Hong-Gang Liao

List of Publications by Citations

67	4,110	28	64
papers	citations	h-index	g-index
76	4,890	11.9	5.61
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
67	Real-time imaging of Pt3Fe nanorod growth in solution. *Science*, **2012**, 336, 1011-4	33.3	563
66	Nanoparticle growth. Facet development during platinum nanocube growth. *Science*, **2014**, 345, 916-9	33.3	347
65	Graphene Decorated with PtAu Alloy Nanoparticles: Facile Synthesis and Promising Application for Formic Acid Oxidation. *Chemistry of Materials*, **2011**, 23, 1079-1081	9.6	342
64	Shape-controlled synthesis of gold nanoparticles in deep eutectic solvents for studies of structure-functionality relationships in electrocatalysis. *Angewandte Chemie - International Edition*, **2008**, 47, 9100-3	16.4	300
63	Polyelectrolyte-induced reduction of exfoliated graphite oxide: a facile route to synthesis of soluble graphene nanosheets. *ACS Nano*, **2011**, 5, 1785-91	16.7	274
62	Visualization of electrode-electrolyte interfaces in LiPF6/EC/DEC electrolyte for lithium ion batteries via in situ TEM. *Nano Letters*, **2014**, 14, 1745-50	11.5	252
61	Durable carbon-coated Li2(S) core-shell spheres for high performance lithium/sulfur cells. *Journal of the American Chemical Society*, **2014**, 136, 4659-63	16.4	228
60	A Gigantic Molecular Wheel of {Gd}: A New Member of the Molecular Wheel Family. *Journal of the American Chemical Society*, **2017**, 139, 18178-18181	16.4	144
59	Observation of growth of metal nanoparticles. *Chemical Communications*, **2013**, 49, 11720-7	5.8	113
58	Carbon nanofiber□sulfur composite cathode materials with different binders for secondary Li/S cells. *Electrochimica Acta*, **2012**, 65, 228-233	6.7	105
57	Liquid cell transmission electron microscopy study of platinum iron nanocrystal growth and shape evolution. *Journal of the American Chemical Society*, **2013**, 135, 5038-43	16.4	96
56	Graphitized porous carbon materials with high sulfur loading for lithium-sulfur batteries. *Nano Energy*, **2017**, 32, 503-510	17.1	95
55	Electrochemically shape-controlled synthesis of trapezohedral platinum nanocrystals with high electrocatalytic activity. *Chemical Communications*, **2012**, 48, 9531-3	5.8	87
54	Liquid Cell Transmission Electron Microscopy. *Annual Review of Physical Chemistry*, **2016**, 67, 719-47	15.7	86
53	Shape-Controlled Synthesis of Gold Nanoparticles in Deep Eutectic Solvents for Studies of Structure□unctionality Relationships in Electrocatalysis. *Angewandte Chemie*, **2008**, 120, 9240-9243	3.6	85
52	Tuning Pt-skin to Ni-rich surface of Pt3Ni catalysts supported on porous carbon for enhanced oxygen reduction reaction and formic electro-oxidation. *Nano Energy*, **2016**, 19, 198-209	17.1	83
51	Screw-like PdPt nanowires as highly efficient electrocatalysts for methanol and ethylene glycol oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 2327-2336	13	71

50	Structural and morphological evolution of lead dendrites during electrochemical migration. *Scientific Reports*, **2013**, 3, 3227	4.9	69
49	An Open-Structured Matrix as Oxygen Cathode with High Catalytic Activity and Large Li2O2 Accommodations for Lithium–Oxygen Batteries. *Advanced Energy Materials*, **2018**, 8, 1800089	21.8	68
48	Tracking Nanoparticle Diffusion and Interaction during Self-Assembly in a Liquid Cell. *Nano Letters*, **2017**, 17, 15-20	11.5	65
47	Platinum–Cobalt Bimetallic Nanoparticles with Pt Skin for Electro-Oxidation of Ethanol. *ACS Catalysis*, **2017**, 7, 892-895	13.1	63
46	Synthesis of u-channelled spherical Fe(CoNi) Janus colloidal particles with excellent electromagnetic wave absorption performance. *Nanoscale*, **2018**, 10, 1930-1938	7.7	49
45	Visualization of the coalescence of bismuth nanoparticles. *Microscopy and Microanalysis*, **2014**, 20, 416-24	4.5	47
44	Ultrasmall Abundant Metal-Based Clusters as Oxygen-Evolving Catalysts. *Journal of the American Chemical Society*, **2019**, 141, 232-239	16.4	41
43	Observation of materials processes in liquids by electron microscopy. *MRS Bulletin*, **2015**, 40, 46-52	3.2	35
42	A novel strategy for synthesizing Fe, N, and S tridoped graphene-supported Pt nanodendrites toward highly efficient methanol oxidation. *Journal of Catalysis*, **2020**, 381, 275-284	7.3	33
41	Highly efficient Co3O4/Co@NCs bifunctional oxygen electrocatalysts for long life rechargeable Zn-air batteries. *Nano Energy*, **2020**, 77, 105200	17.1	30
40	High selectivity PtRh/RGO catalysts for ethanol electro-oxidation at low potentials: Enhancing the efficiency of CO2 from alcoholic groups. *Electrochimica Acta*, **2018**, 292, 208-216	6.7	29
39	Biomimetic micro cell cathode for high performance lithium–sulfur batteries. *Nano Energy*, **2020**, 72, 104680	17.1	25
38	Machine-Learning-Guided Morphology Engineering of Nanoscale Metal-Organic Frameworks. *Matter*, **2020**, 2, 1651-1666	12.7	21
37	A Carbon Foam with Sodiophilic Surface for Highly Reversible, Ultra-Long Cycle Sodium Metal Anode. *Advanced Science*, **2021**, 8, 2003178	13.6	17
36	Direct Electrochemistry and Electrocatalysis of Myoglobin Immobilized on Graphene-CTAB-Ionic Liquid Nanocomposite Film. *Electroanalysis*, **2010**, 22, 2297-2302	3	16
35	Engineering of Amorphous PtOx Interface on Pt/WO3 Nanosheets for Ethanol Oxidation Electrocatalysis. *Advanced Functional Materials*, **2021**, 31, 2100982	15.6	15
34	In-situ Multimodal Imaging and Spectroscopy of Mg Electrodeposition at Electrode-Electrolyte Interfaces. *Scientific Reports*, **2017**, 7, 42527	4.9	14
33	TEM study of fivefold twined gold nanocrystal formation mechanism. *Materials Letters*, **2014**, 116, 299-303	3	14

32	A "Biconcave-Alleviated" Strategy to Construct -Derived Carbon/MoS for Ultrastable Sodium Ion Storage. *ACS Nano*, **2021**,	16.7	14
31	Effect of Atomic Ordering Transformation of PtNi Nanoparticles on Alkaline Hydrogen Evolution: Unexpected Superior Activity of the Disordered Phase. *Journal of Physical Chemistry C*, **2020**, 124, 5036-5045	3.8	13
30	In Situ TEM Study of the Degradation of PbSe Nanocrystals in Air. *Chemistry of Materials*, **2019**, 31, 190-198	9.6	13
29	Synergistic effects of carbon doping and coating of TiO2 with exceptional photocurrent enhancement for high performance H2 production from water splitting. *Journal of Energy Chemistry*, **2021**, 56, 141-151	12	12
28	Shape Evolution of Platinum Nanocrystals by Electrochemistry. *Electrochimica Acta*, **2014**, 140, 345-351	6.7	11
27	Visualizing light-induced dynamic structural transformations of Au clusters-based photocatalyst via in situ TEM. *Nano Research*, **2021**, 14, 2805-2809	10	11
26	Sulfur Microspheres Encapsulated in Porous Silver-Based Shell with Superior Performance for Lithium-Sulfur Batteries. *ChemElectroChem*, **2018**, 5, 1683-1690	4.3	9
25	Reshaping the Cathodic Catalyst Layer for Anion Exchange Membrane Fuel Cells: From Heterogeneous Catalysis to Homogeneous Catalysis. *Angewandte Chemie - International Edition*, **2021**, 60, 4049-4054	16.4	9
24	Creating Fluorine-Doped MoS Edge Electrodes with Enhanced Hydrogen Evolution Activity.. *Small Methods*, **2021**, 5, e2100612	12.8	9
23	Tracking the atomic pathways of Pt3Ni-Ni(OH)2 core-shell structures at the gas-liquid interface by in-situ liquid cell TEM. *Science China Chemistry*, **2020**, 63, 513-518	7.9	8
22	Real time imaging of photocatalytic active site formation during H2 evolution by in-situ TEM. *Applied Catalysis B: Environmental*, **2021**, 284, 119743	21.8	8
21	Atomically Isolated Rh Sites within Highly Branched Rh Sb Nanostructures Enhance Bifunctional Hydrogen Electrocatalysis. *Advanced Materials*, **2021**, 33, e2105049	24	8
20	Preparation of carbon-coated magnetic nanocomposites under inert atmosphere and at low temperature. *Materials and Design*, **2017**, 114, 25-30	8.1	7
19	Revealing dynamic processes of materials in liquids using liquid cell transmission electron microscopy. *Journal of Visualized Experiments*, **2012**,	1.6	6
18	Probing surface structure on two-dimensional metal-organic layers to understand suppressed interlayer packing. *Nano Research*, **2020**, 13, 3151-3156	10	6
17	Reconstruction of Ultrahigh-Aspect-Ratio Crystalline Bismuth□Organic Hybrid Nanobelts for Selective Electrocatalytic CO 2 Reduction to Formate. *Advanced Functional Materials*,2201125	15.6	6
16	Enhancing electrocatalytic nitrogen reduction to ammonia with rare earths (La, Y, and Sc) on high-index faceted platinum alloy concave nanocubes. *Journal of Materials Chemistry A*, **2021**, 9, 26277-26285	13	4
15	In-situ liquid cell TEM investigation on assembly and symmetry transformation of Pt superlattice. *Science China Materials*, **2020**, 63, 602-610	7.1	4

14	Shaping and Edge Engineering of Few-Layered Freestanding Graphene Sheets in a Transmission Electron Microscope. *Nano Letters*, **2020**, 20, 2279-2287	11.5	3
13	Microstrain Engineered NixS2/PtNi Porous Nanowires for Boosting Hydrogen Evolution Activity. *Energy & Fuels*, **2021**, 35, 6928-6934	4.1	3
12	CeO -supported monodispersed MoO3 clusters for high-efficiency electrochemical nitrogen reduction under ambient condition. *Journal of Energy Chemistry*, **2021**, 56, 186-192	12	3
11	Atomic Scale Tracking of Single Layer Oxide Formation: Self-Peeling and Phase Transition in Solution.. *Small Methods*, **2021**, 5, e2001234	12.8	2
10	The Effect of Pretreatment on the Reactivity of Pd/Al2O3 in Room Temperature Formaldehyde Oxidation. *ChemCatChem*, **2021**, 13, 4133	5.2	2
9	Nanostructure Growth, Interactions, and Assembly in the Liquid Phase191-209		1
8	Special IR properties of palladium nanoparticles and their aggregations in CO molecular probe infrared spectroscopy. *Science Bulletin*, **2004**, 49, 1581-1585		0
7	Efficient CO2 reduction MOFs derivatives transformation mechanism revealed by in-situ liquid phase TEM. *Applied Catalysis B: Environmental*, **2022**, 307, 121164	21.8	0
6	Reshaping the Cathodic Catalyst Layer for Anion Exchange Membrane Fuel Cells: From Heterogeneous Catalysis to Homogeneous Catalysis. *Angewandte Chemie*, **2021**, 133, 4095-4100	3.6	0
5	Advanced Electron Energy Loss Spectroscopy for Battery Studies. *Advanced Functional Materials*,2107190	15.6	0
4	Imaging of Pt3Fe Nanwire Growth in Liquids by In situ TEM. *Microscopy and Microanalysis*, **2012**, 18, 1092-1093	3	
3	Special IR properties of palla-dium nanoparticles and their aggregations in CO molecular probe infrared spectroscopy. *Science Bulletin*, **2004**, 49, 1581		
2	Observations of Dense Liquid Phase-Assisted Nanocrystal Growth and Coalescence. *Crystal Growth and Design*,	3.5	
1	Liquid Cell TEM Study of Nanoparticle Diffusion and Interaction in Liquids. *Microscopy and Microanalysis*, **2016**, 22, 742-743	0.5	