Jiangyan Wang

List of Publications by Year in Descending Order

65 papers	6,338 citations	37 h-index	69 g-index
69 ext. papers	7,730 ext. citations	17.5 avg, IF	6.33 L-index

#	Paper	IF	Citations
65	Highly Efficient Photothermal Conversion and Water Transport during Solar Evaporation Enabled by Amorphous Hollow Multishelled Nanocomposites (Adv. Mater. 7/2022). *Advanced Materials*, **2022**, 34, 2270052	24	0
64	Accurately localizing multiple nanoparticles in a multishelled matrix through shell-to-core evolution for maximizing energy storage capability.. *Advanced Materials*, **2022**, e2200206	24	5
63	Coating conductive polypyrrole layers on multiple shells of hierarchical SnO2 spheres and their enhanced cycling stability as lithium-ion battery anode. *Applied Surface Science*, **2022**, 586, 152836	6.7	4
62	Decoding lithium batteries through advanced in situ characterization techniques. *International Journal of Minerals, Metallurgy and Materials*, **2022**, 29, 965-989	3.1	2
61	General Synthesis of Multiple-Cores@Multiple-Shells Hollow Composites and Their Application to Lithium-Ion Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 25719-25722	16.4	7
60	General Synthesis of Multiple-Cores@Multiple-Shells Hollow Composites and Their Application to Lithium-Ion Batteries. *Angewandte Chemie*, **2021**, 133, 25923-25926	3.6	0
59	Highly Efficient Photothermal Conversion and Water Transport during Solar Evaporation Enabled by Amorphous Hollow Multishelled Nanocomposites. *Advanced Materials*, **2021**, e2107400	24	16
58	Free-standing ultrathin lithium metal–graphene oxide host foils with controllable thickness for lithium batteries. *Nature Energy*, **2021**, 6, 790-798	62.3	56
57	Solar Water Splitting: Hollow Multishelled Structured SrTiO3 with La/Rh Co-Doping for Enhanced Photocatalytic Water Splitting under Visible Light (Small 22/2021). *Small*, **2021**, 17, 2170111	11	1
56	Small Structures Bring Big Things: Performance Control of Hollow Multishelled Structures. *Small Structures*, **2021**, 2, 2000041	8.7	23
55	Design and Construction of 3D Porous Na3V2(PO4)3/C as High Performance Cathode for Sodium Ion Batteries. *Chemical Research in Chinese Universities*, **2021**, 37, 265-273	2.2	8
54	Hollow Multishelled Structured SrTiO with La/Rh Co-Doping for Enhanced Photocatalytic Water Splitting under Visible Light. *Small*, **2021**, 17, e2005345	11	16
53	The precise synthesis of twin-born Fe3O4/FeS/carbon nanosheets for high-rate lithium-ion batteries. *Materials Chemistry Frontiers*, **2021**, 5, 4579-4588	7.8	7
52	Hollow Micro-/Nanostructure Reviving Lithium-sulfur Batteries. *Chemical Research in Chinese Universities*, **2020**, 36, 313-319	2.2	48
51	Dual-Defects Adjusted Crystal-Field Splitting of LaCo Ni O Hollow Multishelled Structures for Efficient Oxygen Evolution. *Angewandte Chemie - International Edition*, **2020**, 59, 19691-19695	16.4	37
50	Incorporating the Nanoscale Encapsulation Concept from Liquid Electrolytes into Solid-State Lithium-Sulfur Batteries. *Nano Letters*, **2020**, 20, 5496-5503	11.5	15
49	Dual-Defects Adjusted Crystal-Field Splitting of LaCo1−xNixO3−δ Hollow Multishelled Structures for Efficient Oxygen Evolution. *Angewandte Chemie*, **2020**, 132, 19859-19863	3.6	4

48	Hollow multishelled structures revive high energy density batteries. *Nanoscale Horizons*, **2020**, 5, 1287-1292	3.8	13
47	Cryo-EM Reveals the Structure and Chemistry of the Silicon Solid-Electrolyte Interphase. *CheM*, **2020**, 6, 331-334	16.2	
46	A novel battery scheme: Coupling nanostructured phosphorus anodes with lithium sulfide cathodes. *Nano Research*, **2020**, 13, 1383-1388	10	10
45	Hollow multishell structures exercise temporal–spatial ordering and dynamic smart behaviour. *Nature Reviews Chemistry*, **2020**, 4, 159-168	34.6	83
44	Membrane-Free Zn/MnO2 Flow Battery for Large-Scale Energy Storage. *Advanced Energy Materials*, **2020**, 10, 1902085	21.8	53
43	Scalable synthesis of nanoporous silicon microparticles for highly cyclable lithium-ion batteries. *Nano Research*, **2020**, 13, 1558-1563	10	24
42	Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. *ACS Nano*, **2020**, 14, 4601-4608	16.7	34
41	Efficient sequential harvesting of solar light by heterogeneous hollow shells with hierarchical pores. *National Science Review*, **2020**, 7, 1638-1646	10.8	36
40	V O Textile Cathodes with High Capacity and Stability for Flexible Lithium-Ion Batteries. *Advanced Materials*, **2020**, 32, e1906205	24	68
39	Controllable Synthesis of Hollow Multishell Structured Co3O4 with Improved Rate Performance and Cyclic Stability for Supercapacitors. *Chemical Research in Chinese Universities*, **2020**, 36, 68-73	2.2	39
38	A binder-free high silicon content flexible anode for Li-ion batteries. *Energy and Environmental Science*, **2020**, 13, 848-858	35.4	158
37	Microclusters of Kinked Silicon Nanowires Synthesized by a Recyclable Iodide Process for High-Performance Lithium-Ion Battery Anodes. *Advanced Energy Materials*, **2020**, 10, 2002108	21.8	28
36	Electrolyte-Phobic Surface for the Next-Generation Nanostructured Battery Electrodes. *Nano Letters*, **2020**, 20, 7455-7462	11.5	16
35	Hollow multishelled structural NiO as a "shelter" for high-performance Li–S batteries. *Materials Chemistry Frontiers*, **2020**, 4, 2971-2975	7.8	5
34	Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries. *Nature Nanotechnology*, **2019**, 14, 705-711	28.7	442
33	Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. *Angewandte Chemie - International Edition*, **2019**, 58, 11364-11368	16.4	111
32	Hollow Multishelled Structures for Promising Applications: Understanding the Structure-Performance Correlation. *Accounts of Chemical Research*, **2019**, 52, 2169-2178	24.3	110
31	Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. *Angewandte Chemie*, **2019**, 131, 11486-11490	3.6	44

30	Hollow Multi-Shelled Structural TiO with Multiple Spatial Confinement for Long-Life Lithium-Sulfur Batteries. *Angewandte Chemie - International Edition*, **2019**, 58, 9078-9082	16.4	100
29	Hollow Multi-Shelled Structural TiO2 with Multiple Spatial Confinement for Long-Life Lithium Sulfur Batteries. *Angewandte Chemie*, **2019**, 131, 9176-9180	3.6	33
28	Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode. *Advanced Energy Materials*, **2019**, 9, 1900858	21.8	186
27	Hollow Multi-Shelled Structure with Metal-Organic-Framework-Derived Coatings for Enhanced Lithium Storage. *Angewandte Chemie - International Edition*, **2019**, 58, 5266-5271	16.4	67
26	Improving cyclability of Li metal batteries at elevated temperatures and its origin revealed by cryo-electron microscopy. *Nature Energy*, **2019**, 4, 664-670	62.3	200
25	Hollow Multi-Shelled Structure with Metal Organic-Framework-Derived Coatings for Enhanced Lithium Storage. *Angewandte Chemie*, **2019**, 131, 5320-5325	3.6	12
24	Constructing SrTiO -TiO Heterogeneous Hollow Multi-shelled Structures for Enhanced Solar Water Splitting. *Angewandte Chemie - International Edition*, **2019**, 58, 1422-1426	16.4	139
23	Sequential Templating Approach: A Groundbreaking Strategy to Create Hollow Multishelled Structures. *Advanced Materials*, **2019**, 31, e1802874	24	110
22	Design of Hollow Nanostructures for Energy Storage, Conversion and Production. *Advanced Materials*, **2019**, 31, e1801993	24	224
21	Electrocatalytic N-Doped Graphitic Nanofiber - Metal/Metal Oxide Nanoparticle Composites. *Small*, **2018**, 14, e1703459	11	42
20	A manganese hydrogen battery with potential for grid-scale energy storage. *Nature Energy*, **2018**, 3, 428-435	62.3	174
19	Engineering stable interfaces for three-dimensional lithium metal anodes. *Science Advances*, **2018**, 4, eaat5168	14.3	116
18	Construction of Multishelled Binary Metal Oxides via Coabsorption of Positive and Negative Ions as a Superior Cathode for Sodium-Ion Batteries. *Journal of the American Chemical Society*, **2018**, 140, 17114-17119	16.4	65
17	Constructing SrTiO3 TiO2 Heterogeneous Hollow Multi-shelled Structures for Enhanced Solar Water Splitting. *Angewandte Chemie*, **2018**, 131, 1436	3.6	5
16	Shell-Protective Secondary Silicon Nanostructures as Pressure-Resistant High-Volumetric-Capacity Anodes for Lithium-Ion Batteries. *Nano Letters*, **2018**, 18, 7060-7065	11.5	78
15	Multi-shelled hollow micro-/nanostructures: promising platforms for lithium-ion batteries. *Materials Chemistry Frontiers*, **2017**, 1, 414-430	7.8	157
14	Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. *Nature Nanotechnology*, **2017**, 12, 993-999	28.7	290
13	Multi-shelled metal oxides prepared via an anion-adsorption mechanism for lithium-ion batteries. *Nature Energy*, **2016**, 1,	62.3	304

12	Engineering of multi-shelled SnO2 hollow microspheres for highly stable lithium-ion batteries. *Journal of Materials Chemistry A*, **2016**, 4, 17673-17677	13	108
11	Multi-shelled LiMn2O4 hollow microspheres as superior cathode materials for lithium-ion batteries. *Inorganic Chemistry Frontiers*, **2016**, 3, 365-369	6.8	75
10	Synthesis of multi-shelled MnO2 hollow microspheres via an anion-adsorption process of hydrothermal intensification. *Inorganic Chemistry Frontiers*, **2016**, 3, 1065-1070	6.8	53
9	Multi-shelled hollow micro-/nanostructures. *Chemical Society Reviews*, **2015**, 44, 6749-73	58.5	540
8	Quintuple-shelled SnO(2) hollow microspheres with superior light scattering for high-performance dye-sensitized solar cells. *Advanced Materials*, **2014**, 26, 905-9	24	260
7	Multishelled TiO2 hollow microspheres as anodes with superior reversible capacity for lithium ion batteries. *Nano Letters*, **2014**, 14, 6679-84	11.5	366
6	pH-Regulated Synthesis of Multi-Shelled Manganese Oxide Hollow Microspheres as Supercapacitor Electrodes Using Carbonaceous Microspheres as Templates. *Advanced Science*, **2014**, 1, 1400011	13.6	145
5	Accurate control of multishelled Co3O4 hollow microspheres as high-performance anode materials in lithium-ion batteries. *Angewandte Chemie - International Edition*, **2013**, 52, 6417-20	16.4	580
4	Accurate Control of Multishelled Co3O4 Hollow Microspheres as High-Performance Anode Materials in Lithium-Ion Batteries. *Angewandte Chemie*, **2013**, 125, 6545-6548	3.6	264
3	Molecular Architecture of Cobalt Porphyrin Multilayers on Reduced Graphene Oxide Sheets for High-Performance Oxygen Reduction Reaction. *Angewandte Chemie*, **2013**, 125, 5695-5699	3.6	95
2	The development of hollow multishelled structure: from the innovation of synthetic method to the discovery of new characteristics. *Science China Chemistry*,1	7.9	1
1	Graphene coating on silicon anodes enabled by thermal surface modification for high-energy lithium-ion batteries. *MRS Bulletin*,1	3.2	1