

# Yu Qiao

## List of Publications by Year in descending order

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93  
papers

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citations

61687

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66518

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docs citations

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times ranked

6731  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ion Exchange: A Promising Strategy to Design Li-Rich and Li-Excess Layered Cathode Materials for Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2022, 12, 2003972.	10.2	49
2	Efficient diffusion of superdense lithium <i>via</i> atomic channels for dendrite-free lithium-metal batteries. <i>Energy and Environmental Science</i> , 2022, 15, 196-205.	15.6	27
3	Structure design enables stable anionic and cationic redox chemistry in a T2-type Li-excess layered oxide cathode. <i>Science Bulletin</i> , 2022, 67, 381-388.	4.3	13
4	Nonvolatile and Nonflammable Sulfolane-Based Electrolyte Achieving Effective and Safe Operation of the Li-O <sub>2</sub> Battery in Open O <sub>2</sub> Environment. <i>Nano Letters</i> , 2022, 22, 815-821.	4.5	16
5	Regulating the Architecture of a Solid Electrolyte Interface on a Li-Metal Anode of a Li-O <sub>2</sub> Battery by a Dithiobiuret Additive. , 2022, 4, 682-691.		5
6	Long-Life Aqueous Zn-I <sub>2</sub> Battery Enabled by a Low-Cost Multifunctional Zeolite Membrane Separator. <i>Nano Letters</i> , 2022, 22, 2538-2546.	4.5	65
7	Robust Zn anode enabled by a hydrophilic adhesive coating for long-life zinc-ion hybrid supercapacitors. <i>Chemical Engineering Journal</i> , 2022, 442, 136217.	6.6	13
8	Tailoring the Solvation Sheath of Cations by Constructing Electrode Front-Faces for Rechargeable Batteries. <i>Advanced Materials</i> , 2022, 34, e2201339.	11.1	66
9	Stabilizing Li-O <sub>2</sub> Batteries with Multifunctional Fluorinated Graphene. <i>Nano Letters</i> , 2022, 22, 4985-4992.	4.5	24
10	Triggering and Stabilizing Oxygen Redox Chemistry in Layered Li[Na <sub>1/3</sub> Ru <sub>2/3</sub> ]O <sub>2</sub> Enabled by Stable O-O <sup>-</sup> Na Configuration. <i>ACS Energy Letters</i> , 2022, 7, 2349-2356.	8.8	18
11	Enhancing Li ion transfer efficacy in PEO-based solid polymer electrolytes to promote cycling stability of Li-metal batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 16087-16094.	5.2	24
12	A high-capacity cathode for rechargeable K-metal battery based on reversible superoxide-peroxide conversion. <i>National Science Review</i> , 2021, 8, nwaa287.	4.6	12
13	Stabilizing Anionic Redox Chemistry in a Mn-Based Layered Oxide Cathode Constructed by Li-Deficient Pristine State. <i>Advanced Materials</i> , 2021, 33, e2004280.	11.1	67
14	Amidinothiourea as a new deposition-regulating additive for dendrite-free lithium metal anodes. <i>Chemical Communications</i> , 2021, 57, 10055-10058.	2.2	9
15	Applications of Metal-organic Frameworks (MOFs) Materials in Lithium-ion Battery/Lithium-metal Battery Electrolytes. <i>Acta Chimica Sinica</i> , 2021, 79, 139.	0.5	10
16	A Safe and Sustainable Lithium-Oxygen Battery based on a Low-Cost Dual-Carbon Electrodes Architecture. <i>Advanced Materials</i> , 2021, 33, e2100827.	11.1	14
17	A high-energy-density and long-life initial-anode-free lithium battery enabled by a Li <sub>2</sub> O sacrificial agent. <i>Nature Energy</i> , 2021, 6, 653-662.	19.8	175
18	Achieving stable anionic redox chemistry in Li-excess O <sub>2</sub> -type layered oxide cathode via chemical ion-exchange strategy. <i>Energy Storage Materials</i> , 2021, 38, 1-8.	9.5	46

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19	Sustainable Lithium-Metal Battery Achieved by a Safe Electrolyte Based on Recyclable and Low-Cost Molecular Sieve. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15572-15581.	7.2	43
20	Sustainable Lithium-Metal Battery Achieved by a Safe Electrolyte Based on Recyclable and Low-Cost Molecular Sieve. <i>Angewandte Chemie</i> , 2021, 133, 15700-15709.	1.6	2
21	Designing Cation-Solvent Fully Coordinated Electrolyte for High-Energy-Density Lithium-Sulfur Full Cell Based On Solid-Solid Conversion. <i>Angewandte Chemie</i> , 2021, 133, 17867-17875.	1.6	11
22	Designing Cation-Solvent Fully Coordinated Electrolyte for High-Energy-Density Lithium-Sulfur Full Cell Based On Solid-Solid Conversion. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17726-17734.	7.2	50
23	Reducing Water Activity by Zeolite Molecular Sieve Membrane for Long-Life Rechargeable Zinc Battery. <i>Advanced Materials</i> , 2021, 33, e2102415.	11.1	164
24	Two-dimensional metal-organic framework with perpendicular one-dimensional nano-channel as precise polysulfide sieves for highly efficient lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4870-4879.	5.2	24
25	Formulating a New Electrolyte: Synergy between Low-Polar and Non-polar Solvents in Tailoring the Solid Electrolyte Interface for the Silicon Anode. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 55700-55711.	4.0	7
26	Fabricating better metal-organic frameworks separators for Li-S batteries: Pore sizes effects inspired channel modification strategy. <i>Energy Storage Materials</i> , 2020, 25, 164-171.	9.5	83
27	Superior efficient rechargeable lithium-air batteries using a bifunctional biological enzyme catalyst. <i>Energy and Environmental Science</i> , 2020, 13, 144-151.	15.6	13
28	Identifying Anionic Redox Activity within the Related O3- and P2-Type Cathodes for Sodium-Ion Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 851-857.	4.0	28
29	Elucidating Anionic Redox Chemistry in P3 Layered Cathode for Na-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 38249-38255.	4.0	30
30	A Liquid Electrolyte with De-Solvated Lithium Ions for Lithium-Metal Battery. <i>Joule</i> , 2020, 4, 1776-1789.	11.7	146
31	A Metal-Organic Framework as a Multifunctional Ionic Sieve Membrane for Long-Life Aqueous Zinc-Iodide Batteries. <i>Advanced Materials</i> , 2020, 32, e2004240.	11.1	222
32	Beyond the concentrated electrolyte: further depleting solvent molecules within a Li <sup>+</sup> solvation sheath to stabilize high-energy-density lithium metal batteries. <i>Energy and Environmental Science</i> , 2020, 13, 4122-4131.	15.6	122
33	Tuning Interface Bridging Between MoSe <sub>2</sub> and Three-Dimensional Carbon Framework by Incorporation of MoC Intermediate to Boost Lithium Storage Capability. <i>Nano-Micro Letters</i> , 2020, 12, 171.	14.4	53
34	A 500 Wh/kg Lithium-Metal Cell Based on Anionic Redox. <i>Joule</i> , 2020, 4, 1445-1458.	11.7	80
35	Constructing a Super-Saturated Electrolyte Front Surface for Stable Rechargeable Aqueous Zinc Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9377-9381.	7.2	551
36	Constructing a Super-Saturated Electrolyte Front Surface for Stable Rechargeable Aqueous Zinc Batteries. <i>Angewandte Chemie</i> , 2020, 132, 9463-9467.	1.6	327

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37	In Situ Spectroscopic Investigations of Electrochemical Oxygen Reduction and Evolution Reactions in Cyclic Carbonate Electrolyte Solutions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15781-15792.	1.5	16
38	A Safe Organic Oxygen Battery Built with Li-Based Liquid Anode and MOFs Separator. <i>Advanced Energy Materials</i> , 2020, 10, 1903953.	10.2	33
39	Stabilizing Reversible Oxygen Redox Chemistry in Layered Oxides for Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 1903785.	10.2	87
40	A stable high-voltage lithium-ion battery realized by an in-built water scavenger. <i>Energy and Environmental Science</i> , 2020, 13, 1197-1204.	15.6	67
41	Unraveling the anionic oxygen loss and related structural evolution within O3-type Na layered oxide cathodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20405-20413.	5.2	23
42	H <sub>2</sub> O self-trapping air cathode of Li-O <sub>2</sub> battery enabling low charge potential operating in dry system. <i>Nano Energy</i> , 2019, 64, 103945.	8.2	23
43	Understanding the effect of the concentration of LiNO <sub>3</sub> salt in Li-O <sub>2</sub> batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18318-18323.	5.2	16
44	Advanced Hybrid Electrolyte Li-O <sub>2</sub> Battery Realized by Dual Superlyophobic Membrane. <i>Joule</i> , 2019, 3, 2986-3001.	11.7	56
45	Restraining Oxygen Loss and Suppressing Structural Distortion in a Newly Ti-Substituted Layered Oxide P <sub>2</sub> -Na <sub>0.66</sub> Li <sub>0.22</sub> Ti <sub>0.15</sub> Mn <sub>0.63</sub> O <sub>2</sub> . <i>ACS Energy Letters</i> , 2019, 4, 2409-2417.	8.8	112
46	A New Type of Li-Rich Rock-Salt Oxide Li <sub>2</sub> Ni <sub>1/3</sub> Ru <sub>2/3</sub> O <sub>3</sub> with Reversible Anionic Redox Chemistry. <i>Advanced Materials</i> , 2019, 31, e1807825.	11.1	90
47	Developing a Polysulfide-Phobic Strategy to Restrain Shuttle Effect in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2019, 131, 11900-11904.	1.6	24
48	Developing a Polysulfide-Phobic Strategy to Restrain Shuttle Effect in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11774-11778.	7.2	100
49	Killing two birds with one stone: a Cu ion redox mediator for a non-aqueous Li-O <sub>2</sub> battery. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17261-17265.	5.2	34
50	Manganese-Based Na-Rich Materials Boost Anionic Redox in High-Performance Layered Cathodes for Sodium-Ion Batteries. <i>Advanced Materials</i> , 2019, 31, e1807770.	11.1	113
51	The potential of electrolyte filled MOF membranes as ionic sieves in rechargeable batteries. <i>Energy and Environmental Science</i> , 2019, 12, 2327-2344.	15.6	125
52	A high-energy-density and long-life lithium-ion battery via reversible oxide-peroxide conversion. <i>Nature Catalysis</i> , 2019, 2, 1035-1044.	16.1	150
53	Conjugated Microporous Polymers with Tunable Electronic Structure for High-Performance Potassium-Ion Batteries. <i>ACS Nano</i> , 2019, 13, 745-754.	7.3	162
54	NonAqueous, Metal-Free, and Hybrid Electrolyte Li-Ion O <sub>2</sub> Battery with a Single-Ion-Conducting Separator. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 4908-4914.	4.0	14

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55	Recent advances in functional modification of separators in lithium-sulfur batteries. Dalton Transactions, 2018, 47, 6881-6887.	1.6	61
56	Both Cationic and Anionic Co-(de)intercalation into a Metal-Oxide Material. Joule, 2018, 2, 1134-1145.	11.7	107
57	Direct Visualization of the Reversible $O^{2+}/O^{\cdot+}$ Redox Process in Li-Rich Cathode Materials. Advanced Materials, 2018, 30, e1705197.	11.1	264
58	Reversible anionic redox activity in $Na_3RuO_4$ cathodes: a prototype Na-rich layered oxide. Energy and Environmental Science, 2018, 11, 299-305.	15.6	126
59	Tailoring Sodium Anodes for Stable Sodium-Oxygen Batteries. Advanced Functional Materials, 2018, 28, 1706374.	7.8	63
60	MOF-Based Separator in an $LiO_2$ Battery: An Effective Strategy to Restrain the Shuttling of Dual Redox Mediators. ACS Energy Letters, 2018, 3, 463-468.	8.8	151
61	Amorphous $P_2S_5/C$ Composite as High-Performance Anode Materials for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 16-20.	4.0	20
62	Clean Electrocatalysis in a $Li_2O$ Redox-Based $LiO_2$ Battery Built with a Hydrate-Melt Electrolyte. ACS Catalysis, 2018, 8, 1082-1089.	5.5	23
63	A single ion conducting separator and dual mediator-based electrolyte for high-performance lithium-oxygen batteries with non-carbon cathodes. Journal of Materials Chemistry A, 2018, 6, 9816-9822.	5.2	37
64	Porous hybrid aerogels with ultrahigh sulfur loading for lithium-sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 9032-9040.	5.2	33
65	$Li_2CO_3$ -free $LiO_2/CO_2$ battery with peroxide discharge product. Energy and Environmental Science, 2018, 11, 1211-1217.	15.6	120
66	Solar-driven efficient $Li_2O_2$ oxidation in solid-state Li-ion $O_2$ batteries. Energy Storage Materials, 2018, 11, 170-175.	9.5	51
67	Boosting the Cycle Life of Aprotic $LiO_2$ Batteries via a Photo-Assisted Hybrid $Li_2O_2$ -Scavenging Strategy. Small Methods, 2018, 2, 1700284.	4.6	47
68	An ultra-stable and enhanced reversibility lithium metal anode with a sufficient $O_2$ design for Li- $O_2$ battery. Energy Storage Materials, 2018, 12, 176-182.	9.5	41
69	Minimizing the Abnormal High-Potential Discharge Process Related to Redox Mediators in Lithium-Oxygen Batteries. Journal of Physical Chemistry Letters, 2018, 9, 6761-6766.	2.1	10
70	High-Voltage Li-Ion Full Cells with Ultralong Term Cycle Life at Elevated Temperature. Advanced Energy Materials, 2018, 8, 1802322.	10.2	34
71	High-Power Li-Metal Anode Enabled by Metal-Organic Framework Modified Electrolyte. Joule, 2018, 2, 2117-2132.	11.7	227
72	Simultaneously Inhibiting Lithium Dendrites Growth and Polysulfides Shuttle by a Flexible MOF-Based Membrane in $LiS$ Batteries. Advanced Energy Materials, 2018, 8, 1802130.	10.2	223

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73	A Multifunctional Silly Putty Nanocomposite Spontaneously Repairs Cathode Composite for Advanced Li-S Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1804777.	7.8	52
74	A Hybrid Electrolytes Design for Capacity-Equivalent Dual-Graphite Battery with Superior Long-Term Cycle Life. <i>Advanced Energy Materials</i> , 2018, 8, 1801120.	10.2	50
75	A phase-transition-free cathode for sodium-ion batteries with ultralong cycle life. <i>Nano Energy</i> , 2018, 52, 88-94.	8.2	58
76	An ultrafast rechargeable lithium metal battery. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15517-15522.	5.2	43
77	A High-Crystalline NaV <sub>1.25</sub> Ti <sub>0.75</sub> O <sub>4</sub> Anode for Wide-Temperature Sodium-Ion Battery. <i>Advanced Energy Materials</i> , 2018, 8, 1801162.	10.2	41
78	Boosting the Cycle Life of Li-O <sub>2</sub> Batteries at Elevated Temperature by Employing a Hybrid Polymer-Ceramic Solid Electrolyte. <i>ACS Energy Letters</i> , 2017, 2, 1378-1384.	8.8	71
79	A reversible lithium-CO <sub>2</sub> battery with Ru nanoparticles as a cathode catalyst. <i>Energy and Environmental Science</i> , 2017, 10, 972-978.	15.6	285
80	From O <sub>2</sub> <sup>•-</sup> to HO <sub>2</sub> <sup>•</sup> : Reducing By-Products and Overpotential in Li-O <sub>2</sub> Batteries by Water Addition. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4960-4964.	7.2	133
81	From O <sub>2</sub> <sup>•-</sup> to HO <sub>2</sub> <sup>•</sup> : Reducing By-Products and Overpotential in Li-O <sub>2</sub> Batteries by Water Addition. <i>Angewandte Chemie</i> , 2017, 129, 5042-5046.	1.6	31
82	Unraveling the Complex Role of Iodide Additives in Li-O <sub>2</sub> Batteries. <i>ACS Energy Letters</i> , 2017, 2, 1869-1878.	8.8	102
83	Li-CO <sub>2</sub> Electrochemistry: A New Strategy for CO <sub>2</sub> Fixation and Energy Storage. <i>Joule</i> , 2017, 1, 359-370.	11.7	325
84	A Super-Hydrophobic Quasi-Solid Electrolyte for Li-O <sub>2</sub> Battery with Improved Safety and Cycle Life in Humid Atmosphere. <i>Advanced Energy Materials</i> , 2017, 7, 1601759.	10.2	128
85	Organic hydrogen peroxide-driven low charge potentials for high-performance lithium-oxygen batteries with carbon cathodes. <i>Nature Communications</i> , 2017, 8, 15607.	5.8	53
86	Spectroscopic Investigation for Oxygen Reduction and Evolution Reactions on Carbon Electrodes in Li-O <sub>2</sub> Battery. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8033-8047.	1.5	42
87	Spectroscopic Investigation for Oxygen Reduction and Evolution Reactions with Tetrathiafulvalene as a Redox Mediator in Li-O <sub>2</sub> Battery. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15830-15845.	1.5	75
88	Synthesis and electrochemical properties of porous double-shelled Mn <sub>2</sub> O <sub>3</sub> hollow microspheres as a superior anode material for lithium ion batteries. <i>Electrochimica Acta</i> , 2014, 132, 323-331.	2.6	39
89	Synthesis and electrochemical properties of high performance yolk-structured LiMn <sub>2</sub> O <sub>4</sub> microspheres for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 860-867.	5.2	32
90	Electrostatic spray deposition of porous Fe <sub>2</sub> V <sub>4</sub> O <sub>13</sub> films as electrodes for Li-ion batteries. <i>Journal of Alloys and Compounds</i> , 2012, 520, 77-82.	2.8	26

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91	Facile synthesis of micrometer $\text{Li}_{1.05}\text{Mn}_{1.95}\text{O}_4$ and its low temperature performance for high power lithium ion batteries. <i>Electrochimica Acta</i> , 2012, 81, 191-196.	2.6	18
92	A facile route to synthesize nano- $\text{MnO}/\text{C}$ composites and their application in lithium ion batteries. <i>Chemical Engineering Journal</i> , 2012, 192, 226-231.	6.6	53
93	Three-dimensional porous $\text{Fe}_{0.1}\text{V}_2\text{O}_5 \cdot 1.5\text{H}_2\text{O}$ thin film as a cathode material for lithium ion batteries. <i>Electrochimica Acta</i> , 2012, 64, 81-86.	2.6	45