Shichao Wu

List of Publications by Year
in descending order

56 papers	6,045 citations	94415 37 h-index	149686 56 g-index
56 all docs	56 docs citations	56 times ranked	6295 citing authors

#	Article	IF	Citations
1	A non-flammable hydrous organic electrolyte for sustainable zinc batteries. Nature Sustainability, 2022, 5, 205-213.	23.7	277
2	Liquid Metal Remedies Silicon Microparticulates Toward Highly Stable and Superior Volumetric Lithium Storage. Advanced Energy Materials, 2022, 12, .	19.5	42
3	Electrolyte Sieving Chemistry in Suppressing Gas Evolution of Sodiumâ€Metal Batteries. Angewandte Chemie, 2022, 134, .	2.0	6
4	Electrolyte Sieving Chemistry in Suppressing Gas Evolution of Sodiumâ€Metal Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	29
5	A bidirectional phase-transfer catalyst for Li-O2 batteries with high discharge capacity and low charge potential. Energy Storage Materials, 2022, 50, 564-571.	18.0	12
6	Integrating SEI into Layered Conductive Polymer Coatings for Ultrastable Silicon Anodes. Advanced Materials, 2022, 34, .	21.0	70
7	1000 Wh Lâˆ’1 lithium-ion batteries enabled by crosslink-shrunk tough carbon encapsulated silicon microparticle anodes. National Science Review, 2021, 8, nwab012.	9.5	60
8	Crowning Metal Ions by Supramolecularization as a General Remedy toward a Dendriteâ€Free Alkaliâ€Metal Battery. Advanced Materials, 2021, 33, e2101745.	21.0	32
9	A photo-assisted electrocatalyst coupled with superoxide suppression for high performance Li-O2 batteries. Nano Energy, 2021, 85, 105966.	16.0	27
10	Superior efficient rechargeable lithiumâ€“air batteries using a bifunctional biological enzyme catalyst. Energy and Environmental Science, 2020, 13, 144-151.	30.8	13
11	Dense organic molecules/graphene network anodes with superior volumetric and areal performance for asymmetric supercapacitors. Journal of Materials Chemistry A, 2020, 8, 461-469.	10.3	30
12	Constructing a Highâ€Strength Solid Electrolyte Layer by In Vivo Alloying with Aluminum for an Ultrahighâ€Rate Lithium Metal Anode. Advanced Functional Materials, 2020, 30, 1907343.	14.9	83
13	A Corrosionâ€Resistant and Dendriteâ€Free Zinc Metal Anode in Aqueous Systems. Small, 2020, 16, e2001736.	10.0	354
14	Designing a Multifunctional Separator for Highâ€Performance Liâ€“S Batteries at Elevated Temperature. Small, 2019, 15, e1904332.	10.0	37
15	Interlayers for lithium-based batteries. Energy Storage Materials, 2019, 23, 112-136.	18.0	37
16	Capture and Catalytic Conversion of Polysulfides by In Situ Built TiO₂â€MXene Heterostructures for Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1900219.	19.5	481
17	NonAqueous, Metal-Free, and Hybrid Electrolyte Li-Ion O₂ Battery with a Single-Ion-Conducting Separator. ACS Applied Materials & Interfaces, 2019, 11, 4908-4914.	8.0	14
18	Effective strategies for long-cycle life lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 6155-6182.	10.3	157

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19	Tailoring Sodium Anodes for Stable Sodiumâ€“Oxygen Batteries. Advanced Functional Materials, 2018, 28, 1706374.	14.9	63
20	MOF-Based Separator in an Liâ€“O₂ Battery: An Effective Strategy to Restrain the Shuttling of Dual Redox Mediators. ACS Energy Letters, 2018, 3, 463-468.	17.4	151
21	Clean Electrocatalysis in a Li₂O₂ Redox-Based Liâ€“O₂ Battery Built with a Hydrate-Melt Electrolyte. ACS Catalysis, 2018, 8, 1082-1089.	11.2	23
22	A single ion conducting separator and dual mediator-based electrolyte for high-performance lithiumâ€“oxygen batteries with non-carbon cathodes. Journal of Materials Chemistry A, 2018, 6, 9816-9822.	10.3	37
23	Li₂CO₃-free Liâ€“O₂/CO₂ battery with peroxide discharge product. Energy and Environmental Science, 2018, 11, 1211-1217.	30.8	120
24	Solar-driven efficient Li2O2 oxidation in solid-state Li-ion O2 batteries. Energy Storage Materials, 2018, 11, 170-175.	18.0	51
25	Boosting the Cycle Life of Aprotic Liâ€“O₂ Batteries via a Photoâ€Assisted Hybrid Li₂O₂â€Scavenging Strategy. Small Methods, 2018, 2, 1700284.	8.6	47
26	Minimizing the Abnormal High-Potential Discharge Process Related to Redox Mediators in Lithiumâ€“Oxygen Batteries. Journal of Physical Chemistry Letters, 2018, 9, 6761-6766.	4.6	10
27	Simultaneously Inhibiting Lithium Dendrites Growth and Polysulfides Shuttle by a Flexible MOFâ€Based Membrane in Liâ€“S Batteries. Advanced Energy Materials, 2018, 8, 1802130.	19.5	223
28	A Multifunctional Sillyâ€Putty Nanocomposite Spontaneously Repairs Cathode Composite for Advanced Liâˆ’S Batteries. Advanced Functional Materials, 2018, 28, 1804777.	14.9	52
29	A Hybrid Electrolytes Design for Capacityâ€Equivalent Dualâ€Graphite Battery with Superior Longâ€Term Cycle Life. Advanced Energy Materials, 2018, 8, 1801120.	19.5	50
30	Developing a â€œWaterâ€Defendableâ€•and â€œDendriteâ€Freeâ€•Lithiumâ€Metal Anode Using a Simple and Promising GeCl₄ Pretreatment Method. Advanced Materials, 2018, 30, e1705711.	21.0	186
31	From O₂^{âˆ’} to HO₂^{âˆ’}: Reducing Byâ€Products and Overpotential in Liâ€O₂ Batteries by Water Addition. Angewandte Chemie - International Edition, 2017, 56, 4960-4964.	13.8	133
32	From O₂^{âˆ’} to HO₂^{âˆ’}: Reducing Byâ€Products and Overpotential in Liâ€O₂ Batteries by Water Addition. Angewandte Chemie, 2017, 129, 5042-5046.	2.0	31
33	Unraveling the Complex Role of Iodide Additives in Liâ€“O₂ Batteries. ACS Energy Letters, 2017, 2, 1869-1878.	17.4	102
34	Li-CO2 Electrochemistry: A New Strategy for CO2 Fixation and Energy Storage. Joule, 2017, 1, 359-370.	24.0	325
35	A Superâ€Hydrophobic Quasiâ€Solid Electrolyte for Liâ€O₂ Battery with Improved Safety and Cycle Life in Humid Atmosphere. Advanced Energy Materials, 2017, 7, 1601759.	19.5	128
36	Organic hydrogen peroxide-driven low charge potentials for high-performance lithium-oxygen batteries with carbon cathodes. Nature Communications, 2017, 8, 15607.	12.8	53

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37	A long-life lithiumâ€“sulphur battery by integrating zincâ€“organic framework based separator. Journal of Materials Chemistry A, 2016, 4, 16812-16817.	10.3	121
38	A long-life lithium ion oxygen battery based on commercial silicon particles as the anode. Energy and Environmental Science, 2016, 9, 3262-3271.	30.8	89
39	Metalâ€“organic framework-based separator for lithiumâ€“sulfur batteries. Nature Energy, 2016, 1, .	39.5	1,059
40	A Synergistic System for Lithiumâ€“Oxygen Batteries in Humid Atmosphere Integrating a Composite Cathode and a Hydrophobic Ionic Liquidâ€Based Electrolyte. Advanced Functional Materials, 2016, 26, 3291-3298.	14.9	76
41	Cage-Type Highly Graphitic Porous Carbonâ€“Co₃O₄ Polyhedron as the Cathode of Lithiumâ€“Oxygen Batteries. ACS Applied Materials & Interfaces, 2016, 8, 2796-2804.	8.0	102
42	Hierarchical Porous Nickel Cobaltate Nanoneedle Arrays as Flexible Carbon-Protected Cathodes for High-Performance Lithiumâ€“Oxygen Batteries. ACS Applied Materials & Interfaces, 2016, 8, 8427-8435.	8.0	77
43	Interfacial construction of Li₂O₂ for a performance-improved polymer Liâ€“O₂ battery. Journal of Materials Chemistry A, 2016, 4, 2403-2407.	10.3	40
44	The water catalysis at oxygen cathodes of lithiumâ€“oxygen cells. Nature Communications, 2015, 6, 7843.	12.8	206
45	Low charge overpotentials in lithiumâ€“oxygen batteries based on tetraglyme electrolytes with a limited amount of water. Chemical Communications, 2015, 51, 16860-16863.	4.1	63
46	Reducing the charging voltage of a Liâ€“O₂battery to 1.9 V by incorporating a photocatalyst. Energy and Environmental Science, 2015, 8, 2664-2667.	30.8	147
47	Preparation of ordered mesoporous WO3â€“TiO2 films and their performance as functional Pt supports for synergistic photo-electrocatalytic methanol oxidation. Journal of Power Sources, 2014, 248, 510-516.	7.8	34
48	Effects of platinum on photo-assisted electrocatalytic activity of fringe-shaped highly ordered mesoporous titanium dioxide film. Journal of Power Sources, 2012, 208, 58-66.	7.8	12
49	Fabrication and characterization of thermo-sensitive magnetic polymer composite nanoparticles. Journal of Magnetism and Magnetic Materials, 2012, 324, 1326-1330.	2.3	12
50	Fabrication of unique stripe-shaped mesoporous TiO2 films and their performance as a novel photo-assisted catalyst support for DMFCs. Journal of Materials Chemistry, 2011, 21, 2852.	6.7	21
51	Fabrication of continuous mesoporous organicâ€“inorganic nanocomposite films for corrosion protection of stainless steel in PEM fuel cells. Corrosion Science, 2011, 53, 1498-1504.	6.6	24
52	Effect of Heat-treatment Temperature on the Structure and Properties of Li₄Ti₅O₁₂ Nanorods Prepared by the Hydrothermal Ion Exchange Method. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2011, 26, 123-128.	1.3	2
53	Electromagnetic wave absorption and infrared camouflage of ordered mesoporous carbonâ€“alumina nanocomposites. Microporous and Mesoporous Materials, 2010, 134, 58-64.	4.4	50
54	A novel solâ€“gel synthesis route to NaVPO4F as cathode material for hybrid lithium ion batteries. Journal of Power Sources, 2010, 195, 6854-6859.	7.8	126

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55	Microwave absorption properties and infrared emissivities of ordered mesoporous Câ€“TiO2 nanocomposites with crystalline framework. Journal of Solid State Chemistry, 2010, 183, 2797-2804.	2.9	52
56	Direct Incorporation of Magnetic Constituents within Ordered Mesoporous Carbonâ˜'Silica Nanocomposites for Highly Efficient Electromagnetic Wave Absorbers. Journal of Physical Chemistry C, 2010, 114, 7611-7617.	3.1	186