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## A lithium superionic conductor

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#	Paper	IF	Citations
2298	.		
2297	Ultrastrong Polyoxazole Nanofiber Membranes for Dendrite-Proof and Heat-Resistant Battery Separators.		
2296	High Cycle Capability of All-Solid-State LithiumSulfur Batteries Using Composite Electrodes by Liquid-Phase and Mechanical Mixing.		
2295	Li Distribution Heterogeneity in Solid Electrolyte Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> upon Electrochemical Cycling Probed by <sup>7</sup> Li MRI.		
2294	Lithium Conductivity and Meyer-Neldel Rule in Li <sub>3</sub> PO <sub>4</sub> Li <sub>3</sub> VO <sub>4</sub> Li <sub>4</sub> GeO <sub>4</sub> Lithium Superionic Conductors.		
2293	Influence of Anion Charge on Li Ion Diffusion in a New Solid-State Electrolyte, Li <sub>3</sub> LaI <sub>6</sub> .		
2292	Solid electrolytes: Lithium ions on the fast track. <i>Nature Materials</i> , <b>2011</b> , 10, 649-50	27	73
2291	One-dimensional stringlike cooperative migration of lithium ions in an ultrafast ionic conductor. <b>2012</b> , 101, 031901		60
2290	PREPARATION, STRUCTURAL CHARACTERIZATION AND IONIC CONDUCTIVITY STUDIES OF CALCIUM DOPED <sub>2</sub> (4)3. <b>2012</b> , 442-449		2
2289	Discharge Performance of All-Solid-State Battery Using a Lithium Superionic Conductor Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> . <b>2012</b> , 80, 749-751		102
2288	Bulk-Type All-Solid-State Lithium Secondary Battery with Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Thin-Film Separator. <b>2012</b> , 80, 839-841		9
2287	Electrical conduction of superionic conductors: Na <sub>2</sub> ZrO <sub>3</sub> . <b>2012</b> , 1, 205-211		4
2286	All-solid-state Lithium Secondary Batteries Using Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Solid Electrolytes and LiFePO <sub>4</sub> Electrode Particles with Amorphous Surface Layer. <b>2012</b> , 41, 260-261		24
2285	Editorial. <b>2012</b> , 1, 168-169		
2284	Fabrication and Analysis of the Oriented LiCoO <sub>2</sub> by Slip Casting in a Strong Magnetic Field. <b>2012</b> , 95, 3428-3433		6
2283	New compounds and structures in the solid state. <b>2012</b> , 108, 408		1
2282	Inorganic solid/organic liquid hybrid electrolyte for use in Li-ion battery. <b>2012</b> , 79, 8-16		41

2281	Electrochemical performance and reaction mechanism of all-solid-state lithium-air batteries composed of lithium, $\text{Li}_{1+x}\text{Al}_y\text{Ge}_2\text{O}_7(\text{PO}_4)_3$ solid electrolyte and carbon nanotube air electrode. <b>2012</b> , 5, 9077	125
2280	Electrochemical Investigation of All-Solid-State Lithium Batteries with a High Capacity Sulfur-Based Electrode. <b>2012</b> , 159, A1019-A1022	50
2279	Probing Li-Ni Cation Disorder in $\text{Li}_{1-x}\text{Ni}_x\text{Al}_y\text{O}_2$ Cathode Materials by Neutron Diffraction. <b>2012</b> , 159, A924-A928	36
2278	Rechargeable quasi-solid state lithium battery with organic crystalline cathode. <b>2012</b> , 2, 453	138
2277	Electrodeposited Polyacrylonitrile and Cobalt-Tin Composite Thin Film on Titanium Substrate. <b>2012</b> , 159, A1028-A1033	16
2276	Superionic glass-ceramic electrolytes for room-temperature rechargeable sodium batteries. <b>2012</b> , 3, 856	603
2275	Atomic and electronic structure of superionic solid electrolyte $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ . <b>2012</b> , 1440, 56	1
2274	Ion transport and phase transition in $\text{Li}_7\text{La}_3(\text{Zr}_2\text{M}_x)\text{O}_{12}$ ( $\text{M} = \text{Ta}^{5+}, \text{Nb}^{5+}, x = 0, 0.25$ ). <b>2012</b> , 22, 1426-1434	177
2273	Local Structure and Ionic Conduction at Interfaces of Electrode and Solid Electrolytes. <b>2012</b> , 159, A380-A385	19
2272	Mechanochemical synthesis of Li-argyrodite $\text{Li}_6\text{PS}_5\text{X}$ ( $\text{X} = \text{Cl}, \text{Br}, \text{I}$ ) as sulfur-based solid electrolytes for all solid state batteries application. <b>2012</b> , 221, 1-5	256
2271	Elaboration and characterization of a free standing LiSICON membrane for aqueous lithium-air battery. <b>2012</b> , 214, 330-336	48
2270	Fabrication of favorable interface between sulfide solid electrolyte and Li metal electrode for bulk-type solid-state Li/S battery. <b>2012</b> , 22, 177-180	103
2269	Lithiumbatterien und elektrische Doppelschichtkondensatoren: aktuelle Herausforderungen. <b>2012</b> , 124, 10134-10166	176
2268	Challenges facing lithium batteries and electrical double-layer capacitors. <b>2012</b> , 51, 9994-10024	2149
2267	Lithium Salt Solutions in Mixed Sulfone and Sulfone-Carbonate Solvents: A Walden Plot Analysis of the Maximally Conductive Compositions. <b>2012</b> , 116, 23915-23920	45
2266	First Principles Study of the $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ Lithium Super Ionic Conductor Material. <b>2012</b> , 24, 15-17	459
2265	Molecular germanium selenophosphate salts: phase-change properties and strong second harmonic generation. <b>2012</b> , 134, 20733-44	61
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2263	Interfacial phenomena in solid-state lithium battery with sulfide solid electrolyte. <b>2012</b> , 225, 594-597	123
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2261	Introduction to J-PARC. <b>2012</b> , 2012,	23
2260	Superionic conductivity in lithium-rich anti-perovskites. <b>2012</b> , 134, 15042-7	322
2259	Ion Transport in Liquid Salt Solutions with Oxide Dispersions: "Soggy Sand" Electrolytes. <b>2012</b> , 3, 744-50	28
2258	New Lithium Chalcogenidotetrelates, LiChT: Synthesis and Characterization of the Li <sup>+</sup> -Conducting Tetralithium ortho-Sulfidostannate $\text{Li}_4\text{SnS}_4$ . <b>2012</b> , 24, 2211-2219	97
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2256	Lithium-Ion Conducting Properties of a Hot-pressed $75\text{Li}_2\text{S}5\text{P}_2\text{S}_320\text{P}_2\text{S}_5$ (mol%) Glass. <b>2012</b> , 59, 8-13	1
2255	Enlarged Lithium-Ions Migration Pathway by Substitution of B <sup>3+</sup> for P <sup>5+</sup> in $\text{Li}_3\text{PS}_4$ . <b>2012</b> ,	
2254	Lithium-ion conducting $\text{La}_{2/3}\text{Li}_x\text{TiO}_3$ solid electrolyte thin films with stepped and terraced surfaces. <b>2012</b> , 100, 173107	16
2253	Battery and solid oxide fuel cell materials. <b>2012</b> , 108, 424	10
2252	Structural requirements for fast lithium ion migration in $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ . <b>2012</b> , 22, 7687	129
2251	$\text{Li}_{14}\text{Ln}_5[\text{Si}_{11}\text{N}_{19}\text{O}_5]\text{O}_2\text{F}_2$ with Ln = Ce, Nd--representatives of a family of potential lithium ion conductors. <b>2012</b> , 134, 10132-7	15
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2247	Solution-processed Li-containing chalcogenide for solid electrolyte applications. <b>2012</b> , 8, 215-218	
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2244	Rechargeable batteries: challenges old and new. <b>2012</b> , 16, 2019-2029	262
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2239	Electrochemical properties of all-solid-state lithium batteries with amorphous titanium sulfide electrodes prepared by mechanical milling. <b>2013</b> , 17, 2697-2701	18
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2236	All-solid-state batteries with Li <sub>2</sub> O-Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> glass electrolytes synthesized by two-step mechanical milling. <b>2013</b> , 17, 2551-2557	34
2235	A physical organogel electrolyte: characterized by in situ thermo-irreversible gelation and single-ion-predominant conduction. <b>2013</b> , 3, 1917	34
2234	Sulfide solid electrolyte with favorable mechanical property for all-solid-state lithium battery. <b>2013</b> , 3, 2261	504
2233	Electrochemical properties of all-solid-state lithium secondary batteries using Li-argyrodite Li <sub>6</sub> PS <sub>5</sub> Cl as solid electrolyte. <b>2013</b> , 242, 45-48	58
2232	All-solid secondary batteries with sulfide-based thin film electrolytes. <b>2013</b> , 240, 510-514	10
2231	Preparation and Characterization of Mesoporous Silica and Lithium-Ion-Conductive Halocomplex Salt Composite. <b>2013</b> , 582, 119-122	
2230	Lithium Chalcogenidotetrelates: LiChT <sub>4</sub> Synthesis and Characterization of New Li <sup>+</sup> Ion Conducting Li/Sn/Se Compounds. <b>2013</b> , 25, 2961-2969	22
2229	Tetragonal Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> and Li <sub>7</sub> GePS <sub>8</sub> - exploring the Li ion dynamics in LGPS Li electrolytes. <b>2013</b> , 6, 3548	176
2228	Structures, Li <sup>+</sup> mobilities, and interfacial properties of solid electrolytes Li <sub>3</sub> PS <sub>4</sub> and Li <sub>3</sub> PO <sub>4</sub> from first principles. <b>2013</b> , 88,	105

2227	Oxidation reaction of polyether-based material and its suppression in lithium rechargeable battery using 4 V class cathode, LiNi <sub>1/3</sub> Mn <sub>1/3</sub> Co <sub>1/3</sub> O <sub>2</sub> . <b>2013</b> , 5, 12387-93	25
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2225	All-solid-state lithium metal batteries for next generation energy storage. <b>2013</b> ,	2
2224	Degradation of NASICON-Type Materials in Contact with Lithium Metal: Formation of Mixed Conducting Interphases (MCI) on Solid Electrolytes. <b>2013</b> , 117, 21064-21074	308
2223	KCu <sub>7</sub> S <sub>4</sub> nanowires and the Mn/KCu <sub>7</sub> S <sub>4</sub> nanostructure for solid-state supercapacitors. <b>2013</b> , 1, 15530	31
2222	Long-range Li <sup>+</sup> dynamics in the lithium argyrodite Li <sub>7</sub> PSe <sub>6</sub> as probed by rotating-frame spin-lattice relaxation NMR. <b>2013</b> , 15, 7123-32	51
2221	Ionic mobility and <sup>19</sup> F MAS NMR spectra of lithium octafluorozirconate Li <sub>4</sub> ZrF <sub>8</sub> . <b>2013</b> , 54, 168-173	2
2220	CHAPTER 5: ChalcogenâPhosphorus (and Heavier Congener) Compounds. <b>2013</b> , 238-306	1
2219	Effect of mixing method on the properties of composite cathodes for all-solid-state lithium batteries using Li <sub>2</sub> SâP <sub>2</sub> S <sub>5</sub> solid electrolytes. <b>2013</b> , 244, 476-481	27
2218	Improved coulombic efficiency in nanocomposite thin film based on electrodeposited-oxidized FeNi-electrodes for lithium-ion batteries. <b>2013</b> , 557, 82-90	5
2217	Development of all-solid-state lithium battery using quasi-solidified tetraglymeâlithium bis(trifluoromethanesulfonyl)amideâfumed silica nano-composites as electrolytes. <b>2013</b> , 244, 354-362	22
2216	Effects of Li-ion vacancies on the ionic conduction mechanism of LiMgSO <sub>4</sub> F. <b>2013</b> , 21, 074003	2
2215	Ab initio study of the stabilities of and mechanism of superionic transport in lithium-rich antiperovskites. <b>2013</b> , 87,	98
2214	Li <sub>10</sub> SnP <sub>2</sub> S <sub>12</sub> : an affordable lithium superionic conductor. <b>2013</b> , 135, 15694-7	410
2213	Nuclear Magnetic Resonance Studies of BH <sub>4</sub> Reorientations and Li Diffusion in LiLa(BH <sub>4</sub> ) <sub>3</sub> Cl. <b>2013</b> , 117, 14965-14972	68
2212	Supercapacitor operating at 200 degrees celsius. <b>2013</b> , 3, 2572	75
2211	Highly Conductive [3â] Gold-Ion Clusters Enclosed within Self-Assembled Cages. <b>2013</b> , 125, 6322-6325	11
2210	An All-Solid-State Li-Ion Battery with a Pre-Lithiated Si-Ti-Ni Alloy Anode. <b>2013</b> , 160, A1497-A1501	30

2209	In situ SEM study of a lithium deposition and dissolution mechanism in a bulk-type solid-state cell with a Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> solid electrolyte. <b>2013</b> , 15, 18600-6	176
2208	Anode properties of magnesium hydride catalyzed with niobium oxide for an all solid-state lithium-ion battery. <b>2013</b> , 49, 7174-6	40
2207	Single-crystal X-ray structure analysis of the superionic conductor Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> . <b>2013</b> , 15, 11620-2	99
2206	Highly lithium-ion conductive thio-LISICON thin film processed by low-temperature solution method. <b>2013</b> , 224, 225-229	73
2205	All-solid-state lithium battery with LiBH <sub>4</sub> solid electrolyte. <b>2013</b> , 226, 61-64	109
2204	High temperature sodium batteries: status, challenges and future trends. <b>2013</b> , 6, 734	500
2203	Composite of a nonwoven fabric with poly(vinylidene fluoride) as a gel membrane of high safety for lithium ion battery. <b>2013</b> , 6, 618-624	287
2202	Electrical Conductivity, Self-Diffusivity and Electrolyte Performance of a Quasi-Solid-State Pseudo-Ternary System, Bis(trifluoromethanesulfonyl)amide-Based Room Temperature Ionic Liquid-Lithium Bis(trifluoromethanesulfonyl)amide-Embedded Silica Nanoparticles. <b>2013</b> , 160, A138-A147	38
2201	Reversible chemical delithiation/lithiation of LiFePO <sub>4</sub> : towards a redox flow lithium-ion battery. <b>2013</b> , 15, 1793-7	133
2200	Progress and prospective of solid-state lithium batteries. <b>2013</b> , 61, 759-770	737
2199	Anomalous high ionic conductivity of nanoporous Li <sub>3</sub> PS <sub>4</sub> . <b>2013</b> , 135, 975-8	537
2198	Charge/discharge performances of glyme-lithium salt equimolar complex electrolyte for lithium secondary batteries. <b>2013</b> , 243, 323-327	17
2197	Recent development of sulfide solid electrolytes and interfacial modification for all-solid-state rechargeable lithium batteriesPeer review under responsibility of The Ceramic Society of Japan and the Korean Ceramic Society.View all notes. <b>2013</b> , 1, 17-25	306
2196	Improvement of solid-state symmetric cell performance with lithium vanadium phosphate. <b>2013</b> , 244, 312-317	20
2195	Characteristics of the Li <sub>2</sub> O-Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> glasses synthesized by the two-step mechanical milling. <b>2013</b> , 364, 57-61	82
2194	Preparation and ionic conductivities of (100 ± 0.75Li <sub>2</sub> S)·(25P <sub>2</sub> S <sub>5</sub> )·LiBH <sub>4</sub> glass electrolytes. <b>2013</b> , 244, 707-710	68
2193	A structural, spectroscopic and electrochemical study of a lithium ion conducting Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> solid electrolyte. <b>2013</b> , 229, 117-122	67
2192	Phase Stability and Transport Mechanisms in Antiperovskite Li <sub>3</sub> OCl and Li <sub>3</sub> OBr Superionic Conductors. <b>2013</b> , 25, 4663-4670	151

2191	Synthesis and Raman micro-spectroscopy investigation of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ . <b>2013</b> , 230, 77-82	89
2190	All-solid-state lithium secondary batteries using the $75\text{Li}_2\text{S} \cdot 25\text{P}_2\text{S}_5$ glass and the $70\text{Li}_2\text{S} \cdot 30\text{P}_2\text{S}_5$ glass-ceramic as solid electrolytes. <b>2013</b> , 233, 231-235	129
2189	Determination of the rate-determining step in the electrochemical oxidation of Li metal at the Li negative electrode/ $\text{Li}_2\text{S} \cdot \text{P}_2\text{S}_5$ solid electrolyte interface. <b>2013</b> , 244, 675-678	9
2188	Formation and conductivity studies of lithium argyrodite solid electrolytes using in-situ neutron diffraction. <b>2013</b> , 230, 72-76	81
2187	Effect of lithium borate addition on the physical and electrochemical properties of the lithium ion conductor $\text{Li}_{3.4}\text{Si}_{0.4}\text{P}_{0.6}\text{O}_4$ . <b>2013</b> , 231, 109-115	20
2186	Phase stability, electrochemical stability and ionic conductivity of the $\text{Li}_{10}\text{M}_2\text{P}_2\text{X}_{12}$ (M = Ge, Si, Sn, Al or P, and X = O, S or Se) family of superionic conductors. <b>2013</b> , 6, 148-156	429
2185	A new class of Solvent-in-Salt electrolyte for high-energy rechargeable metallic lithium batteries. <b>2013</b> , 4, 1481	1631
2184	String-like cooperative motion in homogeneous melting. <b>2013</b> , 138, 12A538	62
2183	The mechanism of ultrafast structural switching in superionic copper (I) sulphide nanocrystals. <b>2013</b> , 4, 1369	65
2182	Lithium transport through nanosized amorphous silicon layers. <b>2013</b> , 13, 1237-44	35
2181	Lithium Atom and A-Site Vacancy Distributions in Lanthanum Lithium Titanate. <b>2013</b> , 25, 1607-1614	77
2180	Surface modification of $\text{LiCoO}_2$ with $\text{Li}_3\text{La}_2/3\text{TiO}_3$ for all-solid-state lithium ion batteries using $\text{Li}_2\text{S} \cdot \text{P}_2\text{S}_5$ glass-ceramic. <b>2013</b> , 39, 8453-8458	34
2179	Interface phenomena between Li anode and lithium phosphate electrolyte for Li-ion battery. <b>2013</b> , 244, 136-142	22
2178	Thermodynamics of electrochemical lithium storage. <b>2013</b> , 52, 4998-5026	154
2177	Highly Mobile Ions: Low-Temperature NMR Directly Probes Extremely Fast $\text{Li}^+$ Hopping in Argyrodite-Type $\text{Li}_6\text{PS}_5\text{Br}$ . <b>2013</b> , 4, 2118-2123	90
2176	Lithium superionic sulfide cathode for all-solid lithium-sulfur batteries. <b>2013</b> , 7, 2829-33	284
2175	Lithium polysulfidophosphates: a family of lithium-conducting sulfur-rich compounds for lithium-sulfur batteries. <b>2013</b> , 52, 7460-3	233
2174	A wider temperature range polymer electrolyte for all-solid-state lithium ion batteries. <b>2013</b> , 3, 10722	76



2173	Interfacial nanoarchitectonics for solid-state lithium batteries. <b>2013</b> , 29, 7538-41	100
2172	A trilayer poly(vinylidene fluoride)/polyborate/poly(vinylidene fluoride) gel polymer electrolyte with good performance for lithium ion batteries. <b>2013</b> , 1, 7790	144
2171	The pursuit of rechargeable solid-state Li-air batteries. <b>2013</b> , 6, 2302	142
2170	All-solid-state lithium secondary batteries using NiS-carbon fiber composite electrodes coated with Li-ion-conducting solid electrolytes by pulsed laser deposition. <b>2013</b> , 5, 686-90	55
2169	Highly conductive [3D] gold-ion clusters enclosed within self-assembled cages. <b>2013</b> , 52, 6202-5	60
2168	Effect of Heat Treatment on the Lithium Ion Conduction of the LiBH <sub>4</sub> -Li Solid Solution. <b>2013</b> , 117, 3249-3257	53
2167	In Situ TEM Observation of Local Phase Transformation in a Rechargeable LiMn <sub>2</sub> O <sub>4</sub> Nanowire Battery. <b>2013</b> , 117, 24236-24241	58
2166	Solid State Enabled Reversible Four Electron Storage. <b>2013</b> , 3, 120-127	131
2165	Cheap glass fiber mats as a matrix of gel polymer electrolytes for lithium ion batteries. <b>2013</b> , 3, 3187	88
2164	Electrochemical properties of all-solid-state lithium secondary batteries using Li-argyrodite Li <sub>6</sub> PS <sub>5</sub> Cl as solid electrolyte. <b>2013</b> , 1496, 1	
2163	Lithium Polysulfidophosphates: A Family of Lithium-Conducting Sulfur-Rich Compounds for Lithium-Sulfur Batteries. <b>2013</b> , 125, 7608-7611	64
2162	First-principles calculations of lithium-ion migration at a coherent grain boundary in a cathode material, LiCoO <sub>2</sub> . <b>2013</b> , 25, 618-22	118
2161	Formation of Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> Solid Electrolyte from N-Methylformamide Solution. <b>2013</b> , 42, 1435-1437	25
2160	Thermodynamik der elektrochemischen Lithiumspeicherung. <b>2013</b> , 125, 5100-5131	18
2159	Synthesis of Pure Lithium Amide Nanoparticles. <b>2013</b> , 2013, 1993-1996	1
2158	Glass Electrolytes with High Ion Conductivity and High Chemical Stability in the System LiI-Li <sub>2</sub> O-Li <sub>2</sub> S-P <sub>2</sub> S <sub>5</sub> . <b>2013</b> , 81, 428-431	46
2157	Recent Advances in Inorganic Solid Electrolytes for Lithium Batteries. <b>2014</b> , 2,	205
2156	Preparation of Li <sub>3</sub> BO <sub>3</sub> -Li <sub>2</sub> SO <sub>4</sub> glass-ceramic electrolytes for all-oxide lithium batteries. <b>2014</b> , 270, 603-607	78

2155	Transformation of a layered perovskite to a defect perovskite via cooperative Li-insertion and O/N substitution. <b>2014</b> , 43, 16830-7	2
2154	Separators - Technology review: Ceramic based separators for secondary batteries. <b>2014</b> ,	31
2153	Electrode-Electrolyte Interface for Solid State Li-Ion Batteries: Point Defects and Mechanical Strain. <b>2014</b> , 161, F3104-F3110	24
2152	Nanosecond quantum molecular dynamics simulations of the lithium superionic conductor $\text{Li}_4\text{Ge}_1\text{P}_x\text{S}_4$ . <b>2014</b> , 90,	16
2151	Transformation of P2S5 into a Solid Electrolyte with Ionic Conductivity at the Positive Composite Electrode of All-Solid-State Lithium-Sulfur Batteries. <b>2014</b> , 2, 753-756	19
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2148	New Desolvated Gel Electrolyte for Rechargeable Lithium Metal Sulfurized Polyacrylonitrile (S-PAN) Battery. <b>2014</b> , 118, 28369-28376	26
2147	Ionic Liquid Based Electrolytes: Correlating Li Diffusion Coefficients and Battery Performance. <b>2014</b> , 161, A2036-A2041	18
2146	Gallium Sulfide-Single-Walled Carbon Nanotube Composites: High-Performance Anodes for Lithium-Ion Batteries. <b>2014</b> , 24, 5435-5442	78
2145	Sustainable Electrical Energy Storage through the Ferrocene/Ferrocenium Redox Reaction in Aprotic Electrolyte. <b>2014</b> , 126, 11216-11220	29
2144	Synthesis, structure, and ionic conductivity of solid solution, $\text{Li}_{10}\text{M}_1\text{P}_2\text{S}_{12}$ (M = Si, Sn). <b>2014</b> , 176, 83-94	63
2143	Investigation of cyano resin-based gel polymer electrolyte: in situ gelation mechanism and electrode-electrolyte interfacial fabrication in lithium-ion battery. <b>2014</b> , 2, 20059-20066	65
2142	The synergistic effects of Al and Te on the structure and Li+-mobility of garnet-type solid electrolytes. <b>2014</b> , 2, 20271-20279	71
2141	Emerging electrochemical energy conversion and storage technologies. <b>2014</b> , 2, 79	196
2140	Improved chemical stability and cyclability in $\text{Li}_2\text{S}$ -P2S5-P2O5-ZnO composite electrolytes for all-solid-state rechargeable lithium batteries. <b>2014</b> , 591, 247-250	73
2139	Preparation of $\text{Li}_2\text{S}$ -P2S5 solid electrolyte from N-methylformamide solution and application for all-solid-state lithium battery. <b>2014</b> , 248, 939-942	75
2138	Development of high capacity all-solid-state lithium battery using quasi-solid-state electrolyte containing tetraglyme-Li-TFSA equimolar complexes. <b>2014</b> , 262, 765-768	9

2137	A Composite Gel Polymer Electrolyte with High Performance Based on Poly(Vinylidene Fluoride) and Polyborate for Lithium Ion Batteries. <b>2014</b> , 4, 1300647	202
2136	Progress in flexible lithium batteries and future prospects. <b>2014</b> , 7, 1307-1338	1103
2135	Development of lithium-sulfur batteries using room temperature ionic liquid-based quasi-solid-state electrolytes. <b>2014</b> , 125, 386-394	40
2134	Waxing and waning of dynamical heterogeneity in the superionic state. <b>2014</b> , 89, 010301	15
2133	High sodium ion conductivity of glass-ceramic electrolytes with cubic Na <sub>3</sub> PS <sub>4</sub> . <b>2014</b> , 258, 420-423	185
2132	Preparation and electrochemical characterization of (100 - x)(0.7Li <sub>2</sub> S <sub>5</sub> ·0.3P <sub>2</sub> S <sub>5</sub> ) <sub>x</sub> LiBr glass-ceramic electrolytes. <b>2014</b> , 3, 1	18
2131	Synthesis, structure, physicochemical characterization and electronic structure of thio-lithium super ionic conductors, Li <sub>4</sub> GeS <sub>4</sub> and Li <sub>4</sub> SnS <sub>4</sub> . <b>2014</b> , 586, 736-744	21
2130	Insight into lithium distribution in lithium-stuffed garnet oxides through neutron diffraction and atomistic simulation: Li <sub>7-x</sub> La <sub>3</sub> Zr <sub>2-x</sub> Ta <sub>x</sub> O <sub>12</sub> (x = 0-2) series. <b>2014</b> , 255, 39-49	35
2129	Complex Hydrides for Electrochemical Energy Storage. <b>2014</b> , 24, 2267-2279	156
2128	Garnet related lithium ion conductor processed by spark plasma sintering for all solid state batteries. <b>2014</b> , 249, 197-206	131
2127	The Lithium Air Battery. <b>2014</b> ,	95
2126	Understanding Ionic Conduction and Energy Storage Materials with Bond-Valence-Based Methods. <b>2014</b> , 129-159	28
2125	Wide electrochemical window ionic salt for use in electropositive metal electrodeposition and solid state Li-ion batteries. <b>2014</b> , 2, 2194-2201	19
2124	Synthesis of rock-salt type lithium borohydride and its peculiar Li <sup>+</sup> ion conduction properties. <b>2014</b> , 2, 056109	13
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2122	Heterostructures for Improved Stability of Lithium Sulfur Batteries. <b>2014</b> , 161, A1173-A1180	8
2121	Activation of sulfur active material in an all-solid-state lithium-sulfur battery. <b>2014</b> , 263, 141-144	58
2120	Spark plasma sintered/synthesized dense and nanostructured materials for solid-state Li-ion batteries: Overview and perspective. <b>2014</b> , 247, 920-931	77

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2117	A sulphide lithium super ion conductor is superior to liquid ion conductors for use in rechargeable batteries. <b>2014</b> , 7, 627-631	771
2116	Recent progress on flexible lithium rechargeable batteries. <b>2014</b> , 7, 538-551	314
2115	Lithium metal anodes for rechargeable batteries. <b>2014</b> , 7, 513-537	2793
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2069	The LiBH <sub>4</sub> -LiI Solid Solution as an Electrolyte in an All-Solid-State Battery. <b>2014</b> , 161, A1432-A1439	39
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1508	Facile synthesis of NASICON-type Li <sub>1.3</sub> Al <sub>0.3</sub> Ti <sub>1.7</sub> (PO <sub>4</sub> ) <sub>3</sub> solid electrolyte and its application for enhanced cyclic performance in lithium ion batteries through the introduction of an artificial Li <sub>3</sub> PO <sub>4</sub> SEI layer. <b>2017</b> , 7, 46545-46552	47

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1379	Correlating Transport and Structural Properties in $\text{LiAl Ge(PO)}$ (LAGP) Prepared from Aqueous Solution. <b>2018</b> , 10, 10935-10944	52
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1375	Highly Crystalline Layered VS Nanosheets for All-Solid-State Lithium Batteries with Enhanced Electrochemical Performances. <b>2018</b> , 10, 10053-10063	61
1374	Sulfide solid electrolytes for all-solid-state lithium batteries: Structure, conductivity, stability and application. <b>2018</b> , 14, 58-74	228
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1368	Design Strategies, Practical Considerations, and New Solution Processes of Sulfide Solid Electrolytes for All-Solid-State Batteries. <b>2018</b> , 8, 1800035	269
1367	New P2-Type Honeycomb-Layered Sodium-Ion Conductor: $\text{NaMgTeO}$ . <b>2018</b> , 10, 15760-15766	30
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1362	Nanoporous and lyophilic battery separator from regenerated eggshell membrane with effective suppression of dendritic lithium growth. <b>2018</b> , 14, 258-266	41
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1355	Revisiting the Role of Polysulfides in Lithium-Sulfur Batteries. <b>2018</b> , 30, e1705590	291
1354	Advancing Lithium Metal Batteries. <b>2018</b> , 2, 833-845	620
1353	Statistical variances of diffusional properties from ab initio molecular dynamics simulations. <b>2018</b> , 4,	143
1352	The application of synchrotron X-ray techniques to the study of rechargeable batteries. <b>2018</b> , 27, 1566-1583	38
1351	The effect of sintering process on lithium ionic conductivity of LiAlLaZrO garnet produced by solid-state synthesis.. <b>2018</b> , 8, 13083-13088	26
1350	Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. <b>2018</b> , 389, 120-134	236
1349	Review on solid electrolytes for all-solid-state lithium-ion batteries. <b>2018</b> , 389, 198-213	593
1348	Particle Morphology and Lithium Segregation to Surfaces of the Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Solid Electrolyte. <b>2018</b> , 30, 3019-3027	54
1347	A K <sub>2</sub> Fe <sub>4</sub> O <sub>7</sub> superionic conductor for all-solid-state potassium metal batteries. <b>2018</b> , 6, 8413-8418	50
1346	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. <b>2018</b> , 14, 376-382	73

1345	Summary report of CALPHAD XLV - Awaji Island, Japan, 2016. <b>2018</b> , 61, 288-349	
1344	Bottleneck of Diffusion and Inductive Effects in $\text{Li}_{10}\text{Ge}_4\text{Sn}_x\text{P}_2\text{S}_{12}$ . <b>2018</b> , 30, 1791-1798	78
1343	Germanium Thin Film Protected Lithium Aluminum Germanium Phosphate for Solid-State Li Batteries. <b>2018</b> , 8, 1702374	146
1342	Partial nitridation of $\text{Li}_4\text{SiO}_4$ and ionic conductivity of $\text{Li}_{4.1}\text{SiO}_3.9\text{N}_{0.1}$ . <b>2018</b> , 44, 9058-9062	4
1341	Improvement of ionic conductivity in $\text{Li}_{3.6}\text{Si}_{0.6}\text{V}_{0.4}\text{O}_4$ ceramic inorganic electrolyte by addition of $\text{LiBO}_2$ glass for Li ion battery application. <b>2018</b> , 265, 65-70	16
1340	A quaternary sodium superionic conductor - $\text{Na}_{10.8}\text{Sn}_{1.9}\text{PS}_{11.8}$ . <b>2018</b> , 47, 325-330	45
1339	The interfacial behaviours of all-solid-state lithium ion batteries. <b>2018</b> , 44, 7319-7328	33
1338	Ionic conduction and vibrational characteristics of $\text{Al}^{3+}$ modified monoclinic $\text{LiZr}_2(\text{PO}_4)_3$ . <b>2018</b> , 263, 533-543	13
1337	Solid Electrolyte Layers by Solution Deposition. <b>2018</b> , 5, 1701328	35
1336	Recent Progress of the Solid-State Electrolytes for High-Energy Metal-Based Batteries. <b>2018</b> , 8, 1702657	577
1335	Configuring $\text{PS}_x$ tetrahedral clusters in Li-excess $\text{Li}_7\text{P}_3\text{S}_{11}$ solid electrolyte. <b>2018</b> , 6, 047902	8
1334	Enhancing lithium-ion conductivity in NASICON glass-ceramics by adding yttria. <b>2018</b> , 20, 1375-1382	21
1333	Designing Safe Electrolyte Systems for a High-Stability Lithium-Sulfur Battery. <b>2018</b> , 8, 1702348	210
1332	Synthesis and Structures of Novel Solid-State Electrolytes. <b>2018</b> , 279-298	
1331	All-Solid-State Batteries with Thick Electrode Configurations. <b>2018</b> , 9, 607-613	114
1330	Novel stable structure of $\text{Li}_3\text{PS}_4$ predicted by evolutionary algorithm under high-pressure. <b>2018</b> , 8, 015008	5
1329	Correlation of Structure and Fast Ion Conductivity in the Solid Solution Series $\text{Li}_{1+2x}\text{Zn}_x\text{PS}_4$ . <b>2018</b> , 30, 592-596	32
1328	Polymorphism in $\text{Li}_4\text{Zn}(\text{PO}_4)_2$ and Stabilization of its Structural Disorder to Improve Ionic Conductivity. <b>2018</b> , 30, 1379-1390	10

1327	High-Pressure Phase Diagram and Superionicity of Alkaline Earth Metal Difluorides. <b>2018</b> , 122, 1267-1279	19
1326	Preparation of sulfide solid electrolytes in the $\text{Li}_2\text{S-P}_2\text{S}_5$ system by a liquid phase process. <b>2018</b> , 5, 501-508	32
1325	Graphene oxide as a filler to improve the performance of PAN-LiClO <sub>4</sub> flexible solid polymer electrolyte. <b>2018</b> , 315, 7-13	70
1324	Hybrid solid electrolytes composed of poly(1,4-butylene adipate) and lithium aluminum germanium phosphate for all-solid-state Li/LiNi <sub>0.6</sub> Co <sub>0.2</sub> Mn <sub>0.2</sub> O <sub>2</sub> cells. <b>2018</b> , 315, 65-70	25
1323	Interface Re-Engineering of LiGePS Electrolyte and Lithium anode for All-Solid-State Lithium Batteries with Ultralong Cycle Life. <b>2018</b> , 10, 2556-2565	148
1322	Li <sup>+</sup> ion doping into KI-KBH <sub>4</sub> solid solvent systems: The role of the BH <sub>4</sub> <sup>-</sup> anion. <b>2018</b> , 735, 1291-1296	4
1321	Cruising in ceramics—discovering new structures for all-solid-state batteries—fundamentals, materials, and performances. <b>2018</b> , 24, 639-660	33
1320	Vacancy-Controlled Na Superion Conduction in Na Sn PS. <b>2018</b> , 57, 1351-1355	103
1319	Fast Lithium-Ion Conduction in Atom-Deficient closo-Type Complex Hydride Solid Electrolytes. <b>2018</b> , 30, 386-391	44
1318	Origin of the Phase Transition in Lithium Garnets. <b>2018</b> , 122, 1963-1972	24
1317	Uniform Lithium Nucleation/Growth Induced by Lightweight Nitrogen-Doped Graphitic Carbon Foams for High-Performance Lithium Metal Anodes. <b>2018</b> , 30, 1706216	315
1316	Vacancy-Controlled Na <sup>+</sup> Superion Conduction in Na <sub>11</sub> Sn <sub>2</sub> PS <sub>12</sub> . <b>2018</b> , 130, 1365-1369	23
1315	Ionic conductive GeS <sub>2</sub> -Ga <sub>2</sub> S <sub>3</sub> -Li <sub>2</sub> S-LiI glass powders prepared by mechanical synthesis. <b>2018</b> , 740, 61-67	9
1314	Mechanism of Formation of Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> Solid Electrolytes through Liquid Phase Synthesis. <b>2018</b> , 30, 990-997	90
1313	Study on electrical and structural properties in SiO <sub>2</sub> substituted Li <sub>2</sub> O-Al <sub>2</sub> O <sub>3</sub> -GeO <sub>2</sub> -P <sub>2</sub> O <sub>5</sub> glass-ceramic systems. <b>2018</b> , 44, 13373-13380	6
1312	Progress and prospect on failure mechanisms of solid-state lithium batteries. <b>2018</b> , 392, 94-115	96
1311	Vertically Aligned and Continuous Nanoscale Ceramic-Polymer Interfaces in Composite Solid Polymer Electrolytes for Enhanced Ionic Conductivity. <b>2018</b> , 18, 3829-3838	178
1310	Drawing a Soft Interface: An Effective Interfacial Modification Strategy for Garnet-Type Solid-State Li Batteries. <b>2018</b> , 3, 1212-1218	236



1309	A first principle study of the phase stability, ion transport and substitution strategy for highly ionic conductive sodium antiperovskite as solid electrolyte for sodium ion batteries. <b>2018</b> , 390, 61-70	22
1308	Hybrid electrolytes incorporated with dandelion-like silane- $\text{Al}_2\text{O}_3$ nanoparticles for high-safety high-voltage lithium ion batteries. <b>2018</b> , 391, 113-119	9
1307	XPS and SEM analysis between Li/Li $_3$ PS $_4$ interface with Au thin film for all-solid-state lithium batteries. <b>2018</b> , 322, 1-4	72
1306	Creating Lithium-Ion Electrolytes with Biomimetic Ionic Channels in Metal-Organic Frameworks. <b>2018</b> , 30, e1707476	146
1305	Bayesian-Driven First-Principles Calculations for Accelerating Exploration of Fast Ion Conductors for Rechargeable Battery Application. <b>2018</b> , 8, 5845	53
1304	Ladderlike carbon nanoarrays on 3D conducting skeletons enable uniform lithium nucleation for stable lithium metal anodes. <b>2018</b> , 54, 5330-5333	32
1303	Monitoring the chemical and electronic properties of electrolyte-electrode interfaces in all-solid-state batteries using operando X-ray photoelectron spectroscopy. <b>2018</b> , 20, 11123-11129	33
1302	Li conduction pathways in solid-state electrolytes: Insights from dynamics and polarizability. <b>2018</b> , 698, 234-239	7
1301	Li Distribution Heterogeneity in Solid Electrolyte LiGePS upon Electrochemical Cycling Probed by Li MRI. <b>2018</b> , 9, 1990-1998	64
1300	Compositional descriptor-based recommender system for the materials discovery. <b>2018</b> , 148, 241719	22
1299	Lithium superionic conductors Li $_{10}$ MP $_2$ O $_{12}$ (M = Ge, Si). <b>2018</b> , 11, 1850039	14
1298	NASICON-type La $_3$ +substituted LiZr $_2$ (PO $_4$ ) $_3$ with improved ionic conductivity as solid electrolyte. <b>2018</b> , 271, 120-126	31
1297	Unique rhombus-like precursor for synthesis of Li $_{1.3}$ Al $_{0.3}$ Ti $_{1.7}$ (PO $_4$ ) $_3$ solid electrolyte with high ionic conductivity. <b>2018</b> , 345, 483-491	35
1296	Preparation and characterization of Na $_3$ PS $_4$ -Na $_4$ GeS $_4$ glass and glass-ceramic electrolytes. <b>2018</b> , 320, 193-198	10
1295	Designing solution chemistries for the low-temperature synthesis of sulfide-based solid electrolytes. <b>2018</b> , 6, 7370-7374	37
1294	Impact of Cathode Material Particle Size on the Capacity of Bulk-Type All-Solid-State Batteries. <b>2018</b> , 3, 992-996	134
1293	First-principles study of lithium-ion diffusion in Li $_3$ PS $_4$ for solid-state electrolytes. <b>2018</b> , 18, 541-545	9
1292	Quantum-Chemical Modeling of the Surface Contact of Superionic Conductor Li $_{10}$ GeP $_2$ S $_{12}$ with Different Materials. <b>2018</b> , 63, 69-77	

1291	Importance of mixing protocol for enhanced performance of composite cathodes in all-solid-state batteries using sulfide solid electrolyte. <b>2018</b> , 40, 293-299	10
1290	New Insights into the Interphase between the Na Metal Anode and Sulfide Solid-State Electrolytes: A Joint Experimental and Computational Study. <b>2018</b> , 10, 10076-10086	62
1289	Synthesis of lithium superionic conductor by growth of a nanoglass within mesoporous silica SBA-15 template. <b>2018</b> , 51, 135301	8
1288	Atomistic Simulation of Interfaces in Materials of Solid State Ionics. <b>2018</b> , 63, 1-25	2
1287	Dry coating of electrode particle with model particle of sulfide solid electrolytes for all-solid-state secondary battery. <b>2018</b> , 323, 581-587	11
1286	Recent Developments in Oxide-Based Ionic Conductors: Bulk Materials, Nanoionics, and Their Memory Applications. <b>2018</b> , 43, 47-82	14
1285	Sulfurized solid electrolyte interphases with a rapid Li <sup>+</sup> diffusion on dendrite-free Li metal anodes. <b>2018</b> , 10, 199-205	165
1284	Preparation of Sodium Ion Conductive Na <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> Glass-ceramic Electrolytes. <b>2018</b> , 47, 13-15	20
1283	ZnO/carbon framework derived from metal-organic frameworks as a stable host for lithium metal anodes. <b>2018</b> , 11, 191-196	99
1282	Recent Developments of All-Solid-State Lithium Secondary Batteries with Sulfide Inorganic Electrolytes. <b>2018</b> , 24, 6007-6018	36
1281	Synthesis of cubic Na <sub>3</sub> SbS <sub>4</sub> solid electrolyte with enhanced ion transport for all-solid-state sodium-ion batteries. <b>2018</b> , 259, 100-109	42
1280	Improving Li anode performance by a porous 3D carbon paper host with plasma assisted sponge carbon coating. <b>2018</b> , 11, 47-56	41
1279	A novel porous gel polymer electrolyte based on poly(acrylonitrile-polyhedral oligomeric silsesquioxane) with high performances for lithium-ion batteries. <b>2018</b> , 545, 140-149	81
1278	Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries. <b>2018</b> , 8, 1701963	125
1277	Fast Lithium-Ion Transportation in Crystalline Polymer Electrolytes. <b>2018</b> , 19, 45-50	15
1276	On-Demand Reconfiguration of Nanomaterials: When Electronics Meets Ionics. <b>2018</b> , 30, 1702770	116
1275	Review of Solid Electrolytes for Safe and High Energy Density Lithium-Sulfur Batteries: Promises and Challenges. <b>2018</b> , 165, A6008-A6016	112
1274	Flexible/shape-versatile, bipolar all-solid-state lithium-ion batteries prepared by multistage printing. <b>2018</b> , 11, 321-330	102

1273	Rechargeable Solid-State Li <sup>+</sup> /Air and Li <sup>+</sup> /S Batteries: Materials, Construction, and Challenges. <b>2018</b> , 8, 1701602	165
1272	Mechanisms and properties of ion-transport in inorganic solid electrolytes. <b>2018</b> , 10, 139-159	155
1271	Structure of Li <sub>5</sub> AlS <sub>4</sub> and comparison with other lithium-containing metal sulfides. <b>2018</b> , 257, 19-25	7
1270	FeS nanosheets as positive electrodes for all-solid-state lithium batteries. <b>2018</b> , 318, 60-64	25
1269	Toward practical all-solid-state lithium-ion batteries with high energy density and safety: Comparative study for electrodes fabricated by dry- and slurry-mixing processes. <b>2018</b> , 375, 93-101	160
1268	A novel thin solid electrolyte film and its application in all-solid-state battery at room temperature. <b>2018</b> , 24, 1545-1551	15
1267	Using an in-plane geometry in Hebb-Wagner measurements to avoid errors from electrode overpotential. <b>2018</b> , 260, 855-860	4
1266	Toward understanding of ion dynamics in highly conductive lithium ion conductors: Some perspectives by solid state NMR techniques. <b>2018</b> , 318, 19-26	28
1265	Atomic-Scale Influence of Grain Boundaries on Li-Ion Conduction in Solid Electrolytes for All-Solid-State Batteries. <b>2018</b> , 140, 362-368	147
1264	Molecular insights into ether-based electrolytes for Li-FeS <sub>2</sub> batteries. <b>2018</b> , 12, 85-93	8
1263	Probing Solid-Solid Interfacial Reactions in All-Solid-State Sodium-Ion Batteries with First-Principles Calculations. <b>2018</b> , 30, 163-173	104
1262	Microwave-assisted reactive sintering and lithium ion conductivity of Li <sub>1.3</sub> Al <sub>0.3</sub> Ti <sub>1.7</sub> (PO <sub>4</sub> ) <sub>3</sub> solid electrolyte. <b>2018</b> , 378, 48-52	49
1261	Effect of Si substitution on the structural and transport properties of superionic Li-argyrodites. <b>2018</b> , 6, 645-651	83
1260	Suppression of Dendritic Lithium Growth by in Situ Formation of a Chemically Stable and Mechanically Strong Solid Electrolyte Interphase. <b>2018</b> , 10, 593-601	78
1259	Ionic conductivity of metal oxides: An essential property for all-solid-state lithium-ion batteries. <b>2018</b> , 361-408	1
1258	Positive and Negative Aspects of Interfaces in Solid-State Batteries. <b>2018</b> , 3, 98-103	63
1257	Recent achievements on sulfide-type solid electrolytes: crystal structures and electrochemical performance. <b>2018</b> , 53, 3927-3938	38
1256	Na <sub>11</sub> Sn <sub>2</sub> PS <sub>12</sub> : a new solid state sodium superionic conductor. <b>2018</b> , 11, 87-93	160

1255	Hybrid electrolytes with 3D bicontinuous ordered ceramic and polymer microchannels for all-solid-state batteries. <b>2018</b> , 11, 185-201	176
1254	Beyond lithium ion batteries: Higher energy density battery systems based on lithium metal anodes. <b>2018</b> , 12, 161-175	284
1253	Bulk properties and transport mechanisms of a solid state antiperovskite Li-ion conductor Li <sub>3</sub> OCl: insights from first principles calculations. <b>2018</b> , 6, 1150-1160	33
1252	Ab Initio Molecular Dynamics Studies of Fast Ion Conductors. <b>2018</b> , 147-168	4
1251	From anti-perovskite to double anti-perovskite: tuning lattice chemistry to achieve super-fast Li <sup>+</sup> transport in cubic solid lithium halogen halogenides. <b>2018</b> , 6, 73-83	49
1250	Review of Li Metal Anode in Working Lithium-Sulfur Batteries. <b>2018</b> , 165, A6058-A6072	172
1249	Chalcogenide glass-ceramics: Functional design and crystallization mechanism. <b>2018</b> , 93, 1-44	78
1248	Rational coating of Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> solid electrolyte on MoS <sub>2</sub> electrode for all-solid-state lithium ion batteries. <b>2018</b> , 374, 107-112	55
1247	LiTa <sub>2</sub> PO <sub>8</sub> : a fast lithium-ion conductor with new framework structure. <b>2018</b> , 6, 22478-22482	31
1246	Electrochemical behaviors of Li-argyrodite-based all-solid-state batteries under deep-freezing conditions. <b>2018</b> , 54, 14116-14119	15
1245	A gel single ion conducting polymer electrolyte enables durable and safe lithium ion batteries graft polymerization.. <b>2018</b> , 8, 39967-39975	27
1244	Visualizing the morphological and compositional evolution of the interface of InLi-anode thio-LISION electrolyte in an all-solid-state Li-ion cell by in operando synchrotron X-ray tomography and energy dispersive diffraction. <b>2018</b> , 6, 22489-22496	36
1243	Theoretical description of alkali metal closo-boranes - towards the crystal structure of MgBH. <b>2018</b> , 20, 30140-30149	4
1242	Interface engineering in solid state Li metal batteries by quasi-2D hybrid perovskites. <b>2018</b> , 6, 20896-20903	23
1241	Microwave-aided synthesis of lithium thiophosphate solid electrolyte. <b>2018</b> , 6, 21261-21265	15
1240	Ultra-fine surface solid-state electrolytes for long cycle life all-solid-state lithium-ion batteries. <b>2018</b> , 6, 21248-21254	43
1239	High-performance all-solid-state lithium-sulfur batteries with sulfur/carbon nano-hybrids in a composite cathode. <b>2018</b> , 6, 23345-23356	30
1238	Synthesis and Characterization of Three New Lithium-Scandium Hexathiohypodiphosphates: Li <sub>4</sub> B <sub>x</sub> Sc <sub>x</sub> P <sub>2</sub> S <sub>6</sub> (x = 0.358), m-LiScP <sub>2</sub> S <sub>6</sub> , and t-LiScP <sub>2</sub> S <sub>6</sub> . <b>2018</b> , 644, 1854-1862	1

1237	All-Solid-State Lithium Battery Fitted with Polymer Electrolyte Enhanced by Solid Plasticizer and Conductive Ceramic Filler. <b>2018</b> , 165, A3558-A3565	28
1236	Phase Stability of Dynamically Disordered Solids from First Principles. <b>2018</b> , 121, 225702	4
1235	High-Conductivity Argyrodite LiPSCl Solid Electrolytes Prepared via Optimized Sintering Processes for All-Solid-State Lithium-Sulfur Batteries. <b>2018</b> , 10, 42279-42285	94
1234	Composite Cathode of NCM Particles and Li <sub>3</sub> PS <sub>4</sub> -LiI Electrolytes Prepared using the SEED Method for All-Solid-State Lithium Batteries. <b>2018</b> , 429, 012033	4
1233	Micro-mechanics in Electrochemical Systems. <b>2018</b> , 1-54	
1232	Slurry-Based Processing of Solid Electrolytes: A Comparative Binder Study. <b>2018</b> , 165, A3993-A3999	29
1231	Discovery and design of lithium battery materials via high-throughput modeling. <b>2018</b> , 27, 128801	1
1230	Imaging the diffusion pathway of Al <sup>3+</sup> ion in NASICON-type (Al <sub>0.2</sub> Zr <sub>0.8</sub> ) <sub>20</sub> /19 Nb(PO <sub>4</sub> ) <sub>3</sub> as electrolyte for rechargeable solid-state Al batteries. <b>2018</b> , 27, 128201	28
1229	Revisiting Scientific Issues for Industrial Applications of Lithium-Sulfur Batteries. <b>2018</b> , 1, 196-208	101
1228	Effects of Sintering Temperatures on the Crystallinity and Electrochemical Properties of the Li <sub>10</sub> GeP <sub>2</sub> S <sub>12</sub> via Solid-State Sintering Method. <b>2018</b> , 394, 022038	1
1227	Insights into Grain Boundary in Lithium-Rich Anti-Perovskite as Solid Electrolytes. <b>2018</b> , 165, A3946-A3951	12
1226	Review of Recent Nuclear Magnetic Resonance Studies of Ion Transport in Polymer Electrolytes. <b>2018</b> , 8,	18
1225	Super-Ionic Conduction in Solid-State Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> -Type Sulfide Electrolytes. <b>2018</b> , 30, 8764-8770	20
1224	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. <b>2018</b> , 30, 8747-8756	53
1223	Lithium Permeability Increase in Nanosized Amorphous Silicon Layers. <b>2018</b> , 122, 28528-28536	8
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1221	Interface engineering of sulfide electrolytes for all-solid-state lithium batteries. <b>2018</b> , 53, 958-966	133
1220	Elucidating the role of dopants in the critical current density for dendrite formation in garnet electrolytes. <b>2018</b> , 6, 19817-19827	61

1219	Interfaces in Solid-State Lithium Batteries. <b>2018</b> , 2, 1991-2015	287
1218	Computation-Accelerated Design of Materials and Interfaces for All-Solid-State Lithium-Ion Batteries. <b>2018</b> , 2, 2016-2046	162
1217	Opportunities for Rechargeable Solid-State Batteries Based on Li-Intercalation Cathodes. <b>2018</b> , 2, 2208-2224	97
1216	Architected Macroporous Polyelectrolytes That Suppress Dendrite Formation during High-Rate Lithium Metal Electrodeposition. <b>2018</b> , 51, 7666-7671	8
1215	A novel solid PEO/LLTO-nanowires polymer composite electrolyte for solid-state lithium-ion battery. <b>2018</b> , 292, 718-726	80
1214	A mixed anion hydroborate/carba-hydroborate as a room temperature Na-ion solid electrolyte. <b>2018</b> , 404, 7-12	49
1213	Realizing the Ultimate Thermal Stability of a Lithium-Ion Battery Using Two Zero-Strain Insertion Materials. <b>2018</b> ,	2
1212	Advanced sulfide solid electrolyte by core-shell structural design. <b>2018</b> , 9, 4037	83
1211	Computational Modeling of Morphology Evolution in Metal-Based Battery Electrodes. <b>2018</b> , 1-27	2
1210	Non-flammable organic liquid electrolyte for high-safety and high-energy density Li-ion batteries. <b>2018</b> , 404, 13-19	65
1209	Comparing the Descriptors for Investigating the Influence of Lattice Dynamics on Ionic Transport Using the Superionic Conductor NaPSSe. <b>2018</b> , 140, 14464-14473	86
1208	Ameliorating Interfacial Ionic Transportation in All-Solid-State Li-Ion Batteries with Interlayer Modifications. <b>2018</b> , 3, 2775-2795	45
1207	Interface Engineering for Garnet-Based Solid-State Lithium-Metal Batteries: Materials, Structures, and Characterization. <b>2018</b> , 30, e1802068	135
1206	LiCrS and LiMnS Cathodes with Extraordinary Mixed Electron-Ion Conductivities and Favorable Interfacial Compatibilities with Sulfide Electrolyte. <b>2018</b> , 10, 36941-36953	14
1205	Architectural design and fabrication approaches for solid-state batteries. <b>2018</b> , 43, 775-781	48
1204	Polymer and composite electrolytes. <b>2018</b> , 43, 759-767	42
1203	Predictive modeling and design rules for solid electrolytes. <b>2018</b> , 43, 746-751	31
1202	Frontiers of solid-state batteries. <b>2018</b> , 43, 740-745	20

1201	μSR Study on Li Ionic Conductors. <b>2018,</b>	2
1200	Synthesis and characterisation of the new oxyfluoride Li <sup>+</sup> ion conductor, Li <sub>5</sub> SiO <sub>4</sub> F. <b>2018,</b> 327, 64-70	8
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1198	LiN-Modified Garnet Electrolyte for All-Solid-State Lithium Metal Batteries Operated at 40 °C. <b>2018,</b> 18, 7414-7418	160
1197	Nuclear Spin Relaxation in Nanocrystalline Li <sub>3</sub> PS <sub>4</sub> Reveals Low-Dimensional Li Diffusion in an Isotropic Matrix. <b>2018,</b> 30, 7575-7586	24
1196	Ion-Sieving Carbon Nanoshells for Deeply Rechargeable Zn-Based Aqueous Batteries. <b>2018,</b> 8, 1802470	86
1195	Metal-phosphide-doped Li <sub>7</sub> P <sub>3</sub> S <sub>11</sub> glass-ceramic electrolyte with high ionic conductivity for all-solid-state lithium-sulfur batteries. <b>2018,</b> 97, 100-104	23
1194	Inducing High Ionic Conductivity in the Lithium Superionic Argyrodites LiPGe <sub>2</sub> Si for All-Solid-State Batteries. <b>2018,</b> 140, 16330-16339	205
1193	Li <sub>3</sub> BO <sub>3</sub> ·Li <sub>2</sub> CO <sub>3</sub> : Rationally Designed Buffering Phase for Sulfide All-Solid-State Li-Ion Batteries. <b>2018,</b> 30, 8190-8200	92
1192	Reactivity of Li <sub>14</sub> P <sub>6</sub> S <sub>22</sub> as a Potential Solid Electrolyte for All-Solid-State Lithium-Ion Batteries. <b>2018,</b> 39, 1149-1159	
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1176	A Dual-Crosslinking Design for Resilient Lithium-Ion Conductors. <b>2018</b> , 30, e1804142	80
1175	In-situ investigation of pressure effect on structural evolution and conductivity of Na <sub>3</sub> SbS <sub>4</sub> superionic conductor. <b>2018</b> , 401, 111-116	13
1174	Controllable preparation and high ionic conductivity of Fe <sub>2</sub> O <sub>3</sub> -doped 46Li <sub>2</sub> O-4Al <sub>2</sub> O <sub>3</sub> -50P <sub>2</sub> O <sub>5</sub> glass-ceramics. <b>2018</b> , 500, 401-409	6
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1165	Mechanochemically Prepared LiS-PS-LiBH Solid Electrolytes with an Argyrodite Structure. <b>2018</b> , 3, 5453-5458	24
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