Feng Pan

List of Publications by Year
in descending order

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361 papers	22,232 citations	6254 80 h-index	13771 129 g-index
365 all docs	365 docs citations	365 times ranked	17674 citing authors

#	Article	IF	Citations
1	The role of nanotechnology in the development of battery materials for electric vehicles. Nature Nanotechnology, 2016, 11, 1031-1038.	31.5	581
2	High-Performance Anode Materials for Rechargeable Lithium-Ion Batteries. Electrochemical Energy Reviews, 2018, 1, 35-53.	25.5	514
3	Recent advances in zinc anodes for high-performance aqueous Zn-ion batteries. Nano Energy, 2020, 70, 104523.	16.0	466
4	In situ Raman spectroscopyÂreveals the structure and dissociation of interfacial water. Nature, 2021, 600, 81-85.	27.8	381
5	In situ quantification of interphasial chemistry in Li-ion battery. Nature Nanotechnology, 2019, 14, 50-56.	31.5	373
6	How Solid-Electrolyte Interphase Forms in Aqueous Electrolytes. Journal of the American Chemical Society, 2017, 139, 18670-18680.	13.7	365
7	Building ultraconformal protective layers on both secondary and primary particles of layered lithium transition metal oxide cathodes. Nature Energy, 2019, 4, 484-494.	39.5	345
8	Multifunctional Co 3 S 4 @sulfur nanotubes for enhanced lithium-sulfur battery performance. Nano Energy, 2017, 37, 7-14.	16.0	335
9	Tuning Zn2+ coordination environment to suppress dendrite formation for high-performance Zn-ion batteries. Nano Energy, 2021, 80, 105478.	16.0	318
10	Ni/Li Disordering in Layered Transition Metal Oxide: Electrochemical Impact, Origin, and Control. Accounts of Chemical Research, 2019, 52, 2201-2209.	15.6	315
11	Kinetics Tuning of Li-Ion Diffusion in Layered Li(Ni_xMn_yCo_z)O₂. Journal of the American Chemical Society, 2015, 137, 8364-8367.	13.7	292
12	A Metalâ€“Organicâ€Frameworkâ€Based Electrolyte with Nanowetted Interfaces for Highâ€Energyâ€Density Solidâ€State Lithium Battery. Advanced Materials, 2018, 30, 1704436.	21.0	272
13	An Interfaceâ€Bridged Organicâ€“Inorganic Layer that Suppresses Dendrite Formation and Side Reactions for Ultraâ€Longâ€Life Aqueous Zinc Metal Anodes. Angewandte Chemie - International Edition, 2020, 59, 16594-16601.	13.8	270
14	Mechanisms and properties of ion-transport in inorganic solid electrolytes. Energy Storage Materials, 2018, 10, 139-159.	18.0	267
15	Understanding Co roles towards developing Co-free Ni-rich cathodes for rechargeable batteries. Nature Energy, 2021, 6, 277-286.	39.5	255
16	Alkali-Metal Anodes: From Lab to Market. Joule, 2019, 3, 2334-2363.	24.0	247
17	Structure and Properties of Prussian Blue Analogues in Energy Storage and Conversion Applications. Advanced Functional Materials, 2021, 31, 2006970.	14.9	238
18	Flexible Composite Solid Electrolyte Facilitating Highly Stable â€œSoft Contactingâ€•Liâ€“Electrolyte Interface for Solid State Lithiumâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1701437.	19.5	237

#	Article	IF	Citations
19	A MOF-based single-ion Zn2+ solid electrolyte leading to dendrite-free rechargeable Zn batteries. Nano Energy, 2019, 56, 92-99.	16.0	227
20	High Reversibility of Lattice Oxygen Redox Quantified by Direct Bulk Probes of Both Anionic and Cationic Redox Reactions. Joule, 2019, 3, 518-541.	24.0	225
21	Artificial Solid-Electrolyte Interface Facilitating Dendrite-Free Zinc Metal Anodes via Nanowetting Effect. ACS Applied Materials & Interfaces, 2019, 11, 32046-32051.	8.0	223
22	Challenges in Developing Electrodes, Electrolytes, and Diagnostics Tools to Understand and Advance Sodiumâ€ion Batteries. Advanced Energy Materials, 2018, 8, 1702403.	19.5	221
23	Optimized mesopores enabling enhanced rate performance in novel ultrahigh surface area meso-/microporous carbon for supercapacitors. Nano Energy, 2017, 33, 453-461.	16.0	210
24	Origin of structural degradation in Li-rich layered oxide cathode. Nature, 2022, 606, 305-312.	27.8	206
25	In Situ Probing and Synthetic Control of Cationic Ordering in Niâ€Rich Layered Oxide Cathodes. Advanced Energy Materials, 2017, 7, 1601266.	19.5	200
26	Highly Dispersed Cobalt Clusters in Nitrogenâ€Doped Porous Carbon Enable Multiple Effects for Highâ€Performance Liâ€“S Battery. Advanced Energy Materials, 2020, 10, 1903550.	19.5	192
27	Understanding Thermodynamic and Kinetic Contributions in Expanding the Stability Window of Aqueous Electrolytes. CheM, 2018, 4, 2872-2882.	11.7	187
28	Optimized Temperature Effect of Liâ€ion Diffusion with Layer Distance in Li(Ni_xMn_yCo_z)O₂ Cathode Materials for High Performance Liâ€ion Battery. Advanced Energy Materials, 2016, 6, 1501309.	19.5	182
29	Correlation between manganese dissolution and dynamic phase stability in spinel-based lithium-ion battery. Nature Communications, 2019, 10, 4721.	12.8	182
30	Tuning of Thermal Stability in Layered Li(Ni_xMn_yCo_z)O₂. Journal of the American Chemical Society, 2016, 138, 13326-13334.	13.7	178
31	Novel conductive binder for high-performance silicon anodes in lithium ion batteries. Nano Energy, 2017, 36, 206-212.	16.0	178
32	Designing Flexible Lithium-Ion Batteries by Structural Engineering. ACS Energy Letters, 2019, 4, 690-701.	17.4	175
33	Tiâ€Gradient Doping to Stabilize Layered Surface Structure for High Performance Highâ€Ni Oxide Cathode of Liâ€ion Battery. Advanced Energy Materials, 2019, 9, 1901756.	19.5	169
34	Revealing the Shortâ€Circuiting Mechanism of Garnetâ€Based Solidâ€State Electrolyte. Advanced Energy Materials, 2019, 9, 1900671.	19.5	163
35	Enhancing the High-Voltage Cycling Performance of LiNi_{0.5}Mn_{0.3}Co_{0.2}O₂ by Retarding Its Interfacial Reaction with an Electrolyte by Atomic-Layer-Deposited Al₂O₃. ACS Applied Materials & Interfaces, 2015, 7, 25105-25112.	8.0	158
36	3Dâ€Printed Cathodes of LiMn_{1â^'}_xFe_xPO₄ Nanocrystals Achieve Both Ultrahigh Rate and High Capacity for Advanced Lithiumâ€ion Battery. Advanced Energy Materials, 2016, 6, 1600856.	19.5	157

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37	Tuning phase evolution of Î²-MnO2 during microwave hydrothermal synthesis for high-performance aqueous Zn ion battery. Nano Energy, 2019, 64, 103942.	16.0	154
38	Optimizing Ion Pathway in Titanium Carbide MXene for Practical Highâ€Rate Supercapacitor. Advanced Energy Materials, 2021, 11, 2003025.	19.5	152
39	Structural origin of the high-voltage instability of lithium cobalt oxide. Nature Nanotechnology, 2021, 16, 599-605.	31.5	148
40	Tuning Electronic Push/Pull of Ni-Based Hydroxides To Enhance Hydrogen and Oxygen Evolution Reactions for Water Splitting. ACS Catalysis, 2018, 8, 5621-5629.	11.2	146
41	Efficient Ni₂Co₄P₃ Nanowires Catalysts Enhance Ultrahighâ€Loading Lithiumâ€“Sulfur Conversion in a Microreactorâ€Like Battery. Advanced Functional Materials, 2020, 30, 1906661.	14.9	134
42	Unravelling H⁺/Zn²⁺ Synergistic Intercalation in a Novel Phase of Manganese Oxide for Highâ€Performance Aqueous Rechargeable Battery. Small, 2019, 15, e1904545.	10.0	133
43	Few-Layer Tin Sulfide: A New Black-Phosphorus-Analogue 2D Material with a Sizeable Band Gap, Oddâ€“Even Quantum Confinement Effect, and High Carrier Mobility. Journal of Physical Chemistry C, 2016, 120, 22663-22669.	3.1	130
44	High-performance NaFePO₄formed by aqueous ion-exchange and its mechanism for advanced sodium ion batteries. Journal of Materials Chemistry A, 2016, 4, 4882-4892.	10.3	129
45	Non-classical donor-acceptor chromophores for second order nonlinear optics. Advanced Materials, 1996, 8, 677-680.	21.0	127
46	Synthetic Control of Kinetic Reaction Pathway and Cationic Ordering in Highâ€Ni Layered Oxide Cathodes. Advanced Materials, 2017, 29, 1606715.	21.0	127
47	Preintercalation Strategy in Manganese Oxides for Electrochemical Energy Storage: Review and Prospects. Advanced Materials, 2020, 32, e2002450.	21.0	127
48	Role of Superexchange Interaction on Tuning of Ni/Li Disordering in Layered Li(Ni_xMn_yCo_z)O₂. Journal of Physical Chemistry Letters, 2017, 8, 5537-5542.	4.6	125
49	Boosting interfacial Li+ transport with a MOF-based ionic conductor for solid-state batteries. Nano Energy, 2018, 49, 580-587.	16.0	122
50	Electrochemical Nitrogen Reduction Reaction Performance of Single-Boron Catalysts Tuned by MXene Substrates. Journal of Physical Chemistry Letters, 2019, 10, 6984-6989.	4.6	120
51	Aligned Li⁺ Tunnels in Coreâ€“Shell Li(Ni_xMn_yCo_z)O₂@LiFePO₄ Enhances Its High Voltage Cycling Stability as Li-ion Battery Cathode. Nano Letters, 2016, 16, 6357-6363.	9.1	117
52	Fe-Cluster Pushing Electrons to N-Doped Graphitic Layers with Fe₃C(Fe) Hybrid Nanostructure to Enhance O₂ Reduction Catalysis of Zn-Air Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4587-4596.	8.0	117
53	Tuning the Electrochemical Performance of Titanium Carbide MXene by Controllable In Situ Anodic Oxidation. Angewandte Chemie - International Edition, 2019, 58, 17849-17855.	13.8	117
54	Boosting the Energy Density of Aqueous Batteries via Facile Grotthuss Proton Transport. Angewandte Chemie - International Edition, 2021, 60, 4169-4174.	13.8	116

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55	Cationic Ordering Coupled to Reconstruction of Basic Building Units during Synthesis of High-Ni Layered Oxides. Journal of the American Chemical Society, 2018, 140, 12484-12492.	13.7	113
56	An Anionicâ€MOFâ€Based Bifunctional Separator for Regulating Lithium Deposition and Suppressing Polysulfides Shuttle in Liâ€“S Batteries. Small Methods, 2020, 4, 2000082.	8.6	110
57	Atomic-Resolution Visualization of Distinctive Chemical Mixing Behavior of Ni, Co, and Mn with Li in Layered Lithium Transition-Metal Oxide Cathode Materials. Chemistry of Materials, 2015, 27, 5393-5401.	6.7	108
58	High-efficiency in situ resonant inelastic x-ray scattering (iRIXS) endstation at the Advanced Light Source. Review of Scientific Instruments, 2017, 88, 033106.	1.3	107
59	Biomimetic Bipolar Microcapsules Derived from Staphylococcus aureus for Enhanced Properties of Lithiumâ€“Sulfur Battery Cathodes. Advanced Energy Materials, 2018, 8, 1702373.	19.5	106
60	Simultaneously Regulating Uniform Zn2+ Flux and Electron Conduction by MOF/rGO Interlayers for High-Performance Zn Anodes. Nano-Micro Letters, 2021, 13, 73.	27.0	106
61	Co₃O_{4â^'Î´} Quantum Dots As a Highly Efficient Oxygen Evolution Reaction Catalyst for Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 16159-16167.	8.0	104
62	Ni and Co Segregations on Selective Surface Facets and Rational Design of Layered Lithium Transitionâ€Metal Oxide Cathodes. Advanced Energy Materials, 2016, 6, 1502455.	19.5	100
63	A Novel and Perfectly Aligned Highly Electroâ^'Optic Organic Cocrystal of a Merocyanine Dye and 2,4-Dihydroxybenzaldehyde. Journal of the American Chemical Society, 1996, 118, 6315-6316.	13.7	99
64	Insight into the origin of lithium/nickel ions exchange in layered Li(NixMnyCoz)O2 cathode materials. Nano Energy, 2018, 49, 77-85.	16.0	99
65	Many-Body Effect and Device Performance Limit of Monolayer InSe. ACS Applied Materials & Interfaces, 2018, 10, 23344-23352.	8.0	98
66	Schottky barrier heights in two-dimensional field-effect transistors: from theory to experiment. Reports on Progress in Physics, 2021, 84, 056501.	20.1	97
67	Depolarized and Fully Active Cathode Based on Li(Ni_{0.5}Co_{0.2}Mn_{0.3})O₂ Embedded in Carbon Nanotube Network for Advanced Batteries. Nano Letters, 2014, 14, 4700-4706.	9.1	95
68	Progress in interface structure and modification of zinc anode for aqueous batteries. Nano Energy, 2022, 98, 107333.	16.0	93
69	High-performance aqueous symmetric sodium-ion battery using NASICON-structured Na2VTi(PO4)3. Nano Research, 2018, 11, 490-498.	10.4	92
70	Insights into Li/Ni ordering and surface reconstruction during synthesis of Ni-rich layered oxides. Journal of Materials Chemistry A, 2019, 7, 513-519.	10.3	92
71	In-Situ Polymerized Binder: A Three-in-One Design Strategy for All-Integrated SiO_x Anode with High Mass Loading in Lithium Ion Batteries. ACS Energy Letters, 2021, 6, 290-297.	17.4	92
72	Quasi-solid single Zn-ion conductor with high conductivity enabling dendrite-free Zn metal anode. Energy Storage Materials, 2020, 27, 1-8.	18.0	91

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73	Janus Solidâ€“Liquid Interface Enabling Ultrahigh Charging and Discharging Rate for Advanced Lithium-Ion Batteries. Nano Letters, 2015, 15, 6102-6109.	9.1	90
74	Quantitative probe of the transition metal redox in battery electrodes through soft x-ray absorption spectroscopy. Journal Physics D: Applied Physics, 2016, 49, 413003.	2.8	90
75	Oxygen-Deficient Î²-MnO2@Graphene Oxide Cathode for High-Rate and Long-Life Aqueous Zinc Ion Batteries. Nano-Micro Letters, 2021, 13, 173.	27.0	89
76	Harnessing the surface structure to enable high-performance cathode materials for lithium-ion batteries. Chemical Society Reviews, 2020, 49, 4667-4680.	38.1	88
77	Cycling mechanism of Li2MnO3: Liâ€“CO2Âbatteries and commonality on oxygen redox in cathode materials. Joule, 2021, 5, 975-997.	24.0	88
78	Intrinsic Role of Cationic Substitution in Tuning Li/Ni Mixing in High-Ni Layered Oxides. Chemistry of Materials, 2019, 31, 2731-2740.	6.7	85
79	Coreâ€“shell nano-FeS₂@N-doped graphene as an advanced cathode material for rechargeable Li-ion batteries. Chemical Communications, 2016, 52, 986-989.	4.1	84
80	In Situ Wrapping Si Nanoparticles with 2D Carbon Nanosheets as High-Areal-Capacity Anode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 38159-38164.	8.0	83
81	Dissociate lattice oxygen redox reactions from capacity and voltage drops of battery electrodes. Science Advances, 2020, 6, eaaw3871.	10.3	82
82	Monolayer tellureneâ€“metal contacts. Journal of Materials Chemistry C, 2018, 6, 6153-6163.	5.5	81
83	Spectroscopic Signature of Oxidized Oxygen States in Peroxides. Journal of Physical Chemistry Letters, 2018, 9, 6378-6384.	4.6	80
84	Sub-10Ânm two-dimensional transistors: Theory and experiment. Physics Reports, 2021, 938, 1-72.	25.6	80
85	Depolarization effect to enhance the performance of lithium ions batteries. Nano Energy, 2017, 33, 497-507.	16.0	79
86	Tuning Cu dopant of Zn0.5Cd0.5S nanocrystals enables high-performance photocatalytic H2 evolution from water splitting under visible-light irradiation. Nano Energy, 2016, 26, 405-416.	16.0	78
87	Graphene Quantum Dots Embedded in Bi₂Te₃ Nanosheets To Enhance Thermoelectric Performance. ACS Applied Materials & Interfaces, 2017, 9, 3677-3685.	8.0	78
88	Twin boundary defect engineering improves lithium-ion diffusion for fast-charging spinel cathode materials. Nature Communications, 2021, 12, 3085.	12.8	77
89	2D hybrid anode based on SnS nanosheet bonded with graphene to enhance electrochemical performance for lithium-ion batteries. RSC Advances, 2015, 5, 46941-46946.	3.6	76
90	A coreâ€“shell nanohollow-Î³-Fe₂O₃@graphene hybrid prepared through the Kirkendall process as a high performance anode material for lithium ion batteries. Chemical Communications, 2015, 51, 7855-7858.	4.1	76

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91	Electrical Contacts in Monolayer Arsenene Devices. ACS Applied Materials & Interfaces, 2017, 9, 29273-29284.	8.0	76
92	Algebraic graph-assisted bidirectional transformers for molecular property prediction. Nature Communications, 2021, 12, 3521.	12.8	76
93	Double the Capacity of Manganese Spinel for Lithiumâ€Ion Storage by Suppression of Cooperative Jahnâ€“Teller Distortion. Advanced Energy Materials, 2020, 10, 2000363.	19.5	75
94	Optimized hetero-interfaces by tuning 2D SnS2 thickness in Bi2Te2.7Se0.3/SnS2 nanocomposites to enhance thermoelectric performance. Nano Energy, 2017, 39, 297-305.	16.0	74
95	Monolayer Bismuthene-Metal Contacts: A Theoretical Study. ACS Applied Materials & Interfaces, 2017, 9, 23128-23140.	8.0	73
96	Negligible voltage hysteresis with strong anionic redox in conventional battery electrode. Nano Energy, 2020, 74, 104831.	16.0	72
97	Engineering Fast Ion Conduction and Selective Cation Channels for a Highâ€Rate and Highâ€Voltage Hybrid Aqueous Battery. Angewandte Chemie - International Edition, 2018, 57, 7046-7050.	13.8	71
98	Oxygen vacancy-rich MoO_{3â^'x} nanobelts for photocatalytic N₂ reduction to NH₃ in pure water. Catalysis Science and Technology, 2019, 9, 803-810.	4.1	71
99	Interfacial Properties of Monolayer MoSe₂â€“Metal Contacts. Journal of Physical Chemistry C, 2016, 120, 13063-13070.	3.1	70
100	P2/O3 biphasic Fe/Mn-based layered oxide cathode with ultrahigh capacity and great cyclability for sodium ion batteries. Nano Energy, 2021, 90, 106504.	16.0	69
101	Prelithiation Activates Li(Ni_{0.5}Mn_{0.3}Co_{0.2})O₂ for High Capacity and Excellent Cycling Stability. Nano Letters, 2015, 15, 5590-5596.	9.1	68
102	Overwhelming the Performance of Single Atoms with Atomic Clusters for Platinum-Catalyzed Hydrogen Evolution. ACS Catalysis, 2019, 9, 8213-8223.	11.2	68
103	Novel Organicâ€“Inorganic Hybrid Electrolyte to Enable LiFePO₄ Quasi-Solid-State Li-Ion Batteries Performed Highly around Room Temperature. ACS Applied Materials & Interfaces, 2016, 8, 31273-31280.	8.0	67
104	An Ordered Ni₆â€Ring Superstructure Enables a Highly Stable Sodium Oxide Cathode. Advanced Materials, 2019, 31, e1903483.	21.0	65
105	Excellent Device Performance of Subâ€5â€nm Monolayer Tellurene Transistors. Advanced Electronic Materials, 2019, 5, 1900226.	5.1	65
106	Nanofiber networks of Na₃V₂(PO₄)₃ as a cathode material for high performance all-solid-state sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 5273-5277.	10.3	64
107	Li₂FeSiO₄ nanorods bonded with graphene for high performance batteries. Journal of Materials Chemistry A, 2015, 3, 9601-9608.	10.3	59
108	Structure and performance of the LiFePO₄ cathode material: from the bulk to the surface. Nanoscale, 2020, 12, 15036-15044.	5.6	59

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109	Î³-Fe₂O₃ Nanocrystalline Microspheres with Hybrid Behavior of Battery-Supercapacitor for Superior Lithium Storage. ACS Applied Materials & Interfaces, 2015, 7, 26284-26290.	8.0	58
110	In-situ self-polymerization restriction to form core-shell LiFePO4/C nanocomposite with ultrafast rate capability for high-power Li-ion batteries. Nano Energy, 2017, 39, 346-354.	16.0	58
111	Deciphering the Oxygen Absorption Preâ€edge: A Caveat on its Application for Probing Oxygen Redox Reactions in Batteries. Energy and Environmental Materials, 2021, 4, 246-254.	12.8	56
112	Novel hybrid Si nanocrystals embedded in a conductive SiO_x@C matrix from one single precursor as a high performance anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 7026-7034.	10.3	55
113	Electrical contacts in monolayer blue phosphorene devices. Nano Research, 2018, 11, 1834-1849.	10.4	55
114	Self-assembled N-graphene nanohollows enabling ultrahigh energy density cathode for Liâ€“S batteries. Nanoscale, 2018, 10, 386-395.	5.6	55
115	Origin and regulation of oxygen redox instability in high-voltage battery cathodes. Nature Energy, 2022, 7, 808-817.	39.5	55
116	2D hetero-nanosheets to enable ultralow thermal conductivity by all scale phonon scattering for highly thermoelectric performance. Nano Energy, 2016, 30, 780-789.	16.0	54
117	Temperature Effect on Co-Based Catalysts in Oxygen Evolution Reaction. Inorganic Chemistry, 2018, 57, 2766-2772.	4.0	54
118	Gate-tunable interfacial properties of in-plane ML MX₂ 1Tâ€²â€“2H heterojunctions. Journal of Materials Chemistry C, 2018, 6, 5651-5661.	5.5	54
119	Excellent corrosion resistance of P and Fe modified micro-arc oxidation coating on Al alloy. Journal of Alloys and Compounds, 2017, 710, 452-459.	5.5	53
120	Excess Li-Ion Storage on Reconstructed Surfaces of Nanocrystals To Boost Battery Performance. Nano Letters, 2017, 17, 6018-6026.	9.1	53
121	Fast Diffusion of O₂ on Nitrogen-Doped Graphene to Enhance Oxygen Reduction and Its Application for High-Rate Znâ€“Air Batteries. ACS Applied Materials & Interfaces, 2017, 9, 7125-7130.	8.0	52
122	An Interfaceâ€Bridged Organicâ€“Inorganic Layer that Suppresses Dendrite Formation and Side Reactions for Ultraâ€Longâ€Life Aqueous Zinc Metal Anodes. Angewandte Chemie, 2020, 132, 16737-16744.	2.0	52
123	Defect Engineering in Titanium-Based Oxides for Electrochemical Energy Storage Devices. Electrochemical Energy Reviews, 2020, 3, 286-343.	25.5	52
124	Novel electro-optic molecular cocrystals with ideal chromophoric orientation and large second-order optical nonlinearities. Journal of the Optical Society of America B: Optical Physics, 1998, 15, 426.	2.1	51
125	Coreâ€“Shell Snâ€“Niâ€“Cu-Alloy@Carbon Nanorods to Array as Three-Dimensional Anode by Nanoelectrodeposition for High-Performance Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 12221-12227.	8.0	51
126	Insight into fast Li diffusion in Li-excess spinel lithium manganese oxide. Journal of Materials Chemistry A, 2018, 6, 9893-9898.	10.3	51

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127	Interactions are important: Linking multi-physics mechanisms to the performance and degradation of solid-state batteries. Materials Today, 2021, 49, 145-183.	14.2	51
128	Spontaneous valley splitting and valley pseudospin field effect transistors of monolayer VAgP₂Se₆. Nanoscale, 2018, 10, 13986-13993.	5.6	50
129	Probing into the origin of an electronic conductivity surge in a garnet solid-state electrolyte. Journal of Materials Chemistry A, 2019, 7, 22898-22902.	10.3	50
130	Five-membered heteroaromatic hydrazone derivatives for second-order nonlinear optics. Advanced Materials, 1996, 8, 416-420.	21.0	49
131	Effective atomic interface engineering in Bi2Te2.7Se0.3 thermoelectric material by atomic-layer-deposition approach. Nano Energy, 2018, 49, 257-266.	16.0	49
132	Conductive Binder for Si Anode with Boosted Charge Transfer Capability via n-Type Doping. ACS Applied Materials & Interfaces, 2018, 10, 27795-27800.	8.0	49
133	Holey graphite: A promising anode material with ultrahigh storage for lithium-ion battery. Electrochimica Acta, 2020, 346, 136244.	5.2	49
134	From bulk to interface: electrochemical phenomena and mechanism studies in batteries via electrochemical quartz crystal microbalance. Chemical Society Reviews, 2021, 50, 10743-10763.	38.1	48
135	Hexagonal Zn_{1â^'x}Cd_xS (0.2 â‰¤ x â‰¤ 1) solid solution photocatalysts for H₂ generation from water. Catalysis Science and Technology, 2017, 7, 982-987.	4.1	47
136	Breathing and oscillating growth of solid-electrolyte-interphase upon electrochemical cycling. Chemical Communications, 2018, 54, 814-817.	4.1	47
137	PIMâ€1 as a Multifunctional Framework to Enable Highâ€Performance Solidâ€State Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2021, 31, 2104830.	14.9	47
138	Cascading Boost Effect on the Capacity of Nitrogen-Doped Graphene Sheets for Li- and Na-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 26722-26729.	8.0	46
139	Self-assembly of an acentric co-crystal of a highly hyperpolarizable merocyanine dye with optimized alignment for nonlinear optics. Advanced Materials, 1997, 9, 554-557.	21.0	44
140	Tuning structural stability and lithium-storage properties by d -orbital hybridization substitution in full tetrahedron Li 2 FeSiO 4 nanocrystal. Nano Energy, 2016, 20, 117-125.	16.0	44
141	Fingerprint Oxygen Redox Reactions in Batteries through High-Efficiency Mapping of Resonant Inelastic X-ray Scattering. Condensed Matter, 2019, 4, 5.	1.8	44
142	Tuning Single-Atom Catalysts of Nitrogen-Coordinated Transition Metals for Optimizing Oxygen Evolution and Reduction Reactions. Journal of Physical Chemistry C, 2020, 124, 13168-13176.	3.1	43
143	Recent progress in Li and Mn rich layered oxide cathodes for Li-ion batteries. Journal of Energy Chemistry, 2021, 61, 368-385.	12.9	43
144	Silicene nanomesh. Scientific Reports, 2015, 5, 9075.	3.3	42

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145	Cooperative transport enabling fast Li-ion diffusion in Thio-LISICON Li10SiP2S12 solid electrolyte. Nano Energy, 2019, 62, 844-852.	16.0	42
146	Ultralow-limit gas detection in nano-dumbbell polymer sensor via electrospinning. Nanoscale, 2013, 5, 1803.	5.6	41
147	Soft-contact conductive carbon enabling depolarization of LiFePO4 cathodes to enhance both capacity and rate performances of lithium ion batteries. Journal of Power Sources, 2016, 331, 232-239.	7.8	41
148	Singleâ€Particle Performances and Properties of LiFePO₄ Nanocrystals for Liâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1601894.	19.5	41
149	An open holey structure enhanced rate capability in a NaTi₂(PO₄)₃/C nanocomposite and provided ultralong-life sodium-ion storage. Nanoscale, 2018, 10, 958-963.	5.6	41
150	Revealing cooperative Li-ion migration in Li_{1+x}Al_xTi_{2â^'x}(PO₄)₃ solid state electrolytes with high Al doping. Journal of Materials Chemistry A, 2020, 8, 342-348.	10.3	41
151	A Conductive Binder for High-Performance Sn Electrodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 1672-1677.	8.0	40
152	Modifying Li@Mn₆ Superstructure Units by Al Substitution to Enhance the Longâ€Cycle Performance of Coâ€Free Liâ€Rich Cathode. Advanced Energy Materials, 2021, 11, 2101962.	19.5	39
153	Tuning Li-Ion Diffusion in Î±-LiMn_{1â€“x}Fe_xPO₄ Nanocrystals by Antisite Defects and Embedded Î²-Phase for Advanced Li-Ion Batteries. Nano Letters, 2017, 17, 4934-4940.	9.1	38
154	Constructing a Highly Efficient Aligned Conductive Network to Facilitate Depolarized Highâ€Arealâ€Capacity Electrodes in Liâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2100601.	19.5	38
155	Synergistic Dissociationâ€andâ€Trapping Effect to Promote Liâ€Ion Conduction in Polymer Electrolytes via Oxygen Vacancies. Small, 2021, 17, e2102039.	10.0	38
156	Fast rechargeable all-solid-state lithium ion batteries with high capacity based on nano-sized Li2FeSiO4 cathode by tuning temperature. Nano Energy, 2015, 16, 112-121.	16.0	37
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