

Huamin Zhang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4426293/huamin-zhang-publications-by-year.pdf>
Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

214 papers	10,971 citations	60 h-index	96 g-index
221 ext. papers	13,395 ext. citations	12.8 avg, IF	6.94 L-index

#	Paper	IF	Citations
214	Improved titanium-manganese flow battery with high capacity and high stability. <i>Journal of Power Sources</i> , 2022 , 522, 230995	8.9	1
213	A low-cost bromine-fixed additive enables a high capacity retention zinc-bromine batteries. <i>Journal of Energy Chemistry</i> , 2022 , 65, 89-93	12	3
212	Progress and Perspective of the Cathode Materials towards Bromine-Based Flow Batteries. <i>Energy Material Advances</i> , 2022 , 2022, 1-22	1	0
211	Low-cost hydrocarbon membrane enables commercial-scale flow batteries for long-duration energy storage. <i>Joule</i> , 2022 ,	27.8	4
210	Advanced porous composite membrane with ability to regulate zinc deposition enables dendrite-free and high-areal capacity zinc-based flow battery. <i>Energy Storage Materials</i> , 2022 , 47, 415-423	19.4	0
209	High-energy-density aqueous zinc-based hybrid supercapacitor-battery with uniform zinc deposition achieved by multifunctional decoupled additive. <i>Nano Energy</i> , 2022 , 96, 107120	17.1	1
208	Electrochemical Production of Formic Acid from CO with Cetyltrimethylammonium Bromide-Assisted Copper-Based Catalysts. <i>ChemSusChem</i> , 2021 , 14, 1962-1969	8.3	0
207	Controllable Design Coupled with Finite Element Analysis of Low-Tortuosity Electrode Architecture for Advanced Sodium-Ion Batteries with Ultra-High Mass Loading. <i>Advanced Energy Materials</i> , 2021 , 11, 2003725	21.8	14
206	The Mystery from Tetragonal NaVPO ₄ F to Monoclinic NaVPO ₄ F: Crystal Presentation, Phase Conversion, and Na-Storage Kinetics. <i>Advanced Energy Materials</i> , 2021 , 11, 2100627	21.8	2
205	Endogenous Symbiotic Li N/Cellulose Skin to Extend the Cycle Life of Lithium Anode. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 11718-11724	16.4	25
204	Highly Active Ag Nanoparticle Electrocatalysts toward V ²⁺ /V ³⁺ Redox Reaction. <i>ACS Applied Energy Materials</i> , 2021 , 4, 3913-3920	6.1	4
203	Endogenous Symbiotic Li ₃ N/Cellulose Skin to Extend the Cycle Life of Lithium Anode. <i>Angewandte Chemie</i> , 2021 , 133, 11824-11830	3.6	
202	Constructing Phase-Transitional NiS@Nitrogen-Doped Carbon Cathode Material with High Rate Capability and Cycling Stability for Alkaline Zinc-Based Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 19008-19015	9.5	1
201	Atomic-Dispersed Coordinated Unsaturated Nickel-Nitrogen Sites in Hollow Carbon Spheres for the Efficient Electrochemical CO ₂ Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2021 , 9, 5437-5444	8.2	4
200	In Situ Defect-Free Vertically Aligned Layered Double Hydroxide Composite Membrane for High Areal Capacity and Long-Cycle Zinc-Based Flow Battery. <i>Advanced Functional Materials</i> , 2021 , 31, 2102167	15.6	8
199	Multifunctional Carbon Felt Electrode with N-Rich Defects Enables a Long-Cycle Zinc-Bromine Flow Battery with Ultrahigh Power Density. <i>Advanced Functional Materials</i> , 2021 , 31, 2102913	15.6	11
198	Intercalated polyaniline in V ₂ O ₅ as a unique vanadium oxide bronze cathode for highly stable aqueous zinc ion battery. <i>Energy Storage Materials</i> , 2021 , 38, 590-598	19.4	33

197	Layered double hydroxide membrane with high hydroxide conductivity and ion selectivity for energy storage device. <i>Nature Communications</i> , 2021 , 12, 3409	17.4	19
196	Dendrite-Free Zinc-Based Battery with High Areal Capacity via the Region-Induced Deposition Effect of Turing Membrane. <i>Journal of the American Chemical Society</i> , 2021 , 143, 13135-13144	16.4	15
195	Vanadium-based polyanionic compounds as cathode materials for sodium-ion batteries: Toward high-energy and high-power applications. <i>Journal of Energy Chemistry</i> , 2021 , 55, 361-390	12	28
194	A high potential biphenol derivative cathode: toward a highly stable air-insensitive aqueous organic flow battery. <i>Science Bulletin</i> , 2021 , 66, 457-463	10.6	8
193	Advanced poly(vinyl pyrrolidone) decorated chlorinated polyvinyl chloride membrane with low area resistance for vanadium flow battery. <i>Journal of Membrane Science</i> , 2021 , 620, 118947	9.6	5
192	A defect-free MOF composite membrane prepared via in-situ binder-controlled restrained second-growth method for energy storage device. <i>Energy Storage Materials</i> , 2021 , 35, 687-694	19.4	10
191	Organic Electrode Materials for Non-aqueous K-Ion Batteries. <i>Transactions of Tianjin University</i> , 2021 , 27, 1-23	2.9	7
190	N-doped hierarchical porous carbon derived from bismuth salts decorated ZIF8 as a highly efficient electrocatalyst for CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 320-326	13	3
189	A data-driven and DFT assisted theoretic guide for membrane design in flow batteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 14545-14552	13	2
188	A highly reversible zinc deposition for flow batteries regulated by critical concentration induced nucleation. <i>Energy and Environmental Science</i> , 2021 , 14, 4077-4084	35.4	15
187	Anode for Zinc-Based Batteries: Challenges, Strategies, and Prospects. <i>ACS Energy Letters</i> , 2021 , 6, 2765-2785	27.85	30
186	Ion conductive membranes for flow batteries: Design and ions transport mechanism. <i>Journal of Membrane Science</i> , 2021 , 632, 119355	9.6	6
185	A Coral-Like FeP@NC Anode with Increasing Cycle Capacity for Sodium-Ion and Lithium-Ion Batteries Induced by Particle Refinement. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 25013-25019	16.4	16
184	The crucial role of parallel and interdigitated flow channels in a trapezoid flow battery. <i>Journal of Power Sources</i> , 2021 , 512, 230497	8.9	0
183	Stop Four Gaps with One Bush: Versatile Hierarchical Polybenzimidazole Nanoporous Membrane for Highly Durable Li-S Battery. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 55809-55819	9.5	3
182	Effect of Electrolyte Additives on the Water Transfer Behavior for Alkaline Zinc-Iron Flow Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 51573-51580	9.5	4
181	Recent Development in Composite Membranes for Flow Batteries. <i>ChemSusChem</i> , 2020 , 13, 3805	8.3	15
180	Revisiting of Tetragonal NaVPOF: A High Energy Density Cathode for Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 30510-30519	9.5	4

179	Electrode Design for High-Performance Sodium-Ion Batteries: Coupling Nanorod-Assembled NaV(PO) ₄ @C Microspheres with a 3D Conductive Charge Transport Network. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 13869-13877	9.5	26
178	A Boron Nitride Nanosheets Composite Membrane for a Long-Life Zinc-Based Flow Battery. <i>Angewandte Chemie</i> , 2020 , 132, 6781-6785	3.6	2
177	K ₂ Fe ₃ (SO ₄) ₃ (OH) ₂ (H ₂ O) ₂ : A new high-performance hydroxysulfate cathode material for alkali metal ion batteries. <i>Journal of Power Sources</i> , 2020 , 452, 227835	8.9	4
176	Porous V ₂ O ₅ yolk-shell microspheres for zinc ion battery cathodes: activation responsible for enhanced capacity and rate performance. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 5186-5193	13	59
175	A Boron Nitride Nanosheets Composite Membrane for a Long-Life Zinc-Based Flow Battery. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 6715-6719	16.4	35
174	An aqueous hybrid electrolyte for low-temperature zinc-based energy storage devices. <i>Energy and Environmental Science</i> , 2020 , 13, 3527-3535	35.4	175
173	Thin-film composite membrane breaking the trade-off between conductivity and selectivity for a flow battery. <i>Nature Communications</i> , 2020 , 11, 13	17.4	67
172	A highly reversible neutral zinc/manganese battery for stationary energy storage. <i>Energy and Environmental Science</i> , 2020 , 13, 135-143	35.4	83
171	Dendrite-Free Zinc Deposition Induced by Tin-Modified Multifunctional 3D Host for Stable Zinc-Based Flow Battery. <i>Advanced Materials</i> , 2020 , 32, e1906803	24	135
170	A simple pre-sodiation strategy to improve the performance and energy density of sodium ion batteries with Na ₄ V ₂ (PO ₄) ₃ as the cathode material. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 23368-23375	13.5	13
169	An all-weather Li/LiV ₂ (PO ₄) ₃ primary battery with improved shelf-life based on the in situ modification of the cathode/electrolyte interface. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 16951-16959	13	3
168	Membranes with Well-Defined Selective Layer Regulated by Controlled Solvent Diffusion for High Power Density Flow Battery. <i>Advanced Energy Materials</i> , 2020 , 10, 2001382	21.8	28
167	Cost, performance prediction and optimization of a vanadium flow battery by machine-learning. <i>Energy and Environmental Science</i> , 2020 , 13, 4353-4361	35.4	17
166	Ultrafast and Stable Li-(De)intercalation in a Large Single Crystal H-Nb O Anode via Optimizing the Homogeneity of Electron and Ion Transport. <i>Advanced Materials</i> , 2020 , 32, e2001001	24	36
165	LiCr(MoO ₄) ₂ : a new high specific capacity cathode material for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 567-573	13	16
164	Highly stable zinc-bdine single flow batteries with super high energy density for stationary energy storage. <i>Energy and Environmental Science</i> , 2019 , 12, 1834-1839	35.4	101
163	N-Doped Nanoporous Carbon from Biomass as a Highly Efficient Electrocatalyst for the CO ₂ Reduction Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 5249-5255	8.3	21
162	Advanced Porous Membranes with Tunable Morphology Regulated by Ionic Strength of Nonsolvent for Flow Battery. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 24107-24113	9.5	27

161	Promoting the Transformation of Li S to Li S: Significantly Increasing Utilization of Active Materials for High-Sulfur-Loading Li-S Batteries. <i>Advanced Materials</i> , 2019 , 31, e1901220	24	186
160	A Cost-Effective Mixed Matrix Polyethylene Porous Membrane for Long-Cycle High Power Density Alkaline Zinc-Based Flow Batteries. <i>Advanced Functional Materials</i> , 2019 , 29, 1901674	15.6	13
159	A novel aqueous Li ⁺ (or Na ⁺)/Br ⁻ hybrid-ion battery with super high areal capacity and energy density. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 13050-13059	13	8
158	The Challenge of Lithium Metal Anodes for Practical Applications. <i>Small Methods</i> , 2019 , 3, 1800551	12.8	42
157	A highly stable neutral viologen/bromine aqueous flow battery with high energy and power density. <i>Chemical Communications</i> , 2019 , 55, 4801-4804	5.8	45
156	Fast kinetics of Mg ²⁺ /Li ⁺ hybrid ions in a polyanion Li ₃ V ₂ (PO ₄) ₃ cathode in a wide temperature range. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9968-9976	13	27
155	Membranes Fabricated by Solvent treatment for Flow Battery: Effects of initial structures and intrinsic properties. <i>Journal of Membrane Science</i> , 2019 , 577, 212-218	9.6	12
154	Tuning the electrocatalytic properties of a Cu electrode with organic additives containing amine group for CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5453-5462	13	22
153	Aqueous Flow Batteries: Research and Development. <i>Chemistry - A European Journal</i> , 2019 , 25, 1649-1664	4.8	54
152	Highly selective core-shell structural membrane with cage-shaped pores for flow battery. <i>Energy Storage Materials</i> , 2019 , 17, 325-333	19.4	10
151	Mixed Matrix Membranes: A Cost-Effective Mixed Matrix Polyethylene Porous Membrane for Long-Cycle High Power Density Alkaline Zinc-Based Flow Batteries (Adv. Funct. Mater. 29/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970201	15.6	1
150	Bi-Modified Zn Catalyst for Efficient CO ₂ Electrochemical Reduction to Formate. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 15190-15196	8.3	22
149	Progress and Perspectives of Flow Battery Technologies. <i>Electrochemical Energy Reviews</i> , 2019 , 2, 492-506	6.3	65
148	Going Nano with Confined Effects to Construct Pomegranate-like Cathode for High-Energy and High-Power Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 28934-28942	9.5	2
147	Advanced Materials for Zinc-Based Flow Battery: Development and Challenge. <i>Advanced Materials</i> , 2019 , 31, e1902025	24	77
146	A TiN Nanorod Array 3D Hierarchical Composite Electrode for Ultrahigh-Power-Density Bromine-Based Flow Batteries. <i>Advanced Materials</i> , 2019 , 31, e1904690	24	23
145	Long Cycle Life Lithium Metal Batteries Enabled with Upright Lithium Anode. <i>Advanced Functional Materials</i> , 2019 , 29, 1806752	15.6	60
144	Constructing high-performance 3D porous self-standing electrodes with various morphologies and shapes by a flexible phase separation-derived method. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 22550-22558	13.5	7

143	Zinc-Based Flow Batteries: Advanced Materials for Zinc-Based Flow Battery: Development and Challenge (Adv. Mater. 50/2019). <i>Advanced Materials</i> , 2019 , 31, 1970356	24	2
142	Battery assembly optimization: Tailoring the electrode compression ratio based on the polarization analysis in vanadium flow batteries. <i>Applied Energy</i> , 2019 , 235, 495-508	10.7	23
141	VSC-doping and VSU-doping of Na ₃ V ₂ -xTi _x (PO ₄) ₂ F ₃ compounds for sodium ion battery cathodes: Analysis of electrochemical performance and kinetic properties. <i>Nano Energy</i> , 2018 , 47, 340-352	17.1	74
140	High Capacity, Dendrite-Free Growth, and Minimum Volume Change Na Metal Anode. <i>Small</i> , 2018 , 14, e1703717	11	75
139	Quasi-Stable Electroless Ni ₂ P Deposition: A Pivotal Strategy to Create Flexible Li ₂ S Pouch Batteries with Bench Mark Cycle Stability and Specific Capacity. <i>Advanced Functional Materials</i> , 2018 , 28, 1707272	15.6	17
138	Toward a Low-Cost Alkaline Zinc-Iron Flow Battery with a Polybenzimidazole Custom Membrane for Stationary Energy Storage. <i>IScience</i> , 2018 , 3, 40-49	6.1	71
137	Towards enhanced sodium storage by investigation of the Li ion doping and rearrangement mechanism in Na ₃ V ₂ (PO ₄) ₃ for sodium ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 4209-4218	13	38
136	Low-Cost Room-Temperature Synthesis of NaVO ₂ ·0.69H ₂ O Nanobelts for Mg Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 4757-4766	9.5	38
135	Polysulfide Stabilization: A Pivotal Strategy to Achieve High Energy Density Li ₂ S Batteries with Long Cycle Life. <i>Advanced Functional Materials</i> , 2018 , 28, 1704987	15.6	39
134	LiVBO: a new nano-rod cathode material for lithium ion batteries. <i>Nanoscale</i> , 2018 , 10, 1997-2003	7.7	5
133	Ultrathin Bismuth Nanosheets as a Highly Efficient CO Reduction Electrocatalyst. <i>ChemSusChem</i> , 2018 , 11, 848-853	8.3	84
132	A Long Cycle Life, Self-Healing Zinc-Iodine Flow Battery with High Power Density. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 11171-11176	16.4	91
131	Anchor and activate sulfide with LiTi ₂ (PO ₄) ₂ ·8.88F _{0.12} nano spheres for lithium sulfur battery application. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 7639-7648	13	15
130	Flow field design and optimization of high power density vanadium flow batteries: A novel trapezoid flow battery. <i>AIChE Journal</i> , 2018 , 64, 782-795	3.6	28
129	Reaktitelbild: A Long Cycle Life, Self-Healing Zinc-Iodine Flow Battery with High Power Density (Angew. Chem. 35/2018). <i>Angewandte Chemie</i> , 2018 , 130, 11644-11644	3.6	
128	Solvent treatment: the formation mechanism of advanced porous membranes for flow batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 15569-15576	13	13
127	Progress on the electrode materials towards vanadium flow batteries (VFBs) with improved power density. <i>Journal of Energy Chemistry</i> , 2018 , 27, 1292-1303	12	44
126	The Effect of Organic Additives on the Activity and Selectivity of CO Electroreduction: The Role of Functional Groups. <i>ChemSusChem</i> , 2018 , 11, 2904-2911	8.3	7

125	A Long Cycle Life, Self-Healing Zinc-Iodine Flow Battery with High Power Density. <i>Angewandte Chemie</i> , 2018 , 130, 11341-11346	3.6	44
124	All-NASICON LVP-LTP aqueous lithium ion battery with excellent stability and low-temperature performance. <i>Electrochimica Acta</i> , 2018 , 278, 279-289	6.7	40
123	Magnesium/Lithium-Ion Hybrid Battery with High Reversibility by Employing NaVO ₂ ·1.69H ₂ O Nanobelts as a Positive Electrode. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 21313-21320	9.5	40
122	Advanced porous PBI membranes with tunable performance induced by the polymer-solvent interaction for flow battery application. <i>Energy Storage Materials</i> , 2018 , 10, 40-47	19.4	52
121	Multi-functional nanowall arrays with unrestricted Li ⁺ transport channels and an integrated conductive network for high-area-capacity LiS batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22958-22965	13.3	25
120	Vapour induced phase inversion: preparing high performance self-standing sponge-like electrodes with a sulfur loading of over 10 mg cm ⁻² . <i>Journal of Materials Chemistry A</i> , 2018 , 6, 24066-24070	13	4
119	Superior Na-storage performance of molten-state-blending-synthesized monoclinic NaVPO ₄ F nanoplates for Na-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 24201-24209	13	24
118	A membrane-free interfacial battery with high energy density. <i>Chemical Communications</i> , 2018 , 54, 11626-11629	5.8	1629
117	Inhibition of Zinc Dendrite Growth in Zinc-Based Batteries. <i>ChemSusChem</i> , 2018 , 11, 3996-4006	8.3	149
116	Advanced porous membranes with slit-like selective layer for flow battery. <i>Nano Energy</i> , 2018 , 54, 73-81	17.1	33
115	A high-energy sulfur cathode in carbonate electrolyte by eliminating polysulfides via solid-phase lithium-sulfur transformation. <i>Nature Communications</i> , 2018 , 9, 4509	17.4	123
114	Li ₃ Cr(MoO ₄) ₃ : a NASICON-type high specific capacity cathode material for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 19107-19112	13	13
113	Negatively charged nanoporous membrane for a dendrite-free alkaline zinc-based flow battery with long cycle life. <i>Nature Communications</i> , 2018 , 9, 3731	17.4	76
112	Progress and prospect for NASICON-type Na ₃ V ₂ (PO ₄) ₃ for electrochemical energy storage. <i>Journal of Energy Chemistry</i> , 2018 , 27, 1597-1617	12	56
111	Ion conducting membranes for aqueous flow battery systems. <i>Chemical Communications</i> , 2018 , 54, 7570-7588	5.8	58
110	BiMnO ₂ : a new mullite-type anode material for lithium-ion batteries. <i>Dalton Transactions</i> , 2018 , 47, 7739-7746	4.6	5
109	Structural Design of Lithium-Sulfur Batteries: From Fundamental Research to Practical Application. <i>Electrochemical Energy Reviews</i> , 2018 , 1, 239-293	29.3	197
108	A multi-electron transfer ferrocene derivative positive redox moiety with improved solubility and potential. <i>Chemical Communications</i> , 2018 , 54, 8419-8422	5.8	13

107	Activated Carbon Fiber Paper Based Electrodes with High Electrocatalytic Activity for Vanadium Flow Batteries with Improved Power Density. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 4626-4633	9.5	86
106	Superior Thermally Stable and Nonflammable Porous Polybenzimidazole Membrane with High Wettability for High-Power Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 8742-8750	9.5	60
105	Advanced charged porous membranes with flexible internal crosslinking structures for vanadium flow batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6193-6199	13	22
104	Improving the electrochemical performance of Na ₃ V ₂ (PO ₄) ₃ cathode in sodium ion batteries through Ce/V substitution based on rational design and synthesis optimization. <i>Electrochimica Acta</i> , 2017 , 238, 288-297	6.7	44
103	Y-Doped Na ₃ V ₂ (PO ₄) ₂ F ₃ compounds for sodium ion battery cathodes: electrochemical performance and analysis of kinetic properties. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 10928-10935	13	76
102	Cage-Like Porous Carbon with Superhigh Activity and Br ⁻ -Complex-Entrapping Capability for Bromine-Based Flow Batteries. <i>Advanced Materials</i> , 2017 , 29, 1605815	24	60
101	Porous membranes in secondary battery technologies. <i>Chemical Society Reviews</i> , 2017 , 46, 2199-2236	58.5	256
100	Ultrathin free-standing electrospun carbon nanofibers web as the electrode of the vanadium flow batteries. <i>Journal of Energy Chemistry</i> , 2017 , 26, 730-737	12	22
99	The porous membrane with tunable performance for vanadium flow battery: The effect of charge. <i>Journal of Power Sources</i> , 2017 , 342, 327-334	8.9	23
98	Solvent-Induced Rearrangement of Ion-Transport Channels: A Way to Create Advanced Porous Membranes for Vanadium Flow Batteries. <i>Advanced Functional Materials</i> , 2017 , 27, 1604587	15.6	51
97	Design and synthesis of a free-standing carbon nano-fibrous web electrode with ultra large pores for high-performance vanadium flow batteries. <i>RSC Advances</i> , 2017 , 7, 45932-45937	3.7	28
96	A Low-Cost Neutral Zinc-Iron Flow Battery with High Energy Density for Stationary Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 14953-14957	16.4	71
95	A Low-Cost Neutral Zinc-Iron Flow Battery with High Energy Density for Stationary Energy Storage. <i>Angewandte Chemie</i> , 2017 , 129, 15149-15153	3.6	10
94	Three-in-One: A New 3D Hybrid Structure of Li ₃ V ₂ (PO ₄) ₃ @ Biomorphic Carbon for High-Rate and Low-Temperature Lithium Ion Batteries. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700686	4.6	13
93	Highly stable aromatic poly (ether sulfone) composite ion exchange membrane for vanadium flow battery. <i>Journal of Membrane Science</i> , 2017 , 541, 465-473	9.6	39
92	Shapeable electrodes with extensive materials options and ultra-high loadings for energy storage devices. <i>Nano Energy</i> , 2017 , 39, 418-428	17.1	42
91	One-pot synthesis of 3D hierarchical porous Li ₃ V ₂ (PO ₄) ₃ /C nanocomposites for high-rate and long-life lithium ion batteries. <i>RSC Advances</i> , 2017 , 7, 38415-38423	3.7	12
90	A Venus-flytrap-inspired pH-responsive porous membrane with internal crosslinking networks. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 25555-25561	13	22

89	Rational design and synthesis of $\text{LiTi}_2(\text{PO}_4)_3/\text{NFx}$ anode materials for high-performance aqueous lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 593-599	13	41
88	The next generation vanadium flow batteries with high power density - a perspective. <i>Physical Chemistry Chemical Physics</i> , 2017 , 20, 23-35	3.6	89
87	Advanced porous membranes with ultra-high selectivity and stability for vanadium flow batteries. <i>Energy and Environmental Science</i> , 2016 , 9, 441-447	35.4	208
86	A novel facile and fast hydrothermal-assisted method to synthesize sulfur/carbon composites for high-performance lithium-sulfur batteries. <i>RSC Advances</i> , 2016 , 6, 81950-81957	3.7	7
85	Bismuth nanodendrites as a high performance electrocatalyst for selective conversion of CO_2 to formate. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 13746-13753	13	130
84	Phase-change enabled 2D $\text{Li}_3\text{V}_2(\text{PO}_4)_3/\text{C}$ submicron sheets for advanced lithium-ion batteries. <i>Journal of Power Sources</i> , 2016 , 326, 203-210	8.9	30
83	Facile construction of nanoscale laminated $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ for a high-performance sodium ion battery cathode. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 19170-19178	13	21
82	A Highly Ion-Selective Zeolite Flake Layer on Porous Membranes for Flow Battery Applications. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3058-62	16.4	120
81	High-performance porous uncharged membranes for vanadium flow battery applications created by tuning cohesive and swelling forces. <i>Energy and Environmental Science</i> , 2016 , 9, 2319-2325	35.4	84
80	Flow field design and optimization based on the mass transport polarization regulation in a flow-through type vanadium flow battery. <i>Journal of Power Sources</i> , 2016 , 324, 402-411	8.9	56
79	A Highly Ion-Selective Zeolite Flake Layer on Porous Membranes for Flow Battery Applications. <i>Angewandte Chemie</i> , 2016 , 128, 3110-3114	3.6	16
78	Rational design of a nested pore structure sulfur host for fast Li/S batteries with a long cycle life. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 1653-1662	13	49
77	A highly efficient electrocatalyst for oxygen reduction reaction: phosphorus and nitrogen co-doped hierarchically ordered porous carbon derived from an iron-functionalized polymer. <i>Nanoscale</i> , 2016 , 8, 1580-7	7.7	43
76	1-D oriented cross-linking hierarchical porous carbon fibers as a sulfur immobilizer for high performance lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 5965-5972	13	79
75	Bimodal highly ordered mesostructure carbon with high activity for Br_2/Br^- redox couple in bromine based batteries. <i>Nano Energy</i> , 2016 , 21, 217-227	17.1	55
74	Free-Standing Thin Webs of Activated Carbon Nanofibers by Electrospinning for Rechargeable Li-O ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 1937-42	9.5	49
73	Advanced Charged Sponge-Like Membrane with Ultrahigh Stability and Selectivity for Vanadium Flow Batteries. <i>Advanced Functional Materials</i> , 2016 , 26, 210-218	15.6	115
72	Relationship between activity and structure of carbon materials for Br_2/Br^- zinc bromine flow batteries. <i>RSC Advances</i> , 2016 , 6, 40169-40174	3.7	29

71	Zn electrode with a layer of nanoparticles for selective electroreduction of CO ₂ to formate in aqueous solutions. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 16670-16676	13	56
70	Phase Inversion: A Universal Method to Create High-Performance Porous Electrodes for Nanoparticle-Based Energy Storage Devices. <i>Advanced Functional Materials</i> , 2016 , 26, 8427-8434	15.6	112
69	Polypyrrole modified porous poly(ether sulfone) membranes with high performance for vanadium flow batteries. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 12955-12962	13	30
68	Fabrication of a nano-Li ⁺ -channel interlayer for high performance LiS battery application. <i>RSC Advances</i> , 2015 , 5, 26273-26280	3.7	28
67	Effects of phosphate additives on the stability of positive electrolytes for vanadium flow batteries. <i>Electrochimica Acta</i> , 2015 , 164, 307-314	6.7	35
66	Highly stable membranes based on sulfonated fluorinated poly(ether ether ketone)s with bifunctional groups for vanadium flow battery application. <i>Polymer Chemistry</i> , 2015 , 6, 5385-5392	4.9	21
65	Iridium incorporated into deoxygenated hierarchical graphene as a high-performance cathode for rechargeable LiO ₂ batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 14556-14561	13	31
64	Composite membrane with ultra-thin ion exchangeable functional layer: a new separator choice for manganese-based cathode material in lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 7006-7013	13	12
63	Sulfur embedded in one-dimensional French fries-like hierarchical porous carbon derived from a metal-organic framework for high performance lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 15314-15323	13	89
62	Highly Stable Anion Exchange Membranes with Internal Cross-Linking Networks. <i>Advanced Functional Materials</i> , 2015 , 25, 2583-2589	15.6	98
61	Application and degradation mechanism of polyoxadiazole based membrane for vanadium flow batteries. <i>Journal of Membrane Science</i> , 2015 , 488, 194-202	9.6	29
60	Investigation on the effect of catalyst on the electrochemical performance of carbon felt and graphite felt for vanadium flow batteries. <i>Journal of Power Sources</i> , 2015 , 286, 73-81	8.9	65
59	Carbon-Free CoO Mesoporous Nanowire Array Cathode for High-Performance Aprotic Li-O ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 23182-9	9.5	56
58	Sulfur impregnated in a mesoporous covalent organic framework for high performance lithium-sulfur batteries. <i>RSC Advances</i> , 2015 , 5, 86137-86143	3.7	58
57	Mechanism of Polysulfone-Based Anion Exchange Membranes Degradation in Vanadium Flow Battery. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 19446-54	9.5	99
56	Synthesis and electrochemical properties of Li ₃ V ₂ (P _{1-x} B _x O ₄) ₃ /C cathode materials. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 19469-19475	13	33
55	A Bi-doped Li ₃ V ₂ (PO ₄) ₃ /C cathode material with an enhanced high-rate capacity and long cycle stability for lithium ion batteries. <i>Dalton Transactions</i> , 2015 , 44, 17579-86	4.3	42
54	Hydrophilic poly(vinylidene fluoride) porous membrane with well connected ion transport networks for vanadium flow battery. <i>Journal of Power Sources</i> , 2015 , 298, 228-235	8.9	24

53	Layer-by-Layer Assembled C/S Cathode with Trace Binder for Li-S Battery Application. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 25002-6	9.5	45
52	Dramatic performance gains of a novel circular vanadium flow battery. <i>Journal of Power Sources</i> , 2015 , 277, 104-109	8.9	26
51	Impact of Proton Concentration on Equilibrium Potential and Polarization of Vanadium Flow Batteries. <i>ChemPlusChem</i> , 2015 , 80, 382-389	2.8	18
50	Performance and potential problems of high power density zinc/nickel single flow batteries. <i>RSC Advances</i> , 2015 , 5, 1772-1776	3.7	22
49	Lithium Sulfur Primary Battery with Super High Energy Density: Based on the Cauliflower-like Structured C/S Cathode. <i>Scientific Reports</i> , 2015 , 5, 14949	4.9	74
48	Porous membrane with high curvature, three-dimensional heat-resistance skeleton: a new and practical separator candidate for high safety lithium ion battery. <i>Scientific Reports</i> , 2015 , 5, 8255	4.9	63
47	Solvent responsive silica composite nanofiltration membrane with controlled pores and improved ion selectivity for vanadium flow battery application. <i>Journal of Power Sources</i> , 2015 , 274, 1126-1134	8.9	33
46	Membranes with well-defined ions transport channels fabricated via solvent-responsive layer-by-layer assembly method for vanadium flow battery. <i>Scientific Reports</i> , 2014 , 4, 4016	4.9	32
45	Rechargeables: Vanadium batteries will be cost-effective. <i>Nature</i> , 2014 , 508, 319	50.4	28
44	Morphology and performance of poly(ether sulfone)/sulfonated poly(ether ether ketone) blend porous membranes for vanadium flow battery application. <i>RSC Advances</i> , 2014 , 4, 40400-40406	3.7	28
43	Nitrogen-doped hierarchically porous carbon as efficient oxygen reduction electrocatalysts in acid electrolyte. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 17047-17057	13	57
42	Synthesis of a meso/macro hierarchical porous carbon material for improvement of O ₂ diffusivity in LiO ₂ batteries. <i>RSC Advances</i> , 2014 , 4, 17141	3.7	12
41	A novel solvent-template method to manufacture nano-scale porous membranes for vanadium flow battery applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 9524	13	41
40	Composite porous membranes with an ultrathin selective layer for vanadium flow batteries. <i>Chemical Communications</i> , 2014 , 50, 4596-9	5.8	48
39	Degradation mechanism of sulfonated poly(ether ether ketone) (SPEEK) ion exchange membranes under vanadium flow battery medium. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 19841-7	3.6	122
38	Development and perspective in vanadium flow battery modeling. <i>Applied Energy</i> , 2014 , 132, 254-266	10.7	80
37	Hydrophilic porous poly(sulfone) membranes modified by UV-initiated polymerization for vanadium flow battery application. <i>Journal of Membrane Science</i> , 2014 , 454, 478-487	9.6	47
36	A three-dimensional model for thermal analysis in a vanadium flow battery. <i>Applied Energy</i> , 2014 , 113, 1675-1685	10.7	66

35	A Microsized Cagelike Sulfur/Carbon Composite for a Lithium/Sulfur Battery with Excellent Performance. <i>ChemPlusChem</i> , 2014 , 79, 919-924	2.8	16
34	Poly(vinylidene fluoride) porous membranes precipitated in water/ethanol dual-coagulation bath: The relationship between morphology and performance in vanadium flow battery. <i>Journal of Power Sources</i> , 2014 , 249, 84-91	8.9	63
33	The numerical simulation of dynamic performance in the vanadium flow battery. <i>Electrochimica Acta</i> , 2014 , 118, 51-57	6.7	5
32	A novel single flow zinc/bromine battery with improved energy density. <i>Journal of Power Sources</i> , 2013 , 235, 1-4	8.9	137
31	Hydrophobic asymmetric ultrafiltration PVDF membranes: an alternative separator for VFB with excellent stability. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 1766-71	3.6	75
30	Development of carbon coated membrane for zinc/bromine flow battery with high power density. <i>Journal of Power Sources</i> , 2013 , 227, 41-47	8.9	69
29	Advanced charged membranes with highly symmetric spongy structures for vanadium flow battery application. <i>Energy and Environmental Science</i> , 2013 , 6, 776	35.4	110
28	A modified hierarchical porous carbon for lithium/sulfur batteries with improved capacity and cycling stability. <i>Journal of Solid State Electrochemistry</i> , 2013 , 17, 2243-2250	2.6	23
27	Porous poly (ether sulfone) membranes with tunable morphology: Fabrication and their application for vanadium flow battery. <i>Journal of Power Sources</i> , 2013 , 233, 202-208	8.9	64
26	Vanadium Flow Battery for Energy Storage: Prospects and Challenges. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 1281-94	6.4	357
25	Preface to Special Topic: Selected Papers from the 7th International Energy Conference and the 1st Dalian National Laboratory Conference on Clean Energy, Dalian, China, 2012. <i>Journal of Renewable and Sustainable Energy</i> , 2013 , 5, 021301	2.5	
24	Silica modified nanofiltration membranes with improved selectivity for redox flow battery application. <i>Energy and Environmental Science</i> , 2012 , 5, 6299-6303	35.4	158
23	Carbon paper coated with supported tungsten trioxide as novel electrode for all-vanadium flow battery. <i>Journal of Power Sources</i> , 2012 , 218, 455-461	8.9	172
22	Liquid Redox Rechargeable Batteries 2012 , 279-316		2
21	A high-performance anion exchange membrane based on bi-guanidinium bridged polysilsesquioxane for alkaline fuel cell application. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8203		82
20	Nitrogen-doped carbon xerogel: A novel carbon-based electrocatalyst for oxygen reduction reaction in proton exchange membrane (PEM) fuel cells. <i>Energy and Environmental Science</i> , 2011 , 4, 3389	35.4	149
19	Imidazolium functionalized polysulfone anion exchange membrane for fuel cell application. <i>Journal of Materials Chemistry</i> , 2011 , 21, 12744		251
18	Ion exchange membranes for vanadium redox flow battery (VRB) applications. <i>Energy and Environmental Science</i> , 2011 , 4, 1147	35.4	712

17	Shunt current loss of the vanadium redox flow battery. <i>Journal of Power Sources</i> , 2011 , 196, 10753-10758.	38.9	68
16	A Durable Alternative for Proton-Exchange Membranes: Sulfonated Poly(Benzoxazole Thioether Sulfone)s. <i>Advanced Energy Materials</i> , 2011 , 1, 203-211	21.8	43
15	Nanofiltration (NF) membranes: the next generation separators for all vanadium redox flow batteries (VRBs)?. <i>Energy and Environmental Science</i> , 2011 , 4, 1676	35.4	261
14	Simulation of the self-discharge process in vanadium redox flow battery. <i>Journal of Power Sources</i> , 2011 , 196, 1578-1585	8.9	53
13	PTFE based composite anion exchange membranes: thermally induced in situ polymerization and direct hydrazine hydrate fuel cell application. <i>Journal of Materials Chemistry</i> , 2010 , 20, 8139		49
12	TUNGSTEN TRIOXIDE HYDRATE INCORPORATED NAFION COMPOSITE MEMBRANE FOR PROTON EXCHANGE MEMBRANE FUEL CELLS OPERATED ABOVE 100°C. <i>Chemical Engineering Communications</i> , 2007 , 194, 667-674	2.2	6
11	Challenging reinforced composite polymer electrolyte membranes based on disulfonated poly(arylene ether sulfone)-impregnated expanded PTFE for fuel cell applications. <i>Journal of Materials Chemistry</i> , 2007 , 17, 386-397		50
10	Characteristics and performance of 10 kW class all-vanadium redox-flow battery stack. <i>Journal of Power Sources</i> , 2006 , 162, 1416-1420	8.9	161
9	Influence of anode diffusion layer on the performance of a liquid feed direct methanol fuel cell by AC impedance spectroscopy. <i>International Journal of Energy Research</i> , 2006 , 30, 1216-1227	4.5	24
8	Research and Development of Key Materials of PEMFC 2006 , 105		
7	Modeling and Analysis Approaches for PEMFCs 2006 , 833		1
6	A comparative study of carbon felt and activated carbon based electrodes for sodium polysulfide/bromine redox flow battery. <i>Electrochimica Acta</i> , 2006 , 51, 6304-6312	6.7	153
5	Nickel foam and carbon felt applications for sodium polysulfide/bromine redox flow battery electrodes. <i>Electrochimica Acta</i> , 2005 , 51, 1091-1098	6.7	147
4	Degradation mechanism of polystyrene sulfonic acid membrane and application of its composite membranes in fuel cells. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 611-615	3.6	132
3	Highly stable titanium-manganese single flow batteries for stationary energy storage. <i>Journal of Materials Chemistry A</i> ,	13	5
2	A Coral-Like FeP@NC Anode with Increasing Cycle Capacity for Sodium-Ion and Lithium-Ion Batteries Induced by Particle Refinement. <i>Angewandte Chemie</i> ,	3.6	1
1	A -60°C Low-Temperature Aqueous Lithium Ion-Bromine Battery with High Power Density Enabled by Electrolyte Design. <i>Advanced Energy Materials</i> , 2200728	21.8	0