

# 2019 International Conference on Lithium – Sulfur Batteries

## 2019 International Conference on Lithium–Sulfur Batteries

(Aug. 12 - 15, 2019, Beijing International Convention Center, Beijing, China)

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Email: [ilsb2019@163.com](mailto:ilsb2019@163.com)

Tel: +86-17775083663)

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## 2019 International Conference on Lithium–Sulfur Batteries

Aug. 12, 2019	P.M.	14:00 – 19:00	Registration
Aug. 13, 2019		8:30 – 18:00	Registration
	A.M.	8:30 – 12:00	Plenary Session
		12:00 – 13:00	Lunch
	P.M.	13:00 – 17:35	Topical Session
		18:00 – 20:00	Banquet
Aug. 14, 2019		8:30 – 18:00	Registration
	A.M.	8:30 – 12:05	Topical Session
		11:30 – 13:00	Lunch
	P.M.	13:00 – 17:40	Topical Session
		18:00 – 20:00	Snack + Poster
Aug. 15, 2019	A.M.	8:30 – 10:00	Topical Session
		10:00 – 11:40	Plenary Session
		11:40 – 11:50	Poster Award & Closing Ceremony

## Plenary Session

<b>Aug. 13, 2019</b>				
8:30 – 8:40	Opening Ceremony			
8:40 – 9:10	Chair:	Outlook of Chinese NEV Technology Pathway	Minggao Ouyang	Tsinghua University, China
9:10 – 9:40		Lithium Sulfur Battery Pouch Cell Production: Materials, Processing and Cell Assembly	Stefan Kaskel	Fraunhofer IWS Dresden, Germany
9:40 – 10:10		Nanoscale Design for Lithium–Sulfur Batteries	Yi Cui	Stanford University, USA
10:10 – 10:30	Coffee Break			
10:30 – 11:00	Chair:	Lithium-sulfur Batteries with Practically Necessary Parameters	Arumugam Manthiram	The University of Texas at Austin, USA
11:00 – 11:30		Practical Applications of Lithium–Sulfur Batteries	Jacob Locke	OXIS Energy, UK
11:30 – 12:00		Li-S and Li-Se Batteries: From Liquid to Solid	Xueliang Sun	University of Western Ontario, Canada
<b>Aug. 15, 2019</b>				
10:00 – 10:30	Chair	Emerging Electrolyte for Li-S Batteries	Chunsheng Wang	University of Maryland, USA
10:30 – 11:00		High Gravimetric and Volumetric Energy Density Batteries: Theory and Research	Hong Li	Institute of Physics CAS, China
11:00 – 11:40	Round-table Discussion			
11:40 – 11:50	Poster Award & Closing Ceremony			

## Topical Session

Aug. 13, 2019, Emerging Electrolyte for Li-S Batteries				
13:00 – 13:15	Chair:	Solvate Ionic Liquids as Sparingly Solvating Electrolytes for High Energy Density Lithium Sulfur Batteries	Masayoshi Watanabe	Yokohama National University, Japan
13:15 - 13:30		Understanding Rechargeable Lithium Sulfur Pouch Cells	Jie Xiao	Pacific Northwest National Laboratory, USA
13:30 – 13:45		WS <sub>2</sub> -S/C Composite as the Cathode for the Pouch Li-S Battery with 430 Wh/Kg	Chaoqing Jin, Anbang Wang	Research Institute of Chemical Defense, China
13:45 – 14:00		Interface Engineering in Lithium Sulfur Batteries	Jia-Qi Huang	Beijing Institute of Technology, China
14:00 – 14:15		Functional Additive/Filler and Conformal Coating to Enable Dendrite-Free Li Plating for Highly Reversible Li-Metal and Li-S Batteries	Chilin Li	Shanghai Institute of Ceramics CAS, China
14:15 – 14:30		Sulfide Solid State Electrolytes for All-Solid-State Lithium-Sulfur Batteries	Xiayin Yao	Ningbo Institute of Materials Technology & Engineering CAS, China
14:30 – 14:45		Interface Engineering for Solid-State Li Metal Batteries	Wei Luo	Tongji University, China
14:45 – 14:55		Development of a Sodium-Metal Free Room-Temperature Na-S Battery with Stable Electrochemical Performance	Luise Bloy	Technische Universität Dresden, Germany
14:55 – 15:05		Interfacial Chemistry Regulation for Dendrite-free Li Metal Anode	Xin-Bing Cheng	Tsinghua University, China
15:05 – 15:40	<b>Coffee Break</b>			
15:40 – 15:55	Chair:	How Accurate Is State of Charge as a Predictor of Remaining Useful Work?	Daniel Auger	Cranfield University, UK
15:55 – 16:10		Solid Garnet Batteries	Xiangxin Guo	Qingdao University, China
16:10 – 16:25		Development of Materials for Li-S Batteries	Donghai Wang	Pennsylvania State University, USA
16:25 – 16:40		Harnessing the Unique Features Of 2D Materials for Lithium-Sulfur Batteries	Shubin Yang	Beihang University, China
16:40 – 16:55		Advanced Materials and Electrolyte for Lithium-Sulfur and Lithium Metal Batteries	Yan-Bing He	Tsinghua University, China
16:55 – 17:10		Uniform Lithium Deposition Induced by Structured Anode Design for High Performance Lithium Metal Batteries	Hao Zhang	Research Institute of Chemical Defense, China

17:10 – 17:25		Strategies for Polysulfide Fast Conversion in Lithium Sulfur Batteries and Research on Solid-State Lithium-Sulfur Batteries	Wen Yang	Beijing Institute of Technology, China
17:25 – 17:35		PEO-Based All-Solid-State Li-S Batteries	Chunmei Li	CIC Energigune, Spain
<b>Aug. 14, 2019, Reaction Mechanism</b>				
8:30 – 8:45	Chair:	Redox Mechanism of Li-Sulfur Chemistry and Mitigation of Polysulfide Shuttle-Effect	Deyang Qu	University of Wisconsin Milwaukee, USA
8:45 – 9:00		Catalysis in Li-Sulfur Batteries	Quan-Hong Yang	Tianjin University, China
9:00 – 9:15		Mechanistic Study of Li <sub>2</sub> S Formation in Different Chemical Environments	Robert Dominko	National Institute of Chemistry, Slovenia
9:15 – 9:30		Eutectic Accelerator Based High Performance Li-S Batteries	Jia Xie	Huazhong University of Science and Technology, China
9:30 – 9:45		Multidimensional Operando Analysis of Li/S Batteries with Neutrons and Photons	Sebastian Risse	Helmholtz-Zentrum Berlin, Germany
9:45 – 10:00		Low E/S Ratio Lithium Sulfur Battery Achieved by Coordinated Carbonate Electrolyte	Xiao Liang	Hunan University, China
10:00 – 10:15		Porous Ti <sub>4</sub> O <sub>7</sub> Nanoparticles as High-Efficiency Polysulfide Mediator for Lithium-Sulfur Batteries	Yan Lu	Helmholtz-Zentrum Berlin, Germany
10:15 – 10:30		Heterostructures Design for The Catalytic Conversion of Polysulfides in Lithium-Sulfur Batteries	Wei Lv	Tsinghua University, China
10:30 – 10:50	<b>Coffee Break</b>			
<b>Aug. 14, 2019, Solid-Conversion Mechanism</b>				
10:50 – 11:05	Chair:	Conductive Mechanism of S@PAN via Solid Conversion	Jiulin Wang	Shanghai Jiaotong University, China
11:05 – 11:20		Novel Organopolysulfide Cathode Materials for Rechargeable Lithium Batteries	Yongzhu Fu	Zhengzhou University, China
11:20 – 11:35		Expansion-Tolerant Architectures for Stable Cycling of Ultra-High Loading Sulfur Cathodes in Lithium-Sulfur Batteries	Mahdokht Shaibani	Monash University, Australia
11:35 – 11:50		Rationalizing Li-S Chemistry by Vanadium-Based Compound Design	Jing-Yu Sun	Soochow University, China
11:50 – 12:05		Ultrahigh N-Doped Carbon/Graphene	Zhan Lin	Guangdong University of

		Sheets Host for Lithium-Sulfur Batteries		Technology, China
<b>Aug. 14, 2019, Li Anode</b>				
13:00 – 13:15	Chair:	Failure Mechanism of Lithium Anode in Lithium Sulfur Batteries	Ruiguo Cao	University of Science and Technology of China, China
13:15 – 13:30		Toward Dendrite-Free Lithium Metal Anodes	Chuan Wu	Beijing Institute of Technology, China
13:30 – 13:45		Manipulating the Li <sup>+</sup> Deposition Behaviors by Interfacial Chemical Interaction	Huiqiao Li	Huazhong University of Science and Technology, University
13:45 – 14:00		Theoretical and Modeling Design on Both Cathode and Anode Material System of Lithium-Sulfur Battery	Qian-Fan Zhang	Beihang University, China
14:00 – 14:15		Effect of TEOS on High Performance Lithium Metal Anode	Hongzhang Zhang	Dalian Institute of Chemical Physics CAS, China
14:15 – 14:25		Artificial Solid Electrolyte Interphase Layers for Li Metal Anodes	Nian-Wu Li	Beijing University of Chemical Technology, China
14:25 – 14:55	<b>Coffee Break</b>			
<b>Aug. 14, 2019, Sulfur Cathode Materials</b>				
14:55 – 15:10	Chair:	High-Performance Cathode Host Materials for Lithium-Sulfur Batteries	Hao Zhang, Guoxiu Wang	University of Technology Sydney, Australia
15:10 – 15:25		Rational Design of Porous Carbon Materials for Lithium Sulfur Batteries	An-Hui Lu	Dalian University of Technology, China
15:25 – 15:40		Improving Cycling Performance of Lithium-Sulfur Batteries Using Boron Nitride Nanomaterials	Ying Chen	Deakin University, Australia
15:40 – 15:55		Carbon Nanosheets for High-Performance Lithium-Sulfur Batteries: Synthesis and Properties	Jieshan Qiu	Beijing University of Chemical Technology, China
15:55 – 16:10		Green Carbon-Based Nanomaterials for Li-S Batteries	Xinyong Tao	Zhejiang University of Technology, China
16:10 – 16:25		Mass Production of Graphene & Porous Carbon for Li-S Batteries	Cheng-Meng Chen	Institute of Coal Chemistry CAS, China
16:25 – 16:40		Ultrastable Sodium-Sulfur Batteries without Polysulfides Formation Using Slit Ultramicropore Carbon Carrier	Hui Xia	Nanjing University of Science and Technology, China
16:40 – 16:55		Lithium-Sulfur Batteries with High Volumetric Capacities	Ruihu Wang	Fujian Institute of Research on the Structure of Matter CAS, China
16:55 – 17:10		High-Performance Sulfur Cathodes Promoted by Synergism of Electrocatalysis and Confinement	Lijun Yang	Nanjing University, China

17:10 – 17:20		Design Carbon Materials for Lithium Sulfur Batteries	Zhenhua Sun, Feng Li	Institute of Metal Research CAS, China
17:20 – 17:30		Two Dimensional Materials for High-Performance Li-S Batteries	Zhong-Shuai Wu	Dalian Institute of Chemical Physics CAS China
17:30 – 17:40		Tin Nanowire as A Strong Polysulfide Anchor for Lithium-Sulfur Batteries	Xu Xu, Liqiang Mai	Wuhan University of Technology, China
<b>Aug. 15, 2019, Emerging Sulfur Batteries</b>				
8:30 – 8:45		The Interfaces of Li-S Batteries Based on Solid Electrolyte	Zhaoyin Wen	Shanghai Institute of Ceramics CAS, China
8:45 – 9:00		In Situ Characterization and Performance Improvement of Mg/S Batteries	Yuegang Zhang	Tsinghua University, China
9:00 – 9:15	Chair:	Comprehensive Strategy of Electrolytes and Electrodes Toward High-Performance Magnesium–Selenium and Magnesium–Sulfur Batteries	Guanglei Cui	Qingdao Institute of Biomass Energy and Bioprocess Technology CAS, China
9:15 – 9:30		Dual-Function, Tunable, Nitrogen-Doped Carbon for High-Performance Li Metal–Sulfur Full Cell	Hongli Zhu	Northeastern University, USA
9:30 – 9:45		Li/S Batteries for Applications – What Matters? A Combined Experimental-Modelling Approach to Battery Design	Monica Marinescu	Imperial College London, UK
9:45 – 10:00	<b>Coffee Break</b>			

## Poster Session

No.	Title	Presenting Author	Address
<b>Anode</b>			
001	MOF-Derived Porous $\text{Co}_3\text{O}_4\text{-NC}$ Nanoflake Arrays on Carbon Fiber Cloth as Stable Hosts for Dendrite-Free Li Metal Anodes	Guangyu Jiang	East China University of Science and Technology, China
002	Interfacial Optimization via Organic-Inorganic Compositing Coating for Advanced Lithium Metal and Non-Lithium Metal Batteries	Yong Wang	Shanghai Institute of Space Power-Sources, China
003	Sericin Protein as A Conformal Protective Layer to Enable Air-Endurable Li Metal Anodes and High-Rate Li-S Batteries	Wu Qingping	East China University of Science and Technology, China
004	A Polyethylenimine Grafted Electrospun Polyacrylonitrile Separator for Both Dendrite-Free Lithium Metal Anode and Highly Efficient Sulfur Cathode	Mengfei Hu	East China University of Science and Technology, China
005	Uniform Lithium Nucleation Guided by Atomically Dispersed Lithiophilic $\text{CoN}_x$ Sites for Safe Lithium Metal Batteries	He Liu	Tsinghua University, China
006	In-Situ Optical Microscopic Observation of Dendrite Suppression of Graphene-Cellulose Supported Lithium Metal Anode	Yalan Xing	Beihang University, China
007	Lithiophilic Nano-Metals on 3D Copper-Based Alloy Scaffold for High-Performance Lithium Metal Batteries	Zhicong Shi	Guangdong University of Technology, China
008	Surface Engineering on Ni Foam Through Preformation of $\text{AuLi}_3$ Quasi-Monolayer Film For Stable Li Metal Anodes	Xi Ke	Guangdong University of Technology, China
009	Li-Metal-Free Lithium Sulfur Battery Based on Self-Sacrificing Salt	Bolei Shen	East China University of Science and Technology, China
010	An In Situ Formed $\text{LiCl}$ Protective Layer for Dendrite Free Lithium Metal Anode	Lei Tan	Central South University, China
011	Self-Assembled Monolayer Enables Slurry-Coating of Li Anode	Tuo Kang	Harbin Institute of Technology
012	Dual-Phase Single-Ion Pathway Interfaces for Robust Lithium Metal in Working Batteries	Rui Xu	Beijing Institute of Technology, China
013	Lithiophilic $\text{LiC}_6$ Layers on Carbon Hosts Enabling Stable Li	Peng Shi	Tsinghua



	Metal Anode in Working Batteries		University, China
014	Regulating Anions in The Solvation Sheath of Lithium Ions for Stable Lithium Metal Batteries	Xue-Qiang Zhang	Tsinghua University, China
015	Highly Stable Lithium Metal Batteries Enabled by Regulating the Solvation of Lithium Ions in Nonaqueous Electrolytes	Xue-Qiang Zhang	Tsinghua University, China
016	Facile Generation of Polymer–Alloy Hybrid Layers for Dendrite-Free Lithium-Metal Anodes with Improved Moisture Stability	Zhipeng Jiang	Huazhong University of Science and Technology, China
017	Stress Modeling of Solid Electrolyte Interface on Lithium Metal Anode	Xin Shen	Tsinghua University, China
018	Silver Nanoparticle-Doped 3D Porous Carbon Nanofibers as Separator Coating for Stable Lithium Metal Anodes	Min Liu	Tianjin Polytechnic University, China
019	Water-Stable Lithium Metal Anode Enabled by Heat Assisted Self-Encapsulation for Security Applications	Ye Xiao	Beijing Institute of Technology, China
020	Controlling Structure of Vertically Grown Graphene Sheets on Carbon Fibers for Hosting Li Metal as Rechargeable Battery Anode	Xixi Ji	Harbin Institute of Technology, Shenzhen, China
021	Structured Anodes for Long-lifespan and Dendrite-free Li Metal Batteries	Xiao-Ru Chen	Tsinghua University, China
022	Stable SEI induced by the specific adsorption of Inner Helmholtz Plane	Chong Yan	Beijing Institute of Technology
023	An ion redistributor for dendrite-free lithium metal anodes	Chen-Zi Zhao	Tsinghua University, China
024	Remarkably improved anti-water/air performance and electrochemical cycling stability of lithium metal anode enabled by ethylene-vinyl acetate copolymer film	Yeru Liang	South China Agricultural University, China
025	Sandwich structured lithium metal anode with even Li plating and stripping behavior	Tao Li	Tsinghua University, China
026	Phase Field Theory for Stable Cycling 3D Structured Lithium Metal Anodes	Rui Zhang	Tsinghua University, China
<b>Electrolyte</b>			
027	Solvate Ionic Liquid as The Electrolyte of Lithium Sulfur Battery	Jiali Liu	Yokohama National University, Japan
028	Solid/Solid Interfacial Engineering of Solid Polymer Electrolyte-Based All Solid-State Lithium-Sulfur Batteries by Atomic Layer Deposition	Zengjie Fan	Nanjing University of Aeronautics and Astronautics, China
029	Improved Interfacial Electronic Contact Powering High Sulfur Utilization in All-Solid-State Lithium–Sulfur Batteries	Li-Peng Hou	Tsinghua University, China

030	Upgrading Traditional Ether-Based Liquid Electrolyte via In-Situ Gelatinization for Li-S Battery	Fengquan Liu	Beijing Normal University, China
031	The Stability Between Sulfide Solid Electrolytes and Lithium Metal Anode	Lei Xu	Beijing Institute of Technology, China
032	All-solid-state Li-S batteries with organic/inorganic composite solid electrolyte membrane	Yuede Pan	South China University of Technology, China
033	Study on preparation and electrochemical behavior for solid-state lithium-sulfur pouch cells	Haoxiong Nan	Guangdong University of Technology, China
<b>Cathode</b>			
034	Three-Dimensional Nitrogen-Doped Graphene/Tin Nanowire Composite as A Strong Polysulfide Anchor for Lithium-Sulfur Batteries	Zhaohuai Li	Wuhan University of Technology, China
035	Functional Polymer Electrolyte and Organosulfide Cathode for High Performance Lithium-Sulfur Batteries	Jianghui Jiang	University of Science and Technology Beijing, China
036	A Robust Electrospun Separator Modified with In Situ Grown Metal-Organic Frameworks for Lithium-Sulfur Batteries	Cheng Zhou	Wuhan University of Technology, China
037	Nitrogen/Oxygen Dual-Doped Carbon Nanofibers as An Electrocatalytic Interlayer for A High Sulfur Content Lithium-Sulfur Battery	Tianji Gao	Tsinghua University, China
038	Indium Sulfide/Carbon Nanotubes Composite Materials for Lithium-Sulfur Batteries	Yujie Yang	Beijing Normal University, China
039	A High-Performance Lithium-Sulfur Battery Based on Co-FeO(OH)-Coated Celgard Separator	Xiaoshuan Chen	Sichuan University, China
040	In-Situ Fabrication of MOF Decorated Polyacrylonitrile Based Double-Layered Membranes with Effective Inhibition to Polysulfides for Lithium-Sulfur Batteries	Cheng Zhou	Wuhan University of Technology, China
041	Bifunctional Interface for High-Energy-Density Lithium-Sulfur Batteries	Long Kong	Southern University of Sciences and Technology, China
042	Spinel Oxide as Hosting Materials for High Performance Lithium Sulfur Batteries	Ruiping Liu	China University of Mining and Technology-Beijing, China
043	Construction of Soft Base Tongs on Separator to Grasp Polysulfides From Shuttling in Lithium-Sulfur Batteries	Qin Dong	Chongqing University, China
044	Few-Layer Boron Nitride with Engineered Nitrogen Vacancies for Promoting Conversion of Polysulfide as A Cathode Matrix for	Mingtao Li	Xi'an Jiaotong University, China

	Lithium-Sulfur Batteries		
045	A Free-Standing GO/Ti <sub>3</sub> C <sub>2</sub> Membrane for High-Rate Performance Lithium-Sulfur Batteries	Long Qu	Xi'an Jiaotong University, China
046	Arranged Redistribution of Sulfur Species and Synergistic Mediation of Polysulfides Conversion in Lithium-Sulfur Batteries by A Cactus Structure MnO <sub>2</sub> /Carbon Nanofibers Interlayer	Ying Yang	Tsinghua University, China
047	Modified Cathode and Separator Towards Advanced Lithium-Sulfur Battery with Improved Safety and Enhanced Performance	Gang Wu	Sichuan University, China
048	Powering Lithium-Sulfur Battery Performance by Enhancing Li-S Redox Kinetics	Mingliang Yu	Dalian University of Technology, China
049	A Porous Graphitic Carbon In-Situ Embedded with MgO Nanoparticles as Matrix for High Performance Sulfur Cathode	Yong Li	Shanghai Institute of Space Power-Sources, China
050	The Preparation of High Sulfur Loading Thick Cathode by Carbon Fibers as Additives	Jun Ma	Chengdu Institute of Organic Chemistry CAS, China
051	Porous Organic Polymers as Host for Confinement of Polysulfides in Lithium-Sulfur Batteries	Fei Xu	Technische Universität Dresden, Germany
052	Carbon Nanotubes: from Conductive Additive to Scaffold Structure in Lithium-Sulfur Cells	Tom Boenke	Technische Universität Dresden, Germany
053	Insights of Porous Carbon Materials with Sparingly Polysulfides Solvating Electrolytes in Li-S Batteries	Christian Kensy	Technische Universität Dresden, Germany
054	Lithium Sulfur Pouch Cells with High Rate Performance	Weikun Wang	Research Institute of Chemical Defense, China
055	Functional Separator Modified with Cerium-Based Metal-Organic Frameworks for Lithium-Sulfur Batteries	Xiaojun Liu	Beijing University of Chemical Technology, China
056	Kill Two Birds with One Stone: Simultaneous Tackling Dendrite Formation and The Polysulfide Shuttle in Lithium Sulfur Batteries by Tin Nanowires	Yuankun Wang	Xi'an Jiaotong University, China
057	Strategies to Address the Shuttle Effect of Polysulfides	Yunhua Xu	Tianjin University, China
058	SrTiO <sub>3</sub> -Based Perovskite with In-Situ Exsolved Co Nanometal: A Highly Efficient Sulfur Host for Advanced Lithium-Sulfur Batteries	Wenshuo Hou	Beijing Institute of Technology, China

059	Integrated Nanostructure Electrodes Based on Hierarchical $\text{Co}_3\text{O}_4/\text{Co}@\text{NCNT}$ Arrays for High-Performance Li-S Batteries	Jianbo Li	Beijing university of chemical technology,
060	Graphitic Mesoporous Carbon/ $\text{Mn}_7\text{C}_3$ as Polysulfide Host for High Rate Li-S Batteries	Xiaoqiang Liang	Beijing Institute of Nanoenergy and Nanosystems CAS, China
061	Covalent Organic Framework Nanosheets Modified Separator for Lithium-Sulfur Batteries	Cao Yu	Tianjin University, China
062	CdS Quantum Dots and Conductive MOF in Lithium-Sulfur Batteries	Dong Cai	Jilin university, China
063	Enabling Immobilization and Conversion of Polysulfides Through Yolk-Shell Structured $\text{C}@\text{Fe}_3\text{O}_4$ Nanospheres as Sulfur Host for Lithium-Sulfur Battery	YuPeng Zhang	Shanghai University of Electric Power, China
064	Double-Walled N-Doped Carbon@ $\text{NiCo}_2\text{S}_4$ Hollow Capsules as $\text{SeS}_2$ Hosts for Advanced Li-Se $\text{S}_2$ Batteries	Bingshu Guo	Southwest University, China
065	Hollow Urchin-Like $\text{Mn}_3\text{O}_4$ Microspheres as Efficient Sulfur Hosts for Lithium-Sulfur Batteries	Jianwei Liu	Xi'an Jiaotong University
066	Vertically Aligned Laminate Porous Electrode: Amaze the Performance with A Maze Structure	Ying Yu	Dalian Institute of Chemical Physics CAS, China
067	Strong Chemical Adsorption of Flower-Shaped $\text{W}_{18}\text{O}_{49}$ to the LPSs for Promoted Cycle Performance of Li-S Batteries	Qian Wang	Sichuan University, China
068	Scalable Synthesis of 1D MXene-Based Nanoscrolls as A Host for Advanced Li-S Batteries	Ke Tan	University of Jinan, China
069	Excellent Catalytic Effects of FeP in Promoting Polysulfides Transformation for Long-Life Lithium-Sulfur Batteries	Xiaomin Wang	Taiyuan University of Technology, China
070	Rational Design of Yolk-Shell Structured Cathode Materials as Nanoreactors for High Performance Lithium-Sulfur Batteries	Dong Li	Guangdong University of Technology, China
071	Design Principles and Anchoring Mechanism for Conjugated Microporous Polymers as Effective Scaffolding Materials for Lithium-Sulfur Batteries	Mengru Zhang	Dalian University of Technology, China
072	Highly Active Catalysts Embedded in Robust Carbon Architecture for High-Areal Capacity Sulfur Cathode at High Rate	Jian Wang	Suzhou Institute of Nano-Tech and Nano-Bionics
073	Non-Flammable Electrolyte Enables Sulfur Cathode into A Solid-Phase Conversion Mechanism	Xue Chen	Huazhong University of Science and Technology, China
074	Self-Crosslinking Procedure to Yolk-Shell $\text{Au}@$ Microporous	Weicai Zhang	South China

	Carbon Nanospheres for Lithium-Sulfur Battery		Agricultural University, China
075	Organosulfur Polymer Composite Cathode Embedded by Monoclinic S for High Energy Density Lithium Sulfur Batteries	Xiang Li	Huazhong University of Science and Technology, China
076	Direct Tracking of The Polysulfide Shuttling and Interfacial Evolution in All-Solid-State Lithium-Sulfur Batteries: A Degradation Mechanism Study	Yuexian Song	Institute of Chemistry CAS, China
077	Improving Lithium-Sulfur Battery Performances by Using Conjugative Porous Polymers as The Sulfur Support: The Case of N-Containing Porous Aromatic Framework	Shufei Wang	Tianjin Polytechnic University
078	Uniform Growth of Li <sub>2</sub> S Promoted by An Organophosphorus-Based Mediator for High Rate Li-S Batteries	Ting Yang	Tianjin University, China
079	Lean Electrolyte Lithium-Sulfur Batteries with Effective Anchor for Polysulfides and Enhanced Kinetics Performance	Jizong Zhang	Tianjin University, China
080	Carbon Coated Halloysite Nanotubes as Efficient Sulfur Host Materials for Lithium Sulfur Batteries	Kai Han	Central South University, China
081	Towards Full Demonstration of High Areal Loading Sulfur Cathode in Lithium-Sulfur Batteries	Qi Jin	Tsinghua University, China
082	Enhanced Electrochemical Kinetics and Polysulfide Traps of La <sub>2</sub> Li <sub>0.5</sub> Al <sub>0.5</sub> O <sub>4</sub> for Highly Stable Lithium-Sulfur Batteries	Manfang Chen	Xiangtan University, China
083	A New Strategy in Designing Cathode and Presenting Mechanism for Prompting Redox Process of Li-S Batteries	Naiqing Zhang	Harbin Institute of Technology, China
084	Accelerated Li-S Chemistry at A Cooperative Interface Built In Situ	Yingze Song	Soochow University, China
085	2, 5-Di-Tert-Butyl-1, 4-Benzoquinone as A Novel Additive for High-Performance Lithium-Sulfur Batteries	Zhao Wang	Jilin Normal University, China
086	Design and Construction of Sulfur Cathodes for Room Temperature Sodium-Sulfur Battery	Tingting Yang	Southwest University, China
087	Boron and Nitrogen Co-Doped Carbon Nanofibers and Its Composite Materials as A Polysulfide-Trapping Interlayer for Enhanced-Performance Li-S Batteries	Jinghui Zhu	Harbin Institute of Technology, Shenzhen, China
088	Regulating the Li <sub>2</sub> S Growth and Decomposition in Lithium-Sulfur Batteries by Dual Redox Mediators	Jun-Yu Wei	Beijing Institute of Technology, China
089	Dictating High-Capacity Lithium-Sulfur Batteries Through Redox-Mediated Lithium Sulfide Growth	Meng Zhao	Beijing Institute of Technology, China
090	Activating Inert Metallic Compounds for High-Rate Lithium-Sulfur Batteries Through In-Situ Etching of Extrinsic Metal	Meng Zhao	Beijing Institute of Technology, China
091	A Framework Porphyrin Electrocatalyst For High-Capacity and High-Stable Lithium-Sulfur Batteries	Bo-Quan Li	Tsinghua University, China
092	Conductive and Catalytic Triple-Phase Interfaces Enabling Uniform Nucleation in High-Rate Lithium-Sulfur Batteries	Hong Yuan	Beijing Institute of Technology, China

093	Accelerating Kinetics in Lithium-Sulfurized Polyacrylonitrile Batteries with Redox Mediators	Wei-Jing Chen	Beijing Forestry University, China
094	Nucleation and Growth of $\text{Li}_2\text{S}_2/\text{Li}_2\text{S}$ And Functions of Polysulfide Intermediates in Lithium-Sulfur Batteries	Jin-Xiu Chen	Qufu Normal University, China
095	A Linear Molecule Sulfur-Rich Organic Cathode Material for High Performance Lithium-Sulfur Batteries	Bin Li	Beihang University, China
096	Supramolecular Complexation of Polysulfides by $\beta$ -Cyclodextrin Polymer Functionalized Graphene Hybrid Cathode for High-Performance Lithium-Sulfur Batteries	Lubin Ni	School of Chemistry & Chemical Engineering, China
097	A Supramolecular Capsule for Reversible Polysulfide Storage/Delivery in Lithium-Sulfur Batteries	Jin Xie	Tsinghua University, China
098	Scalable Free-Standing Nanoporous Carbon Scaffold Membranes	Xiaoan Li	Nanjing Momentum Materials Technologies Ltd. Co, China
099	Bimetal sulfide hollow sphere as effective sulfur host for advanced lithium-sulfur batteries	Xiaogang Wang	Qingdao Institute of Bioenergy and Bioprocess Technology CAS, China
100	The Rational Design of Nanocarbon and Metal Composite Materials for Lithium-Sulfur Battery Cathode: Li- or S-Binding?	Xiang Chen	Tsinghua University, China