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	Reduced graphene oxide with superior cycling stability and rate capability for sodium storage. Carbon, 2013, 57, 202-208.	10.3	491
2	Uniform yolk-shell iron sulfideâ€“carbon nanospheres for superior sodiumâ€“iron sulfide batteries. Nature Communications, 2015, 6, 8689.	12.8	374
3	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
4	Atomic cobalt as an efficient electrocatalyst in sulfur cathodes for superior room-temperature sodium-sulfur batteries. Nature Communications, 2018, 9, 4082.	12.8	305
5	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
6	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
7	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
8	Roomâ€Temperature Sodiumâ€Sulfur Batteries: A Comprehensive Review on Research Progress and Cell Chemistry. Advanced Energy Materials, 2017, 7, 1602829.	19.5	270
9	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
10	Silicon/Mesoporous Carbon/Crystalline TiO₂ Nanoparticles for Highly Stable Lithium Storage. ACS Nano, 2016, 10, 10524-10532.	14.6	230
11	General Ïâ€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
12	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
13	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
14	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
15	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
16	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
17	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
18	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

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19	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
20	Atomicâ€Local Environments of Singleâ€Atom Catalysts: Synthesis, Electronic Structure, and Activity. Advanced Energy Materials, 2019, 9, 1900722.	19.5	128
21	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
22	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
23	A Comprehensive Review on Controlling Surface Composition of Ptâ€Based Bimetallic Electrocatalysts. Advanced Energy Materials, 2018, 8, 1703597.	19.5	123
24	Nanoconfined SnS in 3D interconnected macroporous carbon as durable anodes for lithium/sodium ion batteries. Carbon, 2018, 134, 222-231.	10.3	115
25	Developments and Perspectives on Emerging High-Energy-Density Sodium-Metal Batteries. CheM, 2019, 5, 2547-2570.	11.7	110
26	Reversible sodium storage via conversion reaction of a MoS₂â€“C composite. Chemical Communications, 2014, 50, 10730-10733.	4.1	105
27	Electrocatalyzing S Cathodes via Multisulfiphilic Sites for Superior Room-Temperature Sodiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 7259-7268.	14.6	100
28	Fabrication of Superior Singleâ€Atom Catalysts toward Diverse Electrochemical Reactions. Small Methods, 2019, 3, 1800497.	8.6	99
29	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
30	Remedies for Polysulfide Dissolution in Roomâ€Temperature Sodiumâ€“Sulfur Batteries. Advanced Materials, 2020, 32, e1903952.	21.0	96
31	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
32	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
33	Platinumâ€“Cobalt Bimetallic Nanoparticles with Pt Skin for Electro-Oxidation of Ethanol. ACS Catalysis, 2017, 7, 892-895.	11.2	89
34	Morphology tuning of inorganic nanomaterials grown by precipitation through control of electrolytic dissociation and supersaturation. Nature Chemistry, 2019, 11, 695-701.	13.6	86
35	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
36	Tailoring MXene-Based Materials for Sodium-Ion Storage: Synthesis, Mechanisms, and Applications. Electrochemical Energy Reviews, 2020, 3, 766-792.	25.5	86

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37	Multiregion Janus-Featured Cobalt Phosphide-Cobalt Composite for Highly Reversible Room-Temperature Sodium-Sulfur Batteries. ACS Nano, 2020, 14, 10284-10293.	14.6	81
38	TiO₂â€Coated Interlayerâ€Expanded MoSe₂/Phosphorusâ€Doped Carbon Nanospheres for Ultrafast and Ultralong Cycling Sodium Storage. Advanced Science, 2019, 6, 1801222.	11.2	80
39	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
40	Highly efficient Co3O4/Co@NCs bifunctional oxygen electrocatalysts for long life rechargeable Zn-air batteries. Nano Energy, 2020, 77, 105200.	16.0	71
41	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
42	Recent advanced skeletons in sodium metal anodes. Energy and Environmental Science, 0, , .	30.8	69
43	Germanium Nanograin Decoration on Carbon Shell: Boosting Lithiumâ€Storage Properties of Silicon Nanoparticles. Advanced Functional Materials, 2016, 26, 7800-7806.	14.9	68
44	Spontaneous self-intercalation of copper atoms into transition metal dichalcogenides. Science Advances, 2020, 6, eaay4092.	10.3	67
45	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
46	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
47	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
48	Longâ€Life Roomâ€Temperature Sodiumâ€“Sulfur Batteries by Virtue of Transitionâ€Metalâ€Nanoclusterâ€“Sulfur Interactions. Angewandte Chemie, 2019, 131, 1498-1502.	2.0	63
49	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
50	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
51	Materials engineering for adsorption and catalysis in room-temperature Naâ€“S batteries. Energy and Environmental Science, 2021, 14, 3757-3795.	30.8	62
52	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
53	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
54	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

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55	Progress and Challenges for Allâ€Solidâ€State Sodium Batteries. Advanced Energy and Sustainability Research, 2021, 2, 2000057.	5.8	49
56	Continuous Carbon Channels Enable Full Naâ€ion Accessibility for Superior Roomâ€Temperature Naâ€“S Batteries. Advanced Materials, 2022, 34, e2108363.	21.0	49
57	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
58	Nanoengineering to Achieve High Sodium Storage: A Case Study of Carbon Coated Hierarchical Nanoporous TiO₂ Microfibers. Advanced Science, 2016, 3, 1600013.	11.2	47
59	Super Kinetically Pseudocapacitive MnCo₂S₄ Nanourchins toward Highâ€Rate and Highly Stable Sodiumâ€ion Storage. Advanced Functional Materials, 2020, 30, 1909702.	14.9	47
60	Architecting Freestanding Sulfur Cathodes for Superior Roomâ€Temperature Naâ€“S Batteries. Advanced Functional Materials, 2021, 31, 2102280.	14.9	46
61	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
62	S/N-doped carbon nanofibers affording Fe7S8 particles with superior sodium storage. Journal of Power Sources, 2020, 451, 227790.	7.8	43
63	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
64	Sustainable S cathodes with synergic electrocatalysis for room-temperature Naâ€“S batteries. Journal of Materials Chemistry A, 2021, 9, 566-574.	10.3	39
65	Boosting electrochemical kinetics of S cathodes for room temperature Na/S batteries. Matter, 2021, 4, 1768-1800.	10.0	39
66	Highly Electrochemicallyâ€Reversible Mesoporous Na₂FePO₄F/C as Cathode Material for Highâ€Performance Sodiumâ€ion Batteries. Small, 2019, 15, e1903723.	10.0	38
67	Streamline Sulfur Redox Reactions to Achieve Efficient Roomâ€Temperature Sodiumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	38
68	Facile and reversible digestion and regeneration of zirconium-based metal-organic frameworks. Communications Chemistry, 2020, 3, .	4.5	35
69	Activating Inert Surface Pt Single Atoms via Subsurface Doping for Oxygen Reduction Reaction. Nano Letters, 2021, 21, 7970-7978.	9.1	33
70	Highly efficient and selective electrocatalytic hydrogen peroxide production on Co-O-C active centers on graphene oxide. Communications Chemistry, 2022, 5, .	4.5	33
71	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
72	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

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73	Understanding Sulfur Redox Mechanisms in Different Electrolytes for Room-Temperature Naâ€“S Batteries. Nano-Micro Letters, 2021, 13, 121.	27.0	31
74	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
75	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
76	Electrolytes/Interphases: Enabling Distinguishable Sulfur Redox Processes in Roomâ€Temperature Sodiumâ€Sulfur Batteries. Advanced Energy Materials, 2022, 12, .	19.5	29
77	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
78	General Ïâ€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
79	Surface Modification of Fe₇S₈/C Anode via Ultrathin Amorphous TiO₂ Layer for Enhanced Sodium Storage Performance. Small, 2020, 16, e2000745.	10.0	28
80	Atomic Cobalt Vacancyâ€Cluster Enabling Optimized Electronic Structure for Efficient Water Splitting. Advanced Functional Materials, 2021, 31, 2101797.	14.9	26
81	Atomic Structural Evolution of Singleâ€Layer Pt Clusters as Efficient Electrocatalysts. Small, 2021, 17, e2100732.	10.0	26
82	Recent Advances in Seawater Electrolysis. Catalysts, 2022, 12, 123.	3.5	26
83	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
84	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
85	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
86	Germanene Nanosheets: Achieving Superior Sodiumâ€Ion Storage via Pseudointercalation Reactions. Small Structures, 2021, 2, 2100041.	12.0	20
87	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
88	Green energy application technology of litchi pericarp-derived carbon material with high performance. Journal of Cleaner Production, 2021, 286, 124960.	9.3	18
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	Carbonaceous Hosts for Sulfur Cathode in Alkaliâ€Metal/S (Alkali Metal = Lithium, Sodium, Potassium) Batteries. Small, 2021, 17, e2006504.	10.0	17

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91	Superior Li storage anode based on novel Fe-Sn-P alloy prepared by electroplating. Electrochimica Acta, 2017, 247, 314-320.	5.2	16
92	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
93	Manipulating 2D Fewâ€Layer Metal Sulfides as Anode Towards Enhanced Sodiumâ€Ion Batteries. Batteries and Supercaps, 2020, 3, 236-253.	4.7	16
94	New monatomic layer clusters for advanced catalysis materials. Science China Materials, 2019, 62, 149-153.	6.3	12
95	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
96	Twoâ€inâ€one shell configuration for bimetal selenides toward fast sodium storage within broadened voltage windows. , 2022, 4, 586-597.		10
97	Schwefelâ€basierte Elektroden mit Mehrelektronenreaktionen fÃ¼r Raumtemperaturâ€Natriumionenspeicherung. Angewandte Chemie, 2019, 131, 18490-18504.	2.0	9
98	Electrodeposited Binderâ€Free Antimonyâ"Ironâ"Phosphorous Composites as Advanced Anodes for Sodiumâ€Ion Batteries. ChemElectroChem, 2019, 6, 5420-5427.	3.4	6
99	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
100	Effect of ether-based electrolyte composition on the lithium storage performance of copper sulfide. Electrochimica Acta, 2020, 335, 135662.	5.2	3
101	Streamline Sulfur Redox Reactions to Achieve Efficient Roomâ€Temperature Sodiumâ€"Sulfur Batteries. Angewandte Chemie, 2022, 134, .	2.0	3
102	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
103	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
104	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