

Zhumabay Bakenov

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8512922/zhumabay-bakenov-publications-by-citations.pdf>

Version: 2024-04-19

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.

183
papers

4,147
citations

34
h-index

57
g-index

223
ext. papers

5,140
ext. citations

5.2
avg, IF

6.11
L-index

#	Paper	IF	Citations
183	Present and Future Perspective on Electrode Materials for Rechargeable Zinc-Ion Batteries. <i>ACS Energy Letters</i> , 2018 , 3, 2620-2640	20.1	439
182	Ternary sulfur/polyacrylonitrile/Mg _{0.6} Ni _{0.4} O composite cathodes for high performance lithium/sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 295-301	13	191
181	Rechargeable hybrid aqueous batteries. <i>Journal of Power Sources</i> , 2012 , 216, 222-226	8.9	167
180	Physical and electrochemical properties of LiMnPO ₄ /C composite cathode prepared with different conductive carbons. <i>Journal of Power Sources</i> , 2010 , 195, 7445-7451	8.9	135
179	Electrochemical performance of nanocomposite LiMnPO ₄ /C cathode materials for lithium batteries. <i>Electrochemistry Communications</i> , 2010 , 12, 75-78	5.1	125
178	One-step synthesis of branched sulfur/polypyrrole nanocomposite cathode for lithium rechargeable batteries. <i>Journal of Power Sources</i> , 2012 , 208, 1-8	8.9	111
177	High Performance Zn/LiFePO ₄ Aqueous Rechargeable Battery for Large Scale Applications. <i>Electrochimica Acta</i> , 2015 , 152, 505-511	6.7	83
176	Enhanced cycle performance of Li/S battery with the reduced graphene oxide/activated carbon functional interlayer. <i>Journal of Energy Chemistry</i> , 2017 , 26, 1276-1281	12	82
175	Electrochemical performance of nanostructured LiM _x Mn _{2-x} O ₄ (M=Co and Al) powders at high charge/discharge operations. <i>Solid State Ionics</i> , 2005 , 176, 1027-1034	3.3	75
174	Electrochemical performance of lithium gel polymer battery with nanostructured sulfur/carbon composite cathode. <i>Solid State Ionics</i> , 2013 , 234, 40-45	3.3	74
173	Defect-Rich Multishelled Fe-Doped CoO Hollow Microspheres with Multiple Spatial Confinements to Facilitate Catalytic Conversion of Polysulfides for High-Performance Li-S Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 12763-12773	9.5	70
172	A mini-review on the development of Si-based thin film anodes for Li-ion batteries. <i>Materials Today Energy</i> , 2018 , 9, 49-66	7	70
171	Effect of nanosized Mg _{0.6} Ni _{0.4} O prepared by self-propagating high temperature synthesis on sulfur cathode performance in Li/S batteries. <i>Powder Technology</i> , 2013 , 235, 248-255	5.2	68
170	Preparation of carbon coated LiMnPO ₄ powders by a combination of spray pyrolysis with dry ball-milling followed by heat treatment. <i>Advanced Powder Technology</i> , 2010 , 21, 187-196	4.6	64
169	Poly(vinylidene fluoride-co-hexafluoropropylene)/poly(methylmethacrylate)/nanoclay composite gel polymer electrolyte for lithium/sulfur batteries. <i>Journal of Solid State Electrochemistry</i> , 2014 , 18, 1111-1116	2.6	62
168	LiMg _[sub x] Mn _[sub 1-x] PO _[sub 4] /C Cathodes for Lithium Batteries Prepared by a Combination of Spray Pyrolysis with Wet Ballmilling. <i>Journal of the Electrochemical Society</i> , 2010 , 157, A430	3.9	62
167	Exceptionally highly stable cycling performance and facile oxygen-redox of manganese-based cathode materials for rechargeable sodium batteries. <i>Nano Energy</i> , 2019 , 59, 197-206	17.1	62

166	Effect of Graphene on Sulfur/Polyacrylonitrile Nanocomposite Cathode in High Performance Lithium/Sulfur Batteries. <i>Journal of the Electrochemical Society</i> , 2013 , 160, A1194-A1198	3.9	58
165	All-Purpose Electrode Design of Flexible Conductive Scaffold toward High-Performance LiS Batteries. <i>Advanced Functional Materials</i> , 2020 , 30, 2000613	15.6	56
164	Well-dispersed sulfur anchored on interconnected polypyrrole nanofiber network as high performance cathode for lithium-sulfur batteries. <i>Solid State Sciences</i> , 2017 , 66, 44-49	3.4	54
163	Synthesis of Hierarchical Porous Sulfur/Polypyrrole/Multiwalled Carbon Nanotube Composite Cathode for Lithium Batteries. <i>Electrochimica Acta</i> , 2014 , 143, 49-55	6.7	54
162	In situ sol-gel synthesis of ultrafine ZnO nanocrystals anchored on graphene as anode material for lithium-ion batteries. <i>Ceramics International</i> , 2016 , 42, 12371-12377	5.1	54
161	High specific surface area bimodal porous carbon derived from biomass reed flowers for high performance lithium-sulfur batteries. <i>Journal of Colloid and Interface Science</i> , 2020 , 569, 22-33	9.3	51
160	Nickel Hexacyanoferrate Nanoparticles as a Low Cost Cathode Material for Lithium-Ion Batteries. <i>Electrochimica Acta</i> , 2015 , 184, 58-63	6.7	46
159	Exploring 3D microstructural evolution in Li-Sulfur battery electrodes using in-situ X-ray tomography. <i>Scientific Reports</i> , 2016 , 6, 35291	4.9	45
158	A Free-Standing Sulfur/Nitrogen-Doped Carbon Nanotube Electrode for High-Performance Lithium/Sulfur Batteries. <i>Nanoscale Research Letters</i> , 2015 , 10, 450	5	44
157	A Review of Piezoelectric PVDF Film by Electrospinning and Its Applications. <i>Sensors</i> , 2020 , 20,	3.8	42
156	Revisit of layered sodium manganese oxides: achievement of high energy by Ni incorporation. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8558-8567	13	41
155	Preparation of novel network nanostructured sulfur composite cathode with enhanced stable cycle performance. <i>Journal of Power Sources</i> , 2014 , 270, 326-331	8.9	40
154	Three-dimensional carbon fiber as current collector for lithium/sulfur batteries. <i>Ionics</i> , 2014 , 20, 803-808	2.7	39
153	Electrochemical performance of carbon-encapsulated Fe ₃ O ₄ nanoparticles in lithium-ion batteries: morphology and particle size effects. <i>Electrochimica Acta</i> , 2016 , 216, 475-483	6.7	37
152	A novel lithium/sulfur battery based on sulfur/graphene nanosheet composite cathode and gel polymer electrolyte. <i>Nanoscale Research Letters</i> , 2014 , 9, 137	5	37
151	Dual-network nanoporous NiFe ₂ O ₄ /NiO composites for high performance Li-ion battery anodes. <i>Chemical Engineering Journal</i> , 2020 , 388, 124207	14.7	35
150	Micro-Spherical Sulfur/Graphene Oxide Composite via Spray Drying for High Performance Lithium Sulfur Batteries. <i>Nanomaterials</i> , 2018 , 8,	5.4	35
149	High-Voltage Oxygen-Redox-Based Cathode for Rechargeable Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020 , 10, 2001111	21.8	34

148	A simple approach to synthesize nanosized sulfur/graphene oxide materials for high-performance lithium/sulfur batteries. <i>Ionics</i> , 2014 , 20, 1047-1050	2.7	34
147	High performance freestanding composite cathode for lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2016 , 217, 242-248	6.7	34
146	Synthesis of nitrogen-doped oxygen-deficient TiO ₂ -x/reduced graphene oxide/sulfur microspheres via spray drying process for lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2019 , 326, 134968	6.7	29
145	Spray pyrolysis synthesis of nanostructured LiFe _x Mn _{2-x} O ₄ cathode materials for lithium-ion batteries. <i>Powder Technology</i> , 2005 , 159, 55-62	5.2	29
144	Synthesis of carbon coated Fe ₃ O ₄ grown on graphene as effective sulfur-host materials for advanced lithium/sulfur battery. <i>Journal of Power Sources</i> , 2019 , 437, 226901	8.9	28
143	Bimodal nanoporous NiO@Ni ₃ Bi network prepared by dealloying method for stable Li-ion storage. <i>Journal of Power Sources</i> , 2020 , 449, 227550	8.9	27
142	Synthesis and electrochemical investigation of highly dispersed ZnO nanoparticles as anode material for lithium-ion batteries. <i>Ionics</i> , 2016 , 22, 1387-1393	2.7	26
141	Nanoporous GeO ₂ /Cu/Cu ₂ O network synthesized by dealloying method for stable Li-ion storage. <i>Electrochimica Acta</i> , 2019 , 300, 363-372	6.7	25
140	Silicon thin film on graphene coated nickel foam as an anode for Li-ion batteries. <i>Electrochimica Acta</i> , 2017 , 258, 800-806	6.7	25
139	Facile Synthesis of SiO@C Nanoparticles Anchored on MWNT as High-Performance Anode Materials for Li-ion Batteries. <i>Nanoscale Research Letters</i> , 2017 , 12, 459	5	25
138	Ultra-fine zinc oxide nanocrystals decorated three-dimensional macroporous polypyrrole inverse opal as efficient sulfur hosts for lithium/sulfur batteries. <i>Chemical Engineering Journal</i> , 2019 , 375, 122055	14.7	24
137	P2-NaMnO by Co Incorporation: As a Cathode Material of High Capacity and Long Cycle Life for Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 28928-28933	9.5	24
136	Corn stalk-derived activated carbon with a stacking sheet-like structure as sulfur cathode supporter for lithium/sulfur batteries. <i>Ionics</i> , 2016 , 22, 63-69	2.7	23
135	Flexible S/DPAN/KB Nanofiber Composite as Binder-Free Cathodes for Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A5396-A5402	3.9	23
134	Effect of graphene nanosheets on electrochemical performance of Li ₄ Ti ₅ O ₁₂ in lithium-ion capacitors. <i>Ceramics International</i> , 2017 , 43, 6554-6562	5.1	22
133	Enhanced electrochemical performance of sulfur/polyacrylonitrile composite by carbon coating for lithium/sulfur batteries. <i>Journal of Nanoparticle Research</i> , 2017 , 19, 1	2.3	22
132	Chemical Dealloying Synthesis of CuS Nanowire-on-Nanoplate Network as Anode Materials for Li-Ion Batteries. <i>Metals</i> , 2018 , 8, 252	2.3	22
131	Biomass Waste Inspired Highly Porous Carbon for High Performance Lithium/Sulfur Batteries. <i>Nanomaterials</i> , 2017 , 7,	5.4	22

130	Effect of carbon-sulphur bond in a sulphur/dehydrogenated polyacrylonitrile/reduced graphene oxide composite cathode for lithium-sulphur batteries. <i>Journal of Power Sources</i> , 2017 , 355, 140-146	8.9	21
129	Fabrication and Properties of Carbon-Encapsulated Cobalt Nanoparticles over NaCl by CVD. <i>Nanoscale Research Letters</i> , 2016 , 11, 432	5	20
128	Sulfur-Infiltrated Three-Dimensionally Ordered Mesoporous Polypyrrole Cathode for High-Performance Lithium-Sulfur Battery. <i>ChemElectroChem</i> , 2018 , 5, 1591-1598	4.3	19
127	Synthesis of hierarchical MoS ₂ microspheres composed of nanosheets assembled via facile hydrothermal method as anode material for lithium-ion batteries. <i>Journal of Nanoparticle Research</i> , 2016 , 18, 1	2.3	19
126	Numerical study of integrated latent heat thermal energy storage devices using nanoparticle-enhanced phase change materials. <i>Solar Energy</i> , 2019 , 194, 724-741	6.8	19
125	High performance sulfur/nitrogen-doped graphene cathode for lithium/sulfur batteries. <i>Ionics</i> , 2015 , 21, 1925-1930	2.7	19
124	Porous carbon nanotubes microspheres decorated with strong catalyst cobalt nanoparticles as an effective sulfur host for lithium-sulfur battery. <i>Journal of Alloys and Compounds</i> , 2021 , 853, 157268	5.7	18
123	N-Type Doped Silicon Thin Film on a Porous Cu Current Collector as the Negative Electrode for Li-Ion Batteries. <i>ChemistryOpen</i> , 2018 , 7, 92-96	2.3	18
122	Prussian blue analogs derived Fe-Ni-P@nitrogen-doped carbon composites as sulfur host for high-performance lithium-sulfur batteries. <i>Journal of Colloid and Interface Science</i> , 2021 , 595, 51-58	9.3	18
121	Examining the effect of nanosized Mg _{0.6} Ni _{0.4} O and Al ₂ O ₃ additives on S/polyaniline cathodes for lithium-sulfur batteries. <i>Journal of Electroanalytical Chemistry</i> , 2016 , 780, 407-415	4.1	17
120	Battery performance of nanostructured lithium manganese oxide synthesized by ultrasonic spray pyrolysis at elevated temperature. <i>Journal of Solid State Electrochemistry</i> , 2007 , 12, 57-62	2.6	17
119	Flexible free-standing Na ₄ Mn ₉ O ₁₈ /reduced graphene oxide composite film as a cathode for sodium rechargeable hybrid aqueous battery. <i>Electrochimica Acta</i> , 2018 , 259, 647-654	6.7	17
118	3D Ordered Macroporous Carbon Encapsulated ZnO Nanoparticles as a High-Performance Anode for Lithium-Ion Batteries. <i>ChemElectroChem</i> , 2017 , 4, 2359-2365	4.3	16
117	Novel silicon nanowire film on copper foil as high performance anode for lithium-ion batteries. <i>Ionics</i> , 2018 , 24, 373-378	2.7	16
116	Na _{0.96} V ₂ O ₅ : A New Competitive Cathode Material for Sodium-Ion Batteries Synthesized by a Soft Chemistry Route. <i>Chemistry of Materials</i> , 2018 , 30, 5305-5314	9.6	15
115	Three-Dimensional Hierarchical Porous Structure of PPy/Porous-Graphene to Encapsulate Polysulfides for Lithium/Sulfur Batteries. <i>Nanomaterials</i> , 2018 , 8,	5.4	15
114	NaMnO/Carbon Nanotube Composite as a High Electrochemical Performance Material for Aqueous Sodium-Ion Batteries. <i>Nanoscale Research Letters</i> , 2017 , 12, 569	5	14
113	Three-Dimensionally Hierarchical Graphene Based Aerogel Encapsulated Sulfur as Cathode for Lithium/Sulfur Batteries. <i>Nanomaterials</i> , 2018 , 8,	5.4	14

112	Development of a novel SiO ₂ based composite anode material for Li-ion batteries. <i>Materials Today: Proceedings</i> , 2017 , 4, 4542-4547	1.4	14
111	Carbon/Sulfur Composite Cathodes for Flexible Lithium/Sulfur Batteries: Status and Prospects. <i>Frontiers in Energy Research</i> , 2015 , 3,	3.8	14
110	Stability of Lithium Polymer Battery Based on Substituted Spinel Cathode and PEG-Borate Ester Plasticized Polymer Electrolyte. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A1533	3.9	14
109	On using splitter plates and flow guide-vanes for battery module cooling. <i>Heat and Mass Transfer</i> , 2017 , 53, 1-10	2.2	13
108	Morphology and Dimension Variations of Copper Sulfide for High-Performance Electrode in Rechargeable Batteries: A Review. <i>ACS Applied Energy Materials</i> , 2020 , 3, 11480-11499	6.1	13
107	Rational Construction of Sulfur-Deficient NiCo ₂ S ₄ Hollow Microspheres as an Effective Polysulfide Immobilizer toward High-Performance Lithium/Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2021 , 4, 1687-1695	6.1	13
106	Current state of high voltage olivine structured LiMPO ₄ cathode materials for energy storage applications: A review. <i>Journal of Alloys and Compounds</i> , 2021 , 882, 160774	5.7	13
105	Ultrathin clay-containing layer-by-layer separator coating enhances performance of lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2021 , 366, 137454	6.7	12
104	Synergistic effect of 3D current collector structure and Ni inactive matrix on the electrochemical performances of Sn-based anodes for lithium-ion batteries. <i>Materials Today Energy</i> , 2020 , 16, 100397	7	11
103	Polyacrylonitrile-Nanofiber-Based Gel Polymer Electrolyte for Novel Aqueous Sodium-Ion Battery Based on a NaMnO ₂ Cathode and Zn Metal Anode. <i>Polymers</i> , 2018 , 10,	4.5	11
102	CVD graphene growth on a surface of liquid gallium. <i>Materials Today: Proceedings</i> , 2017 , 4, 4548-4554	1.4	11
101	Synthesis of spherical LiMnPO ₄ /C composite microparticles. <i>Materials Research Bulletin</i> , 2011 , 46, 1311-1314	1.4	11
100	A Nonflammable Lithium Polymer Battery with High Performance for Elevated Temperature Applications. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, A208		11
99	Three-dimensional carbon cloth-supported ZnO nanorod arrays as a binder-free anode for lithium-ion batteries. <i>Journal of Nanoparticle Research</i> , 2017 , 19, 1	2.3	10
98	Synthesis of highly defective hollow double-shelled Co ₃ O ₄ microspheres as sulfur host for high-performance lithium-sulfur batteries. <i>Materials Letters</i> , 2019 , 255, 126581	3.3	10
97	Flower-Like MoSe ₂ /MoO ₃ Composite with High Capacity and Long-Term Stability for Lithium-Ion Battery. <i>Nanomaterials</i> , 2019 , 9,	5.4	10
96	The Electrochemical Performances of n-Type Extended Lattice Spaced Si Negative Electrodes for Lithium-Ion Batteries. <i>Frontiers in Chemistry</i> , 2019 , 7, 389	5	10
95	Three-dimensionally ordered macro/mesoporous TiO ₂ matrix to immobilize sulfur for high performance lithium/sulfur batteries. <i>Nanotechnology</i> , 2018 , 29, 415401	3.4	10

94	Understanding the effect of p-, n-type dopants and vinyl carbonate electrolyte additive on electrochemical performance of Si thin film anodes for lithium-ion battery. <i>Electrochimica Acta</i> , 2020 , 330, 135179	6.7	10
93	Mechanistic Investigation of a Hybrid Zn/V O Rechargeable Battery with a Binary Li /Zn Aqueous Electrolyte. <i>ChemSusChem</i> , 2020 , 13, 724-731	8.3	10
92	Improving the cycling stability of three-dimensional nanoporous Ge anode by embedding Ag nanoparticles for high-performance lithium-ion battery. <i>Journal of Colloid and Interface Science</i> , 2021 , 592, 103-115	9.3	10
91	Nickel embedded porous macrocellular carbon derived from popcorn as sulfur host for high-performance lithium-sulfur batteries. <i>Journal of Materials Science and Technology</i> , 2021 , 74, 69-77	9.1	10
90	Recent advancements in solid electrolytes integrated into all-solid-state 2D and 3D lithium-ion microbatteries. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 15140-15178	13	10
89	Electrospun 3D Structured Carbon Current Collector for Li/S Batteries. <i>Nanomaterials</i> , 2020 , 10,	5.4	9
88	Synthesis of a Flexible Freestanding Sulfur/Polyacrylonitrile/Graphene Oxide as the Cathode for Lithium/Sulfur Batteries. <i>Polymers</i> , 2018 , 10,	4.5	9
87	Hierarchical Rambutan-Like CNTs-Assembled NiO@rGO Composite as Sulfur Immobilizer for High-Performance Lithium-Sulfur Batteries. <i>ChemElectroChem</i> , 2019 , 6, 4565-4570	4.3	9
86	Facile Synthesis of ZnO Nanoparticles on Nitrogen-Doped Carbon Nanotubes as High-Performance Anode Material for Lithium-Ion Batteries. <i>Materials</i> , 2017 , 10,	3.5	9
85	Sodium-Based Batteries: In Search of the Best Compromise Between Sustainability and Maximization of Electric Performance. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	9
84	Cobalt-doped oxygen-deficient titanium dioxide coated by carbon layer as high-performance sulfur host for Li/S batteries. <i>Journal of Alloys and Compounds</i> , 2021 , 861, 157969	5.7	9
83	Simple One-Pot Synthesis of Hexagonal ZnO Nanoplates as Anode Material for Lithium-Ion Batteries. <i>Journal of Nanomaterials</i> , 2016 , 2016, 1-6	3.2	9
82	Effect of VO ₄ ³⁻ substitution for PO ₄ ³⁻ on Electrical Conductivity in the Nasicon Li ₃ Sc ₂ (PO ₄) ₃ Compound. <i>Electrochimica Acta</i> , 2015 , 176, 327-333	6.7	8
81	Hybrids of La ₂ O ₃ nanoplates anchored in three-dimensional carbon nanotubes microspheres as efficient sulfur-hosts for highperformance lithium/sulfur batteries. <i>Materials Letters</i> , 2020 , 270, 127690	3.3	8
80	Effect of VO ₄ ³⁻ substitution for PO ₄ ³⁻ on electrochemical properties of the Li ₃ Fe ₂ (PO ₄) ₃ cathode materials. <i>Electrochimica Acta</i> , 2016 , 219, 547-552	6.7	8
79	Nitrogen-doped carbon nanotubes coated with zinc oxide nanoparticles as sulfur encapsulator for high-performance lithium/sulfur batteries. <i>Beilstein Journal of Nanotechnology</i> , 2018 , 9, 1677-1685	3	8
78	LiMnPO ₄ Olivine as a Cathode for Lithium Batteries. <i>Open Materials Science Journal</i> , 2011 , 5, 222-227		8
77	Nitrogen-Deficient Graphitic Carbon Nitride/Carbon Nanotube as Polysulfide Barrier of High-Performance Lithium-Sulfur Batteries. <i>ChemElectroChem</i> , 2020 , 7, 4906-4912	4.3	8

76	Structural and Chemical Modifications Towards High-Performance of Triboelectric Nanogenerators. <i>Nanoscale Research Letters</i> , 2021 , 16, 122	5	8
75	ZnO Nanorods Grown Directly on Copper Foil Substrate as a Binder-Free Anode for High Performance Lithium-Ion Batteries. <i>International Journal of Electrochemical Science</i> , 2016 , 8439-8446	2.2	8
74	Novel Ni/Ni ₂ P@C hollow heterostructure microsphere as efficient sulfur hosts for high-performance lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2021 , 871, 159576	5.7	8
73	Sn modified nanoporous Ge for improved lithium storage performance. <i>Journal of Colloid and Interface Science</i> , 2021 , 602, 563-572	9.3	8
72	Li _{1+x} Al _x Ti _{2-x} (PO ₄) ₃ , NASICON-type solid electrolyte fabrication with different methods. <i>Materials Today: Proceedings</i> , 2020 , 25, 97-100	1.4	7
71	MoS ₂ nanopowder as anode material for lithium-ion batteries produced by self-propagating high-temperature synthesis. <i>Materials Today: Proceedings</i> , 2017 , 4, 4567-4571	1.4	7
70	Lithium AlPO ₄ composite polymer battery with nanostructured LiMn ₂ O ₄ cathode. <i>Journal of Solid State Electrochemistry</i> , 2008 , 12, 295-302	2.6	7
69	Carbon nanotubes assembled on porous TiO matrix doped with CoO as sulfur host for lithium-sulfur batteries. <i>Nanotechnology</i> , 2021 , 32, 075403	3.4	7
68	Dual network porous Si/Al ₉ FeSi ₃ /Fe ₂ O ₃ composite for high performance Li-ion battery anode. <i>Electrochimica Acta</i> , 2020 , 358, 136936	6.7	7
67	Enhancing purity and ionic conductivity of NASICON-typed Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ solid electrolyte. <i>Ceramics International</i> , 2021 , 47, 18188-18195	5.1	7
66	Synthesis of Multiwalled Carbon Nanotube Aqueous Suspension with Surfactant Sodium Dodecylbenzene Sulfonate for Lithium/Sulfur Rechargeable Batteries. <i>Electrochemistry</i> , 2016 , 84, 7-11	1.2	7
65	Gel polymer electrolytes for lithium-sulfur batteries. <i>Materials Today: Proceedings</i> , 2018 , 5, 22882-22888	1.4	7
64	Hierarchical sandwiched Fe ₃ O ₄ @C/Graphene composite as anode material for lithium-ion batteries. <i>Journal of Electroanalytical Chemistry</i> , 2019 , 847, 113240	4.1	6
63	High Mass-Loading of Sulfur-Based Cathode Composites and Polysulfides Stabilization for Rechargeable Lithium/Sulfur Batteries. <i>Frontiers in Energy Research</i> , 2015 , 3,	3.8	6
62	Building on a traditional chemical engineering curriculum using computational fluid dynamics. <i>Education for Chemical Engineers</i> , 2014 , 9, e85-e93	2.4	6
61	Electrodeposited Ni-Sn intermetallic alloy electrode for 3D sulfur battery. <i>Materials Today: Proceedings</i> , 2017 , 4, 4491-4495	1.4	6
60	Photo and thermal crosslinked poly(vinyl alcohol)-based nanofiber membrane for flexible gel polymer electrolyte. <i>Journal of Power Sources</i> , 2022 , 520, 230896	8.9	6
59	Fabrication of UV-Crosslinked Flexible Solid Polymer Electrolyte with PDMS for Li-Ion Batteries. <i>Polymers</i> , 2020 , 13,	4.5	6

58	Synthesis of microflower-like vacancy defective copper sulfide/reduced graphene oxide composites for highly efficient lithium-ion batteries. <i>Nanotechnology</i> , 2020 , 31, 095405	3.4	6
57	NiCo ₂ S ₄ nanoparticles embedded in nitrogen-doped carbon nanotubes networks as effective sulfur carriers for advanced Lithium-Sulfur batteries. <i>Microporous and Mesoporous Materials</i> , 2021 , 316, 110924	5.3	6
56	Physical Vapor Deposition of Cathode Materials for All Solid-State Li Ion Batteries: A Review. <i>Frontiers in Energy Research</i> , 2021 , 9,	3.8	6
55	A simple approach to synthesize novel sulfur/graphene oxide/multiwalled carbon nanotube composite cathode for high performance lithium/sulfur batteries. <i>Ionics</i> , 2016 , 22, 1819-1827	2.7	6
54	A Novel Hierarchically Porous Polypyrrole Sphere Modified Separator for Lithium-Sulfur Batteries. <i>Polymers</i> , 2019 , 11,	4.5	5
53	Design and preparation of thin film gel polymer electrolyte for 3D Li-ion battery. <i>Journal of Power Sources</i> , 2021 , 493, 229686	8.9	5
52	Synthesis of Carbon Nanotubes on a Shungite Substrate and Their Use for Lithium-Sulfur Batteries. <i>Journal of Engineering Physics and Thermophysics</i> , 2018 , 91, 1295-1301	0.6	5
51	Synthesis of Core-Shell Carbon Encapsulated Fe ₂ O ₃ Composite through a Facile Hydrothermal Approach and Their Application as Anode Materials for Sodium-Ion Batteries. <i>Metals</i> , 2018 , 8, 461	2.3	4
50	Electrochemical Performance of Lithium Polymer Battery Based on PC/Polymer Borate Ester Plasticizers. <i>Electrochemical and Solid-State Letters</i> , 2005 , 8, A30		4
49	Oxidized Nb ₂ C MXene as catalysts for lithium-sulfur batteries: mitigating the shuttle phenomenon by facilitating catalytic conversion of lithium polysulfides. <i>Journal of Materials Science and Technology</i> , 2022 ,	9.1	4
48	In-situ constructed accordion-like Nb ₂ C/Nb ₂ O ₅ heterostructure as efficient catalyzer towards high-performance lithium-sulfur batteries. <i>Journal of Power Sources</i> , 2022 , 520, 230902	8.9	4
47	Tetrapropylammonium Hydroxide as a Zinc Dendrite Growth Suppressor for Rechargeable Aqueous Battery. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	4
46	Three-dimensional foam-type current collectors for rechargeable batteries: A short review. <i>Journal of Power Sources Advances</i> , 2021 , 10, 100065	3.3	4
45	Dealloying-derived nanoporous deficient titanium oxide as high-performance bifunctional sulfur host-catalysis material in lithium-sulfur battery. <i>Journal of Materials Science and Technology</i> , 2021 , 84, 124-132	9.1	4
44	A porous puckered V ₂ O ₅ polymorph as new high performance cathode material for aqueous rechargeable zinc batteries. <i>Journal of Energy Chemistry</i> , 2021 , 61, 459-468	12	4
43	Nitrogen-doped graphitized porous carbon with embedded NiFe alloy nanoparticles to enhance electrochemical performance for lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2021 , 882, 160728	5.7	4
42	LiNiN, a Promising Negative Electrode Material for Li-Ion Batteries with a Soft Structural Response. <i>Inorganic Chemistry</i> , 2017 , 56, 13815-13821	5.1	3
41	Preparation of LiNi _{0.5} Mn _{1.5} O ₄ Cathode Materials of Lithium-Ion Batteries by Drip Pyrolysis in Fluidized Bed Reactor Followed by Heat Treatment and Their Electrochemical Properties. <i>Journal of Chemical Engineering of Japan</i> , 2011 , 44, 179-186	0.8	3

40	Facile Synthesis of Binder-Free Three-Dimensional Cu ₂ S Nanoflowers for Lithium Batteries. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	3
39	Rational design of MOFs-derived Fe ₃ O ₄ @C interwoven with carbon nanotubes as sulfur host for advanced lithium-sulfur batteries. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 877, 114608	4.1	3
38	3D Hierarchical Nanocrystalline CuS Cathode for Lithium Batteries. <i>Materials</i> , 2021 , 14,	3.5	3
37	N-type doped amorphous Si thin film on a surface of rough current collector as anode for Li-ion batteries. <i>Materials Today: Proceedings</i> , 2018 , 5, 22759-22763	1.4	3
36	Physical properties of carbon nanowalls synthesized by the ICP-PECVD method vs. the growth time. <i>Scientific Reports</i> , 2021 , 11, 19287	4.9	3
35	3D ordered macroporous amorphous Nb ₂ O ₅ as anode material for high-performance sodium-ion batteries. <i>Applied Surface Science</i> , 2021 , 567, 150862	6.7	3
34	High Mass-Loading Sulfur-Composite Cathode for Lithium-Sulfur Batteries. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	2
33	Mulberry-like hollow rGO microspheres decorated with CoO nanoparticles as efficient polysulfides anchoring for Li-S batteries. <i>Journal of Electroanalytical Chemistry</i> , 2020 , 873, 114375	4.1	2
32	Nanoscale thermal transport and elastic properties of lithiated amorphous Si thin films. <i>Materials Today: Proceedings</i> , 2020 , 25, 88-92	1.4	2
31	Thiol-modified activated carbon material for sensor technology. <i>Materials Today: Proceedings</i> , 2017 , 4, 4599-4602	1.4	2
30	Assessment of a Shallow Water Model using a Linear Turbulence Model for Obstruction-Induced Discontinuous Flows. <i>Eurasian Chemico-Technological Journal</i> , 2015 , 14, 155	0.8	2
29	Defective ZnOx@porous carbon nanofiber network inducing dendrite-free zinc plating as zinc metal anode for high-performance aqueous rechargeable Zn/Na ₄ Mn ₉ O ₁₈ battery based on hybrid electrolyte. <i>Journal of Power Sources</i> , 2022 , 518, 230761	8.9	2
28	Three-Dimensionally Ordered Macroporous ZnO Framework as Dual-Functional Sulfur Host for High-Efficiency Lithium-Sulfur Batteries. <i>Nanomaterials</i> , 2020 , 10,	5.4	2
27	Flower-like Ni ₃ S ₂ hollow microspheres as superior sulfur hosts for lithium-sulfur batteries. <i>Microporous and Mesoporous Materials</i> , 2021 , 326, 111355	5.3	2
26	Interface modification of NASICON-type Li-ion conducting ceramic electrolytes: a critical evaluation. <i>Materials Advances</i> , 2022 , 3, 3055-3069	3.3	2
25	Synthesis and Characterization of Silicon Based Anode Materials. <i>Materials Today: Proceedings</i> , 2017 , 4, 4502-4511	1.4	1
24	Synthesis of ZnO/Polypyrrole Nanoring Composite as High-Performance Anode Materials for Lithium Ion Batteries. <i>Journal of Nanomaterials</i> , 2019 , 2019, 1-8	3.2	1
23	All-Purpose Electrodes: All-Purpose Electrode Design of Flexible Conductive Scaffold toward High-Performance LiS Batteries (Adv. Funct. Mater. 19/2020). <i>Advanced Functional Materials</i> , 2020 , 30, 2070123	15.6	1

22	Suppression of zinc dendrite formation on anode of Zn/LiFePO ₄ aqueous rechargeable batteries using electrodeposition. <i>Materials Today: Proceedings</i> , 2020 , 25, 93-96	1.4	1
21	SYNTHESIS OF NANOSTRUCTURED LiM _{0.15} Mn _{1.85} O ₄ (M = Mn, Co, Al, AND Fe) PARTICLES BY SPRAY PYROLYSIS IN A FLUIDIZED BED REACTOR. <i>Chemical Engineering Communications</i> , 2008 , 195, 1292-1301	2.2	1
20	Effect of thickness and reaction media on properties of ZnO thin films by SILAR.. <i>Scientific Reports</i> , 2022 , 12, 851	4.9	1
19	Spray-Pyrolysis Preparation of Li ₄ Ti ₅ O ₁₂ /Si Composites for Lithium-Ion Batteries. <i>Eurasian Chemico-Technological Journal</i> , 2019 , 69	0.8	1
18	Evaluating Sulfur-Composite Cathode Material with Lithiated Graphite Anode in Coin Cell and Pouch Cell Configuration. <i>Frontiers in Energy Research</i> , 2020 , 8,	3.8	1
17	PAM-based hydrogel electrolyte for hybrid rechargeable aqueous (Zn and Li-ion) battery. <i>Materials Today: Proceedings</i> , 2021 , 49, 2491-2491	1.4	1
16	3D intermetallic anodes for Lithium-ion batteries. <i>Materials Today: Proceedings</i> , 2018 , 5, 22877-22881	1.4	1
15	Rational design of a cobalt sulfide nanoparticle-embedded flexible carbon nanofiber membrane electrocatalyst for advanced lithium-sulfur batteries. <i>Nanotechnology</i> , 2021 , 32,	3.4	1
14	Engineering zwitterionic barrier by squaraine-based porous organic framework fiber for superior lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2021 , 397, 139276	6.7	1
13	Defect-rich porous tubular graphitic carbon nitride with strong adsorption towards lithium polysulfides for high-performance lithium-sulfur batteries. <i>Journal of Materials Science and Technology</i> , 2022 , 115, 140-147	9.1	0
12	Revisiting the carbon mesopore contribution towards improved performance of ionic liquidBased EDLCs at sub-zero temperatures. <i>Ionics</i> ,1	2.7	0
11	NiCoS Nanocrystals on Nitrogen-Doped Carbon Nanotubes as High-Performance Anode for Lithium-Ion Batteries. <i>Nanoscale Research Letters</i> , 2021 , 16, 105	5	0
10	Promoting polysulfides redox conversion by sulfur-deficient ZnS _{1-x} hollow polyhedrons for lithium-sulfur batteries. <i>Materials and Design</i> , 2021 , 210, 110060	8.1	0
9	Application of Response Surface Methodology for Optimization of Nanosized Zinc Oxide Synthesis Conditions by Electrospinning Technique. <i>Nanomaterials</i> , 2022 , 12, 1733	5.4	0
8	A new step in the development of Zn/LiFePO ₄ aqueous battery. <i>Materials Today: Proceedings</i> , 2017 , 4, 4452-4457	1.4	
7	Synthesis and Electrochemical Performance of Polypyrrole-Coated Sulfur/Multi-Walled Carbon Nanotube Composite Cathode Materials for Lithium/Sulfur Batteries. <i>Materials Science Forum</i> , 2016 , 847, 33-38	0.4	
6	Prevention of Reduction in Nasicon-Type Solid Electrolyte By Thin Polymer Coating. <i>ECS Meeting Abstracts</i> , 2021 , MA2021-02, 12-12	0	
5	Thermal stability and reduction mechanism of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ and LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathode materials studied by a Temperature Programmed Reduction. <i>Thermochimica Acta</i> , 2021 , 706, 179069	2.9	

4	Effect of Additions of Organic Sulfonates on the Conductivity of Lithium Conducting Polymer Electrolytes. <i>Electrochemistry</i> , 2001 , 69, 312-313	1.2
3	Development of a novel gel-like composite polymer separator for 3D Zn/LiFePO ₄ aqueous hybrid ion battery. <i>Materials Today: Proceedings</i> , 2018 , 5, 22871-22876	1.4
2	Advanced Battery Materials Research at Nazarbayev University: Review. <i>Eurasian Chemico-Technological Journal</i> , 2021 , 23, 199	0.8
1	Solid-State Nanobatteries. <i>ACS Symposium Series</i> , 201-248	0.4