Yongzhu Fu

List of Publications by Year
in descending order

113 papers	13,316 citations	53794 45 h-index	22166 113 g-index
114 all docs	114 docs citations	114 times ranked	10714 citing authors

#	Article	IF	Citations
1	Rechargeable Lithiumâ€“Sulfur Batteries. Chemical Reviews, 2014, 114, 11751-11787.	47.7	3,842
2	Challenges and Prospects of Lithiumâ€“Sulfur Batteries. Accounts of Chemical Research, 2013, 46, 1125-1134.	15.6	1,962
3	Novel gel polymer electrolyte for high-performance lithiumâ€“sulfur batteries. Nano Energy, 2016, 22, 278-289.	16.0	382
4	A strategic approach to recharging lithium-sulphur batteries for long cycle life. Nature Communications, 2013, 4, 2985.	12.8	376
5	Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. Journal of Power Sources, 2018, 389, 120-134.	7.8	359
6	Highly Reversible Lithium/Dissolved Polysulfide Batteries with Carbon Nanotube Electrodes. Angewandte Chemie - International Edition, 2013, 52, 6930-6935.	13.8	291
7	Orthorhombic Bipyramidal Sulfur Coated with Polypyrrole Nanolayers As a Cathode Material for Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry C, 2012, 116, 8910-8915.	3.1	259
8	Improved lithiumâ€“sulfur cells with a treated carbon paper interlayer. Physical Chemistry Chemical Physics, 2013, 15, 2291.	2.8	241
9	Core-shell structured sulfur-polypyrrole composite cathodes for lithium-sulfur batteries. RSC Advances, 2012, 2, 5927.	3.6	211
10	High-entropy alloys: emerging materials for advanced functional applications. Journal of Materials Chemistry A, 2021, 9, 663-701.	10.3	196
11	Composite membranes based on sulfonated poly(ether ether ketone) and SDBS-adsorbed graphene oxide for direct methanol fuel cells. Journal of Materials Chemistry, 2012, 22, 24862.	6.7	192
12	Organosulfides: An Emerging Class of Cathode Materials for Rechargeable Lithium Batteries. Accounts of Chemical Research, 2019, 52, 2290-2300.	15.6	177
13	Enhanced Cyclability of Lithiumâ€“Sulfur Batteries by a Polymer Acid-Doped Polypyrrole Mixed Ionicâ€“Electronic Conductor. Chemistry of Materials, 2012, 24, 3081-3087.	6.7	166
14	Self-weaving sulfurâ€“carbon composite cathodes for high rate lithiumâ€“sulfur batteries. Physical Chemistry Chemical Physics, 2012, 14, 14495.	2.8	163
15	Advances in Composite Polymer Electrolytes for Lithium Batteries and Beyond. Advanced Energy Materials, 2021, 11, 2000802.	19.5	162
16	Organotrisulfide: A High Capacity Cathode Material for Rechargeable Lithium Batteries. Angewandte Chemie - International Edition, 2016, 55, 10027-10031.	13.8	158
17	Development of novel self-humidifying composite membranes for fuel cells. Journal of Power Sources, 2003, 124, 81-89.	7.8	145
18	Degradation mechanism of polystyrene sulfonic acid membrane and application of its composite membranes in fuel cells. Physical Chemistry Chemical Physics, 2003, 5, 611-615.	2.8	143

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19	Sulfur-Polypyrrole Composite Cathodes for Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2012, 159, A1420-A1424.	2.9	141
20	Li₂Sâ€Carbon Sandwiched Electrodes with Superior Performance for Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2014, 4, 1300655.	19.5	141
21	<i>In Situ</i>-Formed Li₂S in Lithiated Graphite Electrodes for Lithiumâ€“Sulfur Batteries. Journal of the American Chemical Society, 2013, 135, 18044-18047.	13.7	140
22	Artificial dual solid-electrolyte interfaces based on in situ organothiol transformation in lithium sulfur battery. Nature Communications, 2021, 12, 3031.	12.8	138
23	Highly reversible Li/dissolved polysulfide batteries with binder-free carbon nanofiber electrodes. Journal of Materials Chemistry A, 2013, 1, 10362.	10.3	135
24	A universal strategy towards highâ€“energy aqueous multivalentâ€“ion batteries. Nature Communications, 2021, 12, 2857.	12.8	126
25	Blend membranes based on sulfonated poly(ether ether ketone) and polysulfone bearing benzimidazole side groups for proton exchange membrane fuel cells. Electrochemistry Communications, 2006, 8, 1386-1390.	4.7	112
26	Novel Blend Membranes Based on Acid-Base Interactions for Fuel Cells. Polymers, 2012, 4, 1627-1644.	4.5	106
27	A Perspective on Energy Densities of Rechargeable Liâ€S Batteries and Alternative Sulfurâ€Based Cathode Materials. Energy and Environmental Materials, 2018, 1, 20-27.	12.8	104
28	Isomeric Organodithiol Additives for Improving Interfacial Chemistry in Rechargeable Liâ€“S Batteries. Journal of the American Chemical Society, 2021, 143, 11063-11071.	13.7	101
29	Sulfurâ€“Carbon Nanocomposite Cathodes Improved by an Amphiphilic Block Copolymer for High-Rate Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2012, 4, 6046-6052.	8.0	98
30	Nitrate additives for lithium batteries: Mechanisms, applications, and prospects. EScience, 2021, 1, 108-123.	41.6	98
31	Highly Reversible Diphenyl Trisulfide Catholyte for Rechargeable Lithium Batteries. ACS Energy Letters, 2016, 1, 1221-1226.	17.4	82
32	Acidâ€“base blend membranes based on 2-amino-benzimidazole and sulfonated poly(ether ether ketone) for direct methanol fuel cells. Electrochemistry Communications, 2007, 9, 905-910.	4.7	81
33	Li₂S Nanocrystals Confined in Free-Standing Carbon Paper for High Performance Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2015, 7, 21479-21486.	8.0	73
34	The unique chemistry of thiuram polysulfides enables energy dense lithium batteries. Journal of Materials Chemistry A, 2017, 5, 25005-25013.	10.3	71
35	A Class of Organopolysulfides As Liquid Cathode Materials for High-Energy-Density Lithium Batteries. ACS Applied Materials & Interfaces, 2018, 10, 21084-21090.	8.0	68
36	Phenyl Selenosulfides as Cathode Materials for Rechargeable Lithium Batteries. Advanced Functional Materials, 2018, 28, 1801791.	14.9	66

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37	Fast sodium intercalation in Na3.41Â£0.59FeV(PO4)3: A novel sodium-deficient NASICON cathode for sodium-ion batteries. Energy Storage Materials, 2021, 35, 192-202.	18.0	66
38	Polyphenylene Tetrasulfide as an Inherently Flexible Cathode Material for Rechargeable Lithium Batteries. ACS Applied Energy Materials, 2018, 1, 5859-5864.	5.1	62
39	In Charge of the World: Electrochemical Energy Storage. Journal of Physical Chemistry Letters, 2013, 4, 1295-1297.	4.6	60
40	Fast, Reversible Lithium Storage with a Sulfur/Longâ€Chainâ€Polysulfide Redox Couple. Chemistry - A European Journal, 2013, 19, 8621-8626.	3.3	58
41	Rationally Designed High-Sulfur-Content Polymeric Cathode Material for Lithiumâ€"Sulfur Batteries. ACS Applied Materials & Interfaces, 2019, 11, 6136-6142.	8.0	57
42	Bis(aryl) Tetrasulfides as Cathode Materials for Rechargeable Lithium Batteries. Chemistry - A European Journal, 2017, 23, 16941-16947.	3.3	56
43	Tuning the electrochemical behavior of organodisulfides in rechargeable lithium batteries using N-containing heterocycles. Journal of Materials Chemistry A, 2019, 7, 7423-7429.	10.3	55
44	Mixture is better: enhanced electrochemical performance of phenyl selenosulfide in rechargeable lithium batteries. Chemical Communications, 2018, 54, 8873-8876.	4.1	49
45	Polyphenyl polysulfide: a new polymer cathode material for Liâ€"S batteries. Chemical Communications, 2019, 55, 4857-4860.	4.1	47
46	Long Cycle Life Organic Polysulfide Catholyte for Rechargeable Lithium Batteries. Advanced Science, 2020, 7, 1902646.	11.2	47
47	Lithium Benzenedithiolate Catholytes for Rechargeable Lithium Batteries. Advanced Functional Materials, 2019, 29, 1902223.	14.9	44
48	Exploring sodium storage mechanism of topological insulator Bi2Te3 nanosheets encapsulated in conductive polymer. Energy Storage Materials, 2021, 41, 255-263.	18.0	44
49	Geometric and Electrochemical Characteristics of LiNi1/3Mn1/3Co1/3O2 Electrode with Different Calendering Conditions. Electrochimica Acta, 2017, 232, 431-438.	5.2	42
50	In Situ Focused Ion Beam Scanning Electron Microscope Study of Microstructural Evolution of Single Tin Particle Anode for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 1733-1738.	8.0	42
51	Organosulfideâ€Based Deep Eutectic Electrolyte for Lithium Batteries. Angewandte Chemie - International Edition, 2021, 60, 9881-9885.	13.8	42
52	Recent advances of organometallic complexes for rechargeable batteries. Coordination Chemistry Reviews, 2021, 429, 213650.	18.8	41
53	Sulfonated polysulfone with 1,3-1H-dibenzimidazole-benzene additive as a membrane for direct methanol fuel cells. Journal of Membrane Science, 2008, 310, 262-267.	8.2	40
54	Polyprotic acid catholyte for high capacity dual-electrolyte Liâ€"air batteries. Physical Chemistry Chemical Physics, 2012, 14, 12737.	2.8	38

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55	Influence of ionomer content on the proton conduction and oxygen transport in the carbon-supported catalyst layers in DMFC. International Journal of Hydrogen Energy, 2012, 37, 9845-9852.	7.1	38
56	Silicon nanoparticles supported on graphitic carbon paper as a hybrid anode for Li-ion batteries. Nano Energy, 2013, 2, 1107-1112.	16.0	36
57	Electrosynthesis of 1,4-bis(diphenylphosphanyl) tetrasulfide via sulfur radical addition as cathode material for rechargeable lithium battery. Nature Communications, 2021, 12, 3220.	12.8	36
58	Advances of Organosulfur Materials for Rechargeable Metal Batteries. Advanced Science, 2022, 9, e2103989.	11.2	36
59	Advances in multimetallic alloy-based anodes for alkali-ion and alkali-metal batteries. Materials Today, 2021, 50, 259-275.	14.2	35
60	Cu(NO3)2 as efficient electrolyte additive for 4ÂV class Li metal batteries with ultrahigh stability. Energy Storage Materials, 2021, 37, 1-7.	18.0	33
61	Enhanced Cyclability of Li/Polysulfide Batteries by a Polymer-Modified Carbon Paper Current Collector. ACS Applied Materials & Interfaces, 2015, 7, 20369-20376.	8.0	31
62	Selenium Nanocomposite Cathode with Long Cycle Life for Rechargeable Lithiumâ€Selenium Batteries. Batteries and Supercaps, 2019, 2, 784-791.	4.7	31
63	Lowering the charge overpotential of Li₂S <i>via</i> the inductive effect of phenyl diselenide in Liâ€“S batteries. Chemical Communications, 2019, 55, 7655-7658.	4.1	30
64	Hydrocarbon blend membranes with suppressed chemical crossover for redox flow batteries. RSC Advances, 2012, 2, 5554.	3.6	29
65	Imidazole-buffered acidic catholytes for hybrid Liâ€“air batteries with high practical energy density. Electrochemistry Communications, 2014, 47, 67-70.	4.7	29
66	Anodized Aluminum Oxide Separators with Aligned Channels for High-Performance Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2020, 12, 5831-5837.	8.0	29
67	Simultaneously Homogenized Electric Field and Ionic Flux for Reversible Ultrahigh-Areal-Capacity Li Deposition. Nano Letters, 2020, 20, 5662-5669.	9.1	29
68	Hyperbranched organosulfur polymer cathode materials for Li-S battery. Chemical Engineering Journal, 2021, 415, 129043.	12.7	29
69	Atomically dispersed Sn modified with trace sulfur species derived from organosulfide complex for electroreduction of CO2. Applied Catalysis B: Environmental, 2022, 304, 120936.	20.2	29
70	Anion Intercalation of VS₄ Triggers Atomic Sulfur Transfer to Organic Disulfide in Rechargeable Lithium Battery. Advanced Functional Materials, 2021, 31, 2009875.	14.9	28
71	Intermolecular cyclic polysulfides as cathode materials for rechargeable lithium batteries. Journal of Materials Chemistry A, 2020, 8, 87-90.	10.3	27
72	Electrochemical properties of Cu2S with ether-based electrolyte in Li-ion batteries. Electrochimica Acta, 2013, 109, 716-719.	5.2	26

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73	Yttrium Vanadium Oxideâ€“Poly(3,4â€ethylenedioxythiophene) Composite Cathode Material for Aqueous Zincâ€Ion Batteries. Small Methods, 2021, 5, e2100544.	8.6	25
74	Dynamic 1Tâ€2H Mixedâ€Phase MoS₂ Enables Highâ€Performance Liâ€Organosulfide Battery. Small, 2022, 18, e2105071.	10.0	23
75	A Graphite-Polysulfide Full Cell with DME-Based Electrolyte. Journal of the Electrochemical Society, 2016, 163, A1543-A1549.	2.9	22
76	Advances of entropy-stabilized homologous compounds for electrochemical energy storage. Journal of Energy Chemistry, 2022, 67, 276-289.	12.9	22
77	Homogeneous and Fast Li-Ion Transport Enabled by a Novel Metalâ€“Organic-Framework-Based Succinonitrile Electrolyte for Dendrite-Free Li Deposition. ACS Applied Materials & Interfaces, 2021, 13, 52688-52696.	8.0	22
78	Insoluble Naphthoquinoneâ€Derived Molecular Cathode for Highâ€Performance Lithium Organic Battery. Advanced Functional Materials, 2022, 32, .	14.9	22
79	<i>In situ</i> and <i>operando</i> investigation of the dynamic morphological and phase changes of a selenium-doped germanium electrode during (de)lithiation processes. Journal of Materials Chemistry A, 2020, 8, 750-759.	10.3	21
80	Inorganic Mediator toward Organosulfide Active Material: Anchoring and Electrocatalysis. Advanced Functional Materials, 2021, 31, 2001493.	14.9	21
81	Benzoselenol as an organic electrolyte additive in Li-S battery. Nano Research, 2023, 16, 3814-3822.	10.4	20
82	Polysulfide transport through separators measured by a linear voltage sweep method. Journal of Power Sources, 2015, 286, 557-560.	7.8	19
83	Conversion of CO₂ to chemical feedstocks over bismuth nanosheets <i>in situ</i> grown on nitrogen-doped carbon. Journal of Materials Chemistry A, 2020, 8, 19938-19945.	10.3	18
84	Size Effect of Organosulfur and In Situ Formed Oligomers Enables Highâ€Utilization Naâ€“Organosulfur Batteries. Advanced Materials, 2021, 33, e2100824.	21.0	18
85	Nitrogen-rich azoles as trifunctional electrolyte additives for high-performance lithium-sulfur battery. Journal of Energy Chemistry, 2022, 71, 572-579.	12.9	18
86	Electrochemistry of Electrode Materials Containing Sâˆ'Se Bonds for Rechargeable Batteries. Chemistry - A European Journal, 2020, 26, 13322-13331.	3.3	17
87	<i>In Situ</i> Synthesis of Vacancy-Rich Titanium Sulfide Confined in a Hollow Carbon Nanocage as an Efficient Sulfur Host for Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 10104-10113.	5.1	15
88	Lithium Peroxide-Carbon Composite Cathode for Closed System Li-O₂Batteries. Journal of the Electrochemical Society, 2015, 162, A1327-A1333.	2.9	13
89	Identical cut-off voltage <i>versus</i> equivalent capacity: an objective evaluation of the impact of dopants in layered oxide cathodes. Journal of Materials Chemistry A, 2021, 9, 11219-11227.	10.3	12
90	Carbonaceous-assisted confinement synthesis of refractory high-entropy alloy nanocomposites and their application for seawater electrolysis. Journal of Colloid and Interface Science, 2022, 607, 1580-1588.	9.4	11

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91	Reviewâ€"Advances in Rechargeable Li-S Full Cells. Journal of the Electrochemical Society, 2022, 169, 040525.	2.9	11
92	A binder-free sulfur/carbon composite electrode prepared by a sulfur sublimation method for Liâ€“S batteries. RSC Advances, 2016, 6, 52642-52645.	3.6	10
93	Reductive defluorination of graphite monofluoride by weak, non-nucleophilic reductants reveals low-lying electron-accepting sites. Physical Chemistry Chemical Physics, 2018, 20, 14287-14290.	2.8	9
94	Twoâ€Plateau Liâ€Se Chemistry for High Volumetric Capacity Se Cathodes. Angewandte Chemie, 2020, 132, 14012-14018.	2.0	9
95	Benzene-1,2-dithiolato complexes as cathode materials for rechargeable lithium batteries. Electrochimica Acta, 2021, 370, 137757.	5.2	9
96	Tuning Solvation Behavior of Ester-Based Electrolytes toward Highly Stable Lithium-Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 40582-40589.	8.0	9
97	Effect of non-active area on the performance of subgasketed MEAs in PEMFC. International Journal of Hydrogen Energy, 2013, 38, 7400-7406.	7.1	8
98	Biredoxâ€Ionic Anthraquinoneâ€Coupled Ethylviologen Composite Enables Reversible Multielectron Redox Chemistry for Liâ€Organic Batteries. Advanced Science, 2022, 9, e2103632.	11.2	8
99	Chemically synthesized lithium peroxide composite cathodes for closed system Liâ€“O₂ batteries. Chemical Communications, 2016, 52, 5678-5681.	4.1	7
100	Carbon disulfide: A redox mediator for organodisulfides in redox flow batteries. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	7
101	Regulating dissolution chemistry of nitrates in carbonate electrolyte for high-stable lithium metal batteries. Journal of Energy Chemistry, 2022, 73, 422-428.	12.9	7
102	An Organicâ€“Inorganic Hybrid Cathode Based on Sâ€“Se Dynamic Covalent Bonds. Angewandte Chemie, 2020, 132, 2676-2680.	2.0	6
103	A self-healing Liâ€“S redox flow battery with alternative reaction pathways. Journal of Materials Chemistry A, 2021, 9, 12652-12658.	10.3	5
104	Smart Flow Electrosynthesis and Application of Organodisulfides in Redox Flow Batteries. Advanced Science, 2021, 9, 2104036.	11.2	5
105	Garnet solid-state electrolyte with benzenedithiolate catholyte for rechargeable lithium batteries. Chemical Communications, 2022, 58, 3657-3660.	4.1	5
106	Electrochemical behavior of tin foil anode in half cell and full cell with sulfur cathode. Electrochimica Acta, 2019, 294, 60-67.	5.2	4
107	Ultrastable Na-TiS2 battery enabled by in situ construction of gel polymer electrolyte. Journal of Power Sources, 2021, 516, 230653.	7.8	4
108	A fluorinated macrocyclic organodisulfide cathode for lithium organic batteries. Chemical Communications, 2022, 58, 5602-5605.	4.1	4

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109	Advances of Metal Oxide Composite Cathodes for Aqueous Zincâ€Ion Batteries. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	4
110	Nanostructured Materials for Lithium-Ion Batteries. Journal of Nanomaterials, 2013, 2013, 1-1.	2.7	3
111	Biomassâ€Derived Lenthionine Enhanced by Radical Receptor for Rechargeable Lithium Battery. ChemSusChem, 2022, 15, .	6.8	3
112	Conversion of SeS₂ to Organoselenosulfides Enables High-Performance Rechargeable Lithium Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 7526-7535.	6.7	1
113	High-performance garnet solid-state battery enabled by improved interfaces. Journal of Power Sources, 2022, 542, 231798.	7.8	1