

# Xiaowei Yang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

104  
papers

6,328  
citations

34  
h-index

79  
g-index

111  
ext. papers

7,199  
ext. citations

9.6  
avg, IF

6.11  
L-index

#	Paper	IF	Citations
104	Engineering sodium metal anode with sodiophilic bismuthide penetration for dendrite-free and high-rate sodium-ion battery. <i>Engineering</i> , <b>2022</b> ,	9.7	2
103	Epitaxial growth of an atom-thin layer on a LiNiMnO cathode for stable Li-ion battery cycling.. <i>Nature Communications</i> , <b>2022</b> , 13, 1565	17.4	5
102	ZIF-8 penetrating composite membrane for ion sieving. <i>Journal of Solid State Chemistry</i> , <b>2022</b> , 123281	3.3	1
101	Defect-Free Metal-Organic Framework Membrane for Precise Ion/Solvent Separation toward Highly Stable Magnesium Metal Anode. <i>Advanced Materials</i> , <b>2021</b> , e2108114	24	11
100	Low-dimensional non-metal catalysts: principles for regulating p-orbital-dominated reactivity. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	10.9	10
99	Exploiting Interfacial Cl <sup>-</sup> /ClO Redox for a 1.8-V Voltage Plateau Aqueous Electrochemical Capacitor. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 1134-1140	20.1	8
98	New boron nitride monolith phases from high-pressure compression of double-walled boron nitride nanotubes. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 134702	3.9	1
97	Toward Planar and Dendrite-Free Zn Electrodepositions by Regulating Sn-Crystal Textured Surface. <i>Advanced Materials</i> , <b>2021</b> , 33, e2008424	24	53
96	Reducing Crystallinity of Micrometer-Sized Titanium-Niobium Oxide through Cation Substitution for High-Rate Lithium Storage. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 7422-7430	8.3	1
95	Regulating adhesion of solid-electrolyte interphase to silicon via covalent bonding strategy towards high Coulombic-efficiency anodes. <i>Nano Energy</i> , <b>2021</b> , 84, 105935	17.1	4
94	Rational design of robust nano-Si/graphite nanocomposites anodes with strong interfacial adhesion for high-performance lithium-ion batteries. <i>Chinese Chemical Letters</i> , <b>2021</b> , 32, 910-913	8.1	3
93	Morphology mediation of MoS <sub>2</sub> nanosheets with organic cations for fast sodium ion storage. <i>Chinese Chemical Letters</i> , <b>2021</b> , 32, 880-884	8.1	4
92	Structural and chemical interplay between nano-active and encapsulation materials in a core-shell SnO <sub>2</sub> @MXene lithium ion anode system. <i>CrystEngComm</i> , <b>2021</b> , 23, 368-377	3.3	7
91	Proton-induced fast preparation of size-controllable MoS <sub>2</sub> nanocatalyst towards highly efficient water electrolysis. <i>Chinese Chemical Letters</i> , <b>2021</b> , 32, 1191-1196	8.1	2
90	Revisiting the degradation of solid/electrolyte interfaces of magnesium metal anodes: Decisive role of interfacial composition. <i>Nano Energy</i> , <b>2021</b> , 86, 106087	17.1	11
89	Ionic Liquid-Mediated Mass Transport Channels for Ultrahigh Rate Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 46756-46762	9.5	0
88	Three-Dimensional Magnesiophilic Scaffolds for Reduced Passivation toward High-Rate Mg Metal Anodes in a Noncorrosive Electrolyte. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 28298-28305	9.5	13

87	MBenes: emerging 2D materials as efficient electrocatalysts for the nitrogen reduction reaction. <i>Nanoscale Horizons</i> , <b>2020</b> , 5, 1106-1115	10.8	45
86	Beneficial restacking of 2D nanomaterials for electrocatalysis: a case of MoS membranes. <i>Chemical Communications</i> , <b>2020</b> , 56, 7005-7008	5.8	12
85	MXene Frameworks Promote the Growth and Stability of LiF-Rich Solid-Electrolyte Interphases on Silicon Nanoparticle Bundles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 18541-18550	9.5	18
84	2D TiCTMXene couples electrical stimulation to promote proliferation and neural differentiation of neural stem cells. <i>Acta Biomaterialia</i> , <b>2020</b> , 139, 105-105	10.8	34
83	Three dimensional frameworks of super ionic conductor for thermodynamically and dynamically favorable sodium metal anode. <i>Nano Energy</i> , <b>2020</b> , 70, 104479	17.1	20
82	Boron Nitride Nanotubes for Ammonia Synthesis: Activation by Filling Transition Metals. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 308-317	16.4	61
81	Metal-Encapsulated Boron Nitride Nanocages for Solar-Driven Nitrogen Fixation. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 23798-23806	3.8	8
80	Processing micrometer-sized particles in crumpled graphene network for freestanding membrane enabled by freeze casting. <i>Chinese Chemical Letters</i> , <b>2020</b> , 31, 265-268	8.1	4
79	Electrostatic Shielding Guides Lateral Deposition for Stable Interphase toward Reversible Magnesium Metal Anodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 19601-19606	9.5	15
78	A Porous and Interconnected Polypyrrole Film with High Conductivity and Ion Accessibility as Electrode for Flexible All-Solid-State Supercapacitors. <i>ChemElectroChem</i> , <b>2019</b> , 6, 5479-5485	4.3	4
77	High-Performance Sodium-Ion Battery Anode via Rapid Microwave Carbonization of Natural Cellulose Nanofibers with Graphene Initiator. <i>Small</i> , <b>2019</b> , 15, e1901724	11	17
76	Facile synthesis of fluorine doped single crystal Ni-rich cathode material for lithium-ion batteries. <i>Solid State Ionics</i> , <b>2019</b> , 342, 115065	3.3	28
75	Free-standing and highly conductive PEDOT nanowire films for high-performance all-solid-state supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 1323-1333	13	75
74	Integrating Fast Potential-Fringe Battery Reactions for High-Voltage Battery-Supercapacitor Hybrid Energy Storage Systems. <i>Batteries and Supercaps</i> , <b>2019</b> , 2, 766-773	5.6	7
73	Freestanding, Three-Dimensional, and Conductive MoS <sub>2</sub> Hydrogel via the Mediation of Surface Charges for High-Rate Supercapacitor. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 4458-4463	6.1	24
72	Realization of wafer-scale nanogratings with sub-50 nm period through vacancy epitaxy. <i>Nature Communications</i> , <b>2019</b> , 10, 2437	17.4	14
71	Rational Design of the Robust Janus Shell on Silicon Anodes for High-Performance Lithium-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 17375-17383	9.5	29
70	Activating Three-Dimensional Networks of Fe@Ni Nanofibers via Fast Surface Modification for Efficient Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 18342-18348	9.5	19

69	Porous amorphous NiFeOx/NiFeP framework with dual electrocatalytic functions for water electrolysis. <i>Journal of Power Sources</i> , <b>2019</b> , 428, 76-81	8.9	19
68	High-voltage bi-redox lithium-ion capacitor enabled by energizing free water in Water-in-salt <sup>+</sup> electrolyte. <i>Journal of Power Sources</i> , <b>2019</b> , 423, 331-338	8.9	11
67	Advances in the mass transport for 2D nano-catalyst: Toward superior electrocatalytic water splitting. <i>FlatChem</i> , <b>2019</b> , 14, 100087	5.1	3
66	Silicon Nanocages for Selective Carbon Dioxide Conversion under Visible Light. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 9973-9980	3.8	15
65	Enhanced electrochemical performance of the layered nickel-rich oxide cathode by KMnO <sub>4</sub> treatment precursor. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 808, 151683	5.7	11
64	Structurally Tunable Reduced Graphene Oxide Substrate Maintains Mouse Embryonic Stem Cell Pluripotency. <i>Advanced Science</i> , <b>2019</b> , 6, 1802136	13.6	23
63	Decreasing Ion-Diffusion Barrier Enables Superior Na-Ion Storage by Synergizing Hierarchical Architecture and Lattice Distortion. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 27024-27032	9.5	8
62	Boron-doped single crystal LiNi <sub>0.6</sub> Mn <sub>0.2</sub> Co <sub>0.2</sub> O <sub>2</sub> with improved electrochemical performance for lithium-ion batteries. <i>Ionics</i> , <b>2019</b> , 25, 5819-5827	2.7	19
61	Sodium-Ion Batteries: High-Performance Sodium-Ion Battery Anode via Rapid Microwave Carbonization of Natural Cellulose Nanofibers with Graphene Initiator (Small 41/2019). <i>Small</i> , <b>2019</b> , 15, 1970223	11	0
60	Correlating cycle performance improvement and structural alleviation in LiMn <sub>2-x</sub> MxO <sub>4</sub> spinel cathode materials: A systematic study on the effects of metal-ion doping. <i>Electrochimica Acta</i> , <b>2019</b> , 298, 806-817	6.7	13
59	Regulating Fast Anionic Redox for High-Voltage Aqueous Hydrogen-Ion-based Energy Storage. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 211-216	3.6	14
58	Regulating Fast Anionic Redox for High-Voltage Aqueous Hydrogen-Ion-based Energy Storage. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 205-210	16.4	37
57	MXene/reduced graphene oxide hydrogel film extraction combined with gas chromatography-tandem mass spectrometry for the determination of 16 polycyclic aromatic hydrocarbons in river and tap water. <i>Journal of Chromatography A</i> , <b>2019</b> , 1584, 24-32	4.5	15
56	Agglomeration-resistant 2D nanoflakes configured with super electronic networks for extraordinary fast and stable sodium-ion storage. <i>Nano Energy</i> , <b>2019</b> , 56, 502-511	17.1	18
55	Vertical crosslinking MoS <sub>2</sub> /three-dimensional graphene composite towards high performance supercapacitor. <i>Chinese Chemical Letters</i> , <b>2018</b> , 29, 606-611	8.1	13
54	Engineering graphene for high-performance supercapacitors: Enabling role of colloidal chemistry. <i>Journal of Energy Chemistry</i> , <b>2018</b> , 27, 1-5	12	16
53	Microwave-assisted synthesis method for rapid synthesis of tin selenide electrode material for supercapacitors. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 737, 623-629	5.7	30
52	Boosting the Sodiation Capability and Stability of FeP by In Situ Anchoring on the Graphene Conductive Framework. <i>ChemNanoMat</i> , <b>2018</b> , 4, 309-315	3.5	16

51	Microwave-assisted synthesis of honeycomblike hierarchical spherical Zn-doped Ni-MOF as a high-performance battery-type supercapacitor electrode material. <i>Electrochimica Acta</i> , <b>2018</b> , 278, 114-123	6.7	110
50	Toward Superior Capacitive Energy Storage: Recent Advances in Pore Engineering for Dense Electrodes. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705713	24	141
49	Supercapacitors. <i>Chinese Chemical Letters</i> , <b>2018</b> , 29, 551-552	8.1	3
48	Engineering Microsized Materials through Enhanced Colloidal Interactions of Graphene for Ultrahigh-Mass-Loading and Flexible Electrodes. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 2378-2384	6.1	7
47	Engineering Two-Dimensional Mass-Transport Channels of the MoS Nanocatalyst toward Improved Hydrogen Evolution Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 25409-25414	9.5	17
46	Engineering two-dimensional pores in freestanding TiO <sub>2</sub> /graphene gel film for high performance lithium ion battery. <i>Journal of Energy Chemistry</i> , <b>2018</b> , 27, 176-182	12	13
45	MXene nanoribbons as electrocatalysts for the hydrogen evolution reaction with fast kinetics. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 19390-19397	3.6	53
44	Design of a multilayer-based collimated plane-grating monochromator for tender X-ray range. <i>Journal of Synchrotron Radiation</i> , <b>2017</b> , 24, 168-174	2.4	9
43	Solution-processed two-dimensional layered heterostructure thin-film with optimized thermoelectric performance. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 17560-17567	3.6	26
42	Amorphous Metallic NiFeP: A Conductive Bulk Material Achieving High Activity for Oxygen Evolution Reaction in Both Alkaline and Acidic Media. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606570	24	320
41	Effectively incorporating iron, nitrogen, and sulfur functionalities on carbon surface for a superior electrocatalyst toward oxygen reduction reaction. <i>Electrochemistry Communications</i> , <b>2017</b> , 81, 34-37	5.1	19
40	Facile Synthesis of a MoS and Functionalized Graphene Heterostructure for Enhanced Lithium-Storage Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 12907-12913	9.5	48
39	High-Performance and Breathable Polypyrrole Coated Air-Laid Paper for Flexible All-Solid-State Supercapacitors. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1701247	21.8	129
38	In Situ Growth of Polypyrrole onto Three-Dimensional Tubular MoS <sub>2</sub> as an Advanced Negative Electrode Material for Supercapacitor. <i>Electrochimica Acta</i> , <b>2017</b> , 246, 615-624	6.7	83
37	Intrinsic factors attenuate the performance of anhydride organic cathode materials of lithium battery. <i>Journal of Electroanalytical Chemistry</i> , <b>2016</b> , 773, 22-26	4.1	8
36	Accelerating bioelectric functional development of neural stem cells by graphene coupling: Implications for neural interfacing with conductive materials. <i>Biomaterials</i> , <b>2016</b> , 106, 193-204	15.6	91
35	Integrating in situ solvothermal approach synthesized nanostructured tin anchored on graphene sheets into film anodes for sodium-ion batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 196, 572-578	6.7	25
34	A dual-spatially-confined reservoir by packing micropores within dense graphene for long-life lithium/sulfur batteries. <i>Nanoscale</i> , <b>2016</b> , 8, 2395-402	7.7	40

33	High-Rate and High-Volumetric Capacitance of Compact Graphene/Polyaniline Hydrogel Electrodes. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600185	21.8	79
32	Sustained Delivery Growth Factors with Polyethyleneimine-Modified Nanoparticles Promote Embryonic Stem Cells Differentiation and Liver Regeneration. <i>Advanced Science</i> , <b>2016</b> , 3, 1500393	13.6	21
31	An experimental insight into the advantages of in situ solvothermal route to construct 3D graphene-based anode materials for lithium-ion batteries. <i>Nano Energy</i> , <b>2015</b> , 16, 235-246	17.1	56
30	Fabrication of mesoporous Li <sub>2</sub> S-C nanofibers for high performance Li/Li <sub>2</sub> S cell cathodes. <i>Nanoscale</i> , <b>2015</b> , 7, 9472-6	7.7	38
29	Vertically Aligned Carbon Nanotubes on Carbon Nanofibers: A Hierarchical Three-Dimensional Carbon Nanostructure for High-Energy Flexible Supercapacitors. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 1194-1200	9.6	96
28	Dense integration of graphene and sulfur through the soft approach for compact lithium/sulfur battery cathode. <i>Nano Energy</i> , <b>2015</b> , 12, 468-475	17.1	135
27	Three-dimensional metal/oxide nanocone arrays for high-performance electrochemical pseudocapacitors. <i>Nanoscale</i> , <b>2014</b> , 6, 3626-31	7.7	50
26	Polyaniline-modified cetyltrimethylammonium bromide-graphene oxide-sulfur nanocomposites with enhanced performance for lithium-sulfur batteries. <i>Nano Research</i> , <b>2014</b> , 7, 1355-1363	10	58
25	Reversal effect of low-intensity ultrasound on adriamycin-resistant human hepatoma cells in vitro and in vivo. <i>International Journal of Imaging Systems and Technology</i> , <b>2014</b> , 24, 23-28	2.5	3
24	Dynamic electrosorption analysis: a viable liquid-phase characterization method for porous carbon?. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 9332	13	8
23	Dynamic electrosorption analysis as an effective means to characterise the structure of bulk graphene assemblies. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 3082-9	4.8	16
22	Liquid-mediated dense integration of graphene materials for compact capacitive energy storage. <i>Science</i> , <b>2013</b> , 341, 534-7	33.3	1473
21	Facile Spray Drying Route for the Three-Dimensional Graphene-Encapsulated Fe <sub>2</sub> O <sub>3</sub> Nanoparticles for Lithium Ion Battery Anodes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2013</b> , 52, 1197-1204	3.9	105
20	Poly(E-caprolactone)-based copolymers bearing pendant cyclic ketals and reactive acrylates for the fabrication of photocrosslinked elastomers. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 8232-44	10.8	16
19	Revisiting the capacitance of polyaniline by using graphene hydrogel films as a substrate: the importance of nano-architecturing. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 477-481	35.4	178
18	Multilayered graphene membrane as an experimental platform to probe nano-confined electrosorption. <i>Progress in Natural Science: Materials International</i> , <b>2012</b> , 22, 668-672	3.6	9
17	A novel Co(phen) <sub>2</sub> /C catalyst for the oxygen electrode in rechargeable lithium air batteries. <i>Science Bulletin</i> , <b>2012</b> , 57, 1959-1963		13
16	A novel bath lily-like graphene sheet-wrapped nano-Si composite as a high performance anode material for Li-ion batteries. <i>RSC Advances</i> , <b>2011</b> , 1, 958	3.7	78

15	High voltage supercapacitors using hydrated graphene film in a neutral aqueous electrolyte. <i>Electrochemistry Communications</i> , <b>2011</b> , 13, 1166-1169	5.1	61
14	Bioinspired effective prevention of restacking in multilayered graphene films: towards the next generation of high-performance supercapacitors. <i>Advanced Materials</i> , <b>2011</b> , 23, 2833-8	24	888
13	Ordered Gelation of Chemically Converted Graphene for Next-Generation Electroconductive Hydrogel Films. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 7463-7466	3.6	21
12	Ordered gelation of chemically converted graphene for next-generation electroconductive hydrogel films. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 7325-8	16.4	260
11	Dispersing carbon nanotubes with graphene oxide in water and synergistic effects between graphene derivatives. <i>Chemistry - A European Journal</i> , <b>2010</b> , 16, 10653-8	4.8	327
10	A Co(OH) <sub>2</sub> /graphene nanosheets composite as a high performance anode material for rechargeable lithium batteries. <i>Electrochemistry Communications</i> , <b>2010</b> , 12, 570-573	5.1	129
9	Monodisperse carbon microspheres synthesized from asphaltene. <i>Materials Chemistry and Physics</i> , <b>2009</b> , 113, 821-823	4.4	14
8	Tribological property of onion-like fullerenes as lubricant additive. <i>Materials Letters</i> , <b>2008</b> , 62, 2524-2527	3.3	53
7	Electrocatalytic properties of platinum on hard carbon spherules derived from deoiled asphalt for methanol oxidation. <i>Catalysis Today</i> , <b>2007</b> , 125, 169-172	5.3	6
6	Structure of nanocarbons prepared by arc discharge in water. <i>Materials Chemistry and Physics</i> , <b>2007</b> , 105, 175-178	4.4	35
5	Study on Characterizations and Growth Mechanism of Pt/Onion-like Fullerenes Catalyst. <i>Acta Physico-chimica Sinica</i> , <b>2006</b> , 22, 967-971		3
4	Pt/onion-like fullerenes as catalyst for direct methanol fuel cell. <i>Rare Metals</i> , <b>2006</b> , 25, 305-308	5.5	19
3	A novel catalyst support for DMFC: Onion-like fullerenes. <i>Journal of Power Sources</i> , <b>2006</b> , 162, 160-164	8.9	61
2	Hydrothermal modification of natural graphite as an anode material for lithium secondary batteries. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2006</b> , 128, 11-15	3.1	13
1	Lithium/Sulfur Batteries Based on Carbon Nanomaterials	365-384	