

# Zhi-Yuan Wang

## List of Publications by Year in descending order

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49  
papers

2,469  
citations

201674

27  
h-index

197818

49  
g-index

49  
all docs

49  
docs citations

49  
times ranked

2977  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lower-voltage plateau Zn-substituted Co <sub>3</sub> O <sub>4</sub> submicron spheres anode for Li-ion half and full batteries. <i>Journal of Alloys and Compounds</i> , 2022, 890, 161888.	5.5	7
2	Amorphous High-entropy Non-precious metal oxides with surface reconstruction toward highly efficient and durable catalyst for oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 635-644.	9.4	42
3	Recent advances of metal telluride anodes for high-performance lithium/sodium-ion batteries. <i>Materials Horizons</i> , 2022, 9, 524-546.	12.2	32
4	High-entropy chemistry stabilizing spinel oxide (CoNiZnXMnLi) <sub>3</sub> O <sub>4</sub> (X = Fe, Cr) for high-performance anode of Li-ion batteries. <i>Rare Metals</i> , 2022, 41, 1265-1275.	7.1	46
5	Nanosized high entropy spinel oxide (FeCoNiCrMn) <sub>3</sub> O <sub>4</sub> as a highly active and ultra-stable electrocatalyst for the oxygen evolution reaction. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1479-1488.	4.9	31
6	In-situ synthesis of niobium-doped TiO <sub>2</sub> nanosheet arrays on double transition metal MXene (TiNbCT <sub>x</sub> ) as stable anode material for lithium-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2022, 617, 147-155.	9.4	31
7	Recent advances of Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> -based solid-state lithium batteries towards high energy density. <i>Energy Storage Materials</i> , 2022, 49, 299-338.	18.0	30
8	Boosting electrochemical reaction and suppressing phase transition with a high-entropy O <sub>3</sub> -type layered oxide for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 14943-14953.	10.3	29
9	Crystalline Planes templated engineering of defect chemistry in Cobalt(II, III) oxide anodes for lithium ion batteries. <i>Journal of Alloys and Compounds</i> , 2021, 850, 156858.	5.5	14
10	Boosting the electrocatalytic hydrogen evolution and sodium-storage properties of Co <sub>9</sub> S <sub>8</sub> nanoparticles via encapsulation with nitrogen-doped few-layer graphene networks. <i>Sustainable Energy and Fuels</i> , 2021, 5, 4618-4627.	4.9	9
11	Sulfur-doped 3D hierarchical porous carbon network toward excellent potassium-ion storage performance. <i>Rare Metals</i> , 2021, 40, 2464-2473.	7.1	41
12	Nanosized CoSb Alloy Confined in Honeycomb Carbon Framework Toward High-Property Potassium-ion and Sodium-ion Batteries. <i>Energy Technology</i> , 2021, 9, 2100095.	3.8	5
13	Ultrathin Metallic-Phase Molybdenum Disulfide Nanosheets Stabilized on Functionalized Carbon Nanotubes Via Covalent Interface Interaction for Sodium- and Lithium-Ion Storage. <i>ACS Applied Energy Materials</i> , 2021, 4, 9440-9449.	5.1	11
14	New spinel high-entropy oxides (FeCoNiCrMnXLi) <sub>3</sub> O <sub>4</sub> (X = Cu, Mg, Zn) as the anode material for lithium-ion batteries. <i>Ceramics International</i> , 2021, 47, 32025-32032.	4.8	50
15	Precise tuning of low-crystalline Sb@Sb <sub>2</sub> O <sub>3</sub> confined in 3D porous carbon network for fast and stable potassium ion storage. <i>Journal of Materials Science and Technology</i> , 2021, 94, 123-129.	10.7	20
16	Ultrafine nano-scale Cu <sub>2</sub> Sb alloy confined in three-dimensional porous carbon as an anode for sodium-ion and potassium-ion batteries. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 1666-1674.	4.9	8
17	Covalent Pinning of Highly Dispersed Ultrathin Metallic-Phase Molybdenum Disulfide Nanosheets on the Inner Surface of Mesoporous Carbon Spheres for Durable and Rapid Sodium Storage. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 58652-58664.	8.0	13
18	Constructing N-Doped porous carbon confined FeSb alloy nanocomposite with Fe-N-C coordination as a universal anode for advanced Na/K-ion batteries. <i>Chemical Engineering Journal</i> , 2020, 384, 123327.	12.7	60

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19	In Situ Construction of Multibuffer Structure 3D CoSn@SnO <sub>x</sub> /CoO <sub>x</sub> @C Anode Material for Ultralong Life Lithium Storage. <i>Energy Technology</i> , 2020, 8, 1900829.	3.8	11
20	In situ synthesis of Co <sub>3</sub> O <sub>4</sub> nanoparticles confined in 3D nitrogen-doped porous carbon as an efficient bifunctional oxygen electrocatalyst. <i>Rare Metals</i> , 2020, 39, 1383-1394.	7.1	57
21	BiSb@Bi <sub>2</sub> O <sub>3</sub> /SbO <sub>x</sub> encapsulated in porous carbon as anode materials for sodium/potassium-ion batteries with a high pseudocapacitive contribution. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 429-438.	9.4	47
22	NiCo alloy nanoparticles encapsulated in N-doped 3D porous carbon as efficient electrocatalysts for oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 22797-22807.	7.1	20
23	Chemical activation of hollow carbon nanospheres induced self-assembly of metallic 1T phase MoS <sub>2</sub> ultrathin nanosheets for electrochemical lithium storage. <i>Electrochimica Acta</i> , 2020, 353, 136545.	5.2	25
24	Optimizing oxygen vacancies can improve the lithium storage properties in NiO porous nanosheet anodes. <i>Materials Characterization</i> , 2020, 166, 110447.	4.4	14
25	Engineering Surface Structure and Defect Chemistry of Nanoscale Cubic Co <sub>3</sub> O <sub>4</sub> Crystallites for Enhanced Lithium and Sodium Storage. <i>ACS Applied Nano Materials</i> , 2020, 3, 3892-3903.	5.0	32
26	Spinel-structured high entropy oxide (FeCoNiCrMn) <sub>3</sub> O <sub>4</sub> as anode towards superior lithium storage performance. <i>Journal of Alloys and Compounds</i> , 2020, 844, 156158.	5.5	178
27	Porous Co <sub>3</sub> O <sub>4</sub> @CoO composite nanosheets as improved anodes for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155030.	5.5	61
28	Ultrafast and Stable Lithium Storage Enabled by the Electric Field Effect in Layer-Structured Tablet-Like NH <sub>4</sub> <sup>+</sup> TiOF <sub>3</sub> Mesocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 20404-20413.	8.0	10
29	Fabrication of Porous Carbon with Controllable Nitrogen Doping as Anode for High-Performance Potassium-Ion Batteries. <i>ChemElectroChem</i> , 2019, 6, 3699-3707.	3.4	28
30	Ultrafine SnO <sub>2</sub> nanoparticles encapsulated in 3D porous carbon as a high-performance anode material for potassium-ion batteries. <i>Journal of Power Sources</i> , 2019, 441, 227191.	7.8	47
31	High performance potassium-ion battery anode based on biomorphic N-doped carbon derived from walnut septum. <i>Journal of Power Sources</i> , 2019, 415, 165-171.	7.8	139
32	A nanosized SnSb alloy confined in N-doped 3D porous carbon coupled with ether-based electrolytes toward high-performance potassium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14309-14318.	10.3	157
33	Improving the electrochemical performance of layered cathode oxide for sodium-ion batteries by optimizing the titanium content. <i>Journal of Colloid and Interface Science</i> , 2019, 544, 164-171.	9.4	29
34	Monodisperse multicore-shell SnSb@SnO <sub>x</sub> /SbO <sub>x</sub> @C nanoparticles space-confined in 3D porous carbon networks as high-performance anode for Li-ion and Na-ion batteries. <i>Chemical Engineering Journal</i> , 2019, 371, 356-365.	12.7	65
35	Nano-sized MoO <sub>2</sub> spheres interspersed three-dimensional porous carbon composite as advanced anode for reversible sodium/potassium ion storage. <i>Electrochimica Acta</i> , 2019, 307, 293-301.	5.2	79
36	Chemical reduction-induced oxygen deficiency in Co <sub>3</sub> O <sub>4</sub> nanocubes as advanced anodes for lithium ion batteries. <i>Solid State Ionics</i> , 2019, 334, 117-124.	2.7	25

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37	Tuning lithium storage properties of cubic Co <sub>3</sub> O <sub>4</sub> crystallites: The effect of oxygen vacancies. Journal of Alloys and Compounds, 2019, 787, 720-727.	5.5	30
38	In situ double-template fabrication of boron-doped 3D hierarchical porous carbon network as anode materials for Li- and Na-ion batteries. Applied Surface Science, 2019, 464, 422-428.	6.1	77
39	Construction of NiCo <sub>2</sub> O <sub>4</sub> nanorods into 3D porous ultrathin carbon networks for high-performance asymmetric supercapacitors. Journal of Alloys and Compounds, 2019, 783, 1-9.	5.5	14
40	A Simple and Low-Cost Method to Synthesize Cr-Doped Fe <sub>2</sub> O <sub>3</sub> Electrode Materials for Lithium-ion Batteries. ChemElectroChem, 2019, 6, 856-864.	3.4	30
41	Morphological evolution of hollow NiCo <sub>2</sub> O <sub>4</sub> microspheres and their high pseudocapacitance contribution for Li/Na-ion battery anodes. New Journal of Chemistry, 2018, 42, 17762-17768.	2.8	13
42	Novel high-capacity hybrid layered oxides Na <sub>x</sub> Li <sub>1.5-x</sub> Ni <sub>0.167</sub> Co <sub>0.167</sub> Mn <sub>0.67</sub> O <sub>2</sub> as promising cathode materials for rechargeable sodium ion batteries. Ceramics International, 2018, 44, 22512-22519.	4.8	9
43	Improved lithium storage properties of Co <sub>3</sub> O <sub>4</sub> nanoparticles via laser irradiation treatment. Electrochimica Acta, 2018, 281, 31-38.	5.2	41
44	Novel P2-type concentration-gradient Na <sub>0.67</sub> Ni <sub>0.167</sub> Co <sub>0.167</sub> Mn <sub>0.67</sub> O <sub>2</sub> modified by Mn-rich surface as cathode material for sodium ion batteries. Journal of Power Sources, 2018, 396, 404-411.	7.8	45
45	Template-assisted <i>in situ</i> confinement synthesis of nitrogen and oxygen co-doped 3D porous carbon network for high-performance sodium-ion battery anode. New Journal of Chemistry, 2018, 42, 14410-14416.	2.8	15
46	The critical role of sodium content on structure, morphology and electrochemical performance of layered P2-type Na <sub>x</sub> Ni <sub>0.167</sub> Co <sub>0.167</sub> Mn <sub>0.67</sub> O <sub>2</sub> for sodium ion batteries. Journal of Power Sources, 2017, 362, 323-331.	7.8	31
47	Three-dimensional porous bowl-shaped carbon cages interspersed with carbon coated Ni-Sn alloy nanoparticles as anode materials for high-performance lithium-ion batteries. New Journal of Chemistry, 2017, 41, 393-402.	2.8	26
48	Three-dimensional porous carbon nanosheet networks anchored with Cu <sub>6</sub> Sn <sub>5</sub> @carbon as a high-performance anode material for lithium ion batteries. RSC Advances, 2016, 6, 54718-54726.	3.6	20
49	Graphene Networks Anchored with Sn@Graphene as Lithium Ion Battery Anode. ACS Nano, 2014, 8, 1728-1738.	14.6	615