Kun Qian

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5629756/publications.pdf

Version: 2024-02-01

37 papers	1,632 citations	361296 20 h-index	360920 35 g-index
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.	7.1	10
2	A visible to near-infrared nanocrystalline organic photodetector with ultrafast photoresponse. Journal of Materials Chemistry C, 2022, 10, 9391-9400.	2.7	8
3	Insights into the Nanostructure, Solvation, and Dynamics of Liquid Electrolytes through Smallâ€Angle Xâ€Ray Scattering. Advanced Energy Materials, 2021, 11, 2002821.	10.2	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 Nickelâ€Rich Cathodes During Highâ€Temperature Storage and Mitigation of Thermal Instability by Regulating Cationic Disordering. Small, 2021, 17, e2102055.	5.2	8
6	Heterogeneous Degradation in Thick Nickelâ€Rich Cathodes During Highâ€Temperature Storage and Mitigation of Thermal Instability by Regulating Cationic Disordering (Small 34/2021). Small, 2021, 17, 2170177.	5.2	0
7	Decoupling the degradation factors of Ni-rich NMC/Li metal batteries using concentrated electrolytes. Energy Storage Materials, 2021, 41, 222-229.	9.5	16
8	Microscopic Understanding of the Ionic Networks of â€œWater-in-Saltâ€•Electrolytes. Energy Material Advances, 2021, 2021, .	4.7	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.	2.5	17
10	Impact of evolution of cathode electrolyte interface of Li(Ni0.8Co0.1Mn0.1)O2 on electrochemical performance during high voltage cycling process. Journal of Energy Chemistry, 2020, 47, 72-78.	7.1	20
11	Efficient Construction of a C60 Interlayer for Mechanically Robust, Dendrite-free, and Ultrastable Solid-State Batteries. IScience, 2020, 23, 101636.	1.9	11
12	Large-scale synthesis of lithium- and manganese-rich materials with uniform thin-film Al2O3 coating for stable cathode cycling. Science China Materials, 2020, 63, 1683-1692.	3.5	23
13	Dataâ€Driven Fast Clustering of Secondâ€Life Lithiumâ€Ion Battery: Mechanism and Algorithm. Advanced Theory and Simulations, 2020, 3, 2000109.	1.3	20
14	A gradient screening approach for retired lithium-ion batteries based on X-ray computed tomography images. RSC Advances, 2020, 10, 19117-19123.	1.7	14
15	An Efficient Synthetic Method to Prepare High-Performance Ni-rich LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ for Lithium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 7403-7411.	2.5	25
16	Investigation of Interfacial Changes on Grain Boundaries of Li(Ni_{0.5}Co_{0.2}Mn_{0.3})O₂ in the Initial Overcharge Process. Advanced Materials Interfaces, 2019, 6, 1801764.	1.9	17
17	Review of Recent Development of In Situ/Operando Characterization Techniques for Lithium Battery Research. Advanced Materials, 2019, 31, e1806620.	11.1	390
18	Understanding the cathode electrolyte interface formation in aqueous electrolyte by scanning electrochemical microscopy. Journal of Materials Chemistry A, 2019, 7, 12993-12996.	5.2	49

#	Article	IF	Citations
19	Evolution of Solid Electrolyte Interface on TiO₂ Electrodes in an Aqueous Li-Ion Battery Studied Using Scanning Electrochemical Microscopy. Journal of Physical Chemistry C, 2019, 123, 12797-12806.	1.5	30
20	Increase and discretization of the energy barrier for individual LiNi_xCo_yMn_yO₂ (x + 2y =1) particles with the growth of a Li₂CO₃ surface film. Journal of Materials Chemistry A, 2019, 7, 12723-12731.	5.2	43
21	A Simple Method for the Complete Performance Recovery of Degraded Ni-rich LiNi_{0.70}Co_{0.15}Mn_{0.15}O₂ Cathode via Surface Reconstruction. ACS Applied Materials & Interfaces, 2019, 11, 14076-14084.	4.0	89
22	Investigations on the Surface Degradation of LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ after Storage. ACS Sustainable Chemistry and Engineering, 2019, 7, 7378-7385.	3.2	15
23	State-of-health (SOH) evaluation on lithium-ion battery by simulating the voltage relaxation curves. Electrochimica Acta, 2019, 303, 183-191.	2.6	70
24	The different Li/Na ion storage mechanisms of nano Sb 2 O 3 anchored on graphene. Journal of Power Sources, 2018, 385, 114-121.	4.0	41
25	Positive film-forming effect of fluoroethylene carbonate (FEC) on high-voltage cycling with three-electrode LiCoO2/Graphite pouch cell. Electrochimica Acta, 2018, 269, 378-387.	2.6	62
26	Deterioration mechanism of LiNi_{0.8}Co_{0.15}Al_{0.05}O₂/graphiteâ€“SiO_x power batteries under high temperature and discharge cycling conditions. Journal of Materials Chemistry A, 2018, 6, 65-72.	5.2	66
27	Combination Effect of Bulk Structure Change and Surface Rearrangement on the Electrochemical Kinetics of LiNi_{0.80}Co_{0.15}Al_{0.05}O₂ During Initial Charging Processes. ACS Applied Materials & Interfaces, 2018, 10, 41370-41379.	4.0	27
28	Interfacial engineering enables Bi@C-TiO microspheres as superpower and long life anode for lithium-ion batteries. Nano Energy, 2018, 51, 137-145.	8.2	55
29	Influence of charge rate on the cycling degradation of LiFePO4/mesocarbon microbead batteries under low temperature. Ionics, 2017, 23, 1967-1978.	1.2	12
30	Study on the reversible capacity loss of layered oxide cathode during low-temperature operation. Journal of Power Sources, 2017, 342, 24-30.	4.0	42
31	A Facile Surface Reconstruction Mechanism toward Better Electrochemical Performance of Li₄Ti₅O₁₂ in Lithiumâ€ion Battery. Advanced Science, 2017, 4, 1700205.	5.6	37
32	In-situ polymerized lithium polyacrylate (PAALi) as dual-functional lithium source for high-performance layered oxide cathodes. Electrochimica Acta, 2017, 249, 43-51.	2.6	14
33	A dual-functional gel-polymer electrolyte for lithium ion batteries with superior rate and safety performances. Journal of Materials Chemistry A, 2017, 5, 18888-18895.	5.2	85
34	Abuse tolerance behavior of layered oxide-based Li-ion battery during overcharge and over-discharge. RSC Advances, 2016, 6, 76897-76904.	1.7	80
35	Influence of over-discharge on the lifetime and performance of LiFePO₄/graphite batteries. RSC Advances, 2016, 6, 30474-30483.	1.7	71
36	Effects of state of charge on the degradation of LiFePO4/graphite batteries during accelerated storage test. Journal of Alloys and Compounds, 2015, 639, 406-414.	2.8	49

#	Article	IF	Citations
37	Deterioration of lithium iron phosphate/graphite power batteries under high-rate discharge cycling. Electrochimica Acta, 2015, 176, 270-279.	2.6	59