Lei Qin

List of Publications by Year
in descending order

39 papers	1,917 citations	236925 25 h-index	302126 39 g-index
41 all docs	41 docs citations	41 times ranked	2554 citing authors

#	Article	IF	Citations
1	Localized Highâ€Concentration Electrolytes Boost Potassium Storage in Highâ€Loading Graphite. Advanced Energy Materials, 2019, 9, 1902618.	19.5	153
2	Unveiling the Unique Phase Transformation Behavior and Sodiation Kinetics of 1D van der Waals Sb₂S₃ Anodes for Sodium Ion Batteries. Advanced Energy Materials, 2017, 7, 1602149.	19.5	152
3	Ethers Illume Sodiumâ€Based Battery Chemistry: Uniqueness, Surprise, and Challenges. Advanced Energy Materials, 2018, 8, 1801361.	19.5	149
4	Unveiling the influence of electrode/electrolyte interface on the capacity fading for typical graphite-based potassium-ion batteries. Energy Storage Materials, 2020, 24, 319-328.	18.0	140
5	Capillary Encapsulation of Metallic Potassium in Aligned Carbon Nanotubes for Use as Stable Potassium Metal Anodes. Advanced Energy Materials, 2019, 9, 1901427.	19.5	118
6	Sb-doped SnO2/graphene-CNT aerogels for high performance Li-ion and Na-ion battery anodes. Energy Storage Materials, 2017, 9, 85-95.	18.0	85
7	Rational Assembly of Hollow Microporous Carbon Spheres as P Hosts for Longâ€Life Sodiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1702267.	19.5	85
8	Positive role of oxygen vacancy in electrochemical performance of CoMn 2 O 4 cathodes for Li-O 2 batteries. Journal of Power Sources, 2017, 365, 134-147.	7.8	84
9	Artificial Solidâ€Electrolyte Interphase Enabled Highâ€Capacity and Stable Cycling Potassium Metal Batteries. Advanced Energy Materials, 2019, 9, 1902697.	19.5	81
10	Exploring Stability of Nonaqueous Electrolytes for Potassium-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 1828-1833.	5.1	78
11	Dendrite-Free Potassiumâ€“Oxygen Battery Based on a Liquid Alloy Anode. ACS Applied Materials & Interfaces, 2017, 9, 31871-31878.	8.0	72
12	Mildly-expanded graphite with adjustable interlayer distance as high-performance anode for potassium-ion batteries. Carbon, 2021, 172, 200-206.	10.3	63
13	Superoxide-Based Kâ€“O₂ Batteries: Highly Reversible Oxygen Redox Solves Challenges in Air Electrodes. Journal of the American Chemical Society, 2020, 142, 11629-11640.	13.7	49
14	Anomalous Enhancement of Liâ€O₂ Battery Performance with Li₂O₂ Films Assisted by NiFeO_x Nanofiber Catalysts: Insights into Morphology Control. Advanced Functional Materials, 2016, 26, 8290-8299.	14.9	47
15	Room-temperature liquid metal-based anodes for high-energy potassium-based electrochemical devices. Chemical Communications, 2018, 54, 8032-8035.	4.1	47
16	Oxygen-enriched carbon nanotubes as a bifunctional catalyst promote the oxygen reduction/evolution reactions in Li-O2 batteries. Carbon, 2019, 141, 561-567.	10.3	45
17	Porous RuO2 nanosheet/CNT electrodes for DMSO-based Li-O2 and Li ion O2 batteries. Energy Storage Materials, 2017, 8, 110-118.	18.0	36
18	A high-performance lithium ion oxygen battery consisting of Li2O2 cathode and lithiated aluminum anode with nafion membrane for reduced O2 crossover. Nano Energy, 2017, 40, 258-263.	16.0	35

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19	Correlation between Microstructure and Potassium Storage Behavior in Reduced Graphene Oxide Materials. ACS Applied Materials & Interfaces, 2019, 11, 45578-45585.	8.0	34
20	From Kâ€O₂ to Kâ€Air Batteries: Realizing Superoxide Batteries on the Basis of Dry Ambient Air. Angewandte Chemie - International Edition, 2020, 59, 10498-10501.	13.8	33
21	Optimal storage rack design for a multi-deep compact AS/RS considering the acceleration/deceleration of the storage and retrieval machine. International Journal of Production Research, 2015, 53, 929-943.	7.5	32
22	Building a Reactive Armor Using S-Doped Graphene for Protecting Potassium Metal Anodes from Oxygen Crossover in Kâ€“O₂ Batteries. ACS Energy Letters, 2020, 5, 1788-1793.	17.4	32
23	Pursuing graphite-based K-ion O₂ batteries: a lesson from Li-ion batteries. Energy and Environmental Science, 2020, 13, 3656-3662.	30.8	31
24	Achieving Low Overpotential Lithiumâ€“Oxygen Batteries by Exploiting a New Electrolyte Based on N,Nâ€²-Dimethylpropyleneurea. ACS Energy Letters, 2017, 2, 313-318.	17.4	30
25	Molecular Sieve Induced Solution Growth of Li₂O₂ in the Liâ€“O₂ Battery with Largely Enhanced Discharge Capacity. ACS Applied Materials & Interfaces, 2018, 10, 7989-7995.	8.0	28
26	Highly conductive porous graphene/sulfur composite ribbon electrodes for flexible lithiumâ€“sulfur batteries. Nanoscale, 2018, 10, 21132-21141.	5.6	27
27	Phase Transferâ€Mediated Degradation of Etherâ€Based Localized Highâ€Concentration Electrolytes in Alkali Metal Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	21
28	Dense graphene monolith oxygen cathodes for ultrahigh volumetric energy densities. Energy Storage Materials, 2017, 9, 134-139.	18.0	19
29	K₃SbS₄ as a Potassium Superionic Conductor with Low Activation Energy for Kâ€“S Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	19
30	A soluble phenolic mediator contributing to enhanced discharge capacity and low charge overpotential for lithium-oxygen batteries. Electrochemistry Communications, 2017, 79, 68-72.	4.7	18
31	Graphene-Directed Formation of a Nitrogen-Doped Porous Carbon Sheet with High Catalytic Performance for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2018, 122, 13508-13514.	3.1	16
32	Designing Potassium Battery Salts through a Solvent-in-Anion Concept for Concentrated Electrolytes and Mimicking Solvation Structures. Chemistry of Materials, 2020, 32, 10423-10434.	6.7	16
33	Single Potassium-Ion Conducting Polymer Electrolytes: Preparation, Ionic Conductivities, and Electrochemical Stability. ACS Applied Energy Materials, 2021, 4, 4156-4164.	5.1	14
34	From Kâ€O 2 to Kâ€Air Batteries: Realizing Superoxide Batteries on the Basis of Dry Ambient Air. Angewandte Chemie, 2020, 132, 10584-10587.	2.0	10
35	From solid carbon sources to carbon nanotubes: a general water-assisted approach. RSC Advances, 2014, 4, 54244-54248.	3.6	4
36	Controllable Electrochemical Fabrication of KO₂-Decorated Binder-Free Cathodes for Rechargeable Lithiumâ€“Oxygen Batteries. ACS Applied Materials & Interfaces, 2018, 10, 17156-17166.	8.0	4

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37	K₃SbS₄ as a Potassium Superionic Conductor with Low Activation Energy for Kâ€“S Batteries. Angewandte Chemie, 2022, 134, .	2.0	4
38	Phase Transferâ€Mediated Degradation of Etherâ€Based Localized Highâ€Concentration Electrolytes in Alkali Metal Batteries. Angewandte Chemie, 2022, 134, .	2.0	4
39	Tuning hybrid liquid/solid electrolytes by lowering Li salt concentration for lithium batteries. Chinese Physics B, 2018, 27, 068201.	1.4	0