Yunzhi Gao

List of Publications by Year in Descending Order

68 papers	2,344 citations	29 h-index	47 g-index
69 ext. papers	2,911 ext. citations	10.1 avg, IF	5.19 L-index

#	Paper	IF	Citations
68	Regulating Li deposition by constructing homogeneous LiF protective layer for high-performance Li metal anode. *Chemical Engineering Journal*, **2022**, 427, 131625	14.7	6
67	Poly (vinyl ethylene carbonate)-based dual-salt gel polymer electrolyte enabling high voltage lithium metal batteries. *Chemical Engineering Journal*, **2022**, 437, 135419	14.7	1
66	Achieving high-energy-density magnesium/sulfur battery via a passivation-free Mg-Li alloy anode. *Energy Storage Materials*, **2022**, 50, 380-386	19.4	0
65	Stable lithium anode enabled by biphasic hybrid SEI layer toward high-performance lithium metal batteries. *Chemical Engineering Journal*, **2021**, 433, 133570	14.7	1
64	Interface Reinforcement of a Prussian Blue Cathode Using a Non-Flammable Co-Solvent Cresyl Diphenyl Phosphate for a High-Safety Na-Ion Battery. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 5809-5817	8.3	3
63	Formation of an Artificial Mg-Permeable Interphase on Mg Anodes Compatible with Ether and Carbonate Electrolytes. *ACS Applied Materials & Interfaces*, **2021**, 13, 24565-24574	9.5	7
62	Stabilizing Lithium Metal Anode Enabled by a Natural Polymer Layer for Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 28252-28260	9.5	6
61	In-situ thermal polymerization boosts succinonitrile-based composite solid-state electrolyte for high performance Li-metal battery. *Journal of Power Sources*, **2021**, 496, 229861	8.9	11
60	Deactivated Pt Electrocatalysts for the Oxygen Reduction Reaction: The Regeneration Mechanism and a Regenerative Protocol. *ACS Catalysis*, **2021**, 11, 9293-9299	13.1	2
59	Interface Issues and Challenges in All-Solid-State Batteries: Lithium, Sodium, and Beyond. *Advanced Materials*, **2021**, 33, e2000721	24	84
58	An armor-like artificial solid electrolyte interphase layer for high performance lithium-sulfur batteries. *Applied Materials Today*, **2021**, 24, 101108	6.6	2
57	Monovacancy Coupled Pyridinic N Site Enables Surging Oxygen Reduction Activity of Metal-Free CNx Catalyst. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 1264-1271	8.3	2
56	Interrelated interfacial issues between a Li7La3Zr2O12-based garnet electrolyte and Li anode in the solid-state lithium battery: a review. *Journal of Materials Chemistry A*, **2021**, 9, 5952-5979	13	15
55	Polyvinylpyrrolidone-Coordinated Single-Site Platinum Catalyst Exhibits High Activity for Hydrogen Evolution Reaction. *Angewandte Chemie - International Edition*, **2020**, 59, 15902-15907	16.4	38
54	Polyvinylpyrrolidone-Coordinated Single-Site Platinum Catalyst Exhibits High Activity for Hydrogen Evolution Reaction. *Angewandte Chemie*, **2020**, 132, 16036-16041	3.6	7
53	Constructing an inorganic/organic mixed protective film for low-cost fabrication of stable lithium metal anode. *Journal of Alloys and Compounds*, **2020**, 818, 152862	5.7	6
52	A novel MoS2@C framework architecture composites with three-dimensional cross-linked porous carbon supporting MoS2 nanosheets for sodium storage. *Journal of Alloys and Compounds*, **2020**, 818, 152821	5.7	22

51	A dual-salt coupled fluoroethylene carbonate succinonitrile-based electrolyte enables Li-metal batteries. *Journal of Materials Chemistry A*, **2020**, 8, 2066-2073	13	35
50	Unraveling the Relationship between Ti4+ Doping and Li+ Mobility Enhancement in Ti4+ Doped Li3V2(PO4)3. *ACS Applied Energy Materials*, **2020**, 3, 715-722	6.1	6
49	Capacity degradation mechanism and improvement actions for 4 V-class all-solid-state lithium-metal polymer batteries. *Chemical Engineering Journal*, **2020**, 392, 123665	14.7	22
48	Sulfur Dioxide-Tolerant Bimetallic PtRu Catalyst toward Oxygen Electroreduction. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1295-1301	8.3	10
47	The stable cycling of a high-capacity Bi anode enabled by an in situ-generated LiPO transition layer in a sulfide-based all-solid-state battery. *Chemical Communications*, **2020**, 56, 15458-15461	5.8	4
46	Synergistic engineering of defects and architecture in Co3O4@C nanosheets toward Li/Na ion batteries with enhanced pseudocapacitances. *Nano Energy*, **2020**, 78, 105366	17.1	53
45	Black phosphorus-modified sulfurized polyacrylonitrile with high C-rate and cycling performance in ether-based electrolyte for lithium sulfur batteries. *Chemical Communications*, **2020**, 56, 12797-12800	5.8	11
44	Solvate ionic liquid boosting favorable interfaces kinetics to achieve the excellent performance of Li4Ti5O12 anodes in Li10GeP2S12 based solid-state batteries. *Chemical Engineering Journal*, **2020**, 382, 123046	14.7	5
43	High loading single-atom Cu dispersed on graphene for efficient oxygen reduction reaction. *Nano Energy*, **2019**, 66, 104088	17.1	88
42	Direct dimethyl ether fuel cells with low platinum-group-metal loading at anode: Investigations of operating temperatures and anode Pt/Ru ratios. *Journal of Power Sources*, **2019**, 433, 126690	8.9	9
41	Scalable mesoporous silicon microparticles composed of interconnected nanoplates for superior lithium storage. *Chemical Engineering Journal*, **2019**, 375, 121923	14.7	21
40	Achieving long-life Prussian blue analogue cathode for Na-ion batteries via triple-cation lattice substitution and coordinated water capture. *Nano Energy*, **2019**, 61, 201-210	17.1	63
39	Amorphous carbon-encapsulated Si nanoparticles loading on MCMB with sandwich structure for lithium ion batteries. *Electrochimica Acta*, **2019**, 306, 590-598	6.7	31
38	Synthesis of Well-Defined Pt-Based Catalysts for Methanol Oxidation Reaction Based on Electron□Hole Separation Effects. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 8597-8603	8.3	6
37	Scalable submicron/micron silicon particles stabilized in a robust graphite-carbon architecture for enhanced lithium storage. *Journal of Colloid and Interface Science*, **2019**, 555, 783-790	9.3	13
36	Unraveling the Origins of the □Unreactive Core□in Conversion Electrodes to Trigger High Sodium-Ion Electrochemistry. *ACS Energy Letters*, **2019**, 4, 2007-2012	20.1	25
35	Engineering of Nitrogen Coordinated Single Cobalt Atom Moieties for Oxygen Electroreduction. *ACS Applied Materials & Interfaces*, **2019**, 11, 41258-41266	9.5	32
34	Layer-by-Layer Engineered Silicon-Based Sandwich Nanomat as Flexible Anode for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 39970-39978	9.5	17

33	A quasi-solid-state Li□ battery with high energy density, superior stability and safety. *Journal of Materials Chemistry A*, **2019**, 7, 6533-6542	13	24
32	Pt decorated Ti3C2 MXene for enhanced methanol oxidation reaction. *Ceramics International*, **2019**, 45, 2411-2417	5.1	38
31	A three-dimensional silicon/nitrogen-doped graphitized carbon composite as high-performance anode material for lithium ion batteries. *Journal of Alloys and Compounds*, **2019**, 777, 190-197	5.7	40
30	ZIF-8 with Ferrocene Encapsulated: A Promising Precursor to Single-Atom Fe Embedded Nitrogen-Doped Carbon as Highly Efficient Catalyst for Oxygen Electroreduction. *Small*, **2018**, 14, e1704282	11	148
29	Enhanced electrochemical performance of Li4Ti5O12 through in-situ coating 70Li2S-30P2S5 solid electrolyte for all-solid-state lithium batteries. *Journal of Alloys and Compounds*, **2018**, 752, 8-13	5.7	17
28	Unravelling the Enhanced High-Temperature Performance of Lithium-Rich Oxide Cathode with Methyl Diphenylphosphinite as Electrolyte Additive. *ChemElectroChem*, **2018**, 5, 1569-1575	4.3	26
27	Polyaniline-encapsulated silicon on three-dimensional carbon nanotubes foam with enhanced electrochemical performance for lithium-ion batteries. *Journal of Power Sources*, **2018**, 381, 156-163	8.9	60
26	A two-dimensional nitrogen-rich carbon/silicon composite as high performance anode material for lithium ion batteries. *Chemical Engineering Journal*, **2018**, 341, 37-46	14.7	66
25	Enabling reliable lithium metal batteries by a bifunctional anionic electrolyte additive. *Energy Storage Materials*, **2018**, 11, 197-204	19.4	82
24	Iron sulfide/carbon hybrid cluster as an anode for potassium-ion storage. *Journal of Alloys and Compounds*, **2018**, 766, 1086-1091	5.7	39
23	Free-Standing Sandwich-Type Graphene/Nanocellulose/Silicon Laminar Anode for Flexible Rechargeable Lithium Ion Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 29638-29646	9.5	48
22	Superior performance of ordered macroporous TiNb2O7 anodes for lithium ion batteries: Understanding from the structural and pseudocapacitive insights on achieving high rate capability. *Nano Energy*, **2017**, 34, 15-25	17.1	264
21	Improved electrochemical performance of micro-sized SiO-based composite anode by prelithiation of stabilized lithium metal powder. *Journal of Power Sources*, **2017**, 347, 170-177	8.9	91
20	Facilitating the redox reaction of polysulfides by an electrocatalytic layer-modified separator for lithium□sulfur batteries. *Journal of Materials Chemistry A*, **2017**, 5, 10936-10945	13	65
19	Improved high-voltage performance of LiNi1/3Co1/3Mn1/3O2 cathode with Tris(2,2,2-trifluoroethyl) phosphite as electrolyte additive. *Electrochimica Acta*, **2017**, 243, 72-81	6.7	22
18	Two isomorphous coordination polymer-derived metal oxides as high-performance anodes for lithium-ion batteries. *New Journal of Chemistry*, **2017**, 41, 6187-6194	3.6	9
17	1,3,6-Hexanetricarbonitrile as electrolyte additive for enhancing electrochemical performance of high voltage Li-rich layered oxide cathode. *Journal of Power Sources*, **2017**, 361, 227-236	8.9	47
16	Clew-like N-doped multiwalled carbon nanotube aggregates derived from metal-organic complexes for lithium-sulfur batteries. *Carbon*, **2017**, 122, 635-642	10.4	33

15	High-rate capability of three-dimensionally ordered macroporous T-Nb2O5 through Li+ intercalation pseudocapacitance. *Journal of Power Sources*, **2017**, 361, 80-86	8.9	106
14	Triphenyl phosphite as an electrolyte additive to improve the cyclic stability of lithium-rich layered oxide cathode for lithium-ion batteries. *Electrochimica Acta*, **2016**, 216, 44-50	6.7	27
13	A review of applications of poly(diallyldimethyl ammonium chloride) in polymer membrane fuel cells: From nanoparticles to support materials. *Chinese Journal of Catalysis*, **2016**, 37, 1025-1036	11.3	10
12	Oxygen Reduction Kinetics on Pt Monolayer Shell Highly Affected by the Structure of Bimetallic AuNi Cores. *Chemistry of Materials*, **2016**, 28, 5274-5281	9.6	38
11	Synthesis of Nitrogen-doped Niobium Dioxide and its co-catalytic effect towards the electrocatalysis of oxygen reduction on platinum. *Electrochimica Acta*, **2016**, 195, 166-174	6.7	11
10	Facile synthesis of nanostructured TiNb2O7 anode materials with superior performance for high-rate lithium ion batteries. *Chemical Communications*, **2015**, 51, 17293-6	5.8	96
9	Improved electrochemical performance and capacity fading mechanism of nano-sized LiMn0.9Fe0.1PO4 cathode modified by polyacene coating. *Journal of Materials Chemistry A*, **2015**, 3, 1569-1579	13	55
8	Lithium deposition on graphite anode during long-term cycles and the effect on capacity loss. *RSC Advances*, **2014**, 4, 26335-26341	3.7	29
7	Polyelectrolyte assisted synthesis and enhanced oxygen reduction activity of Pt nanocrystals with controllable shape and size. *ACS Applied Materials & Interfaces*, **2014**, 6, 14043-9	9.5	43
6	An Li-rich oxide cathode material with mosaic spinel grain and a surface coating for high performance Li-ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 15640	13	65
5	Lithium compound deposition on mesocarbon microbead anode of lithium ion batteries after long-term cycling. *ACS Applied Materials & Interfaces*, **2014**, 6, 12962-70	9.5	26
4	Changing of SEI Film and Electrochemical Properties about MCMB Electrodes during Long-Term Charge/Discharge Cycles. *Journal of the Electrochemical Society*, **2013**, 160, A2093-A2099	3.9	36
3	Comparative Investigation of Dimethyl Ether Gas and Solution as Fuel under Direct Fuel Cells. *Electrochemical and Solid-State Letters*, **2008**, 11, B205		6
2	Investigation of a novel MEA for direct dimethyl ether fuel cell. *Electrochemistry Communications*, **2008**, 10, 238-241	5.1	12
1	Deactivation and regeneration of a benchmark Pt/C catalyst toward oxygen reduction reaction in the presence of poisonous SO2 and NO. *Catalysis Science and Technology*,	5.5	1