Interconnected Nanowires for Advanced K-Ion Full Batteries. <i>Nano Letters</i> , 2017, 17, 544-550.	4.5	356
876	Temperature effects on SEI formation and cyclability of Si nanoflake powder anode in the presence of SEI-forming additives. <i>Electrochimica Acta</i> , 2017, 224, 186-193.	2.6	68
877	Formation of Stable Solidâ€“Electrolyte Interphase Layer on Few-Layer Graphene-Coated Silicon Nanoparticles for High-Capacity Li-Ion Battery Anodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 26155-26162.	1.5	20
878	New Insights into Mossy Li Induced Anode Degradation and Its Formation Mechanism in Liâ€“S Batteries. <i>ACS Energy Letters</i> , 2017, 2, 2696-2705.	8.8	90
879	General Method of Manipulating Formation, Composition, and Morphology of Solid-Electrolyte Interphases for Stable Li-Alloy Anodes. <i>Journal of the American Chemical Society</i> , 2017, 139, 17359-17367.	6.6	112
880	Robust 3D macroporous structures with SnS nanoparticles decorating nitrogen-doped carbon nanosheet networks for high performance sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23460-23470.	5.2	79
881	Room-Temperature Solution Synthesis of Mesoporous Silicon for Lithium Ion Battery Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 40386-40393.	4.0	41
882	Evaluation of double-layer density modulated Si thin films as Li-ion battery anodes. <i>Materials Research Express</i> , 2017, 4, 106405.	0.8	5
883	Interfacial properties of alloy anodes in combination with room temperature ionic liquid electrolytes: A review based on Li secondary batteries. <i>Journal of Electroanalytical Chemistry</i> , 2017, 805, 98-109.	1.9	14
884	High performance polymer binders inspired by chemical finishing of textiles for silicon anodes in lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22156-22162.	5.2	74

#	ARTICLE	IF	CITATIONS
885	A flexible all inorganic nanowire bilayer mesh as a high-performance lithium-ion battery anode. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22662-22671.	5.2	15
886	Group IVA Element (Si, Ge, Sn)-Based Alloying/Dealloying Anodes as Negative Electrodes for Full-Cell Lithium-Ion Batteries. <i>Small</i> , 2017, 13, 1702000.	5.2	163
887	Atomistic Simulation Protocol for Improved Design of Si-O-C Hybrid Nanostructures as Li-Ion Battery Anodes: ReaxFF Reactive Force Field. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23268-23275.	1.5	14
888	Multiple-Patterning Nanosphere Lithography for Fabricating Periodic Three-Dimensional Hierarchical Nanostructures. <i>ACS Nano</i> , 2017, 11, 10384-10391.	7.3	83
889	Energy Device Applications of Synthesized 1D Polymer Nanomaterials. <i>Small</i> , 2017, 13, 1701820.	5.2	38
890	Atomic-Scale Monitoring of Electrode Materials in Lithium-Ion Batteries using In Situ Transmission Electron Microscopy. <i>Advanced Energy Materials</i> , 2017, 7, 1700709.	10.2	53
891	<i>In situ</i> nitrogen-doped mesoporous carbon nanofibers as flexible freestanding electrodes for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23620-23627.	5.2	95
892	In Situ Wrapping Si Nanoparticles with 2D Carbon Nanosheets as High-Areal-Capacity Anode for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38159-38164.	4.0	83
893	Graphene enhanced silicon/carbon composite as anode for high performance lithium-ion batteries. <i>RSC Advances</i> , 2017, 7, 48286-48293.	1.7	26
894	Self-standing MgMoO ₄ /Reduced Graphene Oxide Nanosheet Arrays for Lithium and Sodium Ion Storage. <i>Electrochimica Acta</i> , 2017, 252, 322-330.	2.6	34
895	In Situ TEM Investigation of the Electrochemical Behavior in CNTs/MnO ₂ -Based Energy Storage Devices. <i>Analytical Chemistry</i> , 2017, 89, 9671-9675.	3.2	10
896	Porous silicon in carbon cages as high-performance lithium-ion battery anode Materials. <i>Electrochimica Acta</i> , 2017, 252, 438-445.	2.6	31
897	Effects of the Formulations of Silicon-Based Composite Anodes on their Mechanical, Storage, and Electrochemical Properties. <i>ChemSusChem</i> , 2017, 10, 4080-4089.	3.6	12
898	Self-Rearrangement of Silicon Nanoparticles Embedded in Micro-Carbon Sphere Framework for High-Energy and Long-Life Lithium-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 5600-5606.	4.5	142
899	Scalable synthesis of Sb/MoS ₂ /C composite as high performance anode material for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 728, 1139-1145.	2.8	21
900	Achieving High-Performance Silicon Anodes of Lithium-Ion Batteries via Atomic and Molecular Layer Deposited Surface Coatings: an Overview. <i>Electrochimica Acta</i> , 2017, 251, 710-728.	2.6	58
901	Uniform Si nanoparticle-embedded nitrogen-doped carbon nanofiber electrodes for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 728, 490-496.	2.8	27
902	Facile Pyrolyzed N-Doped Binder Network for Stable Si Anodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 32775-32781.	4.0	17

#	ARTICLE	IF	CITATIONS
903	Cornlike Ordered Mesoporous Silicon Particles Modified by Nitrogen-Doped Carbon Layer for the Application of Li-Ion Battery. ACS Applied Materials & Interfaces, 2017, 9, 32829-32839.	4.0	62
904	Nanostructured anode materials for lithium-ion batteries: principle, recent progress and future perspectives. Journal of Materials Chemistry A, 2017, 5, 19521-19540.	5.2	323
905	Confronting Issues of the Practical Implementation of Si Anode in High-Energy Lithium-Ion Batteries. Joule, 2017, 1, 47-60.	11.7	329
906	Self-Assembly Growth of 3D WO ₃ Framework with Interpenetrated Nanosheets as Binder-Free Anode for Lithium Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A2783-A2789.	1.3	4
907	The Atomic Scale Electrochemical Lithiation and Delithiation Process of Silicon. Advanced Materials Interfaces, 2017, 4, 1700771.	1.9	39
908	Challenges and Recent Progress in the Development of Si Anodes for Lithium-Ion Battery. Advanced Energy Materials, 2017, 7, 1700715.	10.2	709
909	Interfacial Phenomena/Capacities Beyond Conversion Reaction Occurring in Nano-sized Transition-Metal-Oxide-Based Negative Electrodes in Lithium-Ion Batteries: A Review. ChemElectroChem, 2017, 4, 2727-2754.	1.7	48
910	Two-Dimensional Porous Sandwich-Like C/Si-Graphene-Si/C Nanosheets for Superior Lithium Storage. ACS Applied Materials & Interfaces, 2017, 9, 39371-39379.	4.0	53
911	Cu Diffusion in Amorphous Ta ₂ O ₅ Studied with a Simplified Neural Network Potential. Journal of the Physical Society of Japan, 2017, 86, 104004.	0.7	29
912	Water-soluble-template-derived nanoscale silicon nanoflake and nano-rod morphologies: Stable architectures for lithium-ion battery anodes. Nano Research, 2017, 10, 4284-4297.	5.8	7
913	Self-assembly synthesis of 3D graphene-encapsulated hierarchical Fe ₃ O ₄ nano-flower architecture with high lithium storage capacity and excellent rate capability. Journal of Power Sources, 2017, 365, 98-108.	4.0	61
914	Silicon Nanoparticles: Stability in Aqueous Slurries and the Optimization of the Oxide Layer Thickness for Optimal Electrochemical Performance. ACS Applied Materials & Interfaces, 2017, 9, 32727-32736.	4.0	26
915	A heart-coronary arteries structure of carbon nanofibers/graphene/silicon composite anode for high performance lithium ion batteries. Scientific Reports, 2017, 7, 9642.	1.6	28
916	Scalable preparation of mesoporous Silicon@C/graphite hybrid as stable anodes for lithium-ion batteries. Journal of Alloys and Compounds, 2017, 728, 1-9.	2.8	33
917	Highly rough copper current collector: improving adhesion property between a silicon electrode and current collector for flexible lithium-ion batteries. RSC Advances, 2017, 7, 35681-35686.	1.7	39
918	Advances in Lithium-Containing Anodes of Aprotic Li-O ₂ Batteries: Challenges and Strategies for Improvements. Small Methods, 2017, 1, 1700135.	4.6	78
919	Novel silicon nanoparticles with nitrogen-doped carbon shell dispersed in nitrogen-doped graphene and CNTs hybrid electrode for lithium ion battery. Applied Surface Science, 2017, 425, 742-749.	3.1	36
920	Surface and Interface Engineering of Silicon-Based Anode Materials for Lithium-Ion Batteries. Advanced Energy Materials, 2017, 7, 1701083.	10.2	354

#	ARTICLE	IF	CITATIONS
921	Synthesis of embossing Si nanomesh and its application as an anode for lithium ion batteries. Journal of Power Sources, 2017, 362, 270-277.	4.0	25
922	Nanosilicon anodes for high performance rechargeable batteries. Progress in Materials Science, 2017, 90, 1-44.	16.0	172
923	A candidate strategy to achieve high initial Coulombic efficiency and long cycle life of Si anode materials: exterior carbon coating on porous Si microparticles. Materials Today Energy, 2017, 5, 299-304.	2.5	22
924	Kinetics and electrochemical evolution of binary silicon-polymer systems for lithium ion batteries. RSC Advances, 2017, 7, 36541-36549.	1.7	30
925	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
926	Low-Cost Metallic Anode Materials for High Performance Rechargeable Batteries. Advanced Energy Materials, 2017, 7, 1700536.	10.2	171
927	High-capacity silicon electrodes obtained from the hydrogen production process by aluminum alloy hydrolysis. Journal of Electroanalytical Chemistry, 2017, 799, 424-430.	1.9	3
928	High Rate and Long Cycle Life of a CNT/rGO/Si Nanoparticle Composite Anode for Lithium-Ion Batteries. Particle and Particle Systems Characterization, 2017, 34, 1700141.	1.2	38
929	Recent advancement of SiOx based anodes for lithium-ion batteries. Journal of Power Sources, 2017, 363, 126-144.	4.0	288
930	Two-step ball-milling synthesis of a Si/SiO _x /C composite electrode for lithium ion batteries with excellent long-term cycling stability. RSC Advances, 2017, 7, 36697-36704.	1.7	43
931	Silicon enclosed in rGO/CNT shell-like scaffold as a micro lithium-ion battery anode. , 2017, , .		1
932	Fabrication of Fe ₃ O ₄ Dots Embedded in 3D Honeycomb-Like Carbon Based on Metallo-Organic Molecule with Superior Lithium Storage Performance. Small, 2017, 13, 1701351.	5.2	49
933	A-few-second synthesis of silicon nanoparticles by gas-evaporation and their self-supporting electrodes based on carbon nanotube matrix for lithium secondary battery anodes. Journal of Power Sources, 2017, 363, 450-459.	4.0	21
934	A study of evolution of residual stress in single crystal silicon electrode using Raman spectroscopy. Applied Physics Letters, 2017, 111, 063901.	1.5	17
935	Single-walled carbon nanotubes as stabilizing agents in red phosphorus Li-ion battery anodes. RSC Advances, 2017, 7, 39997-40004.	1.7	24
936	Practical considerations of Si-based anodes for lithium-ion battery applications. Nano Research, 2017, 10, 3970-4002.	5.8	102
937	Green Fabrication of Silkworm Cocoon-like Silicon-Based Composite for High-Performance Li-Ion Batteries. ACS Nano, 2017, 11, 8628-8635.	7.3	88
938	A dual-functional gel-polymer electrolyte for lithium ion batteries with superior rate and safety performances. Journal of Materials Chemistry A, 2017, 5, 18888-18895.	5.2	85

#	ARTICLE	IF	CITATIONS
939	Recycling oil-extracted microalgal biomass residues into nano/micro hierarchical Sn/C composite anode materials for lithium-ion batteries. <i>Electrochimica Acta</i> , 2017, 250, 59-67.	2.6	35
940	Tuning the Outward to Inward Swelling in Lithiated Silicon Nanotubes via Surface Oxide Coating. <i>Microscopy and Microanalysis</i> , 2017, 23, 2018-2019.	0.2	0
941	Reviewâ€”Promises and Challenges of In Situ Transmission Electron Microscopy Electrochemical Techniques in the Studies of Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A2110-A2123.	1.3	34
942	Nanoscale Heterogeneity of Multilayered Si Anodes with Embedded Nanoparticle Scaffolds for Li-ion Batteries. <i>Advanced Science</i> , 2017, 4, 1700180.	5.6	32
943	The nanoscale circuitry of battery electrodes. <i>Science</i> , 2017, 358, .	6.0	235
944	Porous Si/C composite as anode materials for high-performance rechargeable lithium-ion battery. <i>Chinese Chemical Letters</i> , 2017, 28, 2281-2284.	4.8	19
945	Design of Complex Nanomaterials for Energy Storage: Past Success and Future Opportunity. <i>Accounts of Chemical Research</i> , 2017, 50, 2895-2905.	7.6	258
946	Simultaneous Perforation and Doping of Si Nanoparticles for Lithium-Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 44452-44457.	4.0	31
947	Theoretical prediction of fracture conditions for delithiation in silicon anode of lithium ion battery. <i>APL Materials</i> , 2017, 5, .	2.2	13
948	Silicon thin film on graphene coated nickel foam as an anode for Li-ion batteries. <i>Electrochimica Acta</i> , 2017, 258, 800-806.	2.6	36
949	Si nanorod arrays modified with metalâ€”organic segments as anodes in lithium ion batteries. <i>RSC Advances</i> , 2017, 7, 53680-53685.	1.7	14
950	Synthesis and performance of nanostructured silicon/graphite composites with a thin carbon shell and engineered voids. <i>Electrochimica Acta</i> , 2017, 258, 274-283.	2.6	33
951	Silicon Anode Design for Lithium-Ion Batteries: Progress and Perspectives. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27775-27787.	1.5	169
952	New Class of LAGP-Based Solid Polymer Composite Electrolyte for Efficient and Safe Solid-State Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 41837-41844.	4.0	106
953	Cryogenic plasma-processed silicon microspikes as a high-performance anode material for lithium ion-batteries. <i>Journal of Applied Physics</i> , 2017, 122, 155103.	1.1	1
954	Silicene Flowers: A Dual Stabilized Silicon Building Block for High-Performance Lithium Battery Anodes. <i>ACS Nano</i> , 2017, 11, 7476-7484.	7.3	132
955	Advances in electrode materials for Li-based rechargeable batteries. <i>RSC Advances</i> , 2017, 7, 33789-33811.	1.7	30
956	Roles of carbon nanotubes in novel energy storage devices. <i>Carbon</i> , 2017, 122, 462-474.	5.4	157

#	ARTICLE	IF	CITATIONS
957	Silver-decorated and palladium-coated copper-electroplated fibers derived from electrospun polymer nanofibers. <i>Chemical Engineering Journal</i> , 2017, 327, 336-342.	6.6	30
958	Micro-sized spherical silicon@carbon@graphene prepared by spray drying as anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2017, 723, 434-440.	2.8	89
959	Physically cross-linked polymer binder based on poly(acrylic acid) and ion-conducting poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.0	59
960	Liquid exfoliation of interlayer spacing-tunable 2D vanadium oxide nanosheets: High capacity and rate handling Li-ion battery cathodes. <i>Nano Energy</i> , 2017, 39, 151-161.	8.2	123
961	Layered Oxide, Graphite and Silicon-Graphite Electrodes for Lithium-Ion Cells: Effect of Electrolyte Composition and Cycling Windows. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6095-A6102.	1.3	93
962	High-Performance Li-Ion Battery Anodes Based on Silicon-Graphene Self-Assemblies. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6075-A6083.	1.3	37
963	Carbon-coated Si nanoparticles/reduced graphene oxide multilayer anchored to nanostructured current collector as lithium-ion battery anode. <i>Applied Surface Science</i> , 2017, 396, 41-47.	3.1	49
964	Conversion cathodes for rechargeable lithium and lithium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 435-459.	15.6	545
965	A sliced orange-shaped ZnCo ₂ O ₄ material as anode for high-performance lithium ion battery. <i>Energy Storage Materials</i> , 2017, 6, 61-69.	9.5	71
966	Electrospinning combined with hydrothermal synthesis and lithium storage properties of ZnFe ₂ O ₄ -graphene composite nanofibers. <i>Ceramics International</i> , 2017, 43, 2136-2142.	2.3	25
967	Carbon-Coated Silicon Nanowires on Carbon Fabric as Self-Supported Electrodes for Flexible Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 9551-9558.	4.0	101
968	Electrochemical reactivity of polyimide and feasibility as a conductive binder for silicon negative electrodes. <i>Journal of Materials Science</i> , 2017, 52, 3613-3621.	1.7	23
969	Lifetime vs. rate capability: Understanding the role of FEC and VC in high-energy Li-ion batteries with nano-silicon anodes. <i>Energy Storage Materials</i> , 2017, 6, 26-35.	9.5	166
970	Nanoparticles Encapsulated in Porous Carbon Matrix Coated on Carbon Fibers: An Ultrastable Cathode for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1601363.	10.2	48
971	Adsorbed Water on Nano-Silicon Powder and Its Effects on Charge and Discharge Characteristics as Anode in Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6084-A6087.	1.3	14
972	Towards High-Safe Lithium Metal Anodes: Suppressing Lithium Dendrites via Tuning Surface Energy. <i>Advanced Science</i> , 2017, 4, 1600168.	5.6	399
973	Silicon based lithium-ion battery anodes: A chronicle perspective review. <i>Nano Energy</i> , 2017, 31, 113-143.	8.2	1,122
974	Facile Synthesis of Bi ₂ S ₃ @SiO ₂ Core-Shell Microwires as High-Performance Anode Materials for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6110-A6115.	1.3	26

#	ARTICLE	IF	CITATIONS
975	Mechanical Damage of Surface Films and Failure of Nano-Sized Silicon Electrodes in Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A6103-A6109.	1.3	25
976	Application of dielectric barrier discharge plasma-assisted milling in energy storage materials – A review. <i>Journal of Alloys and Compounds</i> , 2017, 691, 422-435.	2.8	301
977	Nanoporous silicon flakes as anode active material for lithium-ion batteries. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 85, 223-226.	1.3	15
978	In Situ DRIFTS Analysis of Solid Electrolyte Interphase of Si-Based Anode with and without Fluoroethylene Carbonate Additive. <i>Journal of the Electrochemical Society</i> , 2017, 164, A3641-A3648.	1.3	32
979	Fabrication of Si-based three-dimensional microbatteries: A review. <i>Frontiers of Mechanical Engineering</i> , 2017, 12, 459-476.	2.5	27
980	Silicon Nano-flake Powder as an Anode for The Next Generation Lithium-ion Batteries: Current Status and Challenges. <i>Electrochemistry</i> , 2017, 85, 623-629.	0.6	14
981	Silicon@conductive porous copper layer anode for rechargeable lithium-ion batteries. , 2017, , .		0
982	Enabling the study of stress states using in situ μ SXRD in the silicon nanowire anode during electrochemical lithiation in a specially designed Li-ion battery test cell. <i>Procedia Engineering</i> , 2017, 215, 263-275.	1.2	7
983	Recent Progress in Synthesis and Application of Low-Dimensional Silicon Based Anode Material for Lithium Ion Battery. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-15.	1.5	12
984	The Fabrication of Porous Si with Interconnected Micro-Sized Dendrites and Tunable Morphology through the Dealloying of a Laser Remelted Al-Si Alloy. <i>Materials</i> , 2017, 10, 357.	1.3	7
985	Rice husk-originating silicon-graphite composites for advanced lithium ion battery anodes. <i>Nano Convergence</i> , 2017, 4, 24.	6.3	16
986	Double-layer Si/TiO ₂ N-TAs as High Performance Anode for Li-ion Batteries. <i>International Journal of Electrochemical Science</i> , 2017, 12, 4456-4464.	0.5	3
987	Phosphorus-doped silicon nanorod anodes for high power lithium-ion batteries. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 222-228.	1.5	11
988	Exploring Critical Factors Affecting Strain Distribution in 1D Silicon-Based Nanostructures for Lithium-ion Battery Anodes. <i>Advanced Materials</i> , 2018, 30, e1705430.	11.1	113
989	High performance porous Si@C anodes synthesized by low temperature aluminothermic reaction. <i>Electrochimica Acta</i> , 2018, 269, 509-516.	2.6	51
990	The effects of cross-linking cations on the electrochemical behavior of silicon anodes with alginate binder. <i>Electrochimica Acta</i> , 2018, 269, 405-414.	2.6	76
991	Rationally engineered amorphous TiO _x /Si/TiO _x nanomembrane as an anode material for high energy lithium ion battery. <i>Energy Storage Materials</i> , 2018, 12, 23-29.	9.5	38
992	Well-developed capacitive-capacity of metal-organic framework derived Co ₃ O ₄ films in Li ion battery anodes. <i>Journal of Alloys and Compounds</i> , 2018, 746, 277-284.	2.8	24

#	ARTICLE	IF	CITATIONS
993	Stability and Reactivity: Positive and Negative Aspects for Nanoparticle Processing. <i>Chemical Reviews</i> , 2018, 118, 3209-3250.	23.0	261
994	One-Step Electrodeposition of Layer by Layer Architectural Si-Graphene Nanocomposite Anode of Lithium Ion Battery with Enhanced Cycle Performance. <i>Journal of the Electrochemical Society</i> , 2018, 165, D110-D115.	1.3	7
995	Effect of particle size distribution on the electrochemical performance of micro-sized silicon-based negative materials. <i>RSC Advances</i> , 2018, 8, 8544-8551.	1.7	44
996	Programming Nanoparticles in Multiscale: Optically Modulated Assembly and Phase Switching of Silicon Nanoparticle Array. <i>ACS Nano</i> , 2018, 12, 2231-2241.	7.3	32
997	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. <i>Electrochemical Energy Reviews</i> , 2018, 1, 35-53.	13.1	514
998	Facile high-voltage sputtering synthesis of three-dimensional hierarchical porous nitrogen-doped carbon coated Si composite for high performance lithium-ion batteries. <i>Chemical Engineering Journal</i> , 2018, 343, 78-85.	6.6	61
999	Improved electrochemical performance of silicon nitride film by hydrogen incorporation for lithium-ion battery anode. <i>Electrochimica Acta</i> , 2018, 268, 241-247.	2.6	15
1000	Fabrication of double core-shell Si-based anode materials with nanostructure for lithium-ion battery. <i>RSC Advances</i> , 2018, 8, 9094-9102.	1.7	28
1001	Multiscale Engineered Si/SiO ₂ Nanocomposite Electrodes for Lithium-Ion Batteries Using Layer-by-Layer Spray Deposition. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15624-15633.	4.0	44
1002	Facile synthesis of N-doped carbon-coated nickel oxide nanoparticles embedded in N-doped carbon sheets for reversible lithium storage. <i>Journal of Alloys and Compounds</i> , 2018, 745, 147-154.	2.8	10
1003	Rapid Amorphization in Metastable CoSeO ₃ ·H ₂ O Nanosheets for Ultrafast Lithiation Kinetics. <i>ACS Nano</i> , 2018, 12, 5011-5020.	7.3	53
1004	Electrochemical performance of thermally-grown SiO ₂ as diffusion barrier layer for integrated lithium-ion batteries. <i>Frontiers in Energy</i> , 2018, 12, 225-232.	1.2	12
1005	Nano-micro structure VO ₂ /CNTs composite as a potential anode material for lithium ion batteries. <i>Ceramics International</i> , 2018, 44, 13113-13121.	2.3	46
1006	Xanthoceras sorbifolia husks-derived porous carbon for sodium-ion and lithium-sulfur batteries. <i>Diamond and Related Materials</i> , 2018, 85, 104-111.	1.8	19
1007	A Novel High-Capacity Anode Material Derived from Aromatic Imides for Lithium-Ion Batteries. <i>Small</i> , 2018, 14, e1704094.	5.2	26
1008	Multidimensional Synergistic Nanoarchitecture Exhibiting Highly Stable and Ultrafast Sodium-Ion Storage. <i>Advanced Materials</i> , 2018, 30, e1707122.	11.1	112
1009	Amorphous manganese silicate anchored on multiwalled carbon nanotubes with enhanced electrochemical properties for high performance supercapacitors. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 548, 158-171.	2.3	45
1010	One-Dimensional Hetero-Nanostructures for Rechargeable Batteries. <i>Accounts of Chemical Research</i> , 2018, 51, 950-959.	7.6	87

#	ARTICLE	IF	CITATIONS
1011	Poly(ethylene carbonate)-based electrolytes with high concentration Li salt for all-solid-state lithium batteries. <i>Rare Metals</i> , 2018, 37, 488-496.	3.6	24
1012	Phosphorus: An Anode of Choice for Sodium-Ion Batteries. <i>ACS Energy Letters</i> , 2018, 3, 1137-1144.	8.8	141
1013	Pulse laser-induced size-controllable and symmetrical ordering of single-crystal Si islands. <i>Nanoscale</i> , 2018, 10, 8133-8138.	2.8	9
1014	Multishelled Si@Cu Microparticles Supported on 3D Cu Current Collectors for Stable and Binder-free Anodes of Lithium-Ion Batteries. <i>ACS Nano</i> , 2018, 12, 3587-3599.	7.3	74
1015	Influence of EDTA in poly(acrylic acid) binder for enhancing electrochemical performance and thermal stability of silicon anode. <i>Applied Surface Science</i> , 2018, 447, 442-451.	3.1	23
1016	Encapsulating ionic liquids into POM-based MOFs to improve their conductivity for superior lithium storage. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8735-8741.	5.2	95
1017	Enhanced lithium ion battery performance of nano/micro-size Si via combination of metal-assisted chemical etching method and ball-milling. <i>Microporous and Mesoporous Materials</i> , 2018, 268, 9-15.	2.2	26
1018	Structured Titanium Nitride Nanotube Arrays/Sulfur Composite as Cathode Materials for Advanced Lithium Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1011-A1018.	1.3	20
1019	A self-buffering structure for application in high-performance sodium-ion batteries. <i>Energy Storage Materials</i> , 2018, 15, 242-248.	9.5	19
1020	Sodium-ion Battery Electrolytes: Modeling and Simulations. <i>Advanced Energy Materials</i> , 2018, 8, 1703036.	10.2	83
1021	Efficient conversion of sand to nano-silicon and its energetic Si-C composite anode design for high volumetric capacity lithium-ion battery. <i>Journal of Power Sources</i> , 2018, 382, 56-68.	4.0	48
1022	Carbon-silicon composite anode electrodes modified with MWCNT for high energy battery applications. <i>Applied Surface Science</i> , 2018, 446, 222-229.	3.1	20
1023	Scalable 2D Mesoporous Silicon Nanosheets for High-performance Lithium-ion Battery Anode. <i>Small</i> , 2018, 14, e1703361.	5.2	112
1024	Morphology changes and long-term cycling durability of Si flake powder negative electrode for lithium-ion batteries. <i>Electrochimica Acta</i> , 2018, 267, 94-101.	2.6	22
1025	Polyaniline-encapsulated silicon on three-dimensional carbon nanotubes foam with enhanced electrochemical performance for lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 381, 156-163.	4.0	80
1026	Operando Micro-Raman Study Revealing Enhanced Connectivity of Plasmonic Metals Decorated Silicon Anodes for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 1096-1105.	2.5	14
1027	Boron-doped porous Si anode materials with high initial coulombic efficiency and long cycling stability. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3022-3027.	5.2	113
1028	Advanced Phosphorus-Based Materials for Lithium/Sodium-ion Batteries: Recent Developments and Future Perspectives. <i>Advanced Energy Materials</i> , 2018, 8, 1703058.	10.2	197

#	ARTICLE	IF	CITATIONS
1029	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.	15.6	329
1030	Electrochemical characteristics of amorphous silicon carbide film as a lithium-ion battery anode. <i>RSC Advances</i> , 2018, 8, 5189-5196.	1.7	51
1031	One-dimensional nanomaterials for energy storage. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 113002.	1.3	48
1032	Surface and Electrochemical Studies on Silicon Diphosphide as Easy-to-Handle Anode Material for Lithium-Based Batteries—the Phosphorus Path. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7096-7106.	4.0	39
1033	Scalable Conversion of CO ₂ to N-Doped Carbon Foam for Efficient Oxygen Reduction Reaction and Lithium Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 3358-3366.	3.2	10
1034	Real-Time Stress Measurement in SiO ₂ Thin Films during Electrochemical Lithiation/Delithiation Cycling. <i>Experimental Mechanics</i> , 2018, 58, 537-547.	1.1	11
1035	Binder-free freestanding flexible Si nanoparticle—multi-walled carbon nanotube composite paper anodes for high energy Li-ion batteries. <i>Journal of Materials Research</i> , 2018, 33, 482-494.	1.2	16
1036	Remarkable Effect of Sodium Alginate Aqueous Binder on Anatase TiO ₂ as High-Performance Anode in Sodium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 5560-5568.	4.0	103
1037	Room temperature solid state dual-ion batteries based on gel electrolytes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 4313-4323.	5.2	40
1038	Nanocomposites based on hierarchical porous carbon fiber@vanadium nitride nanoparticles as supercapacitor electrodes. <i>Dalton Transactions</i> , 2018, 47, 4128-4138.	1.6	51
1039	Ionically Conductive Self-Healing Binder for Low Cost Si Microparticles Anodes in Li-ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1703138.	10.2	224
1040	High-yield fabrication of graphene-wrapped silicon nanoparticles for self-support and binder-free anodes of lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2018, 744, 243-251.	2.8	17
1041	The influence of different Si—C ratios on the electrochemical performance of silicon/carbon layered film anodes for lithium-ion batteries. <i>RSC Advances</i> , 2018, 8, 6660-6666.	1.7	38
1042	Enhanced electrochemical performance of sandwich-structured polyaniline-wrapped silicon oxide/carbon nanotubes for lithium-ion batteries. <i>Applied Surface Science</i> , 2018, 442, 204-212.	3.1	28
1043	Self-Contained Fragmentation and Interfacial Stability in Crude Micron-Silicon Anodes. <i>Journal of the Electrochemical Society</i> , 2018, 165, A244-A250.	1.3	10
1044	Silicon-Based Anodes for Lithium-ion Batteries: From Fundamentals to Practical Applications. <i>Small</i> , 2018, 14, 1702737.	5.2	650
1045	Electrochemical lithium storage properties of desert sands. <i>Ionics</i> , 2018, 24, 2233-2239.	1.2	4
1046	Novel scalable synthesis of porous silicon/carbon composite as anode material for superior lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2018, 739, 510-517.	2.8	31

#	ARTICLE	IF	CITATIONS
1047	Nanowires of spinel cathode material for improved lithium-ion storage. <i>Ionics</i> , 2018, 24, 2523-2532.	1.2	1
1048	Combustion synthesis of silicon by magnesiothermic reduction. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2018, 193, 280-287.	0.8	10
1049	The origin of excellent rate and cycle performance of Sn ₄ P ₃ binary electrodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 1772-1779.	5.2	42
1050	Synthesis of Si nanosheets by using Sodium Chloride as template for high-performance lithium-ion battery anode material. <i>Journal of Power Sources</i> , 2018, 379, 20-25.	4.0	51
1051	Highly porous coral-like silicon particles synthesized by an ultra-simple thermal-reduction method. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2834-2846.	5.2	31
1052	Fundamental Understanding of Nanostructured Si Electrodes: Preparation and Characterization. <i>ChemNanoMat</i> , 2018, 4, 319-337.	1.5	19
1053	Enhanced Ion Conductivity in Conducting Polymer Binder for High-Performance Silicon Anodes in Advanced Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702314.	10.2	258
1054	A high-performance tin dioxide@carbon anode with a super high initial coulombic efficiency via a primary cell prelithiation process. <i>Journal of Alloys and Compounds</i> , 2018, 740, 830-835.	2.8	14
1055	Improved Battery Performance of Nanocrystalline Si Anodes Utilized by Radio Frequency (RF) Sputtered Multifunctional Amorphous Si Coating Layers. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2242-2248.	4.0	11
1056	Evolution of the topological properties of two-dimensional group IVA materials and device design. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 2296-2307.	1.3	29
1057	Recent Advances in Designing High-Capacity Anode Nanomaterials for Li-Ion Batteries and Their Atomic-Scale Storage Mechanism Studies. <i>Advanced Science</i> , 2018, 5, 1700902.	5.6	63
1058	A Novel Approach to Realize Si-Based Porous Wire-In-Tube Nanostructures for High-Performance Lithium-Ion Batteries. <i>Small</i> , 2018, 14, e1800615.	5.2	8
1059	Stabilization of planar tetra-coordinate silicon in a 2D-layered extended system and design of a high-capacity anode material for Li-ion batteries. <i>Nanoscale</i> , 2018, 10, 10450-10458.	2.8	41
1060	High performance sandwich structured Si thin film anodes with LiPON coating. <i>Frontiers of Materials Science</i> , 2018, 12, 147-155.	1.1	16
1061	Scalable Synthesis of Hierarchical Antimony/Carbon Micro-/Nanohybrid Lithium/Sodium-Ion Battery Anodes Based on Dimethacrylate Monomer. <i>Acta Metallurgica Sinica (English Letters)</i> , 2018, 31, 910-922.	1.5	15
1062	Ultralight and fire-resistant ceramic nanofibrous aerogels with temperature-invariant superelasticity. <i>Science Advances</i> , 2018, 4, eaas8925.	4.7	414
1063	Exceptional Effect of Benzene in Uniform Carbon Coating of SiO _x Nanocomposite for High-Performance Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1247-A1253.	1.3	10
1064	Bismuth Microparticles as Advanced Anodes for Potassium-Ion Battery. <i>Advanced Energy Materials</i> , 2018, 8, 1703496.	10.2	306

#	ARTICLE	IF	CITATIONS
1065	3D yolk-shell Si@void@CNF nanostructured electrodes with improved electrochemical performance for lithium-ion batteries. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 64, 344-351.	2.9	23
1066	A nanopore-embedded graphitic carbon shell on silicon anode for high performance lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 8013-8020.	5.2	81
1067	Degradation of Si/Ge core/shell nanowire heterostructures during lithiation and delithiation at 0.8 and 20 A g ⁻¹ . <i>Nanoscale</i> , 2018, 10, 7343-7351.	2.8	16
1068	A bottom-up synthetic hierarchical buffer structure of copper silicon nanowire hybrids as ultra-stable and high-rate lithium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7877-7886.	5.2	44
1069	Zeolite-Templated Mesoporous Silicon Particles for Advanced Lithium-Ion Battery Anodes. <i>ACS Nano</i> , 2018, 12, 3853-3864.	7.3	89
1070	Investigation of the degradation mechanisms of silicon thin film anodes for lithium-ion batteries. <i>Thin Solid Films</i> , 2018, 655, 77-82.	0.8	11
1071	Li ₂ O@B ₂ O ₃ @GeO ₂ glass as a high performance anode material for rechargeable lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6860-6866.	5.2	25
1072	The origin of cycling enhanced capacity of Ni/NiO species confined on nitrogen doped carbon nanotubes for lithium-ion battery anodes. <i>Journal of Alloys and Compounds</i> , 2018, 750, 17-22.	2.8	12
1073	Walnut-Like Multicore-Shell MnO Encapsulated Nitrogen-Rich Carbon Nanocapsules as Anode Material for Long-Cycling and Soft-Packed Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1800003.	7.8	191
1074	Morphology- and Porosity-Tunable Synthesis of 3D Nanoporous SiGe Alloy as a High-Performance Lithium-Ion Battery Anode. <i>ACS Nano</i> , 2018, 12, 2900-2908.	7.3	133
1075	NiS ₂ @CoS ₂ nanocrystals encapsulated in N-doped carbon nanocubes for high performance lithium/sodium ion batteries. <i>Energy Storage Materials</i> , 2018, 11, 67-74.	9.5	346
1076	Three-dimensional spongy nanographene-functionalized silicon anodes for lithium ion batteries with superior cycling stability. <i>Nano Research</i> , 2018, 11, 233-245.	5.8	40
1077	Strategy to form homogeneously macroporous Si as enhanced anode material of Li-ion batteries. <i>Journal of Alloys and Compounds</i> , 2018, 731, 1-9.	2.8	27
1078	Constructing inorganic/polymer microsphere composite as lithium ion battery anode material. <i>Applied Surface Science</i> , 2018, 433, 806-814.	3.1	9
1079	Lithiation Behavior of Silicon Nanowire Anodes for Lithium-Ion Batteries: Impact of Functionalization and Porosity. <i>ChemPhysChem</i> , 2018, 19, 123-129.	1.0	20
1080	Ultrafine Nickel-Nanoparticle-Enabled SiO ₂ Hierarchical Hollow Spheres for High-Performance Lithium Storage. <i>Advanced Functional Materials</i> , 2018, 28, 1704561.	7.8	193
1081	Micro-sized organometallic compound of ferrocene as high-performance anode material for advanced lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 375, 102-105.	4.0	17
1082	High-performance Si Mn/C composite anodes with integrating inactive Mn ₄ Si ₇ alloy for lithium-ion batteries. <i>Electrochimica Acta</i> , 2018, 260, 830-837.	2.6	26

#	ARTICLE	IF	CITATIONS
1083	Novel silicon-tungsten oxide-carbon composite as advanced negative electrode for lithium-ion batteries. <i>Solid State Ionics</i> , 2018, 314, 41-45.	1.3	8
1084	A facile synthesis of controlled Mn ₃ O ₄ hollow polyhedron for high-performance lithium-ion battery anodes. <i>Chemical Engineering Journal</i> , 2018, 334, 2383-2391.	6.6	47
1085	Rational Assembly of Hollow Microporous Carbon Spheres as P Hosts for Long-Life Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702267.	10.2	85
1086	Simultaneous Electrospinning and Electro spraying: Fabrication of a Carbon Nanofibre/MnO/Reduced Graphene Oxide Thin Film as a High-Performance Anode for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2018, 5, 51-61.	1.7	19
1087	Recent Developments on and Prospects for Electrode Materials with Hierarchical Structures for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1701415.	10.2	436
1088	Nanocomposite of Si/C Anode Material Prepared by Hybrid Process of High-Energy Mechanical Milling and Carbonization for Li-Ion Secondary Batteries. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2140.	1.3	11
1089	Deep eutectic-solvothermal synthesis of nanostructured Fe ₃ S ₄ for electrochemical N ₂ fixation under ambient conditions. <i>Chemical Communications</i> , 2018, 54, 13010-13013.	2.2	147
1090	Superlithiation of non-conductive polyimide toward high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21216-21224.	5.2	105
1091	Sandwiched porous C/ZnO/porous C nanosheet battery anodes with a stable solid-electrolyte interphase for fast and long cycling. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22870-22878.	5.2	26
1092	An Ångström-level <i>d</i> -spacing controlling synthetic route for MoS ₂ towards stable intercalation of sodium ions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22513-22518.	5.2	24
1093	Engineering Titanium Dioxide Nanostructures for Enhanced Lithium-Ion Storage. <i>Journal of the American Chemical Society</i> , 2018, 140, 16676-16684.	6.6	85
1094	Yolk-Shell Germanium@Polypyrrole Architecture with Precision Expansion Void Control for Lithium Ion Batteries. <i>IScience</i> , 2018, 9, 521-531.	1.9	22
1095	Synthesis of Si-SiO _x /rGO/PPy Composite as Anode Material for Li-ion Batteries via in-situ Polymerization Process. <i>International Journal of Electrochemical Science</i> , 2018, 13, 5195-5203.	0.5	2
1096	On-Demand CMOS-Compatible Fabrication of Ultrathin Self-Aligned SiC Nanowire Arrays. <i>Nanomaterials</i> , 2018, 8, 906.	1.9	12
1097	Morphology-Controlled Discharge Profile and Reversible Cu Extrusion and Dissolution in Biomimetic CuS. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 41458-41464.	4.0	8
1098	A Comprehensive Review of Nanomaterials Developed Using Electrophoresis Process for High-Efficiency Energy Conversion and Storage Systems. <i>Energies</i> , 2018, 11, 3122.	1.6	18
1099	Double-Holey-Heterostructure Frameworks Enable Fast, Stable, and Simultaneous Ultrahigh Gravimetric, Areal, and Volumetric Lithium Storage. <i>ACS Nano</i> , 2018, 12, 12879-12887.	7.3	61
1100	Highly efficient lithium container based on non-Wadsley-Roth structure Nb ₁₈ W ₁₆ O ₉₃ nanowires for electrochemical energy storage. <i>Electrochimica Acta</i> , 2018, 292, 331-338.	2.6	49

#	ARTICLE	IF	CITATIONS
1101	Interfaces in Solid-State Lithium Batteries. <i>Joule</i> , 2018, 2, 1991-2015.	11.7	444
1102	Correlating Structure and Function of Battery Interphases at Atomic Resolution Using Cryoelectron Microscopy. <i>Joule</i> , 2018, 2, 2167-2177.	11.7	284
1103	Achieving a high loading Si anode <i>via</i> employing a triblock copolymer elastomer binder, metal nanowires and a laminated conductive structure. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20982-20991.	5.2	28
1104	Freestanding silicon/carbon nanofibers composite membrane as a flexible anode for Li-Ion battery. <i>Journal of Power Sources</i> , 2018, 403, 103-108.	4.0	20
1105	A Self-Healing Room-Temperature Liquid-Metal Anode for Alkali-Ion Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1804649.	7.8	147
1106	Toward Promising Turnkey Solution for Next-Generation Lithium Ion Batteries: Scale Preparation, Fading Analysis, and Enhanced Performance of Microsized Si/C Composites. <i>ACS Applied Energy Materials</i> , 2018, 1, 6977-6985.	2.5	10
1107	Magnesium-mechanochemical reduced SiO ₂ for high-performance lithium ion batteries. <i>Journal of Power Sources</i> , 2018, 407, 112-122.	4.0	36
1108	Promise and Challenge of Phosphorus in Science, Technology, and Application. <i>Advanced Functional Materials</i> , 2018, 28, 1803471.	7.8	65
1109	Symmetrical Sandwich-Structured SiN/Si/SiN Composite for Lithium-Ion Battery Anode with Improved Cyclability and Rate Capacity. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3397-A3402.	1.3	10
1110	A first-principles study on a CNT-Si ₆ system. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	0
1111	Formation of Si Hollow Structures as Promising Anode Materials through Reduction of Silica in AlCl ₃ -NaCl Molten Salt. <i>ACS Nano</i> , 2018, 12, 11481-11490.	7.3	84
1112	Fast Na ⁺ Intercalation in Zinc Vanadate for High-Performance Na ⁺ Ion Hybrid Capacitor. <i>Advanced Energy Materials</i> , 2018, 8, 1802800.	10.2	72
1113	Interpenetrated 3D porous silicon as high stable anode material for Li-Ion battery. <i>Journal of Power Sources</i> , 2018, 406, 167-175.	4.0	30
1114	Highly durable 3D conductive matrixed silicon anode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 407, 84-91.	4.0	24
1115	Ultrastable Graphene-Encapsulated 3 nm Nanoparticles by In Situ Chemical Vapor Deposition. <i>Advanced Materials</i> , 2018, 30, e1805023.	11.1	24
1116	Tracing the Impact of Hybrid Functional Additives on a High-Voltage (5 V-class) SiO _x -C/LiNi _{0.5} Mn _{1.5} O ₄ Li-Ion Battery System. <i>Chemistry of Materials</i> , 2018, 30, 8291-8302.	3.2	70
1117	Size and Surface Effects of Silicon Nanocrystals in Graphene Aerogel Composite Anodes for Lithium Ion Batteries. <i>Chemistry of Materials</i> , 2018, 30, 7782-7792.	3.2	50
1118	Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity Anodes for Lithium-Ion Batteries. <i>Nano Letters</i> , 2018, 18, 7060-7065.	4.5	121

#	ARTICLE	IF	CITATIONS
1119	A Bottom-Up Formation Mechanism of Solid Electrolyte Interphase Revealed by Isotope-Assisted Time-of-Flight Secondary Ion Mass Spectrometry. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5508-5514.	2.1	29
1120	Synthesis of complementary hierarchical structured Si/C composites with high Si content for lithium-ion batteries. <i>Nanoscale</i> , 2018, 10, 19195-19202.	2.8	27
1121	Conversion Reaction of Nanoporous ZnO for Stable Electrochemical Cycling of Binderless Si Microparticle Composite Anode. <i>ACS Nano</i> , 2018, 12, 10903-10913.	7.3	33
1122	A new porous metallic silicon dicarbide for highly efficient Li-ion battery anode identified by targeted structure search. <i>Carbon</i> , 2018, 140, 680-687.	5.4	25
1123	Waterborne polyurethane as a carbon coating for micrometre-sized silicon-based lithium-ion battery anode material. <i>Royal Society Open Science</i> , 2018, 5, 180311.	1.1	3
1124	Silicon expansion at the service of safety – A reversible potential-dependent switch for safer batteries. <i>Materials Today Energy</i> , 2018, 10, 89-97.	2.5	5
1125	Template-Free Synthesis of Cobalt Silicate Nanoparticles Decorated Nanosheets for High Performance Lithium Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15591-15597.	3.2	37
1126	The hollow mesoporous silicon nanobox dually encapsulated by SnO ₂ /C as anode material of lithium ion battery. <i>Electrochimica Acta</i> , 2018, 288, 61-70.	2.6	45
1127	Artificial lithium fluoride surface coating on silicon negative electrodes for the inhibition of electrolyte decomposition in lithium-ion batteries: visualization of a solid electrolyte interphase using <i>in situ</i> AFM. <i>Nanoscale</i> , 2018, 10, 17257-17264.	2.8	35
1128	Silicon nanoparticles prepared from industrial wastes as high-performing anode materials for lithium ion batteries. <i>Solid State Ionics</i> , 2018, 325, 141-147.	1.3	9
1129	Polyvinyl alcohol grafted poly (acrylic acid) as water-soluble binder with enhanced adhesion capability and electrochemical performances for Si anode. <i>Journal of Alloys and Compounds</i> , 2018, 763, 228-240.	2.8	90
1130	Super Atomic Clusters: Design Rules and Potential for Building Blocks of Materials. <i>Chemical Reviews</i> , 2018, 118, 5755-5870.	23.0	426
1131	MXene encapsulated titanium oxide nanospheres for ultra-stable and fast sodium storage. <i>Energy Storage Materials</i> , 2018, 14, 306-313.	9.5	119
1132	Self-Standing Carbon Nanofiber and SnO ₂ Nanorod Composite as a High-Capacity and High-Rate-Capability Anode for Lithium-Ion Batteries. <i>ACS Applied Nano Materials</i> , 2018, 1, 2982-2989.	2.4	32
1133	Low-Temperature Growth of All-Carbon Graphdiyne on a Silicon Anode for High-Performance Lithium-Ion Batteries. <i>Advanced Materials</i> , 2018, 30, e1801459.	11.1	250
1134	Novel hyper-crosslinked polymer anode for lithium-ion batteries with highly reversible capacity and long cycling stability. <i>Electrochimica Acta</i> , 2018, 281, 162-169.	2.6	21
1135	A Silicon Anode Material with Layered Structure for the Lithium-ion Battery. <i>Journal of Physics: Conference Series</i> , 2018, 986, 012024.	0.3	5
1136	Morphological Changes of Silicon Nanoparticles and the Influence of Cutoff Potentials in Silicon-Graphite Electrodes. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1503-A1514.	1.3	85

#	ARTICLE	IF	CITATIONS
1137	Dopamine-conjugated Poly(acrylic acid) Blended with an Electrically Conductive Polyaniline Binder for Silicon Anode. <i>Bulletin of the Korean Chemical Society</i> , 2018, 39, 873-878.	1.0	22
1138	Solvent-free two-component electrospinning of ultrafine polymer fibers. <i>New Journal of Chemistry</i> , 2018, 42, 11739-11745.	1.4	6
1139	Rice Husk as the Source of Silicon/Carbon Anode Material and Stable Electrochemical Performance. <i>ChemistrySelect</i> , 2018, 3, 5439-5444.	0.7	15
1140	Synergistic double-shell coating of graphene and Li ₄ SiO ₄ on silicon for high performance lithium-ion battery application. <i>Diamond and Related Materials</i> , 2018, 88, 60-66.	1.8	11
1141	Enhancing the lithium storage capabilities of TiO ₂ nanoparticles using delaminated MXene supports. <i>Ceramics International</i> , 2018, 44, 17660-17666.	2.3	20
1142	Kinked silicon nanowires-enabled interweaving electrode configuration for lithium-ion batteries. <i>Scientific Reports</i> , 2018, 8, 9794.	1.6	20
1143	Putting Nanoarmors on Yolk-Shell Si@C Nanoparticles: A Reliable Engineering Way To Build Better Si-Based Anodes for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 24157-24163.	4.0	46
1144	Dopamine-grafted heparin as an additive to the commercialized carboxymethyl cellulose/styrene-butadiene rubber binder for practical use of SiOx/graphite composite anode. <i>Scientific Reports</i> , 2018, 8, 11322.	1.6	22
1145	Niobium tungsten oxides for high-rate lithium-ion energy storage. <i>Nature</i> , 2018, 559, 556-563.	13.7	612
1146	Mechanical mismatch-driven rippling in carbon-coated silicon sheets for stress-resilient battery anodes. <i>Nature Communications</i> , 2018, 9, 2924.	5.8	94
1147	Probing Stress States in Silicon Nanowires During Electrochemical Lithiation Using In Situ Synchrotron X-Ray Microdiffraction. <i>Frontiers in Energy Research</i> , 2018, 6, .	1.2	17
1148	A high-performance dual-ion cell utilizing Si nanosphere@graphene anode. <i>Electrochimica Acta</i> , 2018, 282, 946-954.	2.6	13
1149	Highly Graphitized Carbon Coating on SiO with a Stacking Precursor Polymer for High Performance Lithium-Ion Batteries. <i>Polymers</i> , 2018, 10, 610.	2.0	14
1150	Hierarchical C/SiO _x /TiO ₂ ultrathin nanobelts as anode materials for advanced lithium ion batteries. <i>Nanotechnology</i> , 2018, 29, 405602.	1.3	20
1151	Current Progress of Si/Graphene Nanocomposites for Lithium-Ion Batteries. <i>Journal of Carbon Research</i> , 2018, 4, 18.	1.4	22
1152	Core/shell Fe ₃ O ₄ @Fe encapsulated in N-doped three-dimensional carbon architecture as anode material for lithium-ion batteries. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 15358-15364.	3.8	7
1153	Feasibility of Using Graphene Oxide Nanoflake (GONF) as Additive of Cement Composite. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 419.	1.3	28
1154	Recent progress on silicon-based anode materials for practical lithium-ion battery applications. <i>Energy Storage Materials</i> , 2018, 15, 422-446.	9.5	292

#	ARTICLE	IF	CITATIONS
1155	Anisotropic mechanical properties of Si anodes in a lithiation process of lithium-ion batteries. <i>Acta Mechanica</i> , 2018, 229, 3293-3303.	1.1	12
1156	A high specific capacity anode with silicon enclosed in RGO sphere by using lyophilization for lithium-ion battery. , 2018, , .		0
1157	Scallop-Inspired Shell Engineering of Microparticles for Stable and High Volumetric Capacity Battery Anodes. <i>Small</i> , 2018, 14, e1800752.	5.2	27
1158	Porous amorphous silicon film anodes for high-capacity and stable all-solid-state lithium batteries. <i>Communications Chemistry</i> , 2018, 1, .	2.0	109
1159	In-situ study of surface structure evolution of silicon anodes by electrochemical atomic force microscopy. <i>Applied Surface Science</i> , 2018, 452, 67-74.	3.1	45
1160	Vinyltriethoxysilane crosslinked poly(acrylic acid sodium) as a polymeric binder for high performance silicon anodes in lithium ion batteries. <i>RSC Advances</i> , 2018, 8, 29230-29236.	1.7	17
1161	Hierarchy Design in Metal Oxides as Anodes for Advanced Lithium-Ion Batteries. <i>Small Methods</i> , 2018, 2, 1800171.	4.6	69
1162	Chemical Reduction Synthesis and Electrochemistry of Si-Sn Nanocomposites as High-Capacity Anodes for Li-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5130-5134.	2.1	14
1163	Effects of electrolyte additive on the electrochemical performance of Si/C anode for lithium-ion batteries. <i>Ionics</i> , 2018, 24, 3691-3698.	1.2	29
1164	Controlling electric potential to inhibit solid-electrolyte interphase formation on nanowire anodes for ultrafast lithium-ion batteries. <i>Nature Communications</i> , 2018, 9, 3461.	5.8	27
1165	Strategy for Boosting Li-Ion Current in Silicon Nanoparticles. <i>ACS Energy Letters</i> , 2018, 3, 2252-2258.	8.8	49
1166	Characterization of low-temperature solution-processed LiCoO ₂ thin-film cathode with molecular weight control of polyvinylpyrrolidone. <i>Thin Solid Films</i> , 2018, 661, 46-52.	0.8	4
1167	Practical anodes for Li-ion batteries comprising metallurgical silicon particles and multiwall carbon nanotubes. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 3289-3301.	1.2	4
1168	Imaging of 3D morphological evolution of nanoporous silicon anode in lithium ion battery by X-ray nano-tomography. <i>Nano Energy</i> , 2018, 52, 381-390.	8.2	101
1169	In situ synthesis of porous Si dispersed in carbon nanotube intertwined expanded graphite for high-energy lithium-ion batteries. <i>Nanoscale</i> , 2018, 10, 16638-16644.	2.8	41
1170	In-situ constructing 3D graphdiyne as all-carbon binder for high-performance silicon anode. <i>Nano Energy</i> , 2018, 53, 135-143.	8.2	81
1171	Hierarchical Carbon-Coated Ball-Milled Silicon: Synthesis and Applications in Free-Standing Electrodes and High-Voltage Full Lithium-Ion Batteries. <i>ACS Nano</i> , 2018, 12, 6280-6291.	7.3	99
1172	Freestanding silicon microparticle and self-healing polymer composite design for effective lithiation stress relaxation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11353-11361.	5.2	25

#	ARTICLE	IF	CITATIONS
1173	Carbon nanofiber interlayer: a highly effective strategy to stabilize silicon anodes for use in lithium-ion batteries. <i>Nanoscale</i> , 2018, 10, 12430-12435.	2.8	9
1174	Interfacial engineering enables Bi@C-TiO microspheres as superpower and long life anode for lithium-ion batteries. <i>Nano Energy</i> , 2018, 51, 137-145.	8.2	55
1175	Hierarchically porous carbon/red phosphorus composite for high-capacity sodium-ion battery anode. <i>Science Bulletin</i> , 2018, 63, 982-989.	4.3	31
1176	Synthesis and characterization of Si nanoparticles wrapped by V ₂ O ₅ nanosheets as a composite anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2018, 281, 676-683.	2.6	16
1177	Realizing stable lithium and sodium storage with high areal capacity using novel nanosheet-assembled compact CaV ₄ O ₉ microflowers. <i>Nano Energy</i> , 2018, 50, 606-614.	8.2	47
1178	Yolk-shell Si/SiO _x @Void@C composites as anode materials for lithium-ion batteries. <i>Functional Materials Letters</i> , 2019, 12, 1850094.	0.7	22
1179	Interfacing TiO ₂ (B) Nanofibers with Li ₄ Ti ₅ O ₁₂ Towards Highly Reversible and Durable TiO ₂ -based Anode for Li ⁺ Ion Batteries. <i>Energy Technology</i> , 2019, 7, 107-112.	1.8	4
1180	A novel and green synthesis of mixed phase CoO@Co ₃ O ₄ @C anode material for lithium ion batteries. <i>Ionics</i> , 2019, 25, 447-455.	1.2	25
1181	Wrinkling and ratcheting of a thin film on cyclically deforming plastic substrate: Mechanical instability of the solid-electrolyte interphase in Li ⁺ ion batteries. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 123, 103-118.	2.3	32
1182	Cu ion implantation improves the performance of Si film anode used in lithium ion battery. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 440, 191-196.	0.6	6
1183	Facile Surface Modification Method To Achieve an Ultralow Interfacial Resistance in Garnet-Based Li Metal Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 6332-6340.	2.5	20
1184	Scanning probe microscopy based characterization of battery materials, interfaces, and processes. <i>Nano Energy</i> , 2019, 65, 103925.	8.2	46
1185	Spin ⁺ Orbital Optical Minigaps in Silicon Nanotubes Si (n, n). <i>Russian Journal of Inorganic Chemistry</i> , 2019, 64, 114-117.	0.3	4
1186	Multifunctional Nano-Architecting of Si Electrode for High-Performance Lithium-Ion Battery Anode. <i>Journal of the Electrochemical Society</i> , 2019, 166, A2776-A2783.	1.3	6
1187	Co-axial fibrous silicon asymmetric membranes for high-capacity lithium-ion battery anode. <i>Journal of Applied Electrochemistry</i> , 2019, 49, 1013-1025.	1.5	4
1188	Stress evolution with concentration-dependent compositional expansion in a silicon lithium-ion battery anode particle. <i>Journal of Solid State Electrochemistry</i> , 2019, 23, 2331-2342.	1.2	16
1189	Anisotropy of the mechanical properties of Li ₁₋₃ AlO ₃ Ti ₁₋₇ (PO ₄) ₃ solid electrolyte material. <i>Journal of Power Sources</i> , 2019, 437, 226940.	4.0	15
1190	C ₂ H ₂ O ₄ etching of AlSi alloy Powder:an efficient and mild preparation approach for high performance micro Si anode. <i>Electrochimica Acta</i> , 2019, 320, 134615.	2.6	23

#	ARTICLE	IF	CITATIONS
1191	Scalable submicron/micron silicon particles stabilized in a robust graphite-carbon architecture for enhanced lithium storage. <i>Journal of Colloid and Interface Science</i> , 2019, 555, 783-790.	5.0	22
1192	Understanding Limited Reversible Capacity of a SiO Electrode during the First Cycle and Its Effect on Initial Coulombic Efficiency. <i>Chemistry of Materials</i> , 2019, 31, 6097-6104.	3.2	33
1193	Everlasting Living and Breathing Gyroid 3D Network in Si@SiO _x /C Nanoarchitecture for Lithium Ion Battery. <i>ACS Nano</i> , 2019, 13, 9607-9619.	7.3	165
1194	Recent Developments in Stability and Passivation Techniques of Phosphorene toward Next-Generation Device Applications. <i>Advanced Functional Materials</i> , 2019, 29, 1903419.	7.8	113
1195	Insight into silicon-carbon multilayer films as anode materials for lithium-ion batteries: A combined experimental and first principles study. <i>Acta Materialia</i> , 2019, 178, 173-178.	3.8	29
1196	In Situ Measurement of Strain Evolution in the Graphene Electrode during Electrochemical Lithiation and Delithiation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 18861-18869.	1.5	18
1197	Litchi-structural core-shell Si@C for high-performance lithium-ion battery anodes. <i>Ionics</i> , 2019, 25, 5809-5818.	1.2	6
1198	Porous carbon encapsulated Mn ₃ O ₄ for stable lithium storage and its ex-situ XPS study. <i>Electrochimica Acta</i> , 2019, 319, 518-526.	2.6	49
1199	Synthesis of Porous Si/C Composite Nanosheets from Vermiculite with a Hierarchical Structure as a High-Performance Anode for Lithium-Ion Battery. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 26854-26862.	4.0	51
1200	Ordered mesoporous Si microspheres with nitrogen-doped carbon coating for advanced lithium-ion battery anodes. <i>Journal of Alloys and Compounds</i> , 2019, 800, 198-207.	2.8	22
1201	Nitrogen Plasma-Treated Core-Shell Si@SiO _x @TiO ₂ : Nanoparticles with Significantly Improved Lithium Storage Performance. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 27658-27666.	4.0	44
1202	Low-Temperature Reduction Strategy Synthesized Si/Ti ₃ C ₂ MXene Composite Anodes for High-Performance Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901065.	10.2	255
1203	Performance and failure analysis of full cell lithium ion battery with LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ and silicon electrodes. <i>Journal of Power Sources</i> , 2019, 437, 226884.	4.0	25
1204	Understanding the Lithium Storage Mechanism in Core-Shell Fe ₂ O ₃ @C Hollow Nanospheres Derived from Metal-Organic Frameworks: An In operando Synchrotron Radiation Diffraction and in operando X-ray Absorption Spectroscopy Study. <i>Chemistry of Materials</i> , 2019, 31, 5633-5645.	3.2	28
1205	Porosity controlled synthesis of nanoporous silicon by chemical dealloying as anode for high energy lithium-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2019, 554, 674-681.	5.0	38
1206	A novel high-performance 3D polymer binder for silicon anode in lithium-ion batteries. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 135, 109113.	1.9	21
1207	Graphene nanowalls conformally coated with amorphous/ nanocrystalline Si as high-performance binder-free nanocomposite anode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2019, 437, 226909.	4.0	39
1208	Interconnected Ultrasmall V ₂ O ₃ and Li ₄ Ti ₅ O ₁₂ Particles Construct Robust Interfaces for Long-Cycling Anodes of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 29993-30000.	4.0	12

#	ARTICLE	IF	CITATIONS
1209	Structure design and mechanism analysis of silicon anode for lithium-ion batteries. <i>Science China Materials</i> , 2019, 62, 1515-1536.	3.5	80
1210	Effect of mechanical treatment on the distribution of valence electrons and characteristics of nanocomposite $(\text{SiO}_2)_x(\text{Al}_2\text{O}_3)_{1-x}$ ($x=0.8, 0.7$) electrodes in lithium power sources. <i>Applied Surface Science</i> , 2019, 494, 1013-1022.	3.1	3
1211	An embedded heterostructure $\text{Fe}_2\text{O}_3@ \pm\text{-FeOOH/RGO}$ with optimized SEI film and fast Li-ion diffusion. <i>Journal of Alloys and Compounds</i> , 2019, 808, 151657.	2.8	14
1212	Layered metal vanadates with different interlayer cations for high-rate Na-ion storage. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16109-16116.	5.2	26
1213	A Review on the Thermal Hazards of the Lithium-Ion Battery and the Corresponding Countermeasures. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2483.	1.3	161
1214	Conducting polyaniline/poly (acrylic acid)/phytic acid multifunctional binders for Si anodes in lithium ion batteries. <i>Ionics</i> , 2019, 25, 5323-5331.	1.2	24
1215	A simple spray assisted method to fabricate high performance layered graphene/silicon hybrid anodes for lithium-ion batteries. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 20267-20277.	3.8	12
1216	Dual-Enhanced Hydrophobic and Mechanical Properties of Long-Range 3D Anisotropic Binary-Composite Nanocellulose Foams via Bidirectional Gradient Freezing. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 12878-12886.	3.2	31
1217	Artificial Solid Electrolyte Interphase Coating to Reduce Lithium Trapping in Silicon Anode for High Performance Lithium-Ion Batteries. <i>Advanced Materials Interfaces</i> , 2019, 6, 1901187.	1.9	54
1218	Interfacial Superassembled Porous CeO_2/C Frameworks Featuring Efficient and Sensitive Decomposing Li_2O for Smart Li_2O Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901751.	10.2	71
1219	Virus-Templated Nickel Phosphide Nanofoams as Additive-Free, Thin-Film Li -Ion Microbattery Anodes. <i>Small</i> , 2019, 15, e1903166.	5.2	31
1220	Silicon-Carbon composite anodes from industrial battery grade silicon. <i>Scientific Reports</i> , 2019, 9, 14814.	1.6	75
1221	Theoretical and Experimental Sets of Choice Anode/Cathode Architectonics for High-Performance Full-Scale LIB Built-up Models. <i>Nano-Micro Letters</i> , 2019, 11, 84.	14.4	34
1222	Effect of the Pillar Size on the Electrochemical Performance of Laser-Induced Silicon Micropillars as Anodes for Lithium-Ion Batteries. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3623.	1.3	6
1223	Novel design and synthesis of carbon-coated porous silicon particles as high-performance lithium-ion battery anodes. <i>Journal of Power Sources</i> , 2019, 439, 227027.	4.0	50
1224	Construction of Structure-Tunable Si@Void@C Anode Materials for Lithium-Ion Batteries through Controlling the Growth Kinetics of Resin. <i>ACS Nano</i> , 2019, 13, 12219-12229.	7.3	119
1225	From natural material to high-performance silicon based anode: Towards cost-efficient silicon based electrodes in high-performance Li-ion batteries. <i>Electrochimica Acta</i> , 2019, 327, 135058.	2.6	28
1226	Edaphic and host plant factors are linked to the composition of arbuscular mycorrhizal fungal communities in the root zone of endangered <i>Ulmus chenmoui</i> Cheng in China. <i>Ecology and Evolution</i> , 2019, 9, 8900-8910.	0.8	16

#	ARTICLE	IF	CITATIONS
1227	Short-Term Photovoltaic Generation Forecasting Based on LVQ-PSO-BP Neural Network and Markov Chain Method. <i>Journal of Physics: Conference Series</i> , 2019, 1267, 012083.	0.3	1
1228	A Novel Least-Mean Kurtosis Adaptive Filtering Algorithm Based on Geometric Algebra. <i>IEEE Access</i> , 2019, 7, 78298-78310.	2.6	23
1229	The Printed-Circuit-Board Electroplating Parallel-Tank Scheduling With Hoist and Group Constraints Using a Hybrid Guided Tabu Search Algorithm. <i>IEEE Access</i> , 2019, 7, 61363-61377.	2.6	7
1230	Dynamic Structure and Chemistry of the Silicon Solid-Electrolyte Interphase Visualized by Cryogenic Electron Microscopy. <i>Matter</i> , 2019, 1, 1232-1245.	5.0	107
1231	Stress-electrochemistry interactions in a composite electrode for Li-ion batteries. <i>Solid State Ionics</i> , 2019, 342, 115053.	1.3	4
1232	Copper Silicide Nanowires as Hosts for Amorphous Si Deposition as a Route to Produce High Capacity Lithium-Ion Battery Anodes. <i>Nano Letters</i> , 2019, 19, 8829-8835.	4.5	32
1233	Native Void Space for Maximum Volumetric Capacity in Silicon-Based Anodes. <i>Nano Letters</i> , 2019, 19, 8793-8800.	4.5	36
1234	Symmetry-adapted real-space density functional theory for cylindrical geometries: Application to large group-IV nanotubes. <i>Physical Review B</i> , 2019, 100, .	1.1	27
1235	Heightened Integration of POM-based Metal-Organic Frameworks with Functionalized Single-Walled Carbon Nanotubes for Superior Energy Storage. <i>Chemistry - an Asian Journal</i> , 2019, 14, 3424-3430.	1.7	21
1236	First-Principles Studies of the Lithiation and Delithiation Paths in Si Anodes in Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2019, 123, 22775-22786.	1.5	7
1237	Silicon Nanoparticles Embedded in Doped Few-Layered Graphene: Facile Synthesis and Application as an Effective Anode for Lithium Ion Batteries. <i>ChemPlusChem</i> , 2019, 84, 1519-1524.	1.3	7
1238	Electrospinning Sn@C nanofibers for high-performance flexible lithium ion battery anodes. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 300, 042021.	0.2	2
1239	Highlighting the Importance of Full-Cell Testing for High Performance Anode Materials Comprising Li Alloying Nanowires. <i>Journal of the Electrochemical Society</i> , 2019, 166, A2784-A2790.	1.3	4
1240	Ultra-high Areal Capacity Realized in Three-Dimensional Holey Graphene/SnO ₂ Composite Anodes. <i>IScience</i> , 2019, 19, 728-736.	1.9	40
1241	Chemically Bonding NiFe-LDH Nanosheets on rGO for Superior Lithium-Ion Capacitors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35977-35986.	4.0	88
1242	Preparation and electrochemical properties of core-shelled silicon-carbon composites as anode materials for lithium-ion batteries. <i>Journal of Applied Electrochemistry</i> , 2019, 49, 1123-1132.	1.5	7
1243	Electrochemically reconfigurable architected materials. <i>Nature</i> , 2019, 573, 205-213.	13.7	145
1244	Electrochemical Interaction of Sn-Containing MAX Phase (Nb ₂ SnC) with Li-Ions. <i>ACS Energy Letters</i> , 2019, 4, 2452-2457.	8.8	36

#	ARTICLE	IF	CITATIONS
1245	Silicon-Coreâ€“Carbon-Shell Nanoparticles for Lithium-Ion Batteries: Rational Comparison between Amorphous and Graphitic Carbon Coatings. <i>Nano Letters</i> , 2019, 19, 7236-7245.	4.5	75
1246	Effect of N/P ratios on the performance of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ SiO ₂ /Graphite lithium-ion batteries. <i>Journal of Power Sources</i> , 2019, 439, 227056.	4.0	31
1247	Facile synthesis of 2D ultrathin and ultrahigh specific surface hierarchical porous carbon nanosheets for advanced energy storage. <i>Carbon</i> , 2019, 155, 674-685.	5.4	18
1248	Deep Reconstruction of Nickel-Based Precatalysts for Water Oxidation Catalysis. <i>ACS Energy Letters</i> , 2019, 4, 2585-2592.	8.8	137
1249	Nanowires for Electrochemical Energy Storage. <i>Chemical Reviews</i> , 2019, 119, 11042-11109.	23.0	309
1250	Insights into Reactivity of Silicon Negative Electrodes: Analysis Using Isothermal Microcalorimetry. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37567-37577.	4.0	28
1251	Electrically Conductive Shell-Protective Layer Capping on the Silicon Surface as the Anode Material for High-Performance Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40034-40042.	4.0	24
1252	Biomass-Derived Carbon Paper to Sandwich Magnetite Anode for Long-Life Li-Ion Battery. <i>ACS Nano</i> , 2019, 13, 11901-11911.	7.3	82
1253	Modeling fracture of solid electrolyte interphase in lithium-ion batteries during cycling. <i>Journal of Solid State Electrochemistry</i> , 2019, 23, 2999-3008.	1.2	11
1254	Porous Si/C anode materials by Alâ€“Si dealloying method with PEA surfactant assisted cross-linked carbon coating for lithium-ion battery applications. <i>Electrochimica Acta</i> , 2019, 327, 134995.	2.6	23
1255	Lithiumâ€“Graphite Paste: An Interface Compatible Anode for Solidâ€“State Batteries. <i>Advanced Materials</i> , 2019, 31, e1807243.	11.1	197
1256	In Situ Raman Spectroscopy on Silicon Nanowire Anodes Integrated in Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A5378-A5385.	1.3	42
1257	Porous Al/Al ₂ O ₃ two-phase nanonetwork to improve electrochemical properties of porous C/SiO ₂ as anode for Li-ion batteries. <i>Electrochimica Acta</i> , 2019, 300, 470-481.	2.6	19
1258	Towards maximized volumetric capacity via pore-coordinated design for large-volume-change lithium-ion battery anodes. <i>Nature Communications</i> , 2019, 10, 475.	5.8	79
1259	Ultrafast-Charging Silicon-Based Coral-Like Network Anodes for Lithium-Ion Batteries with High Energy and Power Densities. <i>ACS Nano</i> , 2019, 13, 2307-2315.	7.3	115
1260	Hierarchical void structured Si/PANi/C hybrid anode material for high-performance lithium-ion batteries. <i>Electrochimica Acta</i> , 2019, 300, 341-348.	2.6	34
1261	Facile synthesis of Si@void@C nanocomposites from low-cost microsized Si as anode materials for lithium-ion batteries. <i>Applied Surface Science</i> , 2019, 479, 287-295.	3.1	42
1262	Quantification of Pseudocapacitive Contribution in Nanocageâ€“Shaped Siliconâ€“Carbon Composite Anode. <i>Advanced Energy Materials</i> , 2019, 9, 1803480.	10.2	75

#	ARTICLE	IF	CITATIONS
1263	Silicon oxides: a promising family of anode materials for lithium-ion batteries. <i>Chemical Society Reviews</i> , 2019, 48, 285-309.	18.7	685
1264	Fabrication of Lamellar Nanosphere Structure for Effective Stress Management in Large Volume Variation Anodes of High Energy Lithium Ion Batteries. <i>Advanced Materials</i> , 2019, 31, e1900970.	11.1	52
1265	Catalytic Growth of Graphitic Carbon Coated Silicon as High Performance Anodes for Lithium Storage. <i>Energy Technology</i> , 2019, 7, 1900502.	1.8	5
1266	A silicon anode for garnet-based all-solid-state batteries: Interfaces and nanomechanics. <i>Energy Storage Materials</i> , 2019, 21, 246-252.	9.5	70
1267	Smart Materials and Design toward Safe and Durable Lithium Ion Batteries. <i>Small Methods</i> , 2019, 3, 1900323.	4.6	47
1268	3D-structured multi-walled carbon nanotubes/copper nanowires composite as a porous current collector for the enhanced silicon-based anode. <i>Journal of Alloys and Compounds</i> , 2019, 803, 505-513.	2.8	15
1269	Novel honeycomb silicon wrapped in reduced graphene oxide/CNT system as high-stability anodes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2019, 317, 583-593.	2.6	42
1270	In Situ Transmission Electron Microscopy for Energy Materials and Devices. <i>Advanced Materials</i> , 2019, 31, e1900608.	11.1	95
1271	Facile Scalable Synthesis of Carbon Coated Ge@C and GeX@C (X=S, Se) Anodes for High Performance Lithium Ion Batteries. <i>ChemistrySelect</i> , 2019, 4, 6587-6592.	0.7	10
1272	Facile preparation of Hollow Si/SiC/C yolk-shell anode by one-step magnesiothermic reduction. <i>Ceramics International</i> , 2019, 45, 17040-17047.	2.3	19
1273	Infinitesimal sulfur fusion yields quasi-metallic bulk silicon for stable and fast energy storage. <i>Nature Communications</i> , 2019, 10, 2351.	5.8	57
1274	Self-Assembled Porous-Silica within N-Doped Carbon Nanofibers as Ultra-flexible Anodes for Soft Lithium Batteries. <i>IScience</i> , 2019, 16, 122-132.	1.9	31
1275	Effect of formation protocol: Cells containing Si-Graphite composite electrodes. <i>Journal of Power Sources</i> , 2019, 435, 126548.	4.0	12
1276	Improving the electrochemical performance of Si-based anode via gradient Si concentration. <i>Materials and Design</i> , 2019, 177, 107851.	3.3	24
1277	Conclusions and Perspectives on New Opportunities of Nanostructures and Nanomaterials in Batteries. , 2019, , 359-379.		0
1278	Characterization of the structural response of a lithiated SiO ₂ / Si interface: A reactive molecular dynamics study. <i>Mechanics of Materials</i> , 2019, 136, 103030.	1.7	7
1279	Charge Transfer and Storage of an Electrochemical Cell and Its Nano Effects. , 2019, , 29-87.		0
1280	Galvanic Replacement Synthesis of Highly Uniform Sb Nanotubes: Reaction Mechanism and Enhanced Sodium Storage Performance. <i>ACS Nano</i> , 2019, 13, 5885-5892.	7.3	73

#	ARTICLE	IF	CITATIONS
1281	Recent Progress in Advanced Characterization Methods for Silicon-Based Lithium-Ion Batteries. Small Methods, 2019, 3, 1900158.	4.6	30
1282	Electrochemical Behavior of Microparticulate Silicon Anodes in Ether-Based Electrolytes: Why Does LiNO_3 Affect Negatively?. ACS Applied Energy Materials, 2019, 2, 4411-4420.	2.5	11
1283	Highly robust silicon bimorph plate anode and its mechanical analysis upon electrochemical lithiation. Energy Storage Materials, 2019, 23, 292-298.	9.5	2
1285	Sandwich structure of carbon-coated silicon/carbon nanofiber anodes for lithium-ion batteries. Ceramics International, 2019, 45, 16195-16201.	2.3	37
1286	Nanostructures and Nanomaterials for Batteries. , 2019, , .		12
1287	Enhanced Electrochemical Performance of Silicon-Based Anode Material Via a Synergistic Effect Between Sodium Alginate and Dopamine Hydrochloride. Journal of Electronic Materials, 2019, 48, 4324-4329.	1.0	4
1288	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
1289	Facile and scalable preparation of 3D SnO_2 /holey graphene composite frameworks for stable lithium storage at a high mass loading level. Inorganic Chemistry Frontiers, 2019, 6, 1367-1373.	3.0	19
1290	Engineering the Core-Shell-Structured NCNTs-Ni ₂ Si@Porous Si Composite with Robust Ni-Si Interfacial Bonding for High-Performance Li-Ion Batteries. Langmuir, 2019, 35, 6321-6332.	1.6	43
1291	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
1292	Prelithiated Surface Oxide Layer Enabled High-Performance Si Anode for Lithium Storage. ACS Applied Materials & Interfaces, 2019, 11, 18305-18312.	4.0	58
1293	Conjugated NH ₂ -Enhanced Cross-Linked Polymer Anode for Lithium-Ion Batteries with High Reversible Capacity and Superior Cycling Stability. Energy Technology, 2019, 7, 1900263.	1.8	6
1294	Influence of sintering temperature on conductivity and mechanical behavior of the solid electrolyte LATP. Ceramics International, 2019, 45, 14697-14703.	2.3	43
1295	Surface-engineered mesoporous silicon microparticles as high-Coulombic-efficiency anodes for lithium-ion batteries. Nano Energy, 2019, 61, 404-410.	8.2	134
1296	Elucidating the interfacial evolution and anisotropic dynamics on silicon anodes in lithium-ion batteries. Nano Energy, 2019, 61, 304-310.	8.2	27
1297	Vertically-aligned nanostructures for electrochemical energy storage. Nano Research, 2019, 12, 2002-2017.	5.8	45
1298	Zinc-assisted mechanochemical coating of a reduced graphene oxide thin layer on silicon microparticles to achieve efficient lithium-ion battery anodes. Sustainable Energy and Fuels, 2019, 3, 1258-1268.	2.5	5
1299	Sn-encapsulated N-doped porous carbon fibers for enhancing lithium-ion battery performance. RSC Advances, 2019, 9, 8753-8758.	1.7	20

#	ARTICLE	IF	CITATIONS
1300	Electrolytes for advanced lithium ion batteries using silicon-based anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9432-9446.	5.2	101
1301	Rechargeable solid-state lithium metal batteries with vertically aligned ceramic nanoparticle/polymer composite electrolyte. <i>Nano Energy</i> , 2019, 60, 205-212.	8.2	259
1302	Anisotropic expansion and size-dependent fracture of silicon nanotubes during lithiation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15113-15122.	5.2	41
1303	Cobalt oxide-based nanoarchitectures for electrochemical energy applications. <i>Progress in Materials Science</i> , 2019, 103, 596-677.	16.0	166
1304	Confronting the Challenges of Next-Generation Silicon Anode-Based Lithium-Ion Batteries: Role of Designer Electrolyte Additives and Polymeric Binders. <i>ChemSusChem</i> , 2019, 12, 2515-2539.	3.6	170
1306	Nanoporous SiO coated amorphous silicon anode material with robust mechanical behavior for high-performance rechargeable Li-ion batteries. <i>Nano Materials Science</i> , 2019, 1, 70-76.	3.9	26
1307	Electrode Design from "Internal" to "External" for High Stability Silicon Anodes in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14142-14149.	4.0	32
1308	Structural Engineering of Hierarchical Micro-nanostructured Ge-C Framework by Controlling the Nucleation for Ultralong-Life Li Storage. <i>Advanced Energy Materials</i> , 2019, 9, 1900081.	10.2	99
1309	Cu-Al-Si alloy anode material with enhanced electrochemical properties for lithium ion batteries. <i>Functional Materials Letters</i> , 2019, 12, 1950054.	0.7	7
1310	Optimal Condition of Solid-Electrolyte-Interphase Prepared by Controlled Prelithiation for High Performance Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A787-A792.	1.3	13
1311	Doped Silicon Nanowires for Lithium Ion Battery Anodes. <i>Materials Research</i> , 2019, 22, .	0.6	18
1312	Fast Charging Lithium Batteries: Recent Progress and Future Prospects. <i>Small</i> , 2019, 15, e1805389.	5.2	277
1313	Design of Red Phosphorus Nanostructured Electrode for Fast-Charging Lithium-Ion Batteries with High Energy Density. <i>Joule</i> , 2019, 3, 1080-1093.	11.7	168
1314	Laser synthesis and functionalization of nanostructures. <i>International Journal of Extreme Manufacturing</i> , 2019, 1, 012002.	6.3	15
1316	Nanostructures of solid electrolyte interphases and their consequences for microsized Sn anodes in sodium ion batteries. <i>Energy and Environmental Science</i> , 2019, 12, 1550-1557.	15.6	167
1317	Fly ashes as a sustainable source for nanostructured Si anodes in lithium-ion batteries. <i>SN Applied Sciences</i> , 2019, 1, 1.	1.5	5
1318	Co ₃ O ₄ Supraparticle-Based Bubble Nanofiber and Bubble Nanosheet with Remarkable Electrochemical Performance. <i>Advanced Science</i> , 2019, 6, 1900107.	5.6	59
1319	A Cost-Effective and Scaleable Approach for the In-Situ Synthesis of Porous Carbon-Coated Micrometer-Sized AlSi Particles as Anode for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2019, 6, 2517-2523.	1.7	4

#	ARTICLE	IF	CITATIONS
1320	Scalable synthesis of ant-nest-like bulk porous silicon for high-performance lithium-ion battery anodes. <i>Nature Communications</i> , 2019, 10, 1447.	5.8	494
1321	Building high-rate silicon anodes based on hierarchical Si@C@CNT nanocomposite. <i>Journal of Alloys and Compounds</i> , 2019, 791, 1105-1113.	2.8	53
1322	Correlation between the physical parameters and the electrochemical performance of a silicon anode in lithium-ion batteries. <i>Journal of Materiomics</i> , 2019, 5, 164-175.	2.8	33
1323	Self-Assembly of Hierarchical Silicon Suboxide Nanoparticles Encapsulated in Nitrogen-Doped Carbon as High Performance Anode Material for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A574-A581.	1.3	14
1324	Achieving carbon-rich silicon-containing ceramic anode for advanced lithium ion battery. <i>Ceramics International</i> , 2019, 45, 10572-10580.	2.3	58
1325	Tuning self-healing properties of stiff, ion-conductive polymers. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6773-6783.	5.2	34
1326	Hybrid Carbon Nanotube Fabrics with Sacrificial Nanofibers for Flexible High Performance Lithium-Ion Battery Anodes. <i>Journal of the Electrochemical Society</i> , 2019, 166, A473-A479.	1.3	16
1327	Cycling-induced structure refinement of MnO nanorods wrapped by N-doped carbon with internal void space for advanced lithium-ion anodes. <i>Applied Surface Science</i> , 2019, 479, 386-394.	3.1	13
1328	Minimized Volume Expansion in Hierarchical Porous Silicon upon Lithiation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 13257-13263.	4.0	51
1329	High-performance $\text{Fe}_2\text{O}_3/\text{C}$ composite anodes for lithium-ion batteries synthesized by hydrothermal carbonization glucose method used pickled iron oxide red as raw material. <i>Composites Part B: Engineering</i> , 2019, 164, 576-582.	5.9	84
1330	Flexible and Freestanding Silicon/MXene Composite Papers for High-Performance Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 10004-10011.	4.0	241
1331	Large-Scale Self-Catalyzed Spongelike Silicon Nano-Network-Based 3D Anodes for High-Capacity Lithium-Ion Batteries. <i>Nano Letters</i> , 2019, 19, 1944-1954.	4.5	53
1332	Rice Husk-Based 3D Porous Silicon/Carbon Nanocomposites as Anode for Lithium-Ion Batteries. <i>Energy Technology</i> , 2019, 7, 1800787.	1.8	13
1333	Critical design factors for kinetically favorable P-based compounds toward alloying with Na ions for high-power sodium-ion batteries. <i>Energy and Environmental Science</i> , 2019, 12, 1326-1333.	15.6	58
1334	Minimized lithium trapping by isovalent isomorphism for high initial Coulombic efficiency of silicon anodes. <i>Science Advances</i> , 2019, 5, eaax0651.	4.7	122
1335	Oxidative Pyrolysis of Si/Polyacrylonitrile Composites as an Unconventional Approach to Fabricate High Performance Lithium Ion Battery Negative Electrodes. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3716-A3722.	1.3	2
1336	Preparation of dual-shell Si/TiO ₂ /CFs composite and its lithium storage performance. <i>Transactions of Nonferrous Metals Society of China</i> , 2019, 29, 2384-2391.	1.7	11
1337	A facile method to fabricate a porous Si/C composite with excellent cycling stability for use as the anode in a lithium ion battery. <i>Chemical Communications</i> , 2019, 55, 13438-13441.	2.2	9

#	ARTICLE	IF	CITATIONS
1338	A long-cycle and high-rate Si/SiO _x /nitrogen-doped carbon composite as an anode material for lithium-ion batteries. <i>New Journal of Chemistry</i> , 2019, 43, 18220-18228.	1.4	15
1339	A hierarchical layering design for stable, self-restrained and high volumetric binder-free lithium storage. <i>Nanoscale</i> , 2019, 11, 21728-21732.	2.8	8
1340	Selection of Optimum Binder for Silicon Powder Anode in Lithium-Ion Batteries Based on the Impact of Its Molecular Structure on Charge/Discharge Behavior. <i>Coatings</i> , 2019, 9, 732.	1.2	1
1341	Facile Synthesis of Antimony Tungstate Nanosheets as Anodes for Lithium-Ion Batteries. <i>Nanomaterials</i> , 2019, 9, 1689.	1.9	28
1342	Engineering of carbon and other protective coating layers for stabilizing silicon anode materials. , 2019, 1, 219-245.		94
1343	Three-Dimensional Monolithic Organic Battery Electrodes. <i>ACS Nano</i> , 2019, 13, 14357-14367.	7.3	22
1344	Energy storage: The future enabled by nanomaterials. <i>Science</i> , 2019, 366, .	6.0	1,119
1345	In Situ Intercalation of Bismuth into 3D Reduced Graphene Oxide Scaffolds for High Capacity and Long Cycle-Life Energy Storage. <i>Small</i> , 2019, 15, e1905903.	5.2	11
1346	Supremely elastic gel polymer electrolyte enables a reliable electrode structure for silicon-based anodes. <i>Nature Communications</i> , 2019, 10, 5586.	5.8	80
1347	Sandwich Structure Electrode as Advanced Performance Anode for Lithium-Ion Batteries. <i>Nano</i> , 2019, 14, 1950123.	0.5	0
1348	Structure and conductivity enhanced treble-shelled porous silicon as an anode for high-performance lithium-ion batteries. <i>RSC Advances</i> , 2019, 9, 35392-35400.	1.7	7
1349	Nucleation and Growth of Lithium-Silicon Alloy on Crystalline Silicon. <i>Advanced Engineering Materials</i> , 2019, 21, 1800520.	1.6	3
1350	A review on modeling of electro-chemo-mechanics in lithium-ion batteries. <i>Journal of Power Sources</i> , 2019, 413, 259-283.	4.0	257
1351	Operando Quantification of (De)Lithiation Behavior of Silicon-Graphite Blended Electrodes for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1803380.	10.2	117
1352	Hierarchical 3D electrodes for electrochemical energy storage. <i>Nature Reviews Materials</i> , 2019, 4, 45-60.	23.3	554
1353	Carbon Coated Si-Metal Silicide Composite Anode Materials Prepared by High-Energy Milling and Carburization for Li-Ion Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A5131-A5138.	1.3	7
1354	Scalable synthesis of Si nanowires interconnected SiO _x anode for high performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019, 783, 128-135.	2.8	43
1355	Electrodeposited Silicon Nanowires from Silica Dissolved in Molten Salts as a Binder-Free Anode for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 804-813.	2.5	49

#	ARTICLE	IF	CITATIONS
1356	A Modified Natural Polysaccharide as a High-Performance Binder for Silicon Anodes in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4311-4317.	4.0	67
1357	Engineering the Direct Deposition of Si Nanoparticles for Improved Performance in Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A5252-A5258.	1.3	3
1358	Pure silicon thin-film anodes for lithium-ion batteries: A review. <i>Journal of Power Sources</i> , 2019, 414, 48-67.	4.0	147
1359	Composite nanofibers through in-situ reduction with abundant active sites as flexible and stable anode for lithium ion batteries. <i>Composites Part B: Engineering</i> , 2019, 161, 369-375.	5.9	24
1360	Porous silicon thin films as anodes for lithium ion batteries deposited by co-evaporation of silicon and zinc. <i>Surface and Coatings Technology</i> , 2019, 358, 586-593.	2.2	11
1361	Failure modes and mechanisms for rechargeable Lithium-based batteries: a state-of-the-art review. <i>Acta Mechanica</i> , 2019, 230, 701-727.	1.1	53
1362	Hierarchical Microspheres of Aggregated Silicon Nanoparticles with Nanometre Gaps as the Anode for Lithium-Ion Batteries with Excellent Cycling Stability. <i>ChemElectroChem</i> , 2019, 6, 1139-1148.	1.7	8
1363	Pseudocapacitance contribution to three-dimensional micro-sized silicon@Fe ₃ O ₄ @few-layered graphene for high-rate and long-life lithium ion batteries. <i>Materials Today Communications</i> , 2019, 18, 66-73.	0.9	27
1364	Vermiculite derived porous silicon nanosheet as a scalable and low cost anode material for lithium-ion batteries. <i>Journal of Power Sources</i> , 2019, 410-411, 132-136.	4.0	61
1365	Encapsulating highly crystallized mesoporous Fe ₃ O ₄ in hollow N-doped carbon nanospheres for high-capacity long-life sodium-ion batteries. <i>Nano Energy</i> , 2019, 56, 426-433.	8.2	111
1366	Preparation of Flexible Self-Supporting 3D SiO _x -Based Membrane Anodes with Stabilized Electrochemical Performances for Lithium-Ion Batteries. <i>Energy Technology</i> , 2019, 7, 1800635.	1.8	8
1367	Lithiation Behavior of Coaxial Hollow Nanocables of Carbon-Silicon Composite. <i>ACS Nano</i> , 2019, 13, 2274-2280.	7.3	47
1368	Rational Design of Robust Si/C Microspheres for High-Tap-Density Anode Materials. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4057-4064.	4.0	111
1369	Three-dimensional carboxymethyl cellulose sponge-like ultralight electrode for lithium-ion batteries. <i>Ionics</i> , 2019, 25, 429-435.	1.2	6
1370	A Novel Anode with Superior Cycling Stability Based on Silicon Encapsulated in Shell-Like rGO/CNT Architecture for Lithium-Ion Batteries. <i>Energy Technology</i> , 2019, 7, 1801047.	1.8	8
1371	Mass-Production of Electrospun Carbon Nanofiber Containing SiO _x for Lithium-Ion Batteries with Enhanced Capacity. <i>Macromolecular Materials and Engineering</i> , 2019, 304, 1800564.	1.7	15
1372	Unusual Capacity Increases with Cycling for Ladder-Type Microporous Polymers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 1739-1747.	4.0	43
1373	An Overview of the Recent Progress in the Synthesis and Applications of Carbon Nanotubes. <i>Journal of Carbon Research</i> , 2019, 5, 3.	1.4	128

#	ARTICLE	IF	CITATIONS
1374	First-principles investigation of the new phases and electrochemical properties of MoSi ₂ as the electrode materials of lithium ion battery. <i>Journal of Alloys and Compounds</i> , 2019, 779, 813-820.	2.8	72
1375	Additive-free Nb ₂ O ₅ -TiO ₂ Hybrid Anode towards Low-Cost and Safe Lithium-Ion Batteries: A Green Electrode Material Produced in an Environmentally Friendly Process. <i>Batteries and Supercaps</i> , 2019, 2, 160-167.	2.4	9
1376	Partial lithiation strategies for suppressing degradation of silicon composite electrodes. <i>Electrochimica Acta</i> , 2019, 295, 778-786.	2.6	23
1377	Highly conductive C-Si@G nanocomposite as a high-performance anode material for Li-ion batteries. <i>Electrochimica Acta</i> , 2019, 295, 719-725.	2.6	41
1378	Protective carbon-coated silicon nanoparticles with graphene buffer layers for high performance anodes in lithium-ion batteries. <i>Applied Surface Science</i> , 2019, 467-468, 926-931.	3.1	30
1379	Scalable Engineering of Bulk Porous Si Anodes for High Initial Efficiency and High-Areal-Capacity Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 714-721.	4.0	30
1380	Silicon rods as a negative electrode material for lithium-ion cells: Quantum chemical modeling. <i>Chemical Physics</i> , 2019, 519, 45-51.	0.9	2
1381	The Impact of Initial SEI Formation Conditions on Strain-Induced Capacity Losses in Silicon Electrodes. <i>Advanced Energy Materials</i> , 2019, 9, 1803066.	10.2	35
1382	Elasticity-Enhanced and Aligned Structure Nanocellulose Foam-like Aerogel Assembled with Cooperation of Chemical Art and Gradient Freezing. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 1381-1388.	3.2	50
1383	Understanding the effect of electrolyte on the cycle and structure stability of high areal capacity Si-Al film electrode. <i>Ionics</i> , 2019, 25, 483-492.	1.2	5
1384	In situ transmission electron microscopy observations of rechargeable lithium ion batteries. <i>Nano Energy</i> , 2019, 56, 619-640.	8.2	42
1385	Robust Pitch on Silicon Nanolayer-Embedded Graphite for Suppressing Undesirable Volume Expansion. <i>Advanced Energy Materials</i> , 2019, 9, 1803121.	10.2	107
1386	Electrochemical performances of graphene and MWCNT supported metallurgical grade silicon anodes. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 2067-2079.	1.1	4
1387	Lithium-Secondary Cell. , 2019, , 143-266.		0
1388	In-situ and Operando Tracking of Microstructure and Volume Evolution of Silicon Electrodes by using Synchrotron X-ray Imaging. <i>ChemSusChem</i> , 2019, 12, 261-269.	3.6	20
1389	Design of Hollow Nanostructures for Energy Storage, Conversion and Production. <i>Advanced Materials</i> , 2019, 31, e1801993.	11.1	313
1390	A scalable synthesis of silicon nanoparticles as high-performance anode material for lithium-ion batteries. <i>Rare Metals</i> , 2019, 38, 199-205.	3.6	53
1391	Integration of Graphite and Silicon Anodes for the Commercialization of High-Energy Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 110-135.	7.2	460

#	ARTICLE	IF	CITATIONS
1392	Graphitâ€•undâ€•Siliciumâ€•Anoden fÃ¼r Lithiumionenâ€•Hochenergiebatterien. <i>Angewandte Chemie</i> , 2020, 132, 112-138.	1.6	23
1393	Facile preparation of core-shell Si@Li ₄ Ti ₅ O ₁₂ nanocomposite as large-capacity lithium-ion battery anode. <i>Journal of Energy Chemistry</i> , 2020, 40, 89-98.	7.1	37
1394	Combination of water-soluble chemical grafting and gradient freezing to fabricate elasticity-enhanced and anisotropic nanocellulose aerogels. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 411-419.	1.6	6
1395	Bilayer-graphene-coated Si nanoparticles as advanced anodes for high-rate lithium-ion batteries. <i>Electrochimica Acta</i> , 2020, 329, 134975.	2.6	34
1396	Nanoporous silicon spheres preparation via a controllable magnesiothermic reduction as anode for Li-ion batteries. <i>Electrochimica Acta</i> , 2020, 329, 135141.	2.6	34
1397	Core-shell structured $\text{Fe}_2\text{O}_3/\text{Li}_4\text{Ti}_5\text{O}_{12}$ composite as anode materials for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 813, 152175.	2.8	22
1398	Electrochemical Thermal-Mechanical Modelling of Stress Inhomogeneity in Lithium-Ion Pouch Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013512.	1.3	59
1399	Recent nanosheet-based materials for monovalent and multivalent ions storage. <i>Energy Storage Materials</i> , 2020, 25, 382-403.	9.5	14
1400	Measurement of mechanical and fracture properties of solid electrolyte interphase on lithium metal anodes in lithium ion batteries. <i>Energy Storage Materials</i> , 2020, 25, 296-304.	9.5	68
1401	A Game Changer: Functional Nano/Micromaterials for Smart Rechargeable Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1902499.	7.8	41
1402	Novel hierarchically branched Co ₂ O ₄ @CoO/Co composite arrays with superior lithium storage performance. <i>Energy Storage Materials</i> , 2020, 24, 362-372.	9.5	31
1403	Key functional groups defining the formation of Si anode solid-electrolyte interphase towards high energy density Li-ion batteries. <i>Energy Storage Materials</i> , 2020, 25, 764-781.	9.5	61
1404	High-capacity flour-based nano-Si/C composite anode materials for lithium-ion batteries. <i>Ionics</i> , 2020, 26, 1-11.	1.2	43
1405	An egg holders-inspired structure design for large-volume-change anodes with long cycle life. <i>Journal of Alloys and Compounds</i> , 2020, 816, 152497.	2.8	12
1406	An overview on efforts to enhance the Si electrode stability for lithium ion batteries. <i>Energy Storage</i> , 2020, 2, e94.	2.3	16
1407	Fibroblast Growth Factor 19â€•Mediated Upâ€•regulation of SYRâ€•Related Highâ€•Mobility Group Box 18 Promotes Hepatocellular Carcinoma Metastasis by Transactivating Fibroblast Growth Factor Receptor 4 and Fmsâ€•Related Tyrosine Kinase 4. <i>Hepatology</i> , 2020, 71, 1712-1731.	3.6	36
1408	Binary Siâ€•Ge Alloys as Highâ€•Capacity Anodes for Liâ€•Ion Batteries. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1900414.	0.8	11
1409	Expression of the long noncoding RNA RP11â€•169D4.1â€•001 in Hypopharyngeal Squamous cell carcinoma tissue and its clinical significance. <i>Journal of Clinical Laboratory Analysis</i> , 2020, 34, e23019.	0.9	8

#	ARTICLE	IF	CITATIONS
1410	Development and application of carbon fiber in batteries. <i>Chemical Engineering Journal</i> , 2020, 384, 123294.	6.6	141
1411	Fabrication of 3D and 4D polymer micro- and nanostructures based on electrospinning. , 2020, , 191-229.		6
1412	Synthesis and resistivity of topological metal MoP nanostructures. <i>APL Materials</i> , 2020, 8, .	2.2	11
1413	Topâ€Down Synthesis of Silicon/Carbon Composite Anode Materials for Lithiumâ€Ion Batteries: Mechanical Milling and Etching. <i>ChemSusChem</i> , 2020, 13, 1923-1946.	3.6	52
1414	Materials and electrode engineering of high capacity anodes in lithium ion batteries. <i>Journal of Power Sources</i> , 2020, 450, 227697.	4.0	55
1415	Effect of crystallinity on capacity and cyclic stability of Na _{1.1} V ₃ O _{7.9} nanoplates as lithium-ion cathode materials. <i>Journal of Solid State Electrochemistry</i> , 2020, 24, 217-223.	1.2	7
1416	Bioinspired hierarchical cross-linked grapheneâ€silicon nanofilms <i>via</i> synergistic interfacial interactions as integrated negative electrodes for high-performance lithium storage. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 2105-2114.	1.3	8
1417	In-plane aligned assemblies of 1D-nanoobjects: recent approaches and applications. <i>Chemical Society Reviews</i> , 2020, 49, 509-553.	18.7	51
1418	Free-standing 3D nitrogenâ€carbon anchored Cu nanorod arrays: <i>in situ</i> derivation from a metalâ€organic framework and strategy to stabilize lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1425-1431.	5.2	17
1419	Copper nanowires in recent electronic applications: progress and perspectives. <i>Journal of Materials Chemistry C</i> , 2020, 8, 849-872.	2.7	53
1420	Phosphoric acid induced homogeneous crosslinked phosphorus doped porous Si nanoparticles with superior lithium storage performance. <i>Applied Surface Science</i> , 2020, 509, 144873.	3.1	21
1421	Urchin-like 3D NiFe ₂ O ₄ with 1D radially oriented nanorods as anode for lithium-ion based dual-ion pseudocapacitor. <i>Electrochimica Acta</i> , 2020, 333, 135557.	2.6	18
1422	Tailoring the interfaces of silicon/carbon nanotube for high rate lithium-ion battery anodes. <i>Journal of Power Sources</i> , 2020, 450, 227593.	4.0	45
1423	Roomâ€Temperature Crosslinkable Natural Polymer Binder for Highâ€Rate and Stable Silicon Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 1908433.	7.8	95
1424	Facile Fabrication of Porous Si Microspheres from Lowâ€Cost Precursors for Highâ€Capacity Electrode. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901726.	1.9	11
1425	Porosityâ€and Graphitizationâ€Controlled Fabrication of Nanoporous Silicon@Carbon for Lithium Storage and Its Conjugation with MXene for Lithiumâ€Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 1908721.	7.8	159
1426	Morphology engineering of self-assembled porous zinc manganate hexagons for lithium ion storage. <i>Electrochimica Acta</i> , 2020, 330, 135260.	2.6	14
1427	Open ZnSe/C nanocages: multi-hierarchy stress-buffer for boosting cycling stability in potassium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 779-788.	5.2	73

#	ARTICLE	IF	CITATIONS
1428	Modeling framework for multiphysics-multiscale behavior of Si/C composite anode. Journal of Power Sources, 2020, 449, 227501.	4.0	39
1429	Strategic Pore Architecture for Accommodating Volume Change from High Si Content in Lithium-Ion Battery Anodes. Advanced Energy Materials, 2020, 10, 1903400.	10.2	50
1430	Li ⁺ Preinsertion Leads to Formation of Solid Electrolyte Interface on TiO ₂ Nanotubes That Enables High-Performance Anodes for Sodium Ion Batteries. Advanced Energy Materials, 2020, 10, 1903448.	10.2	35
1431	3D Meshlike Polyacrylamide Hydrogel as a Novel Binder System via in situ Polymerization for High-Performance Si-Based Electrode. Advanced Materials Interfaces, 2020, 7, 1901475.	1.9	31
1432	Surface Properties of Battery Materials Elucidated Using Scanning Electrochemical Microscopy: The Case of Type I Silicon Clathrate. ChemElectroChem, 2020, 7, 665-671.	1.7	16
1433	Utilizing Cyclic Voltammetry to Understand the Energy Storage Mechanisms for Copper Oxide and its Graphene Oxide Hybrids as Lithium-Ion Battery Anodes. ChemSusChem, 2020, 13, 1504-1516.	3.6	9
1434	Stable and High-Capacity Si Electrodes with Free-Standing Architecture for Lithium-Ion Batteries. ACS Applied Energy Materials, 2020, 3, 208-217.	2.5	9
1435	Boosting Superior Lithium Storage Performance of Alloy-Based Anode Materials via Ultraconformal Sb Coating-Derived Favorable Solid-Electrolyte Interphase. Advanced Energy Materials, 2020, 10, 1903186.	10.2	29
1436	A general strategy to construct yolk-shelled metal oxides inside carbon nanocages for high-stable lithium-ion battery anodes. Nano Energy, 2020, 68, 104368.	8.2	32
1437	Silicon Nanoparticles Preparation by Induction Plasma Technology for Li-ion Batteries Anode Material. Silicon, 2020, 12, 2259-2269.	1.8	9
1438	A binder-free high silicon content flexible anode for Li-ion batteries. Energy and Environmental Science, 2020, 13, 848-858.	15.6	245
1439	Internal failure of anode materials for lithium batteries – A critical review. Green Energy and Environment, 2020, 5, 22-36.	4.7	67
1440	A conductive self-healing hydrogel binder for high-performance silicon anodes in lithium-ion batteries. Journal of Power Sources, 2020, 449, 227472.	4.0	79
1441	The lithiation process and Li diffusion in amorphous SiO_2 and Si from first-principles. Electrochimica Acta, 2020, 331, 135344.	2.6	66
1442	Synthesis of Si nanowire/nanosheet complexes from CaSi ₂ crystals by thermal annealing under MnCl ₂ /NH ₄ Cl vapors. Japanese Journal of Applied Physics, 2020, 59, SFFD01.	0.8	2
1443	A highly stable SiO _x -based anode enabled by self-assembly with polyelectrolyte. Electrochimica Acta, 2020, 360, 136958.	2.6	6
1444	Three-Dimensional Hierarchical Porous Structures Constructed by Two-Stage MXene-Wrapped Si Nanoparticles for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 48718-48728.	4.0	45
1445	In situ growth of silicon carbide interface enhances the long life and high power of the mulberry-like Si-based anode for lithium-ion batteries. Journal of Energy Storage, 2020, 32, 101856.	3.9	11

#	ARTICLE	IF	CITATIONS
1446	Microclusters of Kinked Silicon Nanowires Synthesized by a Recyclable Iodide Process for High-Performance Lithium-Ion Battery Anodes. <i>Advanced Energy Materials</i> , 2020, 10, 2002108.	10.2	57
1447	A New Approach in Recycling Waste Foundry Sand for the Preparation of Porous Silicon Powder. <i>International Journal of Electrochemical Science</i> , 2020, 15, 7633-7645.	0.5	1
1448	Designing double-layered Si and Si/LATP nanocomposite anode for high-voltage aqueous lithium-ion batteries. <i>SN Applied Sciences</i> , 2020, 2, 1.	1.5	0
1449	Effect of Water Concentration in LiPF ₆ -Based Electrolytes on the Formation, Evolution, and Properties of the Solid Electrolyte Interphase on Si Anodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49563-49573.	4.0	27
1450	Crystallinity of Silicon Nanoparticles: Direct Influence on the Electrochemical Performance of Lithium Ion Battery Anodes. <i>ChemElectroChem</i> , 2020, 7, 4349-4353.	1.7	23
1451	Self-assembled materials for electrochemical energy storage. <i>MRS Bulletin</i> , 2020, 45, 815-822.	1.7	7
1452	Titanium Monoxide-Stabilized Silicon Nanoparticles with a Litchi-like Structure as an Advanced Anode for Li-ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48467-48475.	4.0	29
1453	High-Performance Porous Silicon/Nanosilver Anodes from Industrial Low-Grade Silicon for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49080-49089.	4.0	57
1454	Multi-scale quantification and modeling of aged nanostructured silicon-based composite anodes. <i>Communications Chemistry</i> , 2020, 3, .	2.0	30
1455	Toward High-Capacity Battery Anode Materials: Chemistry and Mechanics Intertwined. <i>Chemistry of Materials</i> , 2020, 32, 8755-8771.	3.2	28
1456	Multifunctional Properties of Al ₂ O ₃ /Polyacrylonitrile Composite Coating on Cu to Suppress Dendritic Growth in Anode-Free Li-Metal Battery. <i>ACS Applied Energy Materials</i> , 2020, 3, 7666-7679.	2.5	41
1457	Interpenetrated tunnel routes in silicon/carbon hollow sphere anodes to boost their lithium storage. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2782-2790.	3.2	8
1458	Facile preparation of void-buffered Si@TiO ₂ /C microspheres for high-capacity lithium ion battery anodes. <i>Electrochimica Acta</i> , 2020, 337, 135841.	2.6	23
1459	Latest Advances in Flexible Symmetric Supercapacitors: From Material Engineering to Wearable Applications. <i>Accounts of Chemical Research</i> , 2020, 53, 1468-1477.	7.6	72
1460	Promoting Effect of Si-OH on the Decomposition of Electrolytes in Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2020, 32, 6365-6373.	3.2	23
1461	Progress of 3D network binders in silicon anodes for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25548-25570.	5.2	88
1462	Electrochemical Performance of an Ultrathin Surface Oxide-Modulated Nano-Si Anode Confined in a Graphite Matrix for Highly Reversible Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 54608-54618.	4.0	16
1463	Free-Standing Carbon Nanofibers Protected by a Thin Metallic Iridium Layer for Extended Life-Cycle Li-Oxygen Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 55756-55765.	4.0	16

#	ARTICLE	IF	CITATIONS
1464	Two-Dimensional Silicon/Carbon from Commercial Alloy and CO ₂ for Lithium Storage and Flexible Ti ₃ C ₂ T _x MXene-Based Lithium–Metal Batteries. ACS Nano, 2020, 14, 17574-17588.	7.3	108
1465	A review on recent approaches for designing the SEI layer on sodium metal anodes. Materials Advances, 2020, 1, 3143-3166.	2.6	42
1466	Construction of an Electron Bridge in Polyoxometalates/Graphene Oxide Ultrathin Nanosheets To Boost the Lithium Storage Performance. Energy & Fuels, 2020, 34, 16968-16977.	2.5	11
1467	Clay-derived mesoporous Si/rGO for anode material of lithium-ion batteries. Journal of Alloys and Compounds, 2020, 848, 156590.	2.8	27
1468	Novel Hoberman Sphere Design for Interlaced Mn ₃ O ₄ @CNT Architecture with Atomic Layer Deposition-Coated TiO ₂ Overlay as Advanced Anodes in Li-Ion Battery. ACS Applied Materials & Interfaces, 2020, 12, 39282-39292.	4.0	24
1469	Electrochemical Reactivity and Passivation of Silicon Thin-Film Electrodes in Organic Carbonate Electrolytes. ACS Applied Materials & Interfaces, 2020, 12, 40879-40890.	4.0	42
1470	A Copper Silicide Nanofoam Current Collector for Directly Grown Si Nanowire Networks and their Application as Lithium–Ion Anodes. Advanced Functional Materials, 2020, 30, 2003278.	7.8	57
1471	Metal–Coordination Mediated Polyacrylate for High Performance Silicon Microparticle Anode. Batteries and Supercaps, 2020, 3, 1287-1295.	2.4	15
1472	Thickness gradient promotes the performance of Si-based anode material for lithium-ion battery. Materials and Design, 2020, 195, 108993.	3.3	6
1473	Stable high-capacity and high-rate silicon-based lithium battery anodes upon two-dimensional covalent encapsulation. Nature Communications, 2020, 11, 3826.	5.8	193
1474	Silicon cages with tailored mesopores as anodes for high rate performance lithium ion batteries. Journal of Alloys and Compounds, 2020, 848, 156539.	2.8	7
1475	Influence of flake size and porosity of activated graphene on the performance of silicon/activated graphene composites as lithium-ion battery anodes. Journal of Electroanalytical Chemistry, 2020, 876, 114475.	1.9	11
1476	An atomistic perspective on lithiation kinetics and morphological evolution in void-involved silicon/carbon nanohybrid. Materials and Design, 2020, 195, 109037.	3.3	11
1477	Calendering–Compatible Macroporous Architecture for Silicon–Graphite Composite toward High–Energy Lithium–Ion Batteries. Advanced Materials, 2020, 32, e2003286.	11.1	111
1478	Electrochemical characteristics and energy densities of lithium-ion batteries using mesoporous silicon and graphite as anodes. Electrochimica Acta, 2020, 357, 136870.	2.6	25
1479	Covalently Bonded Si–Polymer Nanocomposites Enabled by Mechanochemical Synthesis as Durable Anode Materials. ACS Applied Materials & Interfaces, 2020, 12, 39127-39134.	4.0	18
1480	Highly Elastic Block Copolymer Binders for Silicon Anodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 38132-38139.	4.0	38
1481	Recent advances and perspectives of 2D silicon: Synthesis and application for energy storage and conversion. Energy Storage Materials, 2020, 32, 115-150.	9.5	74

#	ARTICLE	IF	CITATIONS
1482	Scalable Synthesis of Hollow SiC/Si Anodes via Selective Thermal Oxidation for Lithium-Ion Batteries. <i>ACS Nano</i> , 2020, 14, 11548-11557.	7.3	32
1483	A stress-based charging protocol for silicon anode in lithium-ion battery: Theoretical and experimental studies. <i>Journal of Energy Storage</i> , 2020, 32, 101765.	3.9	21
1484	Robust Cu microcone-array supported silicon film with superb cycling stability for negative electrode of lithium battery. , 2020, , .		0
1485	Moderate-Concentration Fluorinated Electrolyte for High-Energy-Density $\text{Si/LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 16252-16261.	3.2	10
1486	Deformation-induced silicon nanostructures. <i>APL Materials</i> , 2020, 8, .	2.2	2
1487	Sustainable Encapsulation Strategy of Silicon Nanoparticles in Microcarbon Sphere for High-Performance Lithium-Ion Battery Anode. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 14150-14158.	3.2	37
1488	Improved High Rate and Temperature Stability Using an Anisotropically Aligned Pillar-Type Solid Electrolyte Interphase for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 42781-42789.	4.0	9
1489	Chemical Vapor Deposition of Silicon Nanoparticles on the Surface of Multiwalled Carbon Nanotubes. <i>Journal of Structural Chemistry</i> , 2020, 61, 617-627.	0.3	5
1490	Critical barriers to the large scale commercialization of silicon-containing batteries. <i>Nanoscale Advances</i> , 2020, 2, 4368-4389.	2.2	18
1491	Diatomite-Derived Hierarchical Porous Crystalline-Amorphous Network for High-Performance and Sustainable Si Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 2005956.	7.8	36
1492	Metal-Organic Framework Derived Core-Shell N-Doped Carbon Nanocages Embedded with Cobalt Nanoparticles as High-Performance Anode Materials for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2006188.	7.8	98
1493	A Scalable Silicon Nanowires-Grown-On-Graphite Composite for High-Energy Lithium Batteries. <i>ACS Nano</i> , 2020, 14, 12006-12015.	7.3	66
1494	A Review of Recent Advancements in Electrospun Anode Materials to Improve Rechargeable Lithium Battery Performance. <i>Polymers</i> , 2020, 12, 2035.	2.0	30
1495	Enhanced Interfacial Stability of Si Anodes for Li-Ion Batteries via Surface SiO_2 Coating. <i>ACS Applied Energy Materials</i> , 2020, 3, 8842-8849.	2.5	38
1496	Wood nanotechnology: a more promising solution toward energy issues: a mini-review. <i>Cellulose</i> , 2020, 27, 8513-8526.	2.4	14
1497	Niobium Tungsten Oxide in a Green Water-in-Salt Electrolyte Enables Ultra-Stable Aqueous Lithium-Ion Capacitors. <i>Nano-Micro Letters</i> , 2020, 12, 168.	14.4	40
1498	Sustainable Li-Ion Batteries: Chemistry and Recycling. <i>Advanced Energy Materials</i> , 2021, 11, 2003456.	10.2	157
1499	Silicon Nanotubes Fabricated by Wet Chemical Etching of ZnO/Si Core-Shell Nanowires. <i>Nanomaterials</i> , 2020, 10, 2535.	1.9	8

#	ARTICLE	IF	CITATIONS
1500	Supercritical fluid-assisted preparation of Si/CNTs@FG composites with hierarchical conductive networks as a high-performance anode material. <i>Applied Surface Science</i> , 2020, 522, 146507.	3.1	25
1501	A green strategy for the preparation of a honeycomb-like silicon composite with enhanced lithium storage properties. <i>Nanoscale</i> , 2020, 12, 12849-12855.	2.8	7
1502	Muon Spectroscopy for Investigating Diffusion in Energy Storage Materials. <i>Annual Review of Materials Research</i> , 2020, 50, 371-393.	4.3	22
1503	The preparation of graphite/silicon@carbon composites for lithium-ion batteries through molten salts electrolysis. <i>Journal of Materials Science</i> , 2020, 55, 10155-10167.	1.7	20
1504	Review of the Design of Current Collectors for Improving the Battery Performance in Lithium-Ion and Post-Lithium-Ion Batteries. <i>Electrochem</i> , 2020, 1, 124-159.	1.7	53
1505	The nonlocal multi-directional vibration behaviors of buckled viscoelastic nanoribbons. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, 234, 3571-3583.	1.1	4
1506	Highly Stretchable Polymer Binder Engineered with Polysaccharides for Silicon Microparticles as High-Performance Anodes. <i>ChemSusChem</i> , 2020, 13, 3887-3892.	3.6	18
1507	Advances and Challenges of Fe-MOFs Based Materials as Electrocatalysts for Water Splitting. <i>Applied Materials Today</i> , 2020, 20, 100692.	2.3	35
1508	Spontaneous and reversible hollowing of alloy anode nanocrystals for stable battery cycling. <i>Nature Nanotechnology</i> , 2020, 15, 475-481.	15.6	68
1509	Catalysis of silica-based anode (de-)lithiation: compositional design within a hollow structure for accelerated conversion reaction kinetics. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12306-12313.	5.2	43
1510	Surface SiO ₂ Thickness Controls Uniform-to-Localized Transition in Lithiation of Silicon Anodes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 27017-27028.	4.0	37
1511	Multifunctional Water Drop Energy Harvesting and Human Motion Sensor Based on Flexible Dual-Mode Nanogenerator Incorporated with Polymer Nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 24030-24038.	4.0	44
1512	Role of the binder in the mechanical integrity of micro-sized crystalline silicon anodes for Li-Ion batteries. <i>Journal of Power Sources</i> , 2020, 465, 228290.	4.0	12
1513	Elastic buffer structured Si/C microsphere anodes <i>via</i> polymerization-induced colloid aggregation. <i>Chemical Communications</i> , 2020, 56, 6770-6773.	2.2	20
1514	Concentration dependent properties and plastic deformation facilitate instability of the solid-electrolyte interphase in Li-ion batteries. <i>International Journal of Solids and Structures</i> , 2020, 198, 99-109.	1.3	18
1515	Unprecedentedly Low CO ₂ Transport through Vertically Aligned, Conical Silicon Nanotube Membranes. <i>Nano Letters</i> , 2020, 20, 4754-4760.	4.5	9
1516	Tannic Acid as a Small-Molecule Binder for Silicon Anodes. <i>ACS Applied Energy Materials</i> , 2020, 3, 6985-6994.	2.5	33
1517	A facile synthesis of vanadium-doped SiO _x composites for high-performance Li-ion battery anodes. <i>Journal of Alloys and Compounds</i> , 2020, 842, 155900.	2.8	12

#	ARTICLE	IF	CITATIONS
1518	The pitch-based silicon-carbon composites fabricated by electro spraying technique as the anode material of lithium ion battery. <i>Journal of Alloys and Compounds</i> , 2020, 844, 156025.	2.8	19
1519	Pristine MOF and COF materials for advanced batteries. <i>Energy Storage Materials</i> , 2020, 31, 115-134.	9.5	149
1520	3D graphene-like nanosheets/silicon wrapped by catalytic graphite as a superior lithium storage anode. <i>Journal of Electroanalytical Chemistry</i> , 2020, 873, 114350.	1.9	9
1521	Lithium-ion battery performance enhanced by the combination of Si thin flake anodes and binary ionic liquid systems. <i>Materials Advances</i> , 2020, 1, 625-631.	2.6	9
1522	Exploring the Possibility of β -Phase Arsenic-Phosphorus Polymorph Monolayer as Anode Materials for Sodium-Ion Batteries. <i>Advanced Theory and Simulations</i> , 2020, 3, 2000023.	1.3	14
1523	SiO ₂ /N-doped graphene aerogel composite anode for lithium-ion batteries. <i>Journal of Materials Science</i> , 2020, 55, 13023-13035.	1.7	43
1524	Emerging anode and cathode functional materials for lithium-ion batteries. , 2020, , 465-491.		2
1525	Covalent sulfur embedding in inherent N,P co-doped biological carbon for ultrastable and high rate lithium-sulfur batteries. <i>Nanoscale</i> , 2020, 12, 8991-8996.	2.8	25
1526	Facile Fabrication of High-Performance Si/C Anode Materials via AlCl ₃ -Assisted Magnesiothermic Reduction of Phenyl-Rich Polyhedral Silsesquioxanes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 15202-15210.	4.0	22
1527	Covalently Bonded Silicon/Carbon Nanocomposites as Cycle-Stable Anodes for Li-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 16411-16416.	4.0	55
1528	Excellent electrolyte-electrode interface stability enabled by inhibition of anion mobility in hybrid gel polymer electrolyte based Li-O ₂ batteries. <i>Journal of Membrane Science</i> , 2020, 604, 118051.	4.1	19
1529	Rational design of the pea-pod structure of SiO _x /C nanofibers as a high-performance anode for lithium ion batteries. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 1762-1769.	3.0	31
1530	Acrylic random copolymer and network binders for silicon anodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2020, 458, 228054.	4.0	37
1531	Stretchable Carbon Nanotube Dilatometer for <i>In Situ</i> Swelling Detection of Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 3637-3644.	2.5	11
1532	Facile synthesis of core-shell structured Si@graphene balls as a high-performance anode for lithium-ion batteries. <i>Nanoscale</i> , 2020, 12, 9616-9627.	2.8	43
1533	Protective coatings on silicon particles and their effect on energy density and specific energy in lithium ion battery cells: A model study. <i>Journal of Energy Storage</i> , 2020, 29, 101376.	3.9	18
1534	Composite of Tin and Silicon with Nanostructure as High Performance Lithium-Ion Battery Anode. <i>International Journal of Electrochemical Science</i> , 2020, 15, 3054-3067.	0.5	3
1535	Gas phase synthesis of amorphous silicon nitride nanoparticles for high-energy LIBs. <i>Energy and Environmental Science</i> , 2020, 13, 1212-1221.	15.6	48

#	ARTICLE	IF	CITATIONS
1536	A free-standing and flexible phosphorus/nitrogen dual-doped three-dimensional reticular porous carbon frameworks encapsulated cobalt phosphide with superior performance for nitrite detection in drinking water and sausage samples. <i>Sensors and Actuators B: Chemical</i> , 2020, 321, 128541.	4.0	56
1537	Nanospaceâ€Confinement Synthesis: Designing Highâ€Energy Anode Materials toward Ultrastable Lithiumâ€Ion Batteries. <i>Small</i> , 2020, 16, e2002351.	5.2	13
1538	A Commercial Carbonaceous Anode with a-Si Layers by Plasma Enhanced Chemical Vapor Deposition for Lithium Ion Batteries. <i>Journal of Composites Science</i> , 2020, 4, 72.	1.4	6
1539	<i>In Situ&/i> Synthesis of VO₂ Embedded in Graphite/Si as a High Performance Anode for Lithium-Ion Batteries. <i>Materials Science Forum</i> , 0, 999, 3-12.	0.3	1
1540	Hollow multishelled structures revive high energy density batteries. <i>Nanoscale Horizons</i> , 2020, 5, 1287-1292.	4.1	31
1541	Templateâ€Free Electrochemical Formation of Silicon Nanotubes from Silica. <i>Advanced Science</i> , 2020, 7, 2001492.	5.6	51
1542	Anisotropic alignments of hierarchical Li ₂ SiO ₃ /TiO ₂ @nano-C anode//LiMnPO ₄ @nano-C cathode architectures for full-cell lithium-ion battery. <i>National Science Review</i> , 2020, 7, 863-880.	4.6	24
1543	Tuning the electronic properties of SiC nanosheets decorated by Lin (nâ€%o=â€%o1â€“3) for the anode of lithium-ion batteries. <i>Molecular Physics</i> , 2020, 118, e1786182.	0.8	9
1544	Influence of Carbonate-Based Additives on the Electrochemical Performance of Si NW Anodes Cycled in an Ionic Liquid Electrolyte. <i>Nano Letters</i> , 2020, 20, 7011-7019.	4.5	18
1545	Selenium or Tellurium as Eutectic Accelerators for High-Performance Lithium/Sodiumâ€Sulfur Batteries. <i>Electrochemical Energy Reviews</i> , 2020, 3, 613-642.	13.1	75
1546	An efficient prelithiation of graphene oxide nanoribbons wrapping silicon nanoparticles for stable Li+ storage. <i>Carbon</i> , 2020, 168, 392-403.	5.4	34
1547	FeOF/TiO₂ Hetero-Nanostructures for High-Areal-Capacity Fluoride Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 33803-33809.	4.0	12
1548	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. <i>Nature Reviews Materials</i> , 2020, 5, 276-294.	23.3	284
1549	Silicon Anodes for Highâ€Performance Storage Devices: Structural Design, Material Compounding, Advances in Electrolytes and Binders. <i>ChemNanoMat</i> , 2020, 6, 720-738.	1.5	24
1550	Synergistic effect of antimony-triselenide on addition of conductive hybrid matrix for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 828, 154410.	2.8	12
1551	High-performance boron-doped silicon micron-rod anode fabricated using a mass-producible lithography method for a lithium ion battery. <i>Journal of Power Sources</i> , 2020, 454, 227931.	4.0	25
1552	Toward quantifying capacity losses due to solid electrolyte interphase evolution in silicon thin film batteries. <i>Journal of Chemical Physics</i> , 2020, 152, 084702.	1.2	25
1553	Flexible Interface Design for Stress Regulation of a Silicon Anode toward Highly Stable Dualâ€Ion Batteries. <i>Advanced Materials</i> , 2020, 32, e1908470.	11.1	126

#	ARTICLE	IF	CITATIONS
1554	Core-shell structured heterohierarchical porous Si@graphene microsphere for high-performance lithium-ion battery anodes. <i>Materials Letters</i> , 2020, 266, 127484.	1.3	14
1555	Achieving Ultrahigh Rate and High Safety Li ⁺ Storage Based on Interconnected Tunnel Structure in Microsize Niobium Tungsten Oxides. <i>Advanced Materials</i> , 2020, 32, e1905295.	11.1	95
1556	Biomass-Derived Graphitic Carbon Encapsulated Fe/Fe ₃ C Composite as an Anode Material for High-Performance Lithium Ion Batteries. <i>Energies</i> , 2020, 13, 827.	1.6	22
1557	Nano-Structured Composite Anode Enabling Long-Term Cycling Stability for High-Capacity Lithium-Ion Batteries. <i>Small</i> , 2020, 16, e1906812.	5.2	37
1558	Nanoscale thermal transport and elastic properties of lithiated amorphous Si thin films. <i>Materials Today: Proceedings</i> , 2020, 25, 88-92.	0.9	4
1559	Hierarchical urchin-like Fe ₂ O ₃ structures grown directly on Ti foils for binder-free lithium-ion batteries with fast charging/discharging properties. <i>Inorganic Chemistry Communication</i> , 2020, 113, 107769.	1.8	8
1560	Using nanoconfinement to inhibit the degradation pathways of conversion-metal oxide anodes for highly stable fast-charging Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2712-2727.	5.2	32
1561	Self-Catalyzed Vertically Aligned Carbon Nanotube-Silicon Core-Shell Array for Highly Stable, High-Capacity Lithium-Ion Batteries. <i>Langmuir</i> , 2020, 36, 889-896.	1.6	29
1562	A Flexible and Conductive Binder with Strong Adhesion for High Performance Silicon-Based Lithium-Ion Battery Anode. <i>ChemElectroChem</i> , 2020, 7, 1992-2000.	1.7	42
1563	Facile synthesis of ceramic SiC-based nanocomposites and the superior electrochemical lithiation/delithiation performances. <i>Materials Chemistry and Physics</i> , 2020, 243, 122618.	2.0	7
1564	Adhesion and Surface Layers on Silicon Anodes Suppress Formation of <i>c</i> -Li _{3.75} Si and Solid-Electrolyte Interphase. <i>ACS Applied Energy Materials</i> , 2020, 3, 1609-1616.	2.5	10
1565	Binder-free layered ZnO@Ni microspheres as advanced anode materials for lithium-ion batteries. <i>Ionics</i> , 2020, 26, 3281-3288.	1.2	6
1566	Excellent electrochemical performance of the SiO _x -G/PAA-PANi/Cu as anode materials for lithium-ion battery. <i>Materials Technology</i> , 2020, 35, 580-586.	1.5	5
1567	Bulk-Like SnO ₂ -Fe ₂ O ₃ @Carbon Composite as a High-Performance Anode for Lithium Ion Batteries. <i>Nanomaterials</i> , 2020, 10, 249.	1.9	7
1568	Graphene intercalated free-standing carbon paper coated with MnO ₂ for anode materials of lithium ion batteries. <i>Electrochimica Acta</i> , 2020, 348, 136310.	2.6	48
1569	Dynamic bonded supramolecular binder enables high-performance silicon anodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2020, 463, 228208.	4.0	57
1570	An ultrahigh-areal-capacity SiO _x negative electrode for lithium ion batteries. <i>Journal of Power Sources</i> , 2020, 464, 228244.	4.0	21
1571	Mesoporous-Si embedded and anchored by hierarchical Sn nano-particles as promising anode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 832, 154935.	2.8	9

#	ARTICLE	IF	CITATIONS
1572	Superassembly of Porous Fe ₄ (NiFe) ₈ O Frameworks with Stable Octahedron and Multistage Structure for Superior Lithium-Oxygen Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 1904262.	10.2	55
1573	Scalable synthesis of nanoporous silicon microparticles for highly cyclable lithium-ion batteries. <i>Nano Research</i> , 2020, 13, 1558-1563.	5.8	65
1574	One-dimensional mesoporous inorganic nanostructures and their applications in energy, sensor, catalysis and adsorption. <i>Progress in Materials Science</i> , 2020, 113, 100671.	16.0	64
1575	MXene Frameworks Promote the Growth and Stability of LiF-Rich Solid-Electrolyte Interphases on Silicon Nanoparticle Bundles. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 18541-18550.	4.0	44
1576	Controlled synthesis of nanosized Si by magnesiothermic reduction from diatomite as anode material for Li-ion batteries. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2020, 27, 515-525.	2.4	26
1577	Thermolytically grafted silicon particles with ultrathin carbonaceous coating rich of phenyl moieties as lithium-storage anode material. <i>Chemical Engineering Journal</i> , 2020, 395, 125169.	6.6	17
1578	Improved lithium storage performance of pomegranate-like Si@NC/rGO composite anodes by facile in-situ nitrogen doped carbon coating and freeze drying processes. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155230.	2.8	38
1579	Short-time and ultrasensitive electroanalytical technique for electrode active materials used in secondary batteries. <i>Journal of Power Sources</i> , 2020, 459, 228041.	4.0	0
1580	Controllable Synthesis of Peapod-like Sb@C and Corn-like C@Sb Nanotubes for Sodium Storage. <i>ACS Nano</i> , 2020, 14, 5728-5737.	7.3	77
1581	Circumventing huge volume strain in alloy anodes of lithium batteries. <i>Nature Communications</i> , 2020, 11, 1584.	5.8	130
1582	Challenges and Strategies for High-Energy Aqueous Electrolyte Rechargeable Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 598-616.	7.2	272
1583	Wässrige Hochleistungsbatterien: Herausforderungen und Strategien. <i>Angewandte Chemie</i> , 2021, 133, 608-626.	1.6	14
1584	Electrospinning-Based Strategies for Battery Materials. <i>Advanced Energy Materials</i> , 2021, 11, 2000845.	10.2	169
1585	N-doped porous carbon nanofibers sheathed pumpkin-like Si/C composites as free-standing anodes for lithium-ion batteries. <i>Journal of Energy Chemistry</i> , 2021, 54, 727-735.	7.1	140
1586	A multifunctional zipper-like sulfur electrode enables the stable operation of lithium-sulfur battery through self-healing chemistry. <i>Energy Storage Materials</i> , 2021, 34, 755-767.	9.5	18
1587	Directly conversion the biomass-waste to Si/C composite anode materials for advanced lithium ion batteries. <i>Chinese Chemical Letters</i> , 2021, 32, 5-8.	4.8	21
1588	Modeling the chemo-mechanical behavior of all-solid-state batteries: a review.. <i>Meccanica</i> , 2021, 56, 1523-1554.	1.2	41
1589	Self-assembled porous LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ cathode materials with micro/nano-layered hollow morphologies for high-power lithium-ion batteries. <i>Applied Surface Science</i> , 2021, 539, 148034.	3.1	12

#	ARTICLE	IF	CITATIONS
1590	Anchoring silicon on the basal plane of graphite via a three-phase heterostructure for highly reversible lithium storage. <i>Energy Storage Materials</i> , 2021, 34, 311-319.	9.5	65
1591	Battery materials for low-cost electric transportation. <i>Materials Today</i> , 2021, 42, 57-72.	8.3	98
1592	Ultrafine SnO ₂ anchored in ordered mesoporous carbon framework for lithium storage with high capacity and rate capability. <i>Chemical Engineering Journal</i> , 2021, 406, 126710.	6.6	27
1593	Enhancing lithium storage performance by strongly binding silicon nanoparticles sandwiching between spherical graphene. <i>Applied Surface Science</i> , 2021, 539, 148191.	3.1	20
1594	Rational design of functional binder systems for high-energy lithium-based rechargeable batteries. <i>Energy Storage Materials</i> , 2021, 35, 353-377.	9.5	56
1595	Inorganic Nanomaterials for Photothermal-Based Cancer Theranostics. <i>Advanced Therapeutics</i> , 2021, 4, 2000207.	1.6	11
1596	The influence of contact engineering on silicon-based anode for Li-ion batteries. <i>Nano Select</i> , 2021, 2, 468-491.	1.9	11
1597	Recycling Si waste cut from diamond wire into high performance porous Si@SiO ₂ @C anodes for Li-ion battery. <i>Journal of Hazardous Materials</i> , 2021, 407, 124778.	6.5	22
1598	A mechanically robust self-healing binder for silicon anode in lithium ion batteries. <i>Nano Energy</i> , 2021, 81, 105654.	8.2	141
1599	Overcoming the fundamental challenge of PVDF binder use with silicon anodes with a super-molecular nano-layer. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1541-1551.	5.2	45
1600	Green and facile fabrication of nanoporous silicon@carbon from commercial alloy with high graphitization degree for high-energy lithium-ion batteries. <i>Sustainable Materials and Technologies</i> , 2021, 27, e00238.	1.7	10
1601	Perspective on the synergistic effect of chalcogenide multiphases in sodium-ion batteries. <i>Materials Chemistry Frontiers</i> , 2021, 5, 1694-1715.	3.2	22
1602	Design of hollow carbon-based materials derived from metal-organic frameworks for electrocatalysis and electrochemical energy storage. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3880-3917.	5.2	117
1603	Imaging of electric failure in Si-alloy/graphite-blended anodes for Li-ion batteries. <i>Journal of Power Sources</i> , 2021, 485, 229311.	4.0	5
1604	Highly Ordered Carbon Coating Prepared with Polyvinylidene Chloride Precursor for High-Performance Silicon Anodes in Lithium-Ion Batteries. <i>Batteries and Supercaps</i> , 2021, 4, 240-247.	2.4	15
1605	Extra storage capacity in transition metal oxide lithium-ion batteries revealed by in situ magnetometry. <i>Nature Materials</i> , 2021, 20, 76-83.	13.3	432
1606	Poly (acrylic acid-co-N-methylol acrylamide-co-butyl acrylate) copolymer grafted carboxymethyl cellulose binder for silicon anode in lithium ion batteries. <i>Journal of Applied Electrochemistry</i> , 2021, 51, 131-141.	1.5	15
1607	Li ₂ S-Based Li-ion Sulfur Batteries: Progress and Prospects. <i>Small</i> , 2021, 17, e1903934.	5.2	41

#	ARTICLE	IF	CITATIONS
1608	Silicon Leaf Powder [®] Anode. , 2021, , 323-332.		0
1609	Elasticity-oriented design of solid-state batteries: challenges and perspectives. Journal of Materials Chemistry A, 2021, 9, 13804-13821.	5.2	12
1610	Polymer Graphene-Based Nanofibers and Their Application for Batteries. Carbon Nanostructures, 2021, , 119-148.	0.1	1
1611	Freestanding symmetrical SiN/Si/SiN composite coated on carbon nanotube paper for a high-performance lithium-ion battery anode based on synergistic effects. RSC Advances, 2021, 11, 28107-28115.	1.7	2
1612	Nanostructured anode materials in rechargeable batteries. , 2021, , 187-219.		5
1613	Investigation of PZT-5H and PZT-8 type piezoelectric effect on cycling stability on Si- MWCNT containing anode materials. Turkish Journal of Chemistry, 2021, 45, 1551-1558.	0.5	2
1614	In Situ Construction of High-Performing Compact Si _x CN _x Composites from Polyaminosiloxane for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 5008-5016.	4.0	13
1615	Pre-Lithiating SiO Anodes for Lithium-Ion Batteries by a Simple, Effective, and Controllable Strategy Using Stabilized Lithium Metal Powder. ACS Sustainable Chemistry and Engineering, 2021, 9, 648-657.	3.2	60
1616	Reversible Silicon Anodes with Long Cycles by Multifunctional Volumetric Buffer Layers. ACS Applied Materials & Interfaces, 2021, 13, 4093-4101.	4.0	34
1617	State-of-the-Art and Future Challenges in High Energy Lithium-Selenium Batteries. Advanced Materials, 2021, 33, e2003845.	11.1	75
1618	Surface-Oxidation-Induced Constrained Volume Expansion of Commercial Silicon Flakes as High-Performance Anode Material for Lithium-Ion Batteries. Journal of Electronic Materials, 2021, 50, 1140-1145.	1.0	3
1619	Lithium ion battery degradation: what you need to know. Physical Chemistry Chemical Physics, 2021, 23, 8200-8221.	1.3	330
1620	In Situ Transmission Electron Microscopy for Studying Lithium-Ion Batteries. , 2021, , 545-569.		0
1621	Strategies, design and synthesis of advanced nanostructured electrodes for rechargeable batteries. Materials Chemistry Frontiers, 2021, 5, 5897-5931.	3.2	15
1622	Review—The Lithiation/Delithiation Behavior of Si-Based Electrodes: A Connection between Electrochemistry and Mechanics. Journal of the Electrochemical Society, 2021, 168, 010523.	1.3	21
1623	Optimum Particle Size in Silicon Electrodes Dictated by Chemomechanical Deformation of the SEI. Advanced Functional Materials, 2021, 31, 2010640.	7.8	10
1624	Si Swarf Wrapped by Graphite Sheets for Li-Ion Battery Electrodes with Improved Overvoltage and Cyclability. Journal of the Electrochemical Society, 2021, 168, 020521.	1.3	3
1625	TEMPO-oxidized cellulose nanofibers as versatile additives for highly stable silicon anode in lithium-ion batteries. Electrochimica Acta, 2021, 369, 137708.	2.6	14

#	ARTICLE	IF	CITATIONS
1626	Case study of N-carboxyanhydrides in silicon-based lithium ion cells as a guideline for systematic electrolyte additive research. <i>Cell Reports Physical Science</i> , 2021, 2, 100327.	2.8	16
1627	Binder-free silicon anodes wrapped in multiple graphene shells for high-performance lithium-ion batteries. <i>Journal of Power Sources</i> , 2021, 486, 229350.	4.0	32
1628	Porous silicon derived from 130Ånm StÅrber silica as lithium-ion battery anode. <i>Nano Select</i> , 2021, 2, 1554-1565.	1.9	0
1629	Hybrid TiO ₂ /Graphite/Nanodiamond Anode for Realizing High Performance Lithium Ion Battery. <i>ChemistrySelect</i> , 2021, 6, 1458-1465.	0.7	8
1630	Synthesis of porous Si nanoparticles for high performances anode material in lithium-ion batteries. <i>Materials Research Express</i> , 2021, 8, 025008.	0.8	1
1631	Formation mechanism of amorphous silicon nanoparticles with additional counter-flow quenching gas by induction thermal plasma. <i>Chemical Engineering Science</i> , 2021, 230, 116217.	1.9	16
1633	Prelithiation: A Crucial Strategy for Boosting the Practical Application of Next-Generation Lithium Ion Battery. <i>ACS Nano</i> , 2021, 15, 2197-2218.	7.3	192
1634	Molecular Understanding of Electrochemical-Mechanical Responses in Carbon-Coated Silicon Nanotubes during Lithiation. <i>Nanomaterials</i> , 2021, 11, 564.	1.9	7
1635	Designing Adaptive Binders for Microenvironment Settings of Silicon Anode Particles. <i>Advanced Materials</i> , 2021, 33, e2007460.	11.1	46
1636	N-doped C@ZnSe as a low cost positive electrode for aluminum-ion batteries: Better electrochemical performance with high voltage platform of ~1.8 V and new reaction mechanism. <i>Electrochimica Acta</i> , 2021, 370, 137790.	2.6	50
1637	Modeling of Chemo-Mechanical Multi-Particle Interactions in Composite Electrodes for Liquid and Solid-State Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 030515.	1.3	25
1638	Unprecedented Electrochromic Stability of a-WO ₃ Thin Films Achieved by Using a Hybrid-Cationic Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 11067-11077.	4.0	44
1639	Interface Engineering of Silicon and Carbon by Forming a Graded Protective Sheath for High-Capacity and Long-Durable Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 15216-15225.	4.0	31
1640	Perspective-Structure and Stability of the Solid Electrolyte Interphase on Silicon Anodes of Lithium-ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 030521.	1.3	46
1641	Highly Stable Cycling of Silicon-Nanographite Aerogel-Based Anode for Lithium-Ion Batteries. <i>ACS Omega</i> , 2021, 6, 6600-6606.	1.6	6
1642	Boosting Lithium-Ion Transport Kinetics by Increasing the Local Lithium-Ion Concentration Gradient in Composite Anodes of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 14752-14758.	4.0	18
1643	Engineering Molecular Polymerization for Template-Free SiO ₂ /C Hollow Spheres as Ultrastable Anodes in Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2101145.	7.8	74
1644	Pre-Lithiation Strategies for Next-Generation Practical Lithium-Ion Batteries. <i>Advanced Science</i> , 2021, 8, e2005031.	5.6	103

#	ARTICLE	IF	CITATIONS
1645	Recent Advances in Silicon-Based Electrodes: From Fundamental Research toward Practical Applications. <i>Advanced Materials</i> , 2021, 33, e2004577.	11.1	168
1646	Boosting lithium storage performance of Si nanoparticles via thin carbon and nitrogen/phosphorus co-doped two-dimensional carbon sheet dual encapsulation. <i>Rare Metals</i> , 2021, 40, 1347-1356.	3.6	115
1647	Optimal microstructural design of pitch-derived soft carbon shell in yolk-shell silicon/carbon composite for superior lithium storage. <i>Electrochimica Acta</i> , 2021, 373, 137924.	2.6	32
1650	Three-dimensional Si / vertically oriented graphene nanowalls composite for supercapacitor applications. <i>Ceramics International</i> , 2021, 47, 21751-21758.	2.3	9
1651	Silicon Microreactor as a Fast Charge, Long Cycle Life Anode with High Initial Coulombic Efficiency Synthesized via a Scalable Method. <i>ACS Applied Energy Materials</i> , 2021, 4, 4744-4757.	2.5	13
1652	Insights into the Degradation Mechanism of Nanoporous Alloy-Type Li-Ion Battery Anodes. <i>ACS Energy Letters</i> , 2021, 6, 1749-1756.	8.8	29
1653	Insights into the Li Diffusion Mechanism in Si/C Composite Anodes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21362-21370.	4.0	27
1654	New approach for the high electrochemical performance of silicon anode in lithium-ion battery: A rapid and large surface treatment using a high-energy pulsed laser. <i>Journal of Power Sources</i> , 2021, 491, 229573.	4.0	13
1655	High Energy Density and Stable Three-Dimensionally Structured Se-Loaded Bicontinuous Porous Carbon Battery Electrodes. <i>Energy Technology</i> , 2021, 9, 2100175.	1.8	4
1656	Building Elastic Solid Electrolyte Interphases for Stabilizing Microsized Antimony Anodes in Potassium Ion Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2102562.	7.8	33
1657	Chemomechanical Simulation of LiF-Rich Solid-Electrolyte Interphase Formed from Fluoroethylene Carbonate on a Silicon Anode. <i>ACS Applied Energy Materials</i> , 2021, 4, 3231-3239.	2.5	2
1658	Rational Electrolyte Design to Form Inorganic-Polymeric Interphase on Silicon-Based Anodes. <i>ACS Energy Letters</i> , 2021, 6, 1811-1820.	8.8	39
1659	Stoichiometry Dependence of Physical and Electrochemical Properties of the SnO _x Film Anodes Deposited by Pulse DC Magnetron Sputtering. <i>Materials</i> , 2021, 14, 1803.	1.3	0
1660	Rational Design and Engineering of One-Dimensional Hollow Nanostructures for Efficient Electrochemical Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20102-20118.	7.2	123
1661	Rational Design and Engineering of One-Dimensional Hollow Nanostructures for Efficient Electrochemical Energy Storage. <i>Angewandte Chemie</i> , 2021, 133, 20262-20278.	1.6	13
1662	Hierarchical Carbon Shell Compositing Microscale Silicon Skeleton as High-Performance Anodes for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 4976-4985.	2.5	8
1663	Nanostructured Si~C Composites As High-Capacity Anode Material For All-Solid-State Lithium-Ion Batteries**. <i>Batteries and Supercaps</i> , 2021, 4, 1323-1334.	2.4	19
1664	One-Dimensional (1D) Nanostructured Materials for Energy Applications. <i>Materials</i> , 2021, 14, 2609.	1.3	47

#	ARTICLE	IF	CITATIONS
1665	Synthesis of porosity controllable nanoporous silicon with a self-coated nickel layer for lithium-ion batteries. <i>Journal of Power Sources</i> , 2021, 495, 229802.	4.0	9
1666	Modelling capacity fade in silicon-graphite composite electrodes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2021, 377, 138067.	2.6	33
1667	Fabrication of Si ₃ N ₄ @Si@Cu Thin Films by RF Sputtering as High Energy Anode Material for Li-Ion Batteries. <i>Materials</i> , 2021, 14, 2824.	1.3	4
1668	Enhanced adhesion and electrochemical performance of Si anodes with gum arabic grafted poly(acrylic acid) as a water-soluble binder. <i>Polymer International</i> , 2021, 70, 1668-1679.	1.6	7
1669	A review of self-healing electrode and electrolyte materials and their mitigating degradation of Lithium batteries. <i>Nano Energy</i> , 2021, 84, 105907.	8.2	43
1670	Reversible oxide formation during cycling of Si anodes. <i>Nano Energy</i> , 2021, 84, 105886.	8.2	18
1671	Enhanced Electrochemical Performance and Safety of Silicon by a Negative Thermal Expansion Material of ZrW ₂ O ₈ . <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 30468-30478.	4.0	11
1672	Fabricating Silicon Nanotubes by Electrochemical Exfoliation and Reduction of Layer-Structured CaSiO ₃ in Molten Salt. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 30668-30677.	4.0	18
1673	MXene manganese oxides aqueous asymmetric supercapacitors with high mass loadings, high cell voltages and slow self-discharge. <i>Energy Storage Materials</i> , 2021, 38, 438-446.	9.5	40
1674	Hydroxyapatite functionalization of solid polymer electrolytes for high-conductivity solid-state lithium-ion batteries. <i>Materials Today Energy</i> , 2021, 20, 100694.	2.5	20
1675	Advances in multimetallic alloy-based anodes for alkali-ion and alkali-metal batteries. <i>Materials Today</i> , 2021, 50, 259-275.	8.3	35
1676	Electrochemical Conversion of Silica Nanoparticles to Silicon Nanotubes in Molten Salts: Implications for High-Performance Lithium-Ion Battery Anode. <i>ACS Applied Nano Materials</i> , 2021, 4, 7028-7036.	2.4	19
1677	Design, fabrication and applications of soft network materials. <i>Materials Today</i> , 2021, 49, 324-350.	8.3	36
1678	Unveiling micro internal short circuit mechanism in a 60Ah high-energy-density Li-ion pouch cell. <i>Nano Energy</i> , 2021, 84, 105908.	8.2	15
1679	Effects of chiral indices on the atomic arrangements and electronic properties of Si double-walled nanotubes (6,min)@(9,mout) (min = 0 to 6, mout = 0 to 9) by SCC-DFTB calculations. <i>Materials Science in Semiconductor Processing</i> , 2021, 129, 105775.	1.9	15
1680	Silicon monoxide with black titania and carbon coating layer as an anode material for lithium-ion batteries. <i>Applied Surface Science</i> , 2021, 554, 149512.	3.1	9
1681	A Nanowire Nest Structure Comprising Copper Silicide and Silicon Nanowires for Lithium-Ion Battery Anodes with High Areal Loading. <i>Small</i> , 2021, 17, e2102333.	5.2	22
1682	Dopant Effect on Lithiation/Delithiation of Highly Crystalline Silicon Synthesized Using the Czochralski Process. <i>ACS Applied Energy Materials</i> , 2021, 4, 7922-7929.	2.5	8

#	ARTICLE	IF	CITATIONS
1683	Low-cost and scalable preparation of nano-Si from photovoltaic waste silicon for high-performance Li-ion battery anode. <i>Functional Materials Letters</i> , 2021, 14, 2151033.	0.7	8
1684	Rapid CO ₂ exfoliation of Zintl phase CaSi ₂ -derived ultrathin free-standing Si/SiO _x /C nanosheets for high-performance lithium storage. <i>Science China Materials</i> , 2022, 65, 51-58.	3.5	18
1685	Progressive growth of the solid-electrolyte interphase towards the Si anode interior causes capacity fading. <i>Nature Nanotechnology</i> , 2021, 16, 1113-1120.	15.6	147
1686	Ternary SiO ₂ /Al Composite Films as High-Performance Anodes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 34447-34456.	4.0	20
1687	Recent trends in silicon/graphene nanocomposite anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , 2021, 501, 229709.	4.0	46
1688	Materials Strategies for Organic Neuromorphic Devices. <i>Annual Review of Materials Research</i> , 2021, 51, 47-71.	4.3	33
1689	Surface Modification and Functional Structure Space Design to Improve the Cycle Stability of Silicon Based Materials as Anode of Lithium Ion Batteries. <i>Coatings</i> , 2021, 11, 1047.	1.2	5
1690	Mitigation and In Situ Probing of Volume Expansion in Silicon/Graphene Hybrid Anodes for High-Capacity, High-Rate Capable Lithium-Ion Batteries. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100125.	1.8	5
1691	Novel synthesis of porous Si-TiO ₂ composite as a high-capacity anode material for Li secondary batteries. <i>Journal of Alloys and Compounds</i> , 2021, 872, 159640.	2.8	13
1692	Mechanical Stirring Synthesis of 1D Electrode Materials and Designing of Pyramid/Inverted Pyramid Interlocking for Highly Flexible and Foldable Li-Ion Batteries with High Mass Loading. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 38835-38843.	4.0	1
1693	Effect of Diameter, Length, and Chirality on the Properties of Silicon Nanotubes. <i>Silicon</i> , 0, 1.	1.8	5
1694	Boron-Doped and Carbon-Controlled Porous Si/C Anode for High-Performance Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 8488-8495.	2.5	19
1695	Lithium Deposition-Induced Fracture of Carbon Nanotubes and Its Implication to Solid-State Batteries. <i>Nano Letters</i> , 2021, 21, 6859-6866.	4.5	9
1696	MXene Enables Stable Solid-Electrolyte Interphase for Si@MXene Composite with Enhanced Cycling Stability. <i>ChemElectroChem</i> , 2021, 8, 3089-3094.	1.7	8
1697	Engineering hollow cobalt oxide nanospheres with porous carbon coating for stable lithium storage. <i>Journal of Electroanalytical Chemistry</i> , 2021, 895, 115531.	1.9	9
1698	Precisely Designed Mesoscopic Titania for High-Volumetric-Density Pseudocapacitance. <i>Journal of the American Chemical Society</i> , 2021, 143, 14097-14105.	6.6	30
1699	Water-Soluble Polymer Assists Multisize Three-Dimensional Microspheres as a High-Performance Si Anode for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 9673-9681.	2.5	13
1700	Scalable Synthesis and Electrochemical Properties of Porous Si-CoSi ₂ -C Composites as an Anode for Li-ion Batteries. <i>Materials</i> , 2021, 14, 5397.	1.3	5

#	ARTICLE	IF	CITATIONS
1701	The triad "electrode" solid electrolyte interphase "electrolyte" as a ground for the use of conversion type reactions in lithium-ion batteries. <i>Himia, Fizika Ta Tehnologija Poverhni</i> , 2021, 12, 226-279.	0.2	0
1702	Nitrogen-doped graphene supported NiFe ₂ O ₄ nanoparticles as high-performance anode material for lithium-ion batteries. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 26917-26928.	1.1	2
1703	High-Li ⁺ -fraction ether-side-chain pyrrolidinium "asymmetric imide ionic liquid electrolyte for high-energy-density Si//Ni-rich layered oxide Li-ion batteries. <i>Chemical Engineering Journal</i> , 2022, 430, 132693.	6.6	15
1704	High-Performance Core-Shell Structured SiO _x @Si-Silicide Nanocomposite Anode Material for Lithium-Ion Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 090558.	1.3	3
1705	Microscale Silicon-Based Anodes: Fundamental Understanding and Industrial Prospects for Practical High-Energy Lithium-Ion Batteries. <i>ACS Nano</i> , 2021, 15, 15567-15593.	7.3	146
1706	Unveiling the SEI layer formed on pillar-structured MXene anode towards enhanced Li-ion storage. <i>Scripta Materialia</i> , 2021, 202, 113988.	2.6	8
1707	Engineering of Battery Type Electrodes for High Performance Lithium Ion Hybrid Supercapacitors. <i>ChemElectroChem</i> , 2021, 8, 4686-4724.	1.7	7
1708	Constructing a Reinforced and Gradient Solid Electrolyte Interphase on Si Nanoparticles by In Situ Thiol "Click Reaction for Long Cycling Lithium-Ion Batteries. <i>Small</i> , 2021, 17, e2102316.	5.2	24
1709	Progress in one-dimensional nanostructures. <i>Materials Characterization</i> , 2021, 179, 111373.	1.9	19
1710	Metal-organic frameworks-derived CoMOF-D@Si@C core-shell structure for high-performance lithium-ion battery anode. <i>Electrochimica Acta</i> , 2021, 390, 138814.	2.6	19
1711	Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. <i>Chemistry of Materials</i> , 2021, 33, 7315-7336.	3.2	39
1712	Undervalued Roles of Binder in Modulating Solid Electrolyte Interphase Formation of Silicon-Based Anode Materials. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 45139-45148.	4.0	36
1714	Constructing a "pea-pod"-like nanostructure to provide valid conductive matrix and volume change accommodation for silicon anode in lithium ion batteries. <i>Green Chemical Engineering</i> , 2021, 2, 327-335.	3.3	14
1715	SiO _x Anode: From Fundamental Mechanism toward Industrial Application. <i>Small</i> , 2021, 17, e2102641.	5.2	57
1716	N/O Co-doped Hollow Carbon Nanocapsules-Supported Ge Nanoparticles as Anodes for Excellent Performance Lithium-ion batteries. <i>International Journal of Electrochemical Science</i> , 0, , ArticleID:211035.	0.5	0
1717	Improvement of electrochemical performances of ultrathin Ti-coated Si-based multilayer nanofibers as anode materials for lithium-ion batteries. <i>Surface and Coatings Technology</i> , 2021, 424, 127669.	2.2	6
1718	Natural Activation of CuO to CuCl ₂ as a Cathode Material for Dual-Ion Lithium Metal Batteries. <i>Energy Storage Materials</i> , 2021, 41, 466-474.	9.5	16
1719	SiO _x /C Composite Anode of Lithium-Ion Batteries with Enhanced Performances Using Multicomponent Binders. <i>ACS Omega</i> , 2021, 6, 26805-26813.	1.6	5

#	ARTICLE	IF	CITATIONS
1720	Three-dimensional laser-induced holey graphene and its dry release transfer onto Cu foil for high-rate energy storage in lithium-ion batteries. <i>Applied Surface Science</i> , 2021, 564, 150416.	3.1	12
1721	Investigations on the effect of current density on SiO/Si composite electrodes. <i>Electrochimica Acta</i> , 2021, 393, 139072.	2.6	7
1722	Free-standing and flexible CNT/(Fe@Si@SiO ₂) composite anodes with kernel-pulp-skin nanostructure for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2021, 878, 160396.	2.8	28
1723	Efficient utilization of scrapped LiFePO ₄ battery for novel synthesis of Fe ₂ P ₂ O ₇ /C as candidate anode materials. <i>Resources, Conservation and Recycling</i> , 2021, 174, 105802.	5.3	35
1724	Fusing semiconductor and nonmetal into a high conductive wide-range solid solution alloy for Li-ion batteries. <i>Energy Storage Materials</i> , 2021, 42, 502-512.	9.5	12
1725	Equally-dispersed Sb/Sb ₂ O ₃ nanoparticles in ionic liquid-derived nitrogen-enriched carbon for highly reversible lithium/sodium storage. <i>Electrochimica Acta</i> , 2021, 395, 139210.	2.6	14
1726	Hollow Si nanospheres with amorphous TiO ₂ layer used as anode for high-performance Li-ion battery. <i>Applied Surface Science</i> , 2021, 566, 150682.	3.1	15
1727	Recent progress and perspectives on silicon anode: Synthesis and prelithiation for LIBs energy storage. <i>Journal of Energy Chemistry</i> , 2022, 64, 615-650.	7.1	127
1728	Processing and properties of silicon anode materials. , 2022, , 373-407.		0
1729	Silicon anode systems for lithium-ion batteries. , 2022, , 3-46.		2
1730	Preparation of SiO @TiO ₂ @N-doped carbon composite using chitin as carbon precursor for high-performance lithium storage. <i>Journal of Alloys and Compounds</i> , 2022, 891, 162076.	2.8	11
1731	Nanostructured 3D (three dimensional) electrode architectures of silicon for high-performance Li-ion batteries. , 2022, , 331-371.		1
1732	Nano silicon carbon hybrid particles and composites for batteries: Fundamentals, properties and applications. , 2022, , 145-168.		0
1733	Electrolytic preparation of porous TiSi ₂ /Si nanocomposites and the electrochemical performances as lithium-ion battery anode. <i>Journal of Alloys and Compounds</i> , 2022, 890, 161732.	2.8	9
1734	Advanced silicon-based electrodes for high-energy lithium-ion batteries. , 2022, , 411-456.		0
1735	Status and challenges facing representative anode materials for rechargeable lithium batteries. <i>Journal of Energy Chemistry</i> , 2022, 66, 260-294.	7.1	149
1736	Expandable crosslinked polymer coatings on silicon nanoparticle anode toward high-rate and long-cycle-life lithium-ion battery. <i>Applied Surface Science</i> , 2022, 571, 151294.	3.1	15
1737	Nanostructured silicon for energy applications. , 2022, , 169-197.		1

#	ARTICLE	IF	CITATIONS
1738	Active/inactive phases, binders, and impact of electrolyte. , 2022, , 265-295.		0
1739	SEI layer and impact on Si-anodes for Li-ion batteries. , 2022, , 183-263.		4
1740	High-Energy and High-Power Pseudocapacitorâ€“Battery Hybrid Sodium-Ion Capacitor with Na+ Intercalation Pseudocapacitance Anode. Nano-Micro Letters, 2021, 13, 55.	14.4	58
1741	Soft-templated synthesis of coreâ€“shell heterostructured Ni ₃ S ₂ @polypyrrole nanotube aerogels as anode materials for high-performance lithium ion batteries. New Journal of Chemistry, 2021, 45, 13127-13136.	1.4	11
1742	Distilling nanoscale heterogeneity of amorphous silicon using tip-enhanced Raman spectroscopy (TERS) via multiresolution manifold learning. Nature Communications, 2021, 12, 578.	5.8	25
1743	Nanoscale anodes for rechargeable batteries: Fundamentals and design principles. , 2021, , 91-157.		2
1744	Mechanics in Li-Ion Batteries. , 2021, , .		1
1745	Facile and Scalable Synthesis of Si@void@C Embedded in Interconnected 3D Porous Carbon Architecture for High Performance Lithiumâ€“Ion Batteries. Particle and Particle Systems Characterization, 2021, 38, 2000288.	1.2	5
1746	Effect of Size and Shape on Electrochemical Performance of Nano-Silicon-Based Lithium Battery. Nanomaterials, 2021, 11, 307.	1.9	34
1747	The Role of Ex Situ Solid Electrolyte Interphase in Lithium Metal Batteries. , 2021, , 479-511.		0
1748	Biomass-based materials for green lithium secondary batteries. Energy and Environmental Science, 2021, 14, 1326-1379.	15.6	157
1749	Advanced Electrode Materials in Lithium Batteries: Retrospect and Prospect. Energy Material Advances, 2021, 2021, .	4.7	179
1750	Silicon-Graphene Composite Anodes for High-Energy Lithium Batteries. Energy Technology, 2013, 1, 77-84.	1.8	118
1751	Tools and Methodologies for the Characterization of Electrodeâ€“Electrolyte Interfaces. Modern Aspects of Electrochemistry, 2014, , 323-369.	0.2	1
1752	Review Processing, Properties and Applications of Agricultural Solid Waste: Effect of an Open Burning in Environmental Toxicology. Environmental Science and Engineering, 2017, , 161-181.	0.1	5
1753	Recent progress of structural designs of silicon for performance-enhanced lithium-ion batteries. Chemical Engineering Journal, 2020, 397, 125380.	6.6	89
1754	Scalable solvent-free mechanofusion and magnesiothermic reduction processes for obtaining carbon nanospheres-encapsulated crystalline silicon anode for Li-ion batteries. Electrochimica Acta, 2020, 352, 136457.	2.6	18
1755	The high cycling performance of ultra-thin Si nanowires fabricated by metal-assisted chemical etching method as lithium-ion batteries anode. Journal of Electroanalytical Chemistry, 2020, 878, 114567.	1.9	5

#	ARTICLE	IF	CITATIONS
1756	Green and scalable preparation of disproportionated SiO anode materials with cocoon-like buffer layer. <i>Journal of Power Sources</i> , 2020, 466, 228234.	4.0	12
1757	In Situ TEM Observation on Formation of Uniform Amorphous Layer on SnO ₂ Nanotube. <i>Microscopy and Microanalysis</i> , 2016, 22, 1322-1323.	0.2	1
1758	Silicon Few-Layer Graphene Nanocomposite as High-Capacity and High-Rate Anode in Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 1793-1802.	2.5	26
1759	The Progress and Prospect of Tunable Organic Molecules for Organic Lithium-Ion Batteries. <i>ACS Nano</i> , 2021, 15, 47-80.	7.3	130
1760	Side-by-side observation of the interfacial improvement of vertical graphene-coated silicon nanocone anodes for lithium-ion batteries by patterning technology. <i>Nanoscale</i> , 2017, 9, 17241-17247.	2.8	14
1761	One-dimensional nanomaterials in lithium-ion batteries. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 083001.	1.3	11
1762	Pomegranate-like silicon-based anodes self-assembled by hollow-structured Si/void@C nanoparticles for Li-ion batteries with high performances. <i>Nanotechnology</i> , 2021, 32, 095402.	1.3	12
1764	Perspective "Expected Variation in Reported Coin Cell Capacities Due to Current Collector Mass Distribution. <i>Journal of the Electrochemical Society</i> , 2020, 167, 120529.	1.3	5
1765	Stable Cyclability Caused by Highly Dispersed Nanoporous Si Composite Anodes with Sulfide-based Solid Electrolyte. <i>Journal of the Electrochemical Society</i> , 2020, 167, 140522.	1.3	18
1766	Silicon Nanowire Electrodes for Lithium-Ion Battery Negative Electrodes. , 2013, , 1-68.		2
1767	Soluble Polyimide Binder for Silicon Electrodes in Lithium Secondary Batteries. <i>Applied Chemistry for Engineering</i> , 2015, 26, 674-680.	0.2	3
1768	Stable silicon electrodes with vinylidene fluoride polymer binder for lithium-ion batteries. <i>Himia, Fizika Ta Tehnologija Poverhni</i> , 2020, 11, 58-71.	0.2	5
1769	An Overview on the Development of Electrochemical Capacitors and Batteries " part II. <i>Anais Da Academia Brasileira De Ciencias</i> , 2020, 92, e20200800.	0.3	3
1771	A Carbon Nanotubes-Silicon Nanoparticles Network for High Performance Lithium Rechargeable Battery Anodes. <i>Journal of Electrochemical Science and Technology</i> , 2012, 3, 116-122.	0.9	3
1772	Effect of strain on Li adsorption on silicene. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2014, 63, 217101.	0.2	1
1773	A Review on Recent Advances for Boosting Initial Coulombic Efficiency of Silicon Anodic Lithium Ion batteries. <i>Small</i> , 2022, 18, e2102894.	5.2	60
1774	High specific capacity of carbon coating lemon-like SiO ₂ hollow spheres for lithium-ion batteries. <i>Electrochimica Acta</i> , 2022, 401, 139497.	2.6	22
1775	Self-Adapting Electrochemical Grinding Strategy for Stable Silicon Anode. <i>Advanced Functional Materials</i> , 2022, 32, 2109887.	7.8	14

#	ARTICLE	IF	CITATIONS
1776	Litchi shell-derived porous carbon for enhanced stability of silicon-based lithium-ion battery anode materials. <i>Ionics</i> , 2022, 28, 161-172.	1.2	4
1777	Dense Silicon Nanowire Networks Grown on a Stainless Steel Fiber Cloth: A Flexible and Robust Anode for Lithium-Ion Batteries. <i>Advanced Materials</i> , 2021, 33, e2105917.	11.1	46
1778	Carbon Additive-Free Crumpled $\text{Ti}_3\text{C}_2\text{Tx}$ MXene-Encapsulated Silicon Nanoparticle Anodes for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 10762-10773.	2.5	20
1779	Versatilely tuned vertical silicon nanowire arrays by cryogenic reactive ion etching as a lithium-ion battery anode. <i>Scientific Reports</i> , 2021, 11, 19779.	1.6	36
1780	Effect of different parameters on the heat transfer coefficient of silicon and carbon nanotubes. <i>International Communications in Heat and Mass Transfer</i> , 2021, 129, 105692.	2.9	13
1781	SnS nanoparticles as an artificial solid electrolyte interphase and effective conductive additive in silicon anodes. <i>Electrochimica Acta</i> , 2021, 399, 139375.	2.6	2
1782	The mosaic structure design to improve the anchoring strength of $\text{SiO}_x@\text{C}@$ Graphite anode. <i>Materials Today Chemistry</i> , 2021, 22, 100599.	1.7	8
1783	Diffusivity Measurement Techniques. <i>SpringerBriefs in Energy</i> , 2014, , 19-44.	0.2	0
1784	Li Batteries with PSi-Based Electrodes. , 2016, , 319-345.		0
1785	Growth Control of CuO-Si Coaxial Nanowire Array. <i>Advances in Material Chemistry</i> , 2017, 05, 59-69.	0.0	0
1786	Silicon nanowires for Li-based battery anode applications. , 2017, , 455-474.		0
1787	Silicon-based core-shell nanostructures. , 2017, , 215-262.		0
1789	Silicon nanowires for Li-based battery anode applications. <i>Series in Materials Science and Engineering</i> , 2017, , 455-474.	0.1	0
1790	Silicon-based core-shell nanostructures. <i>Series in Materials Science and Engineering</i> , 2017, , 215-262.	0.1	0
1791	Coated silicon nanowires for battery applications. <i>Series in Materials Science and Engineering</i> , 2017, , 475-494.	0.1	0
1792	Porous silicon nanotube arrays. <i>Series in Materials Science and Engineering</i> , 2017, , 599-614.	0.1	0
1793	Silicon-carbon yolk-shell structures for energy storage application. <i>Series in Materials Science and Engineering</i> , 2017, , 617-636.	0.1	0
1794	Influence of local velocity on diffusion-induced stress and axial reaction force in a hollow cylindrical electrode of lithium-ion batteries with considering expansion rate of medium. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2018, 67, 070203.	0.2	1

#	ARTICLE	IF	CITATIONS
1795	Mechanochemically Metamorphosed Composites of Homogeneous Nanoscale Silicon and Silicate Oxides with Lithium and Metal Compounds. <i>Materials Sciences and Applications</i> , 2018, 09, 111-125.	0.3	3
1796	Pore Volume (Porosity) in Porous Silicon. , 2018, , 291-298.		0
1797	Rechargeable Lithium Metal Batteries. , 2019, , 147-203.		0
1798	New High-energy Anode Materials. , 2019, , 1-25.		1
1799	Models, SOC, Maximum, Time, Cell, Data, Parameters. , 2019, , 195-247.		0
1800	High-Performance Freestanding Lithium-Ion Battery Si Anode by Weakening the Current-Collector Constraint. <i>Journal of the Electrochemical Society</i> , 2020, 167, 080536.	1.3	0
1801	A theoretical study of aluminium doping in silicon anode based lithium-ion batteries using <sc>ReaxFF</sc> molecular dynamics simulation. <i>International Journal of Energy Research</i> , 2022, 46, 3714-3724.	2.2	4
1803	Study on the structures and electronic properties of double-walled silicon nanotubes (4,min)@(8,mout) under external electric field by SCC-DFTB calculations. <i>Computational Materials Science</i> , 2022, 202, 110984.	1.4	6
1804	Chemo-Mechanical Model of SEI Growth on Silicon Electrode Particles**. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	16
1805	Significance of Flexible Substrates for Wearable and Implantable Devices: Recent Advances and Perspectives. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	81
1806	Design of ultrafine silicon structure for lithium battery and research progress of silicon-carbon composite negative electrode materials. <i>Journal of Physics: Conference Series</i> , 2021, 2079, 012005.	0.3	1
1807	Evaluation of Initial Mechanical and Electrochemical Degradations in Amorphous Silicon Anode for Lithium-Ion Secondary Battery Using AE Method. <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2020, 69, 547-554.	0.1	0
1808	Formulating a New Electrolyte: Synergy between Low-Polar and Non-polar Solvents in Tailoring the Solid Electrolyte Interface for the Silicon Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 55700-55711.	4.0	7
1809	Optimal Synthesis and Application of a Si-Ti-Al Ternary Alloy as an Anode Material for Lithium-Ion Batteries. <i>Materials</i> , 2021, 14, 6912.	1.3	2
1810	Controlling homogeneity of the first lithiation in methylated amorphous silicon. <i>Electrochimica Acta</i> , 2022, 403, 139655.	2.6	1
1811	Nickel Niobate Anodes for High Rate Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	49
1812	Preparation and characterization of CuCrO ₂ @CeO ₂ nanofibers by electrospinning method. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 1091-1100.	1.1	3
1813	Anisotropic black phosphorene nanotube anodes afford ultrafast kinetic rate or extra capacities for Li-ion batteries. <i>Chinese Chemical Letters</i> , 2022, 33, 3842-3848.	4.8	4

#	ARTICLE	IF	CITATIONS
1814	Silicon nanorod formation from powder feedstock through co-condensation in plasma flash evaporation and its feasibility for lithium-ion batteries. <i>Scientific Reports</i> , 2021, 11, 22445.	1.6	5
1815	1D Mesoporous Inorganic Nanomaterials Applied in Rechargeable Batteries. <i>Springer Series in Materials Science</i> , 2022, , 89-127.	0.4	0
1816	A Comprehensive Study on ZIF-8/SiO ₂ /ZIF-8 Core-Shell Composite as High-Stable Anode Material for Lithium-Ion Batteries. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1817	Impact of nanomaterials on Li-ion battery anodes. <i>Frontiers of Nanoscience</i> , 2021, 19, 55-98.	0.3	1
1818	Revisiting the Preparation Progress of Nano-Structured Si Anodes toward Industrial Application from the Perspective of Cost and Scalability. <i>Advanced Energy Materials</i> , 2022, 12, 2102181.	10.2	65
1819	High performance silicon electrode enabled by titanicon coating. <i>Scientific Reports</i> , 2022, 12, 137.	1.6	10
1820	Nano-structured silicon and silicon based composites as anode materials for lithium ion batteries: recent progress and perspectives. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1014-1050.	2.5	43
1821	Silicon-Based Nanorod Anodes by Employing Bacterial Cellulose Derived Carbon Skeleton Towards Lithium-Ion Batteries. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	9
1822	Microstructure dependent chemo-mechanical behavior of amorphous Si anodes for Li-ion batteries upon delithiation. <i>Journal of Power Sources</i> , 2022, 520, 230803.	4.0	11
1823	Self-healing and ultrastable anode based on room temperature liquid metal reinforced two-dimensional siloxene for high-performance lithium-ion batteries. <i>Applied Materials Today</i> , 2022, 26, 101300.	2.3	12
1824	Stable nanotube construction conditions and electronic properties of possible Si double-walled nanotubes (n _{in} ,m _{in})@(6,m _{out}) (n _{in} =3, 4) by SCC-DFTB calculations. <i>Materials Chemistry and Physics</i> , 2022, 277, 125545.	2.0	3
1825	Fullerene-like elastic carbon coatings on silicon nanoparticles by solvent controlled association of natural polyaromatic molecules as high-performance lithium-ion battery anodes. <i>Energy Storage Materials</i> , 2022, 45, 412-421.	9.5	26
1826	Boosting lithium storage of manganese oxides by integrating improved kinetics porous carbon coating and one-dimensional porous nanostructure. <i>Applied Surface Science</i> , 2022, 581, 152382.	3.1	2
1827	Insight into the Self-Assembled 3D Sandwich-Like Hollow-Silicon-Nanoarray/Graphene Lithium Storage Architecture by Sonication-Assisted Functionalization. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1828	The Role of Silicon in Silicon-Graphite Composite Electrodes Regarding Specific Capacity, Cycle Stability, and Expansion. <i>Journal of the Electrochemical Society</i> , 2022, 169, 010504.	1.3	28
1829	Revisiting the Roles of Natural Graphite in Ongoing Lithium-Ion Batteries. <i>Advanced Materials</i> , 2022, 34, e2106704.	11.1	99
1830	Ultrathin Si Nanosheets Dispersed in Graphene Matrix Enable Stable Interface and High Rate Capability of Anode for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	67
1831	Anomalous interfacial stress generation and role of elasto-plasticity in mechanical failure of Si-based thin film anodes of Li-ion batteries. <i>Bulletin of Materials Science</i> , 2022, 45, 1.	0.8	2

#	ARTICLE	IF	CITATIONS
1832	Nitrogen, Oxygenâ€Codoped Vertical Graphene Arrays Coated 3D Flexible Carbon Nanofibers with High Silicon Content as an Ultrastable Anode for Superior Lithium Storage. <i>Advanced Science</i> , 2022, 9, e2104685.	5.6	42
1833	Toward Practical Highâ€Energy and Highâ€Power Lithium Battery Anodes: Present and Future. <i>Advanced Science</i> , 2022, 9, e2105213.	5.6	84
1834	Density functional theory method for twisted geometries with application to torsional deformations in group-IV nanotubes. <i>Journal of Computational Physics</i> , 2022, 456, 111023.	1.9	6
1835	Optimized design of 3D nitrogen-doped graphene-like carbon derived from g-C3N4 encapsulated nano-Si as high-performance anode for lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2022, 907, 116048.	1.9	6
1836	Polymorphic transition to metastable phases in hollow structured silicon anode in a Li-ions battery. <i>Applied Materials Today</i> , 2022, 26, 101333.	2.3	2
1837	Aluminothermic reduction synthesis of porous silicon nanosheets from vermiculite as high-performance anode materials for lithium-ion batteries. <i>Applied Clay Science</i> , 2022, 218, 106418.	2.6	19
1838	Improving the electrochemical performance of silicon materials by SnO2 through structural design and conductivity. <i>Applied Surface Science</i> , 2022, 581, 152230.	3.1	6
1839	Anti-corrosive and surface-stabilizing functional electrolyte containing LiFSI and LiPO2F2 for SiO /NCM811-based batteries. <i>Corrosion Science</i> , 2022, 198, 110117.	3.0	9
1840	Large areal capacity all-in-one lithium-ion battery based on boron-doped silicon/carbon hybrid anode material and cellulose framework. <i>Journal of Colloid and Interface Science</i> , 2022, 612, 679-688.	5.0	13
1841	Size-and-thickness-dependent fracture patterns of hollow coreâ€shell electrodes during lithiation. <i>Extreme Mechanics Letters</i> , 2022, 52, 101647.	2.0	5
1842	Synthetic Methodologies for Siâ€Containing Liâ€Storage Electrode Materials. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	6
1843	A multifunctional polyimide enabled high performance silicon composite anode materials for Li-Ion batteries. <i>Journal of Power Sources</i> , 2022, 525, 231124.	4.0	8
1844	An integrated interfacial engineering for efficiently confining the asymmetric strain in scalable silicon anode. <i>Journal of Power Sources</i> , 2022, 524, 231086.	4.0	3
1845	Probing the active sites of 2D nanosheets with Fe-N-C carbon shell encapsulated FexC/Fe species for boosting sodium-ion storage performances. <i>Nano Research</i> , 2022, 15, 7154-7162.	5.8	14
1846	Subnano-sized silicon anode via crystal growth inhibition mechanism and its application in a prototype battery pack. <i>Nature Energy</i> , 2021, 6, 1164-1175.	19.8	107
1847	Nano and Battery Anode: A Review. <i>Nanoscale Research Letters</i> , 2021, 16, 177.	3.1	36
1848	Confined self-assembly of SiOC nanospheres in graphene film to achieve cycle stability of lithium ion batteries. <i>New Journal of Chemistry</i> , 2022, 46, 6519-6527.	1.4	10
1849	ZIF-8-derived Three-dimensional Silicon-carbon Network Composite for High-performance Lithium-ion Batteries. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2022, 37, 1016.	0.6	8

#	ARTICLE	IF	CITATIONS
1850	One-dimensional structures in nanoconfinement. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2022, .	0.2	0
1851	Influence of Additives on the Electrochemical and Interfacial Properties of SiO ₂ -Based Anode Materials for Lithium-Sulfur Batteries. <i>Langmuir</i> , 2022, 38, 2423-2434.	1.6	6
1852	Versatile Synthesis of Mesoporous Crystalline TiO ₂ Materials by Monomicelle Assembly. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	21
1853	Versatile Syntheses of Mesoporous Crystalline TiO ₂ Materials from Mono-micelle Assembly. <i>Angewandte Chemie</i> , 0, , .	1.6	0
1854	In situ polymerization of aniline to prepare porous micro-nanostructure anode of graphene wrapping silicon and polyaniline for lithium ion batteries. <i>Ionics</i> , 2022, 28, 2203-2211.	1.2	4
1856	Understanding the Role of a Water-Soluble Catechol-Functionalized Binder for Silicon Anodes by Diverse In Situ Analyses. , 2022, 4, 831-839.		15
1857	Dealloying Synthesis of Silicon Nanotubes for High-Performance Lithium Ion Batteries. <i>ChemPhysChem</i> , 2022, , .	1.0	2
1858	Insight into the Self-Assembled Three-Dimensional Sandwich-Like Hollow Silicon Nanoarray/Graphene Lithium Storage Architecture by Sonication-Assisted Functionalization. <i>Energy & Fuels</i> , 2022, 36, 3283-3292.	2.5	2
1859	Elastic Binder for High-Performance Sulfide-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 2022, 7, 1374-1382.	8.8	27
1860	A Stable Core-Shell Si@SiO _x /C Anode Produced via the Spray and Pyrolysis Method for Lithium-Ion Batteries. <i>Frontiers in Chemistry</i> , 2022, 10, 857036.	1.8	1
1861	Boosting lithium storage performance of diatomite derived Si/SiO _x micronplates via rationally regulating the composition, morphology and crystalline structure. <i>Ceramics International</i> , 2022, 48, 17510-17517.	2.3	11
1862	Research progress of nano-silicon-based materials and silicon-carbon composite anode materials for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2022, 26, 1125-1136.	1.2	18
1863	Generation of Si@C/SiC@C core-shell nanoparticles by laser irradiation of silicon grinding waste. <i>Nano Select</i> , 0, , .	1.9	1
1864	Mitigation of rapid capacity decay in silicon- LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ full batteries. <i>Energy Storage Materials</i> , 2022, 49, 111-121.	9.5	8
1865	Compact Sn/C composite realizes long-life sodium-ion batteries. <i>Nano Research</i> , 2023, 16, 3804-3813.	5.8	11
1866	Mg ₂ /SiO ₄ /Si-Coated Disproportionated SiO Composite Anodes with High Initial Coulombic Efficiency for Lithium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 15337-15345.	4.0	18
1867	Fast Charging Anode Materials for Lithium-Ion Batteries: Current Status and Perspectives. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	185
1868	The typical structural evolution of silicon anode. <i>Cell Reports Physical Science</i> , 2022, 3, 100811.	2.8	10

#	ARTICLE	IF	CITATIONS
1869	Comparing the Electrochemical Performance of Silicon/N-Rich Carbon Composite-based Anode Material Prepared by Hot- drying and Freeze-drying methods. International Journal of Electrochemical Science, 0, , ArticleID:220446.	0.5	2
1870	Turning rice husks to a valuable boron and nitrogen co-doped porous C/SiOx composite for high performance lithium-ion battery anodes. Microporous and Mesoporous Materials, 2022, 335, 111794.	2.2	5
1871	Engineering Bamboo Leaves Into 3D Macroporous Si@C Composites for Stable Lithium-Ion Battery Anodes. Frontiers in Chemistry, 2022, 10, 882681.	1.8	2
1872	Progress and perspectives on two-dimensional silicon anodes for lithium-ion batteries. ChemPhysMater, 2023, 2, 1-19.	1.4	5
1873	Designing Hybrid Artificial Interphases with Dilithium Vinylphosphonate for Lithium Batteries with Siâ€“Graphite Anodes. ACS Applied Energy Materials, 2022, 5, 4673-4683.	2.5	2
1874	A comprehensive study on ZIF-8/SiOx/ZIF-8 core-shell composite as high-stable anode material for lithium-ion batteries. Journal of Electroanalytical Chemistry, 2022, 912, 116258.	1.9	9
1875	Anode materials for lithium-ion batteries: A review. Applied Surface Science Advances, 2022, 9, 100233.	2.9	180
1876	Carbon-coated mesoporous silicon shell-encapsulated silicon nano-grains for high performance lithium-ion batteries anode. Carbon, 2022, 192, 277-284.	5.4	42
1877	Piezoelektrik Malzemelerin Lityum Ä°yon Batarya AnotlarÄ±nda KatkÄ± Olarak KullanÄ±lmasÄ±. KahramanmaraÅŸ SÄ±tÄ±nÄ±n Ä°mam Ä°niversitesi MÄ±hendislik Bilimleri Dergisi, 2021, 24, 258-270.	0.0	0
1878	Metallic Tin Nanoparticle-Reinforced Tin-Doped Porous Silicon Microspheres with Superior Electrochemical Lithium Storage Properties. ACS Applied Energy Materials, 2021, 4, 14141-14154.	2.5	3
1879	Seamlessly Merging the Capacity of P into Sb at Same Voltage with Maintained Superior Cycle Stability and Lowâ€“temperature Performance for Liâ€“ion Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	3
1881	Stress-Dependent Chemo-Mechanical Performance of Amorphous Si Anodes for Li-Ion Batteries upon Lithiation. ACS Applied Energy Materials, 2021, 4, 14718-14726.	2.5	2
1882	Tailoring the structure of silicon-based materials for lithium-ion batteries via electrospinning technology. EScience, 2021, 1, 141-162.	25.0	137
1883	Vulcanized polyisoprene-graft-maleic anhydride as an efficient binder for silicon anodes in lithium-ion batteries. Electrochimica Acta, 2022, 419, 140390.	2.6	6
1884	Electrochemical Synthesis of Multidimensional Nanostructured Silicon as a Negative Electrode Material for Lithium-Ion Battery. ACS Nano, 2022, 16, 7689-7700.	7.3	34
1885	Electrolytes for rechargeable aluminum batteries. Progress in Materials Science, 2022, 128, 100960.	16.0	32
1886	Optimizations of Graphitic Carbon/Silicon Hybrids for Scalable Preparation with High-Performance Lithium-Ion Storage. ACS Sustainable Chemistry and Engineering, 2022, 10, 5590-5598.	3.2	12
1887	Accordion Frameworks Enable Freeâ€“standing, High Si Content Anode for Liâ€“ion Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	2

#	ARTICLE	IF	CITATIONS
1888	Cross-Linked Polymer Binder via Phthalic Acid for Stabilizing SiO _x Anodes. <i>Macromolecular Chemistry and Physics</i> , 0, , 2200068.	1.1	6
1889	Porous, Encapsulated Si-O-C Lithium-Ion Battery Anode Materials from Silicone-Containing Polyesters: Influences of Graphene Oxides. <i>ACS Applied Energy Materials</i> , 2022, 5, 4577-4586.	2.5	3
1890	Design of Vertically Aligned Two-Dimensional Heterostructures of Rigid Ti ₃ C ₂ T _X MXene and Pliable Vanadium Pentoxide for Efficient Lithium Ion Storage. <i>ACS Nano</i> , 2022, 16, 5556-5565.	7.3	33
1893	Chemically Interconnected Amorphous Nanospheres SiO ₂ as High Performance Anodes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1894	Comminution and Classification as Important Process Steps for the Circular Production of Lithium Batteries. <i>KONA Powder and Particle Journal</i> , 2023, 40, 50-73.	0.9	4
1895	Rashba spin-orbit interaction effect in twisted silicon nanotubes for chiral spintronics. <i>Applied Physics Letters</i> , 2022, 120, 173101.	1.5	3
1896	A Robust Bundled and Wrapped Structure Design of Ultrastable Silicon Anodes for Antiaging Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 5540-5550.	2.5	3
1897	Scalable Fabrication of Silicon-Graphite Microsphere by Mechanical Processing for Lithium-Ion Battery Anode with Large Capacity and High Cycling Stability. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	11
1898	Performance improvement of nanoporous Si composite anodes in all-solid-state lithium-ion batteries by using acetylene black as a conductive additive. <i>Electrochemistry Communications</i> , 2022, 138, 107288.	2.3	6
1899	Artificial solid electrolyte interphase coating to reduce lithium trapping in silicon anode for highly stable lithium storage. <i>Surfaces and Interfaces</i> , 2022, 31, 102029.	1.5	7
1900	Environmentally Friendly Single-Step Laser Synthesis of Three-Dimensional C-SiC Micro/Nanoporous Composite Lithium-ion Battery Electrodes and Electrochemical Performance. <i>ACS Applied Energy Materials</i> , 0, , .	2.5	1
1901	Plasma-enabled synthesis and modification of advanced materials for electrochemical energy storage. <i>Energy Storage Materials</i> , 2022, 50, 161-185.	9.5	28
1902	In-situ construction of chemically bonded conductive polymeric network for high-performance silicon microparticle anodes in lithium-ion batteries. <i>Journal of Power Sources</i> , 2022, 539, 231591.	4.0	12
1904	Large-Scale Synthesis of Silicon-Based Nanocomposites in Air Atmosphere for Lithium-Ion Batteries by Ball-Milling Method. <i>Journal of Electronic Materials</i> , 2022, 51, 4329-4336.	1.0	3
1905	Unraveling the Design Principles of Battery-Supercapacitor Hybrid Devices: From Fundamental Mechanisms to Microstructure Engineering and Challenging Perspectives. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	49
1906	Porous Si Decorated on Mxene as Free-Standing Anodes for Lithium-Ion Batteries with Enhanced Diffusion Properties and Mechanical Stability. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1907	Micron-Sized SiO ₂ -Graphite Compound as Anode Materials for Commercializable Lithium-Ion Batteries. <i>Nanomaterials</i> , 2022, 12, 1956.	1.9	6
1908	Recent progress in the realization of metal-ion capacitors with alloying anodic hosts: A mini review. <i>Electrochemistry Communications</i> , 2022, 139, 107305.	2.3	2

#	ARTICLE	IF	CITATIONS
1909	Growth Mechanism of Spiky Nb ₂ O ₅ Nanoparticles and their Electrochemical Property. <i>Physica Status Solidi (B): Basic Research</i> , 2022, 259, .	0.7	2
1910	A High-Performance Polyurethaneâ€“Polydopamine Polymeric Binder for Silicon Microparticle Anodes in Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 7571-7581.	2.5	12
1911	A dual force cross-linked Î³-PGA-PAA binder enhancing the cycle stability of silicon-based anodes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2022, 425, 140704.	2.6	15
1912	Recent advances in lithium-ion battery materials for improved electrochemical performance: A review. <i>Results in Engineering</i> , 2022, 15, 100472.	2.2	51
1913	Effects of chiral index, vacancy defects and external electric field on the structures and electronic properties of DWSiNTs by SCC-DFTB calculations. <i>Materials Science in Semiconductor Processing</i> , 2022, 149, 106904.	1.9	6
1914	Highly Stable Fe ₂ O ₃ @Fe ₃ O ₄ @FeCO ₃ Heterostructure Anchored on Graphene as the Enhanced Electrochemical Performance of Li-Ion Battery Anodes. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1915	From Solid Waste to High-Performance Li _{3.25} Si Anode: Towards High Initial Coulombic Efficiency Li-Si Alloy Electrodes for Li-Ion Batteries. <i>New Journal of Chemistry</i> , 0, , .	1.4	1
1916	Galliumâ€“based liquid metals for lithiumâ€“ion batteries. , 2022, 1, 354-372.		39
1918	The promise of alloy anodes for solid-state batteries. <i>Joule</i> , 2022, 6, 1418-1430.	11.7	56
1919	<sc>Highâ€“Energy</sc> Lithiumâ€“ion Batteries: Recent Progress and a Promising Future in Applications. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	77
1920	Phosphorus-Regulated Nitrogen Sites in Ultrathin Carbon Scrolls for Stable Potassium Storage. <i>ACS Applied Energy Materials</i> , 2022, 5, 8526-8537.	2.5	2
1921	Chemomechanics of Rechargeable Batteries: Status, Theories, and Perspectives. <i>Chemical Reviews</i> , 2022, 122, 13043-13107.	23.0	59
1922	Insights on polymeric materials for the optimization of high-capacity anodes. <i>Composites Part B: Engineering</i> , 2022, 243, 110131.	5.9	4
1923	Ball-Milled Silicon with Amorphous Al ₂ O ₃ /C Hybrid Coating Embedded in Graphene/Graphite Nanosheets with a Boosted Lithium Storage Capability. <i>Langmuir</i> , 2022, 38, 8555-8563.	1.6	3
1924	Mechanical properties of aluminum/SiNT nanocomposite. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2022, 236, 11322-11329.	1.1	4
1925	Switching Electrolyte Interfacial Model to Engineer Solid Electrolyte Interface for Fast Charging and Wideâ€“Temperature Lithiumâ€“ion Batteries. <i>Advanced Science</i> , 2022, 9, .	5.6	24
1926	Nanotube <sc> SnO</sc> cathodes constructed by electrospinning for highâ€“performance hybrid Mg/Li ion batteriesâ€“Feasible modification strategy for superior cycle performance. <i>International Journal of Energy Research</i> , 2022, 46, 16799-16809.	2.2	4
1927	Structures and electronic properties of single-walled silicon nanotubes (6,m) under external electric field by SCC-DFTB calculations. <i>Materials Today Communications</i> , 2022, 32, 103992.	0.9	1

#	ARTICLE	IF	CITATIONS
1928	Chemically interconnected amorphous nanospheres SiO _x C _y as high performance anodes. <i>Electrochimica Acta</i> , 2022, 426, 140772.	2.6	5
1929	Controlled synthesis of mesoporous Si/C composites anode via confining carbon coating and Mg gas reduction. <i>Journal of Colloid and Interface Science</i> , 2022, 627, 151-159.	5.0	6
1930	Simple preparation of Si/CNTs/C composite derived from photovoltaic waste silicon powder as high-performance anode material for Li-ion batteries. <i>Powder Technology</i> , 2022, 408, 117744.	2.1	14
1931	Porous interface for fast charging silicon anode. , 2022, 1, .		18
1932	Decreased Deformation and Heat as well as Improved Interface and Diffusion of Silicon To Enhance Electrochemical Performance and Safety by a Negative Thermal Expansion Material. <i>Journal of Physical Chemistry C</i> , 2022, 126, 12370-12382.	1.5	2
1933	Temperature-Dependent Fracture Resistance of Silicon Nanopillars during Electrochemical Lithiation. <i>Nano Letters</i> , 2022, 22, 6631-6636.	4.5	2
1934	One-Step Synthesis of Multi-Core-Void@Shell Structured Silicon Anode for High-Performance Lithium-Ion Batteries. <i>Small</i> , 2022, 18, .	5.2	15
1935	Propelling performance of silicon thin film lithium ion battery by appropriate dopants. <i>Nano Energy</i> , 2022, 102, 107688.	8.2	10
1936	Highly stable Fe ₂ O ₃ @Fe ₃ O ₄ @FeCO ₃ heterostructure anchored on graphene as the enhanced electrochemical performance of Li-ion battery anodes. <i>Applied Surface Science</i> , 2022, 605, 154798.	3.1	5
1937	Solvent-free and large-scale synthesis of SiO ₂ /C nanocomposite with carbon encapsulation for high-performance lithium-ion battery anodes. <i>Composites Part B: Engineering</i> , 2022, 247, 110308.	5.9	11
1938	Porous Si decorated on MXene as free-standing anodes for lithium-ion batteries with enhanced diffusion properties and mechanical stability. <i>Chemical Engineering Journal</i> , 2023, 451, 138785.	6.6	42
1939	Robust MXene adding enables the stable interface of silicon anodes for high-performance Li-ion batteries. <i>Chemical Engineering Journal</i> , 2023, 452, 139139.	6.6	33
1940	Cu ₃ PS ₄ : a sulfur-rich metal phosphosulfide with superior ionic diffusion channel for high-performance potassium ion batteries/hybrid capacitors. <i>Chemical Engineering Journal</i> , 2023, 452, 139199.	6.6	13
1941	Preparation of Li ⁺ :TiO ₂ nanowires, Li ₄ Ti ₅ O ₁₂ nanotubes, and a Li ₄ Ti ₅ O ₁₂ nanotube/graphene composite by single-spinneret electrospinning for application in a lithium-ion battery. <i>CrystEngComm</i> , 2022, 24, 7482-7492.	1.3	3
1942	Nanomaterials™ Synthesis Approaches for Energy Storage and Electronics Applications. <i>Current and Future Developments in Nanomaterials and Carbon Nanotubes</i> , 2022, , 240-257.	0.1	0
1943	In Situ Synthesis of Cathode Materials for Aqueous High-Rate and Durable Zn ²⁺ Batteries. , 2022, 4, 1872-1881.		30
1944	Performance of a Solid Cell with a Solid-Liquid Electrolyte Prepared by a Microwave-Assisted Sintering Technique from MCM-41 and Ionic Liquids. <i>ChemistrySelect</i> , 2022, 7, .	0.7	1
1945	Tree-Ring Patterns of Halloysite Nanotubes by Agitation-Assisted Assembly for Guiding Cell Alignment. <i>ACS Applied Nano Materials</i> , 2022, 5, 15083-15094.	2.4	3

#	ARTICLE	IF	CITATIONS
1946	Understanding the Degradation of a Model Si Anode in a Li-Ion Battery at the Atomic Scale. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 8416-8421.	2.1	12
1947	In situ dispensing glue to prepare flexible Si-based anode for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 0, , .	1.2	0
1948	ZnOâ€“Plasma Polymer Fluorocarbon Thin Films for Stable Battery Anodes and High-Output Triboelectric Nanogenerators. <i>ACS Applied Nano Materials</i> , 2022, 5, 14540-14550.	2.4	3
1949	In-situ processing nano-porous silicon into 3D conductive structure as high-capacity anode for lithium-ion batteries. <i>Science China Materials</i> , 2023, 66, 493-504.	3.5	6
1950	Facile synthesis of yolk-shell CoS ₂ @FeS ₂ @NC hollow microspheres for advanced lithium-ion batteries anode materials. <i>Ionics</i> , 2022, 28, 4967-4976.	1.2	2
1951	Free-Standing Stable Silicon-Based Anode with Exceptional Flexibility Realized by a Multifunctional Structure Design in Multiple Dimensions. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 46439-46448.	4.0	7
1952	Modifiable dimensionality of aggregates of silicon to optimize the volume effect for lithium storage. <i>Chemical Engineering Journal</i> , 2023, 452, 139639.	6.6	7
1953	An electrochemical sensor based on boron/nitrogen co-doped honeycomb-like porous carbon encapsulation molybdenum trioxides for the simultaneous detection of xanthine, uric acid and dopamine. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 655, 130304.	2.3	7
1954	High-Capacity and Long-Lived Silicon Anodes Enabled by Three-Dimensional Porous Conductive Network Design and Surface Reconstruction. <i>ACS Applied Energy Materials</i> , 2022, 5, 13877-13886.	2.5	9
1955	Revealing solid electrolyte interphase formation through interface-sensitive Operando X-ray absorption spectroscopy. <i>Nature Communications</i> , 2022, 13, .	5.8	11
1956	The AC conductivity and dielectric permittivity for PVA-treated MWCNT electrolyte composite. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 24137-24150.	1.1	10
1957	Three-dimensional hierarchically porous MoS ₂ foam as high-rate and stable lithium-ion battery anode. <i>Nature Communications</i> , 2022, 13, .	5.8	44
1958	Self-propagating fabrication of SiO ₂ @rGO film with superior cycling stability and rate performance as anode for lithium-ion batteries. <i>2D Materials</i> , 2022, 9, 044006.	2.0	2
1960	In situ synthesis of hierarchically-assembled three-dimensional ZnS nanostructures and 3D printed visualization. <i>Scientific Reports</i> , 2022, 12, .	1.6	0
1961	Latticedâ€“Confined Conversion Chemistry of Battery Electrode. <i>Small</i> , 2022, 18, .	5.2	7
1962	On the Specific Capacity and Cycle Stability of Si@void@C Anodes: Effects of Particle Size and Charge/Discharge Protocol. <i>Batteries</i> , 2022, 8, 154.	2.1	0
1963	Flexible and ultralight MXene paper as a current collector for microsized porous silicon anode in high-energy lithium-ion batteries. <i>2D Materials</i> , 2023, 10, 014010.	2.0	7
1964	The pursuit of commercial silicon-based microparticle anodes for advanced lithium-ion batteries: A review. , 2022, 1, e9120037.		63

#	ARTICLE	IF	CITATIONS
1965	Durable flexible dual-layer and free-standing silicon/carbon composite anode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2023, 932, 167687.	2.8	13
1966	Graphene supported double-layer carbon encapsulated silicon for high-performance lithium-ion battery anode materials. <i>Carbon</i> , 2023, 201, 962-971.	5.4	35
1967	Iodine-Ion-Assisted Galvanic Replacement Synthesis of Bismuth Nanotubes for Ultrafast and Ultrastable Sodium Storage. <i>ACS Nano</i> , 2022, 16, 18746-18756.	7.3	16
1968	Hyperbranched Polymer Network Based on Electrostatic Interaction for Anodes in Lithium-Ion Batteries. <i>Materials</i> , 2022, 15, 7921.	1.3	2
1969	A SiO_2 -Reinforced Concrete Structure of Silicon Embedded into an In Situ Grown Carbon Nanotube Scaffold as a High-Performance Anode for Sulfide-Based All-Solid-State Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 14353-14360.	2.5	10
1970	Hollow Microscale and Nanoscale Structures as Anode Materials for Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2022, 34, 9803-9822.	3.2	3
1971	Core-shell structured $\text{Si}@Cu_3\text{Si}$ -Cu nanoparticles coated by N-doped carbon as an enhanced capacity and high-rate anode for lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2022, 927, 116973.	1.9	7
1972	Low-Dimensional Nanostructures for Silicon-Based Anode Materials in Lithium-Ion Batteries. , 0, 17, 289-298.		0
1973	Improved electrochemical performance of SBA-15 based SiO_2 anodes with N-doping porous carbon. <i>Journal of Electroanalytical Chemistry</i> , 2023, 928, 117019.	1.9	3
1974	Si-TiSi_2 clusters eutectic nanoparticles as high initial coulombic efficiency anodes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2023, 439, 141696.	2.6	0
1975	A new approach to stabilize the electrochemical performance of Li metal batteries through the structure alteration of CNT scaffolds. <i>Carbon</i> , 2023, 203, 426-435.	5.4	10
1976	Facile synthesis of $\text{Si/Ge/graphite}@C$ composite with improved tap density and electrochemical performance. <i>RSC Advances</i> , 2022, 13, 440-447.	1.7	2
1977	Enhanced Electrochemical Performance in Ge/GeO_2 Nanotubes Anode Derived from C/Ge Nanofibers. <i>Energy Technology</i> , 2023, 11, .	1.8	2
1978	Exploring the Promise of Multifunctional Zn^{2+} -Phase-Forming Electrolytes for Si-Based Full Cells. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 53860-53871.	4.0	3
1979	Improved Cyclability of Lithium-Ion Batteries Using Pyroprotein-Assisted Silicon Anodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 15538-15547.	2.5	3
1981	Global Advancements and Current Challenges of Electric Vehicle Batteries and Their Prospects: A Comprehensive Review. <i>Sustainability</i> , 2022, 14, 16684.	1.6	3
1982	Insights into Electrolytic Pre-Lithiation: A Thorough Analysis Using Silicon Thin Film Anodes. <i>Small</i> , 2023, 19, .	5.2	4
1983	Stainless Steel-Like Passivation Inspires Persistent Silicon Anodes for Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	2

#	ARTICLE	IF	CITATIONS
1984	Silicon-metal and silicon-metal oxides composite anodes material for lithium-ion batteries. <i>Journal of Physics: Conference Series</i> , 2022, 2399, 012016.	0.3	0
1985	Achieving High-Performance Si Nanoparticles-Embedded Carbon Fiber Film Anodes in Lithium-Ion Batteries Through Low Current Activation. <i>Electronic Materials Letters</i> , 0, .	1.0	0
1986	Stainless Steel-Like Passivation Inspires Persistent Silicon Anodes for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	3
1987	In Situ Mesopore Formation in SiO ₂ Nanoparticles by Chemically Reinforced Heterointerface and Use of Chemical Prelithiation for Highly Reversible Lithium-Ion Battery Anode. <i>Small</i> , 2023, 19, .	5.2	11
1988	Intertwining porous silicon with conducting polymer for high-efficiency stable Li-ion battery anodes. <i>Korean Journal of Chemical Engineering</i> , 2023, 40, 497-503.	1.2	4
1989	Reversing silicon carbide into 1D silicon nanowires and graphene-like structures using a dynamic magnetic flux template. <i>Materials Horizons</i> , 2023, 10, 1354-1362.	6.4	3
1990	Partially Lithiated Microscale Silicon Particles as Anode Material for High-Energy Solid-State Lithium-Ion Batteries. <i>Energy Technology</i> , 2023, 11, .	1.8	8
1991	Dual-Salt Localized High-Concentration Electrolyte for Long Cycle Life Silicon-Based Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 3586-3598.	4.0	12
1992	SiO ₂ -induced thermal instability and interplay between graphite and SiO ₂ in graphite/SiO ₂ composite anode. <i>Nature Communications</i> , 2023, 14, .	5.8	20
1993	First-principles investigation of defective graphene anchored with small silicon clusters as a potential anode material for lithium-ion batteries. <i>Surface Science</i> , 2023, , 122250.	0.8	2
1995	Highly Elastic hyperbranched polymer binder for silicon anodes in lithium-ion batteries. <i>Electrochimica Acta</i> , 2023, 442, 141805.	2.6	4
1996	Application of N-Doped Carbon-Silicon Oxycarbide Based on POSS Synthesis in Lithium-Ion Batteries. <i>Energy & Fuels</i> , 2023, 37, 1387-1395.	2.5	2
1997	Enhanced Capacity and Cyclability of Si@NiSi ₂ Nanocomposite Anodes Fabricated by Facile Electroless Ni Plating. <i>Journal of Physical Chemistry C</i> , 2023, 127, 169-176.	1.5	1
1998	Prefabrication of "Trinity" Functional Binary Layers on a Silicon Surface to Develop High-Performance Lithium-Ion Batteries. <i>ACS Nano</i> , 2023, 17, 2669-2678.	7.3	11
1999	An Elastic Cross-Linked Binder for Silicon Anodes in Lithium-Ion Batteries with a High Mass Loading. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 6594-6602.	4.0	13
2000	Surface-redox sodium-ion storage in anatase titanium oxide. <i>Nature Communications</i> , 2023, 14, .	5.8	43
2001	Expired milk powder emulsion-derived carbonaceous framework/Si composite as efficient anode for lithium-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2023, 638, 99-108.	5.0	15
2002	A silicon/carbon/reduced-graphene composite of honeycomb structure for high-performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2023, 944, 169185.	2.8	7

#	ARTICLE	IF	CITATIONS
2003	Prospects and future perspective of nanomaterials for energy storage applications. , 2023, , 569-578.		0
2004	Influence of machining duration of 0.8SiO ₂ / 0.2Al ₂ O ₃ nanopowder on electrochemical characteristics of lithium power sources. Applied Surface Science, 2023, 617, 156420.	3.1	0
2005	A closed-ended MXene armor on hollow Sn ₄ P ₃ nanospheres for ultrahigh-rate and stable sodium storage. Chemical Engineering Journal, 2023, 465, 142963.	6.6	2
2006	Carbon-coated SiO _x /TiO ₂ composite nanospheres with conductive TiO ₂ nanocrystals as anode materials for lithium-ion batteries. Electrochimica Acta, 2023, 450, 142165.	2.6	4
2007	Silk fibroin-based biopolymer composite binders with gradient binding energy and strong adhesion force for high-performance micro-sized silicon anodes. Journal of Energy Chemistry, 2023, 80, 442-451.	7.1	5
2008	Reduction kinetics of porous silicon synthesis for lithium battery anodes. Electrochimica Acta, 2023, 454, 142374.	2.6	0
2009	Stretchable high-capacity SiO _x /carbon anode with good cycle stability enabled by a triblock copolymer elastomer. European Polymer Journal, 2023, 190, 111989.	2.6	2
2010	Hierarchical pomegranate-structure design enables stress management for volume release of Si anode. Journal of Materials Science and Technology, 2023, 157, 1-10.	5.6	10
2011	Binders for Si based electrodes: Current status, modification strategies and perspective. Energy Storage Materials, 2023, 59, 102776.	9.5	3
2012	A simple and green self-conversion method to construct silicon hollow spheres for high-performance Li-ion battery anodes. Electrochimica Acta, 2023, 443, 141950.	2.6	6
2013	ZIF-67-derived porous nitrogen-doped carbon shell encapsulates photovoltaic silicon cutting waste as anode in high-performance lithium-ion batteries. Journal of Electroanalytical Chemistry, 2023, 931, 117210.	1.9	5
2014	Inhibition of transition-metal dissolution with advanced electrolytes in batteries with silicon-graphite anodes and high-nickel cathodes. Energy Storage Materials, 2023, 56, 562-571.	9.5	7
2015	Silicon-based anode materials for lithium batteries: recent progress, new trends, and future perspectives. Critical Reviews in Solid State and Materials Sciences, 0, , 1-33.	6.8	6
2016	Development and Validation of a ReaxFF Reactive Force Field for Modeling Silicon-Carbon Composite Anode Materials in Lithium-Ion Batteries. Journal of Physical Chemistry C, 2023, 127, 2818-2834.	1.5	6
2017	A review on the development of electrolytes for lithium-based batteries for low temperature applications. Frontiers in Energy, 2023, 17, 43-71.	1.2	7
2018	Nanostructure designing and hybridizing of high-capacity silicon-based anode for lithium-ion batteries. Progress in Natural Science: Materials International, 2023, 33, 16-36.	1.8	8
2019	Highly Cross-Linked 3D μ -Fe ₂ O ₃ Networks Organized by Ultrathin Nanosheets as High-Performance Anode Materials for Lithium-Ion Storage. ACS Applied Nano Materials, 2023, 6, 2356-2365.	2.4	1
2020	Recent Advances in the Structural Design of Silicon/Carbon Anodes for Lithium Ion Batteries: A Review. Coatings, 2023, 13, 436.	1.2	5

#	ARTICLE	IF	CITATIONS
2021	Effect of Si Content on Extreme Fast Charging Behavior in Silicon-Graphite Composite Anodes. Batteries, 2023, 9, 138.	2.1	4
2022	Micro-Raman Stress Characterization of Crystalline Si as a Function of the Lithiation State. ACS Applied Materials & Interfaces, 2023, 15, 10752-10760.	4.0	1
2023	Silicon Whiskers Extraction From Silica by Novel Simple Technology. Silicon, 2023, 15, 4335-4343.	1.8	0
2024	Controlled Isotropic Canalization of Microsized Silicon Enabling Stable High-Rate and High-Loading Lithium Storage. Advanced Materials, 2023, 35, .	11.1	10
2025	Limiting anode utilization: A strategy to increase Si content and useable capacity in Si/C composite anode without compromising cycle life. Electrochimica Acta, 2023, 448, 142105.	2.6	2
2026	Insight into the decay mechanism of non-ultra-thin silicon film anode for lithium-ion batteries. Electrochimica Acta, 2023, 448, 142112.	2.6	2
2027	Tin Metal Improves the Lithiation Kinetics of High-Capacity Silicon Anodes. Chemistry of Materials, 2023, 35, 2281-2288.	3.2	3
2028	Encapsulating Si nanoparticles in multi-shell hollow spheres: An effective approach to boost the cyclability. Science China Materials, 2023, 66, 2199-2206.	3.5	5
2029	The Effect of the SEI Layer Mechanical Deformation on the Passivity of a Si Anode in Organic Carbonate Electrolytes. ACS Nano, 2023, 17, 6943-6954.	7.3	2
2030	Recent Advances in Nanoengineering of Electrode-Electrolyte Interfaces to Realize High-Performance Li-Ion Batteries. Energy and Environmental Materials, 0, , .	7.3	2
2031	Modification of NiCoP nanocages anodes using epoxy-functionalized silane to improve electrochemical performance in lithium-ion batteries. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	1
2032	Carboxymethyl Three-Dimensional Cross-Linked Biopolymer Binder for High-Performance Silicon Anodes in Lithium-Ion Batteries. ACS Applied Energy Materials, 0, , .	2.5	0
2033	Lithiation/delithiation of silicon heavily doped with boron synthesized using the Czochralski process. Energy Advances, 2023, 2, 813-819.	1.4	1
2120	Advanced electrode materials of ion batteries. , 2024, , 121-261.		0
2124	Nanomaterials in batteries. , 2024, , 149-171.		0
2135	Recent advances of nanomaterials for rechargeable lithium-ion batteries: opportunities and challenges. , 2024, , 3-44.		0