Xiaolei Wang

List of Publications by Year in Descending Order

66 papers	4,372 citations	35 h-index	66 g-index
72 ext. papers	5,015 ext. citations	12.6 avg, IF	5.7 L-index

#	Paper	IF	Citations
66	Efficient Zn Metal Anode Enabled by O,N-Codoped Carbon Microflowers.. *Nano Letters*, **2022**,	11.5	12
65	Ultrafast, long-life, high-loading, and wide-temperature zinc ion supercapacitors. *Energy Storage Materials*, **2022**, 46, 233-242	19.4	4
64	Hetero-architectured core-shell NiMoO@NiS/MoS nanorods enabling high-performance supercapacitors.. *Journal of Materials Research*, **2022**, 37, 284-293	2.5	1
63	Ultrafast, Durable, and High-loading Polymer Anode for Aqueous Zinc-Ion Batteries and Supercapacitors.. *Advanced Materials*, **2022**, e2200077	24	10
62	Building Ni9S8/MoS2 Nanosheets Decorated NiMoO4 Nanorods Heterostructure for Enhanced Water Splitting. *Advanced Materials Interfaces*, **2021**, 8, 2101483	4.6	0
61	Facile ball milling preparation of sulfur-doped carbon as peroxymonosulfate activator for efficient removal of organic pollutants. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106536	6.8	5
60	3D Hierarchical Carbon-Rich Micro-/Nanomaterials for Energy Storage and Catalysis. *Electrochemical Energy Reviews*, **2021**, 4, 269-335	29.3	27
59	Realizing high-performance lithium-sulfur batteries via rational design and engineering strategies. *Nano Energy*, **2021**, 82, 105761	17.1	29
58	N, O-Codoped Carbon Nanosheet Array Enabling Stable Lithium Metal Anode. *Advanced Functional Materials*, **2021**, 31, 2102354	15.6	11
57	Bimetallic metal-organic framework derived doped carbon nanostructures as high-performance electrocatalyst towards oxygen reactions. *Nano Research*, **2021**, 14, 1533-1540	10	13
56	N,S-Codoped hollow carbon dodecahedron/sulfides composites enabling high-performance lithium-ion intercalation. *Electrochemical Science Advances*, **2021**, 1, e2100001		
55	Hierarchical Ni-Mo2C/N-doped carbon Mott-Schottky array for water electrolysis. *Applied Catalysis B: Environmental*, **2021**, 292, 120168	21.8	17
54	Strained lattice platinum–palladium alloy nanowires for efficient electrocatalysis. *Inorganic Chemistry Frontiers*, **2020**, 7, 1713-1718	6.8	6
53	Bimetallic CoNi Alloy Nanoparticles Embedded in Pomegranate-like Nitrogen-Doped Carbon Spheres for Electrocatalytic Oxygen Reduction and Evolution. *ACS Applied Nano Materials*, **2020**, 3, 1354-1362	5.6	22
52	Hierarchical Chestnut-Burr Like Structure of Copper Cobalt Oxide Electrocatalyst Directly Grown on Ni Foam for Anion Exchange Membrane Water Electrolysis. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 2344-2349	8.3	18
51	Platinum–palladium alloy nanotetrahedra with tuneable lattice-strain for enhanced intrinsic activity. *Catalysis Science and Technology*, **2020**, 10, 6173-6179	5.5	5
50	Hollow waxberry-like cobalt-nickel oxide/S,N-codoped carbon nanospheres as a trifunctional electrocatalyst for OER, ORR, and HER.. *RSC Advances*, **2020**, 10, 27788-27793	3.7	9

49	Microwave-assisted pyrolysis of sewage sludge: A review. *Fuel Processing Technology*, **2019**, 187, 84-104	7.2	95
48	Simultaneous shape and size measurements of irregular rough particles by an IPI system with double receivers. *Journal of Modern Optics*, **2019**, 66, 1226-1234	1.1	3
47	Abundant Defects-Induced Interfaces Enabling Effective Anchoring for Polysulfides and Enhanced Kinetics in Lean Electrolyte Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 46767-46775	9.5	13
46	3D N-doped hybrid architectures assembled from 0D T-Nb2O5 embedded in carbon microtubes toward high-rate Li-ion capacitors. *Nano Energy*, **2019**, 56, 118-126	17.1	81
45	Chemisorption of polysulfides through redox reactions with organic molecules for lithium-sulfur batteries. *Nature Communications*, **2018**, 9, 705	17.4	159
44	Two-Dimensional Phosphorus-Doped Carbon Nanosheets with Tunable Porosity for Oxygen Reactions in Zinc-Air Batteries. *ACS Catalysis*, **2018**, 8, 2464-2472	13.1	129
43	Bifunctionally active and durable hierarchically porous transition metal-based hybrid electrocatalyst for rechargeable metal-air batteries. *Applied Catalysis B: Environmental*, **2018**, 239, 677-687	21.8	53
42	A Lithium-Sulfur Battery using a 2D Current Collector Architecture with a Large-Sized Sulfur Host Operated under High Areal Loading and Low E/S Ratio. *Advanced Materials*, **2018**, 30, e1804271	24	61
41	Design of ultralong single-crystal nanowire-based bifunctional electrodes for efficient oxygen and hydrogen evolution in a mild alkaline electrolyte. *Journal of Materials Chemistry A*, **2017**, 5, 10895-10901	13	20
40	Tuning Shell Numbers of Transition Metal Oxide Hollow Microspheres toward Durable and Superior Lithium Storage. *ACS Nano*, **2017**, 11, 11521-11530	16.7	72
39	Compact high volumetric and areal capacity lithium sulfur batteries through rock salt induced nano-architectured sulfur hosts. *Journal of Materials Chemistry A*, **2017**, 5, 21435-21441	13	40
38	Carbon-Coated Silicon Nanowires on Carbon Fabric as Self-Supported Electrodes for Flexible Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 9551-9558	9.5	81
37	Enhanced Reversible Sodium-Ion Intercalation by Synergistic Coupling of Few-Layered MoS2 and S-Doped Graphene. *Advanced Functional Materials*, **2017**, 27, 1702562	15.6	116
36	Gas Pickering Emulsion Templated Hollow Carbon for High Rate Performance Lithium Sulfur Batteries. *Advanced Functional Materials*, **2016**, 26, 8408-8417	15.6	90
35	High-performance flexible electrode based on electrodeposition of polypyrrole/MnO2 on carbon cloth for supercapacitors. *Journal of Power Sources*, **2016**, 326, 357-364	8.9	65
34	Pomegranate-Inspired Design of Highly Active and Durable Bifunctional Electrocatalysts for Rechargeable Metal–Air Batteries. *Angewandte Chemie*, **2016**, 128, 5061-5066	3.6	19
33	Implementing an in-situ carbon network in Si/reduced graphene oxide for high performance lithium-ion battery anodes. *Nano Energy*, **2016**, 19, 187-197	17.1	124
32	Sulfur Nanogranular Film-Coated Three-Dimensional Graphene Sponge-Based High Power Lithium Sulfur Battery. *ACS Applied Materials & Interfaces*, **2016**, 8, 1984-91	9.5	60

31	Pomegranate-Inspired Design of Highly Active and Durable Bifunctional Electrocatalysts for Rechargeable Metal-Air Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 4977-82	16.4	218
30	Batteries: Gas Pickering Emulsion Templated Hollow Carbon for High Rate Performance Lithium Sulfur Batteries (Adv. Funct. Mater. 46/2016). *Advanced Functional Materials*, **2016**, 26, 8563-8563	15.6	1
29	Flexible, three-dimensional ordered macroporous TiO2 electrode with enhanced electrode□electrolyte interaction in high-power Li-ion batteries. *Nano Energy*, **2016**, 24, 72-77	17.1	71
28	Structural and chemical synergistic encapsulation of polysulfides enables ultralong-life lithium□sulfur batteries. *Energy and Environmental Science*, **2016**, 9, 2533-2538	35.4	300
27	Flexible high performance lithium ion battery electrode based on a free-standing TiO2 nanocrystals/carbon cloth composite. *RSC Advances*, **2016**, 6, 35479-35485	3.7	11
26	Highly Oriented Graphene Sponge Electrode for Ultra High Energy Density Lithium Ion Hybrid Capacitors. *ACS Applied Materials & Interfaces*, **2016**, 8, 25297-305	9.5	50
25	□NiS grown on reduced graphene oxide and single-wall carbon nanotubes as electrode materials for high-power supercapacitors. *RSC Advances*, **2015**, 5, 27940-27945	3.7	19
24	Fast lithium-ion storage of Nb2O5 nanocrystals in situ grown on carbon nanotubes for high-performance asymmetric supercapacitors. *RSC Advances*, **2015**, 5, 41179-41185	3.7	46
23	Evidence of covalent synergy in silicon-sulfur-graphene yielding highly efficient and long-life lithium-ion batteries. *Nature Communications*, **2015**, 6, 8597	17.4	133
22	Highly Active and Durable Nanocrystal-Decorated Bifunctional Electrocatalyst for Rechargeable Zinc-Air Batteries. *ChemSusChem*, **2015**, 8, 3129-38	8.3	51
21	Building sponge-like robust architectures of CNT□graphene□Si composites with enhanced rate and cycling performance for lithium-ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 3962-3967	13	44
20	Vanadium Pentoxide Nanorods Anchored to and Wrapped with Graphene Nanosheets for High-Power Asymmetric Supercapacitors. *ChemElectroChem*, **2015**, 2, 1264-1269	4.3	29
19	Sulfur Atoms Bridging Few-Layered MoS2 with S-Doped Graphene Enable Highly Robust Anode for Lithium-Ion Batteries. *Advanced Energy Materials*, **2015**, 5, 1501106	21.8	152
18	Sulfur covalently bonded graphene with large capacity and high rate for high-performance sodium-ion batteries anodes. *Nano Energy*, **2015**, 15, 746-754	17.1	144
17	Composites of MnO2 nanocrystals and partially graphitized hierarchically porous carbon spheres with improved rate capability for high-performance supercapacitors. *Carbon*, **2015**, 93, 258-265	10.4	47
16	Vanadium Pentoxide Nanorods Anchored to and Wrapped with Graphene Nanosheets for High-Power Asymmetric Supercapacitors. *ChemElectroChem*, **2015**, 2, 1210-1210	4.3	
15	Better lithium-ion storage materials made through hierarchical assemblies of active nanorods and nanocrystals. *Journal of Materials Chemistry A*, **2014**, 2, 17536-17544	13	12
14	3D nanocomposite architectures from carbon-nanotube-threaded nanocrystals for high-performance electrochemical energy storage. *Advanced Materials*, **2014**, 26, 339-45	24	119

13	Nb2O5-carbon core-shell nanocomposite as anode material for lithium ion battery. *Journal of Energy Chemistry*, **2013**, 22, 357-362	12	55
12	Tetragonal VNb9O24.9-based nanorods: a novel form of lithium battery anode with superior cyclability. *Journal of Materials Chemistry A*, **2013**, 1, 12409	13	25
11	Characterization of niobium and vanadium oxide nanocomposites with improved rate performance and cycling stability. *Electrochimica Acta*, **2013**, 102, 351-357	6.7	19
10	Building robust architectures of carbon and metal oxide nanocrystals toward high-performance anodes for lithium-ion batteries. *ACS Nano*, **2012**, 6, 9911-9	16.7	159
9	High-performance flexible lithium-ion electrodes based on robust network architecture. *Energy and Environmental Science*, **2012**, 5, 6845	35.4	137
8	High-performance energy-storage architectures from carbon nanotubes and nanocrystal building blocks. *Advanced Materials*, **2012**, 24, 2030-6	24	109
7	High-Performance Supercapacitors Based on Nanocomposites of Nb2O5 Nanocrystals and Carbon Nanotubes. *Advanced Energy Materials*, **2011**, 1, 1089-1093	21.8	285
6	A General Synthesis of CuInS2 Based Multicomponent Solid-Solution Nanocrystals with Tunable Band Gap, Size, and Structure. *Journal of Physical Chemistry C*, **2010**, 114, 17293-17297	3.8	53
5	Design and Synthesis of Hierarchical Nanowire Composites for Electrochemical Energy Storage. *Advanced Functional Materials*, **2009**, 19, 3420-3426	15.6	405
4	Alloyed semiconductor nanocrystals with broad tunable band gaps. *Chemical Communications*, **2009**, 4221-3	5.8	105
3	Synthesis of Quaternary Semiconductor Nanocrystals with Tunable Band Gaps. *Chemistry of Materials*, **2009**, 21, 2489-2493	9.6	98
2	Mechanism investigation of enhanced electrochemical H2O2 production performance on oxygen-rich hollow porous carbon spheres. *Nano Research*,1	10	0
1	Enhanced polysulfide regulation via honeycomb-like carbon with catalytic MoC for lithium–sulfur batteries. *Journal of Materials Chemistry A*,	13	3