Zhaoxiang Wang

List of Publications by Year
in descending order

100	8,698	46	92
papers	citations	h-index (50244)	g-index (42364)

100	100	100	10177
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Localizedâ€domains staging structure and evolution in lithiated graphite. , 2023, 5, .		21
2	<scp>Antiâ€perovskite</scp> materials for energy storage batteries. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	32
3	Controlled Lithium Deposition. Frontiers in Energy Research, 2022, 10, .	1.2	3
4	Configurationâ€dependent anionic redox in cathode materials. , 2022, 1, .		28
5	Feasibility to Improve the Stability of Lithium-Rich Layered Oxides by Surface Doping. ACS Applied Materials & Interfaces, 2022, 14, 18353-18359.	4.0	21
6	Electrolyte and current collector designs for stable lithium metal anodes. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 953-964.	2.4	12
7	Anionic redox reaction and structural evolution of Ni-rich layered oxide cathode material. Nano Energy, 2022, 98, 107335.	8.2	27
8	Polymer electrolytes based on interactions between [solvent-Li+] complex and solvent-modified polymer. Energy Storage Materials, 2022, 51, 443-452.	9.5	62
9	Regulating Anion Redox and Cation Migration to Enhance the Structural Stability of Li-Rich Layered Oxides. ACS Applied Materials & Interfaces, 2021, 13, 12159-12168.	4.0	32
10	Iron carbide allured lithium metal storage in carbon nanotube cavities. Energy Storage Materials, 2021, 36, 459-465.	9.5	39
11	Synergy Effect of Trimethyl Borate on Protecting High-Voltage Cathode Materials in Dual-Additive Electrolytes. ACS Applied Materials & Interfaces, 2021, 13, 21459-21466.	4.0	21
12	Competitive Solvation Enhanced Stability of Lithium Metal Anode in Dual-Salt Electrolyte. Nano Letters, 2021, 21, 3310-3317.	4.5	95
13	Anionic Effect on Enhancing the Stability of a Solid Electrolyte Interphase Film for Lithium Deposition on Graphite. Nano Letters, 2021, 21, 5316-5323.	4.5	46
14	Cationic disordering modulated electrochemical performances of layer-structured Li2MoO3. Materials Today Physics, 2021, 21, 100561.	2.9	4
15	Phase Diagram Determined Lithium Plating/Stripping Behaviors on Lithiophilic Substrates. ACS Energy Letters, 2021, 6, 4118-4126.	8.8	65
16	Understanding the dropping of lithium plating potential in carbonate electrolyte. Nano Energy, 2020, 70, 104486.	8.2	42
17	Stacking Faults Hinder Lithium Insertion in Li₂RuO₃. Advanced Energy Materials, 2020, 10, 2002631.	10.2	22
18	Superiority of native vacancies in activating anionic redox in P2-type Na2/3[Mn7/9Mg1/9â–¡1/9]O2. Nano Energy, 2020, 78, 105172.	8.2	40

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19	Self-charging flexible solar capacitors based on integrated perovskite solar cells and quasi-solid-state supercapacitors fabricated at low temperature. Journal of Power Sources, 2020, 479, 229046.	4.0	25
20	Europium-Doped Ceria Nanowires as Anode for Solid Oxide Fuel Cells. Frontiers in Chemistry, 2020, 8, 348.	1.8	11
21	Impact of hydrogen on lithium storage on graphene edges. Applied Surface Science, 2020, 515, 145886.	3.1	5
22	Eliminating Transition Metal Migration and Anionic Redox to Understand Voltage Hysteresis of Lithiumâ€Rich Layered Oxides. Advanced Energy Materials, 2020, 10, 1903634.	10.2	45
23	Insights into Lithium and Sodium Storage in Porous Carbon. Nano Letters, 2020, 20, 3836-3843.	4.5	86
24	Minimizing carbon particle size to improve lithium deposition on natural graphite. Carbon, 2019, 155, 9-15.	5.4	26
25	Interface Engineering to Eliminate Hysteresis of Carbon-Based Planar Heterojunction Perovskite Solar Cells via CuSCN Incorporation. ACS Applied Materials & Interfaces, 2019, 11, 28431-28441.	4.0	60
26	Liâ€“Ti Cation Mixing Enhanced Structural and Performance Stability of Liâ€Rich Layered Oxide. Advanced Energy Materials, 2019, 9, 1901530.	10.2	76
27	Extended â€œAdsorptionâ€“Insertionâ€•Model: A New Insight into the Sodium Storage Mechanism of Hard Carbons. Advanced Energy Materials, 2019, 9, 1901351.	10.2	284
28	Sodium Storage Mechanism: Extended â€œAdsorptionâ€“Insertionâ€•Model: A New Insight into the Sodium Storage Mechanism of Hard Carbons (Adv. Energy Mater. 32/2019). Advanced Energy Materials, 2019, 9, 1970125.	10.2	4
29	Improved lithium deposition on silver plated carbon fiber paper. Nano Energy, 2019, 66, 104144.	8.2	38
30	Atomic Scale Recognition of Structure in the Intercalation of Sodium by Aberration-Corrected Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 2120-2121.	0.2	0
31	Atomistic understanding of structural evolution, ion transport and oxygen stability in layered NaFeO₂. Journal of Materials Chemistry A, 2019, 7, 2619-2625.	5.2	13
32	LiFSI to improve lithium deposition in carbonate electrolyte. Energy Storage Materials, 2019, 23, 350-357.	9.5	65
33	Trimethyl Borate as Film-Forming Electrolyte Additive To Improve High-Voltage Performances. ACS Applied Materials & Interfaces, 2019, 11, 17435-17443.	4.0	77
34	Lithium Plating and Stripping on Carbon Nanotube Sponge. Nano Letters, 2019, 19, 494-499.	4.5	101
35	Native Vacancy Enhanced Oxygen Redox Reversibility and Structural Robustness. Advanced Energy Materials, 2019, 9, 1803087.	10.2	70
36	Iron migration and oxygen oxidation during sodium extraction from NaFeO2. Nano Energy, 2018, 47, 519-526.	8.2	111

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37	Another Strategy, Detouring Potential Decay by Fast Completion of Cation Mixing. Advanced Energy Materials, 2018, 8, 1703092.	10.2	30
38	Reduction Depth Dependent Structural Reversibility of Sn₃(PO₄)₂. ACS Applied Energy Materials, 2018, 1, 129-133.	2.5	8
39	Surface Doping to Enhance Structural Integrity and Performance of Liâ€Rich Layered Oxide. Advanced Energy Materials, 2018, 8, 1802105.	10.2	228
40	First-principles calculations on lithium and sodium adsorption on graphene edges. Electrochimica Acta, 2018, 282, 205-212.	2.6	14
41	Vacancy-induced MnO₆ distortion and its impacts on structural transition of Li₂MnO₃. Physical Chemistry Chemical Physics, 2017, 19, 7025-7031.	1.3	29
42	Design and Properties Prediction of <i>AM</i>CO₃F by First-Principles Calculations. ACS Applied Materials & Interfaces, 2017, 9, 13255-13261.	4.0	5
43	Structural stability and stabilization of Li₂MoO₃. Physical Chemistry Chemical Physics, 2017, 19, 17538-17543.	1.3	20
44	Controlled deposition of Li metal. Nano Energy, 2017, 32, 241-246.	8.2	70
45	Reversible conversion of MoS2 upon sodium extraction. Nano Energy, 2017, 41, 217-224.	8.2	60
46	Li₂C₂, a Highâ€Capacity Cathode Material for Lithium Ion Batteries. Angewandte Chemie - International Edition, 2016, 55, 644-648.	7.2	29
47	Enhanced electrochemical performance of Ti-doped Li1.2Mn0.54Co0.13Ni0.13O2 for lithium-ion batteries. Journal of Power Sources, 2016, 317, 74-80.	4.0	134
48	Ternary Porous Sulfur/Dual-Carbon Architectures for Lithium/Sulfur Batteries Obtained Continuously and on a Large Scale via an Industry-Oriented Spray-Pyrolysis/Sublimation Method. ACS Applied Materials & Interfaces, 2016, 8, 25251-25260.	4.0	15
49	LiCoO2-catalyzed electrochemical oxidation of Li2CO3. Nano Research, 2016, 9, 3903-3913.	5.8	29
50	Reversible reduction of Li₂CO₃. Journal of Materials Chemistry A, 2015, 3, 14173-14177.	5.2	80
51	Novel Largeâ€Scale Synthesis of a C/S Nanocomposite with Mixed Conducting Networks through a Spray Drying Approach for Liâ€"S Batteries. Advanced Energy Materials, 2015, 5, 1500046.	10.2	96
52	Anti-P2 structured Na0.5NbO2and its negative strain effect. Energy and Environmental Science, 2015, 8, 2753-2759.	15.6	14
53	Lithium Storage in Heatâ€Treated SnF₂/Polyacrylonitrile Anode. Chemistry - A European Journal, 2015, 21, 8491-8496.	1.7	7
54	Gelatin-pyrolyzed mesoporous carbon as a high-performance sodium-storage material. Journal of Materials Chemistry A, 2015, 3, 7849-7854.	5.2	97

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55	Selecting Substituent Elements for Li-Rich Mn-Based Cathode Materials by Density Functional Theory (DFT) Calculations. Chemistry of Materials, 2015, 27, 3456-3461.	3.2	149
56	Workfunction, a new viewpoint to understand the electrolyte/electrode interface reaction. Journal of Materials Chemistry A, 2015, 3, 23420-23425.	5.2	21
57	Transitionâ€Metalâ€Catalyzed Oxidation of Metallic Sn in NiO/SnO₂ Nanocomposite. Chemistry - A European Journal, 2014, 20, 5487-5491.	1.7	30
58	Feasibility of Using Li₂MoO₃ in Constructing Li-Rich High Energy Density Cathode Materials. Chemistry of Materials, 2014, 26, 3256-3262.	3.2	106
59	Atomic-Scale Clarification of Structural Transition of MoS₂ upon Sodium Intercalation. ACS Nano, 2014, 8, 11394-11400.	7.3	355
60	Molybdenum Substitution for Improving the Charge Compensation and Activity of Li₂MnO₃. Chemistry - A European Journal, 2014, 20, 8723-8730.	1.7	33
61	Tuning chargeâ€“discharge induced unit cell breathing in layer-structured cathode materials for lithium-ion batteries. Nature Communications, 2014, 5, 5381.	5.8	180
62	High performance pure sulfur honeycomb-like architectures synthesized by a cooperative self-assembly strategy for lithiumâ€“sulfur batteries. RSC Advances, 2014, 4, 36513-36516.	1.7	8
63	Carbon-coated hierarchically porous silicon as anode material for lithium ion batteries. RSC Advances, 2014, 4, 15314.	1.7	35
64	Improved electron/Li-ion transport and oxygen stability of Mo-doped Li2MnO3. Journal of Materials Chemistry A, 2014, 2, 4811.	5.2	101
65	Structural and electrochemical stability of Li-rich layer structured Li2MoO3 in air. Journal of Power Sources, 2014, 258, 314-320.	4.0	41
66	Polypyrroleâ€“NiO composite as high-performance lithium storage material. Electrochimica Acta, 2013, 105, 162-169.	2.6	40
67	Surface modification of Li1.2Mn0.54Co0.13Ni0.13O2 with conducting polypyrrole. Journal of Power Sources, 2013, 231, 44-49.	4.0	91
68	Highly Ordered Mesoporous Crystalline MoSe₂ Material with Efficient Visibleâ€Lightâ€Driven Photocatalytic Activity and Enhanced Lithium Storage Performance. Advanced Functional Materials, 2013, 23, 1832-1838.	7.8	285
69	A Conductive Polypyrroleâ€Coated, Sulfurâ€“Carbon Nanotube Composite for Use in Lithiumâ€“Sulfur Batteries. ChemPlusChem, 2013, 78, 318-324.	1.3	57
70	Lithium storage in nitrogen-rich mesoporous carbon materials. Energy and Environmental Science, 2012, 5, 7950.	15.6	593
71	New Insight into the Atomic Structure of Electrochemically Delithiated O3-Li_(1â€“<i>x</i>)CoO₂ (0 â‰ <i>x</i> â‰ 0.5) Nanoparticles. Nano Letters, 2012, 12, 6192-6197.	4.5	128
72	Mechanism of Lithium Storage in MoS₂ and the Feasibility of Using Li₂S/Mo Nanocomposites as Cathode Materials for Lithiumâ€“Sulfur Batteries. Chemistry - an Asian Journal, 2012, 7, 1013-1017.	1.7	158

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73	Lithium storage performance in ordered mesoporous MoS2 electrode material. Microporous and Mesoporous Materials, 2012, 151, 418-423.	2.2	173
74	Capacitive Energy Storage on Fe/Li₃PO₄ Grain Boundaries. Journal of Physical Chemistry C, 2011, 115, 3803-3808.	1.5	44
75	Atomic-scale investigation on lithium storage mechanism in TiNb2O7,. Energy and Environmental Science, 2011, 4, 2638.	15.6	256
76	Polypyrrole-iron-oxygen coordination complex as high performance lithium storage material. Energy and Environmental Science, 2011, 4, 3442.	15.6	62
77	Nano-CaCO3 templated mesoporous carbon as anode material for Li-ion batteries. Electrochimica Acta, 2011, 56, 6464-6468.	2.6	73
78	Electrode reactions of manganese oxides for secondary lithium batteries. Electrochemistry Communications, 2010, 12, 1520-1523.	2.3	242
79	Research on Advanced Materials for Liâ€ion Batteries. Advanced Materials, 2009, 21, 4593-4607.	11.1	1,633
80	Iodine ion transport in solid electrolyte LiI(C3H5NO)2: a first-principles identification. Ionics, 2007, 12, 343-347.	1.2	13
81	Origin of Solid Electrolyte Interphase on Nanosized LiCoO[sub 2]. Electrochemical and Solid-State Letters, 2006, 9, A328.	2.2	63
82	Ab initiostudies on the stability and electronic structure ofLiCoO2(003) surfaces. Physical Review B, 2005, 71, .	1.1	29
83	First-principles investigation of the structural, magnetic, and electronic properties of olivineLiFePO4. Physical Review B, 2005, 71, .	1.1	57
84	First-principles study of Li ion diffusion inLiFePO4. Physical Review B, 2004, 69, .	1.1	250
85	SPECTROSCOPIC STUDIES OF SOLID-ELECTROLYTE INTERPHASE ON POSITIVE AND NEGATIVE ELECTRODES FOR LITHIUM ION BATTERIES. , 2004, , 140-197.		2
86	New Binary Room-Temperature Molten Salt Electrolyte Based on Urea and LiTFSI. Journal of Physical Chemistry B, 2001, 105, 9966-9969.	1.2	85
87	Nano-SnSb alloy deposited on MCMB as an anode material for lithium ion batteries. Journal of Materials Chemistry, 2001, 11, 1502-1505.	6.7	98
88	Spectroscopic studies on interactions and microstructures in propylene carbonate?LiTFSI electrolytes. Journal of Raman Spectroscopy, 2001, 32, 900-905.	1.2	70
89	Polymer-in-salt electrolytes based on PAN-LiTFSI. , 2000, , .		0
90	Crystallization mechanism in amorphous material of 0.5LiMnO2-0.5B2O3. Journal of Materials Science, 2000, 35, 1695-1698.	1.7	5

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91	Lithium insertion/extraction in pyrolyzed phenolic resin. Journal of Power Sources, 1999, 81-82, 328-334.	4.0	19
92	A new possible mechanism of lithium insertion and extraction in low-temperature pyrolytic carbon electrode. Carbon, 1999, 37, 685-692.	5.4	34
93	Studies of Stannic Oxide as an Anode Material for Lithiumâ€Ion Batteries. Journal of the Electrochemical Society, 1998, 145, 59-62.	1.3	156
94	Ion Association and Salvation Studies of LiClO4/Ethylene Carbonate Electrolyte by Raman and Infrared Spectroscopy. Journal of the Electrochemical Society, 1998, 145, 3346-3350.	1.3	57
95	Dispersion effects of Raman lines in carbons. Journal of Applied Physics, 1998, 84, 227-231.	1.1	44
96	Characterizations of crystalline structure and electrical properties of pyrolyzed polyfurfuryl alcohol. Journal of Applied Physics, 1997, 82, 5705-5710.	1.1	36
97	Competition Between the Plasticizer and Polymer on Associating with Liâ€‰+â€‰ Ions in Polyacrylonitrileâ€Based Electrolytes. Journal of the Electrochemical Society, 1997, 144, 778-786.	1.3	55
98	Experimental Evidence of the Interaction Between Polyacrylonitrile and Ethylene Carbonate Plasticizer by Raman Spectroscopy. Journal of Raman Spectroscopy, 1996, 27, 609-613.	1.2	5
99	Raman Spectroscopic Investigation of the Dissociation of Dimethylsulphoxide Induced by Polyacrylonitrile. Journal of Raman Spectroscopy, 1996, 27, 901-906.	1.2	5
100	A Vibrational Spectroscopic Study on the Interaction Between Lithium Salt and Ethylene Carbonate Plasticizer for PANâ€Based Electrolytes. Journal of the Electrochemical Society, 1996, 143, 1510-1514.	1.3	47