

CITATION REPORT

List of articles citing

Polysulfide Shuttle Study in the Li/S Battery System

DOI: 10.1149/1.1806394

Journal of the Electrochemical Society, 2004, 151, A1969.

Source: <https://exaly.com/paper-pdf/37309023/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1677	Self-discharge characteristics of lithium/sulfur batteries using TEGDME liquid electrolyte. 2006 , 52, 1563-1566		105
1676	A Mathematical Model for a Lithium-Sulfur Cell. <i>Journal of the Electrochemical Society</i> , 2008 , 155, A576	3.9	275
1675	New insight into the discharge process of sulfur cathode by electrochemical impedance spectroscopy. 2009 , 189, 127-132		316
1674	Synthesis and Electrochemical Performance of Sulfur/Highly Porous Carbon Composites. 2009 , 113, 4712-4716		233
1673	Vibrations of the S-S bond in elemental sulfur and organic polysulfides: a structural guide. 2009 , 30, 518-554		60
1672	SECONDARY BATTERIES - LITHIUM RECHARGEABLE SYSTEMS Lithium-Sulfur. 2009 , 155-161		5
1671	Hierarchically Structured Sulfur/Carbon Nanocomposite Material for High-Energy Lithium Battery. 2009 , 21, 4724-4730		766
1670	On the Surface Chemical Aspects of Very High Energy Density, Rechargeable Li-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2009 , 156, A694	3.9	1073
1669	Positive Electrode Materials for Li-Ion and Li-Batteries. 2010 , 22, 691-714		1407
1668	Preparation and performance of a core-shell carbon/sulfur material for lithium/sulfur battery. 2010 , 55, 7010-7015		101
1667	Beyond intercalation-based Li-ion batteries: the state of the art and challenges of electrode materials reacting through conversion reactions. 2010 , 22, E170-92		1859
1666	The preparation of nano-sulfur/MWCNTs and its electrochemical performance. 2010 , 55, 8062-8066		135
1665	Advances in Li-S batteries. 2010 , 20, 9821		1574
1664	Enhancement of long stability of sulfur cathode by encapsulating sulfur into micropores of carbon spheres. 2010 , 3, 1531		1077
1663	Multi-electron reaction materials for high energy density batteries. 2010 , 3, 174-189		512
1662	New nanostructured Li ₂ S/silicon rechargeable battery with high specific energy. 2010 , 10, 1486-91		547
1661	Morphological and Structural Studies of Composite Sulfur Electrodes upon Cycling by HRTEM, AFM and Raman Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2010 , 157, A1131	3.9	161

1660	Structure-Related Electrochemistry of Sulfur-Poly(acrylonitrile) Composite Cathode Materials for Rechargeable Lithium Batteries. 2011 , 23, 5024-5028	283
1659	Improvement of Rate and Cycle Performance by Rapid Polyaniline Coating of a MWCNT/Sulfur Cathode. 2011 , 115, 24411-24417	162
1658	First-Principles Study of Lithium Borocarbide as a Cathode Material for Rechargeable Li ion Batteries. 2011 , 2, 1129-32	30
1657	High rate Li-S cathodes: sulfur imbibed bimodal porous carbons. 2011 , 4, 2878	422
1656	Rechargeable lithium/iodine battery with superior high-rate capability by using iodine-carbon composite as cathode. 2011 , 4, 3947	101
1655	Battery technologies for large-scale stationary energy storage. 2011 , 2, 503-27	296
1654	Effect of Lithium Polysulfides on the Morphology of Block Copolymer Electrolytes. 2011 , 44, 9267-9275	20
1653	Lithium-Sulfur Batteries. 2011 , 811-840	
1652	Graphene-wrapped sulfur particles as a rechargeable lithium-sulfur battery cathode material with high capacity and cycling stability. 2011 , 11, 2644-7	1804
1651	Improving the performance of lithium-sulfur batteries by conductive polymer coating. 2011 , 5, 9187-93	756
1650	Structure and compatibility of a magnesium electrolyte with a sulphur cathode. 2011 , 2, 427	456
1649	Sulfur-impregnated disordered carbon nanotubes cathode for lithium-sulfur batteries. 2011 , 11, 4288-94	1097
1648	Sulfur/Polythiophene with a Core/Shell Structure: Synthesis and Electrochemical Properties of the Cathode for Rechargeable Lithium Batteries. 2011 , 115, 6057-6063	453
1647	Improved cycling performances of lithium sulfur batteries with LiNO ₃ -modified electrolyte. 2011 , 196, 9839-9843	407
1646	Preparation and electrochemical properties of polysulfide polypyrrole. 2011 , 196, 10263-10266	26
1645	Ordered mesoporous carbon/sulfur nanocomposite of high performances as cathode for lithium-sulfur battery. 2011 , 56, 9549-9555	303
1644	Challenges in the development of advanced Li-ion batteries: a review. 2011 , 4, 3243	4665
1643	Hollow carbon nanofiber-encapsulated sulfur cathodes for high specific capacity rechargeable lithium batteries. 2011 , 11, 4462-7	1096

1642	A nano-structured and highly ordered polypyrrole-sulfur cathode for lithium-sulfur batteries. 2011 , 196, 6951-6955		213
1641	Sulfur-impregnated activated carbon fiber cloth as a binder-free cathode for rechargeable Li-S batteries. 2011 , 23, 5641-4		783
1640	Porous Hollow Carbon@Sulfur Composites for High-Power Lithium-Sulfur Batteries. 2011 , 123, 6026-6030		445
1639	Porous hollow carbon@sulfur composites for high-power lithium-sulfur batteries. 2011 , 50, 5904-8		1461
1638	CNT enhanced sulfur composite cathode material for high rate lithium battery. 2011 , 13, 399-402		152
1637	Insights into Li-S Battery Cathode Capacity Fading Mechanisms: Irreversible Oxidation of Active Mass during Cycling. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1816-A1821	3.9	186
1636	The Enhanced Electrochemical Performance of Lithium/Sulfur Battery with Protected Lithium Anode. 2012 , 476-478, 676-680		2
1635	Orthorhombic Bipyramidal Sulfur Coated with Polypyrrole Nanolayers As a Cathode Material for Lithium-Sulfur Batteries. 2012 , 116, 8910-8915		243
1634	Sulfur-carbon nanocomposite cathodes improved by an amphiphilic block copolymer for high-rate lithium-sulfur batteries. 2012 , 4, 6046-52		90
1633	Enhanced Cyclability of Lithium-Sulfur Batteries by a Polymer Acid-Doped Polypyrrole Mixed Ionic-Electronic Conductor. 2012 , 24, 3081-3087		157
1632	Self-weaving sulfur-carbon composite cathodes for high rate lithium-sulfur batteries. 2012 , 14, 14495-9		146
1631	Carbon/carbon nanocomposites fabricated by base catalyzed twin polymerization of a Si-spiro compound on graphite sheets. 2012 , 48, 9867-9		18
1630	High capacity vertical aligned carbon nanotube/sulfur composite cathodes for lithium-sulfur batteries. 2012 , 48, 4097-9		257
1629	One-step synthesis of a sulfur-impregnated graphene cathode for lithium-sulfur batteries. 2012 , 14, 6796-804		164
1628	A hierarchical architecture S/MWCNT nanomicrosphere with large pores for lithium sulfur batteries. 2012 , 14, 5376-82		129
1627	Analysis of the synthesis process of sulphur-poly(acrylonitrile)-based cathode materials for lithium batteries. 2012 , 22, 22077		74
1626	A new approach to improve cycle performance of rechargeable lithium-sulfur batteries by inserting a free-standing MWCNT interlayer. 2012 , 48, 8817-9		601
1625	The Research of Electrolyte on Lithium/Sulfur Battery. 2012 , 476-478, 1763-1766		1

1624	Effect of Discharge Cutoff Voltage on Reversibility of Lithium/Sulfur Batteries with LiNO ₃ -Contained Electrolyte. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A920-A923	3.9	250
1623	A composite material of uniformly dispersed sulfur on reduced graphene oxide: Aqueous one-pot synthesis, characterization and excellent performance as the cathode in rechargeable lithium-sulfur batteries. 2012 , 5, 726-738		109
1622	Li Ion Cells Comprising Lithiated Columnar Silicon Film Anodes, TiS ₂ Cathodes and Fluoroethylene Carbonate (FEC) as a Critically Important Component. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1440-A1445	3.9	83
1621	Application of lithiated Nafion ionomer film as functional separator for lithium sulfur cells. 2012 , 218, 163-167		203
1620	Lithiumbatterien und elektrische Doppelschichtkondensatoren: aktuelle Herausforderungen. 2012 , 124, 10134-10166		176
1619	Confining Sulfur in Double-Shelled Hollow Carbon Spheres for Lithium-Sulfur Batteries. 2012 , 124, 9730-9733		261
1618	Challenges facing lithium batteries and electrical double-layer capacitors. 2012 , 51, 9994-10024		2149
1617	Confining sulfur in double-shelled hollow carbon spheres for lithium-sulfur batteries. 2012 , 51, 9592-5		625
1616	Lithium/sulfur cell discharge mechanism: an original approach for intermediate species identification. 2012 , 84, 3973-80		726
1615	Li-O ₂ and Li-S batteries with high energy storage. 2011 , 11, 19-29		6999
1614	Properties of surface film on lithium anode with LiNO ₃ as lithium salt in electrolyte solution for lithium-sulfur batteries. 2012 , 83, 78-86		263
1613	Polymer electrolytes for lithium/sulfur batteries. 2012 , 2, 553-64		77
1612	Core-shell structured sulfur-polypyrrole composite cathodes for lithium-sulfur batteries. 2012 , 2, 5927		193
1611	Lithium-sulphur batteries with a microporous carbon paper as a bifunctional interlayer. 2012 , 3, 1166		1129
1610	Oxidation process of polysulfides in charge process for lithium-sulfur batteries. 2012 , 18, 867-872		25
1609	Sulfur-Polypyrrole Composite Cathodes for Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A1420-A1424	3.9	110
1608	In Operando X-ray diffraction and transmission X-ray microscopy of lithium sulfur batteries. 2012 , 134, 6337-43		428
1607	A Polyaniline-Coated Sulfur/Carbon Composite with an Enhanced High-Rate Capability as a Cathode Material for Lithium/Sulfur Batteries. 2012 , 2, 1238-1245		460

1606	The Current Move of Lithium Ion Batteries Towards the Next Phase. 2012 , 2, 860-872	512
1605	Mechanism of lithium storage in MoS ₂ and the feasibility of using Li ₂ S/Mo nanocomposites as cathode materials for lithium-sulfur batteries. 2012 , 7, 1013-7	148
1604	Poly(2,5-dimercapto-1,3,4-thiadiazole) as a cathode for rechargeable lithium batteries with dramatically improved performance. 2012 , 18, 8521-6	24
1603	Analysis of Polysulfide Dissolved in Electrolyte in Discharge-Charge Process of Li-S Battery. <i>Journal of the Electrochemical Society</i> , 2012 , 159, A421-A425	3.9 143
1602	Effect of LiBOB as additive on electrochemical properties of lithium-sulfur batteries. 2012 , 18, 249-254	64
1601	Investigation of S/C composite synthesized by solvent exchange method. 2012 , 70, 241-247	13
1600	A facile in situ sulfur deposition route to obtain carbon-wrapped sulfur composite cathodes for lithium-sulfur batteries. 2012 , 77, 272-278	156
1599	New insights into the limiting parameters of the Li/S rechargeable cell. 2012 , 199, 322-330	322
1598	A new direction for the performance improvement of rechargeable lithium/sulfur batteries. 2012 , 200, 77-82	256
1597	A battery with variable electrostatic capacity controlled by redox reaction. 2012 , 203, 184-189	6
1596	Influence of different electrode compositions and binder materials on the performance of lithium-sulfur batteries. 2012 , 205, 420-425	97
1595	A composite of sulfur and polypyrrole-multi walled carbon combinatorial nanotube as cathode for Li/S battery. 2012 , 206, 409-413	128
1594	Thermal runaway caused fire and explosion of lithium ion battery. 2012 , 208, 210-224	1452
1593	Novel positive electrode architecture for rechargeable lithium/sulfur batteries. 2012 , 211, 19-26	105
1592	Lithium-sulfur batteries - binder free carbon nanotubes electrode examined with various electrolytes. 2012 , 213, 239-248	100
1591	A soft approach to encapsulate sulfur: polyaniline nanotubes for lithium-sulfur batteries with long cycle life. 2012 , 24, 1176-81	881
1590	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. 2013 , 23, 929-946	516
1589	Phosphorous Pentasulfide as a Novel Additive for High-Performance Lithium-Sulfur Batteries. 2013 , 23, 1064-1069	363

1588	Ultrafine sulfur nanoparticles in conducting polymer shell as cathode materials for high performance lithium/sulfur batteries. 2013 , 3, 1910		178
1587	Porous nitrogen-doped carbon nanotubes derived from tubular polypyrrole for energy-storage applications. 2013 , 19, 12306-12		149
1586	Phosphazene groups modified sulfur composites as active cathode materials for rechargeable lithium/sulfur batteries. 2013 , 19, 1477-1482		1
1585	Conversion reactions for sodium-ion batteries. 2013 , 15, 15876-87		271
1584	One-dimensional carbon-sulfur composite fibers for Na-S rechargeable batteries operating at room temperature. 2013 , 13, 4532-8		334
1583	Amylopectin wrapped graphene oxide/sulfur for improved cyclability of lithium-sulfur battery. 2013 , 7, 8801-8		167
1582	Electrochemical performance of lithium/sulfur batteries using perfluorinated ionomer electrolyte with lithium sulfonyl dicyanomethide functional groups as functional separator. 2013 , 3, 8889		50
1581	Synthesis of sulfur/activated carbon aerogels composite with a novel homogeneous precipitation method as cathode materials for lithium-sulfur batteries. 2013 , 3, 16318		17
1580	A Review on Li-S Batteries as a High Efficiency Rechargeable Lithium Battery. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1256-A1263	3.9	216
1579	Highly Reversible Lithium/Dissolved Polysulfide Batteries with Carbon Nanotube Electrodes. 2013 , 125, 7068-7073		78
1578	Preparation and electrochemical performance of sulfur-alumina cathode material for lithium-sulfur batteries. 2013 , 48, 2079-2083		61
1577	Metallic anodes for next generation secondary batteries. 2013 , 42, 9011-34		728
1576	High capacity micro-mesoporous carbon-sulfur nanocomposite cathodes with enhanced cycling stability prepared by a solvent-free procedure. 2013 , 1, 9225		119
1575	Improved lithium-sulfur cells with a treated carbon paper interlayer. 2013 , 15, 2291-7		219
1574	Sulfur Speciation in Li-S Batteries Determined by Operando X-ray Absorption Spectroscopy. 2013 , 4, 3227-3232		382
1573	Understanding the role of different conductive polymers in improving the nanostructured sulfur cathode performance. 2013 , 13, 5534-40		543
1572	Degradation of NASICON-Type Materials in Contact with Lithium Metal: Formation of Mixed Conducting Interphases (MCI) on Solid Electrolytes. 2013 , 117, 21064-21074		308
1571	Mesoporous carbon-carbon nanotube-sulfur composite microspheres for high-areal-capacity lithium-sulfur battery cathodes. 2013 , 5, 11355-62		212

1570	A long-life, high-rate lithium/sulfur cell: a multifaceted approach to enhancing cell performance. 2013 , 13, 5891-9	373
1569	In situ-formed Li ₂ S in lithiated graphite electrodes for lithium-sulfur batteries. 2013 , 135, 18044-7	119
1568	On the role of polysulfides for a stable solid electrolyte interphase on the lithium anode cycled in lithium-sulfur batteries. 2013 , 236, 181-187	129
1567	Synthesis and electrochemical performance of TiO ₂ -sulfur composite cathode materials for lithium-sulfur batteries. 2013 , 17, 2959-2965	41
1566	Enhanced electrochemical performance of sulfur/carbon nanocomposite material prepared via chemical deposition with a vacuum soaking step. 2013 , 105, 23-30	24
1565	Importance of open pore structures with mechanical integrity in designing the cathode electrode for lithium-sulfur batteries. 2013 , 241, 554-559	35
1564	Mesoporous MnO ₂ /sulfur composite as cathode material for Li-S batteries. 2013 , 106, 307-311	47
1563	Lithium-sulfur batteries with superior cycle stability by employing porous current collectors. 2013 , 107, 569-576	118
1562	Improved performance of lithium-sulfur battery with fluorinated electrolyte. 2013 , 37, 96-99	112
1561	Enhanced cyclability of sulfur cathodes in lithium-sulfur batteries with Na-alginate as a binder. 2013 , 22, 790-794	67
1560	How a gel polymer electrolyte affects performance of lithium/sulfur batteries. 2013 , 114, 296-302	74
1559	Thermodynamics and cell chemistry of room temperature sodium/sulfur cells with liquid and liquid/solid electrolyte. 2013 , 243, 758-765	142
1558	Lithium-sulfur batteries: electrochemistry, materials, and prospects. 2013 , 52, 13186-200	1989
1557	Improvement on electrochemical performance by electrodeposition of polyaniline nanowires at the top end of sulfur electrode. 2013 , 285, 900-906	23
1556	Graphene-based three-dimensional hierarchical sandwich-type architecture for high-performance Li/S batteries. 2013 , 13, 4642-9	358
1555	Ionic Liquid Electrolytes for Lithium-Sulfur Batteries. 2013 , 117, 20531-20541	223
1554	Recent progress and remaining challenges in sulfur-based lithium secondary batteries--a review. 2013 , 49, 10545-62	430
1553	Porous carbon spheres as a functional conducting framework for use in lithium-sulfur batteries. 2013 , 3, 11774	44

1552	Anionic Effects on Solvate Ionic Liquid Electrolytes in Rechargeable Lithium-Sulfur Batteries. 2013 , 117, 20509-20516	145
1551	Synthesis of spherical porous carbon by spray pyrolysis and its application in Li-S batteries. 2013 , 17, 3169-3175	10
1550	High-performance hollow sulfur nanostructured battery cathode through a scalable, room temperature, one-step, bottom-up approach. 2013 , 110, 7148-53	340
1549	Sulfur@hollow polypyrrole sphere nanocomposites for rechargeable Li-S batteries. 2013 , 3, 24914	62
1548	Fabrication and Characterization of an Effective Polymer Nanocomposite Electrolyte Membrane for High Performance Lithium/Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1052-A1060	36
1547	Highly reversible Li/dissolved polysulfide batteries with binder-free carbon nanofiber electrodes. 2013 , 1, 10362	122
1546	Nano-cellular carbon current collectors with stable cyclability for Li-S batteries. 2013 , 1, 9590	65
1545	Development and costs calculation of lithium-Sulfur cells with high sulfur load and binder free electrodes. 2013 , 224, 260-268	134
1544	In-situ X-ray diffraction studies of lithium-Sulfur batteries. 2013 , 226, 313-319	174
1543	Sulphur-TiO ₂ yolk-shell nanoarchitecture with internal void space for long-cycle lithium-sulphur batteries. 2013 , 4, 1331	1698
1542	Dual core-shell structured sulfur cathode composite synthesized by a one-pot route for lithium sulfur batteries. 2013 , 1, 1716-1723	183
1541	Carbonyl-β-Cyclodextrin as a Novel Binder for Sulfur Composite Cathodes in Rechargeable Lithium Batteries. 2013 , 23, 1194-1201	220
1540	Amorphous TiS ₄ positive electrode for lithium-Sulfur secondary batteries. 2013 , 31, 71-75	51
1539	Sulfur in hierarchically pore-structured carbon pillars as cathode material for lithium-Sulfur batteries. 2013 , 97, 238-243	56
1538	Shuttle phenomenon and the irreversible oxidation mechanism of sulfur active material in Li-S battery. 2013 , 235, 181-186	224
1537	The electrochemical properties of high-capacity sulfur/reduced graphene oxide with different electrolyte systems. 2013 , 244, 240-245	29
1536	Structural changes of a Li/S rechargeable cell in Lithium Metal Polymer technology. 2013 , 241, 249-254	22
1535	Aligned sulfur-coated carbon nanotubes with a polyethylene glycol barrier at one end for use as a high efficiency sulfur cathode. 2013 , 58, 99-106	131

1534	Revisiting TEGDME/DIOX Binary Electrolytes for Lithium/Sulfur Batteries: Importance of Solvation Ability and Additives. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A430-A436	3.9	70
1533	Capacity fading mechanism in lithium sulfur cells using poly(ethylene glycol)-borate ester as plasticizer for polymer electrolytes. 2013 , 242, 478-485		44
1532	A sulfur-carbon composite for lithium/sulfur battery based on activated vapor-grown carbon fiber. 2013 , 238, 44-49		46
1531	Graphene-coated mesoporous carbon/sulfur cathode with enhanced cycling stability. 2013 , 113, 256-262		72
1530	Amphiphilic surface modification of hollow carbon nanofibers for improved cycle life of lithium sulfur batteries. 2013 , 13, 1265-70		615
1529	A new class of Solvent-in-Salt electrolyte for high-energy rechargeable metallic lithium batteries. 2013 , 4, 1481		1631
1528	Sulfur embedded in metal organic framework-derived hierarchically porous carbon nanoplates for high performance lithium-sulfur battery. 2013 , 1, 4490		245
1527	Investigations of lithium-sulfur batteries using electrochemical impedance spectroscopy. 2013 , 97, 42-51		277
1526	A membrane-free lithium/polysulfide semi-liquid battery for large-scale energy storage. 2013 , 6, 1552		331
1525	Role of Polysulfides in Self-Healing Lithium-Sulfur Batteries. 2013 , 3, 833-838		158
1524	Lithium/sulfur batteries with high specific energy: old challenges and new opportunities. 2013 , 5, 2186-204		429
1523	Exceptional electrochemical performance of rechargeable Li-S batteries with a polysulfide-containing electrolyte. 2013 , 3, 3540		85
1522	Hydroxylated Graphene-Sulfur Nanocomposites for High-Rate Lithium-Sulfur Batteries. 2013 , 3, 1008-1012		357
1521	Nanostructured sulfur cathodes. 2013 , 42, 3018-32		1563
1520	Carbon with hierarchical pores from carbonized metal-organic frameworks for lithium sulphur batteries. 2013 , 49, 2192-4		321
1519	In situ synthesis of lithium sulfide-carbon composites as cathode materials for rechargeable lithium batteries. 2013 , 1, 1433-1440		120
1518	Decoration of sulfur with porous metal nanostructures: an alternative strategy for improving the cyclability of sulfur cathode materials for advanced lithium-sulfur batteries. 2013 , 49, 4513-5		55
1517	Chemically tailoring the nanostructure of graphene nanosheets to confine sulfur for high-performance lithium-sulfur batteries. 2013 , 1, 1096-1101		170

1516	Highly dispersed sulfur in a porous aromatic framework as a cathode for lithium-sulfur batteries. 2013 , 49, 4905-7	99
1515	Highly reversible lithium/dissolved polysulfide batteries with carbon nanotube electrodes. 2013 , 52, 6930-5	267
1514	Infiltrating sulfur in hierarchical architecture MWCNT@meso C core-shell nanocomposites for lithium-sulfur batteries. 2013 , 15, 9051-7	63
1513	Crab shells as sustainable templates from nature for nanostructured battery electrodes. 2013 , 13, 3385-90	185
1512	Challenges and prospects of lithium-sulfur batteries. 2013 , 46, 1125-34	1652
1511	Lithium superionic sulfide cathode for all-solid lithium-sulfur batteries. 2013 , 7, 2829-33	284
1510	High sulfur loading cathodes fabricated using peapodlike, large pore volume mesoporous carbon for lithium-sulfur battery. 2013 , 5, 2208-13	200
1509	Molecular structures of polymer/sulfur composites for lithium-sulfur batteries with long cycle life. 2013 , 1, 9517	52
1508	Lithium polysulfidophosphates: a family of lithium-conducting sulfur-rich compounds for lithium-sulfur batteries. 2013 , 52, 7460-3	233
1507	Electrochemical properties of ether-based electrolytes for lithium/sulfur rechargeable batteries. 2013 , 89, 737-743	112
1506	Solvent Effect of Room Temperature Ionic Liquids on Electrochemical Reactions in Lithium-Sulfur Batteries. 2013 , 117, 4431-4440	161
1505	Ionic liquid-enhanced solid state electrolyte interface (SEI) for lithium-sulfur batteries. 2013 , 1, 8464	207
1504	(De)lithiation mechanism of Li/SeS(x) (x = 0-7) batteries determined by in situ synchrotron X-ray diffraction and X-ray absorption spectroscopy. 2013 , 135, 8047-56	268
1503	Electrochemical performance of lithium gel polymer battery with nanostructured sulfur/carbon composite cathode. 2013 , 234, 40-45	74
1502	Electrochemical Performance of All-Solid-State Li/S Batteries with Sulfur-Based Composite Electrodes Prepared by Mechanical Milling at High Temperature. 2013 , 1, 186-192	71
1501	Solvate Ionic Liquid Electrolyte for Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1304-A1310	39
1500	Theory of SEI Formation in Rechargeable Batteries: Capacity Fade, Accelerated Aging and Lifetime Prediction. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A243-A250	3.9 515
1499	A strategic approach to recharging lithium-sulphur batteries for long cycle life. 2013 , 4, 2985	330

1498	Sulphur-carbon composites for Li/S batteries. 2013 , 28, 270-275	6
1497	A High Capacity Calcium Primary Cell Based on the Ca-System. 2013 , 3, 1056-1061	81
1496	Encapsulated monoclinic sulfur for stable cycling of li-s rechargeable batteries. 2013 , 25, 6547-53	295
1495	Revisit Carbon/Sulfur Composite for Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1624-A1628	3.9 89
1494	Study on Al ₂ O ₃ Coated Carbon Sulfur Composite Materials for Lithium-Ion Battery. 2013 , 860-863, 952-955	
1493	Lithium Polysulfidophosphates: A Family of Lithium-Conducting Sulfur-Rich Compounds for Lithium-Sulfur Batteries. 2013 , 125, 7608-7611	64
1492	Lithium-Schwefel-Batterien: Elektrochemie, Materialien und Perspektiven. 2013 , 125, 13426-13441	163
1491	Binding mechanism and electrochemical properties of M13 phage-sulfur composite. 2013 , 8, e82332	15
1490	AFM as an analysis tool for high-capacity sulfur cathodes for Li-S batteries. 2013 , 4, 611-24	19
1489	Analysis of a Mathematical Model of Lithium-Sulfur Cells Part III: Electrochemical Reaction Kinetics, Transport Properties and Charging. 2014 , 137, 575-585	40
1488	High-performance lithium/sulfur cells with a bi-functionally immobilized sulfur cathode. 2014 , 9, 408-416	42
1487	Insight into sulfur reactions in Li-S batteries. 2014 , 6, 21938-45	107
1486	Carbonized eggshell membrane as a natural polysulfide reservoir for highly reversible Li-S batteries. 2014 , 26, 1360-5	310
1485	Nanocasting hierarchical carbide-derived carbons in nanostructured opal assemblies for high-performance cathodes in lithium-sulfur batteries. 2014 , 8, 12130-40	74
1484	A Microsized Cagelike Sulfur/Carbon Composite for a Lithium/Sulfur Battery with Excellent Performance. 2014 , 79, 919-924	16
1483	A facile synthesis approach to micro-mesoporous carbon from cotton and its application in the lithium-sulfur battery. 2014 , 4, 65074-65080	38
1482	Hierarchical vine-tree-like carbon nanotube architectures: In-situ CVD self-assembly and their use as robust scaffolds for lithium-sulfur batteries. 2014 , 26, 7051-8	97
1481	New Desolvated Gel Electrolyte for Rechargeable Lithium Metal Sulfurized Polyacrylonitrile (S-PAN) Battery. 2014 , 118, 28369-28376	26

1480	High-Performance Lithium-Sulfur Batteries Based on Ionic-Liquid Electrolytes with Bis(fluorosulfonyl)imide Anions and Sulfur-Encapsulated Highly Disordered Activated Carbon. 2014 , 1, 1492-1496	21
1479	Perfluorinated ionomer-enveloped sulfur cathodes for lithium-sulfur batteries. 2014 , 7, 3341-6	24
1478	Tethered Molecular Sorbents: Enabling Metal-Sulfur Battery Cathodes. 2014 , 4, 1400390	67
1477	Stabilizing lithium/sulfur batteries by a composite polymer electrolyte containing mesoporous silica particles. 2014 , 245, 656-662	85
1476	A comparison of sulfur loading method on the electrochemical performance of porous carbon/sulfur cathode material for lithium-sulfur battery. 2014 , 18, 935-940	14
1475	Sulfur/mesoporous carbon composites combined with MnS as cathode materials for lithium/sulfur batteries. 2014 , 20, 659-664	26
1474	A natural carbonized leaf as polysulfide diffusion inhibitor for high-performance lithium-sulfur battery cells. 2014 , 7, 1655-61	111
1473	Nitrogen-doped porous carbon nanofiber webs/sulfur composites as cathode materials for lithium-sulfur batteries. 2014 , 116, 210-216	57
1472	Characterization of the solid electrolyte interphase on lithium anode for preventing the shuttle mechanism in lithium-sulfur batteries. 2014 , 246, 840-845	297
1471	A review of electrolytes for lithium-sulfur batteries. 2014 , 255, 204-218	338
1470	Development of lithium-sulfur batteries using room temperature ionic liquid-based quasi-solid-state electrolytes. 2014 , 125, 386-394	40
1469	Low-cost, porous carbon current collector with high sulfur loading for lithium-sulfur batteries. 2014 , 38, 91-95	66
1468	Sulfur encapsulated ZIF-8 as cathode material for lithium-sulfur battery with improved cyclability. 2014 , 185, 92-96	68
1467	A sulfur-polyacrylonitrile/graphene composite cathode for lithium batteries with excellent cyclability. 2014 , 252, 107-112	59
1466	Low surface area graphene/cellulose composite as a host matrix for lithium sulphur batteries. 2014 , 254, 55-61	39
1465	Nafion coated sulfur-carbon electrode for high performance lithium-sulfur batteries. 2014 , 246, 253-259	85
1464	Biomass derived activated carbon with 3D connected architecture for rechargeable lithium-sulfur batteries. 2014 , 116, 146-151	230
1463	Analysis of the solid electrolyte interphase formed with an ionic liquid electrolyte for lithium-sulfur batteries. 2014 , 252, 150-155	93

1462	Sulfur-functionalized mesoporous carbons as sulfur hosts in Li-S batteries: increasing the affinity of polysulfide intermediates to enhance performance. 2014 , 6, 10908-16	88
1461	Activated carbon aerogels with high bimodal porosity for lithium/sulfur batteries. 2014 , 18, 545-551	19
1460	Nanomaterials for electrochemical energy storage. 2014 , 9, 323-350	77
1459	Inverse Vulcanization of Elemental Sulfur to Prepare Polymeric Electrode Materials for Li-S Batteries.. 2014 , 3, 229-232	217
1458	Studies on preventing Li dendrite formation in LiâS batteries by using pre-lithiated Si microwire anodes. 2014 , 248, 1058-1066	74
1457	Fabrication of High Conductive S/C Cathode by Sulfur Infiltration into Hierarchical Porous Carbon/Carbon Fiber Weave-Structured Materials via Vapor-Melting Method. 2014 , 127, 123-131	24
1456	Nano-Copper-Assisted Immobilization of Sulfur in High-Surface-Area Mesoporous Carbon Cathodes for Room Temperature Na-S Batteries. 2014 , 4, 1400226	105
1455	Effective Separation of Lithium Anode and Sulfur Cathode in LithiumâSulfur Batteries. 2014 , 1, 1040-1045	61
1454	Improving the performance of lithium-sulfur batteries using conductive polymer and micrometric sulfur powder. 2014 , 29, 1027-1033	31
1453	Sulfur-infiltrated graphene-based layered porous carbon cathodes for high-performance lithium-sulfur batteries. 2014 , 8, 5208-15	334
1452	Mechanistic modeling of polysulfide shuttle and capacity loss in lithiumâsulfur batteries. 2014 , 259, 300-310	163
1451	Sensitivity analysis of a mathematical model of lithiumâsulfur cells: Part II: Precipitation reaction kinetics and sulfur content. 2014 , 257, 402-411	43
1450	Sensitivity analysis of a mathematical model of lithiumâsulfur cells part I: Applied discharge current and cathode conductivity. 2014 , 257, 394-401	60
1449	Sulfur X-ray absorption fine structure in porous LiâS cathode films measured under argon atmospheric conditions. 2014 , 94-95, 22-26	5
1448	Improving lithium-sulphur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. 2014 , 5, 3943	341
1447	Polysulfide shuttle control: Towards a lithium-sulfur battery with superior capacity performance up to 1000 cycles by matching the sulfur/electrolyte loading. 2014 , 253, 263-268	113
1446	Reduced polysulfide shuttle in lithiumâsulfur batteries using Nafion-based separators. 2014 , 251, 417-422	237
1445	Composite positive electrode based on amorphous titanium polysulfide for application in all-solid-state lithium secondary batteries. 2014 , 262, 143-146	18

1444	Manipulating surface reactions in lithium-sulphur batteries using hybrid anode structures. 2014 , 5, 3015	267
1443	Aligned carbon nanotube/sulfur composite cathodes with high sulfur content for lithium-sulfur batteries. 2014 , 4, 65-72	328
1442	Li ₂ S-reduced graphene oxide nanocomposites as cathode material for lithium sulfur batteries. 2014 , 251, 331-337	96
1441	Nonaqueous Li-air batteries: a status report. 2014 , 114, 11721-50	761
1440	Paving the way for using Li-S batteries. 2014 , 7, 2457-60	24
1439	Effect of sulfur loading on energy density of lithium sulfur batteries. 2014 , 211, 1895-1899	33
1438	Ab initio structure search and in situ ⁷ Li NMR studies of discharge products in the Li-S battery system. 2014 , 136, 16368-77	112
1437	Copper-Stabilized Sulfur-Microporous Carbon Cathodes for Li-S Batteries. 2014 , 24, 4156-4163	183
1436	Simple cathode design for Li-S batteries: cell performance and mechanistic insights by in operando X-ray diffraction. 2014 , 16, 18765-71	53
1435	Encapsulation of selenium in porous hollow carbon spheres for advanced lithium-selenium batteries. 2014 , 4, 39312-39315	16
1434	Micro- and mesoporous carbide-derived carbon prepared by a sacrificial template method in high performance lithium sulfur battery cathodes. 2014 , 2, 17649-17654	51
1433	High performance lithium sulfur batteries with a cassava-derived carbon sheet as a polysulfides inhibitor. 2014 , 38, 4549-4554	73
1432	Improving the performance of PEDOT-PSS coated sulfur@activated porous graphene composite cathodes for lithium-sulfur batteries. 2014 , 2, 18345-18352	73
1431	High performance lithium-sulfur batteries: advances and challenges. 2014 , 2, 12662-12676	235
1430	Polysulfide flow batteries enabled by percolating nanoscale conductor networks. 2014 , 14, 2210-8	178
1429	Binary sulfone/ether-based electrolytes for rechargeable lithium-sulfur batteries. 2014 , 145, 170-176	26
1428	X-ray Absorption Spectra of Dissolved Polysulfides in Lithium-Sulfur Batteries from First-Principles. 2014 , 5, 1547-51	118
1427	A selenium-confined microporous carbon cathode for ultrastable lithium-selenium batteries. 2014 , 2, 17735-17739	97

1426	A lithium/polysulfide semi-solid rechargeable flow battery with high output performance. 2014 , 4, 47517-47520	11
1425	Enhanced cycle performance of lithium-sulfur batteries using a separator modified with a PVDF-C layer. 2014 , 6, 20276-81	115
1424	Understanding the degradation mechanism of rechargeable lithium/sulfur cells: a comprehensive study of the sulfur-graphene oxide cathode after discharge-charge cycling. 2014 , 16, 16931-40	95
1423	Electrostatic shield effect: an effective way to suppress dissolution of polysulfide anions in lithium-sulfur battery. 2014 , 2, 15938-15944	31
1422	Sulfur-infiltrated three-dimensional graphene-like material with hierarchical pores for highly stable lithium-sulfur batteries. 2014 , 2, 4528-4533	43
1421	Binder-free phenyl sulfonated graphene/sulfur electrodes with excellent cyclability for lithium sulfur batteries. 2014 , 2, 5117	63
1420	A hierarchical carbonized paper with controllable thickness as a modifiable interlayer system for high performance Li-S batteries. 2014 , 50, 4184-7	150
1419	Electrochemical reactions of lithium-sulfur batteries: an analytical study using the organic conversion technique. 2014 , 16, 9344-50	103
1418	Scalable synthesis of a sulfur nanosponge cathode for a lithium-sulfur battery with improved cyclability. 2014 , 2, 19788-19796	10
1417	Preparation and electrochemical performance of a graphene-wrapped carbon/sulphur composite cathode. 2014 , 29, 309-315	14
1416	Lithium-sulfur batteries—the solution is in the electrolyte, but is the electrolyte a solution?. 2014 , 7, 3902-3920	250
1415	Hierarchically porous carbon encapsulating sulfur as a superior cathode material for high performance lithium-sulfur batteries. 2014 , 6, 194-9	140
1414	Novel hierarchically porous carbon materials obtained from natural biopolymer as host matrixes for lithium-sulfur battery applications. 2014 , 6, 13174-82	118
1413	Nanowire electrodes for electrochemical energy storage devices. 2014 , 114, 11828-62	552
1412	Stable cycling of a scalable graphene-encapsulated nanocomposite for lithium-sulfur batteries. 2014 , 6, 10917-23	72
1411	Three-Dimensional Flower-Shaped Activated Porous Carbon/Sulfur Composites as Cathode Materials for Lithium-Sulfur Batteries. 2014 , 2, 2442-2447	31
1410	High-Performance Li-S Batteries with an Ultra-lightweight MWCNT-Coated Separator. 2014 , 5, 1978-83	292
1409	Bifunctional Separator with a Light-Weight Carbon-Coating for Dynamically and Statically Stable Lithium-Sulfur Batteries. 2014 , 24, 5299-5306	384

1408	High-rate, ultralong cycle-life lithium/sulfur batteries enabled by nitrogen-doped graphene. 2014 , 14, 4821-7		615
1407	Improved lithium-sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathode-separator interface. 2014 , 7, 3381-3390		425
1406	Polyaniline-modified cetyltrimethylammonium bromide-graphene oxide-sulfur nanocomposites with enhanced performance for lithium-sulfur batteries. 2014 , 7, 1355-1363		58
1405	TiO ₂ coated three-dimensional hierarchically ordered porous sulfur electrode for the lithium/sulfur rechargeable batteries. 2014 , 75, 597-602		46
1404	Sulfur cathodes with hydrogen reduced titanium dioxide inverse opal structure. 2014 , 8, 5249-56		273
1403	Additive effect of ionic liquids on the electrochemical property of a sulfur composite electrode for all-solid-state lithium-sulfur battery. 2014 , 269, 727-734		36
1402	Sulfur/lithium-insertion compound composite cathodes for Li-ion batteries. 2014 , 270, 101-105		50
1401	Multi-wall carbon nanotube@zeolite imidazolate framework composite from a nanoscale zinc oxide precursor. 2014 , 198, 139-143		39
1400	Hierarchical porous carbon by ultrasonic spray pyrolysis yields stable cycling in lithium-sulfur battery. 2014 , 14, 4418-25		214
1399	Chelate Effects in Glyme/Lithium Bis(trifluoromethanesulfonyl)amide Solvate Ionic Liquids, Part 2: Importance of Solvate-Structure Stability for Electrolytes of Lithium Batteries. 2014 , 118, 17362-17373		125
1398	Prussian blue-derived Fe ₂ O ₃ /sulfur composite cathode for lithium-sulfur batteries. 2014 , 137, 52-55		57
1397	Vine-like MoS ₂ anode materials self-assembled from 1-D nanofibers for high capacity sodium rechargeable batteries. 2014 , 6, 10975-81		136
1396	Binder free three-dimensional sulphur/few-layer graphene foam cathode with enhanced high-rate capability for rechargeable lithium sulphur batteries. 2014 , 6, 5746-53		151
1395	Carbon-Based Anodes for Lithium Sulfur Full Cells with High Cycle Stability. 2014 , 24, 1284-1289		148
1394	Understanding of Electrochemical Oxidation Route of Electrically Isolated Li ₂ S Particles. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A2133-A2137	3.9	22
1393	Sulfur/Co ₃ O ₄ nanotube composite with high performances as cathode materials for lithium sulfur batteries. 2014 , 07, 1450020		38
1392	Effect of polypyrrole coating on Li powder anode for lithium-sulfur secondary batteries. 2014 , 15, 1453-1457		9
1391	A lithium anode protection guided highly-stable lithium-sulfur battery. 2014 , 50, 14209-12		316

- 1390 TEMPO: a mobile catalyst for rechargeable Li-O₂ batteries. **2014**, 136, 15054-64 390
- 1389 Mechanism of Enhanced Carbon Cathode Performance by Nitrogen Doping in Lithium-Sulfur Battery: An X-ray Absorption Spectroscopic Study. **2014**, 118, 7765-7771 93
- 1388 A shuttle effect free lithium sulfur battery based on a hybrid electrolyte. **2014**, 16, 21225-9 153
- 1387 An aqueous dissolved polysulfide cathode for lithium-sulfur batteries. **2014**, 7, 3307-3312 113
- 1386 Ionic liquid enabled FeS₂ for high-energy-density lithium-ion batteries. **2014**, 26, 7386-92 106
- 1385 A lithium-sulfur cathode with high sulfur loading and high capacity per area: a binder-free carbon fiber cloth-sulfur material. **2014**, 50, 13231-4 180
- 1384 Enhanced electrochemical performance of sulfur cathode by incorporation of a thin conductive adhesion layer between the current collector and the active material layer. **2014**, 44, 607-611 5
- 1383 Porous spherical carbon/sulfur nanocomposites by aerosol-assisted synthesis: the effect of pore structure and morphology on their electrochemical performance as lithium/sulfur battery cathodes. **2014**, 6, 7596-606 78
- 1382 Solution ionic strength engineering as a generic strategy to coat graphene oxide (GO) on various functional particles and its application in high-performance lithium-sulfur (Li-S) batteries. **2014**, 14, 473-9 164
- 1381 One-step synthesis of a sulfur-graphene composite with enhanced photocatalytic performance. **2014**, 314, 266-272 13
- 1380 Probing the Lithium-Sulfur Redox Reactions: A Rotating-Ring Disk Electrode Study. **2014**, 118, 5733-5741 178
- 1379 Improving the self-discharge behavior of sulfur-polypyrrole cathode material by LiNO₃ electrolyte additive. **2014**, 20, 1291-1300 29
- 1378 Preparation and properties of polyvinylene polysulfides based on trichloroethene and sodium polysulfides. **2014**, 84, 892-900 1
- 1377 A novel lithium/sulfur battery based on sulfur/graphene nanosheet composite cathode and gel polymer electrolyte. **2014**, 9, 137 37
- 1376 From filter paper to carbon paper and toward Li-S battery interlayer. **2014**, 121, 198-201 48
- 1375 Systematical electrochemical study on the parasitic shuttle-effect in lithium-sulfur-cells at different temperatures and different rates. **2014**, 259, 289-299 174
- 1374 Molecular structure and stability of dissolved lithium polysulfide species. **2014**, 16, 10923-32 177
- 1373 Strong sulfur binding with conducting Magnéli-phase Ti(n)O₂(n-1) nanomaterials for improving lithium-sulfur batteries. **2014**, 14, 5288-94 579

1372	A scalable graphene sulfur composite synthesis for rechargeable lithium batteries with good capacity and excellent columbic efficiency. 2014 , 6, 4154-9		69
1371	Formation of Large Polysulfide Complexes during the Lithium-Sulfur Battery Discharge. 2014 , 2,		89
1370	Pitfalls in the characterization of sulfur/carbon nanocomposite materials for lithium-sulfur batteries. 2014 , 79, 245-255		33
1369	Rechargeable lithium-sulfur batteries. 2014 , 114, 11751-87		3074
1368	An effective approach to protect lithium anode and improve cycle performance for Li-S batteries. 2014 , 6, 15542-9		143
1367	Lithium-sulfur batteries: Influence of C-rate, amount of electrolyte and sulfur loading on cycle performance. 2014 , 268, 82-87		122
1366	Functional, water-soluble binders for improved capacity and stability of lithium-sulfur batteries. 2014 , 264, 8-14		98
1365	Toward a Molecular Understanding of Energetics in Li-S Batteries Using Nonaqueous Electrolytes: A High-Level Quantum Chemical Study. 2014 , 118, 11545-11558		120
1364	Sulfur infiltrated activated carbon cathodes for lithium sulfur cells: The combined effects of pore size distribution and electrolyte molarity. 2014 , 248, 752-761		69
1363	Characteristics of Li ₂ S ₈ -tetraglyme catholyte in a semi-liquid lithium-sulfur battery. 2014 , 265, 14-19		63
1362	On the Electrode Potentials in Lithium-Sulfur Batteries and Their Solvent-Dependence. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A1399-A1406	3.9	26
1361	Recent advances in lithium-sulfur batteries. 2014 , 267, 770-783		329
1360	Fingerprinting Lithium-Sulfur Battery Reaction Products by X-ray Absorption Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A1100-A1106	3.9	65
1359	Li-S Cathodes with Extended Cycle Life by Sulfur Encapsulation in Disordered Micro-Porous Carbon Powders. <i>Journal of the Electrochemical Society</i> , 2014 , 161, A657-A662	3.9	13
1358	Free-standing porous carbon nanofibers-sulfur composite for flexible Li-S battery cathode. 2014 , 6, 9579-87		137
1357	Bis(2,2,2-trifluoroethyl) ether as an electrolyte co-solvent for mitigating self-discharge in lithium-sulfur batteries. 2014 , 6, 8006-10		146
1356	V ₂ O ₅ Polysulfide Anion Barrier for Long-Lived Li-S Batteries. 2014 , 26, 3403-3410		176
1355	Experimental and Theoretical Analysis of Products and Reaction Intermediates of Lithium-Sulfur Batteries. 2014 , 118, 12106-12114		86

1354	Confine Sulfur in Polyaniline-Decorated Hollow Carbon Nanofiber Hybrid Nanostructure for Lithium-Sulfur Batteries. 2014 , 118, 13369-13376	33
1353	Core-shell meso/microporous carbon host for sulfur loading toward applications in lithium-sulfur batteries. 2014 , 23, 308-314	49
1352	Preparation of mesohollow and microporous carbon nanofiber and its application in cathode material for lithium-sulfur batteries. 2014 , 608, 220-228	107
1351	Shuttle suppression in room temperature sodium-sulfur batteries using ion selective polymer membranes. 2014 , 50, 3208-10	119
1350	A novel sulfur/carbon composite for low cost lithium-sulfur batteries with high cycling stability. 2014 , 4, 28871-28874	12
1349	Synthesis of hierarchical porous honeycomb carbon for lithium-sulfur battery cathode with high rate capability and long cycling stability. 2014 , 137, 439-446	45
1348	A lithium-ion sulfur battery based on a carbon-coated lithium-sulfide cathode and an electrodeposited silicon-based anode. 2014 , 6, 10924-8	108
1347	Thermal characterization of Li/sulfur cells using isothermal micro-calorimetry. 2014 , 44, 42-44	10
1346	The enhanced performance of Li-S battery with P14YRTFSI-modified electrolyte. 2014 , 262, 174-178	34
1345	Quantification of individual polysulfides in lab-scale and full-scale desulfurisation bioreactors. 2014 , 11, 702	18
1344	Theoretical Modeling of Internal Ionic Resistance Due to SEI Layer Formation in Li/S Batteries. 2015 , 1774, 63-68	
1343	Lithium-Ion Batteries: Thermomechanics, Performance, and Design Optimization. 2015 , 1-16	1
1342	Lithium-tin Alloy/Sulfur Battery with a Solvate Ionic Liquid Electrolyte. 2015 , 83, 914-917	12
1341	Towards Stable Lithium-Sulfur Batteries with a Low Self-Discharge Rate: Ion Diffusion Modulation and Anode Protection. 2015 , 8, 2892-901	59
1340	Functional Mesoporous Carbon-Coated Separator for Long-Life, High-Energy Lithium-Sulfur Batteries. 2015 , 25, 5285-5291	311
1339	Enabling prominent high-rate and cycle performances in one lithium-sulfur battery: designing permselective gateways for Li(+) transportation in Holey-CNT/S cathodes. 2015 , 27, 3774-81	84
1338	Design Considerations for Unconventional Electrochemical Energy Storage Architectures. 2015 , 5, 1402115	224
1337	Progress in Mechanistic Understanding and Characterization Techniques of Li-S Batteries. 2015 , 5, 1500408	321

1336	Hollow Carbon Nanofibers Filled with MnO ₂ Nanosheets as Efficient Sulfur Hosts for Lithium-Sulfur Batteries. 2015 , 54, 12886-90	691
1335	Effects of cell construction parameters on the performance of lithium/sulfur cells. 2015 , 61, 2749-2756	6
1334	An Aligned and Laminated Nanostructured Carbon Hybrid Cathode for High-Performance Lithium-Sulfur Batteries. 2015 , 127, 10685-10690	32
1333	Biomass-Derived Heteroatom-Doped Carbon Aerogels from a Salt Melt Sol-Gel Synthesis and their Performance in Li-S Batteries. 2015 , 8, 3077-83	59
1332	Electrochemical Property of the Composites Composed of Copper Chevrel Phase and Sulfur as Positive Electrode Materials for All-Solid-State Lithium-Sulfur Battery. 2015 , 62, 81-92	
1331	Electrochemically Stable Rechargeable Lithium-Sulfur Batteries with a Microporous Carbon Nanofiber Filter for Polysulfide. 2015 , 5, 1500738	226
1330	Hollow Carbon Nanofibers Filled with MnO ₂ Nanosheets as Efficient Sulfur Hosts for Lithium-Sulfur Batteries. 2015 , 127, 13078-13082	93
1329	Graphene/sulfur hybrid nanosheets from a space-confined "sauna" reaction for high-performance lithium-sulfur batteries. 2015 , 27, 5936-42	106
1328	An Advanced Lithium-Ion Sulfur Battery for High Energy Storage. 2015 , 5, 1500481	84
1327	Synthesis, Spectroscopic Characterization, Crystal Structures, Energetics, and Thermal Stabilities of Li[AlX ₄] (X = Cl, Br): Investigation and Performance of Their Electrolyte Solutions. 2015 , 2015, 3128-3138	3
1326	Sulfur Immobilized in Hierarchically Porous Structured Carbon as Cathodes for Lithium-Sulfur Battery with Improved Electrochemical Performance. 2015 , 32, 756-763	16
1325	Mechanistic Insight into the Stability of HfO ₂ -Coated MoS ₂ Nanosheet Anodes for Sodium Ion Batteries. 2015 , 11, 4341-50	67
1324	A low cost, high energy density, and long cycle life potassium-sulfur battery for grid-scale energy storage. 2015 , 27, 5915-22	127
1323	Stabilization of Insoluble Discharge Products by Facile Aniline Modification for High Performance Li-S Batteries. 2015 , 5, 1500268	43
1322	An Aligned and Laminated Nanostructured Carbon Hybrid Cathode for High-Performance Lithium-Sulfur Batteries. 2015 , 54, 10539-44	83
1321	Graphene/Sulfur/Carbon Nanocomposite for High Performance Lithium-Sulfur Batteries. 2015 , 5, 1481-1492	13
1320	Interfacial Reaction Dependent Performance of Hollow Carbon Nanosphere-Sulfur Composite as a Cathode for Li-S Battery. 2015 , 3,	3
1319	From lithium to sodium: cell chemistry of room temperature sodium-air and sodium-sulfur batteries. 2015 , 6, 1016-55	307

1318	Porous carbon nanofibers formed in situ by electrospinning with a volatile solvent additive into an ice water bath for lithium-sulfur batteries. 2015 , 5, 23749-23757	17
1317	High capacity and cyclability of hierarchical MoS ₂ /SnO ₂ nanocomposites as the cathode of lithium-sulfur battery. 2015 , 173, 476-482	62
1316	Comparative Study of Ether-Based Electrolytes for Application in Lithium-Sulfur Battery. 2015 , 7, 13859-65	76
1315	A new insight on capacity fading of lithium-sulfur batteries: The effect of Li ₂ S phase structure. 2015 , 293, 329-335	34
1314	Sepiolite-sulfur as a high-capacity, high-rate performance, and low-cost cathode material for lithium-sulfur batteries. 2015 , 293, 527-532	16
1313	Novel interlayer made from Fe ₃ C/carbon nanofiber webs for high performance lithium-sulfur batteries. 2015 , 285, 43-50	143
1312	Porous Carbon Mat as an Electrochemical Testing Platform for Investigating the Polysulfide Retention of Various Cathode Configurations in Li-S Cells. 2015 , 6, 2163-9	58
1311	Dispersible percolating carbon nano-electrodes for improvement of polysulfide utilization in Li-S batteries. 2015 , 93, 161-168	19
1310	Preparation and application of hollow ZnFe ₂ O ₄ @PANI hybrids as high performance anode materials for lithium-ion batteries. 2015 , 5, 107247-107253	27
1309	Non-woven carbon paper as current collector for Li-ion/Li ₂ S system: Understanding of the first charge mechanism. 2015 , 180, 178-186	28
1308	A sulfur-microporous carbon composite positive electrode for lithium/sulfur and silicon/sulfur rechargeable batteries. 2015 , 25, 612-621	28
1307	. 2015 ,	8
1306	Sulfur quantum dots wrapped by conductive polymer shell with internal void spaces for high-performance lithium-sulfur batteries. 2015 , 3, 4049-4057	39
1305	Naphthyridine Derivatives as a Model System for Potential Lithium-Sulfur Energy-Storage Applications. 2015 , 2015, 933-937	8
1304	A highly efficient polysulfide mediator for lithium-sulfur batteries. 2015 , 6, 5682	1385
1303	Additive Effect on the Electrochemical Performance of Lithium-Sulfur Battery. 2015 , 154, 205-210	19
1302	A trilayer carbon nanotube/Al ₂ O ₃ /polypropylene separator for lithium-sulfur batteries. 2015 , 21, 981-986	30
1301	Sulfur nanodots electrodeposited on ni foam as high-performance cathode for Li-S batteries. 2015 , 15, 721-6	149

1300	Molecular-confinement of polysulfides within mesoscale electrodes for the practical application of lithium sulfur batteries. 2015 , 13, 267-274	43
1299	Solvent Activity in Electrolyte Solutions Controls Electrochemical Reactions in Li-Ion and Li-Sulfur Batteries. 2015 , 119, 3957-3970	101
1298	First-Principles Study of Redox End Members in Lithium-Sulfur Batteries. 2015 , 119, 4675-4683	53
1297	Sulfur cathodes based on conductive MXene nanosheets for high-performance lithium-sulfur batteries. 2015 , 54, 3907-11	848
1296	Carbide-derived carbon/sulfur composite cathode for multi-layer separator assembled Li-S battery. 2015 , 32, 867-873	11
1295	Lithium/sulfur batteries with mixed liquid electrolytes based on ethyl 1,1,2,2-tetrafluoroethyl ether. 2015 , 161, 55-62	33
1294	Lithium-sulfur batteries: progress and prospects. 2015 , 27, 1980-2006	1044
1293	Permselective graphene oxide membrane for highly stable and anti-self-discharge lithium-sulfur batteries. 2015 , 9, 3002-11	605
1292	Storing energy in plastics: a review on conducting polymers & their role in electrochemical energy storage. 2015 , 5, 11611-11626	144
1291	Sulfur cathode based on layered carbon matrix for high-performance Li-S batteries. 2015 , 12, 742-749	55
1290	Lithium-ion batteries (LIBs) for medium- and large-scale energy storage. 2015 , 213-289	4
1289	A lithium-sulfur full cell with ultralong cycle life: influence of cathode structure and polysulfide additive. 2015 , 3, 3808-3820	73
1288	Direct Observation of Sulfur Radicals as Reaction Media in Lithium Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A474-A478	3.9 155
1287	Dense integration of graphene and sulfur through the soft approach for compact lithium/sulfur battery cathode. 2015 , 12, 468-475	135
1286	Soluble polysulphide sorption using carbon nanotube forest for enhancing cycle performance in a lithium-sulfur battery. 2015 , 12, 538-546	85
1285	Tellurium@Ordered Macroporous Carbon Composite and Free-Standing Tellurium Nanowire Mat as Cathode Materials for Rechargeable Lithium-Tellurium Batteries. 2015 , 5, 1401999	65
1284	Lithium-ion batteries (LIBs) for medium- and large-scale energy storage:: current cell materials and components. 2015 , 125-211	7
1283	Te/C nanocomposites for Li-Te Secondary Batteries. 2015 , 5, 7969	71

1282	Sulfur Cathodes Based on Conductive MXene Nanosheets for High-Performance Lithium-Sulfur Batteries. 2015 , 127, 3979-3983	158
1281	Fabrication of a nano-Li ⁺ -channel interlayer for high performance Li-S battery application. 2015 , 5, 26273-26288	
1280	A novel non-aqueous aluminum sulfur battery. 2015 , 283, 416-422	153
1279	A scalable hybrid separator for a high performance lithium-sulfur battery. 2015 , 51, 6996-9	43
1278	Fabrication of layered Ti ₃ C ₂ with an accordion-like structure as a potential cathode material for high performance lithium-sulfur batteries. 2015 , 3, 7870-7876	131
1277	Electrocatalysis of lithium polysulfides: current collectors as electrodes in Li/S battery configuration. 2015 , 5, 8763	148
1276	Conductive Lewis Base Matrix to Recover the Missing Link of Li ₂ S ₈ during the Sulfur Redox Cycle in Li-S Battery. 2015 , 27, 2048-2055	258
1275	A high performance lithium-ion sulfur battery based on a Li ₂ S cathode using a dual-phase electrolyte. 2015 , 8, 1551-1558	197
1274	Analytical Detection of Polysulfides in the Presence of Adsorption Additives by Operando X-ray Absorption Spectroscopy. 2015 , 119, 19001-19010	58
1273	Sulfur loaded in curved graphene and coated with conductive polyaniline: preparation and performance as a cathode for lithium-sulfur batteries. 2015 , 3, 18098-18104	45
1272	Graphene oxide: A promising nanomaterial for energy and environmental applications. 2015 , 16, 488-515	406
1271	Perspectives in Lithium Batteries. 2015 , 191-232	3
1270	Conductivity of Block Copolymer Electrolytes Containing Lithium Polysulfides. 2015 , 48, 4863-4873	13
1269	A Graphene-like Oxygenated Carbon Nitride Material for Improved Cycle-Life Lithium/Sulfur Batteries. 2015 , 15, 5137-42	314
1268	Application of GO in Energy Conversion and Storage. 2015 , 79-118	
1267	Graphene-Enveloped Poly(N-vinylcarbazole)/Sulfur Composites with Improved Performances for Lithium-Sulfur Batteries by A Simple Vibrating-Emulsification Method. 2015 , 7, 16668-75	21
1266	Hybrid Lithium-Sulfur Batteries with a Solid Electrolyte Membrane and Lithium Polysulfide Catholyte. 2015 , 7, 16625-31	95
1265	Sulfur synchronously electrodeposited onto exfoliated graphene sheets as a cathode material for advanced lithium-sulfur batteries. 2015 , 3, 16513-16519	35

1264	Effect of LiNO ₃ additive and pyrrolidinium ionic liquid on the solid electrolyte interphase in the lithium-sulfur battery. 2015 , 295, 212-220	80
1263	Nickel fibers/sulfur composites cathode with enhanced electrochemical performance for rechargeable lithium-sulfur batteries. 2015 , 176, 442-447	26
1262	Single step transformation of sulphur to Li ₂ S ₂ /Li ₂ S in Li-S batteries. 2015 , 5, 12146	125
1261	Hydroxylated carbon nanotube enhanced sulfur cathodes for improved electrochemical performance of lithium-sulfur batteries. 2015 , 51, 13682-5	49
1260	An electrochemical approach to graphene oxide coated sulfur for long cycle life. 2015 , 7, 13249-55	19
1259	One-pot self-assembly of graphene/carbon nanotube/sulfur hybrid with three dimensionally interconnected structure for lithium-sulfur batteries. 2015 , 295, 182-189	115
1258	Lithium sulfur battery nail penetration test under load. 2015 , 2, 25-29	23
1257	Investigation of surface effects through the application of the functional binders in lithium sulfur batteries. 2015 , 16, 28-37	94
1256	Synthesis of three-dimensionally interconnected sulfur-rich polymers for cathode materials of high-rate lithium-sulfur batteries. 2015 , 6, 7278	300
1255	Chitosan as a functional additive for high-performance lithium-sulfur batteries. 2015 , 3, 15235-15240	77
1254	Nanomaterials: Science and applications in the lithium-sulfur battery. 2015 , 10, 315-338	282
1253	Recent Advances in Electrolytes for Lithium-Sulfur Batteries. 2015 , 5, 1500117	426
1252	A 3D nanostructure of graphene interconnected with hollow carbon spheres for high performance lithium-sulfur batteries. 2015 , 3, 11395-11402	77
1251	Critical Link between Materials Chemistry and Cell-Level Design for High Energy Density and Low Cost Lithium-Sulfur Transportation Battery. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A982-A990 ³⁻⁹	181
1250	Lithium Sulfide (Li ₂ S)/Graphene Oxide Nanospheres with Conformal Carbon Coating as a High-Rate, Long-Life Cathode for Li/S Cells. 2015 , 15, 3479-86	117
1249	A Battery Made from a Single Material. 2015 , 27, 3473-83	231
1248	Progress Towards Commercially Viable Li-S Battery Cells. 2015 , 5, 1500118	300
1247	Understanding the Anchoring Effect of Two-Dimensional Layered Materials for Lithium-Sulfur Batteries. 2015 , 15, 3780-6	636

1246	Inverse vulcanization of elemental sulfur with 1,4-diphenylbutadiyne for cathode materials in Li-S batteries. 2015 , 5, 24718-24722		114
1245	Following the transient reactions in lithium-sulfur batteries using an in situ nuclear magnetic resonance technique. 2015 , 15, 3309-16		88
1244	Specially designed carbon black nanoparticle-sulfur composite cathode materials with a novel structure for lithium-sulfur battery application. 2015 , 285, 478-484		37
1243	Sulfur supported by carbon nanotubes and coated with polyaniline: Preparation and performance as cathode of lithium-sulfur cell. 2015 , 166, 93-99		58
1242	Effects of sulfur loading on the corrosion behaviors of metal lithium anode in lithium-sulfur batteries. 2015 , 68, 160-165		30
1241	Activated clay of nest structure encapsulated sulfur cathodes for lithium-sulfur batteries. 2015 , 5, 28349-28353		
1240	Effect of Carbon Core Grafting on the Properties of Carbon-Sulfur Composite for Lithium/Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A1067-A1071	3.9	10
1239	A hierarchical carbon nanotube-loaded glass-filter composite paper interlayer with outstanding electrolyte uptake properties for high-performance lithium-sulphur batteries. 2015 , 7, 10362-7		47
1238	Thermal characterization of Li/sulfur, Li/S ₂ FePO ₄ and Li/S ₂ V ₃ O ₈ cells using Isothermal Micro-Calorimetry and Accelerating Rate Calorimetry. 2015 , 289, 1-7		12
1237	A Sulfur Cathode with Pomegranate-Like Cluster Structure. 2015 , 5, 1500211		108
1236	Review on Li-Sulfur Battery Systems: an Integral Perspective. 2015 , 5, 1500212		531
1235	A Membrane-Free Ferrocene-Based High-Rate Semiliquid Battery. 2015 , 15, 4108-13		110
1234	Direct Observation of the Redistribution of Sulfur and Polysulfides in Li-S Batteries During the First Cycle by In Situ X-Ray Fluorescence Microscopy. 2015 , 5, 1500072		74
1233	High sulfur loaded carbon aerogel cathode for lithium-sulfur batteries. 2015 , 5, 34008-34018		48
1232	A Lightweight TiO ₂ /Graphene Interlayer, Applied as a Highly Effective Polysulfide Absorbent for Fast, Long-Life Lithium-Sulfur Batteries. 2015 , 27, 2891-8		576
1231	Polysulfide transport through separators measured by a linear voltage sweep method. 2015 , 286, 557-560		19
1230	A rechargeable lithium/quinone battery using a commercial polymer electrolyte. 2015 , 55, 22-25		26
1229	Highly Cyclable Lithium-Sulfur Batteries with a Dual-Type Sulfur Cathode and a Lithiated Si/SiO _x Nanosphere Anode. 2015 , 15, 2863-8		102

1228	Anodes for Rechargeable Lithium-Sulfur Batteries. 2015 , 5, 1402273	362
1227	High Energy Density Lithium-Sulfur Batteries: Challenges of Thick Sulfur Cathodes. 2015 , 5, 1402290	424
1226	Vertically-aligned carbon nanotubes on aluminum as a light-weight positive electrode for lithium-polysulfide batteries. 2015 , 51, 7749-52	17
1225	Free-standing and binder-free highly N-doped carbon/sulfur cathodes with tailorable loading for high-areal-capacity lithium-sulfur batteries. 2015 , 3, 20482-20486	45
1224	Effect of Boron-Doping on the Graphene Aerogel Used as Cathode for the Lithium-Sulfur Battery. 2015 , 7, 25202-10	128
1223	Modeling of nano-structured cathodes for improved lithium-sulfur batteries. 2015 , 184, 124-133	37
1222	Attainable gravimetric and volumetric energy density of Li-S and li ion battery cells with solid separator-protected Li metal anodes. 2015 , 6, 4581-8	210
1221	High-rate lithium-sulfur batteries enabled by hierarchical porous carbons synthesized via ice templation. 2015 , 297, 188-194	36
1220	Fair performance comparison of different carbon blacks in lithium-sulfur batteries with practical mass loadings – Simple design competes with complex cathode architecture. 2015 , 296, 454-461	64
1219	Modeling the voltage loss mechanisms in lithium-sulfur cells: the importance of electrolyte resistance and precipitation kinetics. 2015 , 17, 22581-6	62
1218	Fluoroethylene carbonate as an important component in organic carbonate electrolyte solutions for lithium sulfur batteries. 2015 , 60, 42-46	49
1217	Copolymerization of Polythiophene and Sulfur To Improve the Electrochemical Performance in Lithium-Sulfur Batteries. 2015 , 27, 7011-7017	99
1216	Reinforced Conductive Confinement of Sulfur for Robust and High-Performance Lithium-Sulfur Batteries. 2015 , 7, 23885-92	32
1215	Multi-functional separator/interlayer system for high-stable lithium-sulfur batteries: Progress and prospects. 2015 , 1, 127-145	491
1214	Fluorinated Reduced Graphene Oxide as an Interlayer in Li-S Batteries. 2015 , 27, 7070-7081	109
1213	Lithium sulfur batteries, a mechanistic review. 2015 , 8, 3477-3494	722
1212	A stable graphite negative electrode for the lithium-sulfur battery. 2015 , 51, 17100-3	37
1211	Rechargeable Batteries: Grasping for the Limits of Chemistry. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A2468-A2475	3.9 179

1210	Enhanced Cyclability of Li/Polysulfide Batteries by a Polymer-Modified Carbon Paper Current Collector. 2015 , 7, 20369-76		26
1209	The effect of a solid electrolyte interphase on the mechanism of operation of lithium-sulfur batteries. 2015 , 3, 19873-19883		62
1208	Naturally derived nanostructured materials from biomass for rechargeable lithium/sodium batteries. 2015 , 17, 91-103		118
1207	Absorption mechanism of carbon-nanotube paper-titanium dioxide as a multifunctional barrier material for lithium-sulfur batteries. 2015 , 8, 3066-3074		86
1206	Lotus Root-like Structured Carbon Fibers as Encapsulated Sulfur Host for Lithium Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A2157-A2162	3.9	6
1205	Li ₂ S Nanocrystals Confined in Free-Standing Carbon Paper for High Performance Lithium-Sulfur Batteries. 2015 , 7, 21479-86		65
1204	Enhancing the reversibility of Mg/S battery chemistry through Li(+) mediation. 2015 , 137, 12388-93		185
1203	Electrocatalytic Polysulfide Traps for Controlling Redox Shuttle Process of Li-S Batteries. 2015 , 137, 11542-5		505
1202	Graphene materials for lithium-sulfur batteries. 2015 , 1, 51-73		198
1201	Reactivity at the Lithium-Metal Anode Surface of Lithium-Sulfur Batteries. 2015 , 119, 26828-26839		112
1200	Preparation of sodium trimetaphosphate and its application as an additive agent in a novel polyvinylidene fluoride based gel polymer electrolyte in lithium sulfur batteries. 2015 , 6, 1619-1626		29
1199	Electrostatic self-assembly of graphene oxide wrapped sulfur particles for lithium-sulfur batteries. 2015 , 64, 12-16		26
1198	Graphene oxide wrapped hierarchical porous carbon-sulfur composite cathode with enhanced cycling and rate performance for lithium sulfur batteries. 2015 , 5, 5516-5522		25
1197	Highly ordered nitrogen-rich mesoporous carbon derived from biomass waste for high-performance lithium-sulfur batteries. 2015 , 84, 399-408		177
1196	A class of polysulfide catholytes for lithium-sulfur batteries: energy density, cyclability, and voltage enhancement. 2015 , 17, 2127-36		66
1195	Enhanced electrochemical performances of mesoporous carbon microsphere/selenium composites by controlling the pore structure and nitrogen doping. 2015 , 153, 140-148		41
1194	Sulfur-carbon yolk-shell particle based 3D interconnected nanostructures as cathodes for rechargeable lithium-sulfur batteries. 2015 , 3, 1853-1857		71
1193	Identification of lithium-sulfur battery discharge products through ⁶ Li and ³³ S solid-state MAS and ⁷ Li solution NMR spectroscopy. 2015 , 631, 295-300		50

1192	Sulfur encapsulated in a TiO ₂ -anchored hollow carbon nanofiber hybrid nanostructure for lithium-sulfur batteries. 2015 , 21, 1343-9		74
1191	Fluorinated Electrolytes for Li-S Battery: Suppressing the Self-Discharge with an Electrolyte Containing Fluoroether Solvent. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A64-A68	3-9	74
1190	Sulfur/bamboo charcoal composites cathode for lithium-sulfur batteries. 2015 , 5, 68-74		24
1189	Biomineralization-induced self-assembly of porous hollow carbon nanocapsule monoliths and their application in Li-S batteries. 2015 , 51, 1085-8		19
1188	ZnO Hard Templating for Synthesis of Hierarchical Porous Carbons with Tailored Porosity and High Performance in Lithium-Sulfur Battery. 2015 , 25, 287-297		280
1187	From a historic review to horizons beyond: lithium-sulphur batteries run on the wheels. 2015 , 51, 18-33		147
1186	Lithium-sulfur batteries: from liquid to solid cells. 2015 , 3, 936-958		300
1185	Performance Improvement of Magnesium Sulfur Batteries with Modified Non-Nucleophilic Electrolytes. 2015 , 5, 1401155		241
1184	Polysulfide rejection layer from alpha-lipoic acid for high performance lithium-sulfur battery. 2015 , 3, 323-330		36
1183	Direct Measurement of Polysulfide Shuttle Current: A Window into Understanding the Performance of Lithium-Sulfur Cells. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A1-A7	3-9	184
1182	Towards greener and more sustainable batteries for electrical energy storage. 2015 , 7, 19-29		4222
1181	Large-scale synthesis of ordered mesoporous carbon fiber and its application as cathode material for lithium-sulfur batteries. 2015 , 81, 782-787		149
1180	Lithium-sulphur battery with activated carbon cloth-sulphur cathode and ionic liquid as electrolyte. 2015 , 273, 162-167		26
1179	Micro- and Mesoporous Carbide-Derived Carbon-Selenium Cathodes for High-Performance Lithium Sulfur Batteries. 2015 , 5, 1400981		118
1178	Recent Development of Carbonaceous Materials for Lithium-Sulphur Batteries. 2016 , 2, 33		15
1177	Mesoporous hollow carbon spheres for lithium-sulfur batteries: distribution of sulfur and electrochemical performance. 2016 , 7, 1229-1240		25
1176	Freestanding Bilayer Carbon-Sulfur Cathode with Function of Entrapping Polysulfide for High Performance Li-S Batteries. 2016 , 26, 1225-1232		83
1175	Restricting the Solubility of Polysulfides in Li-S Batteries Via Electrolyte Salt Selection. 2016 , 6, 1600160		57

1174	Carbon Materials for Lithium Sulfur Batteries-Ten Critical Questions. 2016 , 22, 7324-51		274
1173	A novel sulfur-impregnated porous carbon matrix as a cathode material for a lithium-sulfur battery. 2016 , 6, 64228-64233		10
1172	Robust, Ultra-Tough Flexible Cathodes for High-Energy Li-S Batteries. 2016 , 12, 939-50		52
1171	Tuning Transition Metal Oxide-Sulfur Interactions for Long Life Lithium Sulfur Batteries: The "Goldilocks" Principle. 2016 , 6, 1501636		448
1170	Elemental-Sulfur-Mediated Facile Synthesis of a Covalent Triazine Framework for High-Performance Lithium-Sulfur Batteries. 2016 , 128, 3158-3163		89
1169	Elemental-Sulfur-Mediated Facile Synthesis of a Covalent Triazine Framework for High-Performance Lithium-Sulfur Batteries. 2016 , 55, 3106-11		249
1168	Solution-Based Chemical Process for Synthesis of Highly Active Li ₂ S/Carbon Nanocomposite for Lithium-Sulfur Batteries. 2016 , 2, 656-659		4
1167	Sustainable Redox Mediation for Lithium-Oxygen Batteries by a Composite Protective Layer on the Lithium-Metal Anode. 2016 , 28, 857-63		199
1166	Easy preparation of partially-opened carbon nanotubes by simple air oxidation for high performance Li-ion batteries. 2016 , 6, 113522-113526		7
1165	A Comprehensive Study on Rechargeable Energy Storage Technologies. 2016 , 13,		17
1164	A Microstructurally Resolved Model for Li-S Batteries Assessing the Impact of the Cathode Design on the Discharge Performance. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A2817-A2829	3-9	43
1163	Lithium-Ion Batteries: Thermomechanics, Performance, and Design Optimization. 2016 , 1-17		2
1162	Conducting Polymer-based Hybrid Nanocomposites as Promising Electrode Materials for Lithium Batteries. 2016 , 355-396		
1161	A Sheet-like Carbon Matrix Hosted Sulfur as Cathode for High-performance Lithium-Sulfur Batteries. 2016 , 6, 20445		31
1160	Effect of commercial activated carbons in sulfur cathodes on the electrochemical properties of lithium/sulfur batteries. 2016 , 82, 109-114		8
1159	A 2D porous porphyrin-based covalent organic framework for sulfur storage in lithium-sulfur batteries. 2016 , 4, 7416-7421		205
1158	Li ₂ S nano spheres anchored to single-layered graphene as a high-performance cathode material for lithium/sulfur cells. 2016 , 26, 524-532		56
1157	Facile synthesis of hierarchical MoS ₂ -carbon microspheres as a robust anode for lithium ion batteries. 2016 , 4, 9653-9660		68

1156	Progress in electrolytes for rechargeable Li-based batteries and beyond. 2016 , 1, 18-42	265
1155	Hybrid nanostructured microporous carbon-mesoporous carbon doped titanium dioxide/sulfur composite positive electrode materials for rechargeable lithium-sulfur batteries. 2016 , 324, 239-252	48
1154	Elemental Sulfur and Molybdenum Disulfide Composites for Li-S Batteries with Long Cycle Life and High-Rate Capability. 2016 , 8, 13437-48	92
1153	Correlation of capacity fading processes and electrochemical impedance spectra in lithium/sulfur cells. 2016 , 323, 107-114	39
1152	Nanostructured lithium sulfide materials for lithium-sulfur batteries. 2016 , 323, 174-188	64
1151	Polyaniline-coated partially unzipped vapor-grown carbon fibers/sulfur microsphere composites for Liâ cathodes. 2016 , 761, 62-67	6
1150	Demonstration of 99% capacity retention in Li/S batteries with a porous hollow carbon cap nanofiberâgraphene structure through a semi-empirical capacity fading model. 2016 , 4, 7830-7840	9
1149	Pitfalls in Liâ Rate-Capability Evaluation. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A1139-A1145,9	19
1148	Influence of a surface modified Li anode on the electrochemical performance of Liâ batteries. 2016 , 6, 40270-40276	24
1147	Polymerizations with elemental sulfur: A novel route to high sulfur content polymers for sustainability, energy and defense. 2016 , 58, 90-125	224
1146	Evaluating silicene as a potential cathode host to immobilize polysulfides in lithiumâsulfur batteries. 2016 , 69, 2090-2105	32
1145	Understanding the interactions between lithium polysulfides and N-doped graphene using density functional theory calculations. 2016 , 25, 203-210	274
1144	X-ray Absorption Spectroscopic Characterization of the Synthesis Process: Revealing the Interactions in Cetyltrimethylammonium Bromide-Modified SulfurâGraphene Oxide Nanocomposites. 2016 , 120, 10111-10117	13
1143	Well-dispersed sulfur wrapped in reduced graphene oxide nanoscroll as cathode material for lithiumâsulfur battery. 2016 , 780, 19-25	33
1142	Application of Gel Polymer Electrolytes Based on Ionic Liquids in Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A2390-A2398	3.9 29
1141	(De)Lithiation of tubular polypyrrole-derived carbon/sulfur composite in lithium-sulfur batteries. 2016 , 780, 26-31	24
1140	Hollow porous SiO2 nanobelts containing sulfur for long-life lithiumâsulfur batteries. 2016 , 6, 91179-91184	11
1139	Hierarchical Carbon Nanotubes with a Thick Microporous Wall and Inner Channel as Efficient Scaffolds for LithiumâSulfur Batteries. 2016 , 26, 1571-1579	162

1138	Operando Resonant Inelastic X-ray Scattering: An Appropriate Tool to Characterize Sulfur in Li-S Batteries. 2016 , 120, 24568-24576	31
1137	Redox-Active Supramolecular Polymer Binders for Lithium-Sulfur Batteries That Adapt Their Transport Properties in Operando. 2016 , 28, 7414-7421	40
1136	Synthesis of Double-Shell SnO@C Hollow Nanospheres as Sulfur/Sulfide Cages for Lithium-Sulfur Batteries. 2016 , 8, 27795-27802	78
1135	Enhanced performance of lithium sulfur batteries with conductive polymer modified separators. 2016 , 4, 16968-16974	82
1134	Encapsulating sulfur into highly graphitized hollow carbon spheres as high performance cathode for lithium-sulfur batteries. 2016 , 6, 98035-98041	9
1133	Modelling transport-limited discharge capacity of lithium-sulfur cells. 2016 , 219, 502-508	48
1132	Novel Li[(CFSO)(n-CFSO)N]-Based Polymer Electrolytes for Solid-State Lithium Batteries with Superior Electrochemical Performance. 2016 , 8, 29705-29712	67
1131	Light-weight functional layer on a separator as a polysulfide immobilizer to enhance cycling stability for lithium-sulfur batteries. 2016 , 4, 17033-17041	61
1130	Sulfur loaded in micropore-rich carbon aerogel as cathode of lithium-sulfur battery with improved cyclic stability. 2016 , 334, 23-30	40
1129	Improving the over-all performance of Li-S batteries via electrolyte optimization with consideration of loading condition. 2016 , 218, 1-7	11
1128	Transport Properties of Polysulfide Species in Lithium-Sulfur Battery Electrolytes: Coupling of Experiment and Theory. 2016 , 2, 560-8	59
1127	Tailoring Surface Acidity of Metal Oxide for Better Polysulfide Entrapment in Li-S Batteries. 2016 , 26, 7164-7169	78
1126	Biomimetic Ant-Nest Electrode Structures for High Sulfur Ratio Lithium-Sulfur Batteries. 2016 , 16, 5365-72	55
1125	Preparation of a graphitic N-doped multi-walled carbon nanotube composite for lithium-sulfur batteries with long-life and high specific capacity. 2016 , 6, 76568-76574	9
1124	Lithium Polysulfide Radical Anions in Ether-Based Solvents. 2016 , 120, 18403-18410	51
1123	Shuttle inhibition by chemical adsorption of lithium polysulfides in B and N co-doped graphene for Li-S batteries. 2016 , 18, 25241-25248	72
1122	Multi-temperature state-dependent equivalent circuit discharge model for lithium-sulfur batteries. 2016 , 328, 289-299	48
1121	Titanium-Carbide-Decorated Carbon Nanofibers as Hybrid Electrodes for High Performance Li-S Batteries. 2016 , 2, 937-941	34

1120	Bi ₂ S ₃ in-situ formed in molten S environment stabilized sulfur cathodes for high-performance lithium-sulfur batteries. 2016 , 329, 379-386	18
1119	Multifunctional Separator Coatings for High-Performance Lithium-Sulfur Batteries. 2016 , 3, 1600450	51
1118	A review of recent developments in rechargeable lithium-sulfur batteries. 2016 , 8, 16541-16588	269
1117	MOFs Derived Hierarchically Porous TiO ₂ as Effective Chemical and Physical Immobilizer for Sulfur Species as Cathodes for High-Performance Lithium-Sulfur Batteries. 2016 , 215, 689-698	64
1116	Capacity Fade Analysis of Sulfur Cathodes in Lithium-Sulfur Batteries. 2016 , 3, 1600101	147
1115	A core-shell electrode for dynamically and statically stable Li-S battery chemistry. 2016 , 9, 3188-3200	107
1114	Reaction between Lithium Anode and Polysulfide Ions in a Lithium-Sulfur Battery. 2016 , 9, 2348-50	28
1113	Carbon Disulfide Cosolvent Electrolytes for High-Performance Lithium Sulfur Batteries. 2016 , 8, 34379-34386	37
1112	Effect of Hydrofluoroether Cosolvent Addition on Li Solvation in Acetonitrile-Based Solvate Electrolytes and Its Influence on S Reduction in a Li-S Battery. 2016 , 8, 34360-34371	40
1111	Hollow porous titanium nitride tubes as a cathode electrode for extremely stable Li-S batteries. 2016 , 4, 16184-16190	75
1110	Entrapment of Polysulfides by a Black-Phosphorus-Modified Separator for Lithium-Sulfur Batteries. 2016 , 28, 9797-9803	371
1109	Suppressing the dissolution of polysulfides with cosolvent fluorinated diether towards high-performance lithium sulfur batteries. 2016 , 18, 29293-29299	49
1108	Oxidized multiwall carbon nanotube modified separator for high performance lithium-sulfur batteries with high sulfur loading. 2016 , 6, 89972-89978	24
1107	Designing high-energy lithium-sulfur batteries. 2016 , 45, 5605-5634	1475
1106	MnO modified carbon nanotubes as a sulfur host with enhanced performance in Li/S batteries. 2016 , 4, 12858-12864	69
1105	Advanced High Energy Density Secondary Batteries with Multi-Electron Reaction Materials. 2016 , 3, 1600051	141
1104	Numerical and Experimental Investigation of Performance Characteristics of Lithium/Sulfur Cells. 2016 , 213, 174-185	20
1103	Sparingly Solvating Electrolytes for High Energy Density Lithium-Sulfur Batteries. 2016 , 1, 503-509	146

1102	The Importance of Pore Size and Surface Polarity for Polysulfide Adsorption in Lithium Sulfur Batteries. 2016 , 3, 1600508	62
1101	Immobilizing Polysulfides with MXene-Functionalized Separators for Stable Lithium-Sulfur Batteries. 2016 , 8, 29427-29433	171
1100	Understanding and controlling the chemical evolution and polysulfide-blocking ability of lithium-sulfur battery membranes cast from polymers of intrinsic microporosity. 2016 , 4, 16946-16952	36
1099	Hierarchical sulfur electrodes as a testing platform for understanding the high-loading capability of Li-S batteries. 2016 , 334, 179-190	36
1098	Graphene-Based Hierarchically Micro/Mesoporous Nanocomposites as Sulfur Immobilizers for High-Performance Lithium-Sulfur Batteries. 2016 , 28, 7864-7871	43
1097	High performance of electrochemical lithium storage batteries: ZnO-based nanomaterials for lithium-ion and lithium-sulfur batteries. 2016 , 8, 18578-18595	110
1096	High-performance supercapacitors and batteries derived from activated banana-peel with porous structures. 2016 , 222, 1257-1266	121
1095	Molybdenum Polysulfide Chalcogels as High-Capacity, Anion-Redox-Driven Electrode Materials for Li-Ion Batteries. 2016 , 28, 8357-8365	46
1094	Ferrocene-Promoted Long-Cycle Lithium-Sulfur Batteries. 2016 , 128, 15038-15042	11
1093	Ferrocene-Promoted Long-Cycle Lithium-Sulfur Batteries. 2016 , 55, 14818-14822	34
1092	Advanced Lithium-Sulfur Batteries Enabled by a Bio-Inspired Polysulfide Adsorptive Brush. 2016 , 26, 8418-8426	98
1091	A Carbon-Cotton Cathode with Ultrahigh-Loading Capability for Statically and Dynamically Stable Lithium-Sulfur Batteries. 2016 , 10, 10462-10470	205
1090	Sandwich-type porous carbon/sulfur/polyaniline composite as cathode material for high-performance lithium-sulfur batteries. 2016 , 6, 104591-104596	17
1089	Guar gum as a novel binder for sulfur composite cathodes in rechargeable lithium batteries. 2016 , 52, 13479-13482	52
1088	Building better lithium-sulfur batteries: from LiNO ₃ to solid oxide catalyst. 2016 , 6, 33154	71
1087	Modeling of lithium-sulfur batteries incorporating the effect of Li ₂ S precipitation. 2016 , 336, 115-125	65
1086	Biomass-derived hierarchical carbon as sulfur cathode stabilizing agent for lithium-sulfur batteries. 2016 , 297, 59-63	31
1085	Balancing surface adsorption and diffusion of lithium-polysulfides on nonconductive oxides for lithium-sulfur battery design. 2016 , 7, 11203	866

1084	MetalâSulfur Batteries. 2016 , 151-172		1
1083	A self-discharge model of Lithium-Sulfur batteries based on direct shuttle current measurement. 2016 , 336, 325-331		21
1082	Porous Carbon Paper as Interlayer to Stabilize the Lithium Anode for Lithium-Sulfur Battery. 2016 , 8, 31684-31694		65
1081	Durability of the $\text{Li}_{1+x}\text{Ti}_2\text{Al}_x(\text{PO}_4)_3$ Solid Electrolyte in LithiumâSulfur Batteries. 2016 , 1, 1080-1085		67
1080	High rate lithium-sulfur battery enabled by sandwiched single ion conducting polymer electrolyte. 2016 , 6, 22048		31
1079	3D Graphene-Foam-Reduced-Graphene-Oxide Hybrid Nested Hierarchical Networks for High-Performance Li-S Batteries. 2016 , 28, 1603-9		430
1078	3D Interconnected Electrode Materials with Ultrahigh Areal Sulfur Loading for Li-S Batteries. 2016 , 28, 3374-82		433
1077	Multilayer Approach for Advanced Hybrid Lithium Battery. 2016 , 10, 6037-44		67
1076	Modified Separator Using Thin Carbon Layer Obtained from Its Cathode for Advanced Lithium Sulfur Batteries. 2016 , 8, 16101-7		38
1075	High-Performance All-Solid-State Lithium-Sulfur Battery Enabled by a Mixed-Conductive Li_2S Nanocomposite. 2016 , 16, 4521-7		258
1074	Impact of Anionic Structure of Lithium Salt on the Cycling Stability of Lithium-Metal Anode in Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A1776-A1783	3-9	31
1073	Multi-stacked electrodes employing aluminum coated tissue papers and non-oxidized graphene nanoflakes for high performance lithiumâSulfur batteries. 2016 , 6, 60537-60545		8
1072	A low-cost, high-energy polymer lithium-sulfur cell using a composite electrode and polyethylene oxide (PEO) electrolyte. 2016 , 22, 2341-2346		10
1071	Zinc-salt templating of hierarchical porous carbons for low electrolyte high energy lithium-sulfur batteries (LE-LiS). 2016 , 107, 705-710		23
1070	Transient existence of crystalline lithium disulfide Li_2S_2 in a lithium-sulfur battery. 2016 , 325, 641-645		48
1069	Strong affinity of polysulfide intermediates to multi-functional binder for practical application in lithiumâSulfur batteries. 2016 , 26, 722-728		55
1068	A binder-free sulfur/carbon composite electrode prepared by a sulfur sublimation method for LiâS batteries. 2016 , 6, 52642-52645		7
1067	Sulfur Encapsulated in Mo_4O_{11} -Anchored Ultralight Graphene for High-Energy Lithium Sulfur Batteries. 2016 , 4, 3679-3687		22

1066	Mesoporous carbon materials prepared from litchi shell as sulfur encapsulator for lithium-sulfur battery application. 2016 , 324, 547-555		70
1065	On the dispersion of lithium-sulfur battery cathode materials effected by electrostatic and stereo-chemical factors of binders. 2016 , 324, 455-461		45
1064	Amorphous TiS ₃ /S/C Composite Positive Electrodes with High Capacity for Rechargeable Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A1730-A1735	3.9	5
1063	Biomass-derived nanostructured porous carbons for lithium-sulfur batteries. 2016 , 59, 389-407		83
1062	Sisal-derived activated carbons for cost-effective lithium-sulfur batteries. 2016 , 6, 13772-13779		40
1061	Chemical routes toward long-lasting lithium/sulfur cells. 2016 , 9, 94-116		101
1060	Evolution of the effect of sulfur confinement in graphene-based porous carbons for use in Li-S batteries. 2016 , 8, 4447-51		59
1059	Na-X zeolite templated and sulfur-impregnated porous carbon as the cathode for a high-performance Li-S battery. 2016 , 6, 9117-9123		9
1058	Graphene functionalized attapulgite/sulfur composite as cathode of lithium-sulfur batteries for energy storage. 2016 , 224, 239-244		16
1057	A zero dimensional model of lithium-sulfur batteries during charge and discharge. 2016 , 18, 584-93		54
1056	A graphene-like metallic cathode host for long-life and high-loading lithium-sulfur batteries. 2016 , 3, 130-136		355
1055	Interactions Between Electrolytes and Carbon-Based Materials—NMR Studies on Electrical Double-Layer Capacitors, Lithium-Ion Batteries, and Fuel Cells. 2016 , 237-318		13
1054	Reduced graphene oxide-hollow carbon sphere nanostructure cathode material with ultra-high sulfur content for high performance lithium-sulfur batteries. 2016 , 188, 516-522		22
1053	Multidimensional operando analysis of macroscopic structure evolution in lithium sulfur cells by X-ray radiography. 2016 , 18, 10630-6		32
1052	Quinone-formaldehyde polymer as an active material in Li-ion batteries. 2016 , 315, 169-178		31
1051	Solvate ionic liquid electrolyte with 1,1,2,2-tetrafluoroethyl 2,2,2-trifluoroethyl ether as a support solvent for advanced lithium-sulfur batteries. 2016 , 6, 18186-18190		24
1050	Hierarchical Carbon with High Nitrogen Doping Level: A Versatile Anode and Cathode Host Material for Long-Life Lithium-Ion and Lithium-Sulfur Batteries. 2016 , 8, 10274-82		45
1049	Novel gel polymer electrolyte for high-performance lithium-sulfur batteries. 2016 , 22, 278-289		289

1048	Effects of compatibility of polymer binders with solvate ionic liquid electrolytes on discharge and charge reactions of lithium-sulfur batteries. 2016 , 307, 746-752		41
1047	Insight on the LiS electrochemical process in a composite configuration electrode. 2016 , 40, 2935-2943		14
1046	Film Properties of Electropolymerized Polypyrrole for a Sulfur/Ketjenblack Cathode in Lithium Secondary Batteries. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A683-A689	3.9	17
1045	Reconfiguration of lithium sulphur batteries: enhancement of Li-S cell performance by employing a highly porous conductive separator coating 2016 , 309, 76-81		57
1044	Nanocellulose-laden composite polymer electrolytes for high performing lithium-sulphur batteries. 2016 , 3, 69-76		87
1043	A Polysulfide-Trapping Interface for Electrochemically Stable Sulfur Cathode Development. 2016 , 8, 4709-17		58
1042	Dynamic formation of a solid-liquid electrolyte interphase and its consequences for hybrid-battery concepts. 2016 , 8, 426-34		251
1041	In Situ Reactive Assembly of Scalable Core-Shell Sulfur-MnO ₂ Composite Cathodes. 2016 , 10, 4192-8		302
1040	First-Principles Study of Nitrogen-, Boron-Doped Graphene and Co-Doped Graphene as the Potential Catalysts in Nonaqueous Li-O ₂ Batteries. 2016 , 120, 6612-6618		131
1039	Investigation of the Self-Discharge Behavior of Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2016 , 163, A911-A916	3.9	58
1038	A novel separator coated by carbon for achieving exceptional high performance lithium-sulfur batteries. 2016 , 20, 176-184		162
1037	Powering Lithium-Sulfur Battery Performance by Propelling Polysulfide Redox at Sulfiphilic Hosts. 2016 , 16, 519-27		1055
1036	The Li-S battery: an investigation of redox shuttle and self-discharge behaviour with LiNO ₃ -containing electrolytes. 2016 , 6, 3632-3641		56
1035	Graphene oxide-protected three dimensional Se as a binder-free cathode for Li-Se battery. 2016 , 190, 258-263		23
1034	Tri-modal mesoporous carbon/sulfur nanocomposite for high performance Li-S battery. 2016 , 190, 322-328		9
1033	A review on electric vehicle battery modelling: From Lithium-ion toward Lithium-sulphur. 2016 , 56, 1008-1021		387
1032	Electronic and ionic co-conductive coating on the separator towards high-performance lithium-sulfur batteries. 2016 , 306, 347-353		62
1031	A simple, experiment-based model of the initial self-discharge of lithium-sulphur batteries. 2016 , 306, 323-328		27

1030	C-S@PANI composite with a polymer spherical network structure for high performance lithium-sulfur batteries. 2016 , 18, 261-6	26
1029	Improved cycling stability of lithium-sulfur batteries using a polypropylene-supported nitrogen-doped mesoporous carbon hybrid separator as polysulfide adsorbent. 2016 , 303, 317-324	96
1028	Silicon(lithiated)-sulfur full cells with porous silicon anode shielded by Nafion against polysulfides to achieve high capacity and energy density. 2016 , 19, 68-77	69
1027	To mitigate self-discharge of lithium-sulfur batteries by optimizing ionic liquid electrolytes. 2016 , 9, 224-231	159
1026	Elastic porous carbon material supported sulfur cathodes for Li-S battery design. 2016 , 40, 93-96	7
1025	TiO ₂ as an active or supplemental material for lithium batteries. 2016 , 4, 14-31	144
1024	Performance study of magnesium-sulfur battery using a graphene based sulfur composite cathode electrode and a non-nucleophilic Mg electrolyte. 2016 , 8, 3296-306	190
1023	Porous spherical polyacrylonitrile-carbon nanocomposite with high loading of sulfur for lithium-sulfur batteries. 2016 , 302, 70-78	70
1022	Improved cycling performances with high sulfur loading enabled by pre-treating lithium anode. 2016 , 22, 151-157	14
1021	Introducing ion-transport-regulating nanochannels to lithium-sulfur batteries. 2017 , 33, 205-212	47
1020	Heterogeneous Catalysis for Lithium-Sulfur Batteries: Enhanced Rate Performance by Promoting Polysulfide Fragmentations. 2017 , 2, 327-333	141
1019	Highly flexible, freestanding tandem sulfur cathodes for foldable Li-S batteries with a high areal capacity. 2017 , 4, 249-258	66
1018	Inkjet-Printed Lithium-Sulfur Microcathodes for All-Printed, Integrated Nanomanufacturing. 2017 , 13, 1603786	47
1017	Mixed Conduction Membranes Suppress the Polysulfide Shuttle in Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A560-A566	3.9 28
1016	A Mixed Microporous/Low-range Mesoporous Composite with High Sulfur Loading from Hierarchically-structured Carbon for Lithium Sulfur Batteries. 2017 , 230, 181-188	33
1015	Nanostructured Metal Oxides and Sulfides for Lithium-Sulfur Batteries. 2017 , 29, 1601759	911
1014	The mechanism of Li ₂ S activation in lithium-sulfur batteries: Can we avoid the polysulfide formation?. 2017 , 344, 208-217	69
1013	Suppressing Self-Discharge and Shuttle Effect of Lithium-Sulfur Batteries with V O ₂ -Decorated Carbon Nanofiber Interlayer. 2017 , 13, 1602539	165

1012	Recent advances in inorganic 2D materials and their applications in lithium and sodium batteries. 2017 , 5, 3735-3758	259
1011	Functionalized Boron Nitride Nanosheets/Graphene Interlayer for Fast and Long-Life Lithium-Sulfur Batteries. 2017 , 7, 1602380	155
1010	Propelling polysulfides transformation for high-rate and long-life lithium-sulfur batteries. 2017 , 33, 306-312	277
1009	A High-Efficiency Sulfur/Carbon Composite Based on 3D Graphene Nanosheet@Carbon Nanotube Matrix as Cathode for Lithium-Sulfur Battery. 2017 , 7, 1602543	302
1008	Core-Shell Structure and Interaction Mechanism of MnO Coated Sulfur for Improved Lithium-Sulfur Batteries. 2017 , 13, 1603466	113
1007	Physisorption Mechanism of Solvated Polysulfide Chains on Graphene Oxides with Varied Functional Groups. 2017 , 121, 5089-5098	5
1006	Theoretical Investigation of 2D Layered Materials as Protective Films for Lithium and Sodium Metal Anodes. 2017 , 7, 1602528	145
1005	A Novel Optical Diagnostic for In Situ Measurements of Lithium Polysulfides in Battery Electrolytes. 2017 , 71, 1593-1599	21
1004	A New Type of Multifunctional Polar Binder: Toward Practical Application of High Energy Lithium Sulfur Batteries. 2017 , 29, 1605160	239
1003	Spirulina-derived nitrogen-doped porous carbon as carbon/S composite cathodes for high cyclability lithium-sulphur batteries. 2017 , 704, 1-6	25
1002	Lithium sulfur and lithium oxygen batteries: new frontiers of sustainable energy storage. 2017 , 1, 228-247	53
1001	Probing Titanium Disulfide-Sulfur Composite Materials for Li-S Batteries via In Situ X-ray Diffraction (XRD). <i>Journal of the Electrochemical Society</i> , 2017 , 164, A897-A901	3.9 16
1000	In Situ NMR Observation of the Temporal Speciation of Lithium Sulfur Batteries during Electrochemical Cycling. 2017 , 121, 6011-6017	34
999	Revealing Charge Transport Mechanisms in LiS for Li-Sulfur Batteries. 2017 , 8, 1324-1330	51
998	Regenerative Polysulfide-Scavenging Layers Enabling Lithium-Sulfur Batteries with High Energy Density and Prolonged Cycling Life. 2017 , 11, 2697-2705	111
997	Carboxymethyl cellulose binders enable high-rate capability of sulfurized polyacrylonitrile cathodes for Li-S batteries. 2017 , 5, 5460-5465	41
996	Enhanced Li-S batteries using cation-functionalized pigment nanocarbon in core-shell structured composite cathodes. 2017 , 5, 5559-5567	21
995	Sulfonic Groups Originated Dual-Functional Interlayer for High Performance Lithium-Sulfur Battery. 2017 , 9, 14878-14888	97

994	A novel strategy for high-stability lithium sulfur batteries by in situ formation of polysulfide adsorptive-blocking layer. 2017 , 355, 147-153	22
993	Effect of carbon-sulphur bond in a sulphur/dehydrogenated polyacrylonitrile/reduced graphene oxide composite cathode for lithium-sulphur batteries. 2017 , 355, 140-146	21
992	Lithium-Sulfur Batteries with the Lowest Self-Discharge and the Longest Shelf life. 2017 , 2, 1056-1061	45
991	Hierarchical carbon microstructures prepared from oil-palm-shell tracheids for Li-S batteries. 2017 , 41, 4110-4115	10
990	Multifunctional Free-Standing Gel Polymer Electrolyte with Carbon Nanofiber Interlayers for High-Performance Lithium-Sulfur Batteries. 2017 , 12, 1470-1474	26
989	Electrochemical impedance spectroscopy of a Li-S battery: Part 1. Influence of the electrode and electrolyte compositions on the impedance of symmetric cells. 2017 , 244, 61-68	50
988	Tuning the Adsorption of Polysulfides in Lithium-Sulfur Batteries with Metal-Organic Frameworks. 2017 , 29, 4932-4939	83
987	Review on High-Loading and High-Energy Lithium-Sulfur Batteries. 2017 , 7, 1700260	1010
986	Electrolyte decomposition and gas evolution in a lithium-sulfur cell upon long-term cycling. 2017 , 243, 26-32	28
985	Fluoroethylene Carbonate as an Important Component for the Formation of an Effective Solid Electrolyte Interphase on Anodes and Cathodes for Advanced Li-Ion Batteries. 2017 , 2, 1337-1345	263
984	Carbonate-based additive for improvement of cycle durability of electrodeposited Si-O-C composite anode in glyme-based ionic liquid electrolyte for use in lithium secondary batteries. 2017 , 243, 65-71	16
983	Nucleophilic substitution between polysulfides and binders unexpectedly stabilizing lithium sulfur battery. 2017 , 38, 82-90	89
982	Hierarchical porous carbon derived from animal bone as matrix to encapsulated selenium for high performance Li-Se battery. 2017 , 36, 434-441	7
981	MnO ₂ -GO double-shelled sulfur (S@MnO ₂ @GO) as a cathode for Li-S batteries with improved rate capability and cyclic performance. 2017 , 356, 72-79	48
980	High-Performance All-Inorganic Solid-State Sodium-Sulfur Battery. 2017 , 11, 4885-4891	96
979	Multifunctional Co ₃ S ₄ @sulfur nanotubes for enhanced lithium-sulfur battery performance. 2017 , 37, 7-14	254
978	Relevant Features of a Triethylene Glycol Dimethyl Ether-Based Electrolyte for Application in Lithium Battery. 2017 , 9, 17085-17095	19
977	Materials Genomics Screens for Adaptive Ion Transport Behavior by Redox-Switchable Microporous Polymer Membranes in Lithium-Sulfur Batteries. 2017 , 3, 399-406	38

976	A Nanophase-Separated, Quasi-Solid-State Polymeric Single-Ion Conductor: Polysulfide Exclusion for Lithium-Sulfur Batteries. 2017 , 2, 1232-1239	35
975	Structure-Property Relationships of Organic Electrolytes and Their Effects on Li/S Battery Performance. 2017 , 29, 1700449	67
974	Large-Scale Batteries for Green Energy Society. 2017 , 175-195	2
973	Towards flexible lithium-sulfur battery from natural cotton textile. 2017 , 246, 507-516	113
972	Mesoscale Evaluation of Titanium Silicide Monolayer as a Cathode Host Material in Lithium-Sulfur Batteries. 2017 , 69, 1532-1536	5
971	High areal capacity cathode and electrolyte reservoir render practical Li-S batteries. 2017 , 38, 137-146	35
970	How to make inert boron nitride nanosheets active for the immobilization of polysulfides for lithium-sulfur batteries: a computational study. 2017 , 19, 18208-18216	28
969	Quantitative Analysis of Electrochemical and Electrode Stability with Low Self-Discharge Lithium-Sulfur Batteries. 2017 , 9, 20318-20323	19
968	Room-Temperature Sodium-Sulfur Batteries: A Comprehensive Review on Research Progress and Cell Chemistry. 2017 , 7, 1602829	206
967	Directing the Lithium-Sulfur Reaction Pathway via Sparingly Solvating Electrolytes for High Energy Density Batteries. 2017 , 3, 605-613	125
966	Unique aqueous Li-ion/sulfur chemistry with high energy density and reversibility. 2017 , 114, 6197-6202	100
965	CoN Nanosheet Assembled Mesoporous Sphere as a Matrix for Ultrahigh Sulfur Content Lithium-Sulfur Batteries. 2017 , 11, 6031-6039	310
964	A hybrid electrolyte for long-life semi-solid-state lithium sulfur batteries. 2017 , 5, 13971-13975	37
963	A Toolbox for Lithium-Sulfur Battery Research: Methods and Protocols. 2017 , 1, 1700134	160
962	More Reliable Lithium-Sulfur Batteries: Status, Solutions and Prospects. 2017 , 29, 1606823	1054
961	A Novel Polar Copolymer Design as a Multi-Functional Binder for Strong Affinity of Polysulfides in Lithium-Sulfur Batteries. 2017 , 12, 195	26
960	Ultrathin MnO ₂ /Graphene Oxide/Carbon Nanotube Interlayer as Efficient Polysulfide-Trapping Shield for High-Performance Li-S Batteries. 2017 , 27, 1606663	228
959	A bifunctional ion-electron conducting interlayer for high energy density all-solid-state lithium-sulfur battery. 2017 , 351, 17-25	38

958	Effect of fibrous separators on the performance of lithium-sulfur batteries. 2017 , 19, 11239-11248		17
957	Recent progress in Li ₂ S and Li ₂ Se batteries. 2017 , 36, 339-364		66
956	Synthesis and characterization of sulfur/carbon/porous nanostructured V ₂ O ₅ composite cathodes for lithium sulfur batteries. 2017 , 28, 1411-1417		15
955	Liquid Sulfur Impregnation of Microporous Carbon Accelerated by Nanoscale Interfacial Effects. 2017 , 17, 2517-2523		15
954	Ultrathin dendrimer-graphene oxide composite film for stable cycling lithium-sulfur batteries. 2017 , 114, 3578-3583		78
953	In Situ X-ray Absorption Spectroscopy Studies of Discharge Reactions in a Thick Cathode of a Lithium Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A18-A27	3.9	30
952	Understanding the anchoring behavior of titanium carbide-based MXenes depending on the functional group in LiS batteries: A density functional theory study. 2017 , 342, 64-69		106
951	Review On the Mechanism of Quasi-Solid-State Lithiation of Sulfur Encapsulated in Microporous Carbons: Is the Existence of Small Sulfur Molecules Necessary?. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A6244-A6253	3.9	60
950	Metal Sulfide-Blended Sulfur Cathodes in High Energy Lithium-Sulfur Cells. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A265-A276	3.9	35
949	A Sulfur-Rich Copolymer@CNT Hybrid Cathode with Dual-Confinement of Polysulfides for High-Performance Lithium-Sulfur Batteries. 2017 , 29, 1603835		167
948	Ammonium Additives to Dissolve Lithium Sulfide through Hydrogen Binding for High-Energy Lithium-Sulfur Batteries. 2017 , 9, 4290-4295		51
947	The correlation between carbon structures and electrochemical properties of sulfur/carbon composites for Li-S batteries. 2017 , 341, 139-146		20
946	Synthesis, Structure, and Electrochemical Properties of a Sulfur-Carbon Replica Composite Electrode for All-Solid-State Li-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A6178-A6183	3.9	13
945	Nanostructured cathode materials for lithium-sulfur batteries: progress, challenges and perspectives. 2017 , 5, 3014-3038		147
944	Synthesis of hollow silica-sulfur composite nanospheres towards stable lithium-sulfur battery. 2017 , 23, 1091-1096		2
943	An aprotic lithium/polyiodide semi-liquid battery with an ionic shield. 2017 , 342, 9-16		13
942	Three-dimensional graphene hollow spheres with high sulfur loading for high-performance lithium-sulfur batteries. 2017 , 224, 527-533		49
941	Thiol-based electrolyte additives for high-performance lithium-sulfur batteries. 2017 , 32, 50-58		71

940	Carbon-coated core-shell Li ₂ S@C nanocomposites as high performance cathode materials for lithium-sulfur batteries. 2017 , 5, 1428-1433	28
939	Single-wall carbon nanotube network enabled ultrahigh sulfur-content electrodes for high-performance lithium-sulfur batteries. 2017 , 42, 205-214	140
938	New Insights into Mossy Li Induced Anode Degradation and Its Formation Mechanism in Li-S Batteries. 2017 , 2, 2696-2705	72
937	Cell Concepts of Metal-Sulfur Batteries (Metal = Li, Na, K, Mg): Strategies for Using Sulfur in Energy Storage Applications. 2017 , 375, 81	40
936	Electrochemical impedance spectroscopy of a Li-S battery: Part 2. Influence of separator chemistry on the lithium electrode/electrolyte interface. 2017 , 255, 379-390	21
935	High Sulfur Content Material with Stable Cycling in Lithium-Sulfur Batteries. 2017 , 129, 15314-15318	12
934	High Sulfur Content Material with Stable Cycling in Lithium-Sulfur Batteries. 2017 , 56, 15118-15122	39
933	Precipitation-Microstructure Interactions in the Li-Sulfur Battery Electrode. 2017 , 121, 26256-26264	32
932	Encapsulation of cathode in lithium-sulfur batteries with a novel two-dimensional carbon allotrope: DHP-graphene. 2017 , 7, 14948	26
931	Controlling Solid-Liquid Conversion Reactions for a Highly Reversible Aqueous Zinc-Iodine Battery. 2017 , 2, 2674-2680	96
930	The effect of water-containing electrolyte on lithium-sulfur batteries. 2017 , 369, 50-56	17
929	In situ preparation of a macro-chamber for S conversion reactions in lithium-sulfur batteries. 2017 , 5, 23497-23505	27
928	Non-encapsulation approach for high-performance Li-S batteries through controlled nucleation and growth. 2017 , 2, 813-820	256
927	Effect of lithium-trapping on nitrogen-doped graphene as an anchoring material for lithium-sulfur batteries: a density functional theory study. 2017 , 19, 28189-28194	41
926	Factors Affecting the Proper Functioning of a 3Ah Li-S Pouch Cell. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A2948-A2955	3.9 28
925	Progress and prospects of sodium-sulfur batteries: A review. 2017 , 312, 8-16	88
924	Boron- and nitrogen-doped reduced graphene oxide coated separators for high-performance Li-S batteries. 2017 , 369, 87-94	53
923	Designing solid-electrolyte interphases for lithium sulfur electrodes using ionic shields. 2017 , 41, 573-582	28

- 922 Novel flower-like hierarchical carbon sphere with multi-scale pores coated on PP separator for high-performance lithium-sulfur batteries. **2017**, 257, 210-216 32
- 921 Heteroatoms-Doped Porous Carbon Derived from Tuna Bone for High Performance Li-S Batteries. **2017**, 258, 80-89 33
- 920 Freeze-Dried Sulfur-Graphene Oxide-Carbon Nanotube Nanocomposite for High Sulfur-Loading Lithium/Sulfur Cells. **2017**, 17, 7086-7094 78
- 919 Effect of the Hydrofluoroether Cosolvent Structure in Acetonitrile-Based Solvate Electrolytes on the Li Solvation Structure and Li-S Battery Performance. **2017**, 9, 39357-39370 39
- 918 Free-standing compact cathodes for high volumetric and gravimetric capacity Li-S batteries. **2017**, 5, 19924-19933 17
- 917 A High-Volumetric-Capacity Cathode Based on Interconnected Close-Packed N-Doped Porous Carbon Nanospheres for Long-Life Lithium-Sulfur Batteries. **2017**, 7, 1701082 79
- 916 A Praline-Like Flexible Interlayer with Highly Mounted Polysulfide Anchors for Lithium-Sulfur Batteries. **2017**, 13, 1700357 33
- 915 Rational Design of High-Loading Sulfur Cathodes with a Poached-Egg-Shaped Architecture for Long-Cycle Lithium-Sulfur Batteries. **2017**, 2, 2205-2211 52
- 914 Efficient sulfur host based on NiCo₂O₄ hollow microtubes for advanced Li-S batteries. **2017**, 256, 189-195 14
- 913 Advances in lithium-sulfur batteries. **2017**, 121, 1-29 77
- 912 Metal-Organic Framework-Based Separators for Enhancing Li-S Battery Stability: Mechanism of Mitigating Polysulfide Diffusion. **2017**, 2, 2362-2367 160
- 911 Capillarity Compositing Recycled Paper/Graphene Scaffold for Lithium-Sulfur Batteries with Enhanced Capacity and Extended Lifespan. **2017**, 13, 1701927 64
- 910 First-Principles Investigation of Lithium Polysulfide Structure and Behavior in Solution. **2017**, 121, 21105-21117 40
- 909 Probing Impedance and Microstructure Evolution in Lithium-Sulfur Battery Electrodes. **2017**, 121, 21206-21216 8
- 908 High sulfur-containing carbon polysulfide polymer as a novel cathode material for lithium-sulfur battery. **2017**, 7, 11386 35
- 907 Sulfur-impregnated N-doped hollow carbon nanofibers as cathode for lithium-sulfur batteries. **2017**, 209, 505-508 19
- 906 A polysulfide reduction accelerator -NiS₂-modified sulfurized polyacrylonitrile as a high performance cathode material for lithium-sulfur batteries. **2017**, 5, 22120-22124 51
- 905 A Newly Designed Composite Gel Polymer Electrolyte Based on Poly(Vinylidene Fluoride-Hexafluoropropylene) (PVDF-HFP) for Enhanced Solid-State Lithium-Sulfur Batteries. **2017**, 23, 15203-15209 82

904	Effective electrostatic confinement of polysulfides in lithium/sulfur batteries by a functional binder. 2017 , 40, 559-565	66
903	In situ wrapping of the cathode material in lithium-sulfur batteries. 2017 , 8, 479	112
902	Stabilizing the Performance of High-Capacity Sulfur Composite Electrodes by a New Gel Polymer Electrolyte Configuration. 2017 , 10, 3490-3496	17
901	3-D vertically aligned few layer graphene α -partially reduced graphene oxide/sulfur electrodes for high performance lithium-sulfur batteries. 2017 , 1, 1516-1523	11
900	Lithiation-Assisted Strengthening Effect and Reactive Flow in Bulk and Nanoconfined Sulfur Cathodes of Lithium-Sulfur Batteries. 2017 , 121, 17029-17037	7
899	Active Platinum Nanoparticles as a Bifunctional Promoter for Lithium-Sulfur Batteries. 2017 , 4, 2577-2582	19
898	Shaddock wadding created activated carbon as high sulfur content encapsulator for lithium-sulfur batteries. 2017 , 724, 575-580	11
897	A sulfur- FePO_4 nanocomposite cathode for stable and anti-self-discharge lithium-sulfur batteries. 2017 , 5, 17926-17932	13
896	Route to sustainable lithium-sulfur batteries with high practical capacity through a fluorine free polysulfide catholyte and self-standing Carbon Nanofiber membranes. 2017 , 7, 6327	16
895	Collaborative design of Li-S batteries using 3D N-doped graphene aerogel as a sulfur host and graphitic carbon nitride paper as an interlayer. 2017 , 1, 1759-1765	28
894	Graphene-based composite electrodes for electrochemical energy storage devices: Recent progress and challenges. 2017 , 6, 48-76	22
893	Theoretical Studies on the Charging and Discharging of Poly(acrylonitrile)-Based Lithium-Sulfur Batteries. 2017 , 4, 2975-2980	8
892	Electrostatic Polysulfides Confinement to Inhibit Redox Shuttle Process in the Lithium Sulfur Batteries. 2017 , 9, 31741-31745	31
891	In operando infrared spectroscopy of lithium polysulfides using a novel spectro-electrochemical cell. 2017 , 364, 266-271	30
890	Dual Core-Shell-Structured S@C@MnO Nanocomposite for Highly Stable Lithium-Sulfur Batteries. 2017 , 9, 34793-34803	118
889	Reactivity and Diffusivity of Li Polysulfides: A Fundamental Study Using Impedance Spectroscopy. 2017 , 9, 29760-29770	47
888	Directly Coating a Multifunctional Interlayer on the Cathode via Electrospinning for Advanced Lithium-Sulfur Batteries. 2017 , 9, 29804-29811	46
887	Toward in-situ protected sulfur cathodes by using lithium bromide and pre-charge. 2017 , 40, 170-179	42

886	A simple, fast and accurate in-situ method to measure the rate of transport of redox species through membranes for lithium batteries. 2017 , 364, 148-155	4
885	In situ monitoring the viscosity change of an electrolyte in a Li-S battery. 2017 , 53, 10152-10155	20
884	Intrinsic Shuttle Suppression in Lithium-Sulfur Batteries for Pouch Cell Application. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A3766-A3771	3.9 69
883	Modified Separator Performing Dual Physical/Chemical Roles to Inhibit Polysulfide Shuttle Resulting in Ultrastable Li-S Batteries. 2017 , 11, 12436-12445	68
882	Atomic Sulfur Anchored on Silicene, Phosphorene, and Borophene for Excellent Cycle Performance of Li-S Batteries. 2017 , 9, 42836-42844	41
881	Fluorinated Ether Based Electrolyte for High-Energy Lithium-Sulfur Batteries: Li ⁺ Solvation Role Behind Reduced Polysulfide Solubility. 2017 , 29, 10037-10044	56
880	Catholyte Formulations for High-Energy Li-S Batteries. 2017 , 8, 5907-5914	11
879	Self-balancing feature of Lithium-Sulfur batteries. 2017 , 372, 245-251	9
878	In situ/operando characterization techniques for rechargeable lithium-sulfur batteries: a review. 2017 , 9, 19001-19016	71
877	Fabrication of carbon-sulphur composites via a vibration mill process as cathode material for lithium sulphur batteries. 2017 , 9, 70-77	15
876	Better performing composite cathode encompassing graphene and magnesium aluminate for Li ⁺ S batteries. 2017 , 11, 46-55	15
875	Chemical Bonding and Physical Trapping of Sulfur in Mesoporous Magn ⁺ Ti ₄ O ₇ Microspheres for High-Performance Li ⁺ S Battery. 2017 , 7, 1601616	102
874	A new approach for recycling waste rubber products in Li ⁺ S batteries. 2017 , 10, 86-90	69
873	A review of atomic layer deposition providing high performance lithium sulfur batteries. 2017 , 338, 34-48	95
872	Flexible catholyte@carbon nanotube film electrode for high-performance lithium sulfur battery. 2017 , 113, 371-378	30
871	Interwoven MXene Nanosheet/Carbon-Nanotube Composites as Li-S Cathode Hosts. 2017 , 29, 1603040	451
870	Hierarchical porous carbon derived from soybean hulls as a cathode matrix for lithium-sulfur batteries. 2017 , 695, 2246-2252	48
869	Li ⁺ S and Li ⁺ O ₂ Batteries with High Specific Energy. 2017 , 1-48	3

868	Electrochemical studies on composite gel polymer electrolytes for lithium sulfur-batteries. 2017 , 134,	34
867	Gluing Carbon Black and Sulfur at Nanoscale: A Polydopamine-Based "Nano-Binder" for Double-Shelled Sulfur Cathodes. 2017 , 7, 1601591	57
866	A Novel Lithiated Silicon-Sulfur Battery Exploiting an Optimized Solid-Like Electrolyte to Enhance Safety and Cycle Life. 2017 , 13, 1602015	25
865	Sole Chemical Confinement of Polysulfides on Nonporous Nitrogen/Oxygen Dual-Doped Carbon at the Kilogram Scale for Lithium-Sulfur Batteries. 2017 , 27, 1604265	157
864	Prussian Blue: A Potential Material to Improve the Electrochemical Performance of Lithium-Sulfur Batteries. 2017 , 9, 4397-4403	30
863	Lithium-Sulfur Batteries with High Rate and Cycle Performance by using Multilayered Separators coated with Ketjen Black. 2017 , 5, 623-628	25
862	Carbon Composites for a High-Energy Lithium-Sulfur Battery with a Glyme-Based Electrolyte. 2017 , 4, 209-215	22
861	Cobalt oxyhydroxide/graphene oxide nanocomposite for amelioration of electrochemical performance of lithium/sulfur batteries. 2017 , 21, 649-656	12
860	Carbon fiber-incorporated sulfur/carbon ternary cathode for lithium-sulfur batteries with enhanced performance. 2017 , 21, 1203-1210	20
859	Electrochemical properties of sulfurized poly-acrylonitrile (SPAN) cathode containing carbon fiber current collectors. 2017 , 326, 443-449	6
858	Electric vehicle battery parameter identification and SOC observability analysis: NiMH and Li-S case studies. 2017 , 10, 1289-1297	28
857	Lithium-Sulfur Battery Technology Readiness and Applications—A Review. 2017 , 10, 1937	93
856	Complex Hydride Electrolytes for All-solid-state Lithium Rechargeable Batteries. 2017 , 56, 354-357	
855	Kalman-variant estimators for state of charge in lithium-sulfur batteries. 2017 , 343, 254-267	30
854	Promoting sulfur adsorption using surface Cu sites in metal-organic frameworks for lithium sulfur batteries. 2018 , 6, 4811-4821	57
853	Tungsten Carbide as a Highly Efficient Catalyst for Polysulfide Fragmentations in Li-S Batteries. 2018 , 122, 7664-7669	31
852	Progress of the Interface Design in All-Solid-State Li-S Batteries. 2018 , 28, 1707533	140
851	Rational Design of Nanostructured Functional Interlayer/Separator for Advanced Li-S Batteries. 2018 , 28, 1707411	196

850	High-Rate and High-Areal-Capacity Air Cathodes with Enhanced Cycle Life Based on RuO ₂ /MnO ₂ Bifunctional Electrocatalysts Supported on CNT for Pragmatic Li ₂ O ₂ Batteries. 2018 , 8, 2923-2934	38
849	A Lithium-Ion Battery using a 3 D-Array Nanostructured Graphene-Sulfur Cathode and a Silicon Oxide-Based Anode. 2018 , 11, 1512-1520	41
848	High-Rate and Long-Term Cycle Stability of Li-S Batteries Enabled by LiS/TiO ₂ -Impregnated Hollow Carbon Nanofiber Cathodes. 2018 , 10, 16552-16560	27
847	Organic Polysulfides Based on β -Structure as Additives or Cosolvents for High Performance Lithium-Sulfur Batteries. 2018 , 5, 1717-1723	10
846	Ionicly cross-linked PEDOT:PSS as a multi-functional conductive binder for high-performance lithium-sulfur batteries. 2018 , 2, 1574-1581	50
845	A Novel High-Capacity Anode Material Derived from Aromatic Imides for Lithium-Ion Batteries. 2018 , 14, e1704094	20
844	Materials and Device Constructions for Aqueous Lithium-Sulfur Batteries. 2018 , 28, 1707593	24
843	Revisiting the Role of Polysulfides in Lithium-Sulfur Batteries. 2018 , 30, e1705590	291
842	Nafion/Titanium Dioxide-Coated Lithium Anode for Stable Lithium-Sulfur Batteries. 2018 , 13, 1379-1385	24
841	Novel Sulfur Host Composed of Cobalt and Porous Graphitic Carbon Derived from MOFs for the High-Performance Li-S Battery. 2018 , 10, 13499-13508	45
840	Lithiation and Delithiation Processes in Lithium-Sulfur Batteries from Ab Initio Molecular Dynamics Simulations. 2018 , 122, 8769-8779	17
839	Ferromagnetic Nanoparticle-Assisted Polysulfide Trapping for Enhanced Lithium-Sulfur Batteries. 2018 , 28, 1800563	70
838	Mechanism for the Stable Performance of Sulfur-Copolymer Cathode in Lithium-Sulfur Battery Studied by Solid-State NMR Spectroscopy. 2018 , 30, 2915-2923	33
837	Structured Titanium Nitride Nanotube Arrays/Sulfur Composite as Cathode Materials for Advanced Lithium Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A1011-A1018	3.9 11
836	Modeling the effect of key cathode design parameters on the electrochemical performance of a lithium-sulfur battery. 2018 , 42, 2631-2642	17
835	Construction of a stable lithium sulfide membrane to greatly confine polysulfides for high performance lithium-sulfur batteries. 2018 , 6, 8655-8661	8
834	Designing Lithium-Sulfur Cells with Practically Necessary Parameters. 2018 , 2, 710-724	122
833	Glass fiber separator coated by porous carbon nanofiber derived from immiscible PAN/PMMA for high-performance lithium-sulfur batteries. 2018 , 552, 31-42	60

832	Duplex component additive of tris(trimethylsilyl) phosphite-vinylene carbonate for lithium sulfur batteries. 2018 , 14, 75-81	26
831	Biomimetic Bipolar Microcapsules Derived from Staphylococcus aureus for Enhanced Properties of Lithium-Sulfur Battery Cathodes. 2018 , 8, 1702373	77
830	High Lithium Ion Conductivity LiF/GO Solid Electrolyte Interphase Inhibiting the Shuttle of Lithium Polysulfides in Long-Life Li-S Batteries. 2018 , 28, 1706513	83
829	Manipulating the Redox Kinetics of Li-S Chemistry by Tellurium Doping for Improved Li-S Batteries. 2018 , 3, 420-427	94
828	TiS ₂ -Polysulfide Hybrid Cathode with High Sulfur Loading and Low Electrolyte Consumption for Lithium-Sulfur Batteries. 2018 , 3, 568-573	105
827	Strategies to Explore and Develop Reversible Redox Reactions of Li-S in Electrode Architectures Using Silver-Polyoxometalate Clusters. 2018 , 140, 3134-3138	76
826	Insights into the Interconnection of the Electrodes and Electrolyte Species in Lithium-Sulfur Batteries Using Spatially Resolved Operando X-ray Absorption Spectroscopy and X-ray Fluorescence Mapping. 2018 , 122, 5303-5316	8
825	Shuttle Suppression by Polymer-Sealed Graphene-Coated Polypropylene Separator. 2018 , 10, 5534-5542	21
824	Direct Observation of Electrochemical Lithium-Sulfur Reaction inside Carbon Nanotubes. 2018 , 1, 807-813	13
823	Nitrogen-Doped Single-Walled Carbon Nanohorns as a Cost-Effective Carbon Host toward High-Performance Lithium-Sulfur Batteries. 2018 , 10, 5551-5559	41
822	An ion-conductive Li _{1.5} Al _{0.5} Ge _{1.5} (PO ₄) ₃ -based composite protective layer for lithium metal anode in lithium-sulfur batteries. 2018 , 377, 36-43	37
821	A simple approach for making a viable, safe, and high-performances lithium-sulfur battery. 2018 , 377, 26-35	48
820	Multifunctional Interlayer Based on Molybdenum Diphosphide Catalyst and Carbon Nanotube Film for Lithium-Sulfur Batteries. 2018 , 14, 1702853	108
819	Sulfur Immobilization by "Chemical Anchor" to Suppress the Diffusion of Polysulfides in Lithium-Sulfur Batteries. 2018 , 5, 1701274	73
818	Irreversible vs Reversible Capacity Fade of Lithium-Sulfur Batteries during Cycling: The Effects of Precipitation and Shuttle. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6107-A6118	3-9 35
817	Multifunctional Sandwich-Structured Electrolyte for High-Performance Lithium-Sulfur Batteries. 2018 , 5, 1700503	82
816	Synergetic Protective Effect of the Ultralight MWCNTs/NCQDs Modified Separator for Highly Stable Lithium-Sulfur Batteries. 2018 , 8, 1702288	191
815	Rational Design of Statically and Dynamically Stable Lithium-Sulfur Batteries with High Sulfur Loading and Low Electrolyte/Sulfur Ratio. 2018 , 30, 1705951	134

814	Aqueous-Processable Redox-Active Supramolecular Polymer Binders for Advanced Lithium/Sulfur Cells. 2018 , 30, 685-691	33
813	Do imaging techniques add real value to the development of better post-Li-ion batteries?. 2018 , 6, 3304-3327	29
812	High Rate Magnesium-Sulfur Battery with Improved Cyclability Based on Metal-Organic Framework Derivative Carbon Host. 2018 , 30, 1704166	95
811	Flexible and Hierarchically Structured Sulfur Composite Cathode Based on the Carbonized Textile for High-Performance Li-S Batteries. 2018 , 10, 3938-3947	28
810	Severe Loss of Confined Sulfur in Nanoporous Carbon for Li-S Batteries under Wetting Conditions. 2018 , 3, 387-392	23
809	Nanoporous carbon microspheres as matrix of sulfur to prepare sulfur/carbon cathode material for lithium-sulfur battery. 2018 , 24, 2509-2521	2
808	Functional Two-Dimensional Coordination Polymeric Layer as a Charge Barrier in Li-S Batteries. 2018 , 12, 836-843	63
807	Highly efficient and green fabrication of a modified C nanofiber interlayer for high-performance Li-S batteries. 2018 , 6, 2693-2699	47
806	Low Cost Metal Carbide Nanocrystals as Binding and Electrocatalytic Sites for High Performance Li-S Batteries. 2018 , 18, 1035-1043	222
805	Sulfur-Containing Molecules Grafted on Carbon Nanotubes as Highly Cyclable Cathodes for Lithium/Organic Batteries. 2018 , 5, 1732-1737	4
804	Evaluation of Processes for Mechanical Manufacturing of Composite Materials for Li-Sulfur Batteries. 2018 , 90, 513-520	4
803	Plateau targeted conditioning: An additive-free approach towards robust SEI formation in Li-S batteries for enhanced capacity and cycle life. 2018 , 49, 498-507	12
802	A new ether-based electrolyte for lithium sulfur batteries using a S@pPAN cathode. 2018 , 54, 5478-5481	31
801	Enhanced kinetics of polysulfide redox reactions on MoC/CNT in lithium-sulfur batteries. 2018 , 29, 295401	25
800	An ab initio study for probing iodization reactions on metallic anode surfaces of Li-S batteries. 2018 , 6, 7807-7814	6
799	Mesoporous TiO coating on carbon-sulfur cathode for high capacity Li-sulfur battery.. 2018 , 8, 11622-11632	10
798	Progress and Perspective of Solid-State Lithium-Sulfur Batteries. 2018 , 28, 1707570	138
797	Metal-organic framework derived hollow materials for electrochemical energy storage. 2018 , 6, 6754-6771	176

796	Polymer coating technology for high performance applications: Fundamentals and advances. 2018 , 55, 440-448		26
795	Dense Graphene Monolith for High Volumetric Energy Density Li-S Batteries. 2018 , 8, 1703438		78
794	Heteroatom dopings and hierarchical pores of graphene for synergistic improvement of lithium-sulfur battery performance. 2018 , 5, 1053-1061		17
793	Lightweight, free-standing 3D interconnected carbon nanotube foam as a flexible sulfur host for high performance lithium-sulfur battery cathodes. 2018 , 10, 206-215		72
792	N-doped yolk-shell hollow carbon sphere wrapped with graphene as sulfur host for high-performance lithium-sulfur batteries. 2018 , 427, 823-829		43
791	Enhanced sulfide chemisorption by conductive Al-doped ZnO decorated carbon nanoflakes for advanced Li-S batteries. 2018 , 11, 477-489		33
790	Leaf-like interconnected network structure of MWCNT/Co ₉ S ₈ /S for lithium-sulfur batteries. 2018 , 731, 964-970		27
789	The synergetic interaction between LiNO ₃ and lithium polysulfides for suppressing shuttle effect of lithium-sulfur batteries. 2018 , 11, 24-29		111
788	Electrocatalytically Active Niobium Sulfide Modified Carbon Cloth for Lithium-Sulfur Batteries. 2018 , 15,		8
787	Viability of Polysulfide-Retaining Barriers in Li-S Battery. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A5001-A5005	3.9	13
786	The Role of Metal Disulfide Interlayer in Li-S Batteries. 2018 , 122, 1014-1023		36
785	Perspective—Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6005-A6007	3.9	33
784	Catalytic Effects in Lithium-Sulfur Batteries: Promoted Sulfur Transformation and Reduced Shuttle Effect. 2018 , 5, 1700270		471
783	Mesoscale Physicochemical Interactions in Lithium-Sulfur Batteries: Progress and Perspective. 2018 , 15,		8
782	Designing a High-Performance Lithium-Sulfur Batteries Based on Layered Double Hydroxides-Carbon Nanotubes Composite Cathode and a Dual-Functional Graphene-Polypropylene-Al ₂ O ₃ Separator. 2018 , 28, 1704294		115
781	Controlling the Wettability between Freestanding Electrode and Electrolyte for High Energy Density Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A5006-A5013	3.9	27
780	C3B monolayer as an anchoring material for lithium-sulfur batteries. 2018 , 129, 38-44		72
779	Metal-organic-framework-derived N-C-Co film as a shuttle-suppressing interlayer for lithium sulfur battery. 2018 , 334, 2356-2362		55

778	A Li-Garnet composite ceramic electrolyte and its solid-state Li-S battery. 2018 , 382, 190-197		79
777	Self-Discharge Effects in Lithium-Sulfur Equivalent Circuit Networks for State Estimation. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6081-A6090	3.9	2
776	The Effect of Current Inhomogeneity on the Performance and Degradation of Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6073-A6080	3.9	19
775	Operando Spectromicroscopy of Sulfur Species in Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6043-A6050	3.9	18
774	New Separators in Lithium/Sulfur Cells with High-Capacity Cathodes. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6021-A6028	3.9	13
773	Review—From Nano Size Effect to In Situ Wrapping: Rational Design of Cathode Structure for High Performance Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A6034-A6042	3.9	20
772	Conductive Nanocrystalline Niobium Carbide as High-Efficiency Polysulfides Tamer for Lithium-Sulfur Batteries. 2018 , 28, 1704865		173
771	Non-uniformly functionalized titanium carbide-based MXenes as an anchoring material for Li-S batteries: A first-principles calculation. 2018 , 435, 210-215		36
770	Quantitative Galvanostatic Intermittent Titration Technique for the Analysis of a Model System with Applications in Lithium-Sulfur Batteries. 2018 , 5, 445-454		16
769	Enhanced performance of lithium-sulfur batteries with high sulfur loading utilizing ion selective MWCNT/SPANI modified separator. 2018 , 334, 305-312		53
768	Inorganic separators enable significantly suppressed polysulfide shuttling in high-performance lithium-sulfur batteries. 2018 , 6, 23720-23729		43
767	A rechargeable metal-free full-liquid sulfur-bromine battery for sustainable energy storage. 2018 , 6, 20737-20745		5
766	Metal-based nanostructured materials for advanced lithium-sulfur batteries. 2018 , 6, 23127-23168		128
765	A core-shell cathode substrate for developing high-loading, high-performance lithium-sulfur batteries. 2018 , 6, 24841-24847		17
764	Stabilization of all-solid-state Li-S batteries with a polymer-ceramic sandwich electrolyte by atomic layer deposition. 2018 , 6, 23712-23719		51
763	Capacity Recovery Effect in Lithium Sulfur Batteries for Electric Vehicles. 2018 , 9, 34		4
762	Novel cell designs and methods for characterizing lithium protective membranes for lithium metal batteries. 2018 , 151, 62-68		0
761	Computer Simulation of Cathode Materials for Lithium Ion and Lithium Batteries: A Review. 2018 , 1, 148-173		32

760	Designing Lithium-Sulfur Batteries with High-Loading Cathodes at a Lean Electrolyte Condition. 2018 , 10, 43749-43759		22
759	Does the Mg ²⁺ Battery Suffer Severe Shuttle Effect?. 2018 , 122, 28518-28527		3
758	Rate Constants of Electrochemical Reactions in a Lithium-Sulfur Cell Determined by Operando X-ray Absorption Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A3487-A3495	3.9	10
757	Functionalized Double Side Coated Separator for Lithium-Sulfur Batteries with Enhanced Cycle Life. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A3574-A3581	3.9	9
756	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. 2018 , 3, 2921-2930		51
755	Recent Progress in Liquid Electrolyte-Based Li ⁺ Batteries: Shuttle Problem and Solutions. 2018 , 1, 599-624		33
754	Method for Creation of Fine Sulfur Particles with Graphene Oxide for Lithium/Sulfur Cells. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A3257-A3262	3.9	2
753	Revisiting Scientific Issues for Industrial Applications of Lithium-Sulfur Batteries. 2018 , 1, 196-208		101
752	A Facile, Low-Cost Hot-Pressing Process for Fabricating Lithium-Sulfur Cells with Stable Dynamic and Static Electrochemistry. 2018 , 30, e1805571		29
751	Poly(4-styrene sulfonic acid) to Disperse Graphene for Applications in Lithium-Sulfur Batteries. 2018 , 5, 3835-3840		4
750	Electrocatalysis in Lithium Sulfur Batteries under Lean Electrolyte Conditions. 2018 , 130, 15775-15778		55
749	An Integrated Strategy towards Enhanced Performance of the Lithium-Sulfur Battery and its Fading Mechanism. 2018 , 24, 18544-18550		11
748	A 3D Configuration Electrode for Lithium-Sulfur Batteries. 2018 , 47, 7449-7455		2
747	From Ionic Liquids to Solvate Ionic Liquids: Challenges and Opportunities for Next Generation Battery Electrolytes. 2018 , 91, 1660-1682		65
746	A Review of Functional Binders in Lithium-Sulfur Batteries. 2018 , 8, 1802107		203
745	Shuttle in Polysulfide Shuttle: Friend or Foe?. 2018 , 122, 23845-23851		32
744	Electrocatalysis in Lithium Sulfur Batteries under Lean Electrolyte Conditions. 2018 , 57, 15549-15552		130
743	Assessment on the Self-Discharge Behavior of Lithium-Sulfur Batteries with LiNO ₂ -Possessing Electrolytes. 2018 , 10, 35175-35183		32

- 742 A Polysulfide-Immobilizing Polymer Retards the Shuttling of Polysulfide Intermediates in Lithium-Sulfur Batteries. **2018**, 30, e1804581 168
- 741 Architectural design and fabrication approaches for solid-state batteries. **2018**, 43, 775-781 48
- 740 Structure-Property of Lithium-Sulfur Nanoparticles via Molecular Dynamics Simulation. **2018**, 10, 37575-37585 13
- 739 Determination of Redox Reaction Mechanisms in Lithium-Sulfur Batteries. **2018**, 41-74 9
- 738 Enhanced Adsorptions to Polysulfides on Graphene-Supported BN Nanosheets with Excellent Li-S Battery Performance in a Wide Temperature Range. **2018**, 12, 11120-11129 84
- 737 Improved Cycling Performance of Lithium-Sulfur Cell through Supramolecular Interactions. **2018**, 122, 27843-27849 11
- 736 Electrocatalysis of Ruthenium Nanoparticles-Decorated Hollow Carbon Spheres for the Conversion of LiS/LiS in Lithium-Sulfur Batteries. **2018**, 10, 38853-38861 21
- 735 Synthesis and physical properties of new fluoroether sulfones. **2018**, 216, 118-123 4
- 734 Plane Double-Layer Structure of AC@S Cathode Improves Electrochemical Performance for Lithium-Sulfur Battery. **2018**, 6, 447 6
- 733 Synthesis and electrochemical properties of partially fluorinated ether solvents for lithium sulfur battery electrolytes. **2018**, 401, 271-277 13
- 732 Communication-Direct Observation of the Shuttle Phenomenon in Lithium-Sulfur Batteries via the Digital Holographic Method. *Journal of the Electrochemical Society*, **2018**, 165, A2866-A2868 3-9 4
- 731 Room-Temperature Liquid Na-K Anode Membranes. **2018**, 57, 14184-14187 52
- 730 Nontrivial Effects of "Trivial" Parameters on the Performance of Lithium-Sulfur Batteries. **2018**, 4, 22 8
- 729 Insight into Sulfur Confined in Ultramicroporous Carbon. **2018**, 3, 11290-11299 27
- 728 Volumetric expansion of Lithium-Sulfur cell during operation -Fundamental insight into applicable characteristics. **2018**, 10, 233-245 49
- 727 Room-Temperature Liquid Na-K Anode Membranes. **2018**, 130, 14380-14383 10
- 726 Advances in Polar Materials for Lithium-Sulfur Batteries. **2018**, 28, 1707520 181
- 725 Progress on the Critical Parameters for Lithium-Sulfur Batteries to be Practically Viable. **2018**, 28, 1801188 257

724	Analysis of the discharge/charge mechanism in VS4 positive electrode material. 2018 , 323, 32-36	12
723	Insight into the positive effect of porous hierarchy in S/C cathodes on the electrochemical performance of Li-S batteries. 2018 , 10, 11861-11868	24
722	Long-life and high-areal-capacity lithium-sulfur batteries realized by a honeycomb-like N, P dual-doped carbon modified separator. 2018 , 349, 327-337	72
721	Asymmetric self-supporting hybrid fluorinated carbon nanotubes/carbon nanotubes sponge electrode for high-performance lithium-polysulfide battery. 2018 , 349, 756-765	22
720	High Cycle Capability of All-Solid-State Lithium-Sulfur Batteries Using Composite Electrodes by Liquid-Phase and Mechanical Mixing. 2018 , 1, 2373-2377	47
719	Surface Functionalization of Carbon Architecture with Nano-MnO for Effective Polysulfide Confinement in Lithium-Sulfur Batteries. 2018 , 11, 2375-2381	31
718	Permselective SPEEK/Nafion Composite-Coated Separator as a Potential Polysulfide Crossover Barrier Layer for Li-S Batteries. 2018 , 10, 19721-19729	60
717	Stringed Tube on cube-nanohybrids as compact cathode matrix for high-loading and lean-electrolyte lithium-sulfur batteries. 2018 , 11, 2372-2381	193
716	Biological sulfur oxidation in wastewater treatment: A review of emerging opportunities. 2018 , 143, 399-415	112
715	Rationally-Directed Synthesis and Characterization of Nickel-Rich Cathode Material for Lithium Ion Battery. 2018 , 6, 2419-2428	4
714	Pomegranate-like microclusters organized by ultrafine Co nanoparticles@nitrogen-doped carbon subunits as sulfur hosts for long-life lithium-sulfur batteries. 2018 , 6, 14178-14187	63
713	Insight into the Function Mechanism of the Carbon Interlayer in Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A1880-A1885	3-9 5
712	Graphene and its derivatives in lithium-sulfur batteries. 2018 , 9, 319-335	96
711	In Situ Polysulfide Detection in Lithium Sulfur Cells. 2018 , 9, 3751-3755	6
710	In Situ Techniques for Developing Robust Li-S Batteries. 2018 , 2, 1800133	33
709	Toward Better Lithium-Sulfur Batteries: Functional Non-aqueous Liquid Electrolytes. 2018 , 1, 388-402	34
708	Comparison of the state of Lithium-Sulphur and lithium-ion batteries applied to electromobility. 2018 , 226, 1-12	32
707	Phenothiazine-Based Polymer Cathode Materials with Ultrahigh Power Densities for Lithium Ion Batteries. 2018 , 1, 3560-3564	43

706	Synthesis of a Flexible Freestanding Sulfur/Polyacrylonitrile/Graphene Oxide as the Cathode for Lithium/Sulfur Batteries. 2018 , 10,	9
705	Electrolyte Transport Evolution Dynamics in Lithium-Sulfur Batteries. 2018 , 122, 18329-18335	17
704	Metal-organic framework/carbon nanotube-coated polyethylene separator for improving the cycling performance of lithium-sulfur cells. 2018 , 283, 1291-1299	45
703	Separator Modification and Functionalization for Inhibiting the Shuttle Effect in Lithium-Sulfur Batteries. 2018 , 12, 1800249	26
702	Theoretical and experimental analysis of precipitation and solubility effects in lithium-sulfur batteries. 2018 , 284, 469-484	27
701	Preparation of Hierarchical Porous Carbon from Waterweed and Its Application in Lithium/Sulfur Batteries. 2018 , 11, 1535	5
700	Highly Stable Lithium-Sulfur Batteries Based on Laponite Nanosheet-Coated Celgard Separators. 2018 , 8, 1801778	81
699	Development and Challenges of Functional Electrolytes for High-Performance Lithium-Sulfur Batteries. 2018 , 28, 1800919	98
698	Hierarchical electrode architectures for high energy lithium-chalcogen rechargeable batteries. 2018 , 51, 668-679	8
697	Sulfur-polyaniline coated mesoporous carbon composite in combination with carbon nanotubes interlayer as a superior cathode assembly for high capacity lithium-sulfur cells. 2018 , 458, 751-761	18
696	The Importance of Chemical Reactions in the Charging Process of Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A1288-A1296	3.9 21
695	Adsorption and Electrochemical Oxidation of Small Sulfur-Containing Anions on Pt Electrodes in Organic Media. 2018 , 5, 2228-2234	0
694	Tailored Reaction Route by Micropore Confinement for Li-S Batteries Operating under Lean Electrolyte Conditions. 2018 , 8, 1800590	42
693	Systematic Exploration of the Role of a Modified Layer on the Separator in the Electrochemistry of Lithium-Sulfur Batteries. 2018 , 10, 30306-30313	16
692	Schwefel-Spillover auf Kohlenstoffmaterialien und mögliche Einflüsse auf Metall-Schwefel-Batterien. 2018 , 130, 13855-13859	0
691	Bio-Waste Derived Carbon as Interlayer and Scaffold for Li-S Batteries. 2018 , 3, 8901-8911	5
690	Sulfur Spillover on Carbon Materials and Possible Impacts on Metal-Sulfur Batteries. 2018 , 57, 13666-13670	22
689	Metal organic framework laden poly(ethylene oxide) based composite electrolytes for all-solid-state Li-S and Li-metal polymer batteries. 2018 , 285, 355-364	84

688	Enhanced polysulfide redox kinetics electro-catalyzed by cobalt phthalocyanine for advanced lithium-sulfur batteries. 2018 , 6, 17132-17141		34
687	Concurrent Real-Time Estimation of State of Health and Maximum Available Power in Lithium-Sulfur Batteries. 2018 , 11, 2133		6
686	Metal-organic framework@SiO ₂ as permselective separator for lithium-sulfur batteries. 2018 , 6, 14623-14632	7	37
685	Recent research trends in Li-S batteries. 2018 , 6, 11582-11605		130
684	Enabling High-Energy-Density Cathode for Lithium-Sulfur Batteries. 2018 , 10, 23094-23102		48
683	Facile one-pot synthesis of well-defined coaxial sulfur/polypyrrole tubular nanocomposites as cathodes for long-cycling lithium-sulfur batteries. 2018 , 10, 13037-13044		32
682	Sulfur Hosts against the Shuttle Effect. 2018 , 2, 1700345		95
681	Mesoporous Co ₃ N ₄ composite as a sulfur host for high-capacity and long-life lithium-sulfur batteries. 2018 , 53, 13143-13155		14
680	Pre-Film Formation and Cycle Performance of Silicon-Flake-Powder Negative Electrode in a Solvate Ionic Liquid for Silicon-Sulfur Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A1874-A1879	3.9	4
679	A robust sulfur host with dual lithium polysulfide immobilization mechanism for long cycle life and high capacity Li-S batteries. 2019 , 16, 344-353		109
678	High-rate lithium cycling in a scalable trilayer Li-garnet-electrolyte architecture. 2019 , 22, 50-57		147
677	Applications of XPS in the characterization of Battery materials. 2019 , 231, 2-10		49
676	Modeling and theoretical design of next-generation lithium metal batteries. 2019 , 16, 169-193		53
675	Ultrahigh rate sodium-ion storage of SnS/SnS ₂ heterostructures anchored on S-doped reduced graphene oxide by ion-assisted growth. 2019 , 143, 21-29		30
674	Lithium phosphorus oxynitride as an efficient protective layer on lithium metal anodes for advanced lithium-sulfur batteries. 2019 , 18, 414-422		74
673	Study for an effect of LiNO ₃ on polysulfide multistep reaction in Li/S battery. 2019 , 80, 283-291		8
672	Elucidation of structures and lithium environments for an organo-sulfur cathode. 2019 , 21, 18667-18679		5
671	Mo ₂ C/molybdenum carbide/carbon nanofibers as a shuttle inhibitor for lithium-sulfur battery with high sulfur loading. 2019 , 43, 7655		14

670	Revisiting the use of electrolyte additives in Li ⁺ batteries: the role of porosity of sulfur host materials. 2019 , 3, 2788-2797	8
669	Interfacial Incompatibility and Internal Stresses in All-Solid-State Lithium Ion Batteries. 2019 , 9, 1901810	46
668	Carbonized regenerated silk nanofiber as multifunctional interlayer for high-performance lithium-sulfur batteries. 2019 , 592, 117349	29
667	A Facile Strategy to Improve the Electrochemical Performance of Porous Organic Polymer-Based Lithium-Sulfur Batteries. 2019 , 7, 1900583	11
666	Polysulfide Shuttle Suppression by Electrolytes with Low-Density for High-Energy Lithium-Sulfur Batteries. 2019 , 7, 1900625	34
665	In Situ Electrochemical Mapping of Lithium-Sulfur Battery Interfaces Using AFM-SECM. 2019 , 19, 5229-5236	26
664	SMAP interlayer for inhibiting shuttle effect of lithium-sulfur battery. 2019 , 168, 108820	8
663	Pressure effect on mechanical stability and ground state optoelectronic properties of Li ₂ S ₂ produced by Lithium-Sulfur batteries discharge: GGA-PBE, GLLB-SC and mBJ investigation. 2019 , 99, 2789-2817	1
662	High lithium sulfide loading electrodes for practical Li/S cells with high specific energy. 2019 , 64, 103891	6
661	A labyrinth-like network electrode design for lithium-sulfur batteries. 2019 , 11, 14648-14653	8
660	Bio-derived N-doped porous carbon as sulfur hosts for high performance lithium sulfur batteries. 2019 , 26, 1426-1434	3
659	Lithium-Anode Protection in Lithium-Sulfur Batteries. 2019 , 1, 693-704	65
658	Duplex trapping and charge transfer with polysulfides by a diketopyrrolopyrrole-based organic framework for high-performance lithium-sulfur batteries. 2019 , 7, 18100-18108	41
657	Designing a Safe Electrolyte Enabling Long-Life Li/S Batteries. 2019 , 12, 4176-4184	15
656	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
655	Stable and Fast Lithium-Sulfur Battery Achieved by Rational Design of Multifunctional Separator. 2019 , 2, 216-224	21
654	Polydopamine-coated hierarchical tower-shaped carbon for high-performance lithium-sulfur batteries. 2019 , 319, 359-365	18
653	Synergistic Effect of Covalent Bonding and Physical Encapsulation of Sulfur in the Pores of a Microporous COF to Improve Cycling Performance in Li-S Batteries. 2019 , 25, 12394-12404	28

652	Solid/Solid Interfacial Architecturing of Solid Polymer Electrolyte-Based All-Solid-State Lithium-Sulfur Batteries by Atomic Layer Deposition. 2019 , 15, e1903952	35
651	Mitigating strategy in lithium dendrite formation in a LiâS cell in accelerated cycling tests. 2019 , 327, 135007	5
650	Challenges and perspectives for new material solutions in batteries. 2019 , 303-304, 113733	8
649	Three-dimensional image based modelling of transport parameters in lithium-sulfur batteries. 2019 , 21, 4145-4154	17
648	MXene Materials as Electrodes for Lithium-Sulfur Batteries. 2019 , 381-398	2
647	Improved state of charge estimation for lithium-sulfur batteries. 2019 , 26, 100943	15
646	All-Solid-State Printed Bipolar LiâS Batteries. 2019 , 9, 1901841	33
645	Rechargeable IronâSulfur Battery without Polysulfide Shuttling. 2019 , 9, 1902422	39
644	Exploration of sulfur in mixt anchor materials for lithium sulfur batteries. 2019 , 6, 115522	1
643	Transparent Conducting Thin Film Preparation of Carbon Nanotube. 2019 ,	
642	Investigation of the Effects of Copper Nanoparticles on MagnesiumâSulfur Battery Performance: How Practical Is Metallic Copper Addition?. 2019 , 2, 6800-6807	13
641	Investigation of the Nanocrystal CoS Embedded in 3D Honeycomb-like Graphitic Carbon with a Synergistic Effect for High-Performance Lithium Sulfur Batteries. 2019 , 11, 33987-33999	51
640	Polycarboxylate Functionalized Graphene/S Composite Cathodes and Modified Cathode-Facing Side Coated Separators for Advanced Lithium-Sulfur Batteries. 2019 , 14, 265	8
639	Hollow Carbon Nanoballs Coupled with Ultrafine TiO2 Nanoparticles as Efficient Sulfur Hosts for LithiumâSulfur Batteries. 2019 , 58, 18197-18204	9
638	Rational Design of a Gel-Polymer-Inorganic Separator with Uniform Lithium-Ion Deposition for Highly Stable Lithium-Sulfur Batteries. 2019 , 11, 35788-35795	17
637	Titanium Dioxide Wrapped MOFs-Derived Cobalt-Doped Porous Carbon Polyhedrons as Sulfur Hosts for Advanced LithiumâSulfur Batteries. 2019 , 200, 82-89	4
636	On the influence of nucleation and growth of S8 and Li2S in lithium-sulfur batteries. 2019 , 322, 134719	26
635	Redox-active polymers (redoxmers) for electrochemical energy storage. 2019 , 9, 1151-1167	8

634	Modified Separators with Ultrathin Graphite Coating Simultaneously Mitigate the Issues of Metal Dendrites and Lithium Polysulfides to Provide Stable Lithium-Sulfur Batteries. 2019 , 7, 16604-16611		16
633	On the Efficacy of Anode Reversibility in Presence of Li ₂ S ₈ : A Case Study for Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A3098-A3101	3.9	6
632	Cellulose Separators With Integrated Carbon Nanotube Interlayers for Lithium-Sulfur Batteries: An Investigation into the Complex Interplay between Cell Components. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A3235-A3241	3.9	13
631	Research Progress of the Solid State Lithium-Sulfur Batteries. 2019 , 7,		24
630	A new metallic E-conjugated carbon sheet used for the cathode of Li-S batteries.. 2018 , 9, 92-98		4
629	Plasma-functionalized carbon-layered separators for improved performance of lithium sulfur batteries. 2019 , 7, 3772-3782		23
628	Outstanding cycle stability and rate capabilities of the all-solid-state Li-S battery with a Li ₇ P ₃ S ₁₁ glass-ceramic electrolyte and a core-shell S@BP2000 nanocomposite. 2019 , 7, 3895-3902		33
627	Towards online tracking of the shuttle effect in lithium sulfur batteries using differential thermal voltammetry. 2019 , 21, 765-772		9
626	Mg Cathode Materials and Electrolytes for Rechargeable Mg Batteries: A Review. 2019 , 2, 115-127		61
625	Sulfur Redox Reactions at Working Interfaces in Lithium-Sulfur Batteries: A Perspective. 2019 , 6, 1802046		95
624	CoFe ₂ O ₄ coated carbon fiber paper fabricated via a spray pyrolysis method for trapping lithium polysulfide in Li-S batteries. 2019 , 478, 341-346		19
623	High-performance lithium-sulfur batteries fabricated from a three-dimensional porous reduced graphene oxide/La ₂ O ₃ microboards/sulfur aerogel. 2019 , 45, 9017-9024		20
622	Rational Design of TiO-TiO Heterostructure/Polypyrrole as a Multifunctional Sulfur Host for Advanced Lithium-Sulfur Batteries. 2019 , 11, 5055-5063		69
621	Lithium-ion batteries: outlook on present, future, and hybridized technologies. 2019 , 7, 2942-2964		579
620	The combination of intercalation and conversion reactions to improve the volumetric capacity of the cathode in Li-S batteries. 2019 , 7, 3618-3623		16
619	Polyisoprene Captured Sulfur Nanocomposite Materials for High-Areal-Capacity Lithium Sulfur Battery. 2019 , 1, 1965-1970		27
618	RuO ₂ -coated MoS ₂ Nanosheets as Cathode Catalysts for High Efficiency Li-O ₂ Batteries. 2019 , 40, 642-649		9
617	Sulfonic Acid Based Complex Framework Materials (CFM): Nanostructured Polysulfide Immobilization Systems for Rechargeable Lithium-Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1827-A1835	3.9	21

616	Graphitic Mesoporous Carbon/Mn ₇ C ₃ as Polysulfide Host for High Rate Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A2028-A2034	3.9	10
615	Enhanced rate capability due to highly active Ta ₂ O ₅ catalysts for lithium sulfur batteries. 2019 , 435, 226707		15
614	A solution-processed binary composite as a cathode material in lithium-sulfur batteries. 2019 , 125, 1		4
613	A Li ₂ S-TiS ₂ -Electrolyte Composite for Stable Li ₂ S-Based Lithium-Sulfur Batteries. 2019 , 9, 1901397		25
612	Three-Dimensionally Aligned Sulfur Electrodes by Directional Freeze Tape Casting. 2019 , 19, 4731-4737		19
611	Lithium-sulfur battery cathodes made of porous biochar support CoFe@NC metal nanoparticles derived from Prussian blue analogues. 2019 , 25, 5297-5304		9
610	Carbon nanotubes/SiC prepared by catalytic chemical vapor deposition as scaffold for improved lithium-sulfur batteries. 2019 , 21, 1		5
609	Carbon nanotube-modified separator for lithium-sulfur batteries: Effects of mass loading and adding polyvinylpyrrolidone on electrochemical performance. 2019 , 134, 69-76		11
608	A Comprehensive Understanding of Lithium-Sulfur Battery Technology. 2019 , 29, 1901730		156
607	Suppressing the Shuttle Effect in Lithium-Sulfur Batteries by a UiO-66-Modified Polypropylene Separator. 2019 , 4, 10328-10335		33
606	Bio-inspired poly(3,4-ethylenedioxythiophene): Poly(styrene sulfonate)-sulfur@polyacrylonitrile electrospun nanofibers for lithium-sulfur batteries. 2019 , 431, 250-258		19
605	Anchored monodispersed silicon and sulfur nanoparticles on graphene for high-performance lithiated silicon-sulfur battery. 2019 , 23, 284-291		10
604	Sulfur impregnation in polypyrrole-modified MnO nanotubes: efficient polysulfide adsorption for improved lithium-sulfur battery performance. 2019 , 11, 10097-10105		23
603	A multi-functional interface derived from thiol-modified mesoporous carbon in lithium-sulfur batteries. 2019 , 7, 13372-13381		11
602	A New Finding on the Enhancement of the Ability of Polysulfide Adsorption of V ₂ O ₅ by Doping Tungsten in Lithium-Sulfur Batteries. 2019 , 7, 1900405		6
601	Metal-organic frameworks (MOFs) and their composites as electrodes for lithium battery applications: Novel means for alternative energy storage. 2019 , 393, 48-78		123
600	Effect of Electrolyte-to-Sulfur Ratio in the Cell on the Li-S Battery Performance. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1490-A1500	3.9	26
599	A Selection Rule for Hydrofluoroether Electrolyte Cosolvent: Establishing a Linear Free-Energy Relationship in Lithium-Sulfur Batteries. 2019 , 131, 10701-10705		3

598	A Selection Rule for Hydrofluoroether Electrolyte Cosolvent: Establishing a Linear Free-Energy Relationship in Lithium-Sulfur Batteries. 2019 , 58, 10591-10595	19
597	Electrochemical Behavior of Microparticulate Silicon Anodes in Ether-Based Electrolytes: Why Does LiNO ₃ Affect Negatively?. 2019 , 2, 4411-4420	4
596	LAGP Li Interface Modification through a Wetted Polypropylene Interlayer for Solid State Li-Ion and LiâS batteries. 2019 , 2, 4118-4125	28
595	Current Status and Future Prospects of Metal-Sulfur Batteries. 2019 , 31, e1901125	237
594	Interlayers for lithium-based batteries. 2019 , 23, 112-136	22
593	Manipulating the redox kinetics of Li S chemistry by porous hollow cobalt-B, N codoped-graphitic carbon polyhedrons for high performance lithium-sulfur batteries. 2019 , 149, 564-571	28
592	BC ₂ N monolayers as promising anchoring materials for lithium-sulfur batteries: First-principles insights. 2019 , 149, 530-537	30
591	A polar TiO ₂ /MWCNT coating on a separator significantly suppress the shuttle effect in a lithium-sulfur battery. 2019 , 310, 1-12	31
590	High-performance Li-S battery cathode enabled by immobilizing sulfur in hybrid Janus host with hierarchical structure. 2019 , 249, 173-176	6
589	Effect of Electrolyte Composition on Performance and Stability of LithiumâSulfur Batteries. 2019 , 7, 1900197	9
588	Cathode Framework of Nanostructured Titanium Nitride/Graphene for Advanced LithiumâSulfur Batteries. 2019 , 6, 2796-2804	5
587	New Insight into the âShuttle Mechanismâbf Rechargeable Lithium-Sulfur Batteries. 2019 , 6, 2782-2787	14
586	A Sulfur-layered Separator Enabling an Innovative Flexible Li?S Battery without Integrating Elemental Sulfur in the Cathode. 2019 , 40, 517-521	4
585	Sulfur-Based Composite Electrode with Interconnected Mesoporous Carbon for All-Solid-State LithiumâSulfur Batteries. 2019 , 7, 1900077	18
584	Density functional theory calculations for interactions between metal-free phthalocyanine and lithium polysulfides. 2019 , 423, 34-39	4
583	Facile synthesis of Ti ₄ O ₇ on hollow carbon spheres with enhanced polysulfide binding for high-performance lithiumâSulfur batteries. 2019 , 7, 10494-10504	30
582	Mesoscale Elucidation of Self-Discharge-Induced Performance Decay in Lithium-Sulfur Batteries. 2019 , 11, 13326-13333	5
581	Effect of Pore Size in Three Dimensionally Ordered Macroporous Polyimide Separator on Lithium Deposition/Dissolution Behavior. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A754-A761	3-9 17

580	Synthesis of activated carbons derived from avocado shells as cathode materials for lithium-sulfur batteries. 2019 , 1, 1		11
579	Mesoporous Carbon-dispersed Carbon Nanotube Film Electrode Incorporated with Sulfur for Long-Life Li-S Batteries. 2019 , 40, 412-417		2
578	Introduction to Lithium-Sulfur Batteries. 2019 , 5-13		5
577	Mechanisms of Shuttle Effect and Loss of Capacity. 2019 , 15-21		
576	Mg-S Batteries. 2019 , 175-182		
575	Modeling of Batteries. 2019 , 201-218		3
574	Methods and Equipment for Measurement of Battery Parameters. 2019 , 219-230		1
573	Repelling Polysulfide Ions by Boron Nitride Nanosheet Coated Separators in Lithium-Sulfur Batteries. 2019 , 2, 2620-2628		26
572	Graphene/Sulfur@Graphene Composite Structure Material for a Lithium-Sulfur Battery Cathode. 2019 , 2019, 1-10		5
571	Effective Bipyridine and Pyrazine-Based Polysulfide Dissolution Resistant Complex Framework Material Systems for High Capacity Rechargeable Lithium-Sulfur Batteries. 2019 , 7, 1900141		4
570	Cathode-Supported All-Solid-State Lithium-Sulfur Batteries with High Cell-Level Energy Density. 2019 , 4, 1073-1079		86
569	Inhibition of polysulfide diffusion in lithium-sulfur batteries: mechanism and improvement strategies. 2019 , 7, 12381-12413		96
568	Carbon/Gelatin Microcapsules for Sulfur Cathode: A Micro-Reactor Suppressing "Shuttle Effect" <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1045-A1050	3.9	5
567	Toward Improving the Areal Energy Density of Lithium-Sulfur Batteries with Ultramicroporous Carbon-Sulfur Composite Electrodes. 2019 , 7, 1900183		3
566	Structural and Transport Properties of Li/S Battery Electrolytes: Role of the Polysulfide Species. 2019 , 123, 10167-10177		23
565	Observation of Chemomechanical Failure and the Influence of Cutoff Potentials in All-Solid-State Li-S Batteries. 2019 , 31, 2930-2940		69
564	NiCo ₂ S ₄ yolk-shell hollow spheres with physical and chemical interaction toward polysulfides for advanced lithium-sulfur batteries. 2019 , 25, 4047-4056		13
563	On the Factors Affecting Aging and Self-Discharge of Lithium-Sulfur Cells. Effect of Positive Electrode Composition. 2019 , 7, 1900134		4

562	Facile Synthesis of Hierarchical Sulfur Composites for Lithium-Sulfur Batteries. 2019 , 6, 2438-2447	1
561	Preparation of activated carbon derived from biomass and its application in lithium-sulfur batteries. 2019 , 26, 1325-1333	13
560	Dual functional effect of the ferroelectricity embedded interlayer in lithium sulfur battery. 2019 , 419, 35-41	18
559	A novel porous C ₄ N ₄ monolayer as a potential anchoring material for lithium-sulfur battery design. 2019 , 7, 4134-4144	99
558	Unraveling the Formation Mechanism of Solid-Liquid Electrolyte Interphases on LiPON Thin Films. 2019 , 11, 9539-9547	18
557	Toward Environmentally Friendly Lithium Sulfur Batteries: Probing the Role of Electrode Design in MoS ₂ -Containing Li-S Batteries with a Green Electrolyte. 2019 , 7, 5209-5222	11
556	Promoting sulfur immobilization by a hierarchical morphology of hollow carbon nanosphere clusters for high-stability Li-S battery. 2019 , 7, 6250-6258	38
555	Enhanced electrochemical performance of lithium-sulfur battery by negating polysulfide shuttling and interfacial resistance through aluminium nanolayer deposition on a polypropylene separator. 2019 , 25, 1645-1657	8
554	Recent In Situ/Operando Characterization of Lithium-Sulfur Batteries. 2019 , 21-40	1
553	Recent advances in separators to mitigate technical challenges associated with re-chargeable lithium sulfur batteries. 2019 , 7, 6596-6615	115
552	Modified carbon nanotubes for water-based cathode slurries for lithium-sulfur batteries. 2019 , 34, 634-641	3
551	Nano-MgO/AB decorated separator to suppress shuttle effect of lithium-sulfur battery. 2019 , 1, 1589-1597	19
550	Substituting copolymeric poly(alkylenetetrasulfide) for elemental sulfur to diminish the shuttling effect of modified intermediate polysulfides for high-performance lithium-sulfur batteries. 2019 , 55, 3729-3732	9
549	Uniform Mesoporous MnO Nanospheres as a Surface Chemical Adsorption and Physical Confinement Polysulfide Mediator for Lithium-Sulfur Batteries. 2019 , 11, 10624-10630	46
548	Recent advances in shuttle effect inhibition for lithium sulfur batteries. 2019 , 23, 707-732	123
547	A high-entropy metal oxide as chemical anchor of polysulfide for lithium-sulfur batteries. 2019 , 23, 678-683	81
546	The adsorption effect of freestanding SiO ₂ -decorated stabilized polyacrylonitrile interlayers in lithium-sulfur batteries. 2019 , 48, 4353-4361	5
545	Engineering High-Performance Sulfur Electrode from Industrial Conductive Carbons. 2019 , 7, 5515-5523	1

544	Size-Dependent Charge Storage Behavior of Mesoporous Hollow Carbon Spheres for High-Performance Li ₂ S Batteries. 2019 , 123, 5881-5889	5
543	Modelling Coupled Ion Motion in Electrolyte Solutions for Lithium-Sulfur Batteries. 2019 , 2, 473-481	8
542	Understanding the Impact of a Nonfluorinated Ether-Based Electrolyte on Li-S Battery. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A3653-A3659	3.9 5
541	Promoting polysulfide conversion by catalytic ternary Fe ₃ O ₄ /carbon/graphene composites with ordered microchannels for ultrahigh-rate lithium-sulfur batteries. 2019 , 7, 25078-25087	43
540	Insights into the electrochemical processes of rechargeable magnesium-sulfur batteries with a new cathode design. 2019 , 7, 25490-25502	33
539	Abundant Defects-Induced Interfaces Enabling Effective Anchoring for Polysulfides and Enhanced Kinetics in Lean Electrolyte Lithium-Sulfur Batteries. 2019 , 11, 46767-46775	13
538	New-type SiO ₂ /AP interlayer for inhibiting shuttle effect of Li ₂ S battery. 2019 , 6, 126310	0
537	Multifunctional Effects of Sulfonyl-Anchored, Dual-Doped Multilayered Graphene for High Areal Capacity Lithium Sulfur Batteries. 2019 , 5, 1946-1958	22
536	Hydrogen Bond-Assisted Poly (ethyl oxazoline) Polymer as a Functional Binder to Stabilize the Electrochemical Performance of Sulfur Cathodes. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A4080-A4087	3.9 1
535	Building well-defined hierarchical nanostructures for sulfur and silicon electrodes. 2019 , 29, 672-678	1
534	A N-doped graphene-cobalt nickel sulfide aerogel as a sulfur host for lithium-sulfur batteries.. 2019 , 9, 32247-32257	7
533	A wet-laid carbon paper with 3D conductive structure as an interlayer for lithium-sulfur batteries. 2019 , 6, 125547	1
532	Designing Li-protective layer via SOCl ₂ additive for stabilizing lithium-sulfur battery. 2019 , 18, 222-228	52
531	Single-atom catalyst boosts electrochemical conversion reactions in batteries. 2019 , 18, 246-252	121
530	Monolithic heterojunction quasi-solid-state battery electrolytes based on thermodynamically immiscible dual phases. 2019 , 12, 559-565	21
529	Porous Carbon Hosts for Lithium-Sulfur Batteries. 2019 , 25, 3710-3725	85
528	Constructing flexible coaxial-cable structured sulfur cathode with carbon nanomaterials on textile. 2019 , 144, 525-531	2
527	Melamine assisted liquid exfoliation approach for the synthesis of nitrogen doped graphene-like carbon nano sheets from bio-waste bagasse material and its application towards high areal density Li-S batteries. 2019 , 144, 582-590	40

526	Review on areal capacities and long-term cycling performances of lithium sulfur battery at high sulfur loading. 2019 , 18, 289-310		159
525	Mesopore Channel Length Control in Ordered Mesoporous Carbon Hosts for High Performance Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5244-A5251	3-9	6
524	Suppressing Self-Discharge with Polymeric Sulfur in Li-S Batteries. 2018 , 12,		3
523	Freestanding sulfur-graphene oxide/carbon composite paper as a stable cathode for high performance lithium-sulfur batteries. 2019 , 299, 27-33		34
522	Lithiated Defect Sites in Zr Metal-Organic Framework for Enhanced Sulfur Utilization in Li-S Batteries. 2019 , 11, 2159-2167		36
521	Tailoring the structure of clew-like carbon skeleton with 2D Co-MOF for advanced Li-S cells. 2019 , 469, 404-413		15
520	Stabilizing Li-S Battery Through Multilayer Encapsulation of Sulfur. 2019 , 9, 1802213		46
519	A Simple Analytical Model of Capacity Fading for Lithium-Sulfur Cells. 2019 , 34, 5779-5786		5
518	Embedding S@TiO ₂ nanospheres into MXene layers as high rate cyclability cathodes for lithium-sulfur batteries. 2019 , 295, 1067-1074		57
517	New Insights Related to Rechargeable Lithium Batteries: Li Metal Anodes, Ni Rich LiNi _x Co _y Mn _z O ₂ Cathodes and Beyond Them. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5265-A5274	3-9	31
516	Refining Interfaces between Electrolyte and Both Electrodes with Carbon Nanotube Paper for High-Loading Lithium-Sulfur Batteries. 2019 , 11, 6986-6994		21
515	Organic Alkali Metal Salt Derived Three-Dimensional N-Doped Porous Carbon/Carbon Nanotubes Composites with Superior Li-S Battery Performance. 2019 , 7, 3995-4003		13
514	Separator Membranes for Lithium-Sulfur Batteries: Design Principles, Structure, and Performance. 2019 , 7, 1800819		13
513	Cyclic Voltammetry in Lithium-Sulfur Batteries—Challenges and Opportunities. 2019 , 7, 1801001		51
512	Sulfur Cathodes. 2019 , 33-69		
511	Electrolyte for Lithium-Sulfur Batteries. 2019 , 71-119		1
510	Lithium Sulfide. 2019 , 147-183		
509	Degradation in Lithium-Sulfur Batteries. 2019 , 185-226		

508 Lithium-Sulfur Model Development. **2019**, 229-247

507 Battery Management Systems - State Estimation for Lithium-Sulfur Batteries. **2019**, 249-272

0

506 Ultralight polyethylenimine/porous carbon modified separator as an effective polysulfide-blocking barrier for lithium-sulfur battery. **2019**, 299, 749-755

24

505 Carbon/Sulfur Composites Stabilized with Nano-TiNi for High-Performance Li-S Battery Cathodes. **2019**, 2, 1537-1543

6

504 A functional separator modified by synergistic MoS₂ and activated carbon for improved-performance lithium sulfur batteries. **2019**, 6, 045506

8

503 Achieving three-dimensional lithium sulfide growth in lithium-sulfur batteries using high-donor-number anions. **2019**, 10, 188

120

502 Biomass-derived porous carbon materials for advanced lithium sulfur batteries. **2019**, 34, 171-185

69

501 Efficient Charging of Lithium-Sulfur Batteries by Triboelectric Nanogenerator Based on Pulse Current. **2019**, 4, 1800326

6

500 A novel wheel-confined composite as cathode in Li-S batteries with high capacity retention. **2019**, 776, 504-510

8

499 Covalent bonding of sulfur nanoparticles to unzipped multiwalled carbon nanotubes for high-performance lithium-sulfur batteries. **2019**, 30, 024001

18

498 A poly (vinylidene fluoride-hexafluoropropylene) based three-dimensional network gel polymer electrolyte for solid-state lithium-sulfur batteries. **2019**, 358, 1047-1053

79

497 Cardanol Benzoxazines: A Versatile Monomer with Advancing Applications. **2019**, 220, 1800470

22

496 Electrochemical performance and modeling of lithium-sulfur batteries with varying carbon to sulfur ratios. **2019**, 43, 874-883

13

495 Manipulating Polysulfide Conversion with Strongly Coupled Fe₃O₄ and Nitrogen Doped Carbon for Stable and High Capacity Lithium-Sulfur Batteries. **2019**, 29, 1807309

56

494 Palladium nanocrystals-imbedded mesoporous hollow carbon spheres with enhanced electrochemical kinetics for high performance lithium sulfur batteries. **2019**, 143, 878-889

54

493 Solid-state energy storage devices based on two-dimensional nano-materials. **2019**, 20, 269-290

36

492 Polymers for high performance Li-S batteries: Material selection and structure design. **2019**, 89, 19-60

68

491 In-situ measurements of stress evolution in composite sulfur cathodes. **2019**, 16, 491-497

14

490	Functionalized N-doped hollow carbon spheres as sulfur host with enhanced electrochemical performances of lithium-sulfur batteries. 2019 , 25, 503-511	14
489	Lithium nitrate: A double-edged sword in the rechargeable lithium-sulfur cell. 2019 , 16, 498-504	25
488	An imine-linked covalent organic framework as the host material for sulfur loading in lithium-sulfur batteries. 2019 , 28, 54-60	53
487	The role of functional materials to produce high areal capacity lithium sulfur battery. 2020 , 42, 195-209	50
486	Recent progress in fluorinated electrolytes for improving the performance of Li-S batteries. 2020 , 41, 149-170	43
485	A sandwich-structure composite carbon layer coated on separator to trap polysulfides for high-performance lithium sulfur batteries. 2020 , 815, 152189	14
484	High-Sulfur-Content Graphene-Based Composite through Ethanol Evaporation for High-Energy Lithium-Sulfur Battery. 2020 , 13, 1593-1602	9
483	Promoted rate and cycling capability of Li-S batteries enabled by targeted selection of co-solvent for the electrolyte. 2020 , 25, 131-136	13
482	Reversible insertion/extraction of polysulfides into/from polyaniline as an effective strategy to confine polysulfides in lithium-sulfur batteries. 2020 , 26, 191-199	5
481	A Game Changer: Functional Nano/Micromaterials for Smart Rechargeable Batteries. 2020 , 30, 1902499	28
480	Rationalizing Electrocatalysis of Li-S Chemistry by Mediator Design: Progress and Prospects. 2020 , 10, 1901075	184
479	Separator coatings as efficient physical and chemical hosts of polysulfides for high-sulfur-loaded rechargeable lithium-sulfur batteries. 2020 , 44, 51-60	30
478	Novel construction of nanostructured carbon materials as sulfur hosts for advanced lithium-sulfur batteries. 2020 , 44, 70-91	15
477	How do organic polysulphides improve the performance of Li-S batteries?. 2020 , 330, 135253	4
476	Scalable production of nitrogen-doped carbons for multilayer lithium-sulfur battery cells. 2020 , 161, 190-197	28
475	LiS growth on graphene: Impact on the electrochemical performance of Li-S batteries. 2020 , 152, 014701	7
474	Covalent fixing of sulfur in metal-sulfur batteries. 2020 , 13, 432-471	64
473	Confining sulfur particles in clay nanotubes with improved cathode performance of lithium-sulfur batteries. 2020 , 450, 227698	23

472	Na ₄ Mn ₉ O ₁₈ nanowires wrapped by reduced graphene oxide as efficient sulfur host material for lithium/sulfur batteries. 2020 , 24, 111-119	8
471	3D Honeycomb-Shaped Co Porous Carbon Interlayer for Inhibiting the Shuttle Effect of Lithium-Sulfur Batteries. 2020 , 49, 2050-2057	1
470	Facet-tailoring five-coordinated Ti sites and structure-optimizing electron transfer in a bifunctional cathode with titanium nitride nanowire array to boost the performance of Li ₂ S ₆ -based lithium-sulfur batteries. 2020 , 26, 40-45	30
469	Uncovering the Shuttle Effect in Organic Batteries and Counter-Strategies Thereof: A Case Study of the N,N'-Dimethylphenazine Cathode. 2020 , 132, 4052-4063	5
468	Lithium Molybdate (Li ₂ MoO ₃)-Sulfur Battery. 2020 , 3, 275-283	4
467	Numerical investigation of lithium-sulfur batteries by cyclic voltammetry. 2020 , 27, 101158	3
466	Uncovering the Shuttle Effect in Organic Batteries and Counter-Strategies Thereof: A Case Study of the N,N'-Dimethylphenazine Cathode. 2020 , 59, 4023-4034	19
465	Designing Highly Conductive Functional Groups Improving Guest-Host Interactions in Li/S Batteries. 2020 , 16, e1905585	21
464	Functional separators for the batteries of the future. 2020 , 449, 227556	13
463	Donor dominated triazine-based microporous polymer as a polysulfide immobilizer and catalyst for high-performance lithium-sulfur batteries. 2020 , 392, 123694	46
462	Effective Stabilization of Long-Cycle Lithium-Sulfur Batteries Utilizing In Situ Prepared Graphdiyne-Modulated Separators. 2020 , 8, 1741-1750	12
461	Hydroxyapatite nanowires composite interlayer based on aramid fiber paper for Li-S batteries. 2020 , 856, 113662	4
460	A bipolar modified separator using TiO ₂ nanosheets anchored on N-doped carbon scaffold for high-performance Li-S batteries. 2020 , 55, 152-158	16
459	Power Ready for Driving Catalysis and Sensing: Nanomaterials Designed for Renewable Energy Storage. 2020 , 307-346	2
458	Recent advances in nanomaterials for high-performance Li-S batteries. 2020 , 47, 86-106	33
457	In situ surface protection of lithium metal anode in Lithium-Selenium disulfide batteries with ionic liquid-based electrolytes. 2020 , 69, 104434	12
456	A Review of Functional Separators for Lithium Metal Battery Applications. 2020 , 13,	27
455	Current status and future perspectives of lithium metal batteries. 2020 , 480, 228803	37

454	Highly dispersed MoP encapsulated in P-doped porous carbon boosts polysulfide redox kinetics of lithium-sulfur batteries. 2020 , 18, 100531	15
453	Abnormal Overcharging during Lithium-Ether Co-Intercalation in a Graphite System: Formation of Shuttling Species by the Reduction of the TFSI Anion. 2020 , 12, 49541-49548	1
452	Spatial Effects between Two 3D Self-Supported Carbon-Nanotube-Based Skeleton as Binder-Free Cathodes for Lithium-Sulfur Batteries. 2020 , 5, 11383-11390	2
451	Ultra-fast and high-energy density polysulfide-eight ion batteries. 2020 , 477, 229018	4
450	Metal-Based Electrocatalysts for High-Performance Lithium-Sulfur Batteries: A Review. 2020 , 10, 1137	4
449	Dual redox mediators accelerate the electrochemical kinetics of lithium-sulfur batteries. 2020 , 11, 5215	47
448	Coordination effect of biocatalyst dithiothreitol and aramid fiber interlayer for lithium-sulfur batteries. 2020 , 31, 14233-14240	2
447	The importance of sulfur host structural preservation for lithium-sulfur battery performance. 2020 , 8, 26085-26097	6
446	Will Sulfide Electrolytes be Suitable Candidates for Constructing a Stable Solid/Liquid Electrolyte Interface?. 2020 , 12, 52845-52856	4
445	Shielding Polysulfide Intermediates by an Organosulfur-Containing Solid Electrolyte Interphase on the Lithium Anode in Lithium-Sulfur Batteries. 2020 , 32, e2003012	53
444	Pyrolyzed pencil graphite coated cellulose paper as an interlayer: An effective approach for high-performance lithium-sulfur battery. 2020 , 533, 147483	12
443	Exploring and Understanding the Roles of Li ₂ Sn and the Strategies to beyond Present Li-S Batteries. 2020 , 6, 2533-2557	62
442	Modeling the discharge behavior of a lithium-sulfur battery. 2020 , 44, 10599-10611	6
441	Mitigation of Polysulfide Shuttling by Interlayer/Permselective Separators in Lithium-Sulfur Batteries. 2020 , 3, 8095-8129	26
440	Lithium oxidation and electrolyte decomposition at Li-metal/liquid electrolyte interfaces. 2020 , 8, 17036-17055	8
439	Borophene-like boron subunits-inserted molybdenum framework of MoB ₂ enables stable and quick-acting Li ₂ S ₆ -based lithium-sulfur batteries. 2020 , 32, 216-224	21
438	Review of the application of biomass-derived porous carbon in lithium-sulfur batteries. 2020 , 26, 4765-4781	14
437	Defective VSe-Graphene Heterostructures Enabling Electrocatalyst Evolution for Lithium-Sulfur Batteries. 2020 , 14, 11929-11938	61

436	The Surface Chemistry of Thin Lithium Metal Electrodes in Lithium-Sulfur Cells. 2020 , 3, 1370-1376	8
435	Fast Heat Transport Inside Lithium-Sulfur Batteries Promotes Their Safety and Electrochemical Performance. 2020 , 23, 101576	16
434	Reaction heterogeneity in practical high-energy lithium-sulfur pouch cells. 2020 , 13, 3620-3632	59
433	A Review of Solid-State Lithium-Sulfur Battery: Ion Transport and Polysulfide Chemistry. 2020 , 34, 11942-11961	16
432	ZnO quantum dot-modified rGO with enhanced electrochemical performance for lithium-sulfur batteries.. 2020 , 10, 32966-32975	6
431	Separators Modified Using MoO ₂ @Carbon Nanotube Nanocomposites as Dual-Mode Li-Polysulfide Anchoring Materials for High-Performance Anti-Self-Discharge Lithium-Sulfur Batteries. 2020 , 8, 15134-15148	7
430	Lithium Polysulfide Interaction with Group III Atoms-Doped Graphene: A Computational Insight. 2020 , 6, 46	3
429	Hollow multishelled structural NiO as a "helter" for high-performance Li-S batteries. 2020 , 4, 2971-2975	5
428	Nanostructured Sulfur and Sulfides for Advanced Lithium/Sulfur Cells. 2020 , 7, 3927-3942	4
427	Electrocatalytic Cathodes Based on Cobalt Nanoparticles Supported on Nitrogen-Doped Porous Carbon by Strong Electrostatic Adsorption for Advanced Lithium-Sulfur Batteries. 2020 , 34, 13038-13047	3
426	A fundamental look at electrocatalytic sulfur reduction reaction. 2020 , 3, 762-770	206
425	Highly Stable Lithium-Sulfur Batteries Achieved by a SnS/Porous Carbon Nanosheet Architecture Modified Celgard Separator. 2020 , 30, 2006297	18
424	Insights into Self-Discharge of Lithium and Magnesium-Sulfur Batteries. 2020 , 3, 8457-8474	14
423	Rechargeable Calcium-Sulfur Batteries Enabled by an Efficient Borate-Based Electrolyte. 2020 , 16, e2001806	12
422	The Formation of the Solid/Liquid Electrolyte Interphase (SLEI) on NASICON-Type Glass Ceramics and LiPON. 2020 , 7, 2000380	9
421	Chemical prelithiation of Al for use as an ambient air compatible and polysulfide resistant anode for Li-ion/S batteries. 2020 , 8, 18715-18720	9
420	Atomic Layer Deposition of Single Atomic Cobalt as a Catalytic Interlayer for Lithium-Sulfur Batteries. 2020 , 3, 11206-11212	7
419	Continuous Shuttle Current Measurement Method for Lithium Sulfur Cells. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 090534	3-9 4

418	Electrochemical Kinetics Study of Interaction Between Li Metal and Polysulfides. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 080526	3.9	7
417	A Highly Sensitive Electrochemical Sensor of Polysulfides in Polymer Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 080520	3.9	1
416	Elastic, Conductive Coating Layer for Self-Standing Sulfur Cathode Achieving Long Lifespan LiâS Batteries. 2020 , 10, 1904026		6
415	Insights into Multiphase Reactions during Self-Discharge of Li-S Batteries. 2020 , 32, 4518-4526		23
414	Initial investigation and evaluation of potassium metal as an anode for rechargeable potassium batteries. 2020 , 8, 16718-16737		22
413	Efficient polysulfide anchor: brain coral-like WS ₂ nanosheets. 2020 , 55, 12031-12040		2
412	Promoting the sulfur conversion kinetics via a solid auxiliary redox couple embedded in the cathode of LiâS batteries. 2020 , 4, 3701-3711		0
411	Electrodeposition of MoS _x : Tunable Fabrication of Sulfur Equivalent Electrodes for High Capacity or High Power. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 050513	3.9	3
410	Li/S. 2020 , 1-36		
409	Multiple core-shelled sulfur composite based on spherical double-layered hollow carbon and PEDOT:PSS as cathode for lithiumâSulfur batteries. 2020 , 837, 155498		16
408	Ultrathin Lithium Aluminate Nanoflake-Inlaid Sulfur as a Cathode Material for LithiumâSulfur Batteries with High Areal Capacity. 2020 , 3, 5637-5645		8
407	Toward Commercially Viable Li-S Batteries: Overall Performance Improvements Enabled by a Multipurpose Interlayer of Hyperbranched Polymer-Grafted Carbon Nanotubes. 2020 , 12, 25767-25774		10
406	rGO-CNT aerogel embedding iron phosphide nanocubes for high-performance Li-polysulfide batteries. 2020 , 167, 446-454		9
405	A porous organic polymer-coated permselective separator mitigating self-discharge of lithiumâSulfur batteries. 2020 , 1, 648-657		8
404	Recent Progress in High Donor Electrolytes for LithiumâSulfur Batteries. 2020 , 10, 2001456		51
403	Solid Electrolytes for Li-S Batteries: Solid Solutions of Poly(ethylene oxide) with LiPON- and LiSIPON-Based Polymers. 2020 , 12, 30353-30364		11
402	Li-S Batteries. 2020 , 425-440		
401	Glass fiber separator coated by boron doped anatase TiO ₂ for high-rate LiâS battery. 2020 , 129, 110917		9

400	Electrocatalytic polysulfide transformation for suppressing the shuttle effect of Li-S batteries. 2020 , 528, 146970		11
399	In-built durable Li ⁺ counterparts from Li ⁺ /S ₂ batteries. 2020 , 17, 100439		5
398	Tuning Low Concentration Electrolytes for High Rate Performance in Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 100512	3.9	10
397	Rational design of cathode structure based on free-standing S/rGO/CNT nanocomposite for Li-S batteries. 2020 , 267, 116471		6
396	Electrochemical Behaviors of Lithium Powder Anode in Lithium-Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 100549	3.9	1
395	Highly concentrated LiN(SOCF)/dinitrile electrolytes: Liquid structures, transport properties, and electrochemistry. 2020 , 152, 104502		15
394	From Liquid- to Solid-State Batteries: Ion Transfer Kinetics of Heteroionic Interfaces. 2020 , 3, 221-238		55
393	Local Concentration Effect-Derived Heterogeneous LiS/LiS Deposition on Dual-Phase MWCNT/Cellulose Nanofiber/NiCoS Self-Standing Paper for High Performance of Lithium Polysulfide Batteries. 2020 , 12, 15228-15238		19
392	Single-Atom Catalytic Materials for Advanced Battery Systems. 2020 , 32, e1906548		96
391	First-Principles Characterization and Experimental Validation of the Solid-Solid Interface in a Novel Organosulfur Cathode for the Li-S Battery. 2020 , 12, 18101-18109		3
390	Promoting spherical epitaxial deposition of solid sulfides for high-capacity Li ⁺ batteries. 2020 , 8, 7100-7108		5
389	Ultrafine Co ₃ Se ₄ Nanoparticles in Nitrogen-Doped 3D Carbon Matrix for High-Stable and Long-Cycle-Life Lithium Sulfur Batteries. 2020 , 10, 1904273		78
388	Partially Reversible HS Adsorption by MFM-300(Sc): Formation of Polysulfides. 2020 , 12, 18885-18892		16
387	TMDs beyond MoS for Electrochemical Energy Storage. 2020 , 26, 6320-6341		20
386	Bonding VSe ₂ ultrafine nanocrystals on graphene toward advanced lithium-sulfur batteries. 2020 , 13, 2673-2682		33
385	Precipitated sulfur cathode ⁺ hybrid faradaic and pseudocapacitive discharging process. 2020 , 24, 1157-1164		
384	Polysulfide entrapment and retardation in gel electrolyte Li ⁺ batteries: experiments and modeling. 2020 , 8, 4341-4353		14
383	Direct Visualization of Lithium Polysulfides and Their Suppression in Liquid Electrolyte. 2020 , 20, 2080-2086		14

382	Nanoengineering to achieve high efficiency practical lithium-sulfur batteries. 2020 , 5, 808-831	28
381	Attapulgite nanorods assisted surface engineering for separator to achieve high-performance lithium-sulfur batteries. 2020 , 48, 364-374	11
380	MCNT/MoS ₂ promoting the electrochemical performance of lithium-sulfur batteries by adsorption polysulfide. 2020 , 7, 035507	1
379	Solid-State Lithium-Sulfur Battery Enabled by Thio-LiSICON/Polymer Composite Electrolyte and Sulfurized Polyacrylonitrile Cathode. 2020 , 30, 1910123	35
378	Two-Dimensional Materials to Address the Lithium Battery Challenges. 2020 , 14, 2628-2658	93
377	Aminomethyl-Functionalized Carbon Nanotubes as a Host of Small Sulfur Clusters for High-Performance Lithium-Sulfur Batteries. 2020 , 13, 2761-2768	8
376	Multifunctional micro-/nanoscaled structures based on polyaniline: an overview of modern emerging devices. 2020 , 16, 100249	23
375	Study of the discharge/charge process of lithium-sulfur batteries by electrochemical impedance spectroscopy.. 2020 , 10, 5283-5293	25
374	Nitrogen and Sulfur Co-Doped Porous Carbon Derived from Thiourea and Calcium Citrate for Lithium-Sulfur Batteries. 2020 , 10, 1263	1
373	Combined Effects of Anion Substitution and Nanoconfinement on the Ionic Conductivity of Li-Based Complex Hydrides. 2020 , 124, 2806-2816	20
372	Understanding the Inhibition of the Shuttle Effect of Sulfides (S ²⁻) in Lithium-Sulfur Batteries by Heteroatom-Doped Graphene: First-Principles Study. 2020 , 124, 3644-3649	10
371	A long-life Li-S battery enabled by a cathode made of well-distributed B ₄ C nanoparticles decorated activated cotton fibers. 2020 , 451, 227751	12
370	Quest for magnesium-sulfur batteries: Current challenges in electrolytes and cathode materials developments. 2020 , 415, 213312	29
369	Lithium fluoride as an efficient additive for improved electrochemical performance of Li-S batteries. 2020 , 598, 124737	2
368	A Hierarchical Three-Dimensional Porous Laser-Scribed Graphene Film for Suppressing Polysulfide Shuttling in Lithium-Sulfur Batteries. 2020 , 12, 18833-18839	22
367	An organic-inorganic composite separator for preventing shuttle effect in lithium-sulfur batteries. 2020 , 4, 3051-3057	4
366	Vanadium carbide nanoparticles incorporation in carbon nanofibers for room-temperature sodium sulfur batteries: Confining, trapping, and catalyzing. 2020 , 395, 124978	22
365	Facile fabrication of sulfur/Ketjenblack-PEDOT:PSS composite as a cathode with improved cycling performance for lithium sulfur batteries. 2020 , 749, 137426	9

364	Towards practical lithium-metal anodes. 2020 , 49, 3040-3071	224
363	Multifunctional NiCoO nanosheet-assembled hollow nanoflowers as a highly efficient sulfur host for lithium-sulfur batteries. 2020 , 49, 6876-6883	6
362	Operando Identification of Liquid Intermediates in Lithium-Sulfur Batteries via Transmission UV-Vis Spectroscopy. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 080508	3.9 28
361	Loading Fe ₃ O ₄ nanoparticles on paper-derived carbon scaffold toward advanced lithium-sulfur batteries. 2021 , 52, 1-11	23
360	Facile Fabrication of Core-Shell Structure Fe ₃ O ₄ @C Nanodots for Enhanced Lithium-Sulfur Batteries. 2021 , 34, 410-416	4
359	Single-atom catalysts for metal-sulfur batteries: Current progress and future perspectives. 2021 , 54, 452-466	28
358	A carbon mixed amorphous-TiS _x separator coating for lithium sulfur batteries. 2021 , 258, 123923	5
357	Biomass-garlic-peel-derived porous carbon framework as a sulfur host for lithium-sulfur batteries. 2021 , 94, 272-281	8
356	Stabilizing Effect of Polysulfides on Lithium Metal Anodes in Sparingly Solvating Solvents. 2021 , 4, 347-358	5
355	Challenges of today for Na-based batteries of the future: From materials to cell metrics. 2021 , 482, 228872	59
354	Recent Progress and Emerging Application Areas for Lithium-Sulfur Battery Technology. 2021 , 9, 2000694	23
353	Co/Co ₃ O ₄ -embedded N-doped hollow carbon composite derived from a bimetallic MOF/ZnO Core-shell template as a sulfur host for Li-S batteries. 2021 , 407, 126967	36
352	Rational design of Lithium-Sulfur battery cathodes based on differential Atom Electronegativity. 2021 , 35, 577-585	8
351	Rational design of functional binder systems for high-energy lithium-based rechargeable batteries. 2021 , 35, 353-377	13
350	Perspective on ultramicroporous carbon as sulphur host for Li-S batteries. 2021 , 59, 242-256	19
349	Material design strategies to improve the performance of rechargeable magnesium-sulfur batteries. 2021 , 8, 830-853	31
348	Revealing the complex sulfur reduction mechanism using cyclic voltammetry simulation. 2021 , 373, 137523	8
347	Triple-phase interfaces of graphene-like carbon clusters on antimony trisulfide nanowires enable high-loading and long-lasting liquid Li ₂ S ₆ -based lithium-sulfur batteries. 2021 , 59, 599-607	14

346	Strong lithium-polysulfide anchoring effect of amorphous carbon for lithium-sulfur batteries. 2021 , 22, 94-103	4
345	Au modified single vacancy graphene as anchoring material for lithium-sulfur batteries. 2021 , 762, 138101	1
344	Two-dimensional material separation membranes for renewable energy purification, storage, and conversion. 2021 , 6, 193-211	19
343	Nickel Metaphosphate as a Conversion Positive Electrode for Lithium-Ion Batteries. 2021 , 4, 195-204	2
342	Carbon nanotube-sulfur nanocomposite electrodes for high energy-flexible lithium sulfur battery. 2021 , 42, 1638-1641	2
341	Advances in Electrolytes for High Capacity Rechargeable Lithium-Sulphur Batteries. 2021 , 5, 3-37	6
340	Implications of in situ chalcogen substitutions in polysulfides for rechargeable batteries.	10
339	Solvate electrolytes for Li and Na batteries: structures, transport properties, and electrochemistry. 2021 , 23, 21419-21436	8
338	Self-limiting lithiation of vanadium diboride nanosheets as ultra-stable mediators towards high-sulfur loading and long-cycle lithium sulfur batteries. 2021 , 5, 3134-3142	4
337	WO Nanowire/Carbon Nanotube Interlayer as a Chemical Adsorption Mediator for High-Performance Lithium-Sulfur Batteries. 2021 , 26,	4
336	Implication of Mechanical Properties of Li-S Binary Compounds Obtained from the First-Principles Study. 2021 , 125, 290-294	2
335	Recent developments in carbon-based materials as high-rate anode for sodium ion batteries. 2021 , 5, 4089-4106	4
334	The lithium metal anode in Li-ion batteries: challenges and recent progress. 2021 , 9, 10012-10038	13
333	A XANES study of lithium polysulfide solids: a first-principles study.	1
332	The Fundamental Understanding of Lithium Polysulfides in Ether-Based Electrolyte for Lithium-Sulfur Batteries. 2021 , 6, 537-546	29
331	Capture of toxic gases in MOFs: SO ₂ , H ₂ S, NH ₃ and NO. 2021 , 12, 6772-6799	23
330	Single atom catalysts supported on N-doped graphene toward fast kinetics in Li-ion batteries: a theoretical study. 2021 , 9, 12225-12235	18
329	Sulfur and Sulfide Positive Electrode. 2021 , 125-135	

328	Alternatives to Cobalt: Vanadate Glass and Glass-Ceramic Structures as Cathode Materials for Rechargeable Lithium-Ion Batteries. 2021 , 9, 629-638	2
327	Graphene Foam Current Collector for High-Areal-Capacity Lithium-Sulfur Batteries. 2021 , 4, 53-60	7
326	Poly(2-ethyl-2-oxazoline) as a Gel Additive to Improve the Performance of Sulfur Cathodes in Lithium-Sulfur Batteries. 2021 , 8, 411-417	2
325	Lean-electrolyte lithium-sulfur electrochemical cells with high-loading carbon nanotube/nanofiber-polysulfide cathodes. 2021 , 57, 2009-2012	30
324	Investigation on Fabrication of Reduced Graphene Oxide-Sulfur Composite Cathodes for Li-S Battery via Hydrothermal and Thermal Reduction Methods. 2021 , 14,	1
323	In Situ Electrolyte Gelation to Prevent Chemical Crossover in Li Metal Batteries. 2021 , 8, 2002152	1
322	Separator Design Variables and Recommended Characterization Methods for Viable Lithium-Sulfur Batteries. 2021 , 6, 2001136	10
321	Understanding the Strength of the Selenium-Graphene Interfaces for Energy Storage Systems. 2021 , 37, 2029-2039	2
320	A Highly Conductive Gel Polymer Electrolyte for Li-Mg Hybrid Batteries. 2021 , 4, 1906-1914	2
319	Oxygen-Doped Carbon Nitride Tubes for Highly Stable Lithium-Sulfur Batteries. 2021 , 9, 2001057	4
318	The electrochemical performance enhancement of carbon anode by hybrid from battery and capacitor through nitrogen doping. 2021 , 27, 1393-1401	0
317	Understanding the Electrolytes of Lithium-Sulfur Batteries. 2021 , 4, 1064-1095	7
316	A short review on dissolved lithium polysulfide catholytes for advanced lithium-sulfur batteries. 2021 , 38, 461-474	10
315	The 2021 battery technology roadmap. 2021 , 54, 183001	63
314	Linking Solid Electrolyte Degradation to Charge Carrier Transport in the Thiophosphate-Based Composite Cathode toward Solid-State Lithium-Sulfur Batteries. 2021 , 31, 2010620	24
313	The Application of Polymer Nanocomposites in Energy Storage Devices. 2021 , 157-187	1
312	Realigning the Chemistry and Parameterization of Lithium-Sulfur Battery Models to Accommodate Emerging Experimental Evidence and Cell Configurations. 2021 , 8, 1098-1106	4
311	Tailoring 3D Carbon Foam using CNTs and MnO to Fabricate Stable Lithium/Dissolved Lithium Polysulfide Batteries. 2021 , 37, 4016-4024	3

310	Assessment of Li-S Battery Performance as a Function of Electrolyte-to-Sulfur Ratio. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 030502	3.9	3
309	Improvement of electrochemical performance by fluorinated multiwall carbon nanotubes interlayer in lithium-sulfur battery. 2021 , 32, 8265-8274		2
308	Sulfur Transfer Melt Infiltration for High-Power Carbon Nanotube Sheets in Lithium-Sulfur Pouch Cells. 2021 , 4, 989-1002		5
307	Trifunctional Electrolyte Additive Hexadecyltrioctylammonium Iodide for Lithium-Sulfur Batteries with Extended Cycle Life. 2021 , 13, 16545-16557		4
306	2021 roadmap on lithium sulfur batteries. 2021 , 3, 031501		32
305	Critical Role of Functional Groups Containing N, S, and O on Graphene Surface for Stable and Fast Charging Li-S Batteries. 2021 , 17, e2007242		7
304	Arsenene, antimonene and bismuthene as anchoring materials for lithium-sulfur batteries: A computational study. 2021 , 121, 26661		1
303	Single Atom-Based Nanoarchitected Electrodes for High-Performance Lithium-Sulfur Batteries. 2021 , 8, 2002159		9
302	Parameter Identification and Sensitivity Analysis for Zero-Dimensional Physics-Based Lithium-Sulfur Battery Models. 2021 , 1,		1
301	Activated carbon from pyrolysis of peanut shells as cathode for lithium-sulfur batteries. 2021 , 146, 105971		9
300	Phosphorus-Doped Metal-Organic Framework-Derived CoS Nanoboxes with Improved Adsorption-Catalysis Effect for Li-S Batteries. 2021 , 13, 15226-15236		9
299	Quantum computation of dominant products in lithium-sulfur batteries. 2021 , 154, 134115		9
298	Understanding and mitigating mechanical degradation in lithium-sulfur batteries: additive manufacturing of Li ₂ S composites and nanomechanical particle compressions. 1		2
297	Carbonaceous Hosts for Sulfur Cathode in Alkali-Metal/S (Alkali Metal = Lithium, Sodium, Potassium) Batteries. 2021 , 17, e2006504		6
296	Origin of shuttle-free sulfurized polyacrylonitrile in lithium-sulfur batteries. 2021 , 492, 229508		10
295	High Energy Density and Stable Three-Dimensionally Structured Se-Loaded Bicontinuous Porous Carbon Battery Electrodes. 2021 , 9, 2100175		4
294	High-Performance Lithium Sulfur Batteries Based on Multidimensional Graphene-CNT-Nanosulfur Hybrid Cathodes. 2021 , 7, 26		4
293	Material design and structure optimization for rechargeable lithium-sulfur batteries. 2021 , 4, 1142-1188		30

292	Effect of Polysulfide Species on Lithium Anode Cycle Life and Reversibility in Li-S Batteries. 2021 , 4, 4711-4718	4
291	Covalently Interlinked Graphene Sheets with Sulfur-Chains Enable Superior Lithium-Sulfur Battery Cathodes at Full-Mass Level. 2021 , 31, 2101326	6
290	Fluoride in the SEI Stabilizes the Li Metal Interface in Li-S Batteries with Solvate Electrolytes. 2021 , 13, 18865-18875	4
289	Challenges and promises of lithium metal anode by soluble polysulfides in practical lithium-sulfur batteries. 2021 , 45, 62-76	40
288	Tubular CoFeP@CN as a Mott-Schottky Catalyst with Multiple Adsorption Sites for Robust Lithium-Sulfur Batteries. 2021 , 11, 2100432	40
287	Thick free-standing electrode based on carbon-carbon nitride microspheres with large mesopores for high-energy-density lithium-sulfur batteries. 2021 , 3, 410-423	5
286	A novel mechanism on discharge-charge process in Li/S batteries. 2021 , 27, 2989-2996	2
285	Improvement of Electrochemical Property of VS ₄ Electrode Material by Amorphization via Mechanical Milling Process. 2021 , 89, 239-243	2
284	Liquid electrolyte design for metal-sulfur batteries: Mechanistic understanding and perspective. 2021 , 3, e12115	8
283	Improvement of Cycle Capability of VS ₄ by Addition of Phosphorus Element. 2021 , 89, 273-278	1
282	Zinc Complex-Based Multifunctional Reactive Lithium Polysulfide Trapper Approaching Its Theoretical Efficiency. 2021 , 13, 23936-23944	1
281	Nitrogen and sulfur co-doped hierarchical porous carbon as functional sulfur host for lithium-sulfur batteries. 2021 , 27, 102312	1
280	Hollow Carbon Spheres Embedded with VN Quantum Dots as an Efficient Cathode Host for Lithium-Sulfur Batteries. 2021 , 35, 10219-10226	4
279	Insight into Lithium-Sulfur Batteries with Novel Modified Separators: Recent Progress and Perspectives. 2021 , 35, 11089-11117	6
278	An Atomistic View of the Lithiation/Delithiation Behavior of Carbon Nanotube-Confined Sulfur Cathode for Lithium-Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 060531	3-9 0
277	MXenes in lithium-sulfur batteries: Scratching the surface of a complex 2D material – A minireview. 2021 , 27, 102323	8
276	Nonpolar Solvent-based Electrolytes with a Quasi-Solid-State Redox Reaction for Lithium-Sulfur Batteries. 2021 , 8, 2321-2328	
275	Coordinated Adsorption and Catalytic Conversion of Polysulfides Enabled by Perovskite Bimetallic Hydroxide Nanocages for Lithium-Sulfur Batteries. 2021 , 17, e2101538	5

- 274 A robust polymeric binder based on complementary multiple hydrogen bonds in lithium-sulfur batteries. **2021**, 427, 130844 6
- 273 Metal-Organic Frameworks Reinforce the Carbon Nanotube Sponge-Derived Robust Three-Dimensional Sulfur Host for Lithium-Sulfur Batteries. **2021**, 13, 28036-28048 9
- 272 In situ initiator-free gelation of highly concentrated lithium bis(fluorosulfonyl)imide-1,3-dioxolane solid polymer electrolyte for high performance lithium-metal batteries. **2021**, 20, 100623 6
- 271 Electrolyte Issues in Lithium-Sulfur Batteries: Development, Prospect, and Challenges. **2021**, 35, 10405-10427 17
- 270 Lamellar Polypyrene Based on Attapulgite-Sulfur Composite for Lithium-Sulfur Battery. **2021**, 11, 2
- 269 Design of a Metal-Organic Framework-Derived Co₉S₈/S Material for Achieving High Durability and High Performance of Lithium-Sulfur Batteries. **2021**, 8, 3040-3048 2
- 268 Ionic Liquid Electrolytes for Electrochemical Energy Storage Devices. **2021**, 14, 9
- 267 MOF-5-derived honeycomb structured mesoporous carbon with AlF₃·3H₂O for high-stability lithium-sulfur battery cathode. **2021**, 27, 4761
- 266 Rotten albumen derived layered carbon modified separator for enhancing performance of Li-S batteries. **2021**, 895, 115511 0
- 265 Achieving High-Performance Li-S Batteries via Polysulfide Adjoining Interface Engineering. **2021**, 13, 39435-39445 4
- 264 Investigation on Cycling and Calendar Aging Processes of 3.4 Ah Lithium-Sulfur Pouch Cells. **2021**, 13, 9473 1
- 263 Chemical Transformation of H₂S within the Pores of Metal-Organic Frameworks: Formation of Polysulfides. **2021**, 33, 6269-6276 7
- 262 Hierarchical nMOF-867/MXene Nanocomposite for Chemical Adsorption of Polysulfides in Lithium-Sulfur Batteries. **2021**, 4, 8231-8241 2
- 261 Poly(Ethylene Glycol-block-2-Ethyl-2-Oxazoline) as Cathode Binder in Lithium-Sulfur Batteries. **2021**, 10, 960-965 0
- 260 Mn-N-C Nanostructure Derived from MnO₂-x/PANI as Highly Performing Cathode Additive in Li-S Battery. **2021**, 2, 275-286
- 259 Liquid-Based Janus Electrolyte for Sustainable Redox Mediation in Lithium-Oxygen Batteries. **2021**, 11, 2102096 2
- 258 Grafting and Depositing Lithium Polysulfides on Cathodes for Cycling Stability of Lithium-Sulfur Batteries. **2021**, 13, 40685-40694 3
- 257 One-step synthesized CoNi-embedded N-doped carbon nanotubes as sulfur host to synergistically immobilize the discharge products in lithium-sulfur batteries. **2021**, 874, 159952 6

256	Electrolyte solutions design for lithium-sulfur batteries. 2021 , 5, 2323-2364	38
255	Localized High Concentration Electrolyte and Its Effects on Polysulfide Structure in Solution. 2021 , 125, 20157-20170	3
254	Wide Working Temperature Range Rechargeable Lithium-Sulfur Batteries: A Critical Review. 2107136	9
253	On the structure of sulfur/1,3-diisopropenylbenzene co-polymer cathodes for Li-S batteries: insights from density-functional theory calculations. 2021 ,	1
252	Recent Breakthroughs in the Bottleneck of Cathode Materials for Li-S Batteries.	2
251	Advances in Organic Ionic Materials Based on Ionic Liquids and Polymers.	1
250	Polyaniline-Encapsulated Hollow Co-Fe Prussian Blue Analogue Nanocubes Modified on a Polypropylene Separator To Improve the Performance of Lithium-Sulfur Batteries. 2021 , 13, 47593-47602	7
249	Be water strategy of liquid lithium sulfide enables 0.2 V potential barrier for high-performance lithium-sulfur batteries. 2021 , 21, 100793	4
248	A crosslinking hydrogel binder for high-sulfur content S@pPAN cathode in rechargeable lithium batteries. 2021 , 60, 360-367	5
247	In operando Raman and optical study of lithium polysulfides dissolution in lithium-sulfur cells with carrageenan binder. 2021 , 3, 044003	1
246	From dendritic mesoporous silica microspheres to waxberry-like hierarchical hollow carbon spheres: rational design of carbon host for lithium sulfur batteries. 2021 , 32,	
245	Polymer Electrolytes - New Opportunities for the Development of Multivalent Ion Batteries. 2021 , 16, 3272-3280	0
244	CoSe ₂ @C-N/CNT-modified separator for highly efficient lithium-sulphur battery. 2021 , 879, 160368	6
243	Double bond effects induced by iron selenide as immobilized homogenous catalyst for efficient polysulfides capture. 2021 , 421, 129770	6
242	Internment of polysulfide in fractal carbon structure for high rate lithium-sulfur batteries. 2021 , 564, 150294	5
241	Rechargeable metal (Li, Na, Mg, Al)-sulfur batteries: Materials and advances. 2021 , 61, 104-134	22
240	A systematic correlation between morphology of porous carbon cathode and electrolyte in lithium-sulfur battery. 2021 , 61, 561-573	2
239	Functionalized Mo ₂ B ₂ MBenes: Promising anchoring and electrocatalysis materials for Lithium-Sulfur battery. 2021 , 566, 150634	5

238	Multiple roles of titanium carbide in performance boosting: Mediator, anchor and electrocatalyst for polysulfides redox regulation. 2021 , 426, 130744	5
237	Ultra-high rate and high-performance lithium-sulfur batteries with resorcinol-formaldehyde xerogel derived highly porous carbon matrix as sulfur cathode host. 2021 , 425, 131521	2
236	Dual-functional Co _{5.47} N/Fe ₃ N heterostructure interconnected 3D N-doped carbon nanotube-graphene hybrids for accelerating polysulfide conversion in Li-S batteries. 2022 , 427, 131774	4
235	Templated spherical coassembly strategy to fabricate MoS ₂ /C hollow spheres with physical/chemical polysulfides trapping for lithium-sulfur batteries. 2022 , 98, 136-142	2
234	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
233	Two-dimensional conjugated aromatic polymer as a promising anchoring material for lithium-sulfur batteries. 2022 , 571, 151226	1
232	Superfast and solvent-free core-shell assembly of sulfur/carbon active particles by hail-inspired nanostorm technology for high-energy-density Li-S batteries. 2022 , 65, 565-573	1
231	Rational design of high concentration electrolytes and MXene-based sulfur host materials toward high-performance magnesium sulfur batteries. 2022 , 428, 131031	7
230	Nanocomposite-based sulfur cathodes for rechargeable lithium-sulfur batteries. 2021 , 321-342	1
229	Unveiling the physiochemical aspects of the matrix in improving sulfur-loading for room-temperature sodium-sulfur batteries. 2021 , 2, 4165-4189	8
228	S-Encapsulated Micropore Carbon Cathode. 2021 , 357-373	
227	Lithium-Sulfur Batteries. 2021 , 393-402	
226	Influence of polymers on carbon-based composites in energy storage applications. 2021 , 249-264	
225	Thermodynamic aspect of sulfur, polysulfide anion and lithium polysulfide: plausible reaction path during discharge of lithium-sulfur battery. 2021 , 23, 6832-6840	2
224	Crucial Challenges and Recent Optimization Progress of Metal-Sulfur Battery Electrolytes. 2021 , 35, 1966-1988	14
223	Recent progress on pristine metal/covalent-organic frameworks and their composites for lithium-sulfur batteries. 2021 , 14, 1835-1853	54
222	Optimisation of sodium-based energy storage cells using pre-sodiation: a perspective on the emerging field. 2021 , 14, 1380-1401	13
221	Hierarchical Carbide-Derived Carbon Foams with Advanced Mesostructure as a Versatile Electrochemical Energy-Storage Material. 2014 , 4, 1300645	90

220	On the Surface Chemistry of Cathode Materials in Li-Ion Batteries. 2014 , 283-321		4
219	Zukunftstechnologien. 2013 , 199-217		4
218	Next generation technologies. 2018 , 187-208		1
217	Electrospinning of Nanofibers for LiâS Battery. 2020 , 101-120		1
216	High-performance LiâS battery cathode with catalyst-like carbon nanotube-MoP promoting polysulfide redox. 2017 , 10, 3698-3705		95
215	The efficient redox electron transfer and powered polysulfide confinement of carbon doped tungsten nitride with multi-active sites towards high-performance lithium-polysulfide batteries. 2020 , 525, 146625		4
214	Catalytic Effects in the Cathode of Li-S Batteries: Accelerating polysulfides redox conversion. 2020 , 2, 100036		16
213	A multifunctional electrolyte with highly-coordinated solvation structure-in-nonsolvent for rechargeable lithium batteries. 2020 , 51, 362-371		8
212	Carbon-Based Fibers for Advanced Electrochemical Energy Storage Devices. 2020 , 120, 2811-2878		156
211	The Anchoring Effect of 2D Graphdiyne Materials for Lithium-Sulfur Batteries. 2020 , 5, 13424-13429		4
210	Switchable encapsulation of polysulfides in the transition between sulfur and lithium sulfide. 2020 , 11, 845		51
209	Mathematical Model for Li-S Cell with Shuttling-Induced Capacity Loss Approximation. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 130532	3.9	6
208	An Efficient Electrochemical Tanks-in-Series Model for Lithium Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 163503	3.9	4
207	Lithium/Sulfur Secondary Batteries: A Review. 2016 , 7, 97-114		23
206	Lithium/Sulfur Secondary Batteries: A Review. 2016 , 7, 97-114		10
205	A dual-role electrolyte additive for simultaneous polysulfide shuttle inhibition and redox mediation in sulfur batteries.		2
204	Correlations between Precipitation Reactions and Electrochemical Performance of LithiumâSulfur Batteries.		
203	Sulfurized polyacrylonitrile cathodes with electrochemical and structural tuning for high capacity all-solid-state lithiumâSulfur batteries. 2021 , 5, 5603-5614		2

202	High-entropy ceramics: Review of principles, production and applications. 2021 , 146, 100644	32
201	Revamping Lithium-Sulfur Batteries for High Cell-Level Energy Density by Synergistic Utilization of Polysulfide Additives and Artificial Solid-Electrolyte Interphase Layers. 2021 , 33, e2104246	2
200	Collectively Exhaustive MXene and Graphene Oxide Multilayer for Suppressing Shuttling Effect in Flexible Lithium Sulfur Battery. 2101025	2
199	Toward Practical Solid-State Lithium-Sulfur Batteries: Challenges and Perspectives. 2021 , 2, 869-880	8
198	Concurrent Polyvalent Interaction and Electrocatalysis to Improve Lithium-Sulfur Battery Performance.	0
197	Fe-Carbon Hybrid Composite Interlayer for Improved Electrochemical Performance of Li-S Battery. 2021 , 139466	0
196	Lithium/Sulfur Batteries Based on Carbon Nanomaterials. 365-384	
195	Li _{1.4} Al _{0.4} Ti _{1.6} (PO ₄) ₃ high lithium ion conducting solid electrolyte prepared by tape casting and modified with epoxy resin. 2017 , 66, 188201	1
194	Electrochemical and Spectroscopic Studies of Nanocomposites Laden with BaTiO ₃ -grafted-graphene Oxide. 2018 , 319-327	
193	Three-Dimensionally Aligned Sulfur Electrodes by Directional Freeze Tape Casting.	
192	Polypeptoid Material as an Anchoring Material for Li-S Batteries.	1
191	Application of Separators Modified by Carbon Nanospheres Enriched with MoCl_x Nanocrystalline in Lithium Sulfur Batteries. 2020 , 35, 532	
190	Progress on continuum modeling of lithium-sulfur batteries.	2
189	Two-dimensional materials towards separator functionalization in advanced Li-S batteries. 2021 , 13, 18883-18911	1
188	Nanomaterials for Batteries. 2020 , 107-193	
187	Chemical Sulfide Tethering Improves Low-Temperature Li-S Battery Cycling. 2021 , 13, 50862-50868	2
186	VOPO ₄ as effective long-chain polysulfides adsorbent for lithium-sulfur batteries. 1	0
185	Strongly trapping soluble lithium polysulfides using polar cysteamine groups for highly stable lithium sulfur batteries. 2020 , 31, 485403	2

184	Progress of nanotechnology for lithium-sulfur batteries. 2021 , 19, 137-164	
183	Metallic CN monolayer as an efficient catalyst for accelerating redox kinetics of sulfur in lithium-sulfur batteries. 2021 ,	1
182	Operando characterization of active surface area and passivation effects on sulfur-carbon composites for lithium-sulfur batteries. 2022 , 403, 139572	2
181	High Energy Density Rechargeable Batteries Based on Li Metal Anodes. The Role of Unique Surface Chemistry Developed in Solutions Containing Fluorinated Organic Co-solvents. 2021 ,	10
180	Atomistic discharge studies of sulfurized-polyacrylonitrile through ab initio molecular dynamics. 2021 , 403, 139538	1
179	Efficient Magnesium Plating and Stripping in DOL/DME-Mg(HMDS) ₂ -Based Electrolytes and Application in Mg/S Batteries.	1
178	Understanding the role of lithium bonds in doped graphene nanoribbons as cathode hosts for Li-S batteries: A first-principles study.	0
177	An integrated approach to configure rGO/VS ₄ /S composites with improved catalysis of polysulfides for advanced lithium-sulfur batteries. 2021 ,	1
176	Facile Synthesis of Carbon Nanospheres with High Capability to Inhale Selenium Powder for Electrochemical Energy Storage. 2021 , 14,	1
175	A Perspective on Li/S Battery Design: Modeling and Development Approaches. 2021 , 7, 82	2
174	Lithium sulfur batteries: Electrochemistry and mechanistic research. 2021 ,	
173	Dual-role Magnesium Aluminate Ceramic Film as an Advanced Separator and Polysulfide Trapper in Li-S battery: Experimental and DFT investigations.	0
172	First-Principles Study of Amorphous Al ₂ O ₃ ALD Coating in Li-S Battery Electrode Design. 2022 , 15, 390	0
171	VCT catalyzes polysulfide conversion to enhance the redox kinetics of Li-S batteries.. 2022 ,	0
170	Co,N-co-doped graphene sheet as a sulfur host for high-performance lithium-sulfur batteries.. 2022 , 12, 1375-1383	0
169	Molybdenum disulfide/polyaniline interlayer for lithium polysulphide trapping in lithium-sulphur batteries. 2022 , 521, 230945	1
168	Ordered Dual-Channel carbon embedded with molybdenum nitride catalytically induced High-Performance Lithium-Sulfur battery. 2022 , 431, 134163	4
167	Intrinsic catalytic Sites-Rich Co-doped SnO ₂ nanoparticles enabling enhanced conversion and capture of polysulfides. 2022 , 431, 134033	1

- 166 Metal-organic framework derived binary-metal oxide/MXene composite as sulfur host for high-performance lithium-sulfur batteries. **2022**, 899, 163369 6
- 165 Highly branched amylopectin binder for sulfur cathodes with enhanced performance and longevity. 20210131 3
- 164 An encapsulating lithium-polysulfide electrolyte for practical lithium-sulfur batteries. **2022**, 13
- 163 In situ tailored strategy to remove capping agents from copper sulfide for building better lithium-sulfur batteries. 2
- 162 Lithium Metal and Other Anodes. **2022**, 225-246
- 161 Perfluorinated Ionomer as an Artificial SEI for Silicon Nano-Flake Anode in LiTFSI/Tetraglyme Solvate Ionic Liquid. *Journal of the Electrochemical Society*, **2022**, 169, 020519 3.9 0
- 160 Cotton-Derived Fe/FeC-Encapsulated Carbon Nanotubes for High-Performance Lithium-Sulfur Batteries.. **2022**, 3
- 159 Integration of Desulfurization and Lithium-Sulfur Batteries Enabled by Amino- Functionalized Porous Carbon Nanofibers. 0
- 158 Li-Sulfur Battery. **2022**, 87-123
- 157 Cerium oxide nanorods anchored on carbon nanofibers derived from cellulose paper as effective interlayer for lithium sulfur battery.. **2022**, 615, 417-431 1
- 156 Physical and Chemical Adsorption of Polysulfides. **2022**, 111-163
- 155 Perspectives on manufacturing simulations of Li-S battery cathodes. 2
- 154 Dual Role of Mo S in Polysulfide Conversion and Shuttle for Mg-S Batteries.. **2022**, e2104605 7
- 153 Atomic Structure Modification of Fe-N-C Catalysts via Morphology Engineering of Graphene for Enhanced Conversion Kinetics of Lithium-Sulfur Batteries. 2110857 5
- 152 How to Model the Cathode Area in Lithium-Sulfur Batteries?. 1
- 151 LaMoO as an Effective Catalyst for the Cathode Reactions of Lithium-Sulfur Batteries.. **2022**, 1
- 150 Rational Design of High-Performance Nickel-Sulfur Nanocomposites by the Electroless Plating Method for Electrochemical Lithium-Sulfur Battery Cathodes. 4
- 149 Single-atom tailoring of Li₂S to Form Li₂S₂ for building better lithium-sulfur batteries. **2022**, 47, 79-86 5

148	Application of Guar Gum and its Derivatives as Green Binder/Separator for Advanced Lithium-Ion Batteries.. 2022 , 11, e202100209	1
147	Streamline sulfur redox reactions to achieve efficient room-temperature sodium-sulfur batteries.. 2022 ,	5
146	Modeling of the temporal evolution of polysulfide chains within the lithium-sulfur battery. 2022 ,	1
145	Streamline sulfur redox reactions to achieve efficient room-temperature sodium-sulfur batteries.	
144	Polysulfide regulation vs anode modification: Perspectives on commercializing lithium-sulfur batteries. 2022 , 10, 020701	1
143	Understanding the Impact of Precipitation Kinetics on the Electrochemical Performance of Lithium-Sulfur Batteries by Operando X-ray Diffraction.	3
142	Kinetics of sulphur dissolution in lithium-sulphur batteries.	2
141	Evaluating the effectiveness of in situ characterization techniques in overcoming mechanistic limitations in lithium-sulfur batteries.	4
140	Direct optical fiber monitor on stress evolution of the sulfur-based cathodes for lithium-sulfur batteries.	4
139	The Presolvation Strategy of Li ₂ S Cathodes for Lithium-Sulfur Batteries: A Review.	1
138	Computational screening of functionalized MXenes to catalyze the solid and non-solid conversion reactions in cathodes of lithium-sulfur batteries.. 2022 ,	0
137	Impact of compression on the electrochemical performance of the sulfur/carbon composite electrode in lithium-sulfur batteries.	1
136	Sputtered MoN nanolayer as a multifunctional polysulfide catalyst for high-performance lithium-sulfur batteries. 2022 ,	10
135	Review of Multifunctional Separators: Stabilizing the Cathode and the Anode for Alkali (Li, Na, and K) Metal-Sulfur and Selenium Batteries.. 2022 ,	13
134	Dissolution and Reprecipitation of Sulfur on Carbon Surface. 1	0
133	Effective Design Strategy of Small Bipolar Molecules through Fused Conjugation toward 2.5 V Based Redox Flow Batteries.. 2022 , 7, 1274-1283	2
132	A Liquid-Metal Electrocatalyst as a Self-Healing Anchor to Suppress Polysulfide Shuttling in Lithium-Sulfur Batteries.	
131	A novel modified sulfur cathode to facilitate the adsorption and conversion of polysulfides in lithium-sulfur batteries. 1	

130	Correlations between precipitation reactions and electrochemical performance of lithium-sulfur batteries probed by operando scattering techniques. 2022 ,	1
129	Thermal runaway routes of large-format lithium-sulfur pouch cell batteries. 2022 ,	12
128	Optimization of LIB Electrolyte and Exploration of Novel Compounds via the Molecular Dynamics Method. 2022 , 8, 27	1
127	Unraveling the effect of disproportionation of lithium polysulfides on the electrochemical reaction and S utilization in lithium-sulfur battery. 2022 , 412, 140092	0
126	Amorphous Titanium Polysulfide Composites with Electronic/Ionic Conduction Networks for All-Solid-State Lithium Batteries.. 2022 ,	0
125	Nitrogen-doped MoS ₂ as a catalytic sulfur host for lithium-sulfur batteries. 2022 , 439, 135568	2
124	Engineering a TiNbO-Based Electrocatalyst on a Flexible Self-Supporting Sulfur Cathode for Promoting Li-S Battery Performance.. 2021 ,	1
123	Recent Advances in Synthesis and Applications of Single-Atom Catalysts for Rechargeable Batteries.. 2021 ,	1
122	A review of the rational interfacial designs and characterizations for solid-state lithium/sulfur cells.	
121	EFFECT OF WATER-SOLUBLE POLYMER NV-1A ON ELECTROCHEMICAL PARAMETERS OF SULFUR ELECTRODE. 2021 , 87, 55-59	
120	Molybdenum Carbide Electrocatalyst in-situ Embedded in Porous Nitrogen-rich Carbon Nanotubes Promotes Rapid Kinetics in Sodium Metal - Sulfur Batteries.. 2022 , e2106572	3
119	Design of nanostructured sulfur cathodes for high-performance lithium-sulfur batteries. 2022 , 425-452	
118	Separators for lithium-sulfur batteries. 2022 , 121-156	1
117	Model Simulation of Lithium-Sulfur Battery Based on Different Discharge Rates and Sulfur Content. 2022 , 897-905	
116	Electrolyte measures to prevent polysulfide shuttle in Li-S batteries.	4
115	Regulating Polysulfide Diffusion and Deposition via Rational Design of Core-Shell Active Materials in Li-S Batteries.. 2022 ,	3
114	Drastic Effect of Salt Concentration in Ionic Liquid on Performance of Lithium Sulfur Battery. <i>Journal of the Electrochemical Society</i> , 2022 , 169, 050515	3.9 3
113	A Glimpse on the plethora of applications of prodigious material MXene. 2022 , e00439	0

112	CommunicationâPolysulfide-Induced Chemical Capacity Loss in Li-S Batteries. <i>Journal of the Electrochemical Society</i> ,	3.9
111	Strategies towards high performance lithium-sulfur batteries.	3
110	Sulfur-containing polymer cathode materials: From energy storage mechanism to energy density.	2
109	Manipulating the electrocatalytic activity of sulfur cathode via distinct cobalt sulfides as sulfur host materials in lithium-sulfur batteries.. 2022 , 622, 515-525	1
108	Investigation for Charge-Discharge Operations of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ -Sulfur Batteries by Suitable Choice of Materials and Cell Preparation Processes. 2022 ,	
107	Finely-Dispersed Ni ₂ Co Nanoalloys on Flower-Like Graphene Microassembly Empowering a Bi-Service Matrix for Superior LithiumâSulfur Electrochemistry. 2202853	0
106	Approaches to Combat the Polysulfide Shuttle Phenomenon in LiâS Battery Technology. 2022 , 8, 45	2
105	Zr doped NASICON-type LATP glass-ceramic as a super-thin coating onto deoxidized carbon wrapped CNT-S cathode for lithium-sulphur battery. 2022 , 140567	0
104	Rubber-Derived Sulfur Composite Cathode Material for Li-S/Li-ion Battery. 2022 ,	0
103	An Exploration of Sulfur Redox in Lithium Battery Cathodes.	1
102	Advanced Nanostructured MXene-Based Materials for High Energy Density LithiumâSulfur Batteries. 2022 , 23, 6329	2
101	Conducting Polymer Nanomaterials for Electrochemical Energy Storage and Electrocatalysis. 2022 , 337-398	
100	Lithium-Sulfur Solid-State Batteries. 267-288	1
99	High-Performance Cathode Materials for LithiumâSulfur Batteries Based on Sulfurated Poly(norbornadiene) and Sulfurated Poly(dicyclopentadiene).	1
98	An All-Solid-State Battery Based on Sulfide and PEO Composite Electrolyte. 2202069	2
97	Toward Rigorous Validation of Li-S Battery Models. <i>Journal of the Electrochemical Society</i> , 2022 , 169, 060531	3.9
96	Thermal safety and thermal management of batteries. 0210019	1
95	Multiscale modeling of physicochemical interactions in lithium-sulfur battery electrodes. 2022 , 123-158	1

94	Modeling of electrode, electrolyte, and interfaces of lithium-sulfur batteries. 2022 , 201-231	
93	Advanced cathodic free-standing interlayers for lithium-sulfur batteries: understanding, fabrication, and modification.	1
92	Recent Advances in Cu-Based Metal-Organic Frameworks and Their Derivatives for Battery Applications. 2022 , 5, 7842-7873	0
91	Sulfurized Polypropylene as Low-Cost Cathode Material for High Capacity Lithium-Sulfur Batteries.	
90	Graphene-Based Materials for Li-S Batteries. 2022 , 189-213	
89	Effective Ways to Stabilize Polysulfide Ions For High-Capacity Li-S Batteries Based on Organic Chalcogenide Catholytes.	
88	A Lithium-Sulfur Battery Using Binder-Free Graphene-Coated Aluminum Current Collector. 2022 , 36, 9321-9328	0
87	Visualization of Sulfur Chemical State of Cathode Active Materials for Lithium-Sulfur Batteries by Tender X-ray Spectroscopic Ptychography. 2022 , 126, 14047-14057	
86	Suppressing Polysulfides Shuttling and Promoting Sulfur Utilization via Transition Metal and Nitrogen Co-Doping on Graphdiyne Cathodes of Lithium-Sulfur Batteries: A First-Principles Modeling. 2022 , 5, 9722-9732	1
85	Crossover Effects in Lithium-metal Batteries with a Localized High Concentration Electrolyte and High-nickel Cathodes. 2205188	5
84	Will lithium-sulfur batteries be the next beyond-lithium ion batteries and even much better?.	1
83	Targeted Catalysis of the Sulfur Evolution Reaction for High-Performance Lithium-Sulfur Batteries. 2202232	3
82	Molecular engineering of sulfur-providing materials for optimized sulfur conversion in Li-S chemistry.	0
81	Oxygen heteroatom enhanced sulfur-rich polymers synthesized by inverse vulcanization for high-performance lithium-sulfur batteries. 2022 , 545, 231921	0
80	Synthesis of hollow S/FeS ₂ @carbon nanotubes microspheres and their long-term cycling performances as cathode material for lithium-sulfur batteries. 2022 , 922, 116724	0
79	Ni ₃ Sn ₂ /nitrogen-doped graphene composite with chemisorption and electrocatalysis as advanced separator modifying material for lithium sulfur batteries. 2022 , 628, 896-910	1
78	Surface Film Formation from Sodium Polysulfide Decomposition on Sodium-Metal Anode Surface.	1
77	Multifunctional behaviour of graphite in lithium-sulfur batteries. 2022 , 169, 112948	1

- 76 Features of cycling of lithium-sulfur cells with electrolytes based on sulfolane solutions of LiPF₆ and LiBF₄. **2022**, 548, 231980 1
- 75 Constructing lithium oxysulfide-rich solid electrolyte interphase to shield polysulfides in practical lithium-sulfur batteries. **2022**, 550, 232144 0
- 74 Efficient polysulfides trapping and redox enabled by Co/N-carbon implanted Li⁺-montmorillonite for advanced lithium-sulfur batteries. **2023**, 451, 138914 2
- 73 Li⁺ transport properties of sulfolane-based gel polymer electrolyte and effective suppression of lithium polysulfide dissolution in lithium-sulfur batteries. **2022**, 6, 4218-4226 1
- 72 Atomically distributed asymmetrical five-coordinated Co^{II} moieties on N-rich doped C enabling enhanced redox kinetics for advanced Li-S batteries. 0
- 71 Carbon-Based Nanomaterials for Metal-Sulfur/Selenium Batteries. **2022**, 227-247 0
- 70 A Sulfolane-Based Electrolyte Optimized for Microporous Activated Carbon-Sulfur Composites for Lithium Sulfur Batteries. **2022**, 1
- 69 Improving the Electrochemical Performance of Li-S Batteries via a MnCo₂S₄@CoS_{1.097} Heterostructure with a Hollow Structure and High Catalytic Activity. 0
- 68 Self-doped N Sponge Carbon as a functional interlayer for high-performance lithium-sulfur batteries. **2022**, 0
- 67 Carbonaceous-Material-Induced Gelation of Concentrated Electrolyte Solutions for Application in Lithium-Sulfur Battery Cathodes. 0
- 66 S-doped Porous Carbon Cage with Good Accommodation Ability As An Effective S Host for Li-S Battery. 0
- 65 Regulating Polysulfide Conversion Kinetics Using Tungsten Diboride as Additive For High-Performance Li-S Battery. 2203222 1
- 64 Charging characterization of a high-capacity lithium-sulfur pouch cell for state estimation: An experimental approach. 0
- 63 An algorithm for dip point detection in lithium-sulfur battery cells. **2022**, 55, 105665 0
- 62 Headway towards contemporary 2D MXene-based hybrid electrodes for alkali-ion batteries. 0
- 61 Synthesis and Electrochemical Performance of Microporous Hollow Carbon from Milkweed Pappus as Cathode Material of Lithium-Sulfur Batteries. **2022**, 12, 3605 0
- 60 The role of polysulfide-saturation in electrolytes for high power applications of real world Li-S pouch cells. 1
- 59 Spherical Templating of CoSe₂ Nanoparticle-Decorated MXenes for Lithium-Sulfur Batteries. 1

58	Lithium Sulfide Batteries: Addressing the Kinetic Barriers and High First Charge Overpotential.	0
57	Untangling Degradation Chemistries of Lithium-Sulfur Batteries Through Interpretable Hybrid Machine Learning.	2
56	Untangling Degradation Chemistries of Lithium-Sulfur Batteries Through Interpretable Hybrid Machine Learning.	0
55	Improving Li Anode Reversibility in Li-S Batteries by ZnO Coated Separators Using Atomic Layer Deposition.	0
54	Understanding the Catalytic Kinetics of Polysulfide Redox Reactions on Transition Metal Compounds in LiâS Batteries. 2022 , 16, 15734-15759	2
53	An overlooked parameter in Li-S batteries: The impact of electrolyte-to-sulfur ratio on capacity fading. 2022 , 104, 107913	1
52	On the performance of a hierarchically porous Ag ₂ S@xS electrode in Li-ion batteries.	0
51	Rubber-Derived Sulfur Composite as a High Capacity Anode for Li-ion Battery Using 5 V-Class LiNi _{0.5} Mn _{1.5} O ₄ Cathode. 2022 ,	0
50	Carbon-Nitride-Based Materials for Advanced LithiumâSulfur Batteries. 2022 , 14,	0
49	Porosity vs. Carbon Shell Number: Key Factor Actually Affecting the Performance of Multi-shelled Hollow Carbon Nanospheres in Li-S Batteries. 2022 , 116980	0
48	Coordination Supramolecular Network Synergized with Reduced Graphene Oxide Accelerating Redox Kinetics of LithiumâSulfur Batteries.	0
47	Polymeric Interface Engineering in Lithium-Sulfur Batteries. 2022 , 140462	0
46	A Janus MXene/MOF separator for the all-in-one enhancement of lithium-sulfur batteries. 2023 , 55, 652-659	2
45	Molecular polysulfide-scavenging sulfurizedâriazine polymer enable high energy density Li-S battery under lean electrolyte. 2023 , 55, 225-235	0
44	Modeling the volumetric expansion of the lithium-sulfur battery considering charge and discharge profiles. 2023 , 55, 289-300	0
43	Low concentration salt triggered in-situ asymmetric gel electrolyte for Li-S battery. 2023 , 439, 141640	0
42	Investigation of the temperature and DOD effect on the performance-degradation behavior of lithiumâSulfur pouch cells during calendar aging. 2023 , 332, 120543	0
41	Regulating solid electrolyte interphase with amide-rich carbon nanotube interlayer for high power lithium-sulfur battery. 2023 , 36, 102578	0

- 40 Li pre-doping technique using perforated electrodes for the cells with a rubber-derived sulfur composite cathode. **2023**, 556, 232448 ○
- 39 Restraining Shuttle Effect in Rechargeable Batteries by Multifunctional Zeolite Coated Separator. 2211774 ○
- 38 Concentrated Electrolytes for Rechargeable Lithium Metal Batteries. ○
- 37 Non-trivial Contribution of Carbon Hybridization in Carbon-based Substrates to Electrocatalytic Activities in Li-S Batteries. ○
- 36 LiTFSI salt concentration effect to digest lithium polysulfides for high-loading sulfur electrodes. **2022**, ○
- 35 An Experimentally Parameterized Equivalent Circuit Model of a Solid-State Lithium-Sulfur Battery. **2022**, 8, 269 ○
- 34 In Situ Constructing a Catalytic Shell for Sulfur Cathode via Electrochemical Oxidative Polymerization. **2022**, 14, 54830-54839 ○
- 33 Non-trivial Contribution of Carbon Hybridization in Carbon-based Substrates to Electrocatalytic Activities in Li-S Batteries. ○
- 32 Protecting lithium metal anodes in lithium-sulfur batteries: A review. **2023**, 4, ○
- 31 A Comparison Study of the Electrocatalytic Sulfur Reduction Activity on Heteroatom-Doped Graphene for Li-S Battery. 2200244 ○
- 30 An Image Based 3D Modelling Framework for Li-S Batteries. ○
- 29 Lithium-sulfur cells with a sulfide solid electrolyte/polysulfide cathode interface. ○
- 28 Future potential for lithium-sulfur batteries. **2023**, 558, 232566 ○
- 27 Adsorption-catalysis design with cerium oxide nanorods supported nickel-cobalt-oxide with multifunctional reaction interfaces for anchoring polysulfides and accelerating redox reactions in lithium sulfur battery. **2023**, 635, 466-480 ○
- 26 Lithium Batteries with Small-Molecule Quinone Cathode Enabled by Lithium Garnet Separators. **2023**, 6, 745-752 ○
- 25 Bismuth-based compounds as efficient sulfur hosts for novel lithium-sulfur batteries. **2023**, 58, 2234-2248 ○
- 24 Mechanistic Insights into the Cycling Behavior of Sulfur Dry-Film Cathodes. 2200439 ○
- 23 Redox Promotion by Prelithiation Modification of the Separator in Lithium-sulfur Batteries. **2023**, 127, 4006-4014 ○

- 22 Tailoring WB morphology enables d-band centers to be highly active for high-performance lithium-sulfur battery. **2023**, 108189 ○
- 21 Material, configuration, and fabrication designs for lean-electrolyte lithium-sulfur cell with a high-loading sulfur cathode. **2023**, 566, 232944 ○
- 20 Chemical transformations of highly toxic H₂S to promising clean energy in MOFs. **2023**, 485, 215135 ○
- 19 Preparation of functional groups-rich graphene oxide for high-performance lithium-sulfur batteries. **2023**, 21, 100300 1
- 18 Solubility and dissolution kinetics of sulfur and sulfides in electrolyte solvents for lithium-sulfur and sodium-sulfur batteries. **2023**, 158, 064702 ○
- 17 Li-S battery cathode anchoring polysulfides by interaction between redox-active imide and carbon nanotube. **2023**, 137, 107113 ○
- 16 A Ni-MOF derived graphene oxide combined Ni₃S₂@Ni/C composite and its use in the separator coating for lithium sulfur batteries. **2023**, 25, 5559-5568 ○
- 15 Optimizing the p charge of S in p-block metal sulfides for sulfur reduction electrocatalysis. **2023**, 6, 174-184 ○
- 14 ZIF-67 on Sulfur-Functionalized Graphene Oxide for Lithium-Sulfur Batteries. **2023**, 62, 3134-3140 ○
- 13 Effect of Polysulfide Speciation on Mg Anode Passivation in Mg-S Batteries. ○
- 12 Construction of Lithium Metal Anode with High Lithium Utilization and its Application in Lithium-Sulfur Batteries. **2023**, 13, 7-28 ○
- 11 Research Progress on Multifunctional Modified Separator for Lithium-Sulfur Batteries. **2023**, 15, 993 ○
- 10 Understanding of Low-Porosity Sulfur Electrode for High-Energy Lithium-Sulfur Batteries. **2023**, 13, ○
- 9 Coffee grounds derived sulfur and nitrogen dual-doped porous carbon for the cathode material of lithium-sulfur batteries. ○
- 8 Towards safe lithium-sulfur batteries from liquid-state electrolyte to solid-state electrolyte. **2023**, 17, ○
- 7 Heterojunction interlocked catalysis-conduction network in monolithic porous-pipe scaffold for durable Li-S batteries. **2023**, 58, 74-84 ○
- 6 Topological tailoring-induced Dirac cone in ultrathin niobium diboride nanosheets for electrocatalytic sulfur reduction reaction. **2023**, 32, 101029 ○
- 5 Unfolding the structure-property relationships of Li₂S anchoring on two-dimensional materials with high-throughput calculations and machine learning. **2023**, 82, 31-39 ○

- 4 Discharge Behavior within Lithium-Sulfur Batteries Using Li-Tfyme Solvate Ionic Liquids. **2023**, 127, 6645-6654
- 3 Lithium Iron Phosphate Enhances the Performance of High-Areal-Capacity Sulfur Composite Cathodes. **2023**, 15, 19011-19020
- 2 Durable Lithium-Sulfur Batteries Based on a Composite Carbon Nanotube Cathode.
- 1 Nickel Oxide Decorated Halloysite Nanotubes as Sulfur Host Materials for Lithium-Sulfur Batteries.