Jianguo Liu

List of Publications by Year
in descending order

39 papers	1,567 citations	279798 23 h-index	302126 39 g-index
39 all docs	39 docs citations	39 times ranked	1260 citing authors

#	Article	IF	Citations
1	Multi-walled carbon nanotubes used as an electrode reaction catalyst for /VO2+ for a vanadium redox flow battery. Carbon, 2011, 49, 3463-3470.	10.3	260
2	The electrochemical catalytic activity of single-walled carbon nanotubes towards VO2+/VO2+ and V3+/V2+ redox pairs for an all vanadium redox flow battery. Electrochimica Acta, 2012, 79, 102-108.	5.2	121
3	Preparation and characterization of sulfonated poly(ether sulfone)/sulfonated poly(ether ether) Tj ETQq1 1 0.784314 rgBT /Overlock 10 306-312.	8.2	89
4	Investigation of the use of electrolyte viscosity for online state-of-charge monitoring design in vanadium redox flow battery. Applied Energy, 2018, 211, 1050-1059.	10.1	87
5	CeO 2 embedded electrospun carbon nanofibers as the advanced electrode with high effective surface area for vanadium flow battery. Electrochimica Acta, 2016, 215, 57-65.	5.2	82
6	Electrospun carbon nanofibers/electrocatalyst hybrids as asymmetric electrodes for vanadium redox flow battery. Journal of Power Sources, 2015, 281, 1-6.	7.8	72
7	Electrospun carbon nanofibres as electrode materials toward VO2+/VO2+ redox couple for vanadium flow battery. Journal of Power Sources, 2013, 241, 709-717.	7.8	69
8	Effect of the graphitization degree for electrospun carbon nanofibers on their electrochemical activity towards VO2+/VO2+ redox couple. Electrochimica Acta, 2016, 199, 147-153.	5.2	55
9	Quaternary ammonium groups grafted polybenzimidazole membranes for vanadium redox flow battery applications. Journal of Power Sources, 2020, 457, 228037.	7.8	55
10	Investigation of the electrospun carbon web as the catalyst layer for vanadium redox flow battery. Journal of Power Sources, 2014, 270, 634-645.	7.8	53
11	Porous polybenzimidazole membranes with high ion selectivity for the vanadium redox flow battery. Journal of Membrane Science, 2020, 611, 118359.	8.2	52
12	Oriented Proton-Conductive Nanochannels Boosting a Highly Conductive Proton-Exchange Membrane for a Vanadium Redox Flow Battery. ACS Applied Materials & Interfaces, 2021, 13, 4051-4061.	8.0	42
13	Preparation and electrochemical performance of ZrO2 nanoparticle-embedded nonwoven composite separator for lithium-ion batteries. Ceramics International, 2015, 41, 14223-14229.	4.8	41
14	Modified multiwalled carbon nanotubes as an electrode reaction catalyst for an all vanadium redox flow battery. Journal of Solid State Electrochemistry, 2013, 17, 1369-1376.	2.5	40
15	Improved electrochemical performance for vanadium flow battery by optimizing the concentration of the electrolyte. Journal of Power Sources, 2016, 324, 215-223.	7.8	38
16	Numerical modelling and in-depth analysis of multi-stack vanadium flow battery module incorporating transport delay. Applied Energy, 2019, 247, 13-23.	10.1	34
17	Analyses and optimization of electrolyte concentration on the electrochemical performance of iron-chromium flow battery. Applied Energy, 2020, 271, 115252.	10.1	33
18	A new electrocatalyst and its application method for vanadium redox flow battery. Journal of Power Sources, 2015, 287, 81-86.	7.8	32

#	Article	IF	Citations
19	Anchoring effect of the partially reduced graphene oxide doped electrospun carbon nanoï¬bers on their electrochemical performances in vanadium ï¬‚ow battery. Journal of Power Sources, 2019, 425, 94-102.	7.8	31
20	Temperature-related reaction kinetics of the vanadium(<scp>iv</scp>)/(<scp>v</scp>) redox couple in acidic solutions. RSC Advances, 2014, 4, 32405-32411.	3.6	26
21	An advanced integrated electrode with micron- and nano-scale structures for vanadium redox flow battery. Journal of Power Sources, 2020, 450, 227686.	7.8	26
22	A novel mechanism for the oxidation reaction of VO2+ on a graphite electrode in acidic solutions. Journal of Power Sources, 2014, 261, 212-220.	7.8	25
23	Coupling effect between the structure and surface characteristics of electrospun carbon nanofibres on the electrochemical activity towards the VO₂⁺/VO²⁺ redox couple. Physical Chemistry Chemical Physics, 2015, 17, 20368-20375.	2.8	24
24	A pioneering melamine foam-based electrode via facile synthesis as prospective direction for vanadium redox flow batteries. Chemical Engineering Journal, 2022, 439, 135718.	12.7	22
25	Gradient-microstructural porous graphene gelatum/flexible graphite plate integrated electrode for vanadium redox flow batteries. International Journal of Hydrogen Energy, 2020, 45, 916-923.	7.1	18
26	Hollow mesoporous silica sphere-embedded composite separator for high-performance lithium-ion battery. Journal of Solid State Electrochemistry, 2016, 20, 2847-2855.	2.5	17
27	Electrocatalytic effect of the edge planes sites at graphite electrode on the vanadium redox couples. Electrochimica Acta, 2016, 204, 263-269.	5.2	14
28	Investigation of electrolytes of the vanadium redox flow battery (IV): Measurement and prediction of viscosity of aqueous VOSO4 solution at 283.15 to 323.15 K. Journal of Molecular Liquids, 2016, 224, 893-899.	4.9	14
29	A Novel Self-Binding Composite Separator Based on Poly(tetrafluoroethylene) Coating for Li-Ion Batteries. Polymers, 2018, 10, 1409.	4.5	13
30	Investigation of electrolytes of the vanadium redox flow battery (VII): Prediction of the viscosity of mixed electrolyte solution (VOSO4â€¯+â€¯H2SO4â€¯+â€¯H2O) based on Eyringâ€™s theory. Journal of Chemical Thermodynamics, 2019, 134, 69-75.	2.0	12
31	Excellent ion selectivity of Nafion membrane modified by PBI via acid-base pair effect for vanadium flow battery. Electrochimica Acta, 2021, 394, 139144.	5.2	12
32	Zwitterionic interface engineering enables ultrathin composite membrane for high-rate vanadium flow battery. Energy Storage Materials, 2022, 49, 471-480.	18.0	12
33	Advanced poly(vinyl alcohol) porous separator with overcharge protection function for lithium-ion batteries. Journal of Solid State Electrochemistry, 2019, 23, 2853-2862.	2.5	11
34	Highly thermostable expanded polytetrafluoroethylene separator with mussel-inspired silica coating for advanced Li-ion batteries. Journal of Power Sources, 2020, 468, 228403.	7.8	10
35	Polybenzimidazole and Polyvinylpyrrolidone Blend Membranes for Vanadium Flow Battery. Journal of the Electrochemical Society, 2020, 167, 060511.	2.9	10
36	Prediction of viscosity for high-concentrated ternary solution (CH3SO3HÂ+ÂVOSO4Â+ÂH2O) in vanadium flow battery. Journal of Molecular Liquids, 2020, 297, 111908.	4.9	6

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37	In Situ Pore-Making and Heteroatom Doping of Carbon Nanofibers Electrode for High Performance Vanadium Redox Flow Battery. Journal of the Electrochemical Society, 2021, 168, 060533.	2.9	4
38	A new insight into electrode processes of vanadium redox flow battery by thermo-electro-chemistry method. Journal of Energy Storage, 2017, 14, 163-167.	8.1	3
39	Thermodynamic properties and prediction of viscosity for ternary solution (VOSO4Â+ÂPAAÂ+ÂH2O) in vanadium flow battery. Journal of Molecular Liquids, 2021, 328, 115510.	4.9	2