Sheng Liu

List of Publications by Year
in descending order

61	3,424	159585	144013
papers	citations	30 h-index	57 g-index

62	62	62	3437
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highâ€Entropy Alloys to Activate the Sulfur Cathode for Lithiumâ€“Sulfur Batteries. Energy and Environmental Materials, 2023, 6, .	12.8	31
2	Inverse-opal structured TiO2 regulating electrodeposition behavior to enable stable lithium metal electrodes. Green Energy and Environment, 2023, 8, 1664-1672.	8.7	3
3	Highâ€Entropy Spinel Oxide Nanofibers as Catalytic Sulfur Hosts Promise the High Gravimetric and Volumetric Capacities for Lithiumâ€“Sulfur Batteries. Energy and Environmental Materials, 2022, 5, 645-654.	12.8	69
4	Building the Stable Oxygen Framework in Highâ€Ni Layered Oxide Cathode for Highâ€Energyâ€Density Liâ€Ion Batteries. Energy and Environmental Materials, 2022, 5, 1260-1269.	12.8	15
5	Quantitatively regulating defects of 2D tungsten selenide to enhance catalytic ability for polysulfide conversion in a lithium sulfur battery. Energy Storage Materials, 2022, 45, 1229-1237.	18.0	81
6	Heterostructured Gel Polymer Electrolyte Enabling Long-Cycle Quasi-Solid-State Lithium Metal Batteries. ACS Energy Letters, 2022, 7, 42-52.	17.4	53
7	Specific Adsorption Reinforced Interface Enabling Stable Lithium Metal Electrode. Advanced Functional Materials, 2022, 32, .	14.9	13
8	La₂MoO₆ as an Effective Catalyst for the Cathode Reactions of Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2022, 14, 5247-5256.	8.0	5
9	Organo-Soluble Decanoic Acid-Modified Ni-Rich Cathode Material LiNi_{0.90}Co_{0.07}Mn_{0.03}O₂ for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 16348-16356.	8.0	10
10	A Sustainable Multipurpose Separator Directed Against the Shuttle Effect of Polysulfides for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2022, 12, .	19.5	53
11	Nickelâ€“Platinum Alloy Nanocrystallites with Highâ€Index Facets as Highly Effective Core Catalyst for Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	14.9	27
12	High-Efficiency Hybrid Sulfur Cathode Based on Electroactive Niobium Tungsten Oxide and Conductive Carbon Nanotubes for All-Solid-State Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2022, 14, 1212-1221.	8.0	15
13	Metal phosphides and borides as the catalytic host of sulfur cathode for lithiumâ€“sulfur batteries. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 990-1002.	4.9	21
14	Eu2O3-doped Li4SiO4 coating layer with a high ionic conductivity improving performance of LiNi0.8Co0.1Mn0.1O2 cathode materials. Electrochimica Acta, 2022, 420, 140436.	5.2	4
15	La2NiO4 nanoparticles as a core host of sulfur to enhance cathode volumetric capacity for lithiumâ€“sulfur battery. Electrochimica Acta, 2022, 424, 140670.	5.2	3
16	Capturing Polysulfides with a Functional Anhydride Compound for Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2022, 5, 7719-7727.	5.1	10
17	A dimensionally stable lithium alloy based composite electrode for lithium metal batteries. Chemical Engineering Journal, 2022, 450, 138074.	12.7	6
18	From Dendrites to Hemispheres: Changing Lithium Deposition by Highly Ordered Charge Transfer Channels. ACS Applied Materials & Interfaces, 2021, 13, 6249-6256.	8.0	10

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19	Constructing high gravimetric and volumetric capacity sulfur cathode with LiCoO2 nanofibers as carbon-free sulfur host for lithium-sulfur battery. Science China Materials, 2021, 64, 1343-1354.	6.3	23
20	Yttrium Surface Gradient Doping for Enhancing Structure and Thermal Stability of High-Ni Layered Oxide as Cathode for Liâ€“Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 7343-7354.	8.0	51
21	Hollow Molybdate Microspheres as Catalytic Hosts for Enhancing the Electrochemical Performance of Sulfur Cathode under High Sulfur Loading and Lean Electrolyte. Advanced Functional Materials, 2021, 31, 2010693.	14.9	57
22	Crystalline Multiâ€Metallic Compounds as Host Materials in Cathode for Lithiumâ€“Sulfur Batteries. Small, 2021, 17, e2005332.	10.0	33
23	To Promote the Catalytic Conversion of Polysulfides Using Niâ€“B Alloy Nanoparticles on Carbon Nanotube Microspheres under High Sulfur Loading and a Lean Electrolyte. ACS Applied Materials & Interfaces, 2021, 13, 20222-20232.	8.0	18
24	Uniform lithium plating within 3D Cu foam enabled by Ag nanoparticles. Electrochimica Acta, 2021, 379, 138152.	5.2	18
25	Congener Substitution Reinforced Li₇P_{2.9}Sb_{0.1}S_{10.75}O_{0.25} Glass-Ceramic Electrolytes for All-Solid-State Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 34477-34485.	8.0	22
26	Grafting and Depositing Lithium Polysulfides on Cathodes for Cycling Stability of Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 40685-40694.	8.0	8
27	Enabling LiNi_{0.88}Co_{0.09}Al_{0.03}O₂ Cathode Materials with Stable Interface by Modifying Electrolyte with Trimethyl Borate. ACS Sustainable Chemistry and Engineering, 2021, 9, 1958-1968.	6.7	16
28	Sulfur vacancies in Co₉S_{8â^'x}/N-doped graphene enhancing the electrochemical kinetics for high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 10704-10713.	10.3	53
29	Strategy of Enhancing the Volumetric Energy Density for Lithiumâ€“Sulfur Batteries. Advanced Materials, 2021, 33, e2003955.	21.0	185
30	Elucidating the Effect of the Dopant Ionic Radius on the Structure and Electrochemical Performance of Ni-Rich Layered Oxides for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 56233-56241.	8.0	21
31	Covalently Bonded Sulfur Anchored with Thiol-Modified Carbon Nanotube as a Cathode Material for Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 487-494.	5.1	19
32	Understanding the Structureâ€“Performance Relationship of Lithium-Rich Cathode Materials from an Oxygen-Vacancy Perspective. ACS Applied Materials & Interfaces, 2020, 12, 47655-47666.	8.0	44
33	To effectively drive the conversion of sulfur with electroactive niobium tungsten oxide microspheres for lithiumâ^'sulfur battery. Nano Energy, 2020, 77, 105173.	16.0	75
34	Sulfur/Iodine/Graphene Composites as a Cathode Material for Lithiumâ€“Sulfur Battery. Journal of the Electrochemical Society, 2020, 167, 080521.	2.9	2
35	High Volumetric Energy Density Sulfur Cathode with Heavy and Catalytic Metal Oxide Host for Lithiumâ€“Sulfur Battery. Advanced Science, 2020, 7, 1903693.	11.2	96
36	Enhanced Electrochemical and Thermal Stabilities of Li[Ni 0.88 Co 0.09 Al 0.03]O 2 Cathode Material by La 4 NiLiO 8 Coating for Liâ€“Ion Batteries. ChemElectroChem, 2020, 7, 2042-2047.	3.4	12

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37	Grafting polysulfides into a functional N-halo compound for high-performance lithiumâ€”sulfur battery. Science China Materials, 2020, 63, 2002-2012.	6.3	7
38	Spherical Metal Oxides with High Tap Density as Sulfur Host to Enhance Cathode Volumetric Capacity for Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2020, 12, 5909-5919.	8.0	76
39	Conductive RuO2 stacking microspheres as an effective sulfur immobilizer for lithiumâ€“sulfur battery. Electrochimica Acta, 2020, 337, 135772.	5.2	36
40	Inclusion complexation enhanced cycling performance of iodine/carbon composites for lithiumâ€“iodine battery. Journal of Power Sources, 2020, 463, 228212.	7.8	31
41	Sulfur/nickel ferrite composite as cathode with high-volumetric-capacity for lithium-sulfur battery. Science China Materials, 2019, 62, 74-86.	6.3	86
42	Evolution mechanism of phase transformation of Li-rich cathode materials in cycling. Electrochimica Acta, 2019, 328, 135109.	5.2	43
43	Metalophilic Gel Polymer Electrolyte for in Situ Tailoring Cathode/Electrolyte Interface of High-Nickel Oxide Cathodes in Quasi-Solid-State Li-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 14830-14839.	8.0	39
44	Conductive CoOOH as Carbonâ€Free Sulfur Immobilizer to Fabricate Sulfurâ€Based Composite for Lithiumâ€“Sulfur Battery. Advanced Functional Materials, 2019, 29, 1901051.	14.9	157
45	Lithiumâ€“Magnesium Alloy as a Stable Anode for Lithiumâ€“Sulfur Battery. Advanced Functional Materials, 2019, 29, 1808756.	14.9	148
46	In-situ surface modification to stabilize Ni-rich layered oxide cathode with functional electrolyte. Journal of Power Sources, 2019, 410-411, 115-123.	7.8	67
47	NiCo₂O₄ Nanofibers as Carbonâ€Free Sulfur Immobilizer to Fabricate Sulfurâ€Based Composite with High Volumetric Capacity for Lithiumâ€“Sulfur Battery. Advanced Energy Materials, 2019, 9, 1803477.	19.5	252
48	Free-Standing Porous Carbon Nanofiber/Carbon Nanotube Film as Sulfur Immobilizer with High Areal Capacity for Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2018, 10, 8749-8757.	8.0	129
49	Towards deriving Ni-rich cathode and oxide-based anode materials from hydroxides by sharing a facile co-precipitation method. Dalton Transactions, 2018, 47, 6934-6941.	3.3	5
50	Lithiophilic gel polymer electrolyte to stabilize the lithium anode for a quasi-solid-state lithiumâ€“sulfur battery. Journal of Materials Chemistry A, 2018, 6, 18627-18634.	10.3	69
51	Na-Doped LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ with Excellent Stability of Both Capacity and Potential as Cathode Materials for Li-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 3881-3889.	5.1	112
52	A Highâ€Efficiency Sulfur/Carbon Composite Based on 3D Graphene Nanosheet@Carbon Nanotube Matrix as Cathode for Lithiumâ€“Sulfur Battery. Advanced Energy Materials, 2017, 7, 1602543.	19.5	363
53	Encapsulating a high content of iodine into an active graphene substrate as a cathode material for high-rate lithiumâ€“iodine batteries. Journal of Materials Chemistry A, 2017, 5, 15235-15242.	10.3	55
54	Microporous Carbon Polyhedrons Encapsulated Polyacrylonitrile Nanofibers as Sulfur Immobilizer for Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2017, 9, 12436-12444.	8.0	57

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55	Porous Carbon Paper as Interlayer to Stabilize the Lithium Anode for Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2016, 8, 31684-31694.	8.0	83
56	Lanthanum Nitrate As Electrolyte Additive To Stabilize the Surface Morphology of Lithium Anode for Lithiumâ€“Sulfur Battery. ACS Applied Materials & Interfaces, 2016, 8, 7783-7789.	8.0	140
57	Encapsulating sulfur into a hybrid porous carbon/CNT substrate as a cathode for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 6827-6834.	10.3	73
58	Protected lithium anode with porous Al₂O₃layer for lithiumâ€“sulfur battery. Journal of Materials Chemistry A, 2015, 3, 12213-12219.	10.3	189
59	PO43â¯ doped Li4Ti5O12 hollow microspheres as an anode material for lithium-ion batteries. RSC Advances, 2015, 5, 92354-92360.	3.6	9
60	Supramolecular Polymers of two Novel 4-Substituted-1,2,4-Triazolate Complexes: [Cd(pCltrz)2(NCS)2(H2O)2] and [Cu(4-atrz)4(Cl)0.5(H2O)0.5]Â·(ClO4)1.5 (pCltrz:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (4-(p- 2004, 29-31.	1.3	6
61	Silver Iodide as a Host Material of Sulfur for Liâ€“S Battery. Journal of the Electrochemical Society, 0, , .	2.9	3