Zhaoping Liu

List of Publications by Citations

204 papers	7,780 citations	47 h-index	82 g-index
220 ext. papers	9,434 ext. citations	8.4 avg, IF	6.49 L-index

#	Paper	IF	Citations
204	Towards High-Voltage Aqueous Metal-Ion Batteries Beyond 1.5 V: The Zinc/Zinc Hexacyanoferrate System. *Advanced Energy Materials*, **2015**, 5, 1400930	21.8	680
203	Graphene modified LiFePO4 cathode materials for high power lithium ion batteries. *Journal of Materials Chemistry*, **2011**, 21, 3353		420
202	Gas-solid interfacial modification of oxygen activity in layered oxide cathodes for lithium-ion batteries. *Nature Communications*, **2016**, 7, 12108	17.4	379
201	A scalable, solution-phase processing route to graphene oxide and graphene ultralarge sheets. *Chemical Communications*, **2010**, 46, 2611-3	5.8	216
200	3D Porous MXene (TiC)/Reduced Graphene Oxide Hybrid Films for Advanced Lithium Storage. *ACS Applied Materials & Interfaces*, **2018**, 10, 3634-3643	9.5	185
199	A 3D porous architecture of Si/graphene nanocomposite as high-performance anode materials for Li-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 7724		182
198	Large-Sized Few-Layer Graphene Enables an Ultrafast and Long-Life Aluminum-Ion Battery. *Advanced Energy Materials*, **2017**, 7, 1700034	21.8	160
197	Morphology-controlled solvothermal synthesis of LiFePO4 as a cathode material for lithium-ion batteries. *Journal of Materials Chemistry*, **2010**, 20, 8086		158
196	A Comprehensive Understanding of Lithium–Sulfur Battery Technology. *Advanced Functional Materials*, **2019**, 29, 1901730	15.6	156
195	Morphology-Dependent Electrochemical Performance of Zinc Hexacyanoferrate Cathode for Zinc-Ion Battery. *Scientific Reports*, **2015**, 5, 18263	4.9	156
194	Morphological Evolution of High-Voltage Spinel LiNi(0.5)Mn(1.5)O4 Cathode Materials for Lithium-Ion Batteries: The Critical Effects of Surface Orientations and Particle Size. *ACS Applied Materials & Interfaces*, **2016**, 8, 4661-75	9.5	152
193	Sulfur/Carbon Nanotube Composite Film as a Flexible Cathode for Lithium–Sulfur Batteries. *Journal of Physical Chemistry C*, **2013**, 117, 21112-21119	3.8	121
192	Mechanical and Thermal Properties of Epoxy Resin Nanocomposites Reinforced with Graphene Oxide. *Polymer-Plastics Technology and Engineering*, **2012**, 51, 251-256		116
191	Microscale Lithium Metal Stored inside Cellular Graphene Scaffold toward Advanced Metallic Lithium Anodes. *Advanced Energy Materials*, **2018**, 8, 1703152	21.8	113
190	Transition metal oxide-based oxygen reduction reaction electrocatalysts for energy conversion systems with aqueous electrolytes. *Journal of Materials Chemistry A*, **2018**, 6, 10595-10626	13	109
189	A Chronicle Review of Nonsilicon (Sn, Sb, Ge)-Based Lithium/Sodium-Ion Battery Alloying Anodes. *Small Methods*, **2020**, 4, 2000218	12.8	99
188	Enhancing the pyridinic N content of Nitrogen-doped graphene and improving its catalytic activity for oxygen reduction reaction. *International Journal of Hydrogen Energy*, **2017**, 42, 28298-28308	6.7	91

187	Abundant nanoscale defects to eliminate voltage decay in Li-rich cathode materials. *Energy Storage Materials*, **2019**, 16, 220-227	19.4	91
186	Hybrid Organic-Inorganic Thermoelectric Materials and Devices. *Angewandte Chemie - International Edition*, **2019**, 58, 15206-15226	16.4	87
185	Morphology controlled synthesis and modification of high-performance LiMnPO4 cathode materials for Li-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 21144		86
184	Enhanced electrochemical performance with surface coating by reactive magnetron sputtering on lithium-rich layered oxide electrodes. *ACS Applied Materials & Interfaces*, **2014**, 6, 9185-93	9.5	83
183	New-concept batteries based on aqueous Li+/Na+ mixed-ion electrolytes. *Scientific Reports*, **2013**, 3, 1946	4.9	83
182	Self-Templating Construction of 3D Hierarchical Macro-/Mesoporous Silicon from 0D Silica Nanoparticles. *ACS Nano*, **2017**, 11, 889-899	16.7	82
181	Understanding and Controlling Anionic Electrochemical Activity in High-Capacity Oxides for Next Generation Li-Ion Batteries. *Chemistry of Materials*, **2017**, 29, 908-915	9.6	81
180	Electrochemical properties of 0.6Li[Li1/3Mn2/3]O2□0.4LiNixMnyCo1□x□yO2 cathode materials for lithium-ion batteries. *Journal of Power Sources*, **2012**, 218, 128-133	8.9	80
179	Two-dimensional silicon suboxides nanostructures with Si nanodomains confined in amorphous SiO2 derived from siloxene as high performance anode for Li-ion batteries. *Nano Energy*, **2017**, 39, 546-553	17.1	79
178	A novel fluorocyclophosphazene as bifunctional additive for safer lithium-ion batteries. *Journal of Power Sources*, **2015**, 278, 190-196	8.9	77
177	Polyimide matrix-enhanced cross-linked gel separator with three-dimensional heat-resistance skeleton for high-safety and high-power lithium ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 9134	13	75
176	Water-mediated cation intercalation of open-framework indium hexacyanoferrate with high voltage and fast kinetics. *Nature Communications*, **2016**, 7, 11982	17.4	73
175	Improving the cyclability performance of lithium-ion batteries by introducing lithium difluorophosphate (LiPO2F2) additive. *RSC Advances*, **2017**, 7, 26052-26059	3.7	69
174	Synthesis and electrochemical properties of layered lithium transition metal oxides. *Journal of Materials Chemistry*, **2011**, 21, 2544-2549		69
173	(La1□xSrx)0.98MnO3 perovskite with A-site deficiencies toward oxygen reduction reaction in aluminum-air batteries. *Journal of Power Sources*, **2017**, 342, 192-201	8.9	64
172	Porous membrane with high curvature, three-dimensional heat-resistance skeleton: a new and practical separator candidate for high safety lithium ion battery. *Scientific Reports*, **2015**, 5, 8255	4.9	63
171	Solution-Based Evolution and Enhanced Methanol Oxidation Activity of Monodisperse Platinum□Copper Nanocubes. *Angewandte Chemie*, **2009**, 121, 4281-4285	3.6	63
170	Surface structural conversion and electrochemical enhancement by heat treatment of chemical pre-delithiation processed lithium-rich layered cathode material. *Journal of Power Sources*, **2014**, 268, 683-691	8.9	62

169	Superior Thermally Stable and Nonflammable Porous Polybenzimidazole Membrane with High Wettability for High-Power Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 8742-8750	9.5	60
168	Freestanding bacterial cellulose-graphene oxide composite membranes with high mechanical strength for selective ion permeation. *Scientific Reports*, **2016**, 6, 33185	4.9	58
167	Silicon/carbon lithium-ion battery anode with 3D hierarchical macro-/mesoporous silicon network: Self-templating synthesis via magnesiothermic reduction of silica/carbon composite. *Journal of Power Sources*, **2019**, 412, 93-104	8.9	57
166	A comparative study on the oxidation state of lattice oxygen among Li1.14Ni0.136Co0.136Mn0.544O2, Li2MnO3, LiNi0.5Co0.2Mn0.3O2 and LiCoO2 for the initial charge□discharge. *Journal of Materials Chemistry A*, **2015**, 3, 11930-11939	13	52
165	Graphene nested porous carbon current collector for lithium metal anode with ultrahigh areal capacity. *Energy Storage Materials*, **2018**, 15, 266-273	19.4	52
164	Aqueous batteries based on mixed monovalence metal ions: a new battery family. *ChemSusChem*, **2014**, 7, 2295-302	8.3	52
163	Ion-selective copper hexacyanoferrate with an open-framework structure enables high-voltage aqueous mixed-ion batteries. *Journal of Materials Chemistry A*, **2017**, 5, 16740-16747	13	51
162	Orientation Control of Graphene Flakes by Magnetic Field: Broad Device Applications of Macroscopically Aligned Graphene. *Advanced Materials*, **2017**, 29, 1604453	24	50
161	Designed synthesis of LiMn2O4 microspheres with adjustable hollow structures for lithium-ion battery applications. *Journal of Materials Chemistry A*, **2013**, 1, 837-842	13	50
160	Methylsulfonylmethane-Based Deep Eutectic Solvent as a New Type of Green Electrolyte for a High-Energy-Density Aqueous Lithium-Ion Battery. *ACS Energy Letters*, **2019**, 4, 1419-1426	20.1	49
159	Si/Ag/C Nanohybrids with in Situ Incorporation of Super-Small Silver Nanoparticles: Tiny Amount, Huge Impact. *ACS Nano*, **2018**, 12, 861-875	16.7	49
158	La0.8Sr0.2Co1-xMnxO3 perovskites as efficient bi-functional cathode catalysts for rechargeable zinc-air batteries. *Electrochimica Acta*, **2017**, 254, 14-24	6.7	48
157	Composition-Dependent Electrocatalytic Activity of Pt-Cu Nanocube Catalysts for Formic Acid Oxidation. *Angewandte Chemie*, **2010**, 122, 1304-1307	3.6	46
156	Oxygen reduction reaction catalysts of manganese oxide decorated by silver nanoparticles for aluminum-air batteries. *Electrochimica Acta*, **2016**, 214, 49-55	6.7	46
155	Distinguishing thermal lens effect from electronic third-order nonlinear self-phase modulation in liquid suspensions of 2D nanomaterials. *Nanoscale*, **2017**, 9, 3547-3554	7.7	45
154	Synthetic methodologies for carbon nanomaterials. *Advanced Materials*, **2010**, 22, 1963-6	24	45
153	Localized concentration reversal of lithium during intercalation into nanoparticles. *Science Advances*, **2018**, 4, eaao2608	14.3	44
152	Performances of an Al□.15 Bi□.15 Pb□.035 Ga alloy as an anode for Al□ir batteries in neutral and alkaline electrolytes. *RSC Advances*, **2017**, 7, 25838-25847	3.7	43

151	Identifying the chemical and structural irreversibility in LiNi0.8Co0.15Al0.05O2 □a model compound for classical layered intercalation. *Journal of Materials Chemistry A*, **2018**, 6, 4189-4198	13	41
150	Two-Dimensional Porous Micro/Nano Metal Oxides Templated by Graphene Oxide. *ACS Applied Materials & Interfaces*, **2015**, 7, 11984-90	9.5	41
149	Synthesis of Three-Dimensional Nanoporous Li-Rich Layered Cathode Oxides for High Volumetric and Power Energy Density Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 3661-3666	9.5	39
148	Enhanced high voltage cyclability of LiCoO2 cathode by adopting poly[bis-(ethoxyethoxyethoxy)phosphazene] with flame-retardant property as an electrolyte additive for lithium-ion batteries. *Applied Surface Science*, **2017**, 403, 260-266	6.7	35
147	Electrocatalytic activity of silver decorated ceria microspheres for the oxygen reduction reaction and their application in aluminium-air batteries. *Chemical Communications*, **2017**, 53, 7921-7924	5.8	35
146	Scalable in Situ Synthesis of LiTiO/Carbon Nanohybrid with Supersmall LiTiO Nanoparticles Homogeneously Embedded in Carbon Matrix. *ACS Applied Materials & Interfaces*, **2018**, 10, 2591-2602	9.5	35
145	One-Pot Synthesis of Co O /Ag Nanoparticles Supported on N-Doped Graphene as Efficient Bifunctional Oxygen Catalysts for Flexible Rechargeable Zinc-Air Batteries. *Chemistry - A European Journal*, **2018**, 24, 14816-14823	4.8	33
144	Green facile scalable synthesis of titania/carbon nanocomposites: new use of old dental resins. *ACS Applied Materials & Interfaces*, **2014**, 6, 18461-8	9.5	33
143	Enhanced Bifunctional Catalytic Activity of Manganese Oxide/Perovskite Hierarchical Core-Shell Materials by Adjusting the Interface for Metal-Air Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 25870-25881	9.5	32
142	Fluorinated Electrolytes for Li-Ion Batteries: The Lithium Difluoro(oxalato)borate Additive for Stabilizing the Solid Electrolyte Interphase. *ACS Omega*, **2017**, 2, 8741-8750	3.9	32
141	Silicon Oxycarbide/Carbon Nanohybrids with Tiny Silicon Oxycarbide Particles Embedded in Free Carbon Matrix Based on Photoactive Dental Methacrylates. *ACS Applied Materials & Interfaces*, **2016**, 8, 13982-92	9.5	32
140	Cerium ion intercalated MnO2 nanospheres with high catalytic activity toward oxygen reduction reaction for aluminum-air batteries. *Electrochimica Acta*, **2018**, 263, 544-554	6.7	31
139	Synthesis and electrochemical performance of micro-sized Li-rich layered cathode material for Lithium-ion batteries. *Electrochimica Acta*, **2016**, 211, 507-514	6.7	31
138	Promoting effects of Ce0.75Zr0.25O2 on the La0.7Sr0.3MnO3 electrocatalyst for the oxygen reduction reaction in metal□ir batteries. *Journal of Materials Chemistry A*, **2017**, 5, 6411-6415	13	30
137	Eliminating voltage decay of lithium-rich li1.14 mn0.54 ni0.14 co0.14 o2 cathodes by controlling the electrochemical process. *Chemistry - A European Journal*, **2015**, 21, 7503-10	4.8	30
136	New perspective to understand the effect of electrochemical prelithiation behaviors on silicon monoxide.. *RSC Advances*, **2018**, 8, 14473-14478	3.7	30
135	A new family of Mn-based perovskite (La1-xYxMnO3) with improved oxygen electrocatalytic activity for metal-air batteries. *Energy*, **2018**, 154, 561-570	7.9	30
134	Facile synthesis of ternary spinel Co□Mn□i nanorods as efficient bi-functional oxygen catalysts for rechargeable zinc-air batteries. *Journal of Power Sources*, **2019**, 435, 226761	8.9	30

133	5 V-Class Electrolytes Based on Fluorinated Solvents for Li-Ion Batteries with Excellent Cyclability. *ChemElectroChem*, **2015**, 2, 1707-1712	4.3	30
132	Nitrogen-Doped Graphene Nanoscroll Foam with High Diffusion Rate and Binding Affinity for Removal of Organic Pollutants. *Small*, **2017**, 13, 1603779	11	29
131	Facile Scalable Synthesis of TiO2/Carbon Nanohybrids with Ultrasmall TiO2 Nanoparticles Homogeneously Embedded in Carbon Matrix. *ACS Applied Materials & Interfaces*, **2015**, 7, 24247-55	9.5	29
130	Scalable synthesis of Si nanowires interconnected SiOx anode for high performance lithium-ion batteries. *Journal of Alloys and Compounds*, **2019**, 783, 128-135	5.7	29
129	Highly Reversible Li Plating Confined in Three-Dimensional Interconnected Microchannels toward High-Rate and Stable Metallic Lithium Anodes. *ACS Applied Materials & Interfaces*, **2018**, 10, 20387-20395	9.5	29
128	Solution-Processed Transparent Conducting Electrodes for Flexible Organic Solar Cells with 16.61% Efficiency. *Nano-Micro Letters*, **2021**, 13, 44	19.5	27
127	Niobium carbide/reduced graphene oxide hybrid porous aerogel as high capacity and long-life anode material for Li-ion batteries. *International Journal of Energy Research*, **2019**, 43, 4995-5003	4.5	26
126	Oxidation Decomposition Mechanism of Fluoroethylene Carbonate-Based Electrolytes for High-Voltage Lithium Ion Batteries: A DFT Calculation and Experimental Study. *ChemistrySelect*, **2017**, 2, 7353-7361	1.8	26
125	Silver nanoparticles supported on a nitrogen-doped graphene aerogel composite catalyst for an oxygen reduction reaction in aluminum air batteries. *RSC Advances*, **2016**, 6, 99179-99183	3.7	26
124	Competitive Solvation-Induced Concurrent Protection on the Anode and Cathode toward a 400 Wh kg□1 Lithium Metal Battery. *ACS Energy Letters*, **2021**, 6, 115-123	20.1	25
123	La0.7(Sr0.3-xPdx)MnO3 as a highly efficient electrocatalyst for oxygen reduction reaction in aluminum air battery. *Electrochimica Acta*, **2017**, 230, 418-427	6.7	24
122	La1□AgxMnO3 electrocatalyst with high catalytic activity for oxygen reduction reaction in aluminium air batteries. *RSC Advances*, **2017**, 7, 5214-5221	3.7	24
121	A bifunctional hierarchical porous carbon network integrated with an in situ formed ultrathin graphene shell for stable lithium□sulfur batteries. *Journal of Materials Chemistry A*, **2017**, 5, 13674-13682	13	24
120	Hydrothermal self-assembly of graphene foams with controllable pore size. *RSC Advances*, **2016**, 6, 20843-20849	3.7	24
119	Oriented Arrangement: The Origin of Versatility for Porous Graphene Materials. *Small*, **2017**, 13, 1701231	11	24
118	Graphene network nested Cu foam for reducing size of lithium metal towards stable metallic lithium anode. *Energy Storage Materials*, **2019**, 21, 107-114	19.4	24
117	One-pot synthesis of La 0.7 Sr 0.3 MnO 3 supported on flower-like CeO 2 as electrocatalyst for oxygen reduction reaction in aluminum-air batteries. *Journal of Power Sources*, **2017**, 358, 50-60	8.9	23
116	Metastability and Reversibility of Anionic Redox-Based Cathode for High-Energy Rechargeable Batteries. *Cell Reports Physical Science*, **2020**, 1, 100028-100028	6.1	23

115	Ordered self-assembly of amphipathic graphene nanosheets into three-dimensional layered architectures. *Nanoscale*, **2016**, 8, 197-203	7.7	23
114	Effect of alumina on the curvature, Young's modulus, thermal expansion coefficient and residual stress of planar solid oxide fuel cells. *Journal of Power Sources*, **2011**, 196, 7639-7644	8.9	23
113	TiO2(B)□CNT□graphene ternary composite anode material for lithium ion batteries. *RSC Advances*, **2015**, 5, 22449-22454	3.7	20
112	Template-directed fabrication of porous gas diffusion layer for magnesium air batteries. *Journal of Power Sources*, **2015**, 297, 202-207	8.9	20
111	A LiPO2F2/LiFSI dual-salt electrolyte enabled stable cycling of lithium metal batteries. *Journal of Power Sources*, **2018**, 400, 449-456	8.9	20
110	Polyethylene Glycol-Na Interface of Vanadium Hexacyanoferrate Cathode for Highly Stable Rechargeable Aqueous Sodium-Ion Battery. *ACS Applied Materials & Interfaces*, **2019**, 11, 28762-28768	8.5	20
109	Planar Alignment of Graphene Sheets by a Rotating Magnetic Field for Full Exploitation of Graphene as a 2D Material. *Advanced Functional Materials*, **2018**, 28, 1805255	15.6	20
108	Structure-preserved 3D porous silicon/reduced graphene oxide materials as anodes for Li-ion batteries. *RSC Advances*, **2017**, 7, 24305-24311	3.7	19
107	Controlling siloxene oxidization to tailor SiOx anodes for high performance lithium ion batteries. *Journal of Power Sources*, **2019**, 432, 65-72	8.9	19
106	Attapulgite nanofibers and graphene oxide composite membrane for high-performance molecular separation. *Journal of Colloid and Interface Science*, **2019**, 545, 276-281	9.3	19
105	Ultrasmall Co3O4 Nanoparticles Confined in P, N-Doped Carbon Matrices for High-Performance Supercapacitors. *Journal of Physical Chemistry C*, **2020**, 124, 9225-9232	3.8	19
104	Hierarchical porous MnO/graphene composite aerogel as high-performance anode material for lithium ion batteries. *RSC Advances*, **2017**, 7, 15857-15863	3.7	18
103	Physicochemical and Electrochemical Properties of 1,1,2,2-Tetrafluoroethyl-2,2,3,3-Tetrafluoropropyl Ether as a Co-Solvent for High-Voltage Lithium-Ion Electrolytes. *ChemElectroChem*, **2019**, 6, 3747-3755	4.3	18
102	Dental Resin Monomer Enables Unique NbO2/Carbon Lithium-Ion Battery Negative Electrode with Exceptional Performance. *Advanced Functional Materials*, **2019**, 29, 1904961	15.6	18
101	Graphene wrapped silicon suboxides anodes with suppressed Li-uptake behavior enabled superior cycling stability. *Energy Storage Materials*, **2021**, 35, 317-326	19.4	18
100	Double-helix-superstructure aqueous binder to boost excellent electrochemical performance in Li-rich layered oxide cathode. *Journal of Power Sources*, **2019**, 420, 29-37	8.9	17
99	Revisiting the open-framework zinc hexacyanoferrate: The role of ternary electrolyte and sodium-ion intercalation mechanism. *Journal of Power Sources*, **2018**, 380, 135-141	8.9	17
98	A compressible and hierarchical porous graphene/Co composite aerogel for lithium-ion batteries with high gravimetric/volumetric capacity. *Journal of Materials Chemistry A*, **2016**, 4, 6021-6028	13	17

97	Understanding the Discrepancy of Defect Kinetics on Anionic Redox in Lithium-Rich Cathode Oxides. *ACS Applied Materials & Interfaces*, **2019**, 11, 14023-14034	9.5	16
96	Vapor-assisted synthesis of hierarchical porous graphitic carbon materials towards energy storage devices. *Journal of Power Sources*, **2019**, 425, 10-16	8.9	16
95	From −20 °C to 150 °C: a lithium secondary battery with a wide temperature window obtained via manipulated competitive decomposition in electrolyte solution. *Journal of Materials Chemistry A*, **2021**, 9, 9307-9318	13	16
94	Vacuum-Free, All-Solution, and All-Air Processed Organic Photovoltaics with over 11% Efficiency and Promoted Stability Using Layer-by-Layer Codoped Polymeric Electrodes. *Solar Rrl*, **2020**, 4, 1900543	7.1	15
93	Graphene/Sulfur Composites with a Foam-Like Porous Architecture and Controllable Pore Size for High Performance Lithium–Sulfur Batteries. *ChemNanoMat*, **2016**, 2, 952-958	3.5	15
92	Stabilization effects of Al doping for enhanced cycling performances of Li-rich layered oxides. *Ceramics International*, **2017**, 43, 13845-13852	5.1	15
91	Slurry-like hybrid electrolyte with high lithium-ion transference number for dendrite-free lithium metal anode. *Journal of Energy Chemistry*, **2020**, 48, 375-382	12	14
90	Surface oxo-functionalized hard carbon spheres enabled superior high-rate capability and long-cycle stability for Li-ion storage. *Electrochimica Acta*, **2018**, 260, 430-438	6.7	14
89	Regulating capillary pressure to achieve ultralow areal mass loading metallic lithium anodes. *Energy Storage Materials*, **2019**, 23, 693-700	19.4	14
88	Graphene Modified Polyaniline-Hydrogel Based Stretchable Supercapacitor with High Capacitance and Excellent Stretching Stability. *ChemSusChem*, **2021**, 14, 938-945	8.3	14
87	Superior cycling performance of a sandwich structure Si/C anode for lithium ion batteries. *RSC Advances*, **2016**, 6, 12107-12113	3.7	13
86	Graphene/Sulfur/Carbon Nanocomposite for High Performance Lithium-Sulfur Batteries. *Nanomaterials*, **2015**, 5, 1481-1492	5.4	13
85	Si/C nanocomposite anode materials by freeze-drying with enhanced electrochemical performance in lithium-ion batteries. *Journal of Solid State Electrochemistry*, **2012**, 16, 2733-2738	2.6	13
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83	Facile fabrication of nanoporous graphene powder for high-rate lithium–sulfur batteries. *RSC Advances*, **2017**, 7, 5177-5182	3.7	12
82	Composite membrane with ultra-thin ion exchangeable functional layer: a new separator choice for manganese-based cathode material in lithium ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 7006-7013	13	12
81	Improving catalytic activity of layered lithium transition metal oxides for oxygen electrode in metal-air batteries. *International Journal of Hydrogen Energy*, **2020**, 45, 1846-1856	6.7	12
80	Flexible asymmetric microsupercapacitor with high energy density based on all-graphene electrode system. *Journal of Materials Science*, **2020**, 55, 309-318	4.3	12

79	All annealing-free solution-processed highly flexible organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 5425-5433	13	12
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77	MnO/Metal/Carbon Nanohybrid Lithium-Ion Battery Anode With Enhanced Electrochemical Performance: Universal Facile Scalable Synthesis and Fundamental Understanding. *Advanced Materials Interfaces*, **2019**, 6, 1900335	4.6	11
76	Ultrafast Heterogeneous Nucleation Enables a Hierarchical Surface Configuration of Lithium-Rich Layered Oxide Cathode Material for Enhanced Electrochemical Performances. *Advanced Materials Interfaces*, **2018**, 5, 1701465	4.6	11
75	Role of Nickel Nanoparticles in High-Performance TiO /Ni/Carbon Nanohybrid Lithium/Sodium-Ion Battery Anodes. *Chemistry - an Asian Journal*, **2019**, 14, 1557-1569	4.5	10
74	Depressing the irreversible reactions on a three-dimensional interface towards a high-areal capacity lithium metal anode. *Journal of Materials Chemistry A*, **2019**, 7, 6267-6274	13	10
73	Microporous Binder for the Silicon-Based Lithium-Ion Battery Anode with Exceptional Rate Capability and Improved Cyclic Performance. *Langmuir*, **2020**, 36, 2003-2011	4	10
72	All graphene electrode for high-performance asymmetric supercapacitor. *International Journal of Energy Research*, **2020**, 44, 1244-1255	4.5	10
71	Rational Design and Mechanical Understanding of Three-Dimensional Macro-/Mesoporous Silicon Lithium-Ion Battery Anodes with a Tunable Pore Size and Wall Thickness. *ACS Applied Materials & Interfaces*, **2020**, 12, 43785-43797	9.5	10
70	Anode supported planar solid oxide fuel cells with the large size of 30□cm□×□30□cm via tape-casting and co-sintering technique. *International Journal of Hydrogen Energy*, **2016**, 41, 1871-1876	6.7	10
69	Study on the fracture behavior of the planar-type solid oxide fuel cells. *Journal of Alloys and Compounds*, **2019**, 782, 355-362	5.7	10
68	A Nano-Architectured Metal-Oxide/Perovskite Hybrid Material as Electrocatalyst for the Oxygen Reduction Reaction in Aluminum–Air Batteries. *ACS Applied Nano Materials*, **2018**, 1, 6824-6833	5.6	10
67	Reactivating Li O with Nano-Sn to Achieve Ultrahigh Initial Coulombic Efficiency SiO Anodes for Li-Ion Batteries. *ChemSusChem*, **2019**, 12, 3377-3382	8.3	9
66	Lithium Bis(fluorosulfony)imide-Lithium Hexafluorophosphate Binary-Salt Electrolytes for Lithium-Ion Batteries: Aluminum Corrosion Behaviors and Electrochemical Properties. *ChemistrySelect*, **2018**, 3, 1954-1960	1.8	9
65	Hybrid electrolytes incorporated with dandelion-like silane–Al2O3 nanoparticles for high-safety high-voltage lithium ion batteries. *Journal of Power Sources*, **2018**, 391, 113-119	8.9	9
64	Synergistic Effect of Lewis Base Polymers and Graphene in Enhancing the Efficiency of Perovskite Solar Cells. *ACS Applied Energy Materials*, **2021**, 4, 3928-3936	6.1	9
63	Effect of phase transformation of zirconia on the fracture behavior of electrolyte-supported solid oxide fuel cells. *International Journal of Hydrogen Energy*, **2019**, 44, 12118-12126	6.7	7
62	Photoacoustic identification of laser-induced microbubbles as light scattering centers for optical limiting in a liquid suspension of graphene nanosheets. *Nanoscale*, **2020**, 12, 7109-7115	7.7	7

61	Template-free synthesis of titania architectures with controlled morphology evolution. *Journal of Materials Science*, **2016**, 51, 3941-3956	4.3	7
60	Revealing Anion Adsorption Mechanism for Coating Layer on Separator toward Practical Li Metal Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 23584-23591	9.5	7
59	Organosilicon-Based Functional Electrolytes for High-Performance Lithium Batteries. *Advanced Energy Materials*, **2021**, 11, 2101057	21.8	7
58	Hybride organisch-anorganische thermoelektrische Materialien und Baueinheiten. *Angewandte Chemie*, **2019**, 131, 15348-15370	3.6	7
57	Graphene Flakes: Orientation Control of Graphene Flakes by Magnetic Field: Broad Device Applications of Macroscopically Aligned Graphene (Adv. Mater. 1/2017). *Advanced Materials*, **2017**, 29,	24	6
56	Porous Graphene-Like Materials Prepared from Hollow Carbonaceous Microspheres for Supercapacitors. *ChemNanoMat*, **2015**, 1, 422-429	3.5	6
55	Morphology-controlled MoS by low-temperature atomic layer deposition. *Nanoscale*, **2020**, 12, 20404-20412	7.7	6
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53	Sulfur is a New High-Performance Additive toward High-Voltage LiNiCoMnO Cathode: Tiny Amount, Huge Impact. *ACS Applied Materials & Interfaces*, **2021**, 13, 18648-18657	9.5	6
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