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Challenges facing lithium batteries and electrical double-layer capacitors

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2230	The road for nanomaterials industry: a review of carbon nanotube production, post-treatment, and bulk applications for composites and energy storage. 2013 , 9, 1237-65		543
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2226	Twin polymerization at spherical hard templates: an approach to size-adjustable carbon hollow spheres with micro- or mesoporous shells. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 6088-91	16.4	110
2225	Li ⁺ adsorption at prismatic graphite surfaces enhances interlayer cohesion. 2013 , 239, 321-325		8
2224	Microwave synthesized magnetic tubular carbon nanocomposite fabrics toward electrochemical energy storage. 2013 , 5, 1825-30		30
2223	Synthesis of TiO ₂ hollow nanofibers by co-axial electrospinning and its superior lithium storage capability in full-cell assembly with olivine phosphate. 2013 , 5, 5973-80		80
2222	Electrospun Spinel LiNi Mn O Hierarchical Nanofibers as 5 V Cathode Materials for Lithium-Ion Batteries. 2013 , 78, 636-641		31
2221	Highly reversible lithium/dissolved polysulfide batteries with carbon nanotube electrodes. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 6930-5	16.4	267
2220	Etched graphite with internally grown Si nanowires from pores as an anode for high density Li-ion batteries. 2013 , 13, 3403-7		101
2219	Leaf-Like V ₂ O ₅ Nanosheets Fabricated by a Facile Green Approach as High Energy Cathode Material for Lithium-Ion Batteries. 2013 , 3, 1171-1175		175

2218	High-performance rechargeable lithium-iodine batteries using triiodide/iodide redox couples in an aqueous cathode. 2013 , 4, 1896	193
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2216	Atomic layer deposited (ALD) SnO ₂ anodes with exceptional cycleability for Li-ion batteries. 2013 , 2, 720-725	88
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2214	High efficiency immobilization of sulfur on nitrogen-enriched mesoporous carbons for Li-S batteries. 2013 , 5, 5630-8	280
2213	Sulfur-containing activated carbons with greatly reduced content of bottle neck pores for double-layer capacitors: a case study for pseudocapacitance detection. 2013 , 6, 2465	262
2212	Assembly of tin oxide/graphene nanosheets into 3D hierarchical frameworks for high-performance lithium storage. 2013 , 6, 1510-5	85
2211	Long-life and high-rate Li ₃ V ₂ (PO ₄) ₃ /C nanosphere cathode materials with three-dimensional continuous electron pathways. 2013 , 5, 4864-9	77
2210	Critical thickness of SiO ₂ coating layer on core@shell bulk@nanowire Si anode materials for Li-ion batteries. 2013 , 25, 4498-503	202
2209	Encapsulating sulfur into mesoporous TiO ₂ host as a high performance cathode for lithium-sulfur battery. 2013 , 107, 78-84	112
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2199	A novel strategy to construct high performance lithium-ion cells using one dimensional electrospun nanofibers, electrodes and separators. 2013 , 5, 10636-45	65
2198	Carbon-Based Electrodes for Lithium Air Batteries: Scientific and Technological Challenges from a Modeling Perspective. 2013 , 2, M3084-M3100	63
2197	Design of a high performance thin all-solid-state supercapacitor mimicking the active interface of its liquid-state counterpart. 2013 , 5, 13397-404	45
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2195	Influence of synthesis technique on the structural and electrochemical properties of cobalt-free layered type $\text{Li}_{1+x}(\text{Mn}_{0.4}\text{Ni}_{0.4}\text{Fe}_{0.2})\text{O}_2$. 2013 , 108, 749-756	18
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2190	Ultrathin Polyimide Coating for a Spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode and Its Superior Lithium Storage Properties under Elevated Temperature Conditions. 2013 , 160, A1003-A1008	39
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2188	Smart multifunctional fluids for lithium ion batteries: enhanced rate performance and intrinsic mechanical protection. 2013 , 3, 2485	35
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2186	Effect of Fluoroethylene Carbonate on Electrochemical Performances of Lithium Electrodes and Lithium-Sulfur Batteries. 2013 , 160, A873-A881	63
2185	Composite Cathodes Containing SWCNT@S Coaxial Nanocables: Facile Synthesis, Surface Modification, and Enhanced Performance for Li-Ion Storage. 2013 , 30, 158-165	68
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2182	Stabilization of selenium cathodes via in situ formation of protective solid electrolyte layer. 2014 , 2, 18898-18905	27
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2176	Effect of Lithium Bis(oxalato)borate Additive on Electrochemical Performance of Li _{1.17} Ni _{0.17} Mn _{0.5} Co _{0.17} O ₂ Cathodes for Lithium-Ion Batteries. 2014 , 161, A2012-A2019	36
2175	ZnTe and ZnTe/C nanocomposite: a new electrode material for high-performance rechargeable Li-ion batteries. 2014 , 2, 20075-20082	37
2174	Macroporous Fe ₃ O ₄ /carbon composite microspheres with a short Li ⁺ diffusion pathway for the fast charge/discharge of lithium ion batteries. 2014 , 20, 11078-83	34
2173	Multilayered Si nanoparticle/reduced graphene oxide hybrid as a high-performance lithium-ion battery anode. 2014 , 26, 758-64	348
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2170	Hierarchical Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ nanoplates with exposed {010} planes as high-performance cathode material for lithium-ion batteries. 2014 , 26, 6756-60	185
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2167	Fluorine-doped Fe ₂ O ₃ as high energy density electroactive material for hybrid supercapacitor applications. 2014 , 9, 852-7	85
2166	Improving the Energy Storage Performance of Graphene through Insertion of Pristine CNTs and Ordered Mesoporous Carbon Coating. 2014 , 1, 772-778	42
2165	Synthesis of H V O /Reduced Graphene Oxide Composite as a Promising Cathode Material for Lithium-Ion Batteries. 2014 , 79, 447-453	35

2164	Development of a Full Layer Pore-Scale Model for the Simulation of Electro-Active Material Used in Power Sources. 2014 , 161, E3235-E3247	8
2163	Investigation of cyano resin-based gel polymer electrolyte: in situ gelation mechanism and electrode-electrolyte interfacial fabrication in lithium-ion battery. 2014 , 2, 20059-20066	65
2162	A novel hollowed CoO-in-CoSnO ₄ nanostructure with enhanced lithium storage capabilities. 2014 , 6, 13824-30	43
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2160	Silicon-Based Nanomaterials for Lithium-Ion Batteries: A Review. 2014 , 4, 1300882	1012
2159	CoNiO nanowire arrays as a high-performance anode material for lithium-ion batteries. 2014 , 583, 366-371	12
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2144	Selective formation of carbon-coated, metastable amorphous ZnSnO ₄ nanocubes containing mesopores for use as high-capacity lithium-ion battery. 2014 , 10, 2637-44	97
2143	Hollow and yolk-shell iron oxide nanostructures on few-layer graphene in Li-ion batteries. 2014 , 20, 2022-30	36
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2141	Characterization of the solid electrolyte interphase on lithium anode for preventing the shuttle mechanism in lithium-sulfur batteries. 2014 , 246, 840-845	297
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2137	DFT analysis of Li intercalation mechanisms in the Fe-phthalocyanine cathode of Li-ion batteries. 2014 , 16, 743-52	17
2136	Durable carbon-coated Li ₂ (S) core-shell spheres for high performance lithium/sulfur cells. 2014 , 136, 4659-63	228
2135	Lithium and Lithium Compounds. 2014 , 1-38	9
2134	Stretchable all-solid-state supercapacitor with wavy shaped polyaniline/graphene electrode. 2014 , 2, 9142-9149	264
2133	In situ three-dimensional synchrotron X-Ray nanotomography of the (de)lithiation processes in tin anodes. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 4460-4	16.4 91
2132	Separator/Electrode Assembly Based on Thermally Stable Polymer for Safe Lithium-Ion Batteries. 2014 , 4, 1301208	16
2131	Self-supported Li ₄ Ti ₅ O ₁₂ -C nanotube arrays as high-rate and long-life anode materials for flexible Li-ion batteries. 2014 , 14, 2597-603	365
2130	Review of nanostructured carbon materials for electrochemical capacitor applications: advantages and limitations of activated carbon, carbide-derived carbon, zeolite-templated carbon, carbon aerogels, carbon nanotubes, onion-like carbon, and graphene. 2014 , 3, 424-473	398
2129	Improving the energy density of Li-ion capacitors using polymer-derived porous carbons as cathode. 2014 , 130, 766-770	65

2128	High-performance aqueous sodium-ion batteries with $\text{K}_0.27\text{MnO}_2$ cathode and their sodium storage mechanism. 2014 , 5, 97-104	115
2127	Porous nitrogen-doped hollow carbon spheres derived from polyaniline for high performance supercapacitors. 2014 , 2, 5352-5357	369
2126	Construction of high-energy-density supercapacitors from pine-cone-derived high-surface-area carbons. 2014 , 7, 1435-42	105
2125	Winding aligned carbon nanotube composite yarns into coaxial fiber full batteries with high performances. 2014 , 14, 3432-8	195
2124	Hydrogen silsesquioxane-derived $\text{Si/SiO}(x)$ nanospheres for high-capacity lithium storage materials. 2014 , 6, 9608-13	78
2123	In Silico Based Rank-Order Determination and Experiments on Nonaqueous Electrolytes for Sodium Ion Battery Applications. 2014 , 118, 13406-13416	54
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2121	Enhanced Thermoelectric Power in Ionic Liquids. 2014 , 1, 426-430	32
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2119	3D amorphous silicon on nanopillar copper electrodes as anodes for high-rate lithium-ion batteries. 2014 , 8, 1907-12	80
2118	Self-supported, binder-free 3D hierarchical iron fluoride flower-like array as high power cathode material for lithium batteries. 2014 , 4, 7-13	45
2117	Amorphous Fe_2O_3 as a high-capacity, high-rate and long-life anode material for lithium ion batteries. 2014 , 4, 23-30	258
2116	Li_2S -reduced graphene oxide nanocomposites as cathode material for lithium sulfur batteries. 2014 , 251, 331-337	96
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2114	Novel polysilsesquioxane hybrid polymer electrolytes for lithium ion batteries. 2014 , 2, 1277-1283	48
2113	Integration of Sn/C yolk-shell nanostructures into free-standing conductive networks as hierarchical composite 3D electrodes and the Li-ion insertion/extraction properties in a gel-type lithium-ion battery thereof. 2014 , 2, 19122-19130	46
2112	Sulfur-impregnated core-shell hierarchical porous carbon for lithium-sulfur batteries. 2014 , 20, 17523-9	39
2111	Rechargeable Li//Br battery: a promising platform for post lithium ion batteries. 2014 , 2, 19444-19450	65

2110	Multifunctional electroactive heteroatom-doped carbon aerogels. 2014 , 10, 4352-61	53
2109	Evaluation of the constant potential method in simulating electric double-layer capacitors. 2014 , 141, 184102	105
2108	Stable Cycling of Fe O Nanorice as an Anode through Electrochemical Porousness and the Solid-Electrolyte Interphase Thermolysis Approach. 2014 , 79, 143-150	11
2107	Fabrication of graphene-encapsulated CoO/CoFe ₂ O ₄ composites derived from layered double hydroxides and their application as anode materials for lithium-ion batteries. 2014 , 49, 8031-8039	17
2106	Synthesis, Crystal Structure, and Vibrational Spectra of the Anhydrous Lithium Dicyanamide Li[N(CN) ₂]. 2014 , 640, 851-855	17
2105	Solution-Based Processing of Graphene/Li ₂ S Composite Cathodes for Lithium-Ion and Lithium-Sulfur Batteries. 2014 , 31, 639-644	89
2104	Facile synthesis of highly porous Ni-Sn intermetallic microcages with excellent electrochemical performance for lithium and sodium storage. 2014 , 14, 6387-92	227
2103	The role of LiO ₂ solubility in O ₂ reduction in aprotic solvents and its consequences for Li-O ₂ batteries. 2014 , 6, 1091-9	764
2102	Inhibiting the shuttle effect in lithium-sulfur batteries using a layer-by-layer assembled ion-permselective separator. 2014 , 4, 46940-46946	61
2101	Multifunctional dual Na ₃ V ₂ (PO ₄) ₂ F ₃ cathode for both lithium-ion and sodium-ion batteries. 2014 , 4, 11375-11383	73
2100	Porous tin film synthesized by electrodeposition and the electrochemical performance for lithium-ion batteries. 2014 , 149, 330-336	13
2099	Nanoporous Li ₂ S and MWCNT-linked Li ₂ S powder cathodes for lithium-sulfur and lithium-ion battery chemistries. 2014 , 2, 6064-6070	114
2098	One-pot low-temperature synthesis of a MnFe ₂ O ₄ /graphene composite for lithium ion battery applications. 2014 , 4, 28421-28425	34
2097	Fabrication of amorphous carbon-coated NiO nanofibers for electrochemical capacitor applications. 2014 , 2, 3364-3371	73
2096	CoxP compounds: electrochemical conversion/partial recombination reaction and partially disproportionated nanocomposite for Li-ion battery anodes. 2014 , 4, 43227-43234	38
2095	Triple-shelled Mn ₂ O ₃ hollow nanocubes: force-induced synthesis and excellent performance as the anode in lithium-ion batteries. 2014 , 2, 14189	87
2094	Sulfur gradient-distributed CNF composite: a self-inhibiting cathode for binder-free lithium-sulfur batteries. 2014 , 50, 10277-80	71
2093	Atomistic origin of superior performance of ionic liquid electrolytes for Al-ion batteries. 2014 , 16, 20387-91	25

2092	Activated Carbon Spheres as a Flowable Electrode in Electrochemical Flow Capacitors. 2014 , 161, A1078-A1083	38
2091	Stable, high voltage $\text{Li}_{0.85}\text{Ni}_{0.46}\text{Cu}_{0.1}\text{Mn}_{1.49}\text{O}_4$ spinel cathode in a lithium-ion battery using a conversion-type CuO anode. 2014 , 6, 5206-11	34
2090	High performance lithium-sulfur batteries: advances and challenges. 2014 , 2, 12662-12676	235
2089	MOF-derived porous $\text{ZnO}/\text{ZnFe}_2\text{O}_4$ octahedra with hollow interiors for high-rate lithium-ion batteries. 2014 , 26, 6622-8	596
2088	Insertion-type electrodes for nonaqueous Li-ion capacitors. 2014 , 114, 11619-35	533
2087	Probing Lithiation Kinetics of Carbon-Coated ZnFe_2O_4 Nanoparticle Battery Anodes. 2014 , 118, 6069-6076	59
2086	Ultrathin spinel membrane-encapsulated layered lithium-rich cathode material for advanced Li-ion batteries. 2014 , 14, 3550-5	197
2085	Controlling SEI formation on SnSb-porous carbon nanofibers for improved Na ion storage. 2014 , 26, 2901-8	396
2084	Preparation and electrochemical performance of a porous polymer-derived silicon carbonitride anode by hydrofluoric acid etching for lithium ion batteries. 2014 , 4, 23694	20
2083	Deformation and fracture behaviors of microporous polymer separators for lithium ion batteries. 2014 , 4, 14904	50
2082	Tailoring porosity in carbon materials for supercapacitor applications. 2014 , 1, 157-168	235
2081	Functioning Mechanism of AlF_3 Coating on the Li- and Mn-Rich Cathode Materials. 2014 , 26, 6320-6327	264
2080	Radiation induced physicochemical changes in FAP (fluoro alkyl phosphate) based imidazolium ionic liquids and their mechanistic pathways: influence of hydroxyl group functionalization of the cation. 2014 , 43, 609-25	15
2079	Revisiting $\text{Li}_3\text{V}_2(\text{PO}_4)_3$ as an anode in an outstanding negative electrode for high power energy storage devices. 2014 , 2, 17906-17913	27
2078	A promising $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ cathode for use in the construction of high energy batteries. 2014 , 16, 3055-61	77
2077	Exceptional performance of a high voltage spinel $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ cathode in all one dimensional architectures with an anatase TiO_2 anode by electrospinning. 2014 , 6, 8926-34	47
2076	From biomolecule to $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ /nitrogen-decorated carbon hybrids: highly reversible cathodes for sodium-ion batteries. 2014 , 2, 18606-18612	63
2075	Criteria for solvate ionic liquids. 2014 , 16, 8761-72	204

2074	Novel Li ₃ ClO based glasses with superionic properties for lithium batteries. 2014 , 2, 5470-5480	109
2073	Kroll-carbons based on silica and alumina templates as high-rate electrode materials in electrochemical double-layer capacitors. 2014 , 2, 5131	24
2072	Reduction mechanisms of additives on Si anodes of Li-ion batteries. 2014 , 16, 17091-8	73
2071	Diamond-shaped Fe ₂ O ₃ @C ₁₈ H ₃₄ O ₂ core-shell nanostructures as anodes for lithium ion batteries with high over capacity. 2014 , 4, 9166-9171	7
2070	Controllable synthesis of yolk-shell-structured metal oxides with seven to ten components for finding materials with superior lithium storage properties. 2014 , 6, 12421-5	18
2069	Combination of a SnO ₂ /hybrid anode and a tubular mesoporous carbon cathode in a high energy density non-aqueous lithium ion capacitor: preparation and characterisation. 2014 , 2, 6549	85
2068	Facile hydrothermal synthesis of SnO ₂ /C microspheres and double layered core-shell SnO ₂ microspheres as anode materials for Li-ion secondary batteries. 2014 , 4, 25189-25194	23
2067	A specially designed Li ₂ SO ₄ semi-fuel cell: A potential choice for electric vehicle propulsion. 2014 , 4, 18894	6
2066	Electrospun Na ₃ V ₂ (PO ₄) ₃ /C nanofibers as stable cathode materials for sodium-ion batteries. 2014 , 6, 5081-6	235
2065	A XANES study of LiVPO ₄ F: a factor analysis approach. 2014 , 16, 3254-60	18
2064	Accurate surface control of core-shell structured LiMn _{0.5} Fe _{0.5} PO ₄ @C for improved battery performance. 2014 , 2, 17359-17365	54
2063	Controllable synthesis of high-performance LiMnPO ₄ nanocrystals by a facile one-spot solvothermal process. 2014 , 2, 10581-10588	55
2062	Ordered LiMPO ₄ (M = Fe, Mn) nanorods synthesized from NH ₄ MPO ₄ ·H ₂ O microplates by stress involved ion exchange for Li-ion batteries. 2014 , 16, 2239	12
2061	Electrospun TiO ₂ /Nanofibers as Insertion Anode for Li-Ion Battery Applications. 2014 , 118, 16776-16781	26
2060	Ge/C nanowires as high-capacity and long-life anode materials for Li-ion batteries. 2014 , 8, 7051-9	177
2059	Hierarchically porous carbon encapsulating sulfur as a superior cathode material for high performance lithium-sulfur batteries. 2014 , 6, 194-9	140
2058	Synthesis and extreme rate capability of Si-Al-C-N functionalized carbon nanotube spray-on coatings as Li-ion battery electrode. 2014 , 6, 16056-64	27
2057	Nanowire electrodes for electrochemical energy storage devices. 2014 , 114, 11828-62	552

2056	Na _{0.67} Mn _{1-x} Mg _x O ₂ (0 ≤ x ≤ 0.2): a high capacity cathode for sodium-ion batteries. 2014 , 7, 1387-1391	325
2055	Synthesis of Ultrathin GeO ₂ /Reduced Graphene Oxide (RGO) Sheets for a High-Capacity Lithium-Ion Battery Anode. 2014 , 2, 342-347	10
2054	Green energy storage chemistries based on neutral aqueous electrolytes. 2014 , 2, 10739-10755	100
2053	Fabrication of 3D hierarchical MoS ₂ /polyaniline and MoS ₂ /C architectures for lithium-ion battery applications. 2014 , 6, 14644-52	316
2052	Simple preparation of petal-like TiO ₂ nanosheets as anode materials for lithium-ion batteries. 2014 , 40, 16805-16810	24
2051	High-capacity anode materials for sodium-ion batteries. 2014 , 20, 11980-92	442
2050	Woven structured triboelectric nanogenerator for wearable devices. 2014 , 6, 14695-701	255
2049	Graphene nanoscrolls encapsulated TiO ₂ (B) nanowires for lithium storage. 2014 , 268, 372-378	56
2048	Surface structural conversion and electrochemical enhancement by heat treatment of chemical pre-delithiation processed lithium-rich layered cathode material. 2014 , 268, 683-691	62
2047	Co@Co ₂ O ₃ core-shell three-dimensional nano-network for high-performance electrochemical energy storage. 2014 , 10, 2618-24	46
2046	Highly conducting lyotropic liquid crystalline mesophases of pluronics (P65, P85, P103, and P123) and hydrated lithium salts (LiCl and LiNO ₃). 2014 , 30, 6938-45	14
2045	Probing thermally induced decomposition of delithiated Li(1.2-x)Ni(0.15)Mn(0.55)Co(0.1)O ₂ by in situ high-energy X-ray diffraction. 2014 , 6, 12692-7	39
2044	Free-standing nitrogen-doped graphene paper as electrodes for high-performance lithium/dissolved polysulfide batteries. 2014 , 7, 2545-53	135
2043	TiO ₂ hollow spheres composed of highly crystalline nanocrystals exhibit superior lithium storage properties. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 12590-3	16.4 77
2042	Facile synthesis of ultrathin-shell graphene hollow spheres for high-performance lithium-ion batteries. 2014 , 139, 96-103	62
2041	Direct Formation of Hedgehog-Like Hollow Ni-Mn Oxides and Sulfides for Supercapacitor Electrodes. 2014 , 31, 857-862	40
2040	Prussian blue-derived Fe ₂ O ₃ /sulfur composite cathode for lithium-sulfur batteries. 2014 , 137, 52-55	57
2039	Elastic α-silicon nanoparticle backboned graphene hybrid as a self-compacting anode for high-rate lithium ion batteries. 2014 , 8, 8591-9	157

2038	Functionalized meso/macro-porous single ion polymeric electrolyte for applications in lithium ion batteries. 2014 , 2, 2960-2967	46
2037	Dry-air-stable lithium silicide-lithium oxide core-shell nanoparticles as high-capacity prelithiation reagents. 2014 , 5, 5088	203
2036	Understanding side reactions in K-O ₂ batteries for improved cycle life. 2014 , 6, 19299-307	100
2035	One-pot synthesis of thin Co(OH) ₂ nanosheets on graphene and their high activity as a capacitor electrode. 2014 , 4, 51619-51623	23
2034	Molten Salt Assisted Self Assembly (MASA): Synthesis of Mesoporous Metal Titanate (CoTiO ₃ , MnTiO ₃ , and Li ₄ Ti ₅ O ₁₂) Thin Films and Monoliths. 2014 , 26, 6050-6057	18
2033	Nanoporous polymer scaffold-embedded nonwoven composite separator membranes for high-rate lithium-ion batteries. 2014 , 4, 54312-54321	11
2032	High performance LiMn ₂ O ₄ cathode materials grown with epitaxial layered nanostructure for Li-ion batteries. 2014 , 14, 993-9	202
2031	Perfluoroalkyl-Fluorophosphate Anions for High Voltage Electrolytes in Lithium Cells: DFT Study. 2014 , 118, 24221-24230	12
2030	High capacity and low cost spinel Fe ₃ O ₄ for the Na-ion battery negative electrode materials. 2014 , 146, 503-510	108
2029	Understanding the Influence of Composition and Synthesis Temperature on Oxygen Loss, Reversible Capacity, and Electrochemical Behavior of xLi ₂ MnO ₃ -(1-x)LiCoO ₂ Cathodes in the First Cycle. 2014 , 118, 23553-23558	21
2028	Surface-enhanced redox chemistry of polysulphides on a metallic and polar host for lithium-sulphur batteries. 2014 , 5, 4759	972
2027	An SbOx/Reduced Graphene Oxide Composite as a High-Rate Anode Material for Sodium-Ion Batteries. 2014 , 118, 23527-23534	93
2026	High Performance Na _{0.5} [Ni _{0.23} Fe _{0.13} Mn _{0.63}]O ₂ Cathode for Sodium-Ion Batteries. 2014 , 4, 1400083	182
2025	Ultralong Cycle Life Sodium-Ion Battery Anodes Using a Graphene-Templated Carbon Hybrid. 2014 , 118, 22426-22431	63
2024	An activated carbon supercapacitor analysis by using a gel electrolyte of sodium salt-polyethylene oxide in an organic mixture solvent. 2014 , 18, 2217-2223	25
2023	Characterization of solid electrolyte interphase on lithium electrodes cycled in ether-based electrolytes for lithium batteries. 2014 , 719, 122-126	33
2022	Self-assembly of nano/micro-structured Fe ₃ O ₄ microspheres among 3D rGO/CNTs hierarchical networks with superior lithium storage performances. 2014 , 25, 225401	23
2021	Li(+)-conductive polymer-embedded nano-Si particles as anode material for advanced Li-ion batteries. 2014 , 6, 3508-12	72

2020	Mn-doped TiO ₂ nanosheet-based spheres as anode materials for lithium-ion batteries with high performance at elevated temperatures. 2014 , 6, 7292-300	74
2019	Resilient mesoporous TiO ₂ /graphene nanocomposite for high rate performance lithium-ion batteries. 2014 , 256, 247-254	92
2018	A Stable, Magnetic, and Metallic Li ₃ O ₄ Compound as a Discharge Product in a Li-Air Battery. 2014 , 5, 2516-21	48
2017	Three-dimensionally macroporous graphene-supported Fe ₃ O ₄ composite as anode material for Li-ion batteries with long cycling life and ultrahigh rate capability. 2014 , 59, 2017-2023	12
2016	From filter paper to carbon paper and toward LiS battery interlayer. 2014 , 121, 198-201	48
2015	Hydrothermal synthesis of NiCo ₂ O ₄ nanowires/nitrogen-doped graphene for high-performance supercapacitor. 2014 , 314, 1000-1006	42
2014	Mitigating voltage fade in cathode materials by improving the atomic level uniformity of elemental distribution. 2014 , 14, 2628-35	223
2013	Fe ₃ O ₄ -decorated hollow graphene balls prepared by spray pyrolysis process for ultrafast and long cycle-life lithium ion batteries. 2014 , 79, 58-66	63
2012	Carbon-encapsulated pyrite as stable and earth-abundant high energy cathode material for rechargeable lithium batteries. 2014 , 26, 6025-30	192
2011	Graphenal polymers for energy storage. 2014 , 10, 2122-35	29
2010	Sulfur infiltrated activated carbon cathodes for lithium sulfur cells: The combined effects of pore size distribution and electrolyte molarity. 2014 , 248, 752-761	69
2009	Facile synthesis of aluminum-doped LiNi _{0.5} Mn _{1.5} O ₄ hollow microspheres and their electrochemical performance for high-voltage Li-ion batteries. 2014 , 609, 54-59	38
2008	Flexible self-standing graphene/Be@CNT composite film as a binder-free cathode for rechargeable LiBe batteries. 2014 , 263, 85-89	106
2007	Three-dimensional aluminum foam/carbon nanotube scaffolds as long- and short-range electron pathways with improved sulfur loading for high energy density lithium/sulfur batteries. 2014 , 261, 264-270	79
2006	Gelled microporous polymer electrolyte with low liquid leakage for lithium-ion batteries. 2014 , 454, 298-304	59
2005	Cationic surfactant-assisted hydrothermal synthesis of few-layer molybdenum disulfide/graphene composites: Microstructure and electrochemical lithium storage. 2014 , 264, 262-271	75
2004	Preparation and electrochemical performance of the interconnected LiMn ₂ O ₄ fibers. 2014 , 120, 16-22	9
2003	Hollow SnO ₂ microspheres and their carbon-coated composites for supercapacitors. 2014 , 444, 26-32	50

2002	Wide-voltage-window silicon nanowire electrodes for micro-supercapacitors via electrochemical surface oxidation in ionic liquid electrolyte. 2014 , 41, 31-34	55
2001	Unveiling TiNb ₂ O ₇ as an insertion anode for lithium ion capacitors with high energy and power density. 2014 , 7, 1858-63	131
2000	Carbon-Coated Li ₃ Nd ₃ W ₂ O ₁₂ : A High Power and Low-Voltage Insertion Anode with Exceptional Cycleability for Li-Ion Batteries. 2014 , 4, 1301715	30
1999	Encapsulating MWNTs into hollow porous carbon nanotubes: a tube-in-tube carbon nanostructure for high-performance lithium-sulfur batteries. 2014 , 26, 5113-8	318
1998	Ionic liquid-assisted synthesis of microporous carbon nanosheets for use in high rate and long cycle life supercapacitors. 2014 , 26, 3700-5	145
1997	Additive-free hollow-structured Co ₃ O ₄ nanoparticle Li-ion battery: the origins of irreversible capacity loss. 2014 , 8, 6701-12	83
1996	A renewable biopolymer cathode with multivalent metal ions for enhanced charge storage. 2014 , 2, 1974-1979	35
1995	Effect of carbon matrix dimensions on the electrochemical properties of Na ₃ V ₂ (PO ₄) ₃ nanograins for high-performance symmetric sodium-ion batteries. 2014 , 26, 3545-53	402
1994	Selective deposition of Ru nanoparticles on TiSi ₃ nanonet and its utilization for Li ₂ O ₂ formation and decomposition. 2014 , 136, 8903-6	100
1993	Contribution to the understanding of capacity fading in graphene nanosheets acting as an anode in full Li-ion batteries. 2014 , 6, 3290-8	37
1992	Magnesium(II) bis(trifluoromethane sulfonyl) imide-based electrolytes with wide electrochemical windows for rechargeable magnesium batteries. 2014 , 6, 4063-73	326
1991	Ultrathin Surface Modification by Atomic Layer Deposition on High Voltage Cathode LiNi _{0.5} Mn _{1.5} O ₄ for Lithium Ion Batteries. 2014 , 2, 159-165	31
1990	Directly grown Co ₃ O ₄ nanowire arrays on Ni-foam: structural effects of carbon-free and binder-free cathodes for lithium-oxygen batteries. 2014 , 2, 11891	89
1989	A multifunctional phosphite-containing electrolyte for 5 V-class LiNi _{0.5} Mn _{1.5} O ₄ cathodes with superior electrochemical performance. 2014 , 2, 9506-9513	151
1988	Experimental and modeling study on charge storage/transfer mechanism of graphene-based supercapacitors. 2014 , 268, 604-609	11
1987	Improved cyclability of lithium-sulfur battery cathode using encapsulated sulfur in hollow carbon nanofiber@nitrogen-doped porous carbon core-shell composite. 2014 , 78, 1-9	104
1986	Synthesis of chromium-doped lithium titanate microspheres as high-performance anode material for lithium ion batteries. 2014 , 40, 13195-13204	20
1985	Simple and scalable synthesis of phosphorus and nitrogen enriched porous carbons with high volumetric capacitance. 2014 , 136, 466-472	40

1984	Synthesis of Mg-doped $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ oxide and its electrochemical behavior in high-voltage lithium-ion batteries. 2014 , 40, 13223-13230	102
1983	Recent advances in the Si-based nanocomposite materials as high capacity anode materials for lithium ion batteries. 2014 , 17, 285-297	121
1982	Electrolytes for lithium and lithium ion batteries: From synthesis of novel lithium borates and ionic liquids to development of novel measurement methods. 2014 , 42, 39-39	55
1981	TiO_2 Hollow Spheres Composed of Highly Crystalline Nanocrystals Exhibit Superior Lithium Storage Properties. 2014 , 126, 12798-12801	41
1980	Quinone-Decorated Onion-Like Carbon/Carbon Fiber Hybrid Electrodes for High-Rate Supercapacitor Applications. 2015 , 2, 1117-1127	40
1979	A Carbon- and Binder-Free Nanostructured Cathode for High-Performance Nonaqueous Li-O Battery. 2015 , 2, 1500092	65
1978	Systematic interpretation of differential capacitance data. 2015 , 92, 012321	4
1977	Heat generation of mechanically abused lithium-ion batteries modified by carbon black micro-particulates. 2015 , 48, 385501	15
1976	Breathing silicon anodes for durable high-power operations. 2015 , 5, 14433	45
1975	From Soybean residue to advanced supercapacitors. 2015 , 5, 16618	109
1974	Sb Nanoparticles Encapsulated in a Reticular Amorphous Carbon Network for Enhanced Sodium Storage. 2015 , 11, 5381-7	60
1973	A High-Power Symmetric Na-Ion Pseudocapacitor. 2015 , 25, 5778-5785	94
1972	Smart Hybrids of Zn_2GeO_4 Nanoparticles and Ultrathin g- C_3N_4 Layers: Synergistic Lithium Storage and Excellent Electrochemical Performance. 2015 , 25, 6858-6866	155
1971	Design Considerations for Unconventional Electrochemical Energy Storage Architectures. 2015 , 5, 1402115	224
1970	Lithium/Sulfur Batteries Upon Cycling: Structural Modifications and Species Quantification by In Situ and Operando X-Ray Diffraction Spectroscopy. 2015 , 5, 1500165	126
1969	In Situ Synthesis of a Hierarchical All-Solid-State Electrolyte Based on Nitrile Materials for High-Performance Lithium-Ion Batteries. 2015 , 5, 1500353	215
1968	Safety-Reinforced Poly(Propylene Carbonate)-Based All-Solid-State Polymer Electrolyte for Ambient-Temperature Solid Polymer Lithium Batteries. 2015 , 5, 1501082	391
1967	Energy Storage Materials from Nature through Nanotechnology: A Sustainable Route from Reed Plants to a Silicon Anode for Lithium-Ion Batteries. 2015 , 127, 9768-9772	68

1966	Cation-Dependent Stabilization of Electrogenerated Naphthalene Diimide Dianions in Porous Polymer Thin Films and Their Application to Electrical Energy Storage. 2015 , 127, 13423-13427	8	
1965	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, 9632-6	16.4	214
1964	Antimony-based Intermetallic Alloy Anodes for High-Performance Sodium-Ion Batteries: Effect of Additives. 2015 , 36, 1625-1630		10
1963	Reconstruction of Pyrolyzed Bacterial Cellulose (PBC)-Based Three-Dimensional Conductive Network for Silicon Lithium Battery Anodes. 2015 , 2, 1238-1242		7
1962	Green Template-Free Synthesis of Hierarchical Shuttle-Shaped Mesoporous ZnFe ₂ O ₄ Microrods with Enhanced Lithium Storage for Advanced Li-Ion Batteries. 2015 , 21, 13012-9		50
1961	Oxygen Reduction Reaction Promotes Li ⁺ Desorption from Cathode Surface in Li-O ₂ Batteries. 2015 , 2, 1500369		10
1960	In Situ TEM Observation of Electrochemical Lithiation of Sulfur Confined within Inner Cylindrical Pores of Carbon Nanotubes. 2015 , 5, 1501306		81
1959	A Kinetic Model for Exfoliation Kinetics of Layered Materials. 2015 , 127, 10396-10400		2
1958	Reduction of charge and discharge polarization by cobalt nanoparticles-embedded carbon nanofibers for Li-O ₂ batteries. 2015 , 8, 2496-502		20
1957	A rigid naphthalenediimide triangle for organic rechargeable lithium-ion batteries. 2015 , 27, 2907-12		120
1956	Carbon Nanotube-CoF ₂ Multifunctional Cathode for Lithium Ion Batteries: Effect of Electrolyte on Cycle Stability. 2015 , 11, 5164-73		57
1955	Cation-Dependent Stabilization of Electrogenerated Naphthalene Diimide Dianions in Porous Polymer Thin Films and Their Application to Electrical Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 13225-9	16.4	68
1954	Polymer-Templated Mesoporous Li ₄ Ti ₅ O ₁₂ as a High-Rate and Long-Life Anode Material for Rechargeable Li-Ion Batteries. 2015 , 1, 415-421		18
1953	High-Speed Fabrication of Lithium-Ion Battery Electrodes by UV-Curing. 2015 , 3, 469-475		9
1952	Sulfophile leitfähige Substrate als Trägermaterialien für Schwefelkathoden. 2015 , 127, 11170-11172		19
1951	Designing host materials for sulfur cathodes: from physical confinement to surface chemistry. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11018-20	16.4	196
1950	One-Pot Synthesis of Carbon-Coated Nanostructured Iron Oxide on Few-Layer Graphene for Lithium-Ion Batteries. 2015 , 21, 16154-61		11
1949	Liquid-Crystalline Electrolytes for Lithium-Ion Batteries: Ordered Assemblies of a Mesogen-Containing Carbonate and a Lithium Salt. 2015 , 25, 1206-1212		78

1948	Stabilization of Insoluble Discharge Products by Facile Aniline Modification for High Performance Li-S Batteries. 2015 , 5, 1500268	43
1947	A Kinetic Model for Exfoliation Kinetics of Layered Materials. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 10258-62	16.4 22
1946	A rechargeable sodium-ion battery using a nanostructured Sb ₂ S ₃ anode and P2-type layered Na _{0.6} Ni _{0.22} Fe _{0.11} Mn _{0.66} O ₂ cathode. 2015 , 5, 48928-48934	49
1945	The formation mechanism of fluorescent metal complexes at the Li(x)Ni(0.5)Mn(1.5)O(4- $\frac{1}{2}$)/carbonate ester electrolyte interface. 2015 , 137, 3533-9	153
1944	Low-Cost Orthorhombic Na _x [FeTi]O ₄ (x = 1 and 4/3) Compounds as Anode Materials for Sodium-Ion Batteries. 2015 , 27, 4374-4379	32
1943	Recent Advances on the Understanding of Structural and Composition Evolution of LMR Cathodes for Li-ion Batteries. 2015 , 3,	16
1942	Dendrite-free lithium metal anodes: stable solid electrolyte interphases for high-efficiency batteries. 2015 , 3, 7207-7209	132
1941	Integration of network-like porous NiMoO ₄ nanoarchitectures assembled with ultrathin mesoporous nanosheets on three-dimensional graphene foam for highly reversible lithium storage. 2015 , 3, 13691-13698	67
1940	Electrospun porous vanadium pentoxide nanotubes as a high-performance cathode material for lithium-ion batteries. 2015 , 173, 131-138	36
1939	Amorphous GeO _x -Coated Reduced Graphene Oxide Balls with Sandwich Structure for Long-Life Lithium-Ion Batteries. 2015 , 7, 13952-9	56
1938	Sandwich nanoarchitecture of LiV ₃ O ₈ /graphene multilayer nanomembranes via layer-by-layer self-assembly for long-cycle-life lithium-ion battery cathodes. 2015 , 3, 13717-13723	12
1937	Concrete-Inspired construction of a silicon/carbon hybrid electrode for high performance lithium ion battery. 2015 , 93, 59-67	71
1936	High Lithium Storage Performance of FeS Nanodots in Porous Graphitic Carbon Nanowires. 2015 , 25, 2335-2342	130
1935	Boron-doped, carbon-coated SnO ₂ /graphene nanosheets for enhanced lithium storage. 2015 , 21, 5617-22	25
1934	Transition metal oxide-carbon composites as conversion anodes for sodium-ion battery. 2015 , 173, 613-618	69
1933	Vinylene carbonate and tris(trimethylsilyl) phosphite hybrid additives to improve the electrochemical performance of spinel lithium manganese oxide/graphite cells at 60 °C. 2015 , 173, 750-756	15
1932	A simple composite protective layer coating that enhances the cycling stability of lithium metal batteries. 2015 , 284, 103-108	182
1931	Carbide derived carbon electrode with natural graphite addition in magnesium electrolyte based cell for supercapacitor enhancements. 2015 , 24, 264-270	9

1930	Improved supercapacitive charge storage in electrospun niobium doped titania nanowires. 2015 , 5, 50087-50097	37
1929	A novel nanoporous Fe-doped lithium manganese phosphate material with superior long-term cycling stability for lithium-ion batteries. 2015 , 7, 11509-14	34
1928	Degradation of Li/S Battery Electrodes On 3D Current Collectors Studied Using X-ray Phase Contrast Tomography. 2015 , 5, 10921	59
1927	Enhanced Li ⁺ storage properties of few-layered MoS ₂ -C composite microspheres embedded with Si nanopowder. 2015 , 8, 2492-2502	21
1926	Microwave-assisted optimization of the manganese redox states for enhanced capacity and capacity retention of LiAl _x Mn _{2-0.3x} O ₄ (x = 0 and 0.3) spinel materials. 2015 , 5, 32256-32262	24
1925	Ultrahigh Surface Area Three-Dimensional Porous Graphitic Carbon from Conjugated Polymeric Molecular Framework. 2015 , 1, 68-76	177
1924	Preparation of high performance lithium-ion batteries with a separator-free cathode assembly. 2015 , 5, 34184-34190	6
1923	Self-Assembled Sandwich-like Vanadium Oxide/Graphene Mesoporous Composite as High-Capacity Anode Material for Lithium Ion Batteries. 2015 , 54, 11799-806	43
1922	FeS@C on Carbon Cloth as Flexible Electrode for Both Lithium and Sodium Storage. 2015 , 7, 27804-9	172
1921	A separator modified by high efficiency oxygen plasma for lithium ion batteries with superior performance. 2015 , 5, 92995-93001	12
1920	A comprehensive review of Li ₄ Ti ₅ O ₁₂ -based electrodes for lithium-ion batteries: The latest advancements and future perspectives. 2015 , 98, 1-71	389
1919	Electrochemically Expandable Soft Carbon as Anodes for Na-Ion Batteries. 2015 , 1, 516-22	167
1918	Interconnected mesoporous NiO sheets deposited onto TiO ₂ nanosheet arrays as binder-free anode materials with enhanced performance for lithium ion batteries. 2015 , 5, 101247-101256	13
1917	Electrospun porous CuCo ₂ O ₄ nanowire network electrode for asymmetric supercapacitors. 2015 , 5, 96448-96454	60
1916	A Li-rich Layered@Spinel@Carbon heterostructured cathode material for high capacity and high rate lithium-ion batteries fabricated via an in situ synchronous carbonization-reduction method. 2015 , 3, 3995-4003	114
1915	Naphthyridine Derivatives as a Model System for Potential Lithium-Sulfur Energy-Storage Applications. 2015 , 2015, 933-937	8
1914	In situ SEM study of lithium intercalation in individual V ₂ O ₅ nanowires. 2015 , 7, 3022-7	35
1913	A highly efficient polysulfide mediator for lithium-sulfur batteries. 2015 , 6, 5682	1385

1912	Enhanced Lithium Storage Performance of CuO Nanowires by Coating of Graphene Quantum Dots. 2015 , 2, 1400499	80
1911	Fabrication of hierarchical structured SiO ₂ /polyetherimide-polyurethane nanofibrous separators with high performance for lithium ion batteries. 2015 , 154, 219-226	102
1910	Sulfur nanodots electrodeposited on ni foam as high-performance cathode for Li-S batteries. 2015 , 15, 721-6	149
1909	Towards superior volumetric performance: design and preparation of novel carbon materials for energy storage. 2015 , 8, 1390-1403	304
1908	Rational design of metal oxide nanocomposite anodes for advanced lithium ion batteries. 2015 , 282, 1-8	35
1907	Honeycomb-alumina supported garnet membrane: Composite electrolyte with low resistance and high strength for lithium metal batteries. 2015 , 281, 399-403	7
1906	Commercial and research battery technologies for electrical energy storage applications. 2015 , 48, 84-101	165
1905	Side-chain conducting and phase-separated polymeric binders for high-performance silicon anodes in lithium-ion batteries. 2015 , 137, 2565-71	166
1904	Atomic-scale structure evolution in a quasi-equilibrated electrochemical process of electrode materials for rechargeable batteries. 2015 , 27, 2134-49	56
1903	Observation of Electron-Beam-Induced Phase Evolution Mimicking the Effect of the Charge/Discharge Cycle in Li-Rich Layered Cathode Materials Used for Li Ion Batteries. 2015 , 27, 1375-1380	60
1902	Small amount of reduce graphene oxide modified Li ₄ Ti ₅ O ₁₂ nanoparticles for ultrafast high-power lithium ion battery. 2015 , 278, 693-702	73
1901	Effect of rigidity of porous structure on electrochemical behavior of pristine Li ₄ Ti ₅ O ₁₂ microspheres. 2015 , 156, 216-222	14
1900	Slurryless Li ₂ S/reduced graphene oxide cathode paper for high-performance lithium sulfur battery. 2015 , 15, 1796-802	219
1899	A hierarchical carbon fiber/sulfur composite as cathode material for LiS batteries. 2015 , 86, 146-155	60
1898	Nitrogen-treated Hierarchical Macro-/Mesoporous TiO ₂ Used as Anode Materials for Lithium Ion Batteries with High Performance at Elevated Temperatures. 2015 , 156, 53-59	27
1897	In-situ Coating of Cathode by Electrolyte Additive for High-voltage Performance of Lithium-ion Batteries. 2015 , 158, 202-208	11
1896	Cost-effective scalable synthesis of mesoporous germanium particles via a redox-transmetalation reaction for high-performance energy storage devices. 2015 , 9, 2203-12	55
1895	Rapid and efficient redox processes within 2D covalent organic framework thin films. 2015 , 9, 3178-83	247

- 1894 In situ reduction and coating of SnS₂ nanobelts for free-standing SnS@polypyrrole-nanobelt/carbon-nanotube paper electrodes with superior Li-ion storage. **2015**, 3, 5259-5265 85
- 1893 Silica nanonetwork confined in nitrogen-doped ordered mesoporous carbon framework for high-performance lithium-ion battery anodes. **2015**, 7, 3971-5 76
- 1892 Recent Development on Anodes for Na-Ion Batteries. **2015**, 55, 486-507 151
- 1891 Increasing Capacitance of Zeolite-Templated Carbons in Electric Double Layer Capacitors. **2015**, 162, A5070-A5076 24
- 1890 3-Methylpiperidinium ionic liquids. **2015**, 17, 10398-416 17
- 1889 Highly active nitrogen-doped nanocarbon electrocatalysts for alkaline direct methanol fuel cell. **2015**, 281, 94-102 53
- 1888 Flexible fiber energy storage and integrated devices: recent progress and perspectives. **2015**, 18, 265-272 129
- 1887 Hierarchical micron-sized mesoporous/macroporous graphene with well-tuned surface oxygen chemistry for high capacity and cycling stability Li-O₂ battery. **2015**, 7, 3389-97 81
- 1886 Approaching the downsizing limit of silicon for surface-controlled lithium storage. **2015**, 27, 1526-32 95
- 1885 Synthesis of Few-Layer MoS₂/Graphene Composites with Superior Electrochemical Lithium-Storage Performance by an Ionic-Liquid-Mediated Hydrothermal Route. **2015**, 2, 538-546 35
- 1884 Synthesis and Characterization of O-Alkylated Amidium Ionic Liquids. **2015**, 3, 325-333 3
- 1883 3D MoS₂/Graphene Microspheres Consisting of Multiple Nanospheres with Superior Sodium Ion Storage Properties. **2015**, 25, 1780-1788 436
- 1882 Compact Coupled Graphene and Porous Polyaryltriazine-Derived Frameworks as High Performance Cathodes for Lithium-Ion Batteries. **2015**, 127, 1832-1836 29
- 1881 Sodium storage in Na-rich Na_xFeFe(CN)₆ nanocubes. **2015**, 12, 386-393 183
- 1880 Agglomeration of Ni-rich hydroxide crystals in Taylor vortex flow. **2015**, 274, 5-13 21
- 1879 Using a lithium difluoro(sulfato)borate additive to improve electrochemical performance of electrolyte based on lithium bis(oxalate)borate for LiNi_{0.5}Mn_{1.5}O₄/Li cells. **2015**, 155, 321-326 21
- 1878 Cylindrical nanostructured MoS₂ directly grown on CNT composites for lithium-ion batteries. **2015**, 7, 3404-9 80
- 1877 Interfacial oxygen stabilizes composite silicon anodes. **2015**, 15, 703-8 45

1876	Probing the Degradation Mechanism of Li ₂ MnO ₃ Cathode for Li-Ion Batteries. 2015 , 27, 975-982	107
1875	Electrochemical performance of rod-like Sb ₂ S ₃ composite as anodes for Li-ion and Na-ion batteries. 2015 , 3, 3276-3280	82
1874	Hybrid ionogel electrolytes for high temperature lithium batteries. 2015 , 3, 2226-2233	64
1873	A gum-like lithium-ion battery based on a novel arched structure. 2015 , 27, 1363-9	148
1872	Facile Synthesis and High Rate Capability of Silicon Carbonitride/Boron Nitride Composite with a Sheet-Like Morphology. 2015 , 119, 2783-2791	32
1871	Co ₃ O ₄ @MWCNT nanocable as cathode with superior electrochemical performance for supercapacitors. 2015 , 7, 2280-5	147
1870	In situ Fe K-edge X-ray absorption spectroscopy study during cycling of Li ₂ FeSiO ₄ and Li ₂ Fe _{0.9} SiO ₄ Li ion battery materials. 2015 , 3, 7314-7322	19
1869	Te/C nanocomposites for Li-Te Secondary Batteries. 2015 , 5, 7969	71
1868	Facile synthesis of lithium-rich layered oxide Li[Li _{0.2} Ni _{0.2} Mn _{0.6}]O ₂ as cathode of lithium-ion batteries with improved cyclic performance. 2015 , 19, 221-227	10
1867	Two-dimensional nanosheets based Li-ion full batteries with high rate capability and flexibility. 2015 , 12, 816-823	86
1866	Influence of Fe substitution on cycling stability of Li[Li _{0.2} Ni _{0.13} Mn _{0.54} Co _{0.13}]O ₂ cathode for lithium ion batteries. 2015 , 21, 1827-1833	8
1865	Nanostructured alkali cation incorporated EMnO ₂ cathode materials for aqueous sodium-ion batteries. 2015 , 3, 7780-7785	56
1864	High-Performance Lithium-Ion Polymer Cells Assembled with Composite Polymer Electrolytes based on Core-Shell Structured SiO ₂ Particles Containing Poly(lithium acrylate) in the Shell. 2015 , 162, A3071-A3076	16
1863	Studies of Aluminum-Doped LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ : Electrochemical Behavior, Aging, Structural Transformations, and Thermal Characteristics. 2015 , 162, A1014-A1027	99
1862	TiO ₂ polymorphs in blocking-chair Li-ion batteries. 2015 , 18, 345-351	109
1861	Metal hydroxide as a new stabilizer for the construction of sulfur/carbon composites as high-performance cathode materials for lithium-sulfur batteries. 2015 , 3, 17106-17112	73
1860	Porous microspherical silicon composite anode material for lithium ion battery. 2015 , 178, 65-73	22
1859	New Mechanistic Insights on Na-Ion Storage in Nongraphitizable Carbon. 2015 , 15, 5888-92	492

1858	Mitigating irreversible capacity losses from carbon agents via surface modification. 2015 , 275, 605-611	12
1857	Fabrication of graphene nanoplatelets-supported SiO _x -disordered carbon composite and its application in lithium-ion batteries. 2015 , 293, 976-982	27
1856	Three-dimensionally ordered porous TiNb ₂ O ₇ nanotubes: a superior anode material for next generation hybrid supercapacitors. 2015 , 3, 16785-16790	83
1855	Crumpled graphene: preparation and applications. 2015 , 5, 66767-66796	52
1854	MoS ₂ architectures supported on graphene foam/carbon nanotube hybrid films: highly integrated frameworks with ideal contact for superior lithium storage. 2015 , 3, 17534-17543	47
1853	Two-Dimensional Mesoporous Cobalt Sulfide Nanosheets as a Superior Anode for a Li-Ion Battery and a Bifunctional Electrocatalyst for the LiO ₂ System. 2015 , 27, 5726-5735	113
1852	Structural Changes and Microstrain Generated on LiNi _{0.80} Co _{0.15} Al _{0.05} O ₂ during Cycling: Effects on the Electrochemical Performance. 2015 , 162, A1823-A1828	48
1851	Promotional recyclable Li-ion batteries by a magnetic binder with anti-vibration and non-fatigue performance. 2015 , 3, 15403-15407	10
1850	Iridium incorporated into deoxygenated hierarchical graphene as a high-performance cathode for rechargeable LiO ₂ batteries. 2015 , 3, 14556-14561	31
1849	Ultrafast synthesis of MoS ₂ or WS ₂ -reduced graphene oxide composites via hybrid microwave annealing for anode materials of lithium ion batteries. 2015 , 295, 228-234	66
1848	An electrochemical approach to graphene oxide coated sulfur for long cycle life. 2015 , 7, 13249-55	19
1847	Combining Fast Li-Ion Battery Cycling with Large Volumetric Energy Density: Grain Boundary Induced High Electronic and Ionic Conductivity in Li ₄ Ti ₅ O ₁₂ Spheres of Densely Packed Nanocrystallites. 2015 , 27, 5647-5656	111
1846	A ZnNiO rechargeable battery with long lifespan and high energy density. 2015 , 3, 8280-8283	112
1845	Transient Rechargeable Batteries Triggered by Cascade Reactions. 2015 , 15, 4664-71	60
1844	One-pot route to synthesize SnO ₂ -Reduced graphene oxide composites and their enhanced electrochemical performance as anodes in lithium-ion batteries. 2015 , 293, 1024-1031	74
1843	Electrochemical and in-situ scanning tunneling microscopy studies of bis(fluorosulfonyl)imide and bis(trifluoromethanesulfonyl)imide based ionic liquids on graphite and gold electrodes and lithium salt influence. 2015 , 293, 187-195	25
1842	Nanomaterials: Science and applications in the lithium-sulfur battery. 2015 , 10, 315-338	282
1841	Organic Cathode Materials for Rechargeable Batteries. 2015 , 637-671	7

1840	Silicon carbide-free graphene growth on silicon for lithium-ion battery with high volumetric energy density. 2015 , 6, 7393	376
1839	Enhanced electrochemical capabilities of lithium ion batteries by structurally ideal AAO separator. 2015 , 3, 10715-10719	32
1838	A facile approach to prepare biomimetic composite separators toward safety-enhanced lithium secondary batteries. 2015 , 5, 39392-39398	19
1837	Effect of Ni(2+) content on lithium/nickel disorder for Ni-rich cathode materials. 2015 , 7, 7702-8	223
1836	Facile Synthesis of Hollow Mesoporous CoFe ₂ O ₄ Nanospheres and Graphene Composites as High-Performance Anode Materials for Lithium-Ion Batteries. 2015 , 2, 1010-1018	43
1835	Tantalum-doped lithium titanate with enhanced performance for lithium-ion batteries. 2015 , 283, 372-380	70
1834	Na(+) intercalation pseudocapacitance in graphene-coupled titanium oxide enabling ultra-fast sodium storage and long-term cycling. 2015 , 6, 6929	834
1833	Preparation and performance of poly(vinyl alcohol) porous separator for lithium-ion batteries. 2015 , 487, 221-228	77
1832	Theoretical Exploration of Various Lithium Peroxide Crystal Structures in a Li-Air Battery. 2015 , 8, 529-548	12
1831	Carbon surface functionalities and SEI formation during Li intercalation. 2015 , 92, 193-244	80
1830	Starfish-shaped Co ₃ O ₄ /ZnFe ₂ O ₄ Hollow Nanocomposite: Synthesis, Supercapacity, and Magnetic Properties. 2015 , 7, 9972-81	90
1829	High performance Na ₃ V ₂ (PO ₄) ₃ /C composite electrode for sodium-ion capacitors. 2015 , 21, 2633-2638	20
1828	Research Progress on Negative Electrodes for Practical Li-Ion Batteries: Beyond Carbonaceous Anodes. 2015 , 5, 1402225	361
1827	Ultra-Fast Microwave Synthesis of 3D Flower-Like Co ₉ S ₈ Hierarchical Architectures for High-Performance Supercapacitor Applications. 2015 , 2015, 2457-2462	54
1826	Using molecular dynamics to quantify the electrical double layer and examine the potential for its direct observation in the in-situ TEM. 2015 , 1,	27
1825	Porous carbon nanofiber paper as an effective interlayer for high-performance lithium-sulfur batteries. 2015 , 168, 271-276	105
1824	Metal-organic frameworks and their derived nanostructures for electrochemical energy storage and conversion. 2015 , 8, 1837-1866	1246
1823	Chemical dealloying synthesis of porous silicon anchored by in situ generated graphene sheets as anode material for lithium-ion batteries. 2015 , 287, 177-183	88

1822	Honeycomb-like Macro-Germanium as High-Capacity Anodes for Lithium-Ion Batteries with Good Cycling and Rate Performance. 2015 , 27, 4156-4164	61
1821	Recent advancement of nanostructured carbon for energy applications. 2015 , 115, 5159-223	598
1820	The surface chemical properties of multi-walled carbon nanotubes modified by thermal fluorination for electric double-layer capacitor. 2015 , 347, 250-257	36
1819	Chemical vapor deposition and atomic layer deposition for advanced lithium ion batteries and supercapacitors. 2015 , 8, 1889-1904	185
1818	Chemically Reduced Organic Small-Molecule-Based Lithium Battery with Improved Efficiency. 2015 , 27, 2121-2126	62
1817	Mesoporous carbons synthesized by direct carbonization of citrate salts for use as high-performance capacitors. 2015 , 88, 239-251	98
1816	Enhanced reversibility of red phosphorus/active carbon composite as anode for lithium ion batteries. 2015 , 163, 71-76	61
1815	Encapsulation of S/SWNT with PANI web for enhanced rate and cycle performance in lithium sulfur batteries. 2015 , 5, 8946	37
1814	Spatially-confined lithiation/delithiation in highly dense nanocomposite anodes towards advanced lithium-ion batteries. 2015 , 8, 1471-1479	62
1813	Nitrogen-containing mesoporous carbons with high capacitive properties derived from a gelatin biomolecule. 2015 , 91, 200-214	33
1812	Poly(dimethylsiloxane) hybrid gel polymer electrolytes of a porous structure for lithium ion battery. 2015 , 489, 36-42	49
1811	Preparation and electrochemical characteristics of electrospun water-soluble resorcinol/phenol-formaldehyde resin-based carbon nanofibers. 2015 , 5, 40884-40891	12
1810	Yolk-shell Fe ₂ O ₃ / C composites anchored on MWNTs with enhanced lithium and sodium storage. 2015 , 7, 9520-5	61
1809	Ultralong Durability of Porous FeO Nanofibers in Practical Li-Ion Configuration with LiMnO Cathode. 2015 , 2, 1500050	29
1808	Porous MnO/Mn ₃ O ₄ nanocomposites for electrochemical energy storage. 2015 , 13, 702-708	46
1807	Hexamethylene diisocyanate as an electrolyte additive for high-energy density lithium ion batteries. 2015 , 3, 8246-8249	17
1806	Converting biowaste corncob residue into high value added porous carbon for supercapacitor electrodes. 2015 , 189, 285-291	230
1805	Correlation between Chemical and Morphological Heterogeneities in LiNi _{0.5} Mn _{1.5} O ₄ Spinel Composite Electrodes for Lithium-Ion Batteries Determined by Micro-X-ray Fluorescence Analysis. 2015 , 27, 2525-2531	38

1804	Design of SnO ₂ /C hybrid triple-layer nanospheres as Li-ion battery anodes with high stability and rate capability. 2015 , 3, 2748-2755	37
1803	Giant Electric Energy Density in Epitaxial Lead-Free Thin Films with Coexistence of Ferroelectrics and Antiferroelectrics. 2015 , 1, 1500052	141
1802	Nanoporous Carbide-Derived Carbons as Electrode Materials in Electrochemical Double-Layer Capacitors. 2015 , 417-453	2
1801	Graphene for Flexible Lithium-Ion Batteries: Development and Prospects. 2015 , 119-177	2
1800	Nanostructured Activated Carbons for Supercapacitors. 2015 , 1-34	3
1799	Recent Advances in Rechargeable Magnesium Battery Technology: A Review of the Field's Current Status and Prospects. 2015 , 55, 570-585	38
1798	Rechargeable lithium batteries. 2015 , 1-17	10
1797	Structural Design of Cathodes for Li-S Batteries. 2015 , 5, 1500124	342
1796	Free-standing Ni/NiO nanofiber cloth anode for high capacity and high rate Li-ion batteries. 2015 , 18, 47-56	46
1795	Nanoconfined antimony in sulfur and nitrogen co-doped three-dimensionally (3D) interconnected macroporous carbon for high-performance sodium-ion batteries. 2015 , 18, 12-19	80
1794	ZnO/CoO and ZnCo ₂ O ₄ Hierarchical Bipyramid Nanoframes: Morphology Control, Formation Mechanism, and Their Lithium Storage Properties. 2015 , 7, 22848-57	49
1793	Saving electric energy by integrating a photoelectrode into a Li-ion battery. 2015 , 3, 20903-20907	39
1792	Supramolecular Perylene Bisimide-Polysulfide Gel Networks as Nanostructured Redox Mediators in Dissolved Polysulfide Lithium-Sulfur Batteries. 2015 , 27, 6765-6770	63
1791	A high-capacity Li[Ni _{0.8} Co _{0.06} Mn _{0.14}]O ₂ positive electrode with a dual concentration gradient for next-generation lithium-ion batteries. 2015 , 3, 22183-22190	74
1790	Materials insights into low-temperature performances of lithium-ion batteries. 2015 , 300, 29-40	168
1789	Synthesis of nitrogen-doped electrospun carbon nanofibers with superior performance as efficient supercapacitor electrodes in alkaline solution. 2015 , 185, 40-51	61
1788	Yolk-shell silicon-mesoporous carbon anode with compact solid electrolyte interphase film for superior lithium-ion batteries. 2015 , 18, 133-142	197
1787	Ion conduction behaviour in chemically crosslinked hybrid ionogels: effect of free-dangling oligoethyleneoxides. 2015 , 5, 94241-94247	15

1786	Tin Disulfide Nanoflowers versus Nanosheets as Anodes in Lithium-ion Batteries: How the Nanostructure Controls Performance. 2015 , 184, 239-249	17
1785	Challenges in Accommodating Volume Change of Si Anodes for Li-Ion Batteries. 2015 , 2, 1645-1651	144
1784	Evidence of covalent synergy in silicon-sulfur-graphene yielding highly efficient and long-life lithium-ion batteries. 2015 , 6, 8597	133
1783	Analytical, Numerical and Experimental Determination of Thermophysical Properties of Commercial 18650 LiCoO ₂ Lithium-Ion Battery. 2015 , 162, A2789-A2795	27
1782	In Situ Activation of Nitrogen-Doped Graphene Anchored on Graphite Foam for a High-Capacity Anode. 2015 , 9, 8609-16	103
1781	A chemistry and material perspective on lithium redox flow batteries towards high-density electrical energy storage. 2015 , 44, 7968-96	322
1780	Review The Importance of Chemical Interactions between Sulfur Host Materials and Lithium Polysulfides for Advanced Lithium-Sulfur Batteries. 2015 , 162, A2567-A2576	263
1779	Double locked silver-coated silicon nanoparticle/graphene core/shell fiber for high-performance lithium-ion battery anodes. 2015 , 300, 351-357	38
1778	Self-Terminated Artificial SEI Layer for Nickel-Rich Layered Cathode Material via Mixed Gas Chemical Vapor Deposition. 2015 , 27, 7370-7379	53
1777	CO ₂ and ambient air in metal-oxygen batteries: steps towards reality. 2015 , 2, 1070-1079	35
1776	Lithium sulfur batteries, a mechanistic review. 2015 , 8, 3477-3494	722
1775	Review Advanced Carbon-Supported Organic Electrode Materials for Lithium (Sodium)-Ion Batteries. 2015 , 162, A2393-A2405	99
1774	Review Development of Diagnostic Process for Commercially Available Batteries, Especially Lithium Ion Battery, by Electrochemical Impedance Spectroscopy. 2015 , 162, A2529-A2537	98
1773	Copper substituted P2-type Na _{0.67} Cu _x Mn _{1-x} O ₂ : a stable high-power sodium-ion battery cathode. 2015 , 3, 22846-22852	99
1772	Truncated octahedral LiNi _{0.5} Mn _{1.5} O ₄ cathode material for ultralong-life lithium-ion battery: Positive (100) surfaces in high-voltage spinel system. 2015 , 300, 430-437	49
1771	Porous nitrogen and phosphorus co-doped carbon nanofiber networks for high performance electrical double layer capacitors. 2015 , 3, 23268-23273	68
1770	A POM-organic framework anode for Li-ion battery. 2015 , 3, 22989-22995	48
1769	Carbon-based electrocatalysts for advanced energy conversion and storage. 2015 , 1, e1500564	434

1768	Three-dimensional ZnMn ₂ O ₄ /porous carbon framework from petroleum asphalt for high performance lithium-ion battery. 2015 , 180, 164-172	62
1767	Design and synthesis of hierarchical NiCo ₂ S ₄ @NiMoO ₄ core/shell nanospheres for high-performance supercapacitors. 2015 , 39, 8430-8438	24
1766	Three-dimensionally interconnected nickel-antimony intermetallic hollow nanospheres as anode material for high-rate sodium-ion batteries. 2015 , 16, 389-398	137
1765	Selectively accelerated lithium ion transport to silicon anodes via an organogel binder. 2015 , 298, 8-13	18
1764	Uniform yolk-shell Sn ₄ P ₃ @C nanospheres as high-capacity and cycle-stable anode materials for sodium-ion batteries. 2015 , 8, 3531-3538	350
1763	Nanotechnology enabled rechargeable LiBO ₂ batteries: another approach towards post-lithium-ion battery systems. 2015 , 8, 3173-3180	18
1762	High-Performance Silicon Battery Anodes Enabled by Engineering Graphene Assemblies. 2015 , 15, 6222-8	147
1761	Review and prospects of Mn-based spinel compounds as cathode materials for lithium-ion batteries. 2015 , 21, 3001-3030	34
1760	Anatase/TiO ₂ -B hybrid microspheres constructed from ultrathin nanosheets: facile synthesis and application for fast lithium ion storage. 2015 , 17, 7930-7937	17
1759	LiBi-alloy-assisted improvement in the intrinsic cyclability of Mg ₂ Si as an anode material for Li-ion batteries. 2015 , 98, 128-134	21
1758	High energy density sodium-ion capacitors through co-intercalation mechanism in diglyme-based electrolyte system. 2015 , 297, 457-463	48
1757	Sn@Ni ₃ Sn ₄ embedded nanocable-like carbon hybrids for stable lithium-ion batteries. 2015 , 51, 16373-6	17
1756	Perforated Metal Oxide-Carbon Nanotube Composite Microspheres with Enhanced Lithium-Ion Storage Properties. 2015 , 9, 10173-85	84
1755	A Gel-Polymer Sn-C/LiMn _{0.5} Fe _{0.5} PO ₄ Battery Using a Fluorine-Free Salt. 2015 , 7, 21198-207	25
1754	Porous Carbon Spheres Doped with Fe ₃ C as an Anode for High-Rate Lithium-ion Batteries. 2015 , 180, 78-85	38
1753	Ternary Hybrid Material for High-Performance Lithium-Sulfur Battery. 2015 , 137, 12946-53	215
1752	One-step synthesis of the nickel foam supported network-like ZnO nanoarchitectures assembled with ultrathin mesoporous nanosheets with improved lithium storage performance. 2015 , 5, 81341-81347	17
1751	A smart self-regenerative lithium ion supercapacitor with a real-time safety monitor. 2015 , 1, 146-151	27

1750	Research progress on design strategies, synthesis and performance of LiMn ₂ O ₄ -based cathodes. 2015 , 5, 105248-105258	48
1749	Pseudocapacitive slurry electrodes using redox-active quinone for high-performance flow capacitors: an atomic-level understanding of pore texture and capacitance enhancement. 2015 , 3, 23323-23332	48
1748	Synergistically engineered self-standing silicon/carbon composite arrays as high performance lithium battery anodes. 2015 , 3, 494-498	22
1747	Graphene quantum dots coated VO ₂ arrays for highly durable electrodes for Li and Na ion batteries. 2015 , 15, 565-73	417
1746	Electrospun SnSb Crystalline Nanoparticles inside Porous Carbon Fibers as a High Stability and Rate Capability Anode for Rechargeable Batteries. 2015 , 80, 516-521	25
1745	Role of organic solvent addition to ionic liquid electrolytes for lithium-sulfur batteries. 2015 , 5, 2122-2128	19
1744	High-capacity nanocarbon anodes for lithium-ion batteries. 2015 , 622, 783-788	16
1743	Enhanced electrochemical performance of Li ₂ NiTiO ₄ with micro-structural rearrangement via urea treatment. 2015 , 5, 2844-2850	5
1742	Compact coupled graphene and porous polyaryltriazine-derived frameworks as high performance cathodes for lithium-ion batteries. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 1812-6	16.4 125
1741	Hierarchical NiCo ₂ O ₄ nanosheets grown on Ni nanofoam as high-performance electrodes for supercapacitors. 2015 , 11, 804-8	211
1740	The lithium/air battery: still an emerging system or a practical reality?. 2015 , 27, 784-800	471
1739	Template-assisted synthesis of multi-shelled carbon hollow spheres with an ultralarge pore volume as anode materials in Li-ion batteries. 2015 , 5, 3657-3664	30
1738	A layered porous ZrO ₂ /RGO composite as sulfur host for lithium-sulfur batteries. 2015 , 5, 5102-5106	37
1737	Recent advances in the electrolytes for interfacial stability of high-voltage cathodes in lithium-ion batteries. 2015 , 5, 2732-2748	209
1736	Glucose-assisted synthesis of the hierarchical TiO ₂ nanowire@MoS ₂ nanosheet nanocomposite and its synergistic lithium storage performance. 2015 , 3, 2762-2769	128
1735	Fixing of highly soluble Br ₂ /Br ⁻ in porous carbon as a cathode material for rechargeable lithium ion batteries. 2015 , 3, 1879-1883	10
1734	MSnS ₂ (M = Cu, Fe) Electrode Family as Dual-Performance Electrodes for Li ⁺ and Li ⁺ Batteries. 2015 , 162, A284-A287	6
1733	Porous nitrogen-doped carbon microspheres derived from microporous polymeric organic frameworks for high performance electric double-layer capacitors. 2015 , 21, 2310-4	36

1732	Peanut shell hybrid sodium ion capacitor with extreme energy power rivals lithium ion capacitors. 2015 , 8, 941-955	622
1731	Synthesis of nickel doped anatase titanate as high performance anode materials for lithium ion batteries. 2015 , 276, 39-45	41
1730	Electrospun nanofibers: a prospective electro-active material for constructing high performance Li-ion batteries. 2015 , 51, 2225-34	123
1729	Towards low-cost, high energy density Li ₂ MnO ₃ cathode materials. 2015 , 3, 670-679	33
1728	Is there a universal reaction mechanism of Li insertion into oxidic spinels: a case study using MgFe ₂ O ₄ . 2015 , 3, 1549-1561	27
1727	A graphene foam electrode with high sulfur loading for flexible and high energy Li-S batteries. 2015 , 11, 356-365	476
1726	A Free-Standing and Ultralong-Life Lithium-Selenium Battery Cathode Enabled by 3D Mesoporous Carbon/Graphene Hierarchical Architecture. 2015 , 25, 455-463	159
1725	Combining mechanical and chemical effects in the deformation and failure of a cylindrical electrode particle in a Li-ion battery. 2015 , 54, 66-81	45
1724	Electrostatic induced stretch growth of homogeneous Ni(OH) ₂ on graphene with enhanced high-rate cycling for supercapacitors. 2014 , 4, 3669	197
1723	Effects of structural design on the performance of electrical double layer capacitors. 2015 , 138, 631-639	22
1722	Solution processible hyperbranched inverse-vulcanized polymers as new cathode materials in LiS batteries. 2015 , 6, 973-982	45
1721	Mechanistic investigation of ion migration in Na ₃ V ₂ (PO ₄) ₂ F ₃ hybrid-ion batteries. 2015 , 17, 159-65	45
1720	Rapid continuous synthesis of spherical reduced graphene ball-nickel oxide composite for lithium ion batteries. 2014 , 4, 5786	29
1719	Ultrathin sandwich-like MoS ₂ @N-doped carbon nanosheets for anodes of lithium ion batteries. 2015 , 7, 324-9	95
1718	Electrochemical properties of cobalt hydroxylchloride microspheres as a new anode material for Li-ion batteries. 2014 , 4, 5785	27
1717	In situ fabrication of three-dimensional, ultrathin graphite/carbon nanotube/NiO composite as binder-free electrode for high-performance energy storage. 2015 , 3, 624-633	147
1716	SnSe alloy as a promising anode material for Na-ion batteries. 2015 , 51, 50-3	108
1715	Micro- and Mesoporous Carbide-Derived Carbon/Selenium Cathodes for High-Performance Lithium Selenium Batteries. 2015 , 5, 1400981	118

1714	Biomass-derived materials for electrochemical energy storages. 2015 , 43, 136-164	199
1713	Controlled Growth of NiMoO ₄ Nanosheet and Nanorod Arrays on Various Conductive Substrates as Advanced Electrodes for Asymmetric Supercapacitors. 2015 , 5, 1401172	454
1712	A Particle-Controlled, High-Performance, Gum-Like Electrolyte for Safe and Flexible Energy Storage Devices. 2015 , 5, 1400463	38
1711	The Solid Electrolyte Interphase a key parameter of the high performance of Sb in sodium-ion batteries: Comparative X-ray Photoelectron Spectroscopy study of Sb/Na-ion and Sb/Li-ion batteries. 2015 , 273, 14-24	131
1710	Hybrid supercapacitor-battery materials for fast electrochemical charge storage. 2014 , 4, 4315	192
1709	Hydrothermal formation and electrochemical property of Ag _{1.8} Mn ₈ O ₁₆ microcrystals for Li-ion battery cathode application. 2016 , 28, 123-129	
1708	Effects of Catalyst-Support Materials on the Performance of Fuel Cells. 2016 , 517-550	5
1707	Layered conductive polymer on nylon membrane templates for high performance, thin-film supercapacitor electrodes. 2016 ,	
1706	A Green Approach to High-Performance Supercapacitor Electrodes: The Chemical Activation of Hydrochar with Potassium Bicarbonate. 2016 , 9, 1880-8	124
1705	Nanoscale Engineering of Heterostructured Anode Materials for Boosting Lithium-Ion Storage. 2016 , 28, 7580-602	177
1704	Graphene-Based Nanocomposites for Energy Storage. 2016 , 6, 1502159	233
1703	A Sulfur Heterocyclic Quinone Cathode and a Multifunctional Binder for a High-Performance Rechargeable Lithium-Ion Battery. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 6428-32	16.4 146
1702	Carbon Nanotubes and Graphene for Flexible Electrochemical Energy Storage: from Materials to Devices. 2016 , 28, 4306-37	481
1701	MOF-Derived Hollow Co ₉ S ₈ Nanoparticles Embedded in Graphitic Carbon Nanocages with Superior Li-Ion Storage. 2016 , 12, 2354-64	274
1700	Transparent and Capacitive Bioanode Based on Specifically Engineered Glucose Oxidase. 2016 , 28, 1290-1297	7
1699	Enhancing Interfacial Bonding between Anisotropically Oriented Grains Using a Glue-Nanofiller for Advanced Li-Ion Battery Cathode. 2016 , 28, 4705-12	89
1698	Effect of Electrolyte Concentration on the Stern Layer Thickness at a Charged Interface. 2016 , 128, 3854-3858	17
1697	A Sulfur Heterocyclic Quinone Cathode and a Multifunctional Binder for a High-Performance Rechargeable Lithium-Ion Battery. 2016 , 128, 6538-6542	28

1696	Enhancing the Stability of Sulfur Cathodes in LiS Cells via in Situ Formation of a Solid Electrolyte Layer. 2016 , 1, 373-379	51
1695	Hermetically Coated and Well-Separated Co ₃ O ₄ Nanophase within Porous Graphitic Carbon Nanosheets: Synthesis, Confinement Effect, and Improved Lithium-Storage Capacity and Durability. 2016 , 22, 9599-606	9
1694	3D Hierarchically Interconnected Porous Graphene Containing Sulfur for Stable High Rate LiS Batteries. 2016 , 4, 625-632	14
1693	Salt-Acid-Surfactant Lyotropic Liquid Crystalline Mesophases: Synthesis of Highly Transparent Mesoporous Calcium Hydroxyapatite Thin Films. 2016 , 2016, 2114-2121	2
1692	Effect of the Anion Activity on the Stability of Li Metal Anodes in Lithium-Sulfur Batteries. 2016 , 26, 3059-3066	9
1691	Wet-Chemical Processing of Phosphorus Composite Nanosheets for High-Rate and High-Capacity Lithium-Ion Batteries. 2016 , 6, 1502409	173
1690	Easy preparation of partially-opened carbon nanotubes by simple air oxidation for high performance LiS batteries. 2016 , 6, 113522-113526	7
1689	Structural modulation of lithium metal-electrolyte interface with three-dimensional metallic interlayer for high-performance lithium metal batteries. 2016 , 6, 30830	64
1688	N,O-codoped porous carbon nanosheets for capacitors with ultra-high capacitance. 2016 , 59, 547-557	18
1687	Ultradispersed Nanoarchitecture of LiV ₃ O ₈ Nanoparticle/Reduced Graphene Oxide with High-Capacity and Long-Life Lithium-Ion Battery Cathodes. 2016 , 6, 19843	23
1686	High-voltage ionic liquid electrolytes based on ether functionalized pyrrolidinium for electric double-layer capacitors. 2016 , 222, 1847-1852	22
1685	Ultrathin MoS ₂ @C layered structure as an anode of lithium ion battery. 2016 , 1, 1021-1027	1
1684	A novel Lithium/Sodium hybrid aqueous electrolyte for hybrid supercapacitors based on LiFePO ₄ and activated carbon. 2016 , 09, 1642008	13
1683	A comprehensive finite element model for lithium-oxygen batteries. 2016 , 31, 2728-2735	2
1682	Ionic Conducting and Surface Active Binder of Poly (ethylene oxide)-block-poly(acrylonitrile) for High Power Lithium-ion Battery. 2016 , 196, 41-47	14
1681	Li ⁺ -conductive Li ₂ SiO ₃ stabilized Li-rich layered oxide with an in situ formed spinel nano-coating layer: toward enhanced electrochemical performance for lithium-ion batteries. 2016 , 6, 34245-34253	25
1680	The applications of carbon nanotubes and graphene in advanced rechargeable lithium batteries. 2016 , 4, 8932-8951	90
1679	Highly Ordered Mesoporous Si/C Nanocomposite as High Performance Anode Material for Li-ion Batteries. 2016 , 200, 182-188	28

1678	Li/air Flow Battery Employing Ionic Liquid Electrolytes. 2016 , 4, 85-89	12
1677	Impact of the salts and solvents on the SEI formation in Sb/Na batteries: An XPS analysis. 2016 , 207, 284-292	65
1676	Facile synthesis of hierarchical MoS ₂ /Carbon microspheres as a robust anode for lithium ion batteries. 2016 , 4, 9653-9660	68
1675	Nanooctahedra Particles Assembled FeSe ₂ Microspheres Embedded into Sulfur-Doped Reduced Graphene Oxide Sheets As a Promising Anode for Sodium Ion Batteries. 2016 , 8, 13849-56	105
1674	Hollow K _{0.27} MnO ₂ Nanospheres as Cathode for High-Performance Aqueous Sodium Ion Batteries. 2016 , 8, 14564-71	66
1673	Enhancement of the electrochemical performance of silicon anodes through alloying with inert metals and encapsulation by graphene nanosheets. 2016 , 209, 278-284	16
1672	(0 0 1) faceted mesoporous anatase TiO ₂ microcubes as superior insertion anode in practical Li-ion configuration with LiMn ₂ O ₄ . 2016 , 3, 106-112	13
1671	Nitrogen-doped carbonized polyimide microsphere as a novel anode material for high performance lithium ion capacitors. 2016 , 196, 603-610	78
1670	3D ultralong nanowire arrays with a tailored hydrogen titanate phase as binder-free anodes for Li-ion capacitors. 2016 , 4, 8716-8723	59
1669	Electrochemical and cycling performances of novel nonafluorobutanesulfonate (nonaflate) ionic liquid based ternary gel polymer electrolyte membranes for rechargeable lithium ion batteries. 2016 , 514, 350-357	70
1668	Selenium and selenium-sulfur cathode materials for high-energy rechargeable magnesium batteries. 2016 , 323, 213-219	57
1667	Electrical, Mechanical, and Capacity Percolation Leads to High-Performance MoS ₂ /Nanotube Composite Lithium Ion Battery Electrodes. 2016 , 10, 5980-90	134
1666	Facile and environmentally friendly synthesis of ultrathin nickel hydroxide nanosheets with excellent supercapacitor performances. 2016 , 8, 11797-802	39
1665	Tailoring the Electrode Interface with Enhanced Electron Transfer for High-Rate Lithium-Ion Battery Anodes. 2016 , 55, 6643-6648	3
1664	Graphene quantum dots: structural integrity and oxygen functional groups for high sulfur/sulfide utilization in lithium sulfur batteries. 2016 , 8, e272-e272	78
1663	Fabrication of SnO ₂ Asymmetric Membranes for High Performance Lithium Battery Anode. 2016 , 8, 13946-56	22
1662	Hierarchical CuCo ₂ S ₄ hollow nanoneedle arrays as novel binder-free electrodes for high-performance asymmetric supercapacitors. 2016 , 52, 4517-20	174
1661	Brief overview of electrochemical potential in lithium ion batteries. 2016 , 25, 018210	49

1660	A facile spray drying route for mesoporous Li ₃ VO ₄ /C hollow spheres as an anode for long life lithium ion batteries. 2016 , 4, 7165-7168	53
1659	Structural and chemical synergistic encapsulation of polysulfides enables ultralong-life lithium-sulfur batteries. 2016 , 9, 2533-2538	300
1658	Porous Mn ₂ O ₃ microcubes with exposed {001} facets as electrode for lithium ion batteries. 2016 , 40, 6030-6035	7
1657	Nanoelectrical investigation and electrochemical performance of nickel-oxide/carbon sphere hybrids through interface manipulation. 2016 , 469, 287-295	10
1656	Nitrogen-doped carbon nanofoam derived from amino acid chelate complex for supercapacitor applications. 2016 , 316, 60-71	33
1655	Redox-assisted Li ⁺ -storage in lithium-ion batteries. 2016 , 25, 018213	5
1654	NiCo ₂ O ₄ @TiN Core-shell Electrodes through Conformal Atomic Layer Deposition for All-solid-state Supercapacitors. 2016 , 196, 611-621	31
1653	Rational design of graphitic carbon based nanostructures for advanced electrocatalysis. 2016 , 4, 8497-8511	66
1652	Crumpled N-doped carbon nanotubes encapsulated with peapod-like Ge nanoparticles for high-rate and long-life Li-ion battery anodes. 2016 , 4, 7585-7590	39
1651	Identifying a Stable Counter/Reference Electrode for the Study of Aprotic Na ₂ O ₂ Batteries. 2016 , 163, A1270-A1274	13
1650	Ionic Liquid Crystals: Versatile Materials. 2016 , 116, 4643-807	476
1649	Materials chemistry toward electrochemical energy storage. 2016 , 4, 7522-7537	110
1648	Crumpled reduced graphene oxide conformally encapsulated hollow V ₂ O ₅ nano/microsphere achieving brilliant lithium storage performance. 2016 , 24, 32-44	111
1647	Facile synthesis of multilayer-like Si thin film as high-performance anode materials for lithium-ion batteries. 2016 , 122, 1	6
1646	A universal strategy to prepare porous graphene films: binder-free anodes for high-rate lithium-ion and sodium-ion batteries. 2016 , 4, 8837-8843	49
1645	Promoting solution phase discharge in Li-O ₂ batteries containing weakly solvating electrolyte solutions. 2016 , 15, 882-8	349
1644	Facile conversion of activated carbon to battery anode material using microwave graphitization. 2016 , 104, 106-111	35
1643	Facile Synthesis of Carbon-Coated Silicon/Graphite Spherical Composites for High-Performance Lithium-Ion Batteries. 2016 , 8, 12109-17	101

1642	Electrode surface engineering by atomic layer deposition: A promising pathway toward better energy storage. 2016 , 11, 250-271	91
1641	Ultrastrong Polyoxazole Nanofiber Membranes for Dendrite-Proof and Heat-Resistant Battery Separators. 2016 , 16, 2981-7	97
1640	An in situ confinement strategy to porous poly(3,4-ethylenedioxythiophene)/sulfur composites for lithium-sulfur batteries. 2016 , 6, 47858-47863	8
1639	Graphene decorated with bimodal size of carbon polyhedrons for enhanced lithium storage. 2016 , 106, 9-19	23
1638	A simply effective double-coating cathode with MnO ₂ nanosheets/graphene as functionalized interlayer for high performance lithium-sulfur batteries. 2016 , 207, 198-206	74
1637	Discriminating the Mobile Ions from the Immobile Ones in Li _{4+x} Ti ₅ O ₁₂ : ⁶ Li NMR Reveals the Main Li ⁺ Diffusion Pathway and Proposes a Refined Lithiation Mechanism. 2016 , 120, 11372-11381	34
1636	Excellent capacitive deionization performance of meso-carbon microbeads. 2016 , 6, 47285-47291	10
1635	A polydopamine coating ultralight graphene matrix as a highly effective polysulfide absorbent for high-energy Li-S batteries. 2016 , 96, 333-340	22
1634	Hollow porous SiO ₂ nanobelts containing sulfur for long-life lithium-sulfur batteries. 2016 , 6, 91179-91184	11
1633	Synthesis of Lignin-Based Nanomaterials/Nanocomposites: Recent Trends and Future Perspectives. 2016 , 12, 153-160	18
1632	Oxocarbon Salts for Fast Rechargeable Batteries. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 12528-32	16.4 195
1631	Rate limiting activity of charge transfer during lithiation from ionic liquids. 2016 , 330, 84-91	15
1630	Hierarchical mesoporous NiO nanoarrays with ultrahigh capacitance for aqueous hybrid supercapacitor. 2016 , 30, 831-839	158
1629	Gel Polymer Electrolytes Containing Anion-Trapping Boron Moieties for Lithium-Ion Battery Applications. 2016 , 8, 27740-27752	59
1628	A universal surface enhanced Raman spectroscopy (SERS)-active graphene cathode for lithium-air batteries. 2016 , 6, 102272-102279	7
1627	Redox-Active Supramolecular Polymer Binders for Lithium-Sulfur Batteries That Adapt Their Transport Properties in Operando. 2016 , 28, 7414-7421	40
1626	PSi-Based Supercapacitors. 2016 , 347-374	1
1625	High-performance aqueous asymmetric supercapacitor based on K _{0.3} WO ₃ nanorods and nitrogen-doped porous carbon. 2016 , 330, 219-230	22

1624	The effect of Ti doping on electrochemical properties of $\text{Li}_{1.167}\text{Ni}_{0.4}\text{Mn}_{0.383}\text{Co}_{0.05}\text{O}_2$ for lithium-ion batteries. 2016 , 296, 154-157	13
1623	Surface- and Redox-Active Multifunctional Polyphenol-Derived Poly(ionic liquid)s: Controlled Synthesis and Characterization. 2016 , 49, 7676-7691	36
1622	Electrospun Polymer Nanofiber Separators and Electrolyte Membranes for Energy Storage and Conversion Applications. 2016 , 201-223	2
1621	High-performance MgCo_2O_4 nanocone arrays grown on three-dimensional nickel foams: Preparation and application as binder-free electrode for pseudo-supercapacitor. 2016 , 333, 118-124	73
1620	Ambient-Air Stable Lithiated Anode for Rechargeable Li-Ion Batteries with High Energy Density. 2016 , 16, 7235-7240	56
1619	Graphene-Modified Electrodeposited Dendritic Porous Tin Structures as Binder Free Anode for High Performance Lithium-Sulfur Batteries. 2016 , 219, 701-710	13
1618	Effects of carbon surface topography on the electrode/electrolyte interface structure and relevance to Li-air batteries. 2016 , 18, 30830-30836	23
1617	Polyaniline-based electrodes: recent application in supercapacitors and next generation rechargeable batteries. 2016 , 13, 150-160	31
1616	TiO_2 -reduced graphene oxide nanocomposites by microwave-assisted forced hydrolysis as excellent insertion anode for Li-ion battery and capacitor. 2016 , 327, 171-177	81
1615	CuS quantum dot modified carbon aerogel as an immobilizer for lithium polysulfides for high-performance lithium-sulfur batteries. 2016 , 6, 71319-71327	28
1614	Nanowire-Enabled Energy Storage. 2016 , 203-225	
1613	Lithium- and Manganese-Rich Oxide Cathode Materials for High-Energy Lithium Ion Batteries. 2016 , 6, 1600906	177
1612	Strategies toward improving the performance of organic electrodes in rechargeable lithium (sodium) batteries. 2016 , 4, 14902-14914	69
1611	Bridging the performance gap between electric double-layer capacitors and batteries with high-energy/high-power carbon nanotube-based electrodes. 2016 , 4, 14586-14594	33
1610	Adhesive interlayer between active film and current collector for improving the performance of silicon anodes of Li-ion batteries. 2016 , 778, 53-56	6
1609	Polymer-Derived and Sodium Hydroxide-Treated Silicon Carbonitride Material as Anodes for High Electrochemical Performance Li-Ion Batteries. 2016 , 1, 309-317	4
1608	Effect of Al_2O_3 on the sintering of garnet-type $\text{Li}_{6.5}\text{La}_3\text{Zr}_{1.5}\text{Ta}_{0.5}\text{O}_{12}$. 2016 , 294, 108-115	33
1607	New Paradigms on the Nature of Solid Electrolyte Interphase Formation and Capacity Fading of Hard Carbon Anodes in Na-Ion Batteries. 2016 , 3, 1600449	48

1606	Interlayer expanded MoS ₂ enabled by edge effect of graphene nanoribbons for high performance lithium and sodium ion batteries. 2016 , 109, 461-471	100
1605	Three-dimensionally ordered macroporous Li ₂ FeSiO ₄ /C composite as a high performance cathode for advanced lithium ion batteries. 2016 , 329, 297-304	20
1604	NiCoO ₂ flowers grown on the aligned-flakes coated Ni foam for application in hybrid energy storage. 2016 , 329, 238-246	43
1603	Recent progress of silicon composites as anode materials for secondary batteries. 2016 , 6, 87778-87790	48
1602	Electrochemical capacitors: mechanism, materials, systems, characterization and applications. 2016 , 45, 5925-5950	2202
1601	Safe and flexible ion gel based composite electrolyte for lithium batteries. 2016 , 4, 14132-14140	38
1600	Boronic ionogel electrolytes to improve lithium transport for Li-ion batteries. 2016 , 215, 36-41	16
1599	High temperature electrical energy storage: advances, challenges, and frontiers. 2016 , 45, 5848-5887	182
1598	Glutamic acid derivatives as gelators for electrolyte of lithium ion batteries. 2016 , 6, 88820-88825	2
1597	Preparation and modification of high performance porous carbons from petroleum coke for use as supercapacitor electrodes. 2016 , 31, 343-351	21
1596	Heteroatomic Sensing Molecules Confined in Nitrogen-Doped Mesoporous Carbons as Reversible Cathode Materials for High-Performance Lithium Batteries. 2016 , 10, 8289-98	81
1595	Mechanistic Evaluation of Li _x O _y Formation on EMnO ₂ in Nonaqueous Li-Air Batteries. 2016 , 8, 23028-36	37
1594	A direct phase separation approach synthesis of hierarchically porous functional carbon as an advanced electrocatalyst for oxygen reduction reaction. 2016 , 109, 306-313	6
1593	On the Mechanism of the Improved Operation Voltage of Rhombohedral Nickel Hexacyanoferrate as Cathodes for Sodium-Ion Batteries. 2016 , 8, 33619-33625	66
1592	Photopolymerization of Diacetylene on Aligned Multiwall Carbon Nanotube Microfibers for High-Performance Energy Devices. 2016 , 8, 32643-32648	21
1591	Simple Synthesis of Nanocrystalline Tin Sulfide/N-Doped Reduced Graphene Oxide Composites as Lithium Ion Battery Anodes. 2016 , 10, 10778-10788	146
1590	Nanostructured energy materials for electrochemical energy conversion and storage: A review. 2016 , 25, 967-984	316
1589	Phosphorus groups assisted growth of vertically oriented polyaniline nanothorns on N/P co-doped carbon nanofibers for high-performance supercapacitors. 2016 , 216, 355-363	7

1588	Cascading Boost Effect on the Capacity of Nitrogen-Doped Graphene Sheets for Li- and Na-Ion Batteries. 2016 , 8, 26722-26729	37
1587	Improvement of Lithium Storage Performance of Molybdenum Trioxide by a Synergistic Effect of Surface Coating and Oxygen Vacancies. 2016 , 3, 1600730	13
1586	Facile synthesis of ZnCo ₂ O ₄ mesoporous structures with enhanced electrocatalytic oxygen evolution reaction properties. 2016 , 6, 92699-92704	26
1585	Synthesis and electrochemical performance of a coaxial VGCF@ZnMnO ₃ nanocomposite as a high-capacity anode material for lithium-ion batteries. 2016 , 216, 376-385	12
1584	Oxocarbon Salts for Fast Rechargeable Batteries. 2016 , 128, 12716-12720	49
1583	Transition Metal Carbides and Nitrides in Energy Storage and Conversion. 2016 , 3, 1500286	762
1582	Textile-Based Electrochemical Energy Storage Devices. 2016 , 6, 1600783	216
1581	Two dimensional layered Co _{0.85} Se nanosheets as a high-capacity anode for lithium-ion batteries. 2016 , 8, 14992-5000	70
1580	Uniform Fe ₃ O ₄ microflowers hierarchical structures assembled with porous nanoplates as superior anode materials for lithium-ion batteries. 2016 , 389, 240-246	71
1579	Self-Supporting and Binder-Free Anode Film Composed of Beaded Stream-Like Li ₄ Ti ₅ O ₁₂ Nanoparticles for High-Performance Lithium-Ion Batteries. 2016 , 3, 1301-1305	17
1578	Cyclized-polyacrylonitrile modified carbon nanofiber interlayers enabling strong trapping of polysulfides in lithium-sulfur batteries. 2016 , 4, 12973-12980	54
1577	Nanostructured Li ₂ Se cathodes for high performance lithium-selenium batteries. 2016 , 27, 238-246	39
1576	Lithium-Iron Fluoride Battery with In Situ Surface Protection. 2016 , 26, 1507-1516	51
1575	Thermoplastic Elastomer-Enabled Smart Electrolyte for Thermoresponsive Self-Protection of Electrochemical Energy Storage Devices. 2016 , 28, 7921-7928	87
1574	Ex vivo electric power generation in human blood using an enzymatic fuel cell in a vein replica. 2016 , 6, 70215-70220	19
1573	Sintering behavior, ac conductivity and dielectric relaxation of Li _{1.3} Ti _{1.7} Al _{0.3} (PO ₄) ₃ NASICON compound. 2016 , 6, 719-725	26
1572	Effective sulfur-salt composite cathode containing lithium bis(trifluoromethane) sulfonamide for lithium sulfur batteries. 2016 , 220, 130-136	5
1571	Effect of Graphene Modified Cu Current Collector on the Performance of LiTiO Anode for Lithium-Ion Batteries. 2016 , 8, 30926-30932	65

1570	Scalable synthesis of silicon-nanolayer-embedded graphite for high-energy lithium-ion batteries. 2016 , 1,	443
1569	Hierarchical Hydrogen Titanate Nanowire Arrays/Anatase TiO ₂ Heterostructures as Binder-Free Anodes for Li-ion Capacitors. 2016 , 222, 27-35	13
1568	High-Conductive AZO Nanoparticles Decorated Ni-Rich Cathode Material with Enhanced Electrochemical Performance. 2016 , 8, 33546-33552	34
1567	Controlled Growth of LiO by Cocatalysis of Mobile Pd and CoO Nanowire Arrays for High-Performance Li-O Batteries. 2016 , 8, 31653-31660	21
1566	Influence of carbon substrate on the electrochemical performance of carbon/manganese oxide hybrids in aqueous and organic electrolytes. 2016 , 6, 107163-107179	14
1565	Nanocarbons and their hybrids as catalysts for non-aqueous lithium-oxygen batteries. 2016 , 25, 957-966	50
1564	Ferrocene-Promoted Long-Cycle Lithium-Sulfur Batteries. 2016 , 128, 15038-15042	11
1563	Ferrocene-Promoted Long-Cycle Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 14818-14822	16.4 34
1562	Fabrication of a Stainless-Steel-Mesh-Supported Hierarchical Fe ₂ O ₃ @NiCo ₂ O ₄ Core-Shell Tubular Array Anode for Lithium-Ion Battery. 2016 , 1, 5569-5573	14
1561	In situ carbon-coating and Ostwald ripening-based route for hollow Ni ₃ S ₄ @C spheres with superior Li-ion storage performances. 2016 , 6, 101752-101759	21
1560	Nanoparticle Decorated Ultrathin Porous Nanosheets as Hierarchical Co ₃ O ₄ Nanostructures for Lithium Ion Battery Anode Materials. 2016 , 6, 20592	60
1559	Nitrogen-doped TiO ₂ nanospheres for advanced sodium-ion battery and sodium-ion capacitor applications. 2016 , 4, 18278-18283	111
1558	Fast and reversible thermoresponsive polymer switching materials for safer batteries. 2016 , 1,	190
1557	Advances in lithium-Sulfur batteries based on multifunctional cathodes and electrolytes. 2016 , 1,	1317
1556	N ⁷ -(carboxymethyl)guanine-Lithium Crystalline Complex: A Bioinspired Solid Electrolyte. 2016 , 6, 24499	6
1555	General access to metal oxide (Metal = Mn, Co, Ni) double-layer nanospheres for application in lithium ion batteries and supercapacitors. 2016 , 220, 643-653	18
1554	Aligned Ni-Co-Mn oxide nanosheets grown on conductive substrates as binder-free electrodes for high capacity electrochemical energy storage devices. 2016 , 220, 296-303	42
1553	Expansion of titanate nanotubes by the use of a surfactant and its improved performance as an anode in Li-ion batteries. 2016 , 220, 453-464	12

1552	Porous structured niobium pentoxide/carbon complex for lithium-ion intercalation pseudocapacitors. 2016 , 214, 74-80	7
1551	Crystal Engineering of Naphthalenediimide-Based Metal-Organic Frameworks: Structure-Dependent Lithium Storage. 2016 , 8, 31067-31075	56
1550	Rational design of efficient electrode-electrolyte interfaces for solid-state energy storage using ion soft landing. 2016 , 7, 11399	66
1549	Magnesium Borohydride-Based Electrolytes Containing 1-butyl-1-methylpiperidinium bis(trifluoromethyl sulfonyl)imide Ionic Liquid for Rechargeable Magnesium Batteries. 2016 , 163, D682-D688	27
1548	Revealing structure and dynamics in host-guest supramolecular crystalline polymer electrolytes by solid-state NMR: Applications to PCD-polyether/Li ⁺ crystal. 2016 , 105, 310-317	17
1547	Incorporating conjugated carbonyl compounds into carbon nanomaterials as electrode materials for electrochemical energy storage. 2016 , 18, 31361-31377	28
1546	Facile strategy of NCA cation mixing regulation and its effect on electrochemical performance. 2016 , 6, 108558-108565	20
1545	Nanoscale defect engineering of lithium-sulfur battery composite cathodes for improved performance. 2016 , 8, 19368-19375	32
1544	Are Electrospun Carbon/Metal Oxide Composite Fibers Relevant Electrode Materials for Li-Ion Batteries?. 2016 , 163, A2930-A2937	16
1543	A Stretchable Graphitic Carbon/Si Anode Enabled by Conformal Coating of a Self-Healing Elastic Polymer. 2016 , 28, 2455-61	163
1542	Infiltrated Porous Polymer Sheets as Free-Standing Flexible Lithium-Sulfur Battery Electrodes. 2016 , 28, 6365-71	90
1541	Effect of Electrolyte Concentration on the Stern Layer Thickness at a Charged Interface. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3790-4	16.4 192
1540	Silicon Asymmetric Membranes for Efficient Lithium Storage: A Scalable Method. 2016 , 4, 502-509	6
1539	Ever-Increasing Pseudocapacitance in RGOMnORGO Sandwich Nanostructures for Ultrahigh-Rate Lithium Storage. 2016 , 26, 2198-2206	204
1538	An Aqueous Rechargeable Zn//Co ₃ O ₄ Battery with High Energy Density and Good Cycling Behavior. 2016 , 28, 4904-11	305
1537	Armoring Graphene Cathodes for High-Rate and Long-Life Lithium Ion Supercapacitors. 2016 , 6, 1502064	73
1536	Fluorinated Hyperbranched Cyclotriphosphazene Simultaneously Enhances the Safety and Electrochemical Performance of High-Voltage Lithium-Ion Batteries. 2016 , 3, 913-921	32
1535	Facile Synthesis of Nitrogen-Containing Mesoporous Carbon for High-Performance Energy Storage Applications. 2016 , 22, 4256-62	16

1534	A novel anode comprised of C&N co-doped Co ₃ O ₄ hollow nanofibres with excellent performance for lithium-ion batteries. 2016 , 18, 19531-5	23
1533	Closely packed x-poly(ethylene glycol diacrylate) coated polyetherimide/poly(vinylidene fluoride) fiber separators for lithium ion batteries with enhanced thermostability and improved electrolyte wettability. 2016 , 325, 292-300	37
1532	Micron-sized Spherical Si/C Hybrids Assembled via Water/Oil System for High-Performance Lithium Ion Battery. 2016 , 211, 982-988	23
1531	Al ₂ O ₃ /poly(ethylene terephthalate) composite separator for high-safety lithium-ion batteries. 2016 , 22, 2143-2149	30
1530	Li-ion capacitor based on activated rice husk derived porous carbon with improved electrochemical performance. 2016 , 211, 289-296	52
1529	An advanced high-energy sodium ion full battery based on nanostructured Na ₂ Ti ₃ O ₇ /VOPO ₄ layered materials. 2016 , 9, 3399-3405	196
1528	Structure of Surface Entrance Sites for Li Intercalation into TiO ₂ Nanoparticles, Nanosheets, and Mesoporous Architectures with Application for Li-Ion Batteries. 2016 , 120, 14001-14008	6
1527	Sulfur Encapsulated in Mo ₄ O ₁₁ -Anchored Ultralight Graphene for High-Energy Lithium Sulfur Batteries. 2016 , 4, 3679-3687	22
1526	Effects of PVP-assisted Co ₃ O ₄ coating on the electrochemical and storage properties of LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ at high cut-off voltage. 2016 , 210, 548-556	52
1525	Aqueous solutions of acidic ionic liquids for enhanced stability of polyoxometalate-carbon supercapacitor electrodes. 2016 , 326, 569-574	48
1524	Amorphous TiS ₃ /S/C Composite Positive Electrodes with High Capacity for Rechargeable Lithium Batteries. 2016 , 163, A1730-A1735	5
1523	Hollow porous carbon spheres with hierarchical nanoarchitecture for application of the high performance supercapacitors. 2016 , 211, 183-192	102
1522	Hybrid Film from Nickel Oxide and Oxygenated Carbon Nanotube as Flexible Electrodes for Pseudocapacitors. 2016 , 2, 698-703	8
1521	Hollow mesoporous silica sphere-embedded composite separator for high-performance lithium-ion battery. 2016 , 20, 2847-2855	16
1520	Electrochemical oxidation to construct a nickel sulfide/oxide heterostructure with improvement of capacitance. 2016 , 4, 11611-11615	28
1519	Investigating lithium-ion battery materials during overcharge-induced thermal runaway: an operando and multi-scale X-ray CT study. 2016 , 18, 30912-30919	91
1518	Uniform Hierarchical Fe ₃ O ₄ @Polypyrrole Nanocages for Superior Lithium Ion Battery Anodes. 2016 , 6, 1600256	152
1517	Metal-Organic Framework-Based Nanomaterials for Electrocatalysis. 2016 , 6, 1600423	444

1516	Metal Oxide/Graphene Composites for Supercapacitive Electrode Materials. 2016 , 11, 949-64	52
1515	A robust strategy for crafting monodisperse $\text{Li}_4\text{Ti}_5\text{O}_{12}$ nanospheres as superior rate anode for lithium ion batteries. 2016 , 21, 133-144	138
1514	Facile synthesis of magnetic Fe_3S_4 nanosheets and their application in lithium-ion storage. 2016 , 668, 27-32	16
1513	High power density nitridated hematite ($\gamma\text{-Fe}_2\text{O}_3$) nanorods as anode for high-performance flexible lithium ion batteries. 2016 , 308, 7-17	163
1512	One-step thermolysis synthesis of two-dimensional ultrafine Fe_3O_4 particles/carbon nanonetworks for high-performance lithium-ion batteries. 2016 , 8, 4733-41	59
1511	Performance Enhancement and Side Reactions in Rechargeable Nickel-Iron Batteries with Nanostructured Electrodes. 2016 , 8, 2088-96	47
1510	Porous polymer electrolytes with high ionic conductivity and good mechanical property for rechargeable batteries. 2016 , 307, 320-328	35
1509	NiCo_2S_4 nanotube arrays grown on flexible nitrogen-doped carbon foams as three-dimensional binder-free integrated anodes for high-performance lithium-ion batteries. 2016 , 18, 4505-12	78
1508	Na ion- Conducting Ceramic as Solid Electrolyte for Rechargeable Seawater Batteries. 2016 , 191, 1-7	53
1507	The effect of pH on the interlayer distances of elongated titanate nanotubes and their use as a Li-ion battery anode. 2016 , 27, 015401	7
1506	Characterization of a reversible, low-polarization sodium-oxygen battery. 2016 , 191, 516-520	20
1505	In Situ Raman and Nuclear Magnetic Resonance Study of Trapped Lithium in the Solid Electrolyte Interface of Reduced Graphene Oxide. 2016 , 120, 2600-2608	41
1504	Defect-driven oxygen reduction reaction (ORR) of carbon without any element doping. 2016 , 3, 417-421	117
1503	In situ incorporation of FeS nanoparticles/carbon nanosheets composite with an interconnected porous structure as a high-performance anode for lithium ion batteries. 2016 , 4, 3697-3703	125
1502	Encapsulation of organic active materials in carbon nanotubes for application to high-electrochemical-performance sodium batteries. 2016 , 9, 1264-1269	113
1501	Electrode-supported thin $\gamma\text{-Al}_2\text{O}_3$ separators for lithium-ion batteries. 2016 , 305, 209-216	17
1500	A graphene-like metallic cathode host for long-life and high-loading lithium-sulfur batteries. 2016 , 3, 130-136	355
1499	Graphene- Li_2S -Carbon Nanocomposite for Lithium-Sulfur Batteries. 2016 , 10, 1333-40	130

1498	Process Investigation of a Solid Carbon-Fueled Solid Oxide Fuel Cell Integrated with a CO ₂ -Permeating Membrane and a Sintering-Resistant Reverse Boudouard Reaction Catalyst. 2016 , 30, 1841-1848	12
1497	Interactions Between Electrolytes and Carbon-Based Materials—NMR Studies on Electrical Double-Layer Capacitors, Lithium-Ion Batteries, and Fuel Cells. 2016 , 237-318	13
1496	Hybrid Hairy Nanoparticle Electrolytes Stabilizing Lithium Metal Batteries. 2016 , 28, 2147-2157	57
1495	Dinitrile/Mononitrile-Based Electrolyte System for Lithium-Ion Battery Application with the Mechanism of Reductive Decomposition of Mononitriles. 2016 , 120, 6450-6458	23
1494	Probing cation intermixing in Li ₂ SnO ₃ . 2016 , 6, 31559-31564	10
1493	A few-layered Ti ₃ C ₂ nanosheet/glass fiber composite separator as a lithium polysulphide reservoir for high-performance lithium-sulfur batteries. 2016 , 4, 5993-5998	112
1492	Analytical Model on Stress-Regulated Lithiation Kinetics and Fracture of Si-C Yolk-Shell Anodes for Lithium-Ion Batteries. 2016 , 163, A940-A946	8
1491	A compressible and hierarchical porous graphene/Co composite aerogel for lithium-ion batteries with high gravimetric/volumetric capacity. 2016 , 4, 6021-6028	17
1490	Effect of short and long range order on crystal structure interpretation: Raman and powder X-ray diffraction of LiPF ₆ . 2016 , 153, 651-4	13
1489	High-performance NaFePO ₄ formed by aqueous ion-exchange and its mechanism for advanced sodium ion batteries. 2016 , 4, 4882-4892	86
1488	Nanoporous Metals for Li Battery Applications. 2016 , 175-209	2
1487	Eco-friendly Energy Storage System: Seawater and Ionic Liquid Electrolyte. 2016 , 9, 42-9	30
1486	Sandwich-like SnS/Polypyrrole Ultrathin Nanosheets as High-Performance Anode Materials for Li-Ion Batteries. 2016 , 8, 8502-10	115
1485	Ag enhanced electrochemical performance for Na ₂ Li ₂ Ti ₆ O ₁₄ anode in rechargeable lithium-ion batteries. 2016 , 42, 6874-6882	14
1484	Morphological Evolution of High-Voltage Spinel LiNi(0.5)Mn(1.5)O ₄ Cathode Materials for Lithium-Ion Batteries: The Critical Effects of Surface Orientations and Particle Size. 2016 , 8, 4661-75	152
1483	An Unexpected Pathway: ⁶ Li-Exchange NMR Spectroscopy Points to Vacancy-Driven Out-of-Plane Li-Ion Hopping in Crystalline Li ₂ SnO ₃ . 2016 , 120, 3130-3138	18
1482	Novel 18650 lithium-ion battery surrogate cell design with anisotropic thermophysical properties for studying failure events. 2016 , 312, 1-11	10
1481	Determination of Surface Potential and Electrical Double-Layer Structure at the Aqueous Electrolyte-Nanoparticle Interface. 2016 , 6,	102

1480	The smart era of electrochemical energy storage devices. 2016 , 3, 66-68	24
1479	A gel polymer membrane for lithium-ion oxygen battery. 2016 , 287, 22-27	20
1478	Interconnected Fe_2O_3 nanosheet arrays as high-performance anode materials for lithium-ion batteries. 2016 , 192, 407-413	45
1477	Long-Life and High-Areal-Capacity Li-S Batteries Enabled by a Light-Weight Polar Host with Intrinsic Polysulfide Adsorption. 2016 , 10, 4111-8	314
1476	Graphene-based materials with tailored nanostructures for energy conversion and storage. 2016 , 102, 1-72	189
1475	Towards Next Generation Lithium-Sulfur Batteries: Non-Conventional Carbon Compartments/Sulfur Electrodes and Multi-Scale Analysis. 2016 , 163, A730-A741	33
1474	A sodium-ion battery exploiting layered oxide cathode, graphite anode and glyme-based electrolyte. 2016 , 310, 26-31	118
1473	Three-dimensional porous carbon composites containing high sulfur nanoparticle content for high-performance lithium-sulfur batteries. 2016 , 7, 10601	573
1472	Zeolite coated polypropylene separators with tunable surface properties for lithium-ion batteries. 2016 , 226, 406-414	36
1471	The Role of Sodium in $\text{LiNi}_0.8\text{Co}_0.15\text{Al}_0.05\text{O}_2$ Cathode Material and Its Electrochemical Behaviors. 2016 , 120, 3235-3241	118
1470	Caterpillar structured $\text{Ni}(\text{OH})_2/\text{MnO}_2$ core/shell nanocomposite arrays on nickel foam as high performance anode materials for lithium ion batteries. 2016 , 6, 15541-15548	14
1469	Tunable photoluminescence emissions and large dielectric constant of the electroactive poly(vinylidene fluoride-hexafluoropropylene) thin films modified with SnO_2 nanoparticles. 2016 , 6, 29931-29943	20
1468	Amorphous red phosphorous embedded in carbon nanotubes scaffold as promising anode materials for lithium-ion batteries. 2016 , 301, 131-137	72
1467	Molecular modelling of ionic liquids in the ordered mesoporous carbon CMK-5. 2016 , 42, 753-763	5
1466	Ultrathin $\text{NiO}/\text{NiFe}_2\text{O}_4$ Nanoplates Decorated Graphene Nanosheets with Enhanced Lithium Storage Properties. 2016 , 194, 17-25	34
1465	A modified molten-salt method to prepare graphene electrode with high capacitance and low self-discharge rate. 2016 , 102, 255-261	66
1464	Nonlinear aging of cylindrical lithium-ion cells linked to heterogeneous compression. 2016 , 5, 212-223	147
1463	Lithium Titanate Confined in Carbon Nanopores for Asymmetric Supercapacitors. 2016 , 10, 3977-84	85

1462	A comparative study of $\text{Li}_8\text{NaV}_3(\text{P}_2\text{O}_7)_3(\text{PO}_4)_2$ and $\text{Li}_9\text{V}_3(\text{P}_2\text{O}_7)_3(\text{PO}_4)_2$: Synthesis, structure and electrochemical properties. 2016 , 306, 337-346	7
1461	Ether and siloxane functionalized ionic liquids and their mixtures as electrolyte for lithium-ion batteries. 2016 , 18, 16116-26	20
1460	Micron-sized $\text{Fe}_2\text{O}_3/\text{Si}$ ternary composite anodes for high energy Li-ion batteries. 2016 , 9, 1251-1257	117
1459	Mixing Super P-Li with N-Doped Mesoporous Templated Carbon Improves the High Rate Performance of a Potential Lithium Ion Battery Anode. 2016 , 163, A953-A957	7
1458	Nanostructured Electrode Materials Derived from Metal-Organic Framework Xerogels for High-Energy-Density Asymmetric Supercapacitor. 2016 , 8, 2148-57	105
1457	Porous $\text{CNT}@\text{Li}_4\text{Ti}_5\text{O}_{12}$ coaxial nanocables as ultra high power and long life anode materials for lithium ion batteries. 2016 , 4, 2089-2095	39
1456	High-performance $x\text{Li}_2\text{MnO}_3\cdot(1-x)\text{LiMn}_{1/3}\text{Co}_{1/3}\text{Ni}_{1/3}\text{O}_2$ (0.1 $\leq x \leq$ 0.5) as Cathode Material for Lithium-ion Battery. 2016 , 188, 686-695	33
1455	High energy asymmetric supercapacitor with 1D@2D structured $\text{NiCo}_2\text{O}_4@\text{Co}_3\text{O}_4$ and jackfruit derived high surface area porous carbon. 2016 , 306, 248-257	122
1454	Safety focused modeling of lithium-ion batteries: A review. 2016 , 306, 178-192	428
1453	Ionic liquids as tailored media for the synthesis and processing of energy conversion materials. 2016 , 9, 49-61	87
1452	An optimization of MnO_2 amount in CNT-MnO_2 nanocomposite as a high rate cathode catalyst for the rechargeable Li-O_2 batteries. 2016 , 188, 428-440	40
1451	One-pot Aerosol Synthesis of Carbon Nanotube- Zn_2GeO_4 Composite Microspheres for Enhanced Lithium-ion Storage Properties. 2016 , 190, 766-774	15
1450	A novel bifunctional additive for 5 V-class, high-voltage lithium ion batteries. 2016 , 6, 7224-7228	16
1449	Multi-yolk-shell copper oxide@carbon octahedra as high-stability anodes for lithium-ion batteries. 2016 , 20, 305-314	93
1448	What Happens Structurally and Electronically during the Li Conversion Reaction of CoFe_2O_4 Nanoparticles: An Operando XAS and XRD Investigation. 2016 , 28, 434-444	57
1447	Li^+ interstitials as the charge carriers in superionic lithium-rich anti-perovskites. 2016 , 4, 1586-1590	22
1446	Integrating Si nanoscale building blocks into micro-sized materials to enable practical applications in lithium-ion batteries. 2016 , 8, 1834-48	33
1445	Free-Standing Thin Webs of Activated Carbon Nanofibers by Electrospinning for Rechargeable Li-O_2 Batteries. 2016 , 8, 1937-42	49

1444	Sulfur Embedded in a Mesoporous Carbon Nanotube Network as a Binder-Free Electrode for High-Performance Lithium-Sulfur Batteries. 2016 , 10, 1300-8	176
1443	Hierarchical sulfur-impregnated hydrogenated TiO ₂ mesoporous spheres comprising anatase nanosheets with highly exposed (001) facets for advanced Li-S batteries. 2016 , 27, 045403	34
1442	Effect of adding various carbon additives to porous zinc anode in rechargeable hybrid aqueous battery. 2016 , 658, 119-124	37
1441	Reinstating lead for high-loaded efficient negative electrode for rechargeable sodium-ion battery. 2016 , 304, 1-8	30
1440	Improving the electrochemical performance of high voltage spinel cathode at elevated temperature by a novel electrolyte additive. 2016 , 303, 41-48	53
1439	Characteristics of an ionic liquid electrolyte for sodium-ion batteries. 2016 , 303, 203-207	77
1438	Role of zirconium dopant on the structure and high voltage electrochemical performances of LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathode materials for lithium ion batteries. 2016 , 188, 48-56	197
1437	High-Rate and Cycling-Stable Nickel-Rich Cathode Materials with Enhanced Li(+) Diffusion Pathway. 2016 , 8, 582-7	86
1436	Layered/spinel heterostructured Li-rich materials synthesized by a one-step solvothermal strategy with enhanced electrochemical performance for Li-ion batteries. 2016 , 4, 257-263	97
1435	Epicyanohydrin as an Interface Stabilizer Agent for Cathodes of Li-Ion Batteries. 2016 , 163, A171-A177	21
1434	One-dimensional metal oxide-carbon hybrid nanostructures for electrochemical energy storage. 2016 , 1, 27-40	102
1433	Boron-doped nanographene: Lewis acidity, redox properties, and battery electrode performance. 2016 , 7, 219-227	80
1432	Exploiting chemically and electrochemically reactive phosphite derivatives for high-voltage spinel LiNi _{0.5} Mn _{1.5} O ₄ cathodes. 2016 , 302, 22-30	82
1431	Carbon-encapsulated LiMn ₂ O ₄ spheres prepared using a polymer microgel reactor for high-power lithium-ion batteries. 2016 , 301, 376-385	23
1430	Hierarchical architectures of Co ₃ O ₄ ultrafine nanowires grown on Co ₃ O ₄ nanowires with fascinating electrochemical performance. 2016 , 40, 377-384	6
1429	Electrolytes and Separators for Lithium Batteries. 2016 , 431-460	1
1428	Novel Concentrated Li[(FSO)(n-CFSO)N]-Based Ether Electrolyte for Superior Stability of Metallic Lithium Anode. 2017 , 9, 4282-4289	49
1427	Cobalt oxide and N-doped carbon nanosheets derived from a single two-dimensional metal-organic framework precursor and their application in flexible asymmetric supercapacitors. 2017 , 2, 99-105	183

1426	In Situ Infrared Spectroscopy Study of PYR14TFSI Ionic Liquid Stability for LiO ₂ Battery. 2017 , 164, A518-A523	29
1425	Porous One-Dimensional Nanomaterials: Design, Fabrication and Applications in Electrochemical Energy Storage. 2017 , 29, 1602300	435
1424	Spraying Coagulation-Assisted Hydrothermal Synthesis of MoS ₂ /Carbon/Graphene Composite Microspheres for Lithium-Ion Battery Applications. 2017 , 4, 2027-2036	19
1423	Synthesis of Hierarchically Porous Nitrogen-Doped Carbon for Sodium-Ion Batteries. 2017 , 4, 1059-1065	19
1422	Mesoscale Elucidation of Surface Passivation in the Li-Sulfur Battery Cathode. 2017 , 9, 5263-5271	39
1421	Three-dimensional (3D) LiMn _{0.8} Fe _{0.2} PO ₄ nanoflowers assembled from interconnected nanoflakes as cathode materials for lithium ion batteries. 2017 , 43, 3190-3195	8
1420	ReviewRecent Advances and Remaining Challenges for Lithium Ion Battery Cathodes. 2017 , 164, A6341-A6348	128
1419	Cobalt sulfide nanoparticles anchored in three-dimensional carbon nanosheet networks for lithium and sodium ion batteries with enhanced electrochemical performance. 2017 , 492, 41-50	47
1418	The design and study of new Li-ion full cells of LiCo ₂ /3Ni ₁ /6Mn ₁ /6O ₂ positive electrode paired with MnSn ₂ and Li ₄ Ti ₅ O ₁₂ negative electrodes. 2017 , 300, 175-181	10
1417	LiNi _{0.5} Mn _{1.5} O ₄ nano-submicro cubes as high-performance 5 V cathode materials for lithium-ion batteries. 2017 , 230, 293-298	26
1416	Flexible gel polymer electrolyte based on ionic liquid EMIMTFSI for rechargeable battery application. 2017 , 230, 123-131	84
1415	Redox Active Cation Intercalation/Deintercalation in Two-Dimensional Layered MnO Nanostructures for High-Rate Electrochemical Energy Storage. 2017 , 9, 6282-6291	65
1414	High-voltage and free-standing poly(propylene carbonate)/Li _{6.75} La ₃ Zr _{1.75} Ta _{0.25} O ₁₂ composite solid electrolyte for wide temperature range and flexible solid lithium ion battery. 2017 , 5, 4940-4948	284
1413	Recent Progress in Metal-Organic Frameworks and Their Derived Nanostructures for Energy and Environmental Applications. 2017 , 10, 1645-1663	155
1412	Materials Design and System Construction for Conventional and New-Concept Supercapacitors. 2017 , 4, 1600382	289
1411	Polyethylene separator activated by hybrid coating improving Li ⁺ ion transference number and ionic conductivity for Li-metal battery. 2017 , 342, 816-824	66
1410	Electrodifusion versus Chemical Diffusion in Alkali Calcium Phosphate Glasses: Implication of Structural Changes. 2017 , 121, 3203-3211	8
1409	Enhancing the Cycling Stability of Sodium Metal Electrodes by Building an Inorganic-Organic Composite Protective Layer. 2017 , 9, 6000-6006	88

1408	Facile synthesis of Si-C nanocomposites with yolk-shell structure as an anode for lithium-ion batteries. 2017 , 704, 599-606	40
1407	Poly (ether ether ketone) (PEEK) porous membranes with super high thermal stability and high rate capability for lithium-ion batteries. 2017 , 530, 125-131	53
1406	Kelp-derived hard carbons as advanced anode materials for sodium-ion batteries. 2017 , 5, 5761-5769	112
1405	High-capacity cobalt-based coordination polymer nanorods and their redox chemistry triggered by delocalization of electron spins. 2017 , 7, 195-202	23
1404	Synergistic Effects of Stabilizing the Surface Structure and Lowering the Interface Resistance in Improving the Low-Temperature Performances of Layered Lithium-Rich Materials. 2017 , 9, 8641-8648	29
1403	Ab Initio Atomistic Thermodynamics Study of the (001) Surface of LiCoO ₂ in a Water Environment and Implications for Reactivity under Ambient Conditions. 2017 , 121, 5069-5080	26
1402	Design structure model and renewable energy technology for rechargeable battery towards greener and more sustainable electric vehicle. 2017 , 74, 19-25	28
1401	Effect of carbon cathode morphology on the electrode/electrolyte interface structure. 2017 , 51, 51-55	6
1400	Green Solid Ionic Liquid Crystalline Electrolyte Membranes with Anisotropic Channels for Efficient Li-Ion Batteries. 2017 , 1, 1600031	8
1399	Enhanced electrochemical performance of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ by nanoscale surface modification with Co ₃ O ₄ . 2017 , 231, 294-299	62
1398	3D Conductive Network Supported Monolithic Molybdenum Disulfide Nanosheets for High-Performance Lithium Storage Applications. 2017 , 4, 1601228	5
1397	Superior Cathode Performance of Nitrogen-Doped Graphene Frameworks for Lithium Ion Batteries. 2017 , 9, 10643-10651	78
1396	Tunable Nitrogen-Doped Carbon Nanoparticles from Tannic Acid and Urea and Their Potential for Sustainable Soots. 2017 , 3, 311-318	10
1395	Lithium-Ion Batteries with High Rate Capabilities. 2017 , 5, 2799-2816	77
1394	Superior Thermally Stable and Nonflammable Porous Polybenzimidazole Membrane with High Wettability for High-Power Lithium-Ion Batteries. 2017 , 9, 8742-8750	60
1393	Hierarchical Cobalt Hydroxide and B/N Co-Doped Graphene Nanohybrids Derived from Metal-Organic Frameworks for High Energy Density Asymmetric Supercapacitors. 2017 , 7, 43084	61
1392	Mn nanoparticles decorated on the ionic liquid functionalized multiwalled carbon nanotubes as a supercapacitor electrode material. 2017 , 316, 928-935	21
1391	Addressing the Interface Issues in All-Solid-State Bulk-Type Lithium Ion Battery via an All-Composite Approach. 2017 , 9, 9654-9661	96

1390	Improvement in high-voltage and high rate cycling performance of nickel-rich layered cathode materials via facile chemical vapor deposition with methane. 2017 , 230, 308-315	14
1389	Controlled formation of uniform nanoshells of manganese oxide and their potential in lithium ion batteries. 2017 , 53, 2846-2849	13
1388	Porous Si@C coaxial nanotubes: layer-by-layer assembly on ZnO nanorod templates and application to lithium-ion batteries. 2017 , 19, 1220-1229	13
1387	High-performance carbon-coated mesoporous LiMn ₂ O ₄ cathode materials synthesized from a novel hydrated layered-spinel lithium manganate composite. 2017 , 7, 3746-3751	18
1386	Coordination of Surface-Induced Reaction and Intercalation: Toward a High-Performance Carbon Anode for Sodium-Ion Batteries. 2017 , 4, 1600500	64
1385	Facile Synthesis of Nanosized Lithium-Ion-Conducting Solid Electrolyte LiAlTi(PO) and Its Mechanical Nanocomposites with LiMnO for Enhanced Cyclic Performance in Lithium Ion Batteries. 2017 , 9, 11696-11703	47
1384	Low-crystalline iron oxide hydroxide nanoparticle anode for high-performance supercapacitors. 2017 , 8, 14264	452
1383	Vertical few-layer graphene/metalized Si-nanocone arrays as 3D electrodes for solid-state supercapacitors with large areal capacitance and superior rate capability. 2017 , 404, 238-245	20
1382	New Nanoconfined Galvanic Replacement Synthesis of Hollow Sb@C Yolk-Shell Spheres Constituting a Stable Anode for High-Rate Li/Na-Ion Batteries. 2017 , 17, 2034-2042	306
1381	Graphene-doped carbon/Fe ₃ O ₄ porous nanofibers with hierarchical band construction as high-performance anodes for lithium-ion batteries. 2017 , 229, 306-315	45
1380	Enhanced electrochemical performance of LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathode material after surface modification with graphene oxide. 2017 , 705, 405-412	31
1379	Space charge storage in composites: thermodynamics. 2017 , 19, 6379-6396	24
1378	One-pot hydrothermal synthesis of flower-like Ni(OH) ₂ encapsulated by reduced graphene oxide for high-performance supercapacitors. 2017 , 711, 643-651	25
1377	Unveiling two-dimensional TiS ₂ as an insertion host for the construction of high energy Li-ion capacitors. 2017 , 5, 9177-9181	62
1376	Preparation of Li-rich layered-layered type x Li ₂ MnO ₃ (1-x)LiMnO ₂ nanorods and its electrochemical performance as cathode material for Li-ion battery. 2017 , 353, 323-332	24
1375	One-to-One Comparison of Graphite-Blended Negative Electrodes Using Silicon Nanolayer-Embedded Graphite versus Commercial Benchmarking Materials for High-Energy Lithium-Ion Batteries. 2017 , 7, 1700071	60
1374	3D Porous Graphene Nanostructure from a Simple, Fast, Scalable Process for High Performance Flexible Gel-Type Supercapacitors. 2017 , 5, 4457-4467	28
1373	Reducing Interfacial Resistance between Garnet-Structured Solid-State Electrolyte and Li-Metal Anode by a Germanium Layer. 2017 , 29, 1606042	378

1372	Atomic-Scale Structure-Property Relationships in Lithium Ion Battery Electrode Materials. 2017 , 47, 175-198	21
1371	Graphene: a promising 2D material for electrochemical energy storage. 2017 , 62, 724-740	140
1370	Improved supercapacitor performance of MnO ₂ -electrospun carbon nanofibers electrodes by mT magnetic field. 2017 , 358, 22-28	63
1369	Facilitating the redox reaction of polysulfides by an electrocatalytic layer-modified separator for lithium-sulfur batteries. 2017 , 5, 10936-10945	65
1368	Transition-Metal (Fe, Co, Ni) Based Metal-Organic Frameworks for Electrochemical Energy Storage. 2017 , 7, 1602733	582
1367	Ultra-small and highly crystallized ZnFe ₂ O ₄ nanoparticles within double graphene networks for super-long life lithium-ion batteries. 2017 , 5, 11188-11196	45
1366	Atomic-level energy storage mechanism of cobalt hydroxide electrode for pseudocapacitors. 2017 , 8, 15194	186
1365	Studies on Co-oxidation resistances of electrolytes based on sulfolane and lithium bis(oxalato)borate. 2017 , 53, 352-358	1
1364	Phenol-Catalyzed Discharge in the Aprotic Lithium-Oxygen Battery. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6539-6543	16.4 43
1363	Reconciled Nanoarchitecture with Overlapped 2 D Anatomy for High-Energy Hybrid Supercapacitors. 2017 , 5, 1919-1926	3
1362	Construction of 3D CoO Quantum Dots/Graphene Hydrogels as Binder-Free Electrodes for Ultra-high Rate Energy Storage Applications. 2017 , 243, 152-161	28
1361	Cubic Crystal-Structured SnTe for Superior Li- and Na-Ion Battery Anodes. 2017 , 11, 6074-6084	64
1360	General solution-processed formation of porous transition-metal oxides on exfoliated molybdenum disulfides for high-performance asymmetric supercapacitors. 2017 , 5, 11236-11245	75
1359	Phenol-Catalyzed Discharge in the Aprotic Lithium-Oxygen Battery. 2017 , 129, 6639-6643	22
1358	Alleviating structural degradation of nickel-rich cathode material by eliminating the surface Fm3m phase. 2017 , 8, 134-140	27
1357	Inhibiting Polysulfide Shuttle in Lithium-Sulfur Batteries through Low-Ion-Pairing Salts and a Triflamide Solvent. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 6192-6197	16.4 86
1356	Preparation of polypyrrole-coated Bi ₂ O ₃ @CMK-3 nanocomposite for electrochemical lithium storage. 2017 , 238, 202-209	18
1355	Electrical double layer ion transport with cell voltage-pulse potential coupling circuit for separating dilute lead ions from wastewater. 2017 , 535, 20-27	25

1354	Synergistic effect of processing and composition x on conductivity of xLi ₂ S-(100-x)P ₂ S ₅ electrolytes. 2017 , 305, 1-6	22
1353	Low-Temperature Carbon Coating of Nanosized LiAlMnO and High-Density Electrode for High-Power Li-Ion Batteries. 2017 , 17, 3744-3751	35
1352	Effects of different precipitants on LiNi _{0.5} Mn _{1.5} O ₄ for lithium ion batteries prepared by modified co-precipitation method. 2017 , 23, 2993-2999	5
1351	A bio-inspired nanofibrous silicon/carbon composite as an anode material for lithium-ion batteries. 2017 , 41, 4887-4900	22
1350	Inhibiting Polysulfide Shuttle in Lithium-Sulfur Batteries through Low-Ion-Pairing Salts and a Triflamide Solvent. 2017 , 129, 6288-6293	19
1349	Pipe-Wire TiO-Sn@Carbon Nanofibers Paper Anodes for Lithium and Sodium Ion Batteries. 2017 , 17, 3830-3836	242
1348	Graphene oxide wrapped Fe ₂ O ₃ as a durable anode material for high-performance lithium-ion batteries. 2017 , 714, 425-432	40
1347	Best Practices for Mitigating Irreversible Capacity Loss of Negative Electrodes in Li-Ion Batteries. 2017 , 7, 1602607	96
1346	Nanostructured potassium and sodium ion incorporated Prussian blue frameworks as cathode materials for sodium-ion batteries. 2017 , 53, 5569-5572	69
1345	Sulfur Vapor-Infiltrated 3D Carbon Nanotube Foam for Binder-Free High Areal Capacity Lithium-Sulfur Battery Composite Cathodes. 2017 , 11, 4877-4884	193
1344	A PEO-based gel polymer electrolyte for lithium ion batteries. 2017 , 7, 23494-23501	115
1343	Electrospinning synthesis of Co ₃ O ₄ @C nanofibers as a high-performance anode for sodium ion batteries. 2017 , 7, 23122-23126	19
1342	Conductive graphene oxide-polyacrylic acid (GOPAA) binder for lithium-sulfur battery. 2017 , 31, 568-574	124
1341	Atomically thin Co ₃ O ₄ nanosheet-coated stainless steel mesh with enhanced capacitive Na ⁺ storage for high-performance sodium-ion batteries. 2017 , 4, 015022	36
1340	Exploring High-Energy Li-Ion Batteries and Capacitors with Conversion-Type Fe ₃ O ₄ -rGO as the Negative Electrode. 2017 , 4, 2626-2633	8
1339	Ferrous sulfide-assisted hollow carbon spheres as sulfur host for advanced lithium-sulfur batteries. 2017 , 326, 1040-1047	19
1338	A Porphyrin Complex as a Self-Conditioned Electrode Material for High-Performance Energy Storage. 2017 , 129, 10477-10482	21
1337	Mechanistic Insights into Surface Chemical Interactions between Lithium Polysulfides and Transition Metal Oxides. 2017 , 121, 14222-14227	64

1336	A Porphyrin Complex as a Self-Conditioned Electrode Material for High-Performance Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 10341-10346	16.4	57
1335	Facile synthesis of Li ₄ Ti ₅ O ₁₂ /Graphene nanocomposites for high performance lithium-ion batteries via a thermal-decomposition reduction in air. 2017 , 529, 677-685		10
1334	Lithium Bond Chemistry in Lithium-Sulfur Batteries. 2017 , 129, 8290-8294		50
1333	Lithium Bond Chemistry in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 8178-8182	16.4	332
1332	3D-Mesoporous Carbon Infiltrated with Sulfur for High-Rate Stable Lithium-Sulfur Batteries. 2017 , 2, 4131-4137		4
1331	Strategies of constructing stable and high sulfur loading cathodes based on the blade-casting technique. 2017 , 5, 12879-12888		30
1330	Time-efficient synthesis of MnO ₂ encapsulated Fe ₂ O ₃ ellipsoids for lithium ion battery applications. 2017 , 720, 300-308		19
1329	Electrochemical properties of BiFeO ₃ nanoparticles: Anode material for sodium-ion battery application. 2017 , 68, 165-171		18
1328	Comprehensive Insights into the Thermal Stability, Biodegradability, and Combustion Chemistry of Pyrrolidinium-Based Ionic Liquids. 2017 , 10, 3146-3159		37
1327	Synthesis of Core-Shell Particles of Nickel-Manganese-Cobalt Hydroxides in a Continuous Couette-Taylor Crystallizer. 2017 , 17, 3677-3686		15
1326	The Importance of Confined Sulfur Nanodomains and Adjoining Electron Conductive Pathways in Subreaction Regimes of Li-S Batteries. 2017 , 7, 1700074		75
1325	Co(OH) ₂ Nanosheets: A Superior Pseudocapacitive Electrode for High-Energy Supercapacitors. 2017 , 12, 2127-2133		30
1324	A comparative study on polypropylene separators coated with different inorganic materials for lithium-ion batteries. 2017 , 11, 346-352		21
1323	In situ diagnosis of the electrolyte solution in a laminate lithium ion battery by using ultrafine multi-probe Raman spectroscopy. 2017 , 359, 435-440		11
1322	Exploring metal organic frameworks for energy storage in batteries and supercapacitors. 2017 , 20, 191-209		290
1321	Effects of composition and temperature on energy storage properties of (Pb,La)(Zr,Sn,Ti)O ₃ antiferroelectric ceramics. 2017 , 43, 11428-11432		59
1320	Comparative Study of the Adhesion Properties of Ceramic Composite Separators Using a Surface and Interfacial Cutting Analysis System for Lithium-Ion Batteries. 2017 , 2, 2159-2164		10
1319	Iron fluoride microspheres by titanium dioxide surface modification as high capacity cathode of Li-ion batteries. 2017 , 719, 331-340		22

1318	Supercapacitance of nitrogen-sulfur-oxygen co-doped 3D hierarchical porous carbon in aqueous and organic electrolyte. 2017 , 359, 556-567	91
1317	Polypyrrole/carbon nanotube supercapacitors: Technological advances and challenges. 2017 , 352, 174-186	176
1316	Molecular Engineering with Organic Carbonyl Electrode Materials for Advanced Stationary and Redox Flow Rechargeable Batteries. 2017 , 29, 1607007	177
1315	High surface hierarchical carbon nanowalls synthesized by plasma deposition using an aromatic precursor. 2017 , 118, 578-587	16
1314	Electrochemical kinetics of Na ₂ Ti ₃ O ₇ as anode material for lithium-ion batteries. 2017 , 788, 203-209	17
1313	High performance sodium-ion hybrid capacitor based on Na ₂ Ti ₂ O ₄ (OH) ₂ nanostructures. 2017 , 353, 85-94	73
1312	Phase control of TiO ₂ nanobelts by microwave irradiation as anode materials with tunable Li-diffusion kinetics. 2017 , 96, 365-371	13
1311	Hybrid phosphorene/graphene nanocomposite as an anode material for Na-ion batteries: a first-principles study. 2017 , 50, 165501	25
1310	Optimization of porous polymer electrolyte for quasi-solid-state electrical double layer supercapacitor. 2017 , 235, 570-582	55
1309	A bifunctional ion-electron conducting interlayer for high energy density all-solid-state lithium-sulfur battery. 2017 , 351, 17-25	38
1308	Facile Synthesis of Hierarchical Porous Three-Dimensional Free-Standing MnCoO Cathodes for Long-Life Li-O Batteries. 2017 , 9, 12355-12365	49
1307	Layered lithium-rich oxide nanoparticles: low-temperature synthesis in mixed molten salt and excellent performance as cathode of lithium-ion battery. 2017 , 23, 1955-1966	3
1306	Facile synthesis of self-supported Mn ₃ O ₄ @C nanotube arrays constituting an ultrastable and high-rate anode for flexible Li-ion batteries. 2017 , 5, 8555-8565	35
1305	Synthesis of carbon coated Bi ₂ O ₃ nanocomposite anode for sodium-ion batteries. 2017 , 43, 8819-8823	25
1304	Bi ₂ MoO ₃ nanowire bundles fabricated from a self-assembled organic-inorganic precursor as cathodes for lithium-ion batteries. 2017 , 96, 419-424	7
1303	Is Geometric Frustration-Induced Disorder a Recipe for High Ionic Conductivity?. 2017 , 139, 5842-5848	38
1302	Mesoporous silica particles-embedded high performance separator for lithium-ion batteries. 2017 , 28, 6512-6519	3
1301	Investigations on the influence of Sm ³⁺ -ion on the nano TiO ₂ matrix as the anode material for lithium ion batteries. 2017 , 710, 205-215	11

1300	Ultrathin VO ₂ nanosheets self-assembled into 3D micro/nano-structured hierarchical porous sponge-like micro-bundles for long-life and high-rate Li-ion batteries. 2017 , 5, 8307-8316	60
1299	Azide-assisted hydrothermal synthesis of N-doped mesoporous carbon cloth for high-performance symmetric supercapacitor employing LiClO ₄ as electrolyte. 2017 , 98, 58-65	15
1298	Hybrid silica membranes with a polymer nanofiber skeleton and their application as lithium-ion battery separators. 2017 , 144, 178-184	33
1297	Singlet oxygen generation as a major cause for parasitic reactions during cycling of aprotic lithium-oxygen batteries. 2017 , 2,	243
1296	Hierarchical ordered macroporous/ultrathin mesoporous carbon architecture: A promising cathode scaffold with excellent rate performance for rechargeable Li-O ₂ batteries. 2017 , 118, 139-147	37
1295	Ultrathin dendrimer-graphene oxide composite film for stable cycling lithium-sulfur batteries. 2017 , 114, 3578-3583	78
1294	A molybdenum disulfide/reduced oxide-graphene nanoflakelet-on-sheet structure for lithium ion batteries. 2017 , 399, 237-244	13
1293	Metal-Organic Framework-Derived NiSb Alloy Embedded in Carbon Hollow Spheres as Superior Lithium-Ion Battery Anodes. 2017 , 9, 2516-2525	95
1292	Significance of ferroelectric polarization in poly (vinylidene difluoride) binder for high-rate Li-ion diffusion. 2017 , 32, 255-262	38
1291	Sulfur impregnated N, P co-doped hierarchical porous carbon as cathode for high performance Li-S batteries. 2017 , 341, 165-174	125
1290	Hybrid porous bamboo-like CNTs embedding ultrasmall LiCrTiO nanoparticles as high rate and long life anode materials for lithium ion batteries. 2017 , 53, 1033-1036	24
1289	High-rate and long-life performance of a truncated spinel cathode material with off-stoichiometric composition at elevated temperature. 2017 , 225, 198-206	27
1288	Three-Dimensional Interconnected Spherical Graphene Framework/SnS Nanocomposite for Anode Material with Superior Lithium Storage Performance: Complete Reversibility of LiS. 2017 , 9, 1407-1415	86
1287	A stable lithiated silicon-chalcogen battery via synergetic chemical coupling between silicon and selenium. 2017 , 8, 13888	43
1286	Mechanisms of Sodium Insertion/Extraction on the Surface of Defective Graphenes. 2017 , 9, 431-438	15
1285	Pseudocapacitance-Enhanced High-Rate Lithium Storage in Honeycomb-like Mn ₂ O ₃ Anodes. 2017 , 4, 565-569	16
1284	Advanced Organic Electrode Materials for Rechargeable Sodium-Ion Batteries. 2017 , 7, 1601792	327
1283	Hierarchical porous carbon modified with ionic surfactants as efficient sulfur hosts for the high-performance lithium-sulfur batteries. 2017 , 313, 404-414	77

1282	Li- and Mn-Rich Cathode Materials: Challenges to Commercialization. 2017 , 7, 1601284	266
1281	Efficient electricity storage with a battolyser, an integrated NiFe battery and electrolyser. 2017 , 10, 756-764	46
1280	Formation of Stable SolidElectrolyte Interphase Layer on Few-Layer Graphene-Coated Silicon Nanoparticles for High-Capacity Li-Ion Battery Anodes. 2017 , 121, 26155-26162	17
1279	Tailoring the chemistry of blend copolymers boosting the electrochemical performance of Si-based anodes for lithium ion batteries. 2017 , 5, 24159-24167	19
1278	Formation of N-Doped Carbon-Coated ZnO/ZnCo O /CuCo O Derived from a Polymetallic Metal-Organic Framework: Toward High-Rate and Long-Cycle-Life Lithium Storage. 2017 , 13, 1702150	46
1277	Robust 3D macroporous structures with SnS nanoparticles decorating nitrogen-doped carbon nanosheet networks for high performance sodium-ion batteries. 2017 , 5, 23460-23470	70
1276	All-solid-state lithium battery with high capacity enabled by a new way of composite cathode design. 2017 , 310, 44-49	6
1275	Magnesium-sulfur battery: its beginning and recent progress. 2017 , 7, 770-784	53
1274	Reducing the Charge Carrier Transport Barrier in Functionally Layer-Graded Electrodes. 2017 , 129, 15043-15048	5
1273	A new layered titanate Na ₂ Li ₂ Ti ₅ O ₁₂ as a high-performance intercalation anode for sodium-ion batteries. 2017 , 5, 22208-22215	13
1272	High Sulfur Content Material with Stable Cycling in Lithium-Sulfur Batteries. 2017 , 129, 15314-15318	12
1271	High Sulfur Content Material with Stable Cycling in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 15118-15122	16.4 39
1270	Hybrid LiMn ₂ O ₄ Radical polymer cathodes for pulse power delivery applications. 2017 , 255, 442-448	9
1269	Lithium Azide as an Electrolyte Additive for All-Solid-State Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 15368-15372	16.4 152
1268	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. 2017 , 27, 1704391	104
1267	Lithium Azide as an Electrolyte Additive for All-Solid-State LithiumSulfur Batteries. 2017 , 129, 15570-15574	12
1266	Group IVA Element (Si, Ge, Sn)-Based Alloying/Dealloying Anodes as Negative Electrodes for Full-Cell Lithium-Ion Batteries. 2017 , 13, 1702000	120
1265	Highly stable lithium ion capacitor enabled by hierarchical polyimide derived carbon microspheres combined with 3D current collectors. 2017 , 5, 23283-23291	66

1264	Comb-like solid polymer electrolyte based on polyethylene glycol-grafted sulfonated polyether ether ketone. 2017 , 255, 396-404	43
1263	Carbon-Based Nanomaterials Using Low-Temperature Plasmas for Energy Storage Application. 2017 , 739-805	
1262	Prediction of Charge-Discharge and Impedance Characteristics of Electric Double-Layer Capacitors Using Porous Electrode Theory. 2017 , 164, A2899-A2913	13
1261	Spherical graphene and Si nanoparticle composite particles for high-performance lithium batteries. 2017 , 34, 3195-3199	18
1260	High-performance stretchable electrodes prepared from elastomeric current collectors and binders. 2017 , 5, 21550-21559	11
1259	Reducing the Charge Carrier Transport Barrier in Functionally Layer-Graded Electrodes. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14847-14852	16.4 71
1258	Formation of Micron-Sized Nickel Cobalt Sulfide Solid Spheres with High Tap Density for Enhancing Pseudocapacitive Properties. 2017 , 5, 9945-9954	34
1257	Advances in Structure and Property Optimizations of Battery Electrode Materials. 2017 , 1, 522-547	163
1256	Flexible Aqueous Li-Ion Battery with High Energy and Power Densities. 2017 , 29, 1701972	121
1255	Flexible, High-Wettability and Fire-Resistant Separators Based on Hydroxyapatite Nanowires for Advanced Lithium-Ion Batteries. 2017 , 29, 1703548	192
1254	Electrochemical Properties of Sulfurized-Polyacrylonitrile Cathode for Lithium-Sulfur Batteries: Effect of Polyacrylic Acid Binder and Fluoroethylene Carbonate Additive. 2017 , 8, 5331-5337	79
1253	The effect of cation mixing controlled by thermal treatment duration on the electrochemical stability of lithium transition-metal oxides. 2017 , 19, 29886-29894	50
1252	ZnO Nanomembrane/Expanded Graphite Composite Synthesized by Atomic Layer Deposition as Binder-Free Anode for Lithium Ion Batteries. 2017 , 9, 38522-38529	44
1251	Scalable fabrication of core-shell structured Li ₄ Ti ₅ O ₁₂ /PPy particles embedded in N-doped graphene networks as advanced anode for lithium-ion batteries. 2017 , 369, 42-49	26
1250	Recent approaches to improving lithium metal electrodes. 2017 , 6, 70-76	5
1249	ZnAl _x Co _{2-2x} O ₄ Spinel as Cathode Materials for Non-Aqueous Zn Batteries with an Open Circuit Voltage of 2 V. 2017 , 29, 9351-9359	67
1248	TiO ₂ -rGO nanocomposite hollow spheres: large scale synthesis and application as an efficient anode material for lithium-ion batteries. 2017 , 5, 23853-23862	48
1247	Smart Electrochemical Energy Storage Devices with Self-Protection and Self-Adaptation Abilities. 2017 , 29, 1703040	57

1246	Synthesis and electrochemical performances of $\text{LiV}_3\text{O}_8/\text{poly}(3,4\text{-ethylenedioxythiophene})$ composites as cathode materials for rechargeable lithium batteries. 2017 , 310, 30-37	15
1245	Macroscopic-Scale Three-Dimensional Carbon Nanofiber Architectures for Electrochemical Energy Storage Devices. 2017 , 7, 1700826	109
1244	Facile Fabrication of $\text{ZnFe}_2\text{O}_4\text{-MWCNTs}$ Composite as an Anode Material for Rechargeable Lithium-Ion Batteries. 2017 , 2, 7194-7201	8
1243	Differential capacitance of an electric double layer with asymmetric solvent-mediated interactions: mean-field theory and Monte Carlo simulations. 2017 , 19, 23971-23981	17
1242	Charge storage at the nanoscale: understanding the trends from the molecular scale perspective. 2017 , 5, 21049-21076	39
1241	A sulfonimide-based alternating copolymer as a single-ion polymer electrolyte for high-performance lithium-ion batteries. 2017 , 5, 22519-22526	53
1240	An enhanced electrochemical and cycling properties of novel boronic ionic liquid based ternary gel polymer electrolytes for rechargeable Li/LiCoO cells. 2017 , 7, 11103	33
1239	Enhancing electrochemical performance of LiFePO_4 by vacuum-infiltration into expanded graphite for aqueous Li-ion capacitors. 2017 , 253, 413-421	9
1238	Structure and polarization near the Li ion in ethylene and propylene carbonates. 2017 , 147, 161710	19
1237	High-Energy-Density Aqueous Magnesium-Ion Battery Based on a Carbon-Coated FeVO Anode and a Mg-OMS-1 Cathode. 2017 , 23, 17118-17126	55
1236	Pseudocapacitance of Mesoporous Spinel-Type MCoO ($\text{M} = \text{Co, Zn, and Ni}$) Rods Fabricated by a Facile Solvothermal Route. 2017 , 2, 6003-6013	61
1235	Nanofiber/ ZrO_2 -based mixed matrix separator for high safety/high-rate lithium-ion batteries. 2017 , 686, 134-139	14
1234	Nitrogen-doped carbon paper with 3D porous structure as a flexible free-standing anode for lithium-ion batteries. 2017 , 7, 7769	26
1233	Importance of synergistic role of cobalt and aluminum on a greatly improved electrochemical performance of Li-rich oxyfluoride spinel at elevated-temperature. 2017 , 728, 612-622	6
1232	Potassium-ion intercalation in graphite within a potassium-ion battery examined using in situ X-ray diffraction. 2017 , 32, S43-S48	26
1231	Novel silicon nanoparticles with nitrogen-doped carbon shell dispersed in nitrogen-doped graphene and CNTs hybrid electrode for lithium ion battery. 2017 , 425, 742-749	31
1230	Graphite Nanoplates Firmly Anchored with Well-dispersed Porous $\text{Zn}_3\text{V}_2\text{O}_8$ Nanospheres: Rational Fabrication and Enhanced Lithium Storage Capability. 2017 , 248, 140-149	24
1229	Improving the stability of $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ by AlPO_4 nanocoating for lithium-ion batteries. 2017 , 60, 1230-1235	37

1228	A candidate strategy to achieve high initial Coulombic efficiency and long cycle life of Si anode materials: exterior carbon coating on porous Si microparticles. 2017 , 5, 299-304	17
1227	Recent Progress in the Applications of Vanadium-Based Oxides on Energy Storage: from Low-Dimensional Nanomaterials Synthesis to 3D Micro/Nano-Structures and Free-Standing Electrodes Fabrication. 2017 , 7, 1700547	117
1226	Greatly improved cyclability for Li-ion batteries with a PEDOT:PSS coated nanostructured Ge anode. 2017 , 8, 214-218	10
1225	Porous Carbon Nanofibers Encapsulated with Peapod-Like Hematite Nanoparticles for High-Rate and Long-Life Battery Anodes. 2017 , 13, 1701561	46
1224	Water-Soluble Sericin Protein Enabling Stable Solid-Electrolyte Interphase for Fast Charging High Voltage Battery Electrode. 2017 , 29, 1701828	114
1223	Design of Efficient Bifunctional Oxygen Reduction/Evolution Electrocatalyst: Recent Advances and Perspectives. 2017 , 7, 1700544	407
1222	Shaddock wadding created activated carbon as high sulfur content encapsulator for lithium-sulfur batteries. 2017 , 724, 575-580	11
1221	In-situ synthesized ZnFe ₂ O ₄ firmly anchored to the surface of MWCNTs as a long-life anode material with high lithium storage performance. 2017 , 425, 978-987	26
1220	An acid-treated reduced graphene oxide/Mn ₃ O ₄ nanorod nanocomposite as an enhanced anode material for lithium ion batteries. 2017 , 7, 37502-37507	14
1219	Structural Dependence of the Sulfur Reduction Mechanism in Carbon-Based Cathodes for Lithium-Sulfur Batteries. 2017 , 121, 18369-18377	16
1218	One-Pot Synthesis of Biomass-Based Hierarchical Porous Carbons with a Large Porosity Development. 2017 , 29, 6900-6907	68
1217	Controllable preparation of highly uniform CuCo ₂ S ₄ materials as battery electrode for energy storage with enhanced electrochemical performances. 2017 , 249, 64-71	48
1216	Nanostructured Metal Chalcogenides for Energy Storage and Electrocatalysis. 2017 , 27, 1702317	234
1215	A Novel Phase-Transformation Activation Process toward Ni-Mn-O Nanoprism Arrays for 2.4 V Ultrahigh-Voltage Aqueous Supercapacitors. 2017 , 29, 1703463	202
1214	An Insoluble Benzoquinone-Based Organic Cathode for Use in Rechargeable Lithium-Ion Batteries. 2017 , 129, 12735-12739	27
1213	Spinel: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. 2017 , 117, 10121-10211	789
1212	Practical Li-Ion Battery Assembly with One-Dimensional Active Materials. 2017 , 8, 4031-4037	15
1211	Overview of Lithium-Ion Grid-Scale Energy Storage Systems. 2017 , 4, 197-208	8

1210	Improved electrochemical performances of li- and Mn-Rich layered oxides 0.4Li ₄ /3Mn ₂ /3O ₂ •0.6LiNi ₁ /3Co ₁ /3Mn ₁ /3O ₂ cathode material by Co ₃ O ₄ coating. 2017 , 310, 62-70	15
1209	Robust Pitaya-Structured Pyrite as High Energy Density Cathode for High-Rate Lithium Batteries. 2017 , 11, 9033-9040	200
1208	Evaluation of Current, Future, and Beyond Li-Ion Batteries for the Electrification of Light Commercial Vehicles: Challenges and Opportunities. 2017 , 164, E3635-E3646	31
1207	Controlled synthesis of hierarchically-structured MnCo ₂ O ₄ and its potential as a high performance anode material. 2017 , 60, 1180-1186	7
1206	Morphochemical imprinting of melamine cyanurate mesocrystals in glucose-derived carbon for high performance lithium ion batteries. 2017 , 5, 20635-20642	23
1205	NaMnO ₂ @C yolk-shell nanorods as an ultrahigh electrochemical performance anode for lithium ion batteries. 2017 , 5, 18509-18517	18
1204	An Insoluble Benzoquinone-Based Organic Cathode for Use in Rechargeable Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 12561-12565	16.4 117
1203	An in situ iodine-doped graphene/silicon composite paper as a highly conductive and self-supporting electrode for lithium-ion batteries. 2017 , 7, 38639-38646	9
1202	The nanoscale circuitry of battery electrodes. 2017 , 358,	184
1201	Revisiting on the effect and role of TiO ₂ layer thickness on SnO ₂ for enhanced electrochemical performance for lithium-ion batteries. 2017 , 258, 1140-1148	19
1200	Decomposition of Ionic Liquids at Lithium Interfaces. 1.Ab InitioMolecular Dynamics Simulations. 2017 , 121, 28214-28234	54
1199	A facile in situ approach to ion gel based polymer electrolytes for flexible lithium batteries. 2017 , 7, 54391-54398	16.4 117
1198	Advanced Sulfur-Silicon Full Cell Architecture for Lithium Ion Batteries. 2017 , 7, 17264	14
1197	Synergistic Effect of Partially Fluorinated Ether and Fluoroethylene Carbonate for High-Voltage Lithium-Ion Batteries with Rapid Chargeability and Dischargeability. 2017 , 9, 44161-44172	28
1196	The Solid-Electrolyte Interphase Formation Reactions of Ethylene Sulfate and Its Synergistic Chemistry with Prop-1-ene-1,3-Sultone in Lithium-Ion Cells. 2017 , 164, A3445-A3453	19
1195	Synthesis of lithium metal silicates for lithium ion batteries. 2017 , 28, 2195-2206	10
1194	A Simple Prelithiation Strategy To Build a High-Rate and Long-Life Lithium-Ion Battery with Improved Low-Temperature Performance. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 16606-16610	16.4 117 50
1193	Improved performance through tight coupling of redox cycles of sulfur and 2,6-polyanthraquinone in lithium-sulfur batteries. 2017 , 5, 24103-24109	4

1192	A Simple Prelithiation Strategy To Build a High-Rate and Long-Life Lithium-Ion Battery with Improved Low-Temperature Performance. 2017 , 129, 16833-16837	8
1191	Multiscale characterization of a lithium/sulfur battery by coupling operando X-ray tomography and spatially-resolved diffraction. 2017 , 7, 2755	40
1190	Construction of S@TiO ₂ @r-GO Composites for High-Performance Lithium-Sulfur Batteries. 2017 , 2017, 3248-3252	11
1189	Fabrication of Metal Molybdate Micro/Nanomaterials for Electrochemical Energy Storage. 2017 , 13, 1700917	87
1188	Fluorine-doped SnO ₂ nanoparticles anchored on reduced graphene oxide as a high-performance lithium ion battery anode. 2017 , 362, 20-26	77
1187	Silicene Flowers: A Dual Stabilized Silicon Building Block for High-Performance Lithium Battery Anodes. 2017 , 11, 7476-7484	102
1186	ZnO nanoparticles anchored on nickel foam with graphene as morphology-controlling agent for high-performance lithium-ion battery anodes. 2017 , 47, 969-978	4
1185	An Ideal Electrode Material, 3D Surface-Microporous Graphene for Supercapacitors with Ultrahigh Areal Capacitance. 2017 , 9, 24655-24661	65
1184	Review of nanostructured current collectors in lithium-sulfur batteries. 2017 , 10, 4027-4054	74
1183	Preparation of One-dimensional Bamboo-like Cu ₂ -xS@C Nanorods with Enhanced Lithium Storage Properties. 2017 , 247, 271-280	14
1182	Anion Hosting Cathodes in Dual-Ion Batteries. 2017 , 2, 1762-1770	181
1181	Enhanced electrochemical performance of straw-based porous carbon fibers for supercapacitor. 2017 , 21, 3449-3458	13
1180	Simultaneous surface modification method for 0.4Li ₂ MnO ₃ -0.6LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode material for lithium ion batteries: Acid treatment and LiCoPO ₄ coating. 2017 , 10, 4210-4220	25
1179	Cellulose Aerogel Membranes with a Tunable Nanoporous Network as a Matrix of Gel Polymer Electrolytes for Safer Lithium-Ion Batteries. 2017 , 9, 24591-24599	72
1178	Si-FeSi ₂ /C nanocomposite anode materials produced by two-stage high-energy mechanical milling. 2017 , 23, 610-617	9
1177	A simple approach for preparation of porous polybenzimidazole membranes as a promising separator for lithium ion batteries. 2017 , 5, 15087-15095	27
1176	Chemical Bonding and Physical Trapping of Sulfur in Mesoporous Magn γ Ti ₄ O ₇ Microspheres for High-Performance Li-S Battery. 2017 , 7, 1601616	102
1175	KOH-assisted microwave post-treatment of activated carbon for efficient symmetrical double-layer capacitors. 2017 , 41, 728-735	19

1174	Parametric stochastic 3D model for the microstructure of anodes in lithium-ion power cells. 2017 , 126, 453-467	19
1173	Electric double layer capacitors employing nitrogen and sulfur co-doped, hierarchically porous graphene electrodes with synergistically enhanced performance. 2017 , 337, 65-72	37
1172	A Comprehensive Approach toward Stable Lithium-Sulfur Batteries with High Volumetric Energy Density. 2017 , 7, 1601630	240
1171	Design of Flexible and Self-Standing Electrodes for Li-Ion Batteries. 2017 , 35, 41-47	8
1170	An efficient way to achieve high ionic conductivity and electrochemical stability of safer nonaflate anion-based ionic liquid gel polymer electrolytes (ILGPEs) for rechargeable lithium ion batteries. 2017 , 21, 1145-1155	29
1169	Effect of drying temperature on a thin PVDF-HFP/PET composite nonwoven separator for lithium-ion batteries. 2017 , 23, 929-935	10
1168	An investigation of the energy storage properties of a 2D HfMoO_3 -SWCNTs composite films. 2017 , 4, 015005	15
1167	KOH-activated carbon aerogels derived from sodium carboxymethyl cellulose for high-performance supercapacitors and dye adsorption. 2017 , 310, 300-306	158
1166	A Hydrogen-Evolving Hybrid-Electrolyte Battery with Electrochemical/Photoelectrochemical Charging from Water Oxidation. 2017 , 10, 483-488	19
1165	Biomass-derived interconnected carbon nanoring electrochemical capacitors with high performance in both strongly acidic and alkaline electrolytes. 2017 , 5, 181-188	105
1164	Pretreatment of Graphite Anodes with Lithium Sulfate to Improve the Cycle Performance of Lithium-Ion Batteries. 2017 , 5, 549-556	8
1163	Probing Mechanisms for Inverse Correlation between Rate Performance and Capacity in K-O Batteries. 2017 , 9, 4301-4308	45
1162	High-Performance Supercapacitor Based on Polyaniline/Poly(vinylidene fluoride) Composite with KOH. 2017 , 5, 588-598	8
1161	Superior lithium storage properties of $\text{Fe}_2(\text{MoO}_4)_3/\text{MWCNT}$ composite with a nanoparticle (0D)-nanorod (1D) hetero-dimensional morphology. 2017 , 307, 239-248	21
1160	High performance lithium-manganese-rich cathode material with reduced impurities. 2017 , 31, 247-257	18
1159	Marine microalgae-derived porous $\text{ZnMn}_2\text{O}_4/\text{C}$ microspheres and performance evaluation as Li-ion battery Anode by using different binders. 2017 , 308, 1200-1208	28
1158	Interfacial Architectures Derived by Lithium Difluoro(bisoxalato) Phosphate for Lithium-Rich Cathodes with Superior Cycling Stability and Rate Capability. 2017 , 4, 56-65	34
1157	Confined growth of small ZnO nanoparticles in a nitrogen-rich carbon framework: Advanced anodes for long-life Li-ion batteries. 2017 , 113, 46-54	50

1156	Electrochemical properties of sulfurized poly-acrylonitrile (SPAN) cathode containing carbon fiber current collectors. 2017 , 326, 443-449	6
1155	Biredox ionic liquids with solid-like redox density in the liquid state for high-energy supercapacitors. 2017 , 16, 446-453	233
1154	From ZnSn(OH) ₆ to SnS ₂ : Topotactic transformation synthesis of SnS ₂ hierarchical microcubes with superior Li-ion storage performance. 2017 , 96, 28-34	8
1153	Free standing three-dimensional nitrogen-doped carbon nanowire array for high-performance supercapacitors. 2017 , 308, 222-228	42
1152	Redox-electrodes for selective electrochemical separations. 2017 , 244, 6-20	93
1151	Synthesis of Nitrogen-Rich Nanotubes with Internal Compartments having Open Mesoporous Channels and Utilization to Hybrid Full-Cell Capacitors Enabling High Energy and Power Densities over Robust Cycle Life. 2017 , 7, 1601355	50
1150	Theoretically Evaluating the Electric Property of Electric Double Layer at Electrode/Electrolyte Interfaces with Heterogeneous Dielectric Properties. 2017 ,	
1149	Theoretically assessing electric double layer with heterogeneous dielectric properties by considering the steric effect of ions*. 2017 ,	
1148	Preparation of Advanced CuO Nanowires/Functionalized Graphene Composite Anode Material for Lithium Ion Batteries. 2017 , 10,	18
1147	A High Performance Lithium-Ion Capacitor with Both Electrodes Prepared from Sri Lanka Graphite Ore. 2017 , 10,	13
1146	The Influence of Anion Shape on the Electrical Double Layer Microstructure and Capacitance of Ionic Liquids-Based Supercapacitors by Molecular Simulations. 2017 , 22,	10
1145	Orange-Peel-Derived Carbon: Designing Sustainable and High-Performance Supercapacitor Electrodes. 2017 , 3, 25	30
1144	Overcurrent Abuse of Primary Prismatic Zinc-Air Battery Cells Studying Air Supply Effects on Performance and Safety Shut-Down. 2017 , 3, 1	28
1143	Zeolitic Type Templated Porous Carbon Materials. 2017 , 89-108	
1142	Sufficient Utilization of Zirconium Ions to Improve the Structure and Surface properties of Nickel-Rich Cathode Materials for Lithium-Ion Batteries. 2018 , 11, 1639-1648	83
1141	Promises, Challenges, and Recent Progress of Inorganic Solid-State Electrolytes for All-Solid-State Lithium Batteries. 2018 , 30, e1705702	506
1140	Hierarchical Fabric Decorated with Carbon Nanowire/Metal Oxide Nanocomposites for 1.6 V Wearable Aqueous Supercapacitors. 2018 , 8, 1703454	112
1139	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5301-5305	16.4 402

1138	Fabrication of spherical biochar by a two-step thermal process from waste potato peel. 2018 , 626, 478-485	28
1137	Self-templating synthesis of silicon nanorods from natural sepiolite for high-performance lithium-ion battery anodes. 2018 , 6, 6356-6362	51
1136	Encapsulating Various Sulfur Allotropes within Graphene Nanocages for Long-Lasting Lithium Storage. 2018 , 28, 1706443	54
1135	A novel composite for energy storage devices: core-shell MnO ₂ /polyindole nanotubes supported on reduced graphene oxides. 2018 , 29, 5548-5560	8
1134	Li Si C anode material with amorphous core /nanocomposite shell structure. 2018 , 7, 122-128	
1133	Graphene hybridization for energy storage applications. 2018 , 47, 3189-3216	232
1132	Co ₃ O ₄ and its composites for high-performance Li-ion batteries. 2018 , 343, 427-446	71
1131	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes. 2018 , 130, 5399-5403	97
1130	Design and Synthesis of 3D Potassium-Ion Pre-Intercalated Graphene for Supercapacitors. 2018 , 57, 3610-3616	11
1129	Coaxial MnO ₂ Nanoshell/CNFs Composite Film Anode for High-Performance Lithium-Ion Batteries. 2018 , 165, A487-A492	11
1128	A high energy and power sodium-ion hybrid capacitor based on nitrogen-doped hollow carbon nanowires anode. 2018 , 382, 116-121	30
1127	Influence of Atmosphere on Electrochemical Performance of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Electrodes for Li-Ion Batteries. 2018 , 301, 012039	6
1126	Facile Synthesis of Porous Coralline LiVO ₃ as High-Performance Li-Ion Battery Cathodes. 2018 , 3, 592-598	3
1125	Polyethylene oxide film coating enhances lithium cycling efficiency of an anode-free lithium-metal battery. 2018 , 10, 6125-6138	126
1124	Molecular Engineered Safer Organic Battery through the Incorporation of Flame Retarding Organophosphonate Moiety. 2018 , 10, 10096-10101	4
1123	C@MoS ₂ @PPy sandwich-like nanotube arrays as an ultrastable and high-rate flexible anode for Li/Na-ion batteries. 2018 , 14, 118-128	43
1122	CoP ₃ @PPy microcubes as anode for lithium-ion batteries with improved cycling and rate performance. 2018 , 347, 455-461	39
1121	A Rechargeable Hydrogen Battery. 2018 , 9, 2492-2497	13

1120	A facile one-step hydrothermal approach to synthesize hierarchical core-shell NiFeO@NiFeO nanosheet arrays on Ni foam with large specific capacitance for supercapacitors.. 2018 , 8, 15222-15228	24
1119	Effect of Long-Range and Local Order of Exfoliated and Proton-Beam-irradiated WSe ₂ Nanosheets for Sodium Ion Battery Application. 2018 , 39, 665-670	6
1118	Elektrochemische Oxidation von Lithiumcarbonat generiert Singulett-Sauerstoff. 2018 , 130, 5627-5631	11
1117	Dissolution of Complex Metal Oxides from First-Principles and Thermodynamics: Cation Removal from the (001) Surface of Li(NiMnCo)O. 2018 , 52, 5792-5802	34
1116	Ultrahigh energy density battery-type asymmetric supercapacitors: NiMoO ₄ nanorod-decorated graphene and graphene/Fe ₂ O ₃ quantum dots. 2018 , 11, 4744-4758	63
1115	An ultra-high vacuum electrochemical/mass spectrometry study of anodic decomposition of a protic ionic liquid. 2018 , 90, 111-115	1
1114	Nature inspired cathodes using high-density carbon papers with an eddy current effect for high-rate performance lithium-air batteries. 2018 , 6, 9550-9560	15
1113	An All Solid-State Zinc-Air Battery with a Corrosion-Resistant Air Electrode. 2018 , 5, 1817-1821	14
1112	Synergistic effects of ion doping and surface-modifying for lithium transition-metal oxide: Synthesis and characterization of La ₂ O ₃ -modified LiNi ^{1/3} Co ^{1/3} Mn ^{1/3} O ₂ . 2018 , 272, 11-21	46
1111	Fabrication of three-dimensional carbon coating for SnO ₂ /TiO ₂ hybrid anode material of lithium-ion batteries. 2018 , 282, 38-47	36
1110	LiBH ₄ as solid electrolyte for Li-ion batteries with Bi ₂ Te ₃ nanostructured anode. 2018 , 43, 21709-21714	13
1109	Unsymmetrical fluorinated malonateborate as an amphoteric additive for high-energy-density lithium-ion batteries. 2018 , 11, 1552-1562	96
1108	Polysulfide Binding to Several Nanoscale Magnetic Phases Synthesized in Carbon for Long-Life Lithium-Sulfur Battery Cathodes. 2018 , 11, 1838-1848	14
1107	Low temperature preparation of pore structure controllable graphene for high volumetric performance supercapacitors. 2018 , 273, 181-190	13
1106	High energy density hybrid lithium-ion capacitor enabled by Co ₃ ZnC@N-doped carbon nanopolyhedra anode and microporous carbon cathode. 2018 , 14, 246-252	88
1105	A general strategy for the synthesis of two-dimensional holey nanosheets as cathodes for superior energy storage. 2018 , 6, 8374-8381	21
1104	A self-cooling and flame-retardant electrolyte for safer lithium ion batteries. 2018 , 2, 1323-1331	24
1103	Advanced and safer lithium-ion battery based on sustainable electrodes. 2018 , 379, 53-59	18

1102	Stretchable and Tailorable Triboelectric Nanogenerator Constructed by Nanofibrous Membrane for Energy Harvesting and Self-Powered Biomechanical Monitoring. 2018 , 3, 1700370	39
1101	Transition Metal Sulfides Based on Graphene for Electrochemical Energy Storage. 2018 , 8, 1703259	479
1100	Boron and nitrogen dual-doped carbon as a novel cathode for high performance hybrid ion capacitors. 2018 , 29, 624-628	23
1099	Recent Advances in Layered Ti C T MXene for Electrochemical Energy Storage. 2018 , 14, e1703419	478
1098	Green Synthesis of Hierarchically Porous Carbon Nanotubes as Advanced Materials for High-Efficient Energy Storage. 2018 , 14, e1703950	71
1097	The investigation of lithium doping perovskite oxide LiMnO ₃ as possible LIB anode material. 2018 , 44, 8223-8231	12
1096	Fabrication and characterization of monodispersed Mn _{0.8} Ni _{0.2} Co ₂ O ₄ mesoporous microspheres for supercapacitor application. 2018 , 44, 8864-8869	7
1095	Design of high-performance cathode materials with single-phase pathway for sodium ion batteries: A study on P ₂ -Na _x (Li _y Mn _{1-y})O ₂ compounds. 2018 , 381, 171-180	44
1094	Elektrolytadditive für Lithiummetallanoden und wiederaufladbare Lithiummetallbatterien: Fortschritte und Perspektiven. 2018 , 130, 15220-15246	41
1093	Stochastic model for the 3D microstructure of pristine and cyclically aged cathodes in Li-ion batteries. 2018 , 26, 035005	15
1092	Au-doped Li _{1.2} Ni _{0.7} Co _{0.1} Mn _{0.2} O ₂ electrospun nanofibers: synthesis and enhanced capacity retention performance for lithium-ion batteries. 2018 , 8, 4112-4118	9
1091	V ₂ O ₅ -Based nanomaterials: synthesis and their applications. 2018 , 8, 4014-4031	83
1090	Electrochemical Activity of Hematite Phase in Full-Cell Li-ion Assemblies. 2018 , 8, 1702841	15
1089	Molecular Design of Phenanthrenequinone Derivatives as Organic Cathode Materials. 2018 , 11, 1215-1222	14
1088	Deciphering the Ethylene Carbonate-Propylene Carbonate Mystery in Li-Ion Batteries. 2018 , 51, 282-289	145
1087	Functionalization of graphene oxide with naphthalenediimide diamine for high-performance cathode materials of lithium-ion batteries. 2018 , 2, 803-810	14
1086	Nickel phosphide decorated Pt nanocatalyst with enhanced electrocatalytic properties toward common small organic molecule oxidation and hydrogen evolution reaction: A strengthened composite supporting effect. 2018 , 43, 3203-3215	7
1085	Freestanding nano crystalline Tin@carbon anode electrodes for high capacity Li-ion batteries. 2018 , 446, 122-130	13

1084	1D porous MnO@N-doped carbon nanotubes with improved Li-storage properties as advanced anode material for lithium-ion batteries. 2018 , 264, 292-300	127
1083	Three-dimensional design and fabrication of reduced graphene oxide/polyaniline composite hydrogel electrodes for high performance electrochemical supercapacitors. 2018 , 29, 175402	41
1082	Electrolyte Additives for Lithium Metal Anodes and Rechargeable Lithium Metal Batteries: Progress and Perspectives. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 15002-15027	16.4 359
1081	Minimization of Ion-Solvent Clusters in Gel Electrolytes Containing Graphene Oxide Quantum Dots for Lithium-Ion Batteries. 2018 , 14, e1703571	34
1080	Hybrid functional microfibers for textile electronics and biosensors. 2018 , 39, 011009	2
1079	In situ sulfur loading in graphene-like nano-cell by template-free method for Li-S batteries. 2018 , 10, 3877-3883	16
1078	Thermal-Responsive Polymers for Enhancing Safety of Electrochemical Storage Devices. 2018 , 30, e1704347	54
1077	Trapping Lithium into Hollow Silica Microspheres with a Carbon Nanotube Core for Dendrite-Free Lithium Metal Anodes. 2018 , 18, 297-301	111
1076	A zwitterionic block-copolymer, based on glutamic acid and lysine, reduces the biofouling of UF and RO membranes. 2018 , 549, 507-514	28
1075	Issues and Challenges Facing Flexible Lithium-Ion Batteries for Practical Application. 2018 , 14, e1702989	99
1074	Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode. 2018 , 130, 742-745	22
1073	Assembly and Self-Assembly of Nanomembrane Materials-From 2D to 3D. 2018 , 14, e1703665	40
1072	Pyrolytic synthesis of MoO ₃ nanoplates within foam-like carbon nanoflakes for enhanced lithium ion storage. 2018 , 514, 686-693	19
1071	A Flexible Solid Electrolyte Interphase Layer for Long-Life Lithium Metal Anodes. 2018 , 130, 1521-1525	58
1070	Exploiting a hybrid lithium ion power source with a high energy density over 30 Wh/kg. 2018 , 7, 51-57	18
1069	Reticular VO ₂ ·0.6H ₂ O Xerogel as Cathode for Rechargeable Potassium Ion Batteries. 2018 , 10, 642-650	52
1068	In situ electrochemical synchrotron radiation for Li-ion batteries. 2018 , 25, 151-165	9
1067	Optimization of the Pore Structure of Biomass-Based Carbons in Relation to Their Use for CO ₂ Capture under Low- and High-Pressure Regimes. 2018 , 10, 1623-1633	93

1066	Aqueous-Processable Redox-Active Supramolecular Polymer Binders for Advanced Lithium/Sulfur Cells. 2018 , 30, 685-691	33
1065	A Dual-Insertion Type Sodium-Ion Full Cell Based on High-Quality Ternary-Metal Prussian Blue Analogs. 2018 , 8, 1702856	98
1064	Fundamental Understanding of Nanostructured Si Electrodes: Preparation and Characterization. 2018 , 4, 319-337	17
1063	High Tap Density Li ₄ Ti ₅ O ₁₂ Anode Materials Synthesized for High Rate Performance Lithium Ion Batteries. 2018 , 3, 348-353	4
1062	Bismuth oxide nanoflake@carbon film: A free-standing battery-type electrode for aqueous sodium ion hybrid supercapacitors. 2018 , 29, 629-632	16
1061	Nano-TiO ₂ decorated carbon coating on the separator to physically and chemically suppress the shuttle effect for lithium-sulfur battery. 2018 , 378, 537-545	119
1060	Rational Design Oxygen and Sulfur Dual-Doped 3D Hierarchical Porous Carbons for High-Performance Lithium-Sulfur Batteries. 2018 , 165, A31-A39	5
1059	Bilayered nanoporous graphene/molybdenum oxide for high rate lithium ion batteries. 2018 , 45, 273-279	45
1058	Na/Vacancy Disordered P2-NaCoTiO: High-Energy and High-Power Cathode Materials for Sodium Ion Batteries. 2018 , 10, 3562-3570	63
1057	A New Porous Polymer for Highly Efficient Capacitive Energy Storage. 2018 , 6, 202-209	54
1056	Capacitive effects in Li _{1-x} Ni _{0.3} Co _{0.3} Mn _{0.3} O ₂ /C Li-ion cells. 2018 , 18, 72-83	4
1055	Piperidinium ionic liquids as electrolyte solvents for sustained high temperature supercapacitor operation. 2018 , 54, 5590-5593	29
1054	Double Interlayers to Improve Cycle Performance for LiS Batteries by Using Multiwall Carbon Nanotubes/Reduced Graphene Oxide. 2018 , 57, 6741-6745	8
1053	High-Performance Hard Carbon Anode: Tunable Local Structures and Sodium Storage Mechanism. 2018 , 1, 2295-2305	41
1052	An acid-pasting strategy towards PTCDA based high performance lithium/sodium ion battery cathodes. 2018 , 276, 207-213	15
1051	Intermetallic Ni ₃ Sn ₄ -based graphene@carbon hybrid composites for lithium-ion batteries. 2018 , 42, 2961-2970	5
1050	Surface Zn doped LiMnO for an improved high temperature performance. 2018 , 54, 5326-5329	31
1049	Synchronous synthesis of Kirkendall effect induced hollow FeSe/C nanospheres as anodes for high performance sodium ion batteries. 2018 , 54, 5704-5707	55

1048	Enhanced kinetics of polysulfide redox reactions on MoC/CNT in lithium-sulfur batteries. 2018 , 29, 295401	25
1047	Electrochemical Oxidation of Lithium Carbonate Generates Singlet Oxygen. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5529-5533	16.4 137
1046	High-performance of sodium carboxylate-derived materials for electrochemical energy storage. 2018 , 61, 707-718	18
1045	Effect of lithium content on electrochemical property of Li _{1+x} (Mn _{0.6} Ni _{0.2} Co _{0.2}) _{1-x} O ₂ (0 ≤ x ≤ 0.3) composite cathode materials for rechargeable lithium-ion batteries. 2018 , 28, 145-150	7
1044	Lithium Bond Impact on Lithium Polysulfide Adsorption with Functionalized Carbon Fiber Paper Interlayers for Lithium-Sulfur Batteries. 2018 , 122, 7033-7040	39
1043	Double-Confined Sulfur Inside Compressed Nickel Foam and Pencil-Plating Graphite for Lithium-Sulfur Battery. 2018 , 57, 4880-4886	1
1042	Effect of Lewis Acids on Graphite-Electrode Properties in EC-Based Electrolyte Solutions with Organophosphorus Compounds. 2018 , 165, A680-A687	5
1041	Thermal Lithiated-TiO ₂ : A Robust and Electron-Conducting Protection Layer for Li-Si Alloy Anode. 2018 , 10, 12750-12758	29
1040	Influence of the Nature of the Alkali Metal Cations on the Electrical Double-Layer Capacitance of Model Pt(111) and Au(111) Electrodes. 2018 , 9, 1927-1930	46
1039	Li ₂ O-B ₂ O ₃ -GeO ₂ glass as a high performance anode material for rechargeable lithium-ion batteries. 2018 , 6, 6860-6866	13
1038	Nanocellulose: a promising nanomaterial for advanced electrochemical energy storage. 2018 , 47, 2837-2872	401
1037	Semimetallic vanadium molybdenum sulfide for high-performance battery electrodes. 2018 , 6, 9411-9419	60
1036	Fundamental Insight into Zr Modification of Li- and Mn-Rich Cathodes: Combined Transmission Electron Microscopy and Electrochemical Impedance Spectroscopy Study. 2018 , 30, 2566-2573	84
1035	Correlating Li-Solvation Structure and its Electrochemical Reaction Kinetics with Sulfur in Subnano Confinement. 2018 , 9, 1739-1745	16
1034	Improvement of energy storage density with trace amounts of ZrO ₂ additives fabricated by wet-chemical method. 2018 , 747, 495-504	16
1033	Microporous carbons derived from organosilica-containing carbon dots with outstanding supercapacitance. 2018 , 47, 5961-5967	13
1032	A Flexible and Ultrahigh Energy Density Capacitor via Enhancing Surface/Interface of Carbon Cloth Supported Colloids. 2018 , 8, 1703329	51
1031	Enhanced electrochemical performance of SnS nanoparticles/CNTs composite as anode material for sodium-ion battery. 2018 , 29, 187-190	43

1030	N-doped yolk-shell hollow carbon sphere wrapped with graphene as sulfur host for high-performance lithium-sulfur batteries. 2018 , 427, 823-829	43
1029	Self-templating thermolysis synthesis of Cu ₂ S@M (M = C, TiO ₂ , MoS ₂) hollow spheres and their application in rechargeable lithium batteries. 2018 , 11, 831-844	23
1028	Nitrogen and sulfur dual-doped carbon films as flexible free-standing anodes for Li-ion and Na-ion batteries. 2018 , 126, 9-16	98
1027	Graphite modified AlNbO ₄ with enhanced lithium ion storage behaviors and its electrochemical mechanism. 2018 , 97, 405-410	10
1026	MnS decorated N/S codoped 3D graphene which used as cathode of the lithium-sulfur battery. 2018 , 433, 10-15	34
1025	Simple solution-combustion synthesis of Ni-NiO@C nanocomposites with highly electrocatalytic activity for methanol oxidation. 2018 , 112, 119-126	44
1024	Copper incorporated in Li ₃ V ₂ (PO ₄) ₃ /C cathode materials and its effects on high-rate Li-ion batteries. 2018 , 730, 103-109	17
1023	Dreidimensionale Architekturen aus Übergangsmetall-Dichalkogenid-Nanomaterialien zur elektrochemischen Energiespeicherung und -umwandlung. 2018 , 130, 634-655	33
1022	Three-Dimensional Architectures Constructed from Transition-Metal Dichalcogenide Nanomaterials for Electrochemical Energy Storage and Conversion. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 626-646	16.4 305
1021	A gel polymer electrolyte based lithium-sulfur battery with low self-discharge. 2018 , 318, 82-87	32
1020	Sodium storage mechanism of N, S co-doped nanoporous carbon: Experimental design and theoretical evaluation. 2018 , 11, 274-281	83
1019	Spherical Fe ₃ O ₄ ·3.33H ₂ O/MWCNTs nanocomposite with mesoporous structure as cathode material of sodium ion battery. 2018 , 27, 573-581	19
1018	Carbon-Sheathed MoS ₂ Nanothorns Epitaxially Grown on CNTs: Electrochemical Application for Highly Stable and Ultrafast Lithium Storage. 2018 , 8, 1700174	118
1017	Improved Li-storage performance of CNTs-decorated LiVPO ₄ F/C cathode material for electrochemical energy storage. 2018 , 44, 3825-3829	8
1016	Superelastic Hybrid CNT/Graphene Fibers for Wearable Energy Storage. 2018 , 8, 1702047	126
1015	Electronic and Ionic Materials for Neurointerfaces. 2018 , 28, 1704335	41
1014	The roles of graphene in advanced Li-ion hybrid supercapacitors. 2018 , 27, 43-56	50
1013	Well-Dispersed Vanadium Nitride on Porous Carbon Networks Derived from Block Copolymer of PAN-b-PDMC-b-PAN Absorbed with Ammonium Metavanadate for Energy Storage Application. 2018 , 122, 143-149	12

1012	A Flexible Solid Electrolyte Interphase Layer for Long-Life Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1505-1509	16.4	438
1011	Electrolyte mobility in supercapacitor electrodes [Solid state NMR studies on hierarchical and narrow pore sized carbons. 2018 , 12, 183-190		25
1010	Novel MOF shell-derived surface modification of Li-rich layered oxide cathode for enhanced lithium storage. 2018 , 63, 46-53		53
1009	A green and scalable route to yield porous carbon sheets from biomass for supercapacitors with high capacity. 2018 , 6, 1244-1254		244
1008	Self-assembly of polyoxometalate/reduced graphene oxide composites induced by ionic liquids as a high-rate cathode for batteries: Killing two birds with one stone 2018 , 6, 1743-1750		18
1007	Stable interstitial layer to alleviate fatigue fracture of high nickel cathode for lithium-ion batteries. 2018 , 376, 200-206		21
1006	Unveiling the Structural Evolution of Ag _{1.2} Mn ₈ O ₁₆ under Coulombically Controlled (De)Lithiation. 2018 , 30, 366-375		10
1005	Modern Applications of Green Chemistry: Renewable Energy. 2018 , 771-860		2
1004	Boron-enriched advanced energy materials. 2018 , 471, 577-586		23
1003	Highly Conductive, Light Weight, Robust, Corrosion-Resistant, Scalable, All-Fiber Based Current Collectors for Aqueous Acidic Batteries. 2018 , 8, 1702615		46
1002	Assembly of Ni(OH) ₂ -based electrodes without material synthesis step for application in supercapacitors. 2018 , 85, 349-355		1
1001	Vertical graphene/Ti ₂ Nb ₁₀ O ₂₉ /hydrogen molybdenum bronze composite arrays for enhanced lithium ion storage. 2018 , 12, 137-144		93
1000	Prospect and Reality of Ni-Rich Cathode for Commercialization. 2018 , 8, 1702028		391
999	In-situ grown CNTs modified SiO ₂ /C composites as anode with improved cycling stability and rate capability for lithium storage. 2018 , 433, 428-436		30
998	Carbon nanotubes: A potential material for energy conversion and storage. 2018 , 64, 219-253		129
997	General oriented assembly of uniform carbon-confined metal oxide nanodots on graphene for stable and ultrafast lithium storage. 2018 , 5, 78-85		32
996	Recent Developments on and Prospects for Electrode Materials with Hierarchical Structures for Lithium-Ion Batteries. 2018 , 8, 1701415		321
995	Gel Polymer Electrolytes for Electrochemical Energy Storage. 2018 , 8, 1702184		435

994	Binder-free carbon fiber-based lithium-nickel-manganese-oxide composite cathode with improved electrochemical stability against high voltage: Effects of composition on electrode performance. 2018 , 735, 580-587	5
993	Anomalous electrokinetics at hydrophobic surfaces: Effects of ion specificity and interfacial water structure. 2018 , 259, 1011-1020	11
992	Scalable and general synthesis of spinel manganese-based cathodes with hierarchical yolk-shell structure and superior lithium storage properties. 2018 , 11, 246-253	13
991	Electrosprayed porous Fe ₃ O ₄ /carbon microspheres as anode materials for high-performance lithium-ion batteries. 2018 , 11, 892-904	89
990	Interface Engineering of Carbon-Based Nanocomposites for Advanced Electrochemical Energy Storage. 2018 , 5, 1800430	76
989	Ultrastretchable carbon nanotube composite electrodes for flexible lithium-ion batteries. 2018 , 10, 19972-19978	38
988	A rechargeable metal-free full-liquid sulfur-bromine battery for sustainable energy storage. 2018 , 6, 20737-20745	5
987	Facile synthesis of graphene nanoribbons from zeolite-templated ultra-small carbon nanotubes for lithium ion storage. 2018 , 6, 21327-21334	5
986	High-Conductivity Argyrodite LiPSCl Solid Electrolytes Prepared via Optimized Sintering Processes for All-Solid-State Lithium-Sulfur Batteries. 2018 , 10, 42279-42285	94
985	Simultaneously Porous Structure and Chemical Anchor: A Multifunctional Composite by One-Step Mechanochemical Strategy toward High-Performance and Safe Lithium-Sulfur Battery. 2018 , 10, 41359-41369	10
984	Direct Visualization of Li Dendrite Effect on LiCoO ₂ Cathode by In Situ TEM. 2018 , 14, e1803108	28
983	Green synthesis of high-performance LiFePO ₄ nanocrystals in pure water. 2018 , 20, 5215-5223	20
982	MoS ₂ Layers Decorated RGO Composite Prepared by a One-Step High-Temperature Solvothermal Method as Anode for Lithium-Ion Batteries. 2018 , 13, 1850135	2
981	Ion Conducting Behavior of Silsesquioxane-Based Materials Used in Fuel Cell and Rechargeable Battery Applications. 2018 , 59, 1744-1752	4
980	In Situ Self-Formed Nanosheet MoS/Reduced Graphene Oxide Material Showing Superior Performance as a Lithium-Ion Battery Cathode. 2019 , 13, 1490-1498	42
979	Revisiting Scientific Issues for Industrial Applications of Lithium-Sulfur Batteries. 2018 , 1, 196-208	101
978	In Situ Constructing Flexible V ₂ O ₅ @GO Composite Thin Film Electrode for Superior Electrochemical Energy Storage. 2018 , 165, A3738-A3747	15
977	WSe ₂ /Reduced Graphene Oxide Nanocomposite with Superfast Sodium Ion Storage Ability as Anode for Sodium Ion Capacitors. 2018 , 165, A3642-A3647	18

976	Thermal Behavior of Ni-Rich Layered Oxide Cathode Materials during Cycling of 20 Ah-Scale Li-Ion Batteries. 2018 , 165, A3837-A3843	4
975	Recent Progress in Micro-Supercapacitor Design, Integration, and Functionalization. 2018 , 3, 1800367	71
974	A pH dependent high voltage aqueous supercapacitor with dual electrolytes. 2018 , 712, 160-164	8
973	Metal-Organic Framework-Derived Sea-Cucumber-like FeS ₂ @C Nanorods with Outstanding Pseudocapacitive Na-Ion Storage Properties. 2018 , 1, 6234-6241	29
972	Preparation of high-capacitance N,S co-doped carbon nanospheres with hierarchical pores as supercapacitors. 2018 , 291, 168-176	31
971	Interface engineering of sulfide electrolytes for all-solid-state lithium batteries. 2018 , 53, 958-966	133
970	Three-Electron Redox Enabled Dithiocarboxylate Electrode for Superior Lithium Storage Performance. 2018 , 10, 35469-35476	18
969	One-step hydrothermal reduction synthesis of tiny Sn/SnO ₂ nanoparticles sandwiching between spherical graphene with excellent lithium storage cycling performances. 2018 , 292, 72-80	18
968	Boosting long-cycle-life energy storage with holey graphene supported TiNb ₂ O ₇ network nanostructure for lithium ion hybrid supercapacitors. 2018 , 403, 66-75	63
967	Nitrogen-doped thermally reduced graphene oxide quantum dots/MnO composite toward enhanced-performance Li-ion battery. 2018 , 124, 1	1
966	Advanced Nanocarbon Materials for Future Energy Applications. 2018 , 305-325	1
965	Rate and Composition Dependence on the Structural/Electrochemical Relationships in P ₂ N ₁₂ /3Fe ₁ /MnyO ₂ Positive Electrodes for Sodium-Ion Batteries. 2018 , 30, 7503-7510	17
964	Poly(carbazole)-Coated Selenium@Conical Carbon Nanofibers Hybrid for Lithium-Selenium Batteries with Enhanced Lifespan. 2018 , 1, 6964-6976	8
963	Ameliorating Interfacial Ionic Transportation in All-Solid-State Li-Ion Batteries with Interlayer Modifications. 2018 , 3, 2775-2795	45
962	Impedance Characterization of an LCO-NMC/Graphite Cell: Ohmic Conduction, SEI Transport and Charge-Transfer Phenomenon. 2018 , 4, 43	38
961	Self-Healing Lamellar Structure Boosts Highly Stable Zinc-Storage Property of Bilayered Vanadium Oxides. 2018 , 10, 35079-35089	101
960	Assessment on the Self-Discharge Behavior of Lithium-Sulfur Batteries with LiNO ₃ -Possessing Electrolytes. 2018 , 10, 35175-35183	32
959	Low-Dose Aberration-Free Imaging of Li-Rich Cathode Materials at Various States of Charge Using Electron Ptychography. 2018 , 18, 6850-6855	34

958	Toward a high-performance Li-ion battery: Constructing a Co _{1-x} S/ZnS@C composite derived from metal-organic framework @3D disordered polystyrene sphere template. 2018 , 160, 636-641	16
957	Solvothermal preparation of Al/Fe-doped V ₆ O ₁₃ as cathode materials for lithium-ion batteries with enhanced electrochemical performance. 2018 , 829, 20-26	10
956	Polymer-Laden Composite Lignin-Based Electrolyte Membrane for High-Performance Lithium Batteries. 2018 , 6, 14460-14469	32
955	Li ₂ Oxygen Battery: Parasitic Reactions. 2018 , 95-124	
954	Hierarchical Graphene-Scaffolded Silicon/Graphite Composites as High Performance Anodes for Lithium-Ion Batteries. 2018 , 14, e1802457	59
953	A Multifunctional Silly-Putty Nanocomposite Spontaneously Repairs Cathode Composite for Advanced Li ₂ S Batteries. 2018 , 28, 1804777	33
952	Towards more Durable Electrochemical Capacitors by Elucidating the Ageing Mechanisms under Different Testing Procedures. 2019 , 6, 566-573	12
951	Facile synthesis of a high-performance, fire-retardant organic gel polymer electrolyte for flexible solid-state supercapacitors. 2018 , 290, 262-272	33
950	Acid-Assisted Strategy Combined with KOH Activation to Efficiently Optimize Carbon Architectures from Green Copolymer Adhesive for Solid-State Supercapacitors. 2018 , 6, 14838-14846	12
949	Recessed deposition of TiN into N-doped carbon as a cathode host for superior Li-S batteries performance. 2018 , 54, 1-9	82
948	Water-processable Li ₄ Ti ₅ O ₁₂ electrodes featuring eco-friendly sodium alginate binder. 2018 , 289, 112-119	12
947	Storing electricity as chemical energy: beyond traditional electrochemistry and double-layer compression. 2018 , 11, 3069-3074	24
946	Zinc Battery Driven by an Electro-Organic Reactor Cathode. 2018 , 6, 15007-15014	1
945	Design and Mechanisms of Asymmetric Supercapacitors. 2018 , 118, 9233-9280	1396
944	Role of Stefan-Maxwell fluxes in the dynamics of concentrated electrolytes. 2018 , 14, 8267-8275	15
943	Recent advances in effective protection of sodium metal anode. 2018 , 53, 630-642	133
942	Sheet-membrane Mn-doped nickel hydroxide encapsulated via heterogeneous Ni ₃ S ₂ nanoparticles for efficient alkaline battery-supercapacitor hybrid devices. 2018 , 6, 19020-19029	40
941	Electrode Edge Effects and the Failure Mechanism of Lithium-Metal Batteries. 2018 , 11, 3821-3828	25

940	Potassium Superoxide: A Unique Alternative for Metal-Air Batteries. 2018 , 51, 2335-2343	72
939	Lithium Ion Capacitors in Organic Electrolyte System: Scientific Problems, Material Development, and Key Technologies. 2018 , 8, 1801243	146
938	In Situ Doping Boron Atoms into Porous Carbon Nanoparticles with Increased Oxygen Graft Enhances both Affinity and Durability toward Electrolyte for Greatly Improved Supercapacitive Performance. 2018 , 28, 1804190	101
937	Biopolymer-assisted synthesis of 3D interconnected Fe ₃ O ₄ @carbon core@shell as anode for asymmetric lithium ion capacitors. 2018 , 140, 296-305	66
936	A High-Performance Sodium-Ion Hybrid Capacitor Constructed by Metal-Organic Framework-Derived Anode and Cathode Materials. 2018 , 28, 1800757	151
935	Comparative Study of Li ₄ Ti ₅ O ₁₂ Composites Prepared with Pristine, Oxidized, and Surfactant-Treated Multiwalled Carbon Nanotubes for High-Power Hybrid Supercapacitors. 2018 , 5, 2357-2366 ¹⁰	
934	Manipulating electrolyte and solid electrolyte interphase to enable safe and efficient Li-S batteries. 2018 , 50, 431-440	84
933	Zn _{Nix} MnxCo _{2-2x} O ₄ Spinel as a High-Voltage and High-Capacity Cathode Material for Nonaqueous Zn-Ion Batteries. 2018 , 8, 1800589	72
932	Hollow TiNb O @C Spheres with Superior Rate Capability and Excellent Cycle Performance as Anode Material for Lithium-Ion Batteries. 2018 , 24, 12932-12937	34
931	Aqueous intercalation-type electrode materials for grid-level energy storage: Beyond the limits of lithium and sodium. 2018 , 50, 229-244	78
930	Nickel@Nickel Oxide Core-Shell Electrode with Significantly Boosted Reactivity for Ultrahigh-Energy and Stable Aqueous Ni-Zn Battery. 2018 , 28, 1802157	92
929	A facile method to enhance electrochemical performance of high-nickel cathode material Li(Ni _{0.8} Co _{0.1} Mn _{0.1})O ₂ via Ti doping. 2018 , 29, 10702-10708	17
928	Crossed carbon skeleton enhances the electrochemical performance of porous silicon nanowires for lithium ion battery anode. 2018 , 280, 86-93	29
927	Hybrid MnO/C nanorod arrays derived from a MOF precursor with enhanced oxygen evolution activity. 2018 , 53, 11574-11583	10
926	Stabilizing Cathode Materials of Lithium-Ion Batteries by Controlling Interstitial Sites on the Surface. 2018 , 4, 1685-1695	45
925	Chemical Immobilization and Conversion of Active Polysulfides Directly by Copper Current Collector: A New Approach to Enabling Stable Room-Temperature Li-S and Na-S Batteries. 2018 , 8, 1800624	47
924	Hierarchical nanorods constructed by Mn ₂ Mo ₃ O ₈ @reduced graphene oxide nanosheet arrays with enhanced lithium storage properties. 2018 , 121, 71-77	9
923	Synthesis of bimetallic CoNi-CoNiO ₂ nanoparticles embedded into mesoporous carbon as high-performance catalysts for supercapacitor electrode. 2018 , 272, 222-231	7

922	Layered titanate hierarchical spheres as a promising pseudocapacitive electrode material for high rate lithium ion batteries. 2018 , 338, 17-25	5
921	A coupled chemo-mechanical model to study the effects of adhesive strength on the electrochemical performance of silicon electrodes for advanced lithium ion batteries. 2018 , 407, 153-161	11
920	FeP@C Nanotube Arrays Grown on Carbon Fabric as a Low Potential and Freestanding Anode for High-Performance Li-Ion Batteries. 2018 , 14, e1800793	73
919	Stretchable Lithium Metal Anode with Improved Mechanical and Electrochemical Cycling Stability. 2018 , 2, 1857-1865	99
918	Review of Hybrid Ion Capacitors: From Aqueous to Lithium to Sodium. 2018 , 118, 6457-6498	504
917	Nonaqueous arylated quinone catholytes for lithium-organic flow batteries. 2018 , 6, 14761-14768	7
916	Nano-structured GeNb ₁₈ O ₄₇ as novel anode host with superior lithium storage performance. 2018 , 282, 634-641	12
915	3D hierarchical porous sponge-like V ₂ O ₅ micro/nano-structures for high-performance Li-ion batteries. 2018 , 765, 901-906	16
914	Iron Fluoride/Carbon Nanocomposite Nanofibers as Free-Standing Cathodes for High-Energy Lithium Batteries. 2018 , 28, 1801711	65
913	Construction of three-dimensional nitrogen-doped graphene coated with uniform nickel oxide/nickel ferrite nanoparticles with enhanced electrochemical properties for supercapacitors. 2018 , 765, 480-488	14
912	Enhanced electrochemical performance of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ by surface modification with lithium-active MoO ₃ . 2018 , 823, 359-367	36
911	2.3 Boron. 2018 , 72-87	
910	Molecular-Scale Functionality on Graphene To Unlock the Energy Capabilities of Metal Hydrides for High-Capacity Lithium-Ion Batteries. 2018 , 12, 8177-8186	4
909	Sandwiched spherical tin dioxide/graphene with a three-dimensional interconnected closed pore structure for lithium storage. 2018 , 10, 16116-16126	25
908	Aliphatic Polycarbonate-Based Solid-State Polymer Electrolytes for Advanced Lithium Batteries: Advances and Perspective. 2018 , 14, e1800821	79
907	Controlled scalable synthesis of yolk-shell structured large-size industrial silicon with interconnected carbon network for lithium storage. 2018 , 283, 1702-1711	16
906	An ultrafast rechargeable lithium metal battery. 2018 , 6, 15517-15522	28
905	One-step cathodic electrodeposition of a cobalt hydroxide-graphene nanocomposite and its use as a high performance supercapacitor electrode material.. 2018 , 8, 26818-26827	14

904	Polymer nanocomposites for lithium battery applications. 2018 , 283-313	4
903	Binder-Free Nanoparticulate Coating of a Polyethylene Separator via a Reactive Atmospheric Pressure Plasma for Lithium-Ion Batteries with Improved Performances. 2018 , 5, 1800579	18
902	Toward Highly Reversible Magnesium Sulfur Batteries with Efficient and Practical Mg[B(hfp)4]2 Electrolyte. 2018 , 3, 2005-2013	149
901	Biscrolled Carbon Nanotube Yarn Structured Silver-Zinc Battery. 2018 , 8, 11150	23
900	Waste soybean dreg-derived N/O co-doped hierarchical porous carbon for high performance supercapacitor. 2018 , 284, 336-345	96
899	A high-rate and ultrastable anode enabled by boron-doped nanoporous carbon spheres for high-power and long life lithium ion capacitors. 2018 , 9, 428-439	16
898	Review of electrical energy storage technologies, materials and systems: challenges and prospects for large-scale grid storage. 2018 , 11, 2696-2767	865
897	Functionalized carbon nanotubes as emerging delivery system for the treatment of cancer. 2018 , 548, 540-558	95
896	2.20 Batteries. 2018 , 629-662	2
895	A smart safe rechargeable zinc ion battery based on sol-gel transition electrolytes. 2018 , 63, 1077-1086	94
894	Wet-chemical synthesized MCMB@Si@C microspheres for high-performance lithium-ion battery anodes. 2018 , 54, 9466-9469	19
893	Facile synthesis of hierarchical CNF/SnO/Ni nanostructures via self-assembly process as anode materials for lithium ion batteries. 2018 , 5, 171522	6
892	High performance potassium sulfur batteries based on a sulfurized polyacrylonitrile cathode and polyacrylic acid binder. 2018 , 6, 14587-14593	63
891	Multi-Heteroatom-Doped Hollow Carbon Attached on Graphene Using LiFePO Nanoparticles as Hard Templates for High-Performance Lithium-Sulfur Batteries. 2018 , 10, 26485-26493	22
890	Porous activated carbon derived from Chinese-chive for high energy hybrid lithium-ion capacitor. 2018 , 398, 128-136	44
889	Unlocking the Energy Capabilities of Lithium Metal Electrode with Solid-State Electrolytes. 2018 , 2, 1674-1689	133
888	Seed-Surface Grafting Precipitation Polymerization for Preparing Microsized Optically Active Helical Polymer Core/Shell Particles and Their Application in Enantioselective Crystallization. 2018 , 39, e1800072	6
887	Scallop-Inspired Shell Engineering of Microparticles for Stable and High Volumetric Capacity Battery Anodes. 2018 , 14, e1800752	14

886	High-Strength Internal Cross-Linking Bacterial Cellulose-Network-Based Gel Polymer Electrolyte for Dendrite-Suppressing and High-Rate Lithium Batteries. 2018 , 10, 17809-17819	84
885	Ionic liquids and plastic crystals with a symmetrical pyrrolidinium cation. 2018 , 2, 1207-1214	23
884	Investigation of the graphene-electrolyte interface in Li-air batteries: A molecular dynamics study. 2018 , 946, 012028	8
883	Diffusion controlled multilayer electrocatalysts via graphene oxide nanosheets of varying sizes. 2018 , 10, 16159-16168	16
882	Bi@C Nanoplates Derived from (BiO) ₂ CO ₃ as an Enhanced Electrode Material for Lithium/Sodium-Ion Batteries. 2018 , 3, 8973-8979	14
881	Structural and electrochemical properties of LiMn _{0.6} Fe _{0.4} PO ₄ as a cathode material for flexible lithium-ion batteries and self-charging power pack. 2018 , 52, 510-516	52
880	Multifunctionality of Carbon-based Frameworks in Lithium Sulfur Batteries. 2018 , 1, 403-432	27
879	Impedance Characterization of the Transport Properties of Electrolytes Contained within Porous Electrodes and Separators Useful for Li-S Batteries. 2018 , 165, A2741-A2749	22
878	Dopamine-Assisted Synthesis of MoS ₂ Nanosheets on Carbon Nanotube for Improved Lithium and Sodium Storage Properties. 2018 , 1, 5112-5118	19
877	In-situ gas reduction in reversible SnS-SnO ₂ @N-doped graphene anodes for high-rate and lasting lithium storage. 2018 , 769, 1007-1018	12
876	In situ growth of self-supported and defect-engineered carbon nanotube networks on 316L stainless steel as binder-free supercapacitors. 2018 , 532, 622-629	13
875	Effect of cobalt content on the electrochemical properties and structural stability of NCA type cathode materials. 2018 , 20, 22805-22817	19
874	A two-step approach to synthesis of Co(OH) ₂ /NiOOH/reduced graphene oxide nanocomposite for high performance supercapacitors. 2018 , 12, 273-282	3
873	MoO nanosheet arrays as superior anode materials for Li- and Na-ion batteries. 2018 , 10, 16040-16049	38
872	Temporal-spatial-resolved mapping of the electrical double layer changes by surface plasmon resonance imaging.. 2018 , 8, 28266-28274	6
871	Nitrogen-doped carbon nanotube sponge with embedded Fe/Fe ₃ C nanoparticles as binder-free cathodes for high capacity lithium-sulfur batteries. 2018 , 6, 17473-17480	49
870	Recent progress of advanced binders for Li-S batteries. 2018 , 396, 19-32	56
869	Solar thermal-driven capacitance enhancement of supercapacitors. 2018 , 11, 2016-2024	54

868	Atomic and Molecular Layer Deposition for Superior Lithium-Sulfur Batteries: Strategies, Performance, and Mechanisms. 2018 , 1, 41-68	43
867	Flexible MnS-Carbon Fiber Hybrids for Lithium-Ion and Sodium-Ion Energy Storage. 2018 , 24, 13535-13539	41
866	2.21 Supercapacitors. 2018 , 663-695	4
865	Free standing Cu ₂ Te, new anode material for sodium-ion battery. 2018 ,	3
864	A P2-type Na _{0.44} Mn _{0.6} Ni _{0.3} Cu _{0.1} O ₂ cathode material with high energy density for sodium-ion batteries. 2018 , 6, 12582-12588	41
863	Theoretical understanding of SnS monolayer as Li ion battery anode material. 2018 , 121, 261-265	15
862	Stackable bipolar pouch cells with corrosion-resistant current collectors enable high-power aqueous electrochemical energy storage. 2018 , 11, 2865-2875	36
861	Facile synthesis of partially oxidized MnO-functionalized carbon cathodes for rechargeable Li-O batteries.. 2018 , 8, 22226-22232	2
860	Effectively enhance high voltage stability of LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ cathode material with excellent energy density via La ₂ O ₃ surface modified. 2019 , 25, 2007-2016	4
859	Copper and carbon co-encapsulated tin dioxide nanocrystals for high performance lithium ion batteries. 2019 , 774, 565-572	5
858	Rational design of multi-walled carbon nanotube@hollow FeO@C coaxial nanotubes as long-cycle-life lithium ion battery anodes. 2019 , 30, 465402	7
857	Controllable Cathode/Electrolyte Interface of Li[Ni _{0.8} Co _{0.1} Mn _{0.1}]O ₂ for Lithium Ion Batteries: A Review. 2019 , 9, 1901597	167
856	Unraveling the Formation of Amorphous MoS ₂ Nanograins during the Electrochemical Delithiation Process. 2019 , 29, 1904843	26
855	Understanding the Role of Dopant Metal Atoms on the Structural and Electronic Properties of Lithium-Rich LiNiMnO Cathode Material for Lithium-Ion Batteries. 2019 , 10, 4842-4850	10
854	In situ imaging of electrocatalysis in a K-O battery with a hollandite β -MnO nanowire air cathode. 2019 , 55, 10880-10883	6
853	Carbon nanomaterials for rechargeable lithium-sulfur batteries. 2019 , 279-309	2
852	Three-Dimensional Porous TiNb ₂ O ₇ /CNT-KB Composite Microspheres as Lithium-Ion Battery Anode Material. 2019 , 6, 3959-3965	16
851	Tuning sodium nucleation and stripping by the mixed surface of carbon nanotube-sodium composite electrodes for improved reversibility. 2019 , 438, 227005	7

850	Inorganic sulfide solid electrolytes for all-solid-state lithium secondary batteries. 2019 , 7, 20540-20557	66
849	Simplifying the Electrolyte Systems with the Functional Cosolvent. 2019 , 11, 27854-27861	6
848	Asymmetric behaviour of Li/Li symmetric cells for Li metal batteries. 2019 , 55, 9637-9640	21
847	A Four-Electron Sulfur Electrode Hosting a Cu ²⁺ /Cu ⁺ Redox Charge Carrier. 2019 , 131, 12770-12775	15
846	A Four-Electron Sulfur Electrode Hosting a Cu /Cu Redox Charge Carrier. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 12640-12645	16.4 32
845	3D pomegranate-like structures of porous carbon microspheres self-assembled by hollow thin-walled highly-graphitized nanoballs as sulfur immobilizers for LiS batteries. 2019 , 63, 103894	36
844	Unusual formation of hollow NiCoO ₂ sub-microspheres by oxygen functional group dominated thermally induced mass relocation towards efficient lithium storage. 2019 , 7, 18109-18117	25
843	Free-standing hybrid porous membranes integrated with transition metal nitride and carbide nanoparticles for high-performance lithium-sulfur batteries. 2019 , 378, 122208	22
842	Compaction self-assembly of ultralow-binder-content particulate composites. 2019 , 175, 107144	5
841	Recent Advances in Aerosol-Assisted Spray Processes for the Design and Fabrication of Nanostructured Metal Chalcogenides for Sodium-Ion Batteries. 2019 , 14, 3127-3140	16
840	Large-Area, Uniform, Aligned Arrays of Na (VO) (PO) F on Carbon Nanofiber for Quasi-Solid-State Sodium-Ion Hybrid Capacitors. 2019 , 15, e1902466	56
839	Designing a Safe Electrolyte Enabling Long-Life Li/S Batteries. 2019 , 12, 4176-4184	15
838	Rational Design of Highly Packed, Crack-Free Sulfur Electrodes by Scaffold-Supported Drying for Ultrahigh-Sulfur-Loaded Lithium-Sulfur Batteries. 2019 , 11, 29849-29857	5
837	Sulfurized Polyacrylonitrile Cathodes with High Compatibility in Both Ether and Carbonate Electrolytes for Ultrastable LithiumSulfur Batteries. 2019 , 29, 1902929	87
836	Correlation study on temperature dependent conductivity and line profile along the LLTO/LFP-C cross section for all solid-state Lithium-ion batteries. 2019 , 341, 115032	8
835	The application of metal-organic frameworks in electrode materials for lithium-ion and lithium-sulfur batteries. 2019 , 6, 190634	20
834	Planar all-solid-state rechargeable Zn ir batteries for compact wearable energy storage. 2019 , 7, 17581-17593	77
833	Solution-processed organic PDI/CB/TPU cathodes for flexible lithium ion batteries. 2019 , 319, 201-209	8

832	Surface-Based Li ⁺ Complex Enables Uniform Lithium Deposition for Stable Lithium Metal Anodes. 2019 , 2, 4602-4608	19
831	An insoluble naphthalenediimide derivative as a highly stable cathode material for lithium-ion batteries. 2019 , 236, 121815	6
830	Review Article: Layer-structured carbonaceous materials for advanced Li-ion and Na-ion batteries: Beyond graphene. 2019 , 37, 040803	14
829	Wearable Woven Triboelectric Nanogenerator Utilizing Electrospun PVDF Nanofibers for Mechanical Energy Harvesting. 2019 , 10,	31
828	Understanding the Electrode/Electrolyte Interface Layer on the Li-Rich Nickel Manganese Cobalt Layered Oxide Cathode by XPS. 2019 , 11, 43166-43179	50
827	Dendrite-Free Lithium Deposition via a Superfilling Mechanism for High-Performance Li-Metal Batteries. 2019 , 31, e1903248	66
826	Heterocarbides Reinforced Electrochemical Energy Storage. 2019 , 15, e1903652	5
825	Study of NiO/CNSs hybrid nanostructure as an electrode material: synthesis and excellent electrochemical performance for application of supercapacitors. 2019 , 49, 1181-1191	0
824	Ultra-small NiO nanoparticles anchored on nitrogen-doped carbon flowers through strong chemical bonding for high-performance lithium-ion batteries. 2019 , 441, 227182	30
823	Largely enhancing the output power and charging efficiency of electret generators using position-based auto-switch and passive power management module. 2019 , 66, 104202	10
822	Exploring Battery-Type ZnO/ZnFe ₂ O ₄ Spheres-3D Graphene Electrodes for Supercapacitor Applications: Advantage of Yolk@Shell over Solid Structures. 2019 , 6, 5819-5828	2
821	Meso/macrospectically multifunctional surface interfaces, ridges, and vortex-modified anode/cathode cuticles as force-driven modulation of high-energy density of LIB electric vehicles. 2019 , 9, 14701	12
820	Li ₂ Air: Current Scenario and Its Future. 2019 , 291-375	
819	Inhibiting VOPO ₄ ·x H ₂ O Decomposition and Dissolution in Rechargeable Aqueous Zinc Batteries to Promote Voltage and Capacity Stabilities. 2019 , 131, 16203-16207	2
818	Synthesis of Nickel Ferrite Nanoparticles Supported on Graphene Nanosheets as Composite Electrodes for High Performance Supercapacitor. 2019 , 4, 9952-9958	17
817	Flower-like SnS composite with 3D pyrolyzed bacterial cellulose as the anode for lithium-ion batteries with ultralong cycle life and superior rate capability. 2019 , 48, 833-838	6
816	MXene Materials as Electrodes for Lithium-Sulfur Batteries. 2019 , 381-398	2
815	Highly efficient direct electron transfer bioanode containing glucose dehydrogenase operating in human blood. 2019 , 441, 227163	11

814	Rational Design of Flexible Two-Dimensional MXenes with Multiple Functionalities. 2019 , 119, 11980-12031	137
813	Performance study of a Li ₄ Ti ₅ O ₁₂ electrode for lithium batteries prepared by atmospheric plasma spraying. 2019 , 45, 23750-23755	5
812	Exploiting the Condensation Reactions of Acetophenone to Engineer Carbon-Encapsulated Nb ₂ O ₅ Nanocrystals for High-Performance Li and Na Energy Storage Systems. 2019 , 9, 1902813	27
811	Inhibiting VOPO \times H ₂ O Decomposition and Dissolution in Rechargeable Aqueous Zinc Batteries to Promote Voltage and Capacity Stabilities. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16057-16061	164 64
810	Iron Fluoride Nanoparticles Embedded in a Nitrogen and Oxygen Dual-doped 3D Porous Carbon Derived from Nori for High Rate Cathode in Lithium-ion Battery. 2019 , 4, 10334-10339	2
809	Spinel/Lithium-Rich Manganese Oxide Hybrid Nanofibers as Cathode Materials for Rechargeable Lithium-Ion Batteries. 2019 , 3, 1900350	28
808	Carbon Derived from Sucrose as Anode Material for Lithium-Ion Batteries. 2019 , 48, 7389-7395	8
807	Mechanisms of the performance fading of carbon-based electrochemical capacitors operating in a LiNO ₃ electrolyte. 2019 , 438, 227029	12
806	Lowering Charge Transfer Barrier of LiMnO ₂ via Nickel Surface Doping To Enhance Li Intercalation Kinetics at Subzero Temperatures. 2019 , 141, 14038-14042	77
805	Stabilizing cathodes of lithium-sulfur batteries by the chemical binding of sulfur and their discharge products to carbon nanofibers. 2019 , 43, 15267-15274	4
804	N-Doped Hierarchical Continuous Hollow Thin Porous Carbon Nanostructure for High-Performance Flexible Gel-Type Symmetric Supercapacitors. 2019 , 7, 17020-17029	9
803	Metal-Organic Frameworks Enabled High-Performance Separators for Safety-Reinforced Lithium Ion Battery. 2019 , 7, 16612-16619	23
802	Hierarchical porous carbon sheets with compressed framework and optimized pore configuration for high-rate and long-term sodium and lithium ions storage. 2019 , 155, 166-175	18
801	Electrocatalysts for electrooxidation of direct alcohol fuel cell: chemistry and applications. 2019 , 14, 100182	46
800	Carbon-pore-sheathed cobalt nanoseeds: An exceptional and durable bifunctional catalyst for zinc-air batteries. 2019 , 65, 104051	33
799	Nanowires for Electrochemical Energy Storage. 2019 , 119, 11042-11109	167
798	Phase Behavior and Ion Dynamics of Nanoconfined LiBH ₄ in Silica. 2019 , 123, 25559-25569	15
797	Hierarchically structured microspheres consisting of carbon coated silicon nanocomposites with controlled porosity as superior anode material for lithium-ion batteries. 2019 , 324, 134850	33

796	Recent advances in nanostructured electrode-electrolyte design for safe and next-generation electrochemical energy storage. 2019 , 8, 100057	23
795	Molecular Cooperative Assembly-Mediated Synthesis of Ultra-High-Performance Hard Carbon Anodes for Dual-Carbon Sodium Hybrid Capacitors. 2019 , 13, 11935-11946	24
794	A Three-Dimensional Electrochemical-Mechanical Model at the Particle Level for Lithium-Ion Battery. 2019 , 166, A3319-A3331	14
793	Preparation and performance of polypropylene separator modified by SiO ₂ /PVA layer for lithium batteries. 2019 , 19, 470-476	7
792	Atomic Pt Promoted N-Doped Carbon as Novel Negative Electrode for Li-Ion Batteries. 2019 , 11, 37559-37566	11
791	Lithium-Graphite Paste: An Interface Compatible Anode for Solid-State Batteries. 2019 , 31, e1807243	150
790	Low concentrated carbonaceous suspensions assisted with carboxymethyl cellulose as electrode for electrochemical flow capacitor. 2019 , 42, 8	6
789	Review Multifunctional Separators: A Promising Approach for Improving the Durability and Performance of Li-Ion Batteries. 2019 , 166, A5369-A5377	15
788	FeNb ₁₁ O ₂₉ nanotubes: Superior electrochemical energy storage performance and operating mechanism. 2019 , 58, 399-409	56
787	Unraveling the Impact of Ether and Carbonate Electrolytes on the Solid-Electrolyte Interface and the Electrochemical Performances of ZnSe@C Core-Shell Composites as Anodes of Lithium-Ion Batteries. 2019 , 11, 8009-8017	36
786	Nanoporous Polymer Films with a High Cation Transference Number Stabilize Lithium Metal Anodes in Light-Weight Batteries for Electrified Transportation. 2019 , 19, 1387-1394	42
785	Iron oxide-based nanomaterials for supercapacitors. 2019 , 30, 204002	28
784	Zwitterions for Organic/Perovskite Solar Cells, Light-Emitting Devices, and Lithium Ion Batteries: Recent Progress and Perspectives. 2019 , 9, 1803354	41
783	A novel MoS ₂ nanosheets-decorated Sb@Sb ₂ S ₃ @C tubular composites as anode material for high performance lithium ion battery. 2019 , 786, 169-176	16
782	Electrospun Nanofibers for Lithium-Ion Batteries. 2019 , 671-694	6
781	Critical Review of the Use of Reference Electrodes in Li-Ion Batteries: A Diagnostic Perspective. 2019 , 5, 12	64
780	Fabrication of one-dimensional architecture Bi ₅ Nb ₃ O ₁₅ nanowires by electrospinning for lithium-ion batteries with enhanced electrochemical performance. 2019 , 299, 894-901	12
779	An ultrathin surface-nitrided porous titanium sheet as a current collector-free sulfur host for high-gravimetric-capacity lithium-sulfur batteries. 2019 , 55, 1655-1658	2

778	4.4 V supercapacitors based on super-stable mesoporous carbon sheet made of edge-free graphene walls. 2019 , 12, 1542-1549	101
777	FeS quantum dots embedded in 3D ordered macroporous carbon nanocomposite for high-performance sodium-ion hybrid capacitors. 2019 , 7, 1138-1148	64
776	Effect of component content variation on composition and structure of activated carbon in PVDF/KCO. 2019 , 21, 2382-2388	1
775	Fluorination of Li-Rich Lithium-Ion-Battery Cathode Materials by Fluorine Gas: Chemistry, Characterization, and Electrochemical Performance in Half Cells. 2019 , 6, 3337-3349	20
774	Defective Lithium Storage Boosts High Rate and Long-Life Span of Carbon Fibers. 2019 , 4, 5768-5775	2
773	Pore-size dominated electrochemical properties of covalent triazine frameworks as anode materials for K-ion batteries. 2019 , 10, 7695-7701	46
772	Fabrication of Lamellar Nanosphere Structure for Effective Stress-Management in Large-Volume-Variation Anodes of High-Energy Lithium-Ion Batteries. 2019 , 31, e1900970	28
771	Self-Supported and Flexible Sulfur Cathode Enabled via Synergistic Confinement for High-Energy-Density Lithium-Sulfur Batteries. 2019 , 31, e1902228	149
770	Axial expansion of Ni-doped TiO ₂ nanorods grown on carbon nanotubes for favourable lithium-ion intercalation. 2019 , 375, 122021	6
769	Operando X-ray absorption spectroscopy applied to battery materials at ICGM: The challenging case of BiSb's sodiation. 2019 , 21, 1-13	7
768	Structural and defect engineering of cobaltosic oxide nanoarchitectures as an ultrahigh energy density and super durable cathode for Zn-based batteries. 2019 , 10, 7600-7609	28
767	Facile Synthesis of Peapod-Like Cu Ge/Ge@C as a High-Capacity and Long-Life Anode for Li-Ion Batteries. 2019 , 25, 11486-11493	11
766	Preparation and characterization of Ga and Sr co-doped Li ₇ La ₃ Zr ₂ O ₁₂ garnet-type solid electrolyte. 2019 , 339, 114992	19
765	Hierarchical porous CoO /carbon nanocomposite for enhanced lithium storage. 2019 , 847, 113202	5
764	Specifically Designed Ionic Liquids Formulations, Physicochemical Properties, and Electrochemical Double Layer Storage Behavior. 2019 , 3, 58	
763	Hydrothermal synthesis of a lamellar zinc dimolybdate hydroxide with application as the anode for lithium-ion batteries. 2019 , 47, 627-639	
762	The effect of local lithium surface chemistry and topography on solid electrolyte interphase composition and dendrite nucleation. 2019 , 7, 14882-14894	31
761	Hetero-layered MoS ₂ /C composites enabling ultrafast and durable Na storage. 2019 , 21, 115-123	24

760	Surface Pseudocapacitive Mechanism of Molybdenum Phosphide for High-Energy and High-Power Sodium-Ion Capacitors. 2019 , 9, 1900967	37
759	Oxygen Vacancy Diffusion and Condensation in Lithium-Ion Battery Cathode Materials. 2019 , 131, 10588-10595	8
758	Oxygen Vacancy Diffusion and Condensation in Lithium-Ion Battery Cathode Materials. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 10478-10485	16.4 41
757	Power management and effective energy storage of pulsed output from triboelectric nanogenerator. 2019 , 61, 517-532	88
756	Metal-organic frameworks (MOFs) and their composites as electrodes for lithium battery applications: Novel means for alternative energy storage. 2019 , 393, 48-78	123
755	Redox activity of selenocyanate anion in electrochemical capacitor application. 2019 , 253, 62-72	15
754	Advanced Graphene@Sulfur composites via an in-situ reduction and wrapping strategy for high energy density lithium-sulfur batteries. 2019 , 150, 224-232	20
753	Current Status and Future Prospects of Metal-Sulfur Batteries. 2019 , 31, e1901125	237
752	Template-synthesized hierarchical porous carbons from bio-oil with high performance for supercapacitor electrodes. 2019 , 192, 239-249	42
751	Interlayers for lithium-based batteries. 2019 , 23, 112-136	22
750	Anode material with Li-Si nano-domains in three-dimensional carbon network. 2019 , 29, 310-315	3
749	Nonflammable, Low-Cost, and Fluorine-Free Solvent for Liquid Electrolyte of Rechargeable Lithium Metal Batteries. 2019 , 11, 17333-17340	16
748	Recent Advances and Perspectives of Carbon-Based Nanostructures as Anode Materials for Li-ion Batteries. 2019 , 12,	67
747	Synthesis of ZnFe ₂ O ₄ @MnO ₂ Multilevel Nanosheets Structure and Its Electrochemical Properties as Positive Electrodes for Asymmetric Supercapacitors. 2019 , 4, 5168-5177	3
746	Capacitive Sodium-Ion Storage Based on Double-Layered Mesoporous Graphene with High Capacity and Charging/Discharging Rate. 2019 , 12, 4323-4331	7
745	Pseudocapacitive Behavior and Ultrafast Kinetics from Solvated Ion Cointercalation into MoS ₂ for Its Alkali Ion Storage. 2019 , 2, 3726-3735	2
744	The rise of bio-inspired energy devices. 2019 , 23, 390-408	8
743	Boosting the cycling stability of Li _x Si alloy microparticles through electroless copper deposition. 2019 , 370, 1019-1026	12

742	Synthesis, microstructure, and electrochemical performance of Li-rich layered oxide cathode materials for Li-ion batteries. 2019 , 68, 301-312	3
741	Study on the Fading Mechanism of SiO ₂ -based Anodes Using Styrene Butadiene Rubber and Carboxymethyl Cellulose as Binders for Lithium-ion Batteries. 2019 , 242, 042014	1
740	Unlocking the Lithium Storage Capacity of Aluminum by Molecular Immobilization and Purification. 2019 , 31, e1901372	9
739	Elucidating the interfacial evolution and anisotropic dynamics on silicon anodes in lithium-ion batteries. 2019 , 61, 304-310	22
738	Natural Okra Shells Derived Nitrogen-Doped Porous Carbon to Regulate Polysulfides for High-Performance Lithium-Sulfur Batteries. 2019 , 7, 1900165	7
737	Morphology inheritance synthesis of carbon-coated Li ₃ VO ₄ rods as anode for lithium-ion battery. 2019 , 62, 1105-1114	11
736	Hierarchical flower-like Fe ₂ O ₃ mesoporous nanosheets with superior electrochemical lithium storage performance. 2019 , 23, 363-370	12
735	Carbonyl-based polyimide and polyquinoneimide for potassium-ion batteries. 2019 , 7, 9997-10003	69
734	Co-Electrodeposited porous PEDOT-CNT microelectrodes for integrated micro-supercapacitors with high energy density, high rate capability, and long cycling life. 2019 , 11, 7761-7770	49
733	Liquid electrolyte immobilized in compact polymer matrix for stable sodium metal anodes. 2019 , 23, 610-616	21
732	Revisiting and improving the preparation of silicon-based electrodes for lithium-ion batteries: ball milling impact on poly(acrylic acid) polymer binders. 2019 , 3, 881-891	12
731	An asymmetric electric double-layer capacitor with a janus membrane and two different aqueous electrolytes. 2019 , 423, 68-71	11
730	A novel flexible fiber-shaped dual-ion battery with high energy density based on omnidirectional porous Al wire anode. 2019 , 60, 285-293	30
729	Direct production of porous carbon nanosheets/particle composites from wasted litchi shell for supercapacitors. 2019 , 788, 677-684	27
728	Toward high energy-density and long cycling-lifespan lithium ion capacitors: a 3D carbon modified low-potential Li ₂ TiSiO ₅ anode coupled with a lignin-derived activated carbon cathode. 2019 , 7, 8234-8244	38
727	Toward a low-cost high-voltage sodium aqueous rechargeable battery. 2019 , 29, 26-36	101
726	Investigation of the swelling failure of lithium-ion battery packs at low temperatures using 2D/3D X-ray computed tomography. 2019 , 305, 65-71	15
725	Fire-Retardant Phosphate-Based Electrolytes for High-Performance Lithium Metal Batteries. 2019 , 2, 2708-2716	32

724	A review of rechargeable batteries for portable electronic devices. 2019 , 1, 6-32	400
723	Recent advance in new-generation integrated devices for energy harvesting and storage. 2019 , 60, 600-619	126
722	Ni ₃ S ₂ @PANI core-shell nanosheets as a durable and high-energy binder-free cathode for aqueous rechargeable nickel-zinc batteries. 2019 , 7, 10629-10635	63
721	Introduction to Lithium-Sulfur Batteries. 2019 , 5-13	5
720	A high-performance Zn battery based on self-assembled nanostructured NiCo ₂ O ₄ electrode. 2019 , 421, 6-13	54
719	Polymer-inorganic solid-electrolyte interphase for stable lithium metal batteries under lean electrolyte conditions. 2019 , 18, 384-389	367
718	Uniform Lithium Deposition Assisted by Single-Atom Doping toward High-Performance Lithium Metal Anodes. 2019 , 9, 1804019	95
717	Lithium bisoxalatodifluorophosphate (LiBODFP) as a multifunctional electrolyte additive for 5 V LiNi _{0.5} Mn _{1.5} O ₄ -based lithium-ion batteries with enhanced electrochemical performance. 2019 , 7, 8292-8301	43
716	Design of Red Phosphorus Nanostructured Electrode for Fast-Charging Lithium-Ion Batteries with High Energy Density. 2019 , 3, 1080-1093	102
715	CoS ₂ as a Sulfur Redox-Active Cathode Material for High-Capacity Nonaqueous Zn Batteries. 2019 , 123, 8740-8745	21
714	Identification of Phase Control of Carbon-Confined Nb ₂ O ₅ Nanoparticles toward High-Performance Lithium Storage. 2019 , 9, 1802695	88
713	Gyroidal Niobium Sulfide/Carbon Hybrid Monoliths for Electrochemical Energy Storage. 2019 , 2, 668-672	5
712	Mitigating self-discharge of carbon-based electrochemical capacitors by modifying their electric-double layer to maximize energy efficiency. 2019 , 38, 214-218	20
711	Effects of Carbon Pore Size on the Contribution of Ionic Liquid Electrolyte Phase Transitions to Energy Storage in Supercapacitors. 2019 , 6,	12
710	Electrospun sandwich polysulfonamide/polyacrylonitrile/polysulfonamide composite nanofibrous membranes for lithium-ion batteries.. 2019 , 9, 11220-11229	21
709	Mesoporous carbon nanotube microspheres supported microporous pyrolytic carbon for high-performance supercapacitors. 2019 , 840, 423-429	4
708	Micron-sized secondary Si/C composite with in situ crosslinked polymeric binder for high-energy-density lithium-ion battery anode. 2019 , 309, 157-165	19
707	An affordable manufacturing method to boost the initial Coulombic efficiency of disproportionated SiO lithium-ion battery anodes. 2019 , 426, 116-123	36

706	Hierarchical nitrogen-doped porous carbon/carbon nanotube composites for high-performance supercapacitor. 2019 , 130, 50-60	18
705	Key Aspects of Lithium Metal Anodes for Lithium Metal Batteries. 2019 , 15, e1900687	134
704	A new design for Si wears double jackets used as a high-performance lithium-ion battery anode. 2019 , 370, 565-572	30
703	Rheological phase synthesis of Fe ₂ P ₂ O ₇ /C composites as the precursor to fabricate high performance LiFePO ₄ /C composites for lithium-ion batteries. 2019 , 45, 12331-12336	4
702	Designing the Charge Storage Properties of Li-Exchanged Sodium Vanadium Fluorophosphate for Powering Implantable Biomedical Devices. 2019 , 9, 1900226	16
701	Overcharge Behavior and Early Warning Analysis of LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ /C Lithium-Ion Battery with High Capacity. 2019 , 166, A1055-A1062	31
700	Functional Hydrogels for Next-Generation Batteries and Supercapacitors. 2019 , 1, 335-348	103
699	High-Safety All-Solid-State Lithium-Metal Battery with High-Ionic-Conductivity Thermoresponsive Solid Polymer Electrolyte. 2019 , 19, 3066-3073	64
698	5 V Stable Nitrile-Bearing Polymer Electrolyte with Aliphatic Segment as Internal Plasticizer. 2019 , 2, 3264-3273	9
697	Hierarchical flower-like structures composed of cross-shaped vanadium dioxide nanobelts as superior performance anode for lithium and sodium ions batteries. 2019 , 480, 882-887	23
696	Optimising lithium-ion cell design for plug-in hybrid and battery electric vehicles. 2019 , 22, 228-238	36
695	The graphene/lanthanum oxide nanocomposites as electrode materials of supercapacitors. 2019 , 419, 99-105	117
694	Effect of ionic substitutions on the physicochemical, morphological, and electrochemical properties of lithium-rich vanadium phosphate and pyrophosphate compounds. 2019 , 25, 969-980	11
693	Construction of unique heterogeneous cobalt/manganese oxide porous microspheres for the assembly of long-cycle and high-rate lithium ion battery anodes. 2019 , 7, 6149-6160	73
692	Ni-stabilizing additives for completion of Ni-rich layered cathode systems in lithium-ion batteries: An Ab initio study. 2019 , 418, 74-83	12
691	A Layered Lithium-Rich Li(Li _{0.2} Ni _{0.15} Mn _{0.55} Co _{0.1})O ₂ Cathode Material: Surface Phase Modification and Enhanced Electrochemical Properties for Lithium-Ion Batteries. 2019 , 6, 1542-1551	6
690	Yeast protein derived hierarchical mesoporous carbon for symmetrical capacitor with excellent electrochemical performances. 2019 , 281, 50-56	7
689	Disordered surface formation of WS ₂ via hydrogen plasma with enhanced anode performances for lithium and sodium ion batteries. 2019 , 3, 865-874	13

688	High-Fluorinated Electrolytes for LiB Batteries. 2019 , 9, 1803774	144
687	Perovskite KNi _{0.1} Co _{0.9} F ₃ as a pseudocapacitive conversion anode for high-performance nonaqueous Li-ion capacitors and dual-ion batteries. 2019 , 7, 8315-8326	28
686	Quantitative characterization of the interfacial morphology and bulk porosity of nanoporous cluster-assembled carbon thin films. 2019 , 479, 395-402	19
685	Long Cycle Life Lithium Metal Batteries Enabled with Upright Lithium Anode. 2019 , 29, 1806752	60
684	Vanadium Nitride Nanoparticles as Anode Material for Lithium Ion Hybrid Capacitor Applications. 2019 , 34, 1274-1278	3
683	Material Characterization and Analysis on the Effect of Vibration and Nail Penetration on Lithium Ion Battery. 2019 , 10, 69	1
682	Rational Construction of V ₂ O ₅ @rGO with Enhanced Pseudocapacitive Storage for High-Performance Flexible Energy Storage Device. 2019 , 6, 5845-5855	6
681	Environmentally friendly room temperature synthesis of hierarchical porous Ni(OH) ₂ nanosheets for supercapacitor and catalysis applications. 2019 , 21, 5960-5968	20
680	A high-power lithium-ion hybrid capacitor based on a hollow N-doped carbon nanobox anode and its porous analogue cathode. 2019 , 11, 20715-20724	27
679	A hierarchical layering design for stable, self-restrained and high volumetric binder-free lithium storage. 2019 , 11, 21728-21732	4
678	Brief review of batteries for XEV applications. 2019 , 2, 100032	10
677	Artificial SEI Transplantation: A Pathway to Enabling Lithium Metal Cycling in Water-Containing Electrolytes. 2019 , 2, 8912-8918	3
676	Almond Shell-Derived Carbons under Low-Temperature Activation with Ultra-High Surface Area and Superior Performance for Supercapacitors. 2019 , 4, 12472-12478	2
675	Staging Na/K-ion de-/intercalation of graphite retrieved from spent Li-ion batteries: in operando X-ray diffraction studies and an advanced anode material for Na/K-ion batteries. 2019 , 12, 3575-3584	116
674	Lithiophilic montmorillonite serves as lithium ion reservoir to facilitate uniform lithium deposition. 2019 , 10, 4973	86
673	A Nitrogen-Doped Manganese Oxide Nanoparticles/Porous Carbon Nanosheets Hybrid Material: A High-Performance Anode for Lithium Ion Batteries. 2019 , 84, 1805-1815	2
672	A Rechargeable Aqueous Lithium Ion Battery with High Rate Capability Based on Metallic Cadmium and LiCoO ₂ . 2019 , 55, 1068-1076	
671	The influence of silica surface groups on the Li-ion conductivity of LiBH/SiO nanocomposites. 2019 , 21, 22456-22466	15

670	Design and synthesis of hierarchical NiO/NiVO nanoplatelet arrays with enhanced lithium storage properties.. 2019 , 9, 39536-39544	1
669	3D ordered macroporous MoO ₂ attached on carbonized cloth for high performance free-standing binder-free lithium-sulfur electrodes. 2019 , 7, 24524-24531	13
668	Three-dimensional MoS ₂ /rGO foams as efficient sulfur hosts for high-performance lithium-sulfur batteries. 2019 , 355, 671-678	107
667	Transition metal (Fe, Co, Ni) fluoride-based materials for electrochemical energy storage. 2019 , 4, 99-116	64
666	Increasing the Electric Double-Layer Capacitance in Boron-Doped Diamond Electrodes. 2019 , 6, 1683-1687	3
665	Nanocellulose for Energy Storage Systems: Beyond the Limits of Synthetic Materials. 2019 , 31, e1804826	115
664	Vanadium Dioxide for Li- and Na-Ion Storage. 2019 , 51-73	
663	Thermodynamic Activation of Charge Transfer in Anionic Redox Process for Li-Ion Batteries. 2019 , 99-121	3
662	Preparation and electrochemical properties of Li _{0.33} Sr _x La _{0.56} /3xTiO ₃ -based solid-state ionic supercapacitor. 2019 , 45, 2584-2590	6
661	Facile one-step carbothermal reduction synthesis of Na ₃ V ₂ (PO ₄) ₂ F ₃ /C serving as cathode for sodium ion batteries. 2019 , 298, 459-467	30
660	Hybrid energy storage devices: Advanced electrode materials and matching principles. 2019 , 21, 22-40	105
659	Recent progress in polymer materials for advanced lithium-sulfur batteries. 2019 , 90, 118-163	90
658	The Role of Cellulose Based Separator in Lithium Sulfur Batteries. 2019 , 166, A5237-A5243	18
657	Synergistically Suppressing Lithium Dendrite Growth by Coating Poly-L-Lactic Acid on Sustainable Gel Polymer Electrolyte. 2019 , 7, 1800768	3
656	Dimensionally Designed Carbon/Silicon Hybrids for Lithium Storage. 2019 , 29, 1806061	91
655	Nickel self-doped iron oxide/manganese carbonate hierarchical 2D/3D structures for electrochemical energy storage. 2019 , 297, 77-86	12
654	Scavenging Materials to Stabilize LiPF ₆ -Containing Carbonate-Based Electrolytes for Li-Ion Batteries. 2019 , 31, e1804822	96
653	PPy-encapsulated SnS Nanosheets Stabilized by Defects on a TiO Support as a Durable Anode Material for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 811-815	16.4 209

652	Carbon fiber@ pore-ZnO composite as anode materials for structural lithium-ion batteries. 2019 , 833, 39-46	18
651	Immobilized cation functional gel polymer electrolytes with high lithium transference number for lithium ion batteries. 2019 , 572, 382-389	42
650	PPy-encapsulated SnS ₂ Nanosheets Stabilized by Defects on a TiO ₂ Support as a Durable Anode Material for Lithium-Ion Batteries. 2019 , 131, 821-825	18
649	Redox-Mediator-Enhanced Electrochemical Capacitors: Recent Advances and Future Perspectives. 2019 , 12, 1118-1132	40
648	TEMPO-oxidized cellulose nanofiber-reinforced lignin based polyester films as a separator for electric double-layer capacitor. 2019 , 26, 569-580	12
647	First-principles modeling for optimal design, operation, and integration of energy conversion and storage systems. 2019 , 65, e16482	5
646	High Performance LiMn _{1.9} Al _{0.1} O ₄ Porous Microspheres Rapidly Self-Assembled through an Acetylene-Black-Assisted Solid-State Approach. 2019 , 6, 668-675	3
645	Advanced sodium-ion pseudocapacitor performance of oxygen-implanted hard carbon derived from carbon spheres. 2019 , 54, 4124-4134	9
644	One-pot synthesis of SnS/C nanocomposites on carbon paper as a high-performance free-standing anode for lithium ion batteries. 2019 , 779, 67-73	14
643	Synthesis and Characterization of Alginate-Based Sol-Gel Synthesis of Lithium Nickel Phosphate with Surface Area Control. 2019 , 58, 625-631	3
642	KOH activation of wax gourd-derived carbon materials with high porosity and heteroatom content for aqueous or all-solid-state supercapacitors. 2019 , 537, 569-578	54
641	Supercapacitor Energy Storage Device Using Biowastes: A Sustainable Approach to Green Energy. 2019 , 11, 414	82
640	Fading Mechanisms and Voltage Hysteresis in FeF ₂ -NiF Solid Solution Cathodes for Lithium and Lithium-Ion Batteries. 2019 , 15, e1804670	31
639	Rational design of porous carbon matrices to enable efficient lithiated silicon sulfur full cell. 2019 , 145, 100-111	10
638	Constructing surface-driven lithium ion storage structure for high performance hybrid capacitor. 2019 , 299, 163-172	15
637	A Practical Li-Ion Full Cell with a High-Capacity Cathode and Electrochemically Exfoliated Graphene Anode: Superior Electrochemical and Low-Temperature Performance. 2019 , 2, 486-492	12
636	An in-situ polymerized solid polymer electrolyte enables excellent interfacial compatibility in lithium batteries. 2019 , 299, 820-827	47
635	Improved high rate capability of Li[Li _{0.2} Mn _{0.534} Co _{0.133} Ni _{0.133}]O ₂ cathode material by surface modification with Co ₃ O ₄ . 2019 , 783, 349-356	13

- 634 Multilayer-graphene-stabilized lithium deposition for anode-free lithium-metal batteries. **2019**, 11, 2710-2720 60
- 633 Cyclic Voltammetry in Lithium-Sulfur Batteries: Challenges and Opportunities. **2019**, 7, 1801001 51
- 632 Spatially Self-Confined Formation of Ultrafine NiCoO Nanoparticles@Ultralong Amorphous N-Doped Carbon Nanofibers as an Anode towards Efficient Capacitive Li Storage. **2019**, 25, 863-873 19
- 631 Interfacial engineering of 0D/2D SnS heterostructure onto nitrogen-doped graphene for boosted lithium storage capability. **2019**, 538, 116-124 16
- 630 Capacitance controlled, hierarchical porous 3D ultra-thin carbon networks reinforced prussian blue for high performance Na-ion battery cathode. **2019**, 58, 192-201 64
- 629 Achieving three-dimensional lithium sulfide growth in lithium-sulfur batteries using high-donor-number anions. **2019**, 10, 188 120
- 628 Improved accessibility of porous carbon electrodes with surfactant ionic liquids for supercapacitors. **2019**, 49, 151-162 5
- 627 Zirconia fiber membranes based on PVDF as high-safety separators for lithium-ion batteries using a papermaking method. **2019**, 23, 269-276 12
- 626 Mn₂O₃@C yolk-shell nanocubes as lithium-storage anode with suppressed surface electrolyte decomposition. **2019**, 222, 256-262 5
- 625 Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal. *Angewandte Chemie - International Edition*, **2019**, 58, 3779-3783 16.4 204
- 624 LiY(MoO₄)₂ nanotubes: Novel zero-strain anode for electrochemical energy storage. **2019**, 21, 297-307 13
- 623 Unexplored Pathways To Charge Storage in Supercapacitors. **2019**, 123, 195-204 9
- 622 Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In Situ Etching of Extrinsic Metal. **2019**, 131, 3819-3823 34
- 621 1D Nb-doped LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ nanostructures as excellent cathodes for Li-ion battery. **2019**, 297, 258-266 50
- 620 Designed Nanoarchitectures by Electrostatic Spray Deposition for Energy Storage. **2019**, 31, e1803408 29
- 619 Three-dimensional hierarchical ternary aerogels of ultrafine TiO₂ nanoparticles@porous carbon nanofibers-reduced graphene oxide for high-performance lithium-ion capacitors. **2019**, 296, 790-798 23
- 618 Composite electrolytes of pyrrolidone-derivatives-PEO enable to enhance performance of all solid state lithium-ion batteries. **2019**, 293, 25-29 28
- 617 A multifunctional silicotungstic acid-modified Li-rich manganese-based cathode material with excellent electrochemical properties. **2019**, 23, 101-108 1

616	A robust strategy for engineering Li ₄ Ti ₅ O ₁₂ hollow micro-cube as superior rate anode for lithium ion batteries. 2019 , 293, 141-148	14
615	Sodium metal anodes for room-temperature sodium-ion batteries: Applications, challenges and solutions. 2019 , 16, 6-23	164
614	Towards rational mechanical design of inorganic solid electrolytes for all-solid-state lithium ion batteries. 2020 , 26, 313-324	48
613	Inverse-opal-structured hybrids of N, S-codoped-carbon-confined Co ₉ S ₈ nanoparticles as bifunctional oxygen electrocatalyst for on-chip all-solid-state rechargeable Zn-air batteries. 2020 , 260, 118209	86
612	Layered Transition Metal Dichalcogenide-Based Nanomaterials for Electrochemical Energy Storage. 2020 , 32, e1903826	174
611	Fabrication of a flexible binder-free lithium manganese oxide cathode for secondary Li - Ion batteries. 2020 , 137, 109222	10
610	A review on mechanistic understanding of MnO ₂ in aqueous electrolyte for electrical energy storage systems. 2020 , 65, 356-387	63
609	Advanced carbon nanostructures for future high performance sodium metal anodes. 2020 , 25, 811-826	70
608	Highly dispersible hollow nanospheres organized by ultra-small ZnFe ₂ O ₄ subunits with enhanced lithium storage properties. 2020 , 812, 152014	14
607	Mesoporous Fe ₃ S ₄ microparticles as a novel anode material for rechargeable alkaline aqueous batteries. 2020 , 26, 105-113	2
606	Design and interface optimization of a sandwich-structured cathode for lithium-sulfur batteries. 2020 , 381, 122648	13
605	Potassium pre-inserted K _{1.04} Mn ₈ O ₁₆ as cathode materials for aqueous Li-ion and Na-ion hybrid capacitors. 2020 , 46, 53-61	22
604	Construction of T-Nb ₂ O ₅ nanoparticles on/in N-doped carbon hollow tubes for Li-ion hybrid supercapacitors. 2020 , 330, 135204	35
603	Facile preparation of W ₅ O ₁₄ nanosheet arrays with large crystal channels as high-performance negative electrode for supercapacitor. 2020 , 330, 135209	13
602	Hierarchical porous nanofibers of carbon@nickel oxide nanoparticles derived from polymer/block copolymer system. 2020 , 31, 2202-2206	1
601	Polymer Electrolytes for Supercapacitor and Challenges. 2020 , 231-297	5
600	MOFs and COFs for Batteries and Supercapacitors. 2020 , 3, 81-126	57
599	Rational construction and decoration of Fe _{0.5} Nb _{24.5} O ₆₂ @C nanowires as superior anode material for lithium storage. 2020 , 384, 123314	9

598	La-doping and carbon-coating collaboratively enhance the cycling and rate properties of LiFeBO ₃ for Li-ion battery. 2020 , 741, 137090	4
597	Effect of dual local structures of amorphous FeSi films on the performance of anode of lithium-ion batteries. 2020 , 243, 122666	3
596	High-conductivity free-standing Li ₆ PS ₅ Cl/poly(vinylidene difluoride) composite solid electrolyte membranes for lithium-ion batteries. 2020 , 6, 70-76	19
595	SnS/N-Doped carbon composites with enhanced Li ⁺ storage and lifetime by controlled hierarchical submicron- and nano-structuring. 2020 , 22, 1547-1554	9
594	Nanostructured metal chalcogenides confined in hollow structures for promoting energy storage. 2020 , 2, 583-604	11
593	Chinese hydrangea lantern-like CoS@MoS composites with enhanced lithium-ion battery properties. 2020 , 12, 3435-3442	7
592	Confining sulfur particles in clay nanotubes with improved cathode performance of lithium-sulfur batteries. 2020 , 450, 227698	23
591	Materials and electrode engineering of high capacity anodes in lithium ion batteries. 2020 , 450, 227697	34
590	Mechanical properties of metallic lithium: from nano to bulk scales. 2020 , 186, 215-222	46
589	Fe ₂ O ₃ nanoparticles anchored in MWCNT hybrids as efficient sulfur hosts for high-performance lithium-sulfur battery cathode. 2020 , 858, 113806	10
588	Phosphorous/oxygen co-doped mesoporous carbon bowls as sulfur host for high performance lithium-sulfur batteries. 2020 , 450, 227658	16
587	Enhanced electrolyte performance by adopting Zwitterionic lithium-silica sulfobetaine silane as electrolyte additive for lithium-ion batteries. 2020 , 243, 122577	4
586	Co-Ni Alloy Encapsulated by N-doped Graphene as a Cathode Catalyst for Rechargeable Hybrid Li-Air Batteries. 2020 , 12, 4366-4372	22
585	Surface and Interfacial Chemistry in the Nickel-Rich Cathode Materials. 2020 , 3, 309-322	16
584	Fabrication of FeO@CuCo ₂ S ₄ multifunctional electrode for ultrahigh-capacity supercapacitors and efficient oxygen evolution reaction. 2020 , 44, 1798-1811	26
583	Anatase TiO ₂ Confined in Carbon Nanopores for High-Energy Li-Ion Hybrid Supercapacitors Operating at High Rates and Subzero Temperatures. 2020 , 10, 1902993	28
582	Constructing an unbalanced structure toward high working voltage for improving energy density of non-aqueous carbon-based electrochemical capacitors. 2020 , 31, 903-908	1
581	A review on doping/coating of nickel-rich cathode materials for lithium-ion batteries. 2020 , 819, 153048	59

580	Recent Advances and Challenges of Two-Dimensional Materials for High-Energy and High-Power Lithium-Ion Capacitors. 2020 , 3, 10-29	26
579	In-situ electrochemical functionalization of carbon materials for high-performance LiO ₂ batteries. 2020 , 48, 7-13	4
578	Large-scale giant architectonic electrodes designated with complex geometrics and super topographic surfaces for fully cycled dynamic LIB modules. 2020 , 26, 260-275	11
577	Highly Exfoliated and Functionalized Single-Walled Carbon Nanotubes as Fast-Charging, High-Capacity Cathodes for Rechargeable Lithium-Ion Batteries. 2020 , 12, 1322-1329	12
576	A LiAlO ₄ Solid-State Electrolyte with High Ionic Conductivity and Good Capability to Protect Li Anode. 2020 , 30, 1905949	31
575	Sulfur-Rich Molybdenum Sulfide as an Anode Coating to Improve Performance of Lithium Metal Batteries. 2020 , 7, 222-228	3
574	Electrochemical exfoliation of graphene as an anode material for ultra-long cycle lithium ion batteries. 2020 , 139, 109301	21
573	Structure, Magnetism, and Electrochemistry of LiMgZnVO Spinel with 0 μ . 2020 , 59, 777-789	6
572	Fast Lithium Ion Conduction in Lithium Phosphidoaluminates. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 5665-5674	16.4 16
571	Nano/Microstructured Silicon-Carbon Hybrid Composite Particles Fabricated with Corn Starch Biowaste as Anode Materials for Li-Ion Batteries. 2020 , 20, 625-635	88
570	Phase transformation and sulfur vacancy modulation of 2D layered tin sulfide nanoplates as highly durable anodes for pseudocapacitive lithium storage. 2020 , 392, 123722	27
569	Fast Lithium Ion Conduction in Lithium Phosphidoaluminates. 2020 , 132, 5714-5723	5
568	MoS ₂ nanosheets/graphitized porous carbon nanofiber composite: A dual-functional host for high-performance lithium-sulfur batteries. 2020 , 820, 153144	21
567	A Multi-Wall Sn/SnO ₂ @Carbon Hollow Nanofiber Anode Material for High-Rate and Long-Life Lithium-Ion Batteries. 2020 , 132, 2486-2493	30
566	Intercalation pseudo-capacitance behavior of few-layered molybdenum sulfide in various electrolytes. 2020 , 561, 117-126	9
565	A Multi-Wall Sn/SnO @Carbon Hollow Nanofiber Anode Material for High-Rate and Long-Life Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 2465-2472	16.4 107
564	Irreversible Structural Changes of Copper Hexacyanoferrate Used as a Cathode in Zn-Ion Batteries. 2020 , 26, 4917-4922	20
563	A lignocellulose-based neutral hydrogel electrolyte for high-voltage supercapacitors with overlong cyclic stability. 2020 , 363, 137241	7

562	Surface Modification of Li-Rich Mn-Based Layered Oxide Cathodes: Challenges, Materials, Methods, and Characterization. 2020 , 10, 2002506	44
561	Facile synthesis and performance of NASICON $\text{Li}_{1+x}\text{Al}_x\text{Ge}_{2-x}(\text{PO}_4)_3$ electrolytes for all solid state lithium-ion battery. 2020 , 356, 115454	2
560	Imaging Arrangements of Discrete Ions at Liquid-Solid Interfaces. 2020 , 20, 7927-7932	3
559	Recent advances in preparation and application of laser-induced graphene in energy storage devices. 2020 , 18, 100569	18
558	Self-assembled materials for electrochemical energy storage. 2020 , 45, 815-822	5
557	Supercapacitors in the Light of Solid Waste and Energy Management: A Review. 2020 , 4, 2000182	3
556	Anomalous Sodium Storage Behavior in Al/F Dual-Doped P2-Type Sodium Manganese Oxide Cathode for Sodium-Ion Batteries. 2020 , 10, 2002205	12
555	Construction of dual-function carbon materials network towards high performance MnCO_3 anode via nanoprecipitation process. 2020 , 358, 136930	
554	Waste-to-wealth: low-cost hard carbon anode derived from unburned charcoal with high capacity and long cycle life for sodium-ion/lithium-ion batteries. 2020 , 361, 137041	27
553	Highly crystalline nickel hexacyanoferrate as a long-life cathode material for sodium-ion batteries.. 2020 , 10, 27033-27041	11
552	Synthesis of a Very High Specific Surface Area Active Carbon and Its Electrical Double-Layer Capacitor Properties in Organic Electrolytes. 2020 , 4, 43	20
551	Bifunctional Surface Coating of LiNbO_3 on High-Ni Layered Cathode Materials for Lithium-Ion Batteries. 2020 , 12, 35098-35104	11
550	Progress of 3D network binders in silicon anodes for lithium ion batteries. 2020 , 8, 25548-25570	26
549	Dendrite-free Li Anode Enabled by a Metal-Organic Framework-Modified Solid Polymer Electrolyte for High-Performance Lithium Metal Batteries. 2020 , 3, 12351-12359	5
548	A review on recent approaches for designing the SEI layer on sodium metal anodes. 2020 , 1, 3143-3166	10
547	Nitrogen-Doped Mesoporous Carbon Microspheres by Spray Drying-Vapor Deposition for High-Performance Supercapacitor. 2020 , 8, 592904	0
546	Boosting Tunnel-Type Manganese Oxide Cathodes by Lithium Nitrate for Practical Aqueous Na-Ion Batteries. 2020 , 3, 10744-10751	0
545	Ionic liquid assisted multi-heteroatom doping in core-shell $\text{ZnFe}_2\text{O}_4@\text{rGO}$ with highly reversible lithiation/delithiation kinetics. 2020 , 848, 156593	4

544	Structure and dynamics of a chiral cubanoid complex composed of lithium and salphen. 2020 , 512, 119894	
543	Synthesis of Ni-rich LiNi _{0.83} Co _{0.12} Mn _{0.05} O ₂ cathode materials with low residual Lithium content without washing. 2020 , 355, 115418	2
542	Recent progress and challenges of carbon materials for Zn-ion hybrid supercapacitors. 2020 , 2, 521-539	59
541	Riveting Dislocation Motion: The Inspiring Role of Oxygen Vacancies in the Structural Stability of Ni-Rich Cathode Materials. 2020 , 12, 37208-37217	27
540	An Electrochemical Neutralization Cell for Spontaneous Water Desalination. 2020 , 4, 1730-1742	16
539	Lithium oxidation and electrolyte decomposition at Li-metal/liquid electrolyte interfaces. 2020 , 8, 17036-17055	18
538	Stable Electrochemical Li Plating/Stripping Behavior by Anchoring MXene Layers on Three-Dimensional Conductive Skeletons. 2020 , 12, 37967-37976	14
537	The influence of alkyl chain branching on the properties of pyrrolidinium-based ionic electrolytes. 2020 , 22, 18102-18113	5
536	Review on comprehending and enhancing the initial Coulombic efficiency of anode materials in lithium-ion/sodium-ion batteries. 2020 , 77, 105143	106
535	Application of MOFs-derived mixed metal oxides in energy storage. 2020 , 878, 114576	13
534	Electrical and electrochemical studies of core-shell structured nanorods of LiMn ₂ O ₄ @PANI composite. 2020 , 31, 19526-19540	1
533	Design and fabrication of NaFePO ₄ /MWCNTs hybrid electrode material for sodium-ion battery. 2020 , 31, 21792-21801	1
532	7-Hydroxycoumarin as a Novel Film-Forming Additive for LiNi _{0.5} Mn _{1.5} O ₄ Cathode at Elevated Temperature. 2020 , 7, 4655-4662	2
531	Practical energy densities, cost, and technical challenges for magnesium-sulfur batteries. 2020 , 2, e12056	7
530	Robust Cu microcone-array supported silicon film with superb cycling stability for negative electrode of lithium battery. 2020 ,	
529	Vacancy-Driven High Rate Capabilities in Calcium-Doped Na _{0.4} MnO ₂ Cathodes for Aqueous Sodium-Ion Batteries. 2020 , 10, 2002077	12
528	Advanced Battery-Type Anode Materials for High-Performance Sodium-Ion Capacitors. 2020 , 4, 2000401	30
527	Piper longum Extract-Mediated Green Synthesis of Porous Cu ₂ O:Mo Microspheres and Their Superior Performance as Active Anode Material in Lithium-Ion Batteries. 2020 , 8, 14557-14567	8

526	Carbon Encapsulated Ternary MnNiCo Oxide Nanoparticles as Electrode Materials for Energy Storage Applications. 2020 , 32, 2926-2935	6
525	Sustainable Formation of Sulfur-Enriched Solid Electrolyte Interface on a Li Metal Electrode by Sulfur Chain-Containing Polymer Electrolyte Interfacial Layers. 2020 , 3, 10070-10079	1
524	Li-rich cathodes for rechargeable Li-based batteries: reaction mechanisms and advanced characterization techniques. 2020 , 13, 4450-4497	72
523	Bagasse as a carbon structure with high sulfur content for lithium-sulfur batteries.. 2020 , 10, 32345-32349	0
522	Electrochemically Active Red P/BaTiO ₃ -Based Protective Layers Suppressing Li Dendrite Growth for Li Metal Batteries. 2020 , 7, 2001037	6
521	Quantify the Protein-Protein Interaction Effects on Adsorption Related Lubricating Behaviors of α -Amylase on a Glass Surface. 2020 , 12,	0
520	Synthesis of lithium manganese oxide nanocomposites using microwave-assisted chemical precipitation technique and their performance evaluation in lithium-ion batteries. 2020 , 2, e202	4
519	Methanol-derived high-performance NaV(PO)/C: from kilogram-scale synthesis to pouch cell safety detection. 2020 , 12, 21165-21171	6
518	Laminar Burning Velocity of the Dimethyl Carbonate/Air Mixture Formed by the Li-Ion Electrolyte Solvent. 2020 , 56, 383-393	5
517	Electrochemical properties study on NCM622 by in suit modification of Mg and F. 2020 , 1605, 012166	
516	Recent Advances in Semiconducting Monoelemental Selenium Nanostructures for Device Applications. 2020 , 30, 2003301	18
515	Coaxial double helix structured fiber-based triboelectric nanogenerator for effectively harvesting mechanical energy. 2020 , 2, 4482-4490	7
514	Vanadium based carbide-oxide heterogeneous VO@VC nanotube arrays for high-rate and long-life lithium-sulfur batteries. 2020 , 12, 18950-18964	11
513	Interlinking Primary Grains with Lithium Boron Oxide to Enhance the Stability of LiNiCoAlO. 2020 , 12, 56963-56973	7
512	Facile fabrication of comb-like porous NiCo ₂ O ₄ nanoneedles on Ni foam as an advanced electrode for high-performance supercapacitor. 2020 , 45, 32343-32354	13
511	Bulk COFs and COF nanosheets for electrochemical energy storage and conversion. 2020 , 49, 3565-3604	256
510	Hollow-Structured Electrode Materials: Self-Templated Synthesis and Their Potential in Secondary Batteries. 2020 , 6, 1298-1314	3
509	How the Nature of the Alkali Metal Cations Influences the Double-Layer Capacitance of Cu, Au, and Pt Single-Crystal Electrodes. 2020 , 124, 12442-12447	17

508	Promoting the sulfur conversion kinetics via a solid auxiliary redox couple embedded in the cathode of LiS batteries. 2020 , 4, 3701-3711	0
507	Li/S. 2020 , 1-36	
506	One-step fabrication of biomass-derived hierarchically porous carbon/MnO nanosheets composites for symmetric hybrid supercapacitor. 2020 , 526, 146696	81
505	Structural engineering of Fe _{2.8} Sn _{0.2} O ₄ @C micro/nano composite as anode material for high-performance lithium ion batteries. 2020 , 468, 228366	5
504	Construction of metal-organic framework-derived CeO ₂ /C integrated MoS ₂ hybrid for high-performance asymmetric supercapacitor. 2020 , 353, 136502	36
503	Emerging investigator series: first-principles and thermodynamics comparison of compositionally-tuned delafossites: cation release from the (001) surface of complex metal oxides. 2020 , 7, 1642-1651	4
502	The design and synthesis of NiCoO ₂ @NiCoO ₂ @Ni nanoflakes arrays for electrochemical energy storage. 2020 , 830, 154667	8
501	Nanostructured CoS ₂ -Decorated Hollow Carbon Spheres: A Performance Booster for Li-Ion/Sulfur Batteries. 2020 , 3, 6447-6459	10
500	1-(2-Cyanoethyl)pyrrole enables excellent battery performance at high temperature via the synergistic effect of Lewis base and C[triple bond, length as m-dash]N functional groups. 2020 , 56, 8420-8423	1
499	A Triple-Gradient Host for Long Cycling Lithium Metal Anodes at Ultrahigh Current Density. 2020 , 16, e2001992	8
498	Flexible Type Symmetric Supercapacitor Electrode Fabrication Using Phosphoric Acid-Activated Carbon Nanomaterials Derived from Cow Dung for Renewable Energy Applications. 2020 , 5, 15028-15038	12
497	Recent advances in phthalocyanines for chemical sensor, non-linear optics (NLO) and energy storage applications. 2020 , 420, 213359	55
496	Simultaneously enhancing the thermal stability and electrochemical performance of solid polymer electrolytes by incorporating rod-like Zn ₂ (OH)BO ₃ particles. 2020 , 45, 19601-19610	5
495	Operando Differential Electrochemical Pressimetry for Probing Electrochemo-Mechanics in All-Solid-State Batteries. 2020 , 30, 2002535	19
494	Multifunctional MoSe ₂ @rGO coating on the cathode versus the separator as an efficient polysulfide barrier for high-performance lithium-sulfur battery. 2020 , 527, 146785	28
493	Charge/discharge cycling of Li _{1+x} (Ni _{0.6} Co _{0.2} Mn _{0.2}) _{1-x} O ₂ primary particles performed in a liquid microcell for transmission electron microscopy studies. 2020 , 2, 034007	5
492	Gel Polymer Electrolyte with Anion-Trapping Boron Moieties via One-Step Synthesis for Symmetrical Supercapacitors. 2020 , 305, 1900807	2
491	Confined red phosphorus in N-doped hierarchically porous carbon for lithium ion batteries with enhanced rate capability and cycle stability. 2020 , 305, 110365	5

490	A Novel Li ⁺ -Conducting Polymer Membrane Gelled by Fluorine-Free Electrolyte Solutions for Li-Ion Batteries. 2020 , 3, 1112-1119	2
489	Manganese selenide: Synthetic aspects and applications. 2020 , 842, 155800	7
488	Study of the solid electrolyte interphase of Li-O ₂ battery electrolyte by analytical transmission electron microscopy. 2020 , 69, 227-233	3
487	On-line monitoring of dissolution processes in nonaqueous electrolytes [A case study with platinum. 2020 , 114, 106702	9
486	Two-Dimensional Transition Metal Chalcogenides for Alkali Metal Ions Storage. 2020 , 13, 1114-1154	37
485	Engaging tailored capacity of layered WS ₂ via sulphur bonding coupled with polyetherimide (WS ₂ @NC) nanocomposite for high power and improved lithium-ion storage. 2020 , 246, 122832	5
484	Lithiophilic Silver Coating on Lithium Metal Surface for Inhibiting Lithium Dendrites. 2020 , 8, 109	6
483	Amine- and Amide-Functionalized Mesoporous Carbons: A Strategy for Improving Sulfur/Host Interactions in LIB Batteries. 2020 , 3, 757-765	5
482	DFT and thermodynamics calculations of surface cation release in LiCoO ₂ . 2020 , 515, 145865	18
481	In-situ formation of oxygen-vacancy-rich NiCo ₂ O ₄ /nitrogen-deficient graphitic carbon nitride hybrids for high-performance supercapacitors. 2020 , 340, 135996	25
480	Ultrastable Silicon Anode by Three-Dimensional Nanoarchitecture Design. 2020 , 14, 4374-4382	49
479	Imidazolium-based ionic liquids as electrolyte additives for high-voltage Li-ion batteries. 2020 , 46, 3007-3023	6
478	An ionic liquid-modified reduced graphene oxide electrode material with favourable electrochemical properties. 2020 , 44, 6428-6434	7
477	Covalent Organic Frameworks: Advanced Organic Electrode Materials for Rechargeable Batteries. 2020 , 10, 1904199	240
476	A functional hyperbranched binder enabling ultra-stable sulfur cathode for high-performance lithium-sulfur battery. 2020 , 50, 63-72	19
475	Toward the Design of High-performance Supercapacitors by Prussian Blue, its Analogues and their Derivatives. 2020 , 3, 323-345	12
474	Determination of solid electrolyte interphase formation mechanism on negative electrode surface in Li-O ₂ battery electrolyte by operando electrochemical atomic force microscopy observation. 2020 , 528, 146997	1
473	Anisotropic alignments of hierarchical LiSiO/TiO @nano-C anode//LiMnPO@nano-C cathode architectures for full-cell lithium-ion battery. 2020 , 7, 863-880	15

472	One-Step Processing of Soft Electrolyte/Metallic Lithium Interface for High-Performance Solid-State Lithium Batteries. 2020 , 3, 6139-6145	6
471	Surface engineering of $\text{LiNi}_{0.8}\text{Mn}_{0.1}\text{Co}_{0.1}\text{O}_2$ towards boosting lithium storage: Bimetallic oxides versus monometallic oxides. 2020 , 77, 105034	35
470	The Development of Vanadyl Phosphate Cathode Materials for Energy Storage Systems: A Review. 2020 , 26, 8190-8204	10
469	Spinel/layered heterostructured Li-rich Mn-based cathode material for high-capacity and high-rate Li-ion batteries. 2020 , 31, 5376-5384	3
468	Sulfur-Based Electrode Using a Polyelectrolyte Binder Studied via Coupled in Situ Synchrotron X-ray Diffraction and Tomography. 2020 , 3, 2422-2431	8
467	Dual-Scale Al_2O_3 Particles Coating for High-Performance Separator and Lithium Metal Anode. 2020 , 8, 1901429	11
466	In Situ Construction of Spinel Coating on the Surface of a Lithium-Rich Manganese-Based Single Crystal for Inhibiting Voltage Fade. 2020 , 12, 11579-11588	24
465	Biomass-Derived Carbons for Sodium-Ion Batteries and Sodium-Ion Capacitors. 2020 , 13, 1275-1295	51
464	Controlled design of metal oxide-based ($\text{Mn}^{2+}/\text{Nb}^{5+}$) anodes for superior sodium-ion hybrid supercapacitors: Synergistic mechanisms of hybrid ion storage. 2020 , 71, 104594	46
463	Lithium-selenium sulfide batteries with long cycle life and high energy density via solvent washing treatment. 2020 , 512, 145632	5
462	Hierarchically Rambutan-Like $\text{Zn}_3\text{V}_3\text{O}_8$ Hollow Spheres as Anodes for Lithium-/Potassium-Ion Batteries. 2020 , 8, 2000010	8
461	Transport and Structure of Room-Temperature Ionic Liquids in Conical Nanopores under External Electric Fields. 2020 , 124, 5817-5828	0
460	Hierarchical WS@NiCoO Core-shell Heterostructure Arrays Supported on Carbon Cloth as High-Performance Electrodes for Symmetric Flexible Supercapacitors. 2020 , 5, 4657-4667	14
459	Cyclic Aminosilane-Based Additive Ensuring Stable Electrode/Electrolyte Interfaces in Li-Ion Batteries. 2020 , 10, 2000012	36
458	Stretchable Lithium-Ion Battery Based on Re-entrant Micro-honeycomb Electrodes and Cross-Linked Gel Electrolyte. 2020 , 14, 3660-3668	44
457	Increasing Poly(ethylene oxide) Stability to 4.5 V by Surface Coating of the Cathode. 2020 , 5, 826-832	91
456	Boosting aqueous zinc-ion storage in MoS_2 via controllable phase. 2020 , 389, 124405	53
455	Designing ionic channels in novel carbons for electrochemical energy storage. 2020 , 7, 191-201	16

454	Insight into pseudocapacitive-diffusion mixed kinetics and conversion-alloying hybrid mechanisms of low-cost Zn-Mn perovskite fluorides anodes for powerful Li-ion/dual-ion storage. 2020 , 388, 124154	8
453	Porous carbon prepared via combustion and acid treatment as flexible zinc-ion capacitor electrode material. 2020 , 387, 124161	73
452	Thermal Stability Enhancement through Structure Modification on the Microsized Crystalline Grain Surface of Lithium-Rich Layered Oxides. 2020 , 12, 8306-8315	24
451	DBD plasma-tuned functionalization of edge-enriched graphene nanoribbons for high performance supercapacitors. 2020 , 337, 135741	6
450	Defective Phosphorene as a Promising Anchoring Material for Lithium-Sulfur Batteries. 2020 , 124, 2739-2746	22
449	Loan approval evaluation framework of public-private partnership project of battery storage power station under interval-valued intuitionistic fuzzy environment. 2020 , 254, 120133	6
448	Biomass-derived porous graphitic carbon materials for energy and environmental applications. 2020 , 8, 5773-5811	110
447	Interface engineering by atomically thin layer tungsten disulfide catalyst for high performance LiS battery. 2020 , 16, 100380	10
446	Synthesis, structural and microstructural study of new FeNa _{0.5} H _{1.5} MoO ₅ hybrid material for highly efficient energy storage hybrid systems. 2020 , 113, 107811	1
445	Counter-ion and humidity effects on electromechanical properties of Nafion® /Pt composites. 2020 , 244, 122674	12
444	Electrochemical Properties of Tin Sulfide Nano-Sheets as Cathode Material for Lithium-Sulfur Batteries. 2020 , 8, 254	2
443	Design of P-Doped Mesoporous Carbon Nitrides as High-Performance Anode Materials for Li-Ion Battery. 2020 , 12, 24007-24018	24
442	A novel SiO ₂ nanofiber-supported organic/inorganic gel polymer electrolyte for dendrite-free lithium metal batteries. 2020 , 55, 9504-9515	3
441	Enabling electrochemical compatibility of non-flammable phosphate electrolytes for lithium-ion batteries by tuning their molar ratios of salt to solvent. 2020 , 56, 6559-6562	12
440	Template-assisted synthesis of LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ hollow nanospheres as cathode material for lithium ion batteries. 2020 , 55, 9493-9503	5
439	Sn restriction and Li ₂ S reversible properties of novel sandwiched SnS@graphene hollow-sphere architecture for lithium storage. 2020 , 345, 136154	3
438	Electrolyte-Additive-Driven Interfacial Engineering for High-Capacity Electrodes in Lithium-Ion Batteries: Promise and Challenges. 2020 , 5, 1537-1553	77
437	TiCT MXene Nanosheets as a Robust and Conductive Tight on Si Anodes Significantly Enhance Electrochemical Lithium Storage Performance. 2020 , 14, 5111-5120	77

436	Sodiophilic Decoration of a Three-Dimensional Conductive Scaffold toward a Stable Na Metal Anode. 2020 , 8, 5452-5463	17
435	Sodium phthalate as an anode material for sodium ion batteries: effect of the bridging carbonyl group. 2020 , 8, 8469-8475	10
434	The electrochemical interface in first-principles calculations. 2020 , 75, 100492-100492	44
433	Ultrafast microwave synthesis of rambutan-like CMK-3/carbon nanotubes nanocomposites for high-performance supercapacitor electrode materials. 2020 , 10, 6227	7
432	The Sodium Storage Mechanism in Tunnel-Type Na _{0.44} MnO ₂ Cathodes and the Way to Ensure Their Durable Operation. 2020 , 10, 2000564	20
431	Recent Advances in the Development of Organic and Organometallic Redox Shuttles for Lithium-Ion Redox Flow Batteries. 2020 , 13, 2142-2159	8
430	Achieving a 2.7 V aqueous hybrid supercapacitor by the pH-regulation of electrolyte. 2020 , 8, 8648-8660	18
429	Layered VSe ₂ : a promising host for fast zinc storage and its working mechanism. 2020 , 8, 9313-9321	29
428	Manipulating interfacial stability of LiNi _{0.5} Co _{0.3} Mn _{0.2} O ₂ cathode with sulfide electrolyte by nanosized LLTO coating to achieve high-performance all-solid-state lithium batterie. 2021 , 52, 202-209	19
427	Advances in Composite Polymer Electrolytes for Lithium Batteries and Beyond. 2021 , 11, 2000802	74
426	Stabilization Perspective on Metal Anodes for Aqueous Batteries. 2021 , 11, 2000962	51
425	Carbon decorated Li ₃ V ₂ (PO ₄) ₃ for high-rate lithium-ion batteries: Electrochemical performance and charge compensation mechanism. 2021 , 53, 124-131	16
424	Graphene quantum dots synthesis and energy application: a review. 2021 , 31, 1-12	18
423	A Review of Metal Silicides for Lithium-Ion Battery Anode Application. 2021 , 34, 291-308	8
422	Insight into pre-sodiation in Na ₃ V ₂ (PO ₄) ₂ F ₃ /C @ hard carbon full cells for promoting the development of sodium-ion battery. 2021 , 413, 127565	13
421	Recent advancement made in the field of reduced graphene oxide-based nanocomposites used in the energy storage devices: A review. 2021 , 33, 102032	19
420	Understanding all solid-state lithium batteries through in situ transmission electron microscopy. 2021 , 42, 137-161	34
419	Confinement of PMo ₁₂ in hollow SiO ₂ -PMo ₁₂ @rGO nanospheres for high-performance lithium storage. 2021 , 8, 352-360	5

418	Chemically building interpenetrating polymeric networks of Bi-crosslinked hydrogel macromolecules for membrane supercapacitors. 2021 , 255, 117346	10
417	Porous conductive interlayer for dendrite-free lithium metal battery. 2021 , 53, 412-418	7
416	VOx/VSx@Graphene nanocomposites for electrochemical energy storage. 2021 , 404, 126310	3
415	Highly stable aqueous rechargeable Zn-ion battery: The synergistic effect between NaV6O15 and V2O5 in skin-core heterostructured nanowires cathode. 2021 , 55, 25-33	20
414	Nb2O5 quantum dots coated with biomass carbon for ultra-stable lithium-ion supercapacitors. 2021 , 850, 156808	22
413	Comparative life cycle assessment of high performance lithium-sulfur battery cathodes. 2021 , 282, 124528	12
412	Interfacial challenges for all-solid-state batteries based on sulfide solid electrolytes. 2021 , 7, 209-218	30
411	Superior lithium-ion storage performance of hierarchical tin disulfide and carbon nanotube-carbon cloth composites. 2021 , 482, 228923	10
410	Atom-economic synthesis of Magnli phase Ti4O7 microspheres for improved sulfur cathodes for LiB batteries. 2021 , 79, 105428	17
409	Polymer gel electrolytes for flexible supercapacitors: Recent progress, challenges, and perspectives. 2021 , 34, 320-355	30
408	Uniformly dispersed nano-crystallite graphite in a silicon-oxygen-carbon matrix for high rate performance lithium-ion batteries. 2021 , 857, 157476	1
407	Advanced electrolyte design for stable lithium metal anode: From liquid to solid. 2021 , 80, 105516	34
406	Advances in triboelectric nanogenerators for biomedical sensing. 2021 , 171, 112714	90
405	Needle-like cobalt phosphide arrays grown on carbon fiber cloth as a binder-free electrode with enhanced lithium storage performance. 2021 , 32, 154-157	3
404	High-performance hybrid supercapacitors based on MOF-derived hollow ternary chalcogenides. 2021 , 35, 750-760	44
403	Progress in layered cathode and anode nanoarchitectures for charge storage devices: Challenges and future perspective. 2021 , 35, 443-469	18
402	Ultrasmall SnO2 nanocrystals sandwiched into polypyrrole and Ti3C2Tx MXene for highly effective sodium storage. 2021 , 5, 825-833	13
401	Ingeniously designing anode material of Ni3S2/MnS2@Carbon nanocomposite with a wide potential window of 1.3 V. 2021 , 365, 137386	3

400	Nanowires: Synthesis and Energy/Environmental Applications. 2021 ,	4
399	Recent advances on the bacterial cellulose-derived carbon aerogels. 2021 , 9, 818-828	14
398	First Decade of Interfacial Iontronic Sensing: From Droplet Sensors to Artificial Skins. 2021 , 33, e2003464	50
397	Boosting LiS battery performance using an in-cell electropolymerized conductive polymer. 2021 , 2, 974-984	1
396	Metal-Organic-Framework-Derived Porous Carbon Embedded with TiO ₂ Nanoparticles as a Cathode for Advanced Lithium-Sulfur Batteries. 2021 , 8, 90-95	8
395	Recent progress in carbon-based materials for supercapacitor electrodes: a review. 2021 , 56, 173-200	150
394	Organophosphorus decorated lithium borate and phosphate salts with extended π -conjugated backbone. 2021 , 50, 6667-6672	
393	Building next-generation supercapacitors with battery type Ni(OH) ₂ . 2021 , 9, 15542-15585	14
392	Lignin biopolymer: the material of choice for advanced lithium-based batteries.. 2021 , 11, 23644-23653	7
391	A multifunctional artificial protective layer for producing an ultra-stable lithium metal anode in a commercial carbonate electrolyte. 2021 , 9, 7667-7674	12
390	Structure and properties of 2D materials in general and their importance to energy storage. 2021 , 11-75	
389	Polymer nanocomposites for energy-related applications. 2021 , 215-248	
388	Efficient energy storage in mustard husk derived porous spherical carbon nanostructures.	3
387	Enabling stable and high-rate cycling of a Ni-rich layered oxide cathode for lithium-ion batteries by modification with an artificial Li ⁺ -conducting cathode-electrolyte interphase. 2021 , 9, 11623-11631	5
386	Emerging trends in anion storage materials for the capacitive and hybrid energy storage and beyond. 2021 , 50, 6734-6789	25
385	Batteries. 2021 , 79-141	
384	Conjugated cyclized-polyacrylonitrile encapsulated carbon nanotubes as core-shell heterostructured anodes with favorable lithium storage. 2021 , 9, 6962-6970	5
383	Synthesis, Modification, and Lithium-Storage Properties of Spinel LiNi _{0.5} Mn _{1.5} O ₄ . 2021 , 8, 608-624	5

382	In situ-formed flexible three-dimensional honeycomb-like film for a LiF/Li ₃ N-enriched hybrid organic/inorganic interphase on the Li metal anode.	3
381	Elucidating the nature of grain boundary resistance in lithium lanthanum titanate. 2021 , 9, 6487-6498	11
380	Revealing practical specific capacity and carbonyl utilization of multi-carbonyl compounds for organic cathode materials. 2021 , 23, 13159-13169	1
379	Understanding Structure-Property Relationships under Experimental Conditions for the Optimization of Lithium-Ion Capacitor Anodes based on All-Carbon-Composite Materials. 2021 , 9, 2001054	1
378	Ti ₃ C ₂ T _x MXene for electrode materials of supercapacitors. 2021 , 9, 11501-11529	41
377	Cultured Diatoms Suitable for the Advanced Anode of Lithium Ion Batteries. 2021 , 9, 844-852	4
376	A facial strategy to synthesize Co ₃ O ₄ hollow tube nanoarray with enhanced supercapacitive performance. 2021 , 34, 102169	8
375	Effect of Structural Ordering on the Charge Storage Mechanism of p-Type Organic Electrode Materials. 2021 , 13, 7135-7141	5
374	Tortuosity Modulation toward High-Energy and High-Power Lithium Metal Batteries. 2021 , 11, 2003663	13
373	Stabilization of Organic Cathodes by a Temperature-Induced Effect Enabling Higher Energy and Excellent Cyclability. 2021 , 13, 7178-7187	8
372	Replacing conventional battery electrolyte additives with dioxolone derivatives for high-energy-density lithium-ion batteries. 2021 , 12, 838	30
371	Quantum Simulations of Hydrogen Bonding Effects in Glycerol Carbonate Electrolyte Solutions. 2021 , 125, 2157-2166	4
370	A novel redox capacitor with a natural rubber-based solid polymer electrolyte for energy applications. 2021 , 27, 2231-2239	1
369	Recent advances in nonmetallic atom-doped metal nanocrystals: Synthesis and catalytic applications. 2021 , 32, 2679-2679	1
368	Supercapacitor electrode materials: addressing challenges in mechanism and charge storage. 2021 ,	13
367	A Growing Appreciation for the Role of LiF in the Solid Electrolyte Interphase. 2021 , 11, 2100046	106
366	Trifunctional Electrolyte Additive Hexadecyltrioctylammonium Iodide for Lithium-Sulfur Batteries with Extended Cycle Life. 2021 , 13, 16545-16557	4
365	Comparative Studies of Solutions of Homogeneous Electrochemical Capacitors Models. 2021 , 35, 102221	1

364	Mapping the knowledge domains of new energy vehicle safety: Informetrics analysis-based studies. 2021 , 35, 102275	3
363	Interlayer spacing engineering in N doped MoS ₂ for efficient lithium ion storage. 2021 , 261, 124166	3
362	Fe-cation Doping in NiSe as an Effective Method of Electronic Structure Modulation towards High-Performance Lithium-Sulfur Batteries. 2021 , 14, 1710-1719	5
361	Lithium-Ion Desolvation Induced by Nitrate Additives Reveals New Insights into High Performance Lithium Batteries. 2021 , 31, 2101593	27
360	Investigation on the electrochemical performance of hybrid zinc batteries through numerical analysis. 2021 , 375, 137967	3
359	High-Performance Ytterbium-Doped V ₂ O ₅ / H ₂ O Binder-Free Thin-Film Electrodes for Supercapacitors. 2021 , 8, 1993-2004	0
358	Study on modification and failure of precast solid electrolyte interface film on Li metal anodes. 2021 , 45, 14034-14046	
357	Porosity Engineering of MOF-Based Materials for Electrochemical Energy Storage. 2021 , 11, 2100154	18
356	Synergistic engineering of fluorine doping and oxygen vacancies towards high-energy and long-lifespan flexible solid-state asymmetric supercapacitor. 2021 , 27, 2649-2658	1
355	Large-surface-area activated carbon with high density by electrostatic densification for supercapacitor electrodes. 2021 , 175, 281-288	25
354	Polypyrrole Modification of High Sulfur-Loaded Three-Dimensional Aluminum Foam Cathode in Lithium-Sulfur Batteries for High-Rate Capability. 2021 , 168, 040517	3
353	Maintaining a Flat Li Surface during the Li Stripping Process via Interface Design. 2021 , 33, 2814-2823	10
352	Flexible Antifreeze Zn-Ion Hybrid Supercapacitor Based on Gel Electrolyte with Graphene Electrodes. 2021 , 13, 16454-16468	39
351	Strategies for fabrication, confinement and performance boost of Li ₂ S in lithium-sulfur, silicon-sulfur & related batteries. 2021 , 49, 253-253	10
350	Chalcogen as Anode Material for Aqueous Rechargeable Lithium-Ion Batteries. 2021 , 57, 419-433	
349	Disc-Shaped Li ₄ K _x Ti ₅ O ₁₂ Derived from MIL-125(Ti) as an Anode Material with High Performance For Lithium-Ion Batteries. 2021 , 50, 4066-4074	0
348	Covalently Interlinked Graphene Sheets with Sulfur-Chains Enable Superior Lithium-Sulfur Battery Cathodes at Full-Mass Level. 2021 , 31, 2101326	6
347	Revealing the Impact of Hierarchical Pore Organization in Supercapacitor Electrodes by Coupling Ionic Dynamics at Micro- and Macroscales. 2021 , 11, 2100700	9

346	Evaluation and realization of safer Mg-S battery: The decisive role of the electrolyte. 2021 , 83, 105832	3
345	Multidimensional Nonstoichiometric Electrode Materials for Electrochemical Energy Conversion and Storage. 2100640	10
344	Heteroepitaxial interface of layered cathode materials for lithium ion batteries. 2021 , 37, 161-189	6
343	High energy density and extremely stable supercapacitors based on carbon aerogels with 100% capacitance retention up to 65,000 cycles. 2021 , 118,	6
342	Safety challenges and safety measures of Li-ion batteries. 2021 , 9, 1647-1672	10
341	Aluminum and lithium sulfur batteries: a review of recent progress and future directions. 2021 , 33,	3
340	Towards Higher Electric Conductivity and Wider Phase Stability Range via Nanostructured Glass-Ceramics Processing. 2021 , 11,	9
339	Hierarchical Porous Graphene Bubbles as Host Materials for Advanced Lithium Sulfur Battery Cathode. 2021 , 9, 653476	5
338	A Review on the Current Progress and Challenges of 2D Layered Transition Metal Dichalcogenides as Li/Na-ion Battery Anodes. 2021 , 8, 2358-2396	5
337	Strategies to anode protection in lithium metal battery: A review.	33
336	Fundamental and solutions of microcrack in Ni-rich layered oxide cathode materials of lithium-ion batteries. 2021 , 83, 105854	66
335	Extraction and comparative study of green energy using different types of biowaste material. 2021 , 49, 3474-3474	1
334	Operando analysis of the molten Li LLZO interface: Understanding how the physical properties of Li affect the critical current density. 2021 , 4, 1947-1961	17
333	Transformation of Undesired Li ₂ CO ₃ into Lithiophilic Layer Via Double Replacement Reaction for Garnet Electrolyte Engineering.	5
332	Aging processes in high voltage lithium-ion capacitors containing liquid and gel-polymer electrolytes. 2021 , 496, 229797	2
331	A review of self-healing electrode and electrolyte materials and their mitigating degradation of Lithium batteries. 2021 , 84, 105907	14
330	Nonpolar Solvent-based Electrolytes with a Quasi-Solid-State Redox Reaction for Lithium-Sulfur Batteries. 2021 , 8, 2321-2328	
329	Sb ₂ S ₃ -Bi ₂ S ₃ microrods with the combined action of carbon encapsulation and rGO confinement for improving high cycle stability in sodium/potassium storage. 2021 , 414, 128787	18

328	Core-shell NiSe/Ni(OH) with NiSe nanorods and Ni(OH) nanosheets as battery-type electrode for hybrid supercapacitors. 2021 , 32,	5
327	A review on the stability and surface modification of layered transition-metal oxide cathodes. 2021 , 46, 155-182	35
326	An ultrahigh power LiD ₂ battery. 2021 , 27, 102412	1
325	Organic cation linkers polyoxomolybdate-polypyrrole nanocomposite-based supercapacitors. 2021 , 27, 4023-4035	1
324	Revealing the Multi-Electron Reaction Mechanism of Na V O (PO) F Towards Improved Lithium Storage. 2021 , 14, 2984-2991	1
323	A Strategy to Reduce Air Breakdown Effect and Boost Output Energy for Contact-Separation Mode Triboelectric Nanogenerator. 2021 ,	1
322	Laser-Ablated Red Phosphorus on Carbon Nanotube Film for Accelerating Polysulfide Conversion toward High-Performance and Flexible Lithium-Sulfur Batteries.. 2021 , 5, e2100215	9
321	Electrocatalytic performance of NiNHBDc MOF based composites with rGO for methanol oxidation reaction. 2021 , 11, 13402	8
320	Biomass-based activated carbon monolith from Tectona grandis leaf as supercapacitor electrode materials. 1-12	4
319	Synthesis of Nickel Fumarate and Its Electrochemical Properties for Li-Ion Batteries. 2021 , 2, 439-451	3
318	Atomic Welded Dual-Wall Hollow Nanospheres for Three-in-One Hybrid Storage Mechanism of Alkali Metal Ion Batteries. 2021 , 15, 14125-14136	3
317	Complex Growth Behavior of Li Dendrites in Al ₂ O ₃ Nanoparticles-Driven Viscoelastic Electrolytes for Lithium Metal Batteries: Dynamic versus Quasistatic Rheology. 2021 , 8, 2100687	3
316	Improvement of Cyclic Stability of Na _{0.67} Mn _{0.8} Ni _{0.1} Co _{0.1} O ₂ via Suppressing Lattice Variation. 2021 , 38, 076102	1
315	Vertically aligned two-dimensional materials-based thick electrodes for scalable energy storage systems. 2021 , 14, 3562-3575	8
314	Laser-Induced Graphene Assisting Self-Conversion Reaction for Sulfur-Free Aqueous Cu-S Battery. 2103893	3
313	Design principles and direct applications of cobalt-based metal-organic frameworks for electrochemical energy storage. 2021 , 438, 213872	20
312	Soybean root-derived N, O co-doped hierarchical porous carbon for supercapacitors. 2021 , 555, 149726	21
311	Polysaccharides for sustainable energy storage - A review. 2021 , 265, 118063	9

310	Polypyrrole-based emerging and futuristic hybrid nanocomposites. 1	1
309	Reversible Low Temperature Li-Storage in Liquid Metal Based Anodes via a Co-Solvent Strategy[] 2021 , 39, 2801-2807	1
308	Electrodeposition of Zinc onto Au(111) and Au(100) from the Ionic Liquid [MPPip][TFSI]. 2021 , 133, 20624-20631	
307	The Role of Alkali Cation Intercalates on the Electrochemical Characteristics of Nb CT MXene for Energy Storage. 2021 , 27, 13235-13241	2
306	Nanocellulose-Based Functional Materials: From Chiral Photonics to Soft Actuator and Energy Storage. 2104991	26
305	Electrodeposition of Zinc onto Au(111) and Au(100) from the Ionic Liquid [MPPip][TFSI]. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 20461-20468	16.4 3
304	Enhanced Conductivity Boosts the Cathodic Performance of Aluminium-Doped SrTiO ₃ in Rechargeable Alkaline Zinc Battery. 2021 , 168, 080530	1
303	Hierarchical Tiny-Sb encapsulated in MOFs derived-carbon and TiO ₂ hollow nanotubes for enhanced Li/Na-Ion half-and full-cell batteries. 2021 , 417, 129106	9
302	Electrospun FeO-Sn@Carbon Nanofibers Composite as Efficient Anode Material for Li-Ion Batteries. 2021 , 11,	
301	High-performance hard carbon anode prepared via an ingenious green-hydrothermal route. 2021 , 558, 149824	4
300	Grafting and Depositing Lithium Polysulfides on Cathodes for Cycling Stability of Lithium-Sulfur Batteries. 2021 , 13, 40685-40694	3
299	Ternary V-doped Li ₄ Ti ₅ O ₁₂ -polyaniline-graphene nanostructure with enhanced electrochemical capacitance performance. 2021 , 271, 115312	7
298	Influence of an ambient medium of tetragonal solid electrolyte Li ₇ La ₃ Zr ₂ O ₁₂ on the structural stability on high operating voltages of Ni-rich cathode material for lithium-ion batteries. 2021 , 389, 138775	0
297	Microbial Porous Carbon by Low-Alkali Activation for Flexible Supercapacitors. 1	3
296	Supercapacitor performances of titaniumpolymeric nanocomposites: a review study. 1	1
295	Temperature dependences of the double layer capacitance of some solid/liquid and solid/solid electrified interfaces. An experimental study. 2021 , 391, 138969	1
294	Effect of particle size on electrochemical performance of lithium iron phosphate materials. 2021 , 2011, 012078	0
293	Multifunctional High-Efficiency Additive with Synergistic Anion and Cation Coordination for High-Performance LiNiCoMnO Lithium Metal Batteries. 2021 , 13, 46783-46793	9

- 292 Microcrack generation and modification of Ni-rich cathodes for Li-ion batteries: A review. **2021**, 29, e00305 7
- 291 Neuro-Receptor Mediated Synapse Device Based on the Crumpled MXene Ti3C2Tx Nanosheets. 2104304 4
- 290 Reliable protocols for calculating the specific energy and energy density of Li-Ion batteries. **2021**, 21, 100838 2
- 289 Ionic Liquid-Mediated Mass Transport Channels for Ultrahigh Rate Lithium-Ion Batteries. **2021**, 13, 46756-46762
- 288 Six-armed and dicationic polymeric ionic liquid for highly stretchable, nonflammable and notch-insensitive intrinsic self-healing solid-state polymer electrolyte for flexible and safe lithium batteries. **2021**, 430, 132706 10
- 287 A review: Modification strategies of nickel-rich layer structure cathode (Ni D.8) materials for lithium ion power batteries. **2021**, 60, 435-450 22
- 286 Oxygen-defective V2O5 nanosheets boosting 3D diffusion and reversible storage of zinc ion for aqueous zinc-ion batteries. **2021**, 562, 150196 8
- 285 Potassium Humate Carbon Derived from Chlorination Roast Quenching of Municipal Sludge for High-performance Supercapacitor Electrodes. **2021**, 421, 129993 6
- 284 Design of pseudocapacitance and amorphization Co-enhanced Mn3O4/graphene sheets nanocomposites for high-performance lithium storage. **2021**, 563, 150199 2
- 283 Understanding electronic and Li-ion transport of LiNi0.5Co0.2Mn0.3O2 electrodes affected by porosity and electrolytes using electrochemical impedance spectroscopy. **2021**, 510, 230338 3
- 282 Recent advances of metal phosphates-based electrodes for high-performance metal ion batteries. **2021**, 41, 842-882 12
- 281 Recent Progress in MXene-Based Materials for Metal-Sulfur and Metal-Air Batteries: Potential High-Performance Electrodes. 1 18
- 280 Solar-assisted lithium metal recovery from spent lithium iron phosphate batteries. **2021**, 8, 100163 1
- 279 New insights on lithium storage in silicon oxycarbide/carbon composites: Impact of microstructure on electrochemical properties. **2021**, 225, 109302 4
- 278 Contribution to the understanding of the performance differences between commercial current collectors in LiB batteries. **2021**, 62, 295-306 6
- 277 Confining invasion directions of Li⁺ to achieve efficient Si anode material for lithium-ion batteries. **2021**, 42, 231-239 11
- 276 First-Principle study of lithium polysulfide adsorption on heteroatom doped graphitic carbon nitride for Lithium-Sulfur batteries. **2021**, 565, 150378 6
- 275 Dispersion hydrophobic electrolyte enables lithium-oxygen battery enduring saturated water vapor. **2022**, 64, 511-519 1

274	Stress accumulation in Ni-rich layered oxide cathodes: Origin, impact, and resolution. 2022 , 65, 236-253	10
273	High-capacity Bi ₂ O ₃ anode for 2.4 V neutral aqueous sodium-ion battery-supercapacitor hybrid device through phase conversion mechanism. 2022 , 65, 605-615	6
272	Lithiated halloysite nanotube/cross-linked network polymer composite artificial solid electrolyte interface layer for high-performance lithium metal batteries. 2022 , 429, 132239	5
271	Rational design of an Allyl-rich Triazine-based covalent organic framework host used as efficient cathode materials for Li-S batteries. 2022 , 429, 132254	8
270	Ti ₃ C ₂ -MXene composite films functionalized with polypyrrole and ionic liquid-based microemulsion particles for supercapacitor applications. 2022 , 428, 131107	13
269	Identifying a Li-rich superionic conductor from charge-discharge structural evolution study: LiMnO. 2021 , 23, 4829-4834	0
268	Polar NiFe layered double hydroxide nanosheets for enhancing the performance of lithium-sulfur batteries. 2021 , 5, 5780-5789	0
267	Self-assembly of corn-like Co ₃ O ₄ from nanoparticles induced by graphene wrinkles and its application in lithium ion batteries. 2021 , 5, 2469-2476	2
266	Electrochemistry, ion adsorption and dynamics in the double layer: a study of NaCl(aq) on graphite. 2021 , 12, 11166-11180	9
265	Self-assembled cationic organic nanosheets: role of positional isomers in a guanidinium-core for efficient lithium-ion conduction. 2021 , 12, 13878-13887	2
264	Towards practical cells: combined use of titanium black as a cathode additive and sparingly solvating electrolyte for high-energy-density lithium-sulfur batteries. 2021 , 5, 1821-1831	3
263	Effect of fluorinated additives or co-solvent on performances of graphite//LiMn ₂ O ₄ cells cycled at high potential. 2021 , 52, 332-342	7
262	Biomass-based materials for green lithium secondary batteries. 2021 , 14, 1326-1379	55
261	Bioinspired Redox-Active Catechol-Bearing Polymers as Ultrarobust Organic Cathodes for Lithium Storage. 2017 , 29, 1703373	75
260	Hierarchical Carbide-Derived Carbon Foams with Advanced Mesostructure as a Versatile Electrochemical Energy-Storage Material. 2014 , 4, 1300645	90
259	Ion-Solvent Complexes Promote Gas Evolution from Electrolytes on a Sodium Metal Anode. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 734-737	16.4 140
258	Recent progress in development of efficient electrocatalyst for methanol oxidation reaction in direct methanol fuel cell. 2021 , 45, 6550-6583	23
257	Investigation of NiO/CNF Coating on Glass Fiber Separator as Polysulfide Migration Inhibitors for High-Energy Lithium-Sulfur Batteries. 2020 , 379-386	1

256	Mathematical modeling and numerical analysis of the discharge process of an alkaline zinc-cobalt battery. 2020 , 30, 101432	3
255	Low-strain titanium-based oxide electrodes for electrochemical energy storage devices: design, modification, and application. 2020 , 11, 100085	14
254	Switchable encapsulation of polysulfides in the transition between sulfur and lithium sulfide. 2020 , 11, 845	51
253	Fire-extinguishing organic electrolytes for safe batteries. 2018 , 3, 22-29	406
252	A chemically bonded NaTi ₂ (PO ₄) ₃ /rGO microsphere composite as a high-rate insertion anode for sodium-ion capacitors. 2017 , 5, 17506-17516	64
251	Microscopic dynamics in room-temperature ionic liquids confined in materials for supercapacitor applications. 2020 , 4, 1554-1576	11
250	High specific capacity Mg-doping LiNi _{1/3} Mn _{1/3} Co _{1/3} O ₂ cathode materials synthesised by a simple stepwise co-precipitation method. 2019 , 14, 129-132	2
249	Metallurgically lithiated SiO _x anode with high capacity and ambient air compatibility. 2016 , 113, 7408-13	103
248	Synthesis of Single Crystal LiNi _{0.92} Co _{0.06} Mn _{0.01} Al _{0.01} O ₂ Cathode Materials with Superior Electrochemical Performance for Lithium Ion Batteries. 2020 , 167, 120514	8
247	Electrochemical Performance of Anatase TiO ₂ Nanotube Arrays Electrode in Ionic Liquid Based Electrolyte for Lithium Ion Batteries. 2017 , 164, H5100-H5107	14
246	High Energy Density Germanium Anodes for Next Generation Lithium Ion Batteries. 2014 , 25, 1-13	14
245	Recent Progress on Polymeric Binders for Silicon Anodes in Lithium-Ion Batteries. 2015 , 6, 35-49	29
244	Nanostructured Electrode Materials for Rechargeable Lithium-Ion Batteries. 2020 , 11, 195-219	14
243	Recent Progress on Polymeric Binders for Silicon Anodes in Lithium-Ion Batteries. 2015 , 6, 35-49	34
242	A highly conductive quasi-solid-state electrolyte based on helical silica nanofibers for lithium batteries.. 2021 , 11, 33858-33866	0
241	Wide Voltage Aqueous Asymmetric Supercapacitors: Advances, Strategies, and Challenges. 2108107	15
240	Sustainability Indicators for the Manufacturing and Use of a Fuel Cell Prototype and Hydrogen Storage for Portable Uses. 2021 , 14, 6558	3
239	Reliability of electrode materials for supercapacitors and batteries in energy storage applications: a review. 1	1

- 238 Nanostructured Fe₂O₃@C Negative Electrodes for Stable Asymmetric Supercapacitors with High-Performance. **2021**, 35, 16915-16924 1
- 237 Environmental Impacts of Graphite Recycling from Spent Lithium-Ion Batteries Based on Life Cycle Assessment. **2021**, 9, 14488-14501 10
- 236 Insights into Bulk Properties and Transport Mechanisms in New Ternary Halide Solid Electrolytes: First-Principles Calculations. **2021**, 125, 23510-23520 3
- 235 Organophosphorus Hybrid Solid Electrolyte Interphase Layer Based on Li_xPO₄ Enables Uniform Lithium Deposition for High-Performance Lithium Metal Batteries. 2107923 5
- 234 Charge transport modelling of Lithium-ion batteries. 1-49 1
- 233 Capturing polysulfides by sulfurized-polyacrylonitrile in lithium-sulfur batteries and the sulfur-chain effects through Density Functional Theory. 1
- 232 N-doped sawdust-based activated biocarbons prepared by microwave-assisted heat treatment as potential electrode materials for supercapacitors. 1-14 3
- 231 Heat- and freeze-tolerant organohydrogel with enhanced ionic conductivity over a wide temperature range for highly mechanoresponsive smart paint. **2021**, 608, 2158-2168 1
- 230 Leading strategies and research advances for the restoration of graphite from expired Li⁺ energy storage devices. **2021**, 9, 106455 1
- 229 The complementary advanced characterization and electrochemical techniques for electrode materials for supercapacitors. **2021**, 44, 103370 6
- 228 Buckwheat derived N-doped carbon coated Na₃V₂(PO₄)₂F₃ enwrapping in graphene as enhanced cathode material for high performance sodium ion batteries. **2021**, 516, 230654 3
- 227 A Comparison of the Discharged Products in Environmentally Benign Li-O₂ and Na-O₂ Batteries. **2016**, 25, 82-87
- 226 Polymer- and Carbon-Based Nanofibres for Energy Storage. **2017**, 307-335
- 225 Introduction. **2017**, 1-13
- 224 Fundamentals of silicon nanotubes. **2017**, 537-564
- 223 Introduction. **2018**, 1-8
- 222 Analysis of the Main Factors Affecting the Safety of Lithium Ion Batteries. **2018**, 06, 391-394
- 221 Stress monitoring of lithium ion cells during cycling to correlate with the electrochemical processes. **2018**,

220	Boron Doped Nanotubes Produced by Thermal Plasma and Their Potential use as Supercapacitor. 2018,	
219	Hybrid Hairy Nanoparticle Electrolytes Stabilize Lithium Metal Batteries. 2019, 13-33	
218	Chapter 17:Applications of Solid-state NMR in Crystalline Solid Polymer Electrolytes. 2019, 387-419	
217	3D Graphene and Its Nanocomposites: From Synthesis to Multifunctional Applications. 2019, 363-388	1
216	Composite Electrolytes Based on Tetragonal Li ₇ La ₃ Zr ₂ O ₁₂ for Lithium Batteries. 2019, 167-193	
215	Ultrathin MoS ₂ nanosheets anchored on carbon nanofibers as free-standing flexible anode with stable lithium storage performance. 2021, 894, 162550	27
214	In-situ construction of edge site-enriched VS ₄ /graphene hybrids toward high-performance lithium storage. 2022, 430, 133044	0
213	Graphene/Phosphorene nano-heterostructure as a potential anode material for (K/Na)-ion batteries: Insights from DFT and AIMD. 2022, 202, 110936	7
212	MOF-derived porous carbon inlaid with MnO nanoparticles as stable aqueous Zn-ion battery cathodes. 2021, 50, 17723-17733	2
211	Electrochemical Functions of Nanostructured Liquid Crystals with Electronic and Ionic Conductivity. 2020, 359-377	
210	Design of a Dual-Electrolyte Battery System Based on a High-Energy NCM811-Si/C Full Battery Electrode-Compatible Electrolyte. 2021, 13, 54069-54078	1
209	Rational design and synthesis of multi-shelled NiCo ₂ S ₄ hollow microspheres for high performance supercapacitors. 2021, 44, 103407	0
208	Past, present, and future of electrochemical energy storage: A brief perspective. 2021, 1-28	0
207	A truncated octahedron metal-organic framework derived TiO ₂ @C@MoS ₂ composite with superior lithium-ion storage properties. 2022, 518, 230746	2
206	Next-generation Li-ion capacitor with high energy and high power by limiting alloying-intercalation process using SnO ₂ @Graphite composite as battery type electrode. 2022, 230, 109487	4
205	SWCNTs/phthalocyanine polymer composite derived nitrogen self-doped graphene-like carbon for high-performance supercapacitors electrodes. 2022, 277, 125433	0
204	The Functions and Applications of Fluorinated Interface Engineering in Li-Based Secondary Batteries. 2021, 1, 2100066	3
203	CommunicationCross-Linked Anionic Polymer Coating Prepared by UV and Thermal Curing for Long-Life Lithium-Sulfur Battery. 2021, 168, 110552	1

202	Intercalation in 2D transition metal chalcogenides: interlayer engineering and applications.	0
201	Graphdiyne-Based Materials in Rechargeable Batteries Applications. 2022 , 221-285	0
200	An overview on the use of metal vanadium oxides and vanadates in supercapacitors and rechargeable batteries.	2
199	A Review of Performance Attenuation and Mitigation Strategies of Lithium-Ion Batteries. 2107769	4
198	Facile synthesis of NiCo ₂ O ₄ nanosheets with oxygen vacancies for aqueous zinc-ion supercapacitors. 2021 , 896, 162925	2
197	Tailoring the capacitive performance of ZnCo ₂ O ₄ by doping of Ni ²⁺ and fabrication of asymmetric supercapacitor. 2021 , 45, 21919-21927	0
196	Challenge-driven printing strategies toward high-performance solid-state lithium batteries.	
195	Disordered carbon coating free Li _{0.2375} La _{0.5875} TiO ₃ : a superior perovskite anode material for high power long-life lithium-ion batteries. 2022 , 57, 2825	0
194	Enhancement of discharge capacity and energy density by oxygen vacancies in nickel doped SrTiO ₃ as cathode for rechargeable alkaline zinc battery. 2022 , 404, 139705	0
193	Structural engineering of tin sulfides anchored on nitrogen/phosphorus dual-doped carbon nanofibres in sodium/potassium-ion batteries. 2022 , 189, 46-56	12
192	All-electrospun performance-enhanced triboelectric nanogenerator based on the charge-storage process. 2022 , 57, 5334	2
191	In-situ constructed lithium-salt lithiophilic layer inducing bi-functional interphase for stable LLZO/Li interface. 2022 , 47, 61-69	8
190	Achieving long cycle life for all-solid-state rechargeable Li-I battery by a confined dissolution strategy.. 2022 , 13, 125	2
189	Materials and technologies for energy storage: Status, challenges, and opportunities. 2021 , 46, 1153	3
188	Rechargeable hybrid organic Zn battery (ReHOZnB) with non-flammable electrolyte. 2022 , 904, 115949	5
187	Graphitic carbon nitride for batteries. 2022 , 367-392	
186	Enabling Silicon Anodes with Novel Isosorbide-Based Electrolytes. 2022 , 7, 897-905	2
185	Application of Guar Gum and its Derivatives as Green Binder/Separator for Advanced Lithium-Ion Batteries.. 2022 , 11, e202100209	1

184	High-voltage lithium-ion capacitors enabled by a multifunctional phosphite electrolyte additive. 2022 , 46, 431-442	1
183	TiO ₂ encrusted MXene as a High-Performance anode material for Li-ion batteries. 2022 , 583, 152441	2
182	Supercapacitor-Inspired Triboelectric Nanogenerator Based on Electrostatic Double Layer. 2022 , 95, 106971	3
181	Chemical-Mechanical Effects in Ni-Rich Cathode Materials.	3
180	An Iron Supramolecular Compound Containing Terpyridine Polycarboxylic Acid for High Performance Lithium-Ion Batteries. 2022 , 120848	
179	Evaluating the effectiveness of in situ characterization techniques in overcoming mechanistic limitations in lithium-sulfur batteries.	4
178	Synthesis of a graphitized hierarchical porous carbon material supported with a transition metal for electrochemical conversion.	1
177	Understanding the interactions between lithium polysulfides and anchoring materials in advanced lithium-sulfur batteries using density functional theory.. 2022 ,	3
176	Life-Related Hazards of Materials Applied to Mg Batteries. 2022 , 15, 1543	
175	MXenes for metal-ion and metal-sulfur batteries: Synthesis, properties, and electrochemistry. 2022 , 2, 100077	
174	Importance of Mass Transport in High Energy Density Lithium-Sulfur Batteries Under Lean Electrolyte Conditions.	1
173	Current international research into cellulose as a functional nanomaterial for advanced applications. 2022 , 57, 5697-5767	10
172	Bitumen and asphaltene derived nanoporous carbon and nickel oxide/carbon composites for supercapacitor electrodes.. 2022 , 12, 4095	1
171	3DG/Se _{4.7} S _{3.3} composites with different morphologies as new all-solid-state lithium storage electrode materials. 2022 , 9, 035601	
170	A Liquid-Metal Electrocatalyst as a Self-Healing Anchor to Suppress Polysulfide Shuttling in Lithium-Sulfur Batteries.	
169	A Cobalt Enrichment Strategy for Suppressing the 4.2 V Adverse Phase Transition in Ni-Rich Layered Materials.	
168	ReviewRevealing the Intercrystalline Cracking Mechanism of NCM and Some Regulating Strategies. 2022 , 169, 040512	
167	Tuning the Porous Structure in PMMA-Templated Mesoporous MoO ₂ for Pseudocapacitive Li-Ion Electrodes.	0

166	Porous core-shell B-doped silicon-carbon composites as electrode materials for lithium ion capacitors. 2022 , 531, 231345	1
165	Practical 4.4 V Li NCM811 batteries enabled by a thermal stable and HF free carbonate-based electrolyte. 2022 , 96, 107122	5
164	Bifunctional separators design for safe lithium-ion batteries: Suppressed lithium dendrites and fire retardance. 2022 , 97, 107204	5
163	Stabilization of crystal and interfacial structure of Ni-rich cathode material by vanadium-doping.. 2022 , 617, 193-203	0
162	Hollow TiNb2O7 Nanospheres with a Carbon Coating as High-Efficiency Anode Materials for Lithium-Ion Batteries. 2022 , 10, 61-70	6
161	Specific Ion Solvation and Pairing Effects in Glycerol Carbonate.. 2021 , 125, 13635-13643	2
160	Recent progress of battery grade metal sulfides for hybrid energy storage devices. 2022 , 46, 3906-3938	1
159	Utilization of Cellulose to Its Full Potential: A Review on Cellulose Dissolution, Regeneration, and Applications.. 2021 , 13,	5
158	Design of Functional Carbon Composite Materials for Energy Conversion and Storage. 1	0
157	Advanced Current Collector Materials for High-Performance Lithium Metal Anodes.. 2022 , e2200010	6
156	Fundamental mechanism revealed for lithium deficiencies engineering in a new spherical Li-Rich Mn-based layered Li _{1.23} Mn _{0.46} Ni _{0.246} Co _{0.046} Al _{0.015} O ₂ cathode. 2022 , 418, 140379	0
155	Combination of chemical foaming strategy and laser-induced graphene technology for enhanced paper-based microsupercapacitor. 2022 , 535, 231488	1
154	Data_Sheet_1.docx. 2019 ,	
153	Table_1.DOCX. 2020 ,	
152	Dual-Layered Interfacial Evolution of Lithium Metal Anode: SEI Analysis via TOF-SIMS Technology.. 2022 ,	1
151	Exchange-Mediated Transport in Battery Electrolytes: Ultrafast or Ultraslow?. 2022 ,	3
150	Mechanical properties of cathode materials for lithium-ion batteries. 2022 ,	5
149	Advances of Synthesis Methods for Porous Silicon-Based Anode Materials.. 2022 , 10, 889563	0

- ¹⁴⁸ A Robust Bundled and Wrapped Structure Design of Ultrastable Silicon Anodes for Antiaging Lithium-Ion Batteries.
- ¹⁴⁷ Bi 3+ Induced Crystal Growth of a Symbiotic Heterojunction Enables Long-Lifespan Zn-Ion Batteries. **2022**, 9,
- ¹⁴⁶ 4-Fluorophenylsulfonylacetonitrile as an Electrolyte Additive for Improving the High-Voltage Performance of LiNi_{0.83}Co_{0.11}Mn_{0.06}O₂ Cathode Batteries.
- ¹⁴⁵ Achieving high-performance aqueous Zn-ion hybrid supercapacitors by utilizing zinc-based MOF-derived N-doped carbon. 1 0
- ¹⁴⁴ Synthesis and characterization of porous-crystalline C/Fe₃O₄ microspheres by spray pyrolysis with steam oxidation as anode materials for Li-ion batteries. **2022**, 33, 103606 0
- ¹⁴³ A hydrophobic membrane to enable lithium-air batteries to operate in ambient air with a long cycle life. **2022**, 421, 140517 2
- ¹⁴² Malonatophosphate as an SEI- and CEI-forming additive that outperforms malonatoborate for thermally robust lithium-ion batteries. **2022**, 50, 75-85 2
- ¹⁴¹ Development of high areal capacity electrolytic MnO₂-Zn battery via an iodine mediator. 1
- ¹⁴⁰ Spherical CoS₂ with high load capacity as cathode carrier material of lithium sulfur batteries for improving the volume energy density. 0
- ¹³⁹ Mo C Nanoparticles Embedded in Carbon Nanowires with Surface Pseudocapacitance Enables High-Energy and High-Power Sodium Ion Capacitors.. **2022**, e2200805 1
- ¹³⁸ Biochar electrocatalysts for clean energy applications. **2022**, 333-343
- ¹³⁷ Advances in Electrode Materials for Rechargeable Batteries. **2022**, 243-318
- ¹³⁶ Study on the Relationship Between Open-Circuit Voltage, Time Constant And Polarization Resistance of Lithium-Ion Batteries. 3
- ¹³⁵ High-areal-capacity of micron-sized silicon anodes in lithium-ion batteries by using wrinkled-multilayered-graphenes. **2022**, 50, 234-242 6
- ¹³⁴ Unraveling diffusion kinetics of honeycomb structured Na₂Ni₂TeO₆ as a high-potential and stable electrode for sodium-ion batteries. 3
- ¹³³ Preparation of bulk doped NiCo₂O₄ bimetallic oxide supercapacitor materials by in situ growth method. 1-10
- ¹³² Dual carbon Li-ion capacitor with high energy density and ultralong cycling life at a wide voltage window. 0
- ¹³¹ Porphyrin-based Framework Materials for Energy Conversion. **2022**, null 26

- 130 Thorn-Like Carbon Nanofibers Combined with Molybdenum Nitride Nanosheets as a Modified Separator Coating: An Efficient Chemical Anchor and Catalyst for LiS Batteries. 1
- 129 Potassium formate-based electrolytes for high performance aqueous electrochemical capacitors. **2022**, 541, 231657 0
- 128 Rational design of 3D net-like carbon based Mn₃O₄ anode materials with enhanced lithium storage performance. 0
- 127 Vapor-Solid-Solid Growth of Si Nanowires Using Mg Seeds and Their Electrochemical Performance in Li-Ion Battery Anodes. 0
- 126 A Novel Ethanol-Mediated Synthesis of Superionic Halide Electrolytes for High-Voltage All-Solid-State Lithium Metal Batteries. 0
- 125 Impact of Overlithiation and Al doping on the battery performance of Li-rich layered oxide materials. **2022**, 140737 2
- 124 Prussian blue analogue/KB-derived Ni/Co/KB composite as a superior adsorption-catalysis separator modification material for Li-S batteries. **2022**, 625, 425-434 0
- 123 Engineering thermoelectric and mechanical properties by nanoporosity in calcium cobaltate films from reactions of Ca(OH)₂/Co₃O₄ multilayers. 0
- 122 Polymethylene Blue Nanospheres Supported Honeycomb-Like NiCo-Ldh for High-Performance Supercapacitors. 0
- 121 Hierarchical Diagnostics and Risk Assessment for Energy Supply in Military Vehicles. **2022**, 15, 4791 0
- 120 Integrated Photovoltaic Charging and Energy Storage Systems: Mechanism, Optimization, and Future. 2203014 2
- 119 Design Criteria for Silicon-Based Anode Binders in Half and Full Cells. 2200850 8
- 118 Structural Oxygen Vacancies and Crystalline Defects in Iron Vanadate with Multiple Redox Centers Boosting Surface Migration for High-Performance Zinc-Ion Battery. 2200641 0
- 117 A dual-lithiophilic interfacial layer with intensified Lewis basicity and orbital hybridization for high-performance lithium metal batteries. **2022**, 0
- 116 Recent Advanced Development of Stabilizing Sodium Metal Anodes. **2022**, 1
- 115 Sn nanoparticles embedded into porous hydrogel-derived pyrolytic carbon as composite anode materials for lithium-ion batteries. 2
- 114 In Situ Grown MnO₂ Nanoflower Arrays on Ni Foam (MnO₂@NF) as 3D Lithiophilic Hosts for a Stable Lithium Metal Anode. 0
- 113 Tailoring crystallinity of 2D cobalt phosphate to introduce pseudocapacitive behavior. **2022**, 54, 105371 0

- 112 Hybrid Electrolytes Enabling in-situ Interphase Protection and Suppressed Electrode Dissolution for Aqueous Sodium-Ion Batteries. 0
- 111 Research progress and potential materials of porous thick electrode with directional structure for lithium-sulfur batteries. 0
- 110 Probing Electrolyte Influence on CO₂ Reduction in Aprotic Solvents. **2022**, 126, 13595-13606 2
- 109 Three-dimensional Ti₃C₂ MXene@silicon@nitrogen-doped carbon foam for high performance self-standing lithium-ion battery anodes. **2022**, 921, 116664 0
- 108 Synthesis and electrochemical characterization of polyaniline doped cadmium oxide (PANI-CdO) nanocomposites for supercapacitor applications. **2022**, 55, 105446 1
- 107 Hydrothermally prepared composite of Na₃V₂(PO₄)₂F₃ with gelatin and graphene used as a high-performance sodium ion battery cathode. **2022**, 926, 166857 0
- 106 A room-temperature ionic liquid-based superionic conductive polymer electrolyte with high thermal stability for long-cycle-life lithium batteries. 0
- 105 Applications of graphene-based composites in the anode of lithium-ion batteries. 4, 0
- 104 Copper-Coated Graphite Felt as Current Collector for Li-Ion Batteries. **2022**, 12, 1321 0
- 103 Corrosion suppression of aluminium current collectors within Li-ion cells using 3-methoxypropionitrile-based electrolytes. **2022**, 431, 141105 0
- 102 Navel orange peel-derived hard carbons as high performance anode materials of Na and Li-ion batteries. **2022**, 129, 109329 0
- 101 3D-architected spherical Ce₂Mo₅O₁₆ by a time-dependent hydrothermal process and their energy storage application. **2022**, 928, 167215 0
- 100 Ultrathin two-dimensional nanosheet metal-organic frameworks with high-density ligand active sites for advanced lithium-ion capacitors. **2022**, 103, 107797 2
- 99 Two-dimensional redox polydopamine with in-plane cylindrical mesochannels on graphene for high-energy and high-power lithium-ion capacitors. **2023**, 452, 139095 0
- 98 Vapor-solid-solid growth of silicon nanowires using magnesium seeds and their electrochemical performance in Li-ion battery anodes. **2023**, 452, 139397 0
- 97 Nano/Microstructures of Nickel Sulphide for Energy Storage and Conversion Devices. **2022**, 347-370 0
- 96 A functional electrolyte additive enabling robust interphases in high-voltage Li₂LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ batteries at elevated temperatures. 1
- 95 Electrochemically induced catalytic adsorption sites in spent lithium-ion battery cathodes for high-rate vanadium redox flow batteries. **2022**, 10, 18626-18635 1

94	Leveraging Advanced X-ray Imaging for Sustainable Battery Design. 2022 , 7, 3151-3176	0
93	Shape-Memory Electrochemical Energy Storage Devices.	0
92	Amylopectin-Assisted Fabrication of In Situ Carbon-Coated Na ₃ V ₂ (PO ₄) ₂ F ₃ Nanosheets for Ultra-Fast Sodium Storage. 2022 , 14, 40812-40821	1
91	MXene/PVA Fiber-based Supercapacitor with Stretchability for Wearable Energy Storage.	3
90	An Efficient Structure Manipulation Strategy of Preparing Vanadium Carbide, V ₈ C ₇ /C, for Improving Lithium and Zinc Storage. 2022 , 51, 6047-6055	0
89	Recent Advance in Two-Dimensional MXenes: New Horizons in Flexible Batteries and Supercapacitors Technologies. 2022 ,	1
88	Carbonaceous-Material-Induced Gelation of Concentrated Electrolyte Solutions for Application in Lithium-Sulfur Battery Cathodes.	0
87	Caesium acetate based electrolytes for aqueous electrical double layer capacitors.	0
86	Development of Proteins for High-Performance Energy Storage Devices: Opportunities, Challenges, and Strategies. 2202568	0
85	High-Energy and Long-Lasting Organic Electrode for a Rechargeable Aqueous Battery. 3637-3645	0
84	A Self-Standing Flexible Gel Polymer Electrolyte for Dendrite-Free Lithium-Metal Batteries.	0
83	Trichloroisocyanuric Acid (TCCA): A Suitable Reagent for the Synthesis of Selanyl-benzo[b]chalcogenophenes.	1
82	Effect of Solvents on a Li ₁₀ GeP ₂ S ₁₂ -Based Composite Electrolyte via Solution Method for Solid-State Battery Applications.	1
81	Few layer graphene nanosheets from kinnow peel waste for high-performance supercapacitors: A comparative study with three different electrolytes. 2022 , 55, 105729	1
80	Perpetual Voltage Control with Flexible Thin Battery from Green Garbage Materials. 2022 , 1-9	0
79	Surface engineering towards high-energy carbon cathode for advanced aqueous zinc-ion hybrid capacitors. 2022 , 107919	0
78	Development of a lithium-oxygen battery with an improved redox mediator applicable to gel polymer electrolytes. 2022 ,	0
77	Acceleration of Cathode Interfacial Kinetics by Liquid Organosulfides in Lithium Metal Batteries.	2

76	Rational design of thermally stable polymorphic layered cathode materials for next generation lithium rechargeable batteries. 2022 ,	0
75	Desolvation Synergy of Multiple H/Li Bonds on Iron Dextran-Based Catalyst Stimulates Lithium-Sulfur Cascade Catalysis. 2207074	1
74	Acceleration of Cathode Interfacial Kinetics by Liquid Organosulfides in Lithium Metal Batteries.	0
73	Ultrathin Ti ₃ C ₂ T _x nanosheets modified separators for Lithium-sulfur batteries.	0
72	Facile synthesis of lithium argyrodite Li _{5.5} PS _{4.5} Br _{1.5} with high ionic conductivity for all-solid-state batteries. 4,	1
71	Storage of Na in 2D SnS for Na ion batteries: A DFT Prediction.	0
70	Two-dimensional porous CeO ₂ @Co ₃ O ₄ sheet-like heterostructures for high-performance aqueous hybrid supercapacitors.	0
69	Enhancing the reversibility of Li deposition/dissolution in sulfur batteries using high-concentration electrolytes to develop anode-less batteries with lithium sulfide cathode. 2023 , 554, 232323	0
68	Recent advances of emerging oxyhydroxide for electrochemical energy storage applications. 2023 , 554, 232309	1
67	Hollow ppy@Ti ₂ Nb ₁₀ O _{29-x} @NC bowls: A stress-release structure with vacancy defects and coating interface for Li capacitor. 2023 , 454, 140287	1
66	Scalable Advanced Li(Ni _{0.8} Co _{0.1} Mn _{0.1})O ₂ Cathode Materials from a Slug Flow Continuous Process.	0
65	Valerolactone as sustainable and low-toxic solvent for electrical double layer capacitors.	0
64	Activation of 2D MoS ₂ electrodes induced by high-rate lithiation processes. 2022 ,	1
63	Introducing oxidant to expand laser-induced in-plane microsupercapacitor in depth. 2023 , 555, 232394	0
62	Internally-externally molecules-scissored ramie carbon for high performance electric double layer supercapacitors. 2023 , 439, 141583	0
61	Fabrication of honeycomb-structured composite material of Pr ₂ O ₃ , Co ₃ O ₄ , and graphene on nickel foam for high-stability supercapacitors. 2022 , 47, 211-219	0
60	Enabling a compatible Li/garnet interface via a multifunctional additive of sulfur. 2022 , 11, 251-258	0
59	Polymethylene blue nanospheres supported honeycomb-like NiCo-LDH for high-performance supercapacitors. 2023 , 439, 141683	0

- 58 Cation-doped V₂O₅ microsphere as a bidirectional catalyst to activate sulfur redox reactions for lithium-sulfur batteries. **2023**, 456, 140948 1
- 57 MOF derived metal oxide composites and their applications in energy storage. **2023**, 477, 214949 0
- 56 Building Na-ion full cells using homologous Prussian blue and its phosphide derivative. **2023**, 612, 155952 0
- 55 2,2,5,5-Tetramethyl-2,5-disila-1-oxacyclopentane as a bifunctional electrolyte additive for Ni-rich (LiNi_{0.9}Co_{0.05}Mn_{0.05}O₂) cathode in Li-ion batteries. **2023**, 556, 232411 0
- 54 Fundamentals and advances of ligand field theory in understanding structure-electrochemical property relationship of intercalation-type electrode materials for rechargeable batteries. **2023**, 133, 101055 2
- 53 Low-cost iron-based electrocatalysts for high-performance LiO₂ batteries. **2023**, 17, 100351 0
- 52 Operando Observation of Coupled Discontinuous-Continuous Transitions in Ion-Stabilized Intercalation Cathodes. **2022**, 8, 252 0
- 51 Nanostructured Manganese Dioxide for Hybrid Supercapacitor Electrodes. **2022**, 8, 263 1
- 50 Smart Deep Eutectic Electrolyte Enabling Thermally Induced Shutdown Toward High-Safety Lithium Metal Batteries. 2202529 0
- 49 Polymer Electrolytes Based on the Lithium Form of Nafion Sulfonic Cation-Exchange Membranes: Current State of Research and Prospects for Use in Electrochemical Power Sources. **2022**, 4, 433-454 0
- 48 Three-Dimensional Unified Electrode Design Using CuO Embedded MnO₂ Nano-Dandelions@Ni(OH)₂ Nanoflakes as Electrode Material for High-Performance Supercapacitors. **2022**, 168603 0
- 47 Metal-air batteries: progress and perspective. **2022**, 67, 2449-2486 2
- 46 Polyacrylonitrile-Polyvinyl Alcohol-Based Composite Gel-Polymer Electrolyte for All-Solid-State Lithium-Ion Batteries. **2022**, 14, 5327 0
- 45 Modified cathode-electrolyte interphase toward high-performance batteries. **2022**, 3, 101197 0
- 44 Biomass Hierarchical Porous Carbonized Typha angustifolia Prepared by Green Pore-Making Technology for Energy Storage. 0
- 43 A Rising 2D Star: Novel MBenes with Excellent Performance in Energy Conversion and Storage. **2023**, 15, 0
- 42 SnS@C nanoparticles anchored on graphene oxide as high-performance anode materials for lithium-ion batteries. 10, 0
- 41 Cobalt hydroxide nanoflakes intercalated into nitrogen-doped reduced graphene oxide nanosheets for supercapattery application. 0

- 40 Microwave-assisted synthesis and electrochemical characterization of TiNb_2O_7 microspheres as anode materials for lithium ion batteries. ○
- 39 Future potential for lithium-sulfur batteries. **2023**, 558, 232566 ○
- 38 Nature-inspired self-activation method for the controllable synthesis of highly porous carbons for high-performance supercapacitors. **2023**, 205, 1-9 ○
- 37 Increasing sinterability and ionic conductivity of $\text{Na}_3\text{Zr}_2\text{Si}_2\text{PO}_{12}$ ceramics by high energy ball-milling. **2023**, 391, 116139 ○
- 36 $\text{LiNi}_{0.8}\text{Fe}_{0.1}\text{Al}_{0.1}\text{O}_2$ as a Cobalt-Free Cathode Material with High Capacity and High Capability for Lithium-Ion Batteries. **2023**, 9, 23 ○
- 35 Ni_3Se_4 Nanostructure as a Battery-type Positive Electrode for Hybrid Capacitors. ○
- 34 SDF-based conjugated microporous polymers cathode materials with high cycle stability for lithium-ion batteries. **2023**, 34, ○
- 33 Pendant Length-Dependent Electrochemical Performances for Conjugated Organic Polymers as Solid-State Polymer Electrolytes in Lithium Metal Batteries. **2023**, 15, 5283-5292 ○
- 32 Key approaches and challenges in fabricating advanced flexible zinc-ion batteries with functional hydrogel electrolytes. **2023**, 56, 351-393 ○
- 31 Stimuli-responsive structure-property switchable polymer materials. ○
- 30 Catalytic performance of binary transition metal sulfide $\text{FeCoS}_2/\text{rGO}$ for lithium-sulfur batteries. **2023**, 27, 1045-1053 ○
- 29 Efficient boron-based electrolytes constructed by anionic and interfacial co-regulation for rechargeable magnesium batteries. **2023**, 461, 141901 ○
- 28 Elastic Interfacial Layer Enabled the High-Temperature Performance of Lithium-Ion Batteries via Utilization of Synthetic Fluorosulfate Additive. ○
- 27 An integrated study on the ionic migration across the nano lithium lanthanum titanate (LLTO) and lithium iron phosphate-carbon (LFP-C) interface in all-solid-state Li-ion batteries. **2023**, 565, 232907 ○
- 26 Preparation of porous carbon spheres and their application as anode materials for lithium-ion batteries: A review. **2023**, 22, 100321 ○
- 25 MXene/carbon composites for electrochemical energy storage and conversion. **2023**, 22, 100350 ○
- 24 Crystal structure regulation boosts the conductivity and redox chemistry of $\text{T-Nb}_2\text{O}_5$ anode material. **2023**, 110, 108377 ○
- 23 Facile synthesis of C, N, P co-doped SiO_2 as anode material for lithium-ion batteries with excellent rate performance. **2023**, 64, 107147 ○

- 22 Liquid crystalline electrolytes derived from the 1,12-disubstituted [closo-CB11H12]⁻anion. **2023**, 377, 121525 ○
- 21 Cyclotetrabenzil Derivatives for Electrochemical Lithium-Ion. ○
- 20 A 10 years-developmental study on conducting polymers composites for supercapacitors electrodes: A review for extensive data interpretation. **2023**, 122, 27-45 ○
- 19 Preparation of functional groups-rich graphene oxide for high-performance lithium-sulfur batteries. **2023**, 21, 100300 1
- 18 Highly defective N-doped carbon/reduced graphene oxide composite cathode material with rapid electrons/ions dual transport channels for high energy density lithium-ion capacitor. **2023**, 443, 141704 ○
- 17 Enhanced energy density and power density of asymmetric supercapacitor by induced defects on the surface of MoS₂ with strontium atoms. **2023**, 34, ○
- 16 Enhancing the Electrochemical Performance of High Voltage LiNi_{0.5}Mn_{1.5}O₄ Cathode Materials by Surface Modification with Li_{1.3}Al_{0.3}Ti_{1.7}(PO₄)₃/C. **2023**, 13, 628 ○
- 15 A Rational Design of Silicon-Based Anode for All-Solid-State Lithium-Ion Batteries: A Review. 2201321 ○
- 14 A review of all-solid-state electrolytes for lithium batteries: high-voltage cathode materials, solid-state electrolytes and electrode/electrolyte interfaces. **2023**, 7, 1268-1297 ○
- 13 Incorporation of Embedded Protective Layers to Circumvent the Low LiNO₃ Solubility Problem and Enhance Li Metal Anode Cycling Performance. **2023**, 6, 2311-2319 ○
- 12 Research Progress of Stable Lithium Metal Anodes. **2023**, 13, 11-26 ○
- 11 Recent developments, challenges and future prospects of magnetic field effects in supercapacitors. **2023**, 11, 5495-5519 ○
- 10 Research Progress on Multifunctional Modified Separator for Lithium-Sulfur Batteries. **2023**, 15, 993 ○
- 9 Recent Advances in Two-Dimensional MXene for Supercapacitor Applications: Progress, Challenges, and Perspectives. **2023**, 13, 919 ○
- 8 Slug Flow Coprecipitation Synthesis of Uniformly-Sized Oxalate Precursor Microparticles for Improved Reproducibility and Tap Density of Li(Ni_{0.8}Co_{0.1}Mn_{0.1})O₂ Cathode Materials. **2023**, 6, 3213-3224 ○
- 7 Ultrafine Sb₂O₃ Nanoparticle-Decorated Reduced Graphene Oxide as an Anode Material for Lithium-Ion Batteries. **2023**, 37, 5586-5594 ○
- 6 A new electrolyte based on magnetic ionic liquid with magnetic-tuning electrochemical performance. ○
- 5 The evolution of anionic nanoclusters at the electrode interface in water-in-salt electrolytes. **2023**, 25, 10301-10312 ○

- 4 Integrated Photo - rechargeable Batteries: Photoactive Nanomaterials and Opportunities. **2023**, 375, 02010 o
- 3 Uniform integration of SnO₂ nanoparticles on graphene benefitting from the buffer vacancies induced by Al₂O₃ used as anode for lithium-ion batteries. o
- 2 Preparation and electrochemical performance of CNT/Fe₃O₄@C for lithium-ion battery. o
- 1 Cyclotetrabenzil Derivatives for Electrochemical Lithium-Ion. o