

Kun Qian

List of Publications by Year in descending order

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37
papers

1,632
citations

361413
20
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37
all docs

37
docs citations

37
times ranked

2329
citing authors

#	ARTICLE	IF	CITATIONS
1	Understanding fluorine-free electrolytes via small-angle X-ray scattering. Journal of Energy Chemistry, 2022, 70, 340-346.	12.9	10
2	A visible to near-infrared nanocrystalline organic photodetector with ultrafast photoresponse. Journal of Materials Chemistry C, 2022, 10, 9391-9400.	5.5	8
3	Insights into the Nanostructure, Solvation, and Dynamics of Liquid Electrolytes through Small-Angle X-Ray Scattering. Advanced Energy Materials, 2021, 11, 2002821.	19.5	37
4	Revealing the Nanostructures of Liquid Electrolytes By X-Ray Scattering. ECS Meeting Abstracts, 2021, MA2021-01, 464-464.	0.0	0
5	Heterogeneous Degradation in Thick Nickel-Rich Cathodes During High-Temperature Storage and Mitigation of Thermal Instability by Regulating Cationic Disorder. Small, 2021, 17, e2102055.	10.0	8
6	Heterogeneous Degradation in Thick Nickel-Rich Cathodes During High-Temperature Storage and Mitigation of Thermal Instability by Regulating Cationic Disorder (Small 34/2021). Small, 2021, 17, 2170177.	10.0	0
7	Decoupling the degradation factors of Ni-rich NMC/Li metal batteries using concentrated electrolytes. Energy Storage Materials, 2021, 41, 222-229.	18.0	16
8	Microscopic Understanding of the Ionic Networks of "Water-in-Salt" Electrolytes. Energy Material Advances, 2021, 2021, .	11.0	20
9	Understanding Solvation Behavior of the Saturated Electrolytes with Small/Wide-Angle X-ray Scattering and Raman Spectroscopy. Energy & Fuels, 2021, 35, 19849-19855.	5.1	17
10	Impact of evolution of cathode electrolyte interface of Li(Ni _{0.8} Co _{0.1} Mn _{0.1})O ₂ on electrochemical performance during high voltage cycling process. Journal of Energy Chemistry, 2020, 47, 72-78.	12.9	20
11	Efficient Construction of a C60 Interlayer for Mechanically Robust, Dendrite-free, and Ultrastable Solid-State Batteries. IScience, 2020, 23, 101636.	4.1	11
12	Large-scale synthesis of lithium- and manganese-rich materials with uniform thin-film Al ₂ O ₃ coating for stable cathode cycling. Science China Materials, 2020, 63, 1683-1692.	6.3	23
13	Data-Driven Fast Clustering of Second-Life Lithium-Ion Battery: Mechanism and Algorithm. Advanced Theory and Simulations, 2020, 3, 2000109.	2.8	20
14	A gradient screening approach for retired lithium-ion batteries based on X-ray computed tomography images. RSC Advances, 2020, 10, 19117-19123.	3.6	14
15	An Efficient Synthetic Method to Prepare High-Performance Ni-rich LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ for Lithium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 7403-7411.	5.1	25
16	Investigation of Interfacial Changes on Grain Boundaries of Li(Ni _{0.5} Co _{0.2} Mn _{0.3})O ₂ in the Initial Overcharge Process. Advanced Materials Interfaces, 2019, 6, 1801764.	3.7	17
17	Review of Recent Development of In Situ/Operando Characterization Techniques for Lithium Battery Research. Advanced Materials, 2019, 31, e1806620.	21.0	390
18	Understanding the cathode electrolyte interface formation in aqueous electrolyte by scanning electrochemical microscopy. Journal of Materials Chemistry A, 2019, 7, 12993-12996.	10.3	49

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19	Evolution of Solid Electrolyte Interface on TiO_2 Electrodes in an Aqueous Li-Ion Battery Studied Using Scanning Electrochemical Microscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12797-12806.	3.1	30
20	Increase and discretization of the energy barrier for individual $\text{LiNi}_x\text{Co}_y\text{Mn}_y\text{O}_2$ ($x + 2y = 1$) particles with the growth of a Li_2CO_3 surface film. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12723-12731.	10.3	43
21	A Simple Method for the Complete Performance Recovery of Degraded Ni-rich $\text{LiNi}_{0.70}\text{Co}_{0.15}\text{Mn}_{0.15}\text{O}_2$ Cathode via Surface Reconstruction. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14076-14084.	8.0	89
22	Investigations on the Surface Degradation of $\text{LiNi}_{1/3}\text{Co}_{1/3}\text{Mn}_{1/3}\text{O}_2$ after Storage. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7378-7385.	6.7	15
23	State-of-health (SOH) evaluation on lithium-ion battery by simulating the voltage relaxation curves. <i>Electrochimica Acta</i> , 2019, 303, 183-191.	5.2	70
24	The different Li/Na ion storage mechanisms of nano Sb_2O_3 anchored on graphene. <i>Journal of Power Sources</i> , 2018, 385, 114-121.	7.8	41
25	Positive film-forming effect of fluoroethylene carbonate (FEC) on high-voltage cycling with three-electrode $\text{LiCoO}_2/\text{Graphite}$ pouch cell. <i>Electrochimica Acta</i> , 2018, 269, 378-387.	5.2	62
26	Deterioration mechanism of $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2/\text{graphite}$ "SiO _x " power batteries under high temperature and discharge cycling conditions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 65-72.	10.3	66
27	Combination Effect of Bulk Structure Change and Surface Rearrangement on the Electrochemical Kinetics of $\text{LiNi}_{0.80}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ During Initial Charging Processes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 41370-41379.	8.0	27
28	Interfacial engineering enables Bi@C-TiO microspheres as superpower and long life anode for lithium-ion batteries. <i>Nano Energy</i> , 2018, 51, 137-145.	16.0	55
29	Influence of charge rate on the cycling degradation of $\text{LiFePO}_4/\text{mesocarbon microbead}$ batteries under low temperature. <i>Ionics</i> , 2017, 23, 1967-1978.	2.4	12
30	Study on the reversible capacity loss of layered oxide cathode during low-temperature operation. <i>Journal of Power Sources</i> , 2017, 342, 24-30.	7.8	42
31	A Facile Surface Reconstruction Mechanism toward Better Electrochemical Performance of $\text{Li}_4\text{Ti}_5\text{O}_{12}$ in Lithium-Ion Battery. <i>Advanced Science</i> , 2017, 4, 1700205.	11.2	37
32	In-situ polymerized lithium polyacrylate (PAAli) as dual-functional lithium source for high-performance layered oxide cathodes. <i>Electrochimica Acta</i> , 2017, 249, 43-51.	5.2	14
33	A dual-functional gel-polymer electrolyte for lithium ion batteries with superior rate and safety performances. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18888-18895.	10.3	85
34	Abuse tolerance behavior of layered oxide-based Li-ion battery during overcharge and over-discharge. <i>RSC Advances</i> , 2016, 6, 76897-76904.	3.6	80
35	Influence of over-discharge on the lifetime and performance of $\text{LiFePO}_4/\text{graphite}$ batteries. <i>RSC Advances</i> , 2016, 6, 30474-30483.	3.6	71
36	Effects of state of charge on the degradation of $\text{LiFePO}_4/\text{graphite}$ batteries during accelerated storage test. <i>Journal of Alloys and Compounds</i> , 2015, 639, 406-414.	5.5	49

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37	Deterioration of lithium iron phosphate/graphite power batteries under high-rate discharge cycling. Electrochimica Acta, 2015, 176, 270-279.	5.2	59