Youhao Liao

List of Publications by Citations

38 papers	1,222 citations	19 h-index	34 g-index
39 ext. papers	1,446 ext. citations	7.1 avg, IF	4.47 L-index

#	Paper	IF	Citations
38	Designing Low Impedance Interface Films Simultaneously on Anode and Cathode for High Energy Batteries. *Advanced Energy Materials*, **2018**, 8, 1800802	21.8	137
37	Layered Lithium-Rich Oxide Nanoparticles Doped with Spinel Phase: Acidic Sucrose-Assistant Synthesis and Excellent Performance as Cathode of Lithium Ion Battery. *ACS Applied Materials & Interfaces*, **2016**, 8, 4575-84	9.5	99
36	Constructing a Protective Interface Film on Layered Lithium-Rich Cathode Using an Electrolyte Additive with Special Molecule Structure. *ACS Applied Materials & Interfaces*, **2016**, 8, 30116-30125	9.5	89
35	Diethyl(thiophen-2-ylmethyl)phosphonate: a novel multifunctional electrolyte additive for high voltage batteries. *Journal of Materials Chemistry A*, **2018**, 6, 10990-11004	13	74
34	Maintaining structural integrity of 4.5 V lithium cobalt oxide cathode with fumaronitrile as a novel electrolyte additive. *Journal of Power Sources*, **2017**, 338, 108-116	8.9	73
33	Morphology-Conserved Transformations of Metal-Based Precursors to Hierarchically Porous Micro-/Nanostructures for Electrochemical Energy Conversion and Storage. *Advanced Materials*, **2017**, 29, 1607015	24	66
32	Mechanism of cycling degradation and strategy to stabilize a nickel-rich cathode. *Journal of Materials Chemistry A*, **2018**, 6, 16149-16163	13	66
31	Constructing Unique Cathode Interface by Manipulating Functional Groups of Electrolyte Additive for Graphite/LiNiCoMnO Cells at High Voltage. *Journal of Physical Chemistry Letters*, **2018**, 9, 3434-3445	6.4	57
30	Structural Exfoliation of Layered Cathode under High Voltage and Its Suppression by Interface Film Derived from Electrolyte Additive. *ACS Applied Materials & Interfaces*, **2017**, 9, 12021-12034	9.5	52
29	Sodium Intercalation Behavior of Layered NaxNbS2 (0 □x □1). *Chemistry of Materials*, **2013**, 25, 1699-1705	9.6	50
28	Sulfur loaded in curved graphene and coated with conductive polyaniline: preparation and performance as a cathode for lithium□sulfur batteries. *Journal of Materials Chemistry A*, **2015**, 3, 18098-18104	13	45
27	Understanding self-discharge mechanism of layered nickel cobalt manganese oxide at high potential. *Journal of Power Sources*, **2015**, 286, 551-556	8.9	43
26	Constructing a Low-Impedance Interface on a High-Voltage LiNiCoMnO Cathode with 2,4,6-Triphenyl Boroxine as a Film-Forming Electrolyte Additive for Li-Ion Batteries. *ACS Applied Materials & Interfaces*, **2020**, 12, 37013-37026	9.5	34
25	Cycling performance improvement of polypropylene supported poly(vinylidene fluoride-co-hexafluoropropylene)/maleic anhydride-grated-polyvinylidene fluoride based gel electrolyte by incorporating nano-Al2O3 for full batteries. *Journal of Membrane Science*, **2016**, 507, 126-134	9.6	31
24	Effect of particle size on rate capability and cyclic stability of LiNi0.5Mn1.5O4 cathode for high-voltage lithium ion battery. *Journal of Solid State Electrochemistry*, **2015**, 19, 569-576	2.6	26
23	The improved effect of co-doping with nano-SiO2 and nano-Al2O3 on the performance of poly(methyl methacrylate-acrylonitrile-ethyl acrylate) based gel polymer electrolyte for lithium ion batteries. *RSC Advances*, **2015**, 5, 64368-64377	3.7	25
22	Tris(trimethylsilyl)phosphate as electrolyte additive for self-discharge suppression of layered nickel cobalt manganese oxide. *Electrochimica Acta*, **2016**, 212, 352-359	6.7	25

21	Preparation and performance of a composite polyimide/poly(vinylidene fluoride-co-hexafluoropropylene)/nano-Al2O3 polymer electrolyte for lithium-sulfur cell. *Ionics*, **2015**, 21, 1937-1943	2.7	24
20	Highly effective fabrication of two dimensional metal oxides as high performance lithium storage anodes. *Journal of Materials Chemistry A*, **2019**, 7, 3924-3932	13	19
19	A cross-like hierarchical porous lithium-rich layered oxide with (110)-oriented crystal planes as a high energy density cathode for lithium ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 13120-13129	13	19
18	Investigation on polyethylene supported poly(butyl methacrylate-acrylonitrile-styrene) terpolymer based gel electrolyte reinforced by doping nano-SiO2 for high voltage lithium ion battery. *Electrochimica Acta*, **2017**, 251, 145-154	6.7	19
17	Mesoporous carbon-sulfur composite as cathode for lithium-sulfur battery. *Ionics*, **2015**, 21, 645-650	2.7	15
16	Carbon coating of Li4Ti5O12-TiO2 anode by using cetyl trimethyl ammonium bromide as dispersant and phenolic resin as carbon precursor. *Ionics*, **2015**, 21, 1539-1544	2.7	14
15	Functionalized N-doped hollow carbon spheres as sulfur host with enhanced electrochemical performances of lithium-sulfur batteries. *Ionics*, **2019**, 25, 503-511	2.7	14
14	A facile strategy to improve the cycle stability of 4.45 V LiCoO2 cathode in gel electrolyte system via succinonitrile additive under elevated temperature. *Solid State Ionics*, **2019**, 341, 115049	3.3	13
13	Improved rate performance of LiNi0.5Mn1.5O4 cathode for lithium ion battery by carbon coating. *Ionics*, **2015**, 21, 1269-1275	2.7	13
12	Improved performance of LiNi0.5Mn1.5O4 cathode for high-voltage lithium-ion battery at elevated temperature by using gel polymer electrolyte. *Ionics*, **2015**, 21, 2457-2463	2.7	12
11	Performance enforcement of gel polymer electrolyte for lithium ion battery with co-doping silicon dioxide and zirconium dioxide nanoparticles. *Ionics*, **2015**, 21, 2763-2770	2.7	11
10	Improved electrochemical performance of LiNi0.5Mn1.5O4 as cathode of lithium ion battery by Co and Cr co-doping. *Journal of Solid State Electrochemistry*, **2014**, 18, 2027-2033	2.6	11
9	Cyclic stability improvement in a blended P(VdF-HFP)/P(BMA-AN-St)-based gel electrolyte by electrospinning for high voltage lithium ion batteries. *Electrochimica Acta*, **2019**, 299, 45-54	6.7	10
8	Polyethylene-supported poly(methyl methacrylate-co-butyl acrylate)-based novel gel polymer electrolyte for lithium ion battery. *Ionics*, **2016**, 22, 1035-1042	2.7	9
7	Influence of Fe substitution on cycling stability of Li[Li0.2Ni0.13Mn0.54Co0.13]O2 cathode for lithium ion batteries. *Ionics*, **2015**, 21, 1827-1833	2.7	8
6	Optimal concentration of electrolyte additive for cyclic stability improvement of high-voltage cathode of lithium-ion battery. *Ionics*, **2018**, 24, 661-670	2.7	8
5	Significantly improved cyclability of lithium manganese oxide, simultaneously inhibiting electrochemical and thermal decomposition of the electrolyte by the use of an additive. *RSC Advances*, **2017**, 7, 46594-46603	3.7	6
4	Effect of pore structure in polymer membrane from various preparation techniques on cyclic stability of 4.9 V LiNi0.5Mn1.5O4 at elevated temperature. *Journal of Membrane Science*, **2020**, 597, 117628	8.6	5

3	Application of Terpolymer Encapsulated Flame-Retardant Separator in Ni-Rich and High-Voltage Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2022**, 169, 020513	3.9	0
2	Poly(methyl methacrylate-butyl-acrylamide-styrene)/polyethylene electrospinning separator incorporated with ionic liquid for safer LiNi0.5Co0.2Mn0.3O2 cathode. *Ionics*, **2022**, 28, 543	2.7	0
1	Electrochemical improvement in high-voltage Li-ion batteries by electrospinning a small amount of nano-Al2O3 in P(MVE-MA)/P(VdF-HFP)-blended gel electrolyte. *Ionics*, **2022**, 28, 767	2.7	0