Xizheng Liu

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/306789/publications.pdf

Version: 2024-02-01

101	5,889	71102	74163
papers	citations	41 h-index	75 g-index

106	106	106	8190
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In situ preparation of gel polymer electrolyte for lithium batteries: Progress and perspectives. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	93
2	High performance Zn-I2 battery with acetonitrile electrolyte working at low temperature. Nano Research, 2022, 15, 3170-3177.	10.4	11
3	Wide-temperature rechargeable Li metal batteries enabled by an in-situ fabricated composite gel electrolyte with a hierarchical structure. Fundamental Research, 2022, 2, 611-618.	3.3	3
4	Accelerated Hydrogen â€œSpillâ€Overâ€•Enhances Anode Performance of Tensile Strained Pdâ€Based Fuel Cell Electrocatalysts. Small Methods, 2022, 6, e2101328.	8.6	4
5	Hierarchical Sulfideâ€Rich Modification Layer on SiO/C Anode for Lowâ€Temperature Liâ€Ion Batteries. Advanced Science, 2022, 9, e2104531.	11.2	17
6	Bottom-Up Li Deposition by Constructing a Multiporous Lithiophilic Gradient Layer on 3D Cu Foam for Stable Li Metal Anodes. ACS Sustainable Chemistry and Engineering, 2022, 10, 7188-7195.	6.7	13
7	Low-temperature and high-performance Si/graphite composite anodes enabled by sulfite additive. Chemical Engineering Journal, 2021, 421, 127782.	12.7	16
8	Enhanced Safety Performance of Automotive Lithiumâ€Ion Batteries with Al₂O₃â€Coated Nonâ€Woven Separator. Batteries and Supercaps, 2021, 4, 146-151.	4.7	8
9	Prevention of Na Corrosion and Dendrite Growth for Long-Life Flexible Naâ€“Air Batteries. ACS Central Science, 2021, 7, 335-344.	11.3	24
10	Rational reconfiguration of a gradient redox mediator with in-situ fabricated gel electrolyte for Liâ€“air batteries. Chemical Engineering Journal, 2021, 416, 129016.	12.7	9
11	Immobilizing Ceramic Electrolyte Particles into a Gel Matrix Formed In Situ for Stable Li-Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 38179-38187.	8.0	8
12	Reversible Low Temperature <scp>Liâ€Storage</scp> in Liquid Metal Based Anodes via a <scp>Coâ€Solvent</scp> Strategy^{â€}. Chinese Journal of Chemistry, 2021, 39, 2801-2807.	4.9	10
13	Boosting the electrochemical performance of nanoporous CuGe anode by regulating the porous structure and solid electrolyte interface layer through Ni-doping. Applied Surface Science, 2021, 558, 149868.	6.1	5
14	Liquid Metal-Modified Nanoporous SiGe Alloy as an Anode for Li-Ion Batteries and Its Self-Healing Performance. ACS Applied Energy Materials, 2021, 4, 14575-14581.	5.1	9
15	A stable tunnel-type NaGe3/2Mn1/2O4 anode for Na-ion batteries. RSC Advances, 2020, 10, 1426-1429.	3.6	0
16	A Strategy To Prepare High-Quality Monocrystalline Graphene: Inducing Graphene Growth with Seeding Chemical Vapor Deposition and Its Mechanism. ACS Applied Materials & Interfaces, 2020, 12, 1306-1314.	8.0	7
17	A high-power aqueous rechargeable Fe-I2 battery. Energy Storage Materials, 2020, 28, 247-254.	18.0	63
18	A thermodynamically stable quasi-liquid interface for dendrite-free sodium metal anodes. Journal of Materials Chemistry A, 2020, 8, 6822-6827.	10.3	20

#	Article	IF	Citations
19	Bifunctional polymer-of-intrinsic-microporosity membrane for flexible Li/Naâ€“H₂O₂ batteries with hybrid electrolytes. Journal of Materials Chemistry A, 2020, 8, 3491-3498.	10.3	8
20	A MoS2/Carbon hybrid anode for high-performance Li-ion batteries at low temperature. Nano Energy, 2020, 70, 104550.	16.0	101
21	Rechargeable Naâ€“SO 2 Battery with Ethylenediamine Additive in Etherâ€Based Electrolyte. Advanced Functional Materials, 2020, 30, 2002120.	14.9	15
22	Enhanced low-temperature Li-ion storage in MXene titanium carbide by surface oxygen termination. 2D Materials, 2019, 6, 045025.	4.4	46
23	A â€œdirected precursor self-assemblyâ€•strategy for the facile synthesis of heteropoly blues: crystal structures, formation mechanism and electron distribution. Dalton Transactions, 2019, 48, 14347-14353.	3.3	4
24	Porous-hollow nanorods constructed from alternate intercalation of carbon and MoS2 monolayers for lithium and sodium storage. Nano Research, 2019, 12, 1912-1920.	10.4	39
25	Nanoporous Cu@Cu₂O hybrid arrays enable photo-assisted supercapacitor with enhanced capacities. Journal of Materials Chemistry A, 2019, 7, 15691-15697.	10.3	66
26	Unveiling the structural evolution of 1T SnS2 anode upon lithiation/delithiation by TEM. Chemical Communications, 2019, 55, 7800-7803.	4.1	5
27	A Liâ€“urine battery based on organic/aqueous hybrid electrolytes. Inorganic Chemistry Frontiers, 2019, 6, 1654-1659.	6.0	0
28	Synergistic Regulation of Polysulfides Conversion and Deposition by MOFâ€Derived Hierarchically Ordered Carbonaceous Composite for Highâ€Energy Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2019, 29, 1900875.	14.9	104
29	Temperature-Dependent Li Storage Performance in Nanoporous Cuâ€“Geâ€“Al Alloy. ACS Applied Materials & Interfaces, 2019, 11, 9073-9082.	8.0	24
30	A hierarchically structured Si/Cu/Ag integrated anode for efficient lithium-ion batteries. Materials Letters, 2019, 244, 199-202.	2.6	10
31	Induced growth of quasi-free-standing graphene on SiC substrates. RSC Advances, 2019, 9, 32226-32231.	3.6	6
32	Spider-Web-Inspired Nanocomposite-Modified Separator: Structural and Chemical Cooperativity Inhibiting the Shuttle Effect in Liâ€“S Batteries. ACS Nano, 2019, 13, 1563-1573.	14.6	65
33	Ambient stable Na0.76Mn0.48Ti0.44O2 as anode for Na-ion battery. Electrochimica Acta, 2019, 295, 181-186.	5.2	14
34	A sustainable aqueous Zn-I2 battery. Nano Research, 2018, 11, 3548-3554.	10.4	122
35	Preparation of bilayer graphene utilizing CuO as nucleation sites by CVD method. Journal of Materials Science: Materials in Electronics, 2018, 29, 4495-4502.	2.2	10
36	Porous MnO as efficient catalyst towards the decomposition of Li2CO3 in ambient Li-air batteries. Electrochimica Acta, 2018, 280, 308-314.	5.2	27

#	Article	IF	Citations
37	Synergetic enhancement of the electronic/ionic conductivity of a Li-ion battery by fabrication of a carbon-coated nanoporous SnOxSb alloy anode. Nanoscale, 2018, 10, 7605-7611.	5.6	9
38	Li₂CO₃-free Liâ€“O₂/CO₂ battery with peroxide discharge product. Energy and Environmental Science, 2018, 11, 1211-1217.	30.8	120
39	Facile fabrication of CuS microflower as a highly durable sodium-ion battery anode. Inorganic Chemistry Frontiers, 2018, 5, 1045-1052.	6.0	52
40	Micro/nano-structured FeS2 for high energy efficiency rechargeable Li-FeS2 battery. Chemical Engineering Journal, 2018, 334, 725-731.	12.7	45
41	Nitrogen and sulfur co-doped porous carbon derived from bio-waste as a promising electrocatalyst for zinc-air battery. Energy, 2018, 143, 43-55.	8.8	98
42	Three-dimensional electrode with conductive Cu framework for stable and fast Li-ion storage. Energy Storage Materials, 2018, 11, 83-90.	18.0	32
43	Facile fabrication of polyether sulfone (PES) protecting layer on Cu foil for stable Li metal anode. Electrochimica Acta, 2018, 260, 407-412.	5.2	19
44	Porous Mn₂O₃ cathode for highly durable Liâ€“CO₂ batteries. Journal of Materials Chemistry A, 2018, 6, 20829-20835.	10.3	81
45	Graphene Nucleation Preference at CuO Defects Rather Than Cu₂O on Cu(111): A Combination of DFT Calculation and Experiment. ACS Applied Materials & Interfaces, 2018, 10, 43156-43165.	8.0	16
46	Flexible Lithiumâ€“Air Battery in Ambient Air with an Inâ€…Situ Formed Gel Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 16131-16135.	13.8	89
47	Flexible Lithiumâ€“Air Battery in Ambient Air with an Inâ€…Situ Formed Gel Electrolyte. Angewandte Chemie, 2018, 130, 16363-16367.	2.0	63
48	The Role of Geometric Sites in 2D Materials for Energy Storage. Joule, 2018, 2, 1075-1094.	24.0	108
49	Rechargeable Alâ€“CO₂ Batteries for Reversible Utilization of CO₂. Advanced Materials, 2018, 30, e1801152.	21.0	96
50	Few-atomic-layered hollow nanospheres constructed from alternate intercalation of carbon and MoS2 monolayers for sodium and lithium storage. Nano Energy, 2018, 51, 546-555.	16.0	98
51	Yucca fern shaped CuO nanowires on Cu foam for remitting capacity fading of Li-ion battery anodes. Scientific Reports, 2018, 8, 6530.	3.3	56
52	In Situ Electrochemistry of Rechargeable Battery Materials: Status Report and Perspectives. Advanced Materials, 2017, 29, 1606922.	21.0	81
53	Improved sodium-ion storage properties by fabricating nanoporous CuSn alloy architecture. RSC Advances, 2017, 7, 29458-29463.	3.6	14
54	Filling and unfilling carbon capsules with transition metal oxide nanoparticles for Li-ion hybrid supercapacitors: towards hundred grade energy density. Science China Materials, 2017, 60, 217-227.	6.3	17

#	Article	IF	Citations
55	Inâ€...Situ Fabrication of Hierarchical Porous CoO/Cu₂O Composites on Cu Foam as Highâ€Performance Freestanding Anodes for Lithiumâ€“Ion Batteries. Energy Technology, 2017, 5, 1720-1727.	3.8	6
56	Boosting the ultrastable Li storage performance in electron-sponge-like polyoxovanadates by constructing inorganic 3D structures. Inorganic Chemistry Frontiers, 2017, 4, 2012-2016.	6.0	22
57	CoFe2O4 nanoplates synthesized by dealloying method as high performance Li-ion battery anodes. Electrochimica Acta, 2017, 252, 295-305.	5.2	63
58	Scalable synthesis and excellent catalytic effect of hydrangea-like RuO2 mesoporous materials for lithiumâ€“O2 batteries. Energy Storage Materials, 2016, 2, 8-13.	18.0	40
59	Enhanced anode performance of manganese oxides with petal-like microsphere structures by optimizing the sintering conditions. RSC Advances, 2016, 6, 34501-34506.	3.6	6
60	Metalâ€“organic framework-based separator for lithiumâ€“sulfur batteries. Nature Energy, 2016, 1, .	39.5	1,059
61	Crystalline Cu-silicide stabilizes the performance of a high capacity Si-based Li-ion battery anode. Journal of Materials Chemistry A, 2016, 4, 19140-19146.	10.3	37
62	A Synergistic System for Lithiumâ€“Oxygen Batteries in Humid Atmosphere Integrating a Composite Cathode and a Hydrophobic Ionic Liquidâ€Based Electrolyte. Advanced Functional Materials, 2016, 26, 3291-3298.	14.9	76
63	Enhancing the performance of MnO by double carbon modification for advanced lithium-ion battery anodes. Journal of Materials Chemistry A, 2016, 4, 920-925.	10.3	70
64	Amorphous Phosphorus/Nitrogen-Doped Graphene Paper for Ultrastable Sodium-Ion Batteries. Nano Letters, 2016, 16, 2054-2060.	9.1	314
65	Promotional recyclable Li-ion batteries by a magnetic binder with anti-vibration and non-fatigue performance. Journal of Materials Chemistry A, 2015, 3, 15403-15407.	10.3	11
66	Doping-induced memory effect in Li-ion batteries: the case of Al-doped Li₄Ti₅O₁₂. Chemical Science, 2015, 6, 4066-4070.	7.4	23
67	Low charge overpotentials in lithiumâ€“oxygen batteries based on tetraglyme electrolytes with a limited amount of water. Chemical Communications, 2015, 51, 16860-16863.	4.1	63
68	Novel Stable Gel Polymer Electrolyte: Toward a High Safety and Long Life Liâ€“Air Battery. ACS Applied Materials & Interfaces, 2015, 7, 23798-23804.	8.0	89
69	A quinone-based oligomeric lithium salt for superior Liâ€“organic batteries. Energy and Environmental Science, 2014, 7, 4077-4086.	30.8	259
70	Atomistic Origins of High Rate Capability and Capacity of N-Doped Graphene for Lithium Storage. Nano Letters, 2014, 14, 1164-1171.	9.1	304
71	A novel tunnel Na0.61Ti0.48Mn0.52O2 cathode material for sodium-ion batteries. Chemical Communications, 2014, 50, 7998.	4.1	61
72	Study on the capacity fading of pristine and FePO 4 coated LiNi 1/3 Co 1/3 Mn 1/3 O 2 by Electrochemical and Magnetical techniques. Electrochimica Acta, 2014, 148, 26-32.	5.2	11

#	Article	IF	Citations
73	High stable post-spinel NaMn₂O₄ cathode of sodium ion battery. Journal of Materials Chemistry A, 2014, 2, 14822-14826.	10.3	59
74	Surface coating of lithiumâ€“manganese-rich layered oxides with delaminated MnO2 nanosheets as cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 4422.	10.3	112
75	The Sizeâ€Dependent Phase Transition of LiFePO₄ Particles during Charging and Discharging in Lithiumâ€ion Batteries. Energy Technology, 2014, 2, 542-547.	3.8	23
76	Improvement of electrochemical properties of LiNi1/3Co1/3Mn1/3O2 by coating with V2O5 layer. Journal of Alloys and Compounds, 2013, 552, 76-82.	5.5	73
77	A hybrid phase-transition model of olivine LiFePO4 for the charge and discharge processes. Journal of Power Sources, 2013, 233, 299-303.	7.8	15
78	Multidimensional crystal frameworks based on heteropoly blue building block of [SiW10MoV2O40]6â^': synthesis, structures and magnetic properties. Dalton Transactions, 2013, 42, 5839.	3.3	14
79	Li₃VO₄: A Promising Insertion Anode Material for Lithiumâ€ion Batteries. Advanced Energy Materials, 2013, 3, 428-432.	19.5	225
80	PEDOT modified LiNi 1/3 Co 1/3 Mn 1/3 O 2 with enhanced electrochemical performance for lithium ion batteries. Journal of Power Sources, 2013, 243, 374-380.	7.8	86
81	Fabrication of FePO4 layer coated LiNi1/3Co1/3Mn1/3O2: Towards high-performance cathode materials for lithium ion batteries. Electrochimica Acta, 2012, 83, 253-258.	5.2	89
82	Hierarchical micro/nano porous silicon Li-ion battery anodes. Chemical Communications, 2012, 48, 5079.	4.1	142
83	Multidimensional frameworks constructed from Keggin-type heteropoly blue of molybdenumâ€“tungsten cluster. CrystEngComm, 2011, 13, 410-413.	2.6	19
84	Heteropoly blue-intercalated layered double hydroxides for cationic dye removal from aqueous media. Applied Clay Science, 2011, 54, 242-247.	5.2	65
85	New Câ€•C bond formation with induced chiral carbon atoms under the presence of polyoxometalate. Inorganic Chemistry Communication, 2011, 14, 594-596.	3.9	4
86	Magnetic relaxation behavior of lanthanide substituted Dawson-type tungstoarsenates. Journal of Solid State Chemistry, 2010, 183, 350-355.	2.9	13
87	Ligand substitution in sandwich-type complexes of germanotungstates: Syntheses, crystal structures and magnetic properties. Inorganic Chemistry Communication, 2010, 13, 964-967.	3.9	6
88	Chirality and magnetism of an open-framework cobalt phosphite containing helical channels from achiral materials. Chemical Communications, 2010, 46, 2614.	4.1	55
89	Solvothermal synthesis and magnetic properties of cobalt(II) phosphite structures of varying dimensionality. CrystEngComm, 2010, 12, 383-386.	2.6	12
90	A new cation induced chain-like complex [Cu(H₂tea)(H₂O)(imi)][Cu(H₃tea)(imi)][Na{Mo₈O₂₆}] Â· 4H₂O. Journal of Coordination Chemistry, 2009, 62, 2583-2590.	2.2	3

#	Article	IF	Citations
91	Electrochemical and magnetic properties of inorganic polymers constructed from Mn(II)/Co(II)-substituted heteropolymolybdates. Solid State Sciences, 2009, 11, 1433-1438.	3.2	12
92	An Unexpected Ferromagnetic Coupling in a Dinuclear Manganese(II) Linked Trivacant Heteropolymolybdate Derivative. European Journal of Inorganic Chemistry, 2009, 2009, 1460-1463.	2.0	21
93	Synthesis, characterization and magnetic properties of a novel fluorinated iron phosphite Fe2(HPO3)F2 with infinite â€“Feâ€“Fâ€“Feâ€“Oâ€“Feâ€“ linkage and â€“Feâ€“Fâ€“Feâ€“ layer. Inorganica Chimica Acta, 2009, 362, 3881-3884.	2.4	9
94	3D framework constructed from Keggin polymolybdate anion covalently linked by meso-helical mixed-valence copper(I/II) complex. Inorganic Chemistry Communication, 2009, 12, 259-262.	3.9	14
95	An unusual 3D complex showing 5,8-connected topology with encapsulated 8-connected octamolybdate polyoxoanions. Inorganic Chemistry Communication, 2009, 12, 875-878.	3.9	1
96	The first Îµ-Keggin core of molybdogermanate in extended architectures of nickel(II) with N-donor ligands: syntheses, crystal structures and magnetic properties. CrystEngComm, 2009, 11, 2488.	2.6	45
97	Hydrothermal synthesis and crystal structure of Na(NH4)[C13N2H16]2[Mo7O24]ÂÂ·Â8H2O: A novel 3-D extended supramolecular network with 1-D channels. Structural Chemistry, 2008, 19, 801-805.	2.0	8
98	Tungstocobaltate-pillared layered double hydroxides: Preparation, characterization, magnetic and catalytic properties. Journal of Solid State Chemistry, 2008, 181, 1292-1297.	2.9	19
99	A new complex based on chelate copper coordination with divacant polyanion ligand [Î³-PW10O36]7â˜. Inorganic Chemistry Communication, 2008, 11, 1313-1315.	3.9	2
100	1D lanthanide(iii) coordination polymers with disulfide ligand generated in situ. CrystEngComm, 2008, 10, 693.	2.6	32
101	CO₂ Coordination by Inorganic Polyoxoanion in Water. Journal of the American Chemical Society, 2008, 130, 10838-10839.	13.7	120