Yun-Xiao Wang

List of Publications by Year
in descending order

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104 papers	9,016 citations	36303 51 h-index	42399 92 g-index
105 all docs	105 docs citations	105 times ranked	8852 citing authors

#	Article	IF	Citations
1	Novel Li₃VO₄ Nanostructures Grown in Highly Efficient Microwave Irradiation Strategy and Their Inâ€Situ Lithium Storage Mechanism. Advanced Science, 2022, 9, e2103493.	11.2	23
2	Recent Advances in Seawater Electrolysis. Catalysts, 2022, 12, 123.	3.5	26
3	Electrolytes/Interphases: Enabling Distinguishable Sulfur Redox Processes in Roomâ€Temperature Sodiumâ€Sulfur Batteries. Advanced Energy Materials, 2022, 12, .	19.5	29
4	Continuous Carbon Channels Enable Full Naâ€Ion Accessibility for Superior Roomâ€Temperature Naâ€“S Batteries. Advanced Materials, 2022, 34, e2108363.	21.0	49
5	Streamline Sulfur Redox Reactions to Achieve Efficient Roomâ€Temperature Sodiumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	38
6	Streamline Sulfur Redox Reactions to Achieve Efficient Roomâ€Temperature Sodiumâ€“Sulfur Batteries. Angewandte Chemie, 2022, 134, .	2.0	3
7	Highly efficient and selective electrocatalytic hydrogen peroxide production on Co-O-C active centers on graphene oxide. Communications Chemistry, 2022, 5, .	4.5	33
8	Twoâ€inâ€one shell configuration for bimetal selenides toward fast sodium storage within broadened voltage windows. , 2022, 4, 586-597.		10
9	Efficient separators with fast Li-ion transfer and high polysulfide entrapment for superior lithium-sulfur batteries. Chemical Engineering Journal, 2021, 408, 127348.	12.7	25
10	Hard Carbon Anodes: Fundamental Understanding and Commercial Perspectives for Naâ€Ion Batteries beyond Liâ€Ion and Kâ€Ion Counterparts. Advanced Energy Materials, 2021, 11, .	19.5	282
11	Sustainable S cathodes with synergic electrocatalysis for room-temperature Naâ€“S batteries. Journal of Materials Chemistry A, 2021, 9, 566-574.	10.3	39
12	Green energy application technology of litchi pericarp-derived carbon material with high performance. Journal of Cleaner Production, 2021, 286, 124960.	9.3	18
13	Materials engineering for adsorption and catalysis in room-temperature Naâ€“S batteries. Energy and Environmental Science, 2021, 14, 3757-3795.	30.8	62
14	Tunable Electrocatalytic Behavior of Sodiated MoS₂ Active Sites toward Efficient Sulfur Redox Reactions in Roomâ€Temperature Naâ€“S Batteries. Advanced Materials, 2021, 33, e2100229.	21.0	66
15	Carbonaceous Hosts for Sulfur Cathode in Alkaliâ€Metal/S (Alkali Metal = Lithium, Sodium, Potassium) Batteries. Small, 2021, 17, e2006504.	10.0	17
16	Atomic Cobalt Vacancyâ€Cluster Enabling Optimized Electronic Structure for Efficient Water Splitting. Advanced Functional Materials, 2021, 31, 2101797.	14.9	26
17	Understanding Sulfur Redox Mechanisms in Different Electrolytes for Room-Temperature Naâ€“S Batteries. Nano-Micro Letters, 2021, 13, 121.	27.0	31
18	Atomic Structural Evolution of Singleâ€Layer Pt Clusters as Efficient Electrocatalysts. Small, 2021, 17, e2100732.	10.0	26

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19	Architecting Freestanding Sulfur Cathodes for Superior Roomâ€Temperature Naâ€“S Batteries. Advanced Functional Materials, 2021, 31, 2102280.	14.9	46
20	Boosting electrochemical kinetics of S cathodes for room temperature Na/S batteries. Matter, 2021, 4, 1768-1800.	10.0	39
21	Thickness-independent scalable high-performance Li-S batteries with high areal sulfur loading via electron-enriched carbon framework. Nature Communications, 2021, 12, 4519.	12.8	139
22	Germanene Nanosheets: Achieving Superior Sodiumâ€Ion Storage via Pseudointercalation Reactions. Small Structures, 2021, 2, 2100041.	12.0	20
23	Electrochemical release of catalysts in nanoreactors for solid sulfur redox reactions in room-temperature sodium-sulfur batteries. Cell Reports Physical Science, 2021, 2, 100539.	5.6	20
24	Atomically dispersed S-Fe-N4 for fast kinetics sodium-sulfur batteries via a dual function mechanism. Cell Reports Physical Science, 2021, 2, 100531.	5.6	31
25	Progress and Challenges for Allâ€Solidâ€State Sodium Batteries. Advanced Energy and Sustainability Research, 2021, 2, 2000057.	5.8	49
26	Activating Inert Surface Pt Single Atoms via Subsurface Doping for Oxygen Reduction Reaction. Nano Letters, 2021, 21, 7970-7978.	9.1	33
27	Remedies for Polysulfide Dissolution in Roomâ€Temperature Sodiumâ€“Sulfur Batteries. Advanced Materials, 2020, 32, e1903952.	21.0	96
28	Manipulating 2D Fewâ€Layer Metal Sulfides as Anode Towards Enhanced Sodiumâ€Ion Batteries. Batteries and Supercaps, 2020, 3, 236-253.	4.7	16
29	Effect of ether-based electrolyte composition on the lithium storage performance of copper sulfide. Electrochimica Acta, 2020, 335, 135662.	5.2	3
30	High-performance room-temperature sodiumâ€“sulfur battery enabled by electrocatalytic sodium polysulfides full conversion. Energy and Environmental Science, 2020, 13, 562-570.	30.8	163
31	Facile and reversible digestion and regeneration of zirconium-based metal-organic frameworks. Communications Chemistry, 2020, 3, .	4.5	35
32	General Synthesis of Singleâ€Atom Catalysts for Hydrogen Evolution Reactions and Roomâ€Temperature Naâ€S Batteries. Angewandte Chemie - International Edition, 2020, 59, 22171-22178.	13.8	80
33	Multiregion Janus-Featured Cobalt Phosphide-Cobalt Composite for Highly Reversible Room-Temperature Sodium-Sulfur Batteries. ACS Nano, 2020, 14, 10284-10293.	14.6	81
34	Electrodeposited binder-free Sb/NiSb anode of sodium-ion batteries with excellent cycle stability and rate capability and new insights into its reaction mechanism by operando XRD analysis. Nano Energy, 2020, 77, 105123.	16.0	51
35	Highly efficient Co3O4/Co@NCs bifunctional oxygen electrocatalysts for long life rechargeable Zn-air batteries. Nano Energy, 2020, 77, 105200.	16.0	71
36	General Synthesis of Singleâ€Atom Catalysts for Hydrogen Evolution Reactions and Roomâ€Temperature Naâ€S Batteries. Angewandte Chemie, 2020, 132, 22355-22362.	2.0	62

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37	Alkaliâ€Metal Sulfide as Cathodes toward Safe and Highâ€Capacity Metal (M = Li, Na, K) Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2001764.	19.5	29
38	Tailoring MXene-Based Materials for Sodium-Ion Storage: Synthesis, Mechanisms, and Applications. Electrochemical Energy Reviews, 2020, 3, 766-792.	25.5	86
39	Sodiumâ€“Sulfur Batteries: Remedies for Polysulfide Dissolution in Roomâ€Temperature Sodiumâ€“Sulfur Batteries (Adv. Mater. 18/2020). Advanced Materials, 2020, 32, 2070145.	21.0	2
40	Layered mesoporous CoO/reduced graphene oxide with strong interfacial coupling as a high-performance anode for lithium-ion batteries. Journal of Alloys and Compounds, 2020, 843, 156050.	5.5	32
41	Spontaneous self-intercalation of copper atoms into transition metal dichalcogenides. Science Advances, 2020, 6, eaay4092.	10.3	67
42	Super Kinetically Pseudocapacitive MnCo₂S₄ Nanourchins toward Highâ€Rate and Highly Stable Sodiumâ€Ion Storage. Advanced Functional Materials, 2020, 30, 1909702.	14.9	47
43	A Highâ€Kinetics Sulfur Cathode with a Highly Efficient Mechanism for Superior Roomâ€Temperature Naâ€“S Batteries. Advanced Materials, 2020, 32, e1906700.	21.0	126
44	S/N-doped carbon nanofibers affording Fe7S8 particles with superior sodium storage. Journal of Power Sources, 2020, 451, 227790.	7.8	43
45	Self-assembling RuO₂ nanogranulates with few carbon layers as an interconnected nanoporous structure for lithiumâ€“oxygen batteries. Chemical Communications, 2020, 56, 7253-7256.	4.1	5
46	Surface Modification of Fe₇S₈/C Anode via Ultrathin Amorphous TiO₂ Layer for Enhanced Sodium Storage Performance. Small, 2020, 16, e2000745.	10.0	28
47	Electrocatalyzing S Cathodes via Multisulfiphilic Sites for Superior Room-Temperature Sodiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 7259-7268.	14.6	100
48	New monatomic layer clusters for advanced catalysis materials. Science China Materials, 2019, 62, 149-153.	6.3	12
49	Morphology tuning of inorganic nanomaterials grown by precipitation through control of electrolytic dissociation and supersaturation. Nature Chemistry, 2019, 11, 695-701.	13.6	86
50	Developments and Perspectives on Emerging High-Energy-Density Sodium-Metal Batteries. CheM, 2019, 5, 2547-2570.	11.7	110
51	Atomicâ€Local Environments of Singleâ€Atom Catalysts: Synthesis, Electronic Structure, and Activity. Advanced Energy Materials, 2019, 9, 1900722.	19.5	128
52	Highly Electrochemicallyâ€Reversible Mesoporous Na₂FePO₄F/C as Cathode Material for Highâ€Performance Sodiumâ€Ion Batteries. Small, 2019, 15, e1903723.	10.0	38
53	Electrodeposited Binderâ€Free Antimonyâ"Ironâ"Phosphorous Composites as Advanced Anodes for Sodiumâ€Ion Batteries. ChemElectroChem, 2019, 6, 5420-5427.	3.4	6
54	Targeted Synergy between Adjacent Co Atoms on Graphene Oxide as an Efficient New Electrocatalyst for Liâ€“CO₂ Batteries. Advanced Functional Materials, 2019, 29, 1904206.	14.9	86

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55	Nickel sulfide nanocrystals on nitrogen-doped porous carbon nanotubes with high-efficiency electrocatalysis for room-temperature sodium-sulfur batteries. Nature Communications, 2019, 10, 4793.	12.8	147
56	General Ï€â€Electronâ€Assisted Strategy for Ir, Pt, Ru, Pd, Fe, Ni Singleâ€Atom Electrocatalysts with Bifunctional Active Sites for Highly Efficient Water Splitting. Angewandte Chemie - International Edition, 2019, 58, 11868-11873.	13.8	229
57	General Ï€â€Electronâ€Assisted Strategy for Ir, Pt, Ru, Pd, Fe, Ni Singleâ€Atom Electrocatalysts with Bifunctional Active Sites for Highly Efficient Water Splitting. Angewandte Chemie, 2019, 131, 11994-11999.	2.0	28
58	Schwefelâ€basierte Elektroden mit Mehrelektronenreaktionen fÃ¼r Raumtemperaturâ€Natriumionenspeicherung. Angewandte Chemie, 2019, 131, 18490-18504.	2.0	9
59	Sulfurâ€Based Electrodes that Function via Multielectron Reactions for Roomâ€Temperature Sodiumâ€Ion Storage. Angewandte Chemie - International Edition, 2019, 58, 18324-18337.	13.8	69
60	An electrodeposition strategy for the controllable and cost-effective fabrication of Sb-Fe-P anodes for Li ion batteries. Electrochimica Acta, 2019, 309, 469-476.	5.2	11
61	In Situ Formation of Co₉S₈ Nanoclusters in Sulfur-Doped Carbon Foam as a Sustainable and High-Rate Sodium-Ion Anode. ACS Applied Materials & Interfaces, 2019, 11, 19218-19226.	8.0	51
62	Engineering the Distribution of Carbon in Silicon Oxide Nanospheres at the Atomic Level for Highly Stable Anodes. Angewandte Chemie, 2019, 131, 6741-6745.	2.0	16
63	Engineering the Distribution of Carbon in Silicon Oxide Nanospheres at the Atomic Level for Highly Stable Anodes. Angewandte Chemie - International Edition, 2019, 58, 6669-6673.	13.8	209
64	The Quasiâ€Ptâ€Allotrope Catalyst: Hollow PtCo@singleâ€Atom Pt₁ on Nitrogenâ€Doped Carbon toward Superior Oxygen Reduction. Advanced Functional Materials, 2019, 29, 1807340.	14.9	97
65	Fabrication of Superior Singleâ€Atom Catalysts toward Diverse Electrochemical Reactions. Small Methods, 2019, 3, 1800497.	8.6	99
66	Lotus rhizome-like S/Nâ€“C with embedded WS₂ for superior sodium storage. Journal of Materials Chemistry A, 2019, 7, 25932-25943.	10.3	39
67	TiO₂â€Coated Interlayerâ€Expanded MoSe₂/Phosphorusâ€Doped Carbon Nanospheres for Ultrafast and Ultralong Cycling Sodium Storage. Advanced Science, 2019, 6, 1801222.	11.2	80
68	Sodium Ion Storage: TiO₂â€Coated Interlayerâ€Expanded MoSe₂/Phosphorusâ€Doped Carbon Nanospheres for Ultrafast and Ultralong Cycling Sodium Storage (Adv. Sci. 1/2019). Advanced Science, 2019, 6, 1970005.	11.2	1
69	Longâ€Life Roomâ€Temperature Sodiumâ€“Sulfur Batteries by Virtue of Transitionâ€Metalâ€Nanoclusterâ€“Sulfur Interactions. Angewandte Chemie, 2019, 131, 1498-1502.	2.0	63
70	Longâ€Life Roomâ€Temperature Sodiumâ€“Sulfur Batteries by Virtue of Transitionâ€Metalâ€Nanoclusterâ€“Sulfur Interactions. Angewandte Chemie - International Edition, 2019, 58, 1484-1488.	13.8	165
71	Ordered platinumâ€“bismuth intermetallic clusters with Pt-skin for a highly efficient electrochemical ethanol oxidation reaction. Journal of Materials Chemistry A, 2019, 7, 5214-5220.	10.3	48
72	Defect Sites-Rich Porous Carbon with Pseudocapacitive Behaviors as an Ultrafast and Long-Term Cycling Anode for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 9353-9361.	8.0	91

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73	Nanoconfined SnS in 3D interconnected macroporous carbon as durable anodes for lithium/sodium ion batteries. Carbon, 2018, 134, 222-231.	10.3	115
74	A Comprehensive Review on Controlling Surface Composition of Ptâ€Based Bimetallic Electrocatalysts. Advanced Energy Materials, 2018, 8, 1703597.	19.5	123
75	Atomic cobalt as an efficient electrocatalyst in sulfur cathodes for superior room-temperature sodium-sulfur batteries. Nature Communications, 2018, 9, 4082.	12.8	305
76	Self-Assembling Hollow Carbon Nanobeads into Double-Shell Microspheres as a Hierarchical Sulfur Host for Sustainable Room-Temperature Sodiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 20422-20428.	8.0	65
77	Atomically thin Co ₃ O ₄ nanosheet-coated stainless steel mesh with enhanced capacitive Na ⁺ storage for high-performance sodium-ion batteries. 2D Materials, 2017, 4, 015022.	4.4	44
78	Roomâ€Temperature Sodiumâ€Sulfur Batteries: A Comprehensive Review on Research Progress and Cell Chemistry. Advanced Energy Materials, 2017, 7, 1602829.	19.5	270
79	Amorphous TiO₂ Shells: A Vital Elastic Buffering Layer on Silicon Nanoparticles for Highâ€Performance and Safe Lithium Storage. Advanced Materials, 2017, 29, 1700523.	21.0	342
80	Platinumâ€“Cobalt Bimetallic Nanoparticles with Pt Skin for Electro-Oxidation of Ethanol. ACS Catalysis, 2017, 7, 892-895.	11.2	89
81	Superior Li storage anode based on novel Fe-Sn-P alloy prepared by electroplating. Electrochimica Acta, 2017, 247, 314-320.	5.2	16
82	In Situ Grown S Nanosheets on Cu Foam: An Ultrahigh Electroactive Cathode for Room-Temperature Naâ€“S Batteries. ACS Applied Materials & Interfaces, 2017, 9, 24446-24450.	8.0	65
83	Critical thickness of phenolic resin-based carbon interfacial layer for improving long cycling stability of silicon nanoparticle anodes. Nano Energy, 2016, 27, 255-264.	16.0	204
84	Nanoengineering to Achieve High Sodium Storage: A Case Study of Carbon Coated Hierarchical Nanoporous TiO₂ Microfibers. Advanced Science, 2016, 3, 1600013.	11.2	47
85	Achieving High-Performance Room-Temperature Sodiumâ€“Sulfur Batteries With S@Interconnected Mesoporous Carbon Hollow Nanospheres. Journal of the American Chemical Society, 2016, 138, 16576-16579.	13.7	280
86	Germanium Nanograin Decoration on Carbon Shell: Boosting Lithiumâ€Storage Properties of Silicon Nanoparticles. Advanced Functional Materials, 2016, 26, 7800-7806.	14.9	68
87	Nanoparticles: Germanium Nanograin Decoration on Carbon Shell: Boosting Lithium-Storage Properties of Silicon Nanoparticles (Adv. Funct. Mater. 43/2016). Advanced Functional Materials, 2016, 26, 7799-7799.	14.9	0
88	Silicon/Mesoporous Carbon/Crystalline TiO₂ Nanoparticles for Highly Stable Lithium Storage. ACS Nano, 2016, 10, 10524-10532.	14.6	230
89	Chemically Bonded Sn Nanoparticles Using the Crosslinked Epoxy Binder for High Energyâ€Density Li Ion Battery. Advanced Materials Interfaces, 2016, 3, 1600662.	3.7	17
90	Rapid synthesis of Î±-Fe2O3/rGO nanocomposites by microwave autoclave as superior anodes for sodium-ion batteries. Journal of Power Sources, 2015, 280, 107-113.	7.8	123

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91	Yolk-shell silicon-mesoporous carbon anode with compact solid electrolyte interphase film for superior lithium-ion batteries. Nano Energy, 2015, 18, 133-142.	16.0	238
92	Uniform yolk-shell iron sulfideâ€“carbon nanospheres for superior sodiumâ€“iron sulfide batteries. Nature Communications, 2015, 6, 8689.	12.8	374
93	Reversible sodium storage via conversion reaction of a MoS₂â€“C composite. Chemical Communications, 2014, 50, 10730-10733.	4.1	105
94	Highâ€Performance Sodiumâ€Ion Batteries and Sodiumâ€Ion Pseudocapacitors Based on MoS₂/Graphene Composites. Chemistry - A European Journal, 2014, 20, 9607-9612.	3.3	192
95	Ultrafine SnO₂nanoparticle loading onto reduced graphene oxide as anodes for sodium-ion batteries with superior rate and cycling performances. Journal of Materials Chemistry A, 2014, 2, 529-534.	10.3	297
96	A facile route to synthesize transition metal oxide/reduced graphene oxide composites and their lithium storage performance. RSC Advances, 2013, 3, 16597.	3.6	61
97	The electrochemical properties of high-capacity sulfur/reduced graphene oxide with different electrolyte systems. Journal of Power Sources, 2013, 244, 240-245.	7.8	32
98	Nanocomposites of silicon and carbon derived from coal tar pitch: Cheap anode materials for lithium-ion batteries with long cycle life and enhanced capacity. Electrochimica Acta, 2013, 93, 213-221.	5.2	93
99	Reduced graphene oxide with superior cycling stability and rate capability for sodium storage. Carbon, 2013, 57, 202-208.	10.3	491
100	A hybrid electrolyte energy storage device with high energy and long life using lithium anode and MnO2 nanoflake cathode. Electrochemistry Communications, 2013, 31, 35-38.	4.7	24
101	Facile synthesis of a interleaved expanded graphite-embedded sulphur nanocomposite as cathode of Liâ€“S batteries with excellent lithium storage performance. Journal of Materials Chemistry, 2012, 22, 4744.	6.7	195
102	Lithium storage performance and interfacial processes of three dimensional porous Snâ€“Co alloy electrodes for lithium-ion batteries. Electrochimica Acta, 2011, 56, 5979-5987.	5.2	62
103	Fabrication and electrochemical properties of the Snâ€“Niâ€“P alloy rods array electrode for lithium-ion batteries. Electrochemistry Communications, 2010, 12, 1226-1229.	4.7	28
104	Recent advanced skeletons in sodium metal anodes. Energy and Environmental Science, 0, , .	30.8	69