Li Tao

List of Publications by Year in Descending Order

67 papers	6,897 citations	42 h-index	70 g-index
70 ext. papers	8,808 ext. citations	12.5 avg, IF	6.34 L-index

#	Paper	IF	Citations
67	Combined anodic and cathodic hydrogen production from aldehyde oxidation and hydrogen evolution reaction. *Nature Catalysis*, **2022**, 5, 66-73	36.5	29
66	Transform electrocatalytic biomass upgrading and hydrogen production from electricity input to electricity output.. *Angewandte Chemie - International Edition*, **2021**, e202115636	16.4	7
65	Tailoring lattice strain in ultra-fine high-entropy alloys for active and stable methanol oxidation. *Science China Materials*, **2021**, 64, 2454-2466	7.1	9
64	Defect-Rich High-Entropy Oxide Nanosheets for Efficient 5-Hydroxymethylfurfural Electrooxidation. *Angewandte Chemie*, **2021**, 133, 20415-20420	3.6	5
63	Unveiling the Electrooxidation of Urea: Intramolecular Coupling of the N□N Bond. *Angewandte Chemie*, **2021**, 133, 7373-7383	3.6	13
62	Unveiling the Electrooxidation of Urea: Intramolecular Coupling of the N-N Bond. *Angewandte Chemie - International Edition*, **2021**, 60, 7297-7307	16.4	49
61	Defect-Rich High-Entropy Oxide Nanosheets for Efficient 5-Hydroxymethylfurfural Electrooxidation. *Angewandte Chemie - International Edition*, **2021**, 60, 20253-20258	16.4	21
60	Coupling Glucose-Assisted Cu(I)/Cu(II) Redox with Electrochemical Hydrogen Production. *Advanced Materials*, **2021**, 33, e2104791	24	15
59	Atomically Dispersed Fe on Nanosheet-linked, Defect-rich, Highly N-Doped 3D Porous Carbon for Efficient Oxygen Reduction. *Chemical Research in Chinese Universities*, **2020**, 36, 453-458	2.2	8
58	Identification of the Dynamic Behavior of Oxygen Vacancy-Rich CoO for Oxygen Evolution Reaction. *Journal of the American Chemical Society*, **2020**, 142, 12087-12095	16.4	279
57	Coupling N and CO in HO to synthesize urea under ambient conditions. *Nature Chemistry*, **2020**, 12, 717-724	17.6	146
56	Defect Engineering for Fuel-Cell Electrocatalysts. *Advanced Materials*, **2020**, 32, e1907879	24	170
55	Advanced Exfoliation Strategies for Layered Double Hydroxides and Applications in Energy Conversion and Storage. *Advanced Functional Materials*, **2020**, 30, 1909832	15.6	47
54	Defect repair of tin selenide photocathode via in situ selenization: enhanced photoelectrochemical performance and environmental stability. *Journal of Materials Chemistry A*, **2020**, 8, 5342-5349	13	4
53	Defect Engineering on Electrode Materials for Rechargeable Batteries. *Advanced Materials*, **2020**, 32, e1905923	24	270
52	In Situ Exfoliation and Pt Deposition of Antimonene for Formic Acid Oxidation via a Predominant Dehydrogenation Pathway. *Research*, **2020**, 2020, 5487237	7.8	5
51	Defect Chemistry on Electrode Materials for Electrochemical Energy Storage and Conversion. *ChemNanoMat*, **2020**, 6, 1589-1600	3.5	10

50	Charge Transfer Modulated Activity of Carbon-Based Electrocatalysts. *Advanced Energy Materials*, **2020**, 10, 1901227	21.8	93
49	Electrochemical Oxidation of 5-Hydroxymethylfurfural on Nickel Nitride/Carbon Nanosheets: Reaction Pathway Determined by In Situ Sum Frequency Generation Vibrational Spectroscopy. *Angewandte Chemie*, **2019**, 131, 16042-16050	3.6	47
48	Electrochemical Oxidation of 5-Hydroxymethylfurfural on Nickel Nitride/Carbon Nanosheets: Reaction Pathway Determined by In Situ Sum Frequency Generation Vibrational Spectroscopy. *Angewandte Chemie - International Edition*, **2019**, 58, 15895-15903	16.4	141
47	Rational design of three-phase interfaces for electrocatalysis. *Nano Research*, **2019**, 12, 2055-2066	10	86
46	Low-temperature plasma technology for electrocatalysis. *Chinese Chemical Letters*, **2019**, 30, 826-838	8.1	28
45	In-situ evolution of active layers on commercial stainless steel for stable water splitting. *Applied Catalysis B: Environmental*, **2019**, 248, 277-285	21.8	64
44	Chemically activated MoS2 for efficient hydrogen production. *Nano Energy*, **2019**, 57, 535-541	17.1	55
43	Defect-Based Single-Atom Electrocatalysts. *Small Methods*, **2019**, 3, 1800406	12.8	94
42	Bridging the Surface Charge and Catalytic Activity of a Defective Carbon Electrocatalyst. *Angewandte Chemie - International Edition*, **2019**, 58, 1019-1024	16.4	162
41	Efficient Metal-Free Electrocatalysts from N-Doped Carbon Nanomaterials: Mono-Doping and Co-Doping. *Advanced Materials*, **2019**, 31, e1805121	24	205
40	Bridging the Surface Charge and Catalytic Activity of a Defective Carbon Electrocatalyst. *Angewandte Chemie*, **2019**, 131, 1031-1036	3.6	29
39	Recent Advances on Non-precious Metal Porous Carbon-based Electrocatalysts for Oxygen Reduction Reaction. *ChemElectroChem*, **2018**, 5, 1775-1785	4.3	114
38	3D Carbon Electrocatalysts In Situ Constructed by Defect-Rich Nanosheets and Polyhedrons from NaCl-Sealed Zeolitic Imidazolate Frameworks. *Advanced Functional Materials*, **2018**, 28, 1705356	15.6	180
37	Plasma-Assisted Synthesis and Surface Modification of Electrode Materials for Renewable Energy. *Advanced Materials*, **2018**, 30, e1705850	24	323
36	Defect-Enhanced Charge Separation and Transfer within Protection Layer/Semiconductor Structure of Photoanodes. *Advanced Materials*, **2018**, 30, e1801773	24	51
35	One-step, room temperature generation of porous and amorphous cobalt hydroxysulfides from layered double hydroxides for superior oxygen evolution reactions. *Journal of Materials Chemistry A* , **2018**, 6, 24311-24316	13	62
34	Enriched nucleation sites for Pt deposition on ultrathin WO3 nanosheets with unique interactions for methanol oxidation. *Journal of Materials Chemistry A*, **2018**, 6, 23028-23033	13	49
33	Carbon-Based, Metal-Free Electrocatalysts for Renewable Energy Technologies **2018**, 313-334		

32	Interface engineering of Pt and CeO2 nanorods with unique interaction for methanol oxidation. *Nano Energy*, **2018**, 53, 604-612	17.1	131
31	Ultrafine nano-sulfur particles anchored on in situ exfoliated graphene for lithium–sulfur batteries. *Journal of Materials Chemistry A*, **2017**, 5, 9412-9417	13	68
30	Creating coordinatively unsaturated metal sites in metal-organic-frameworks as efficient electrocatalysts for the oxygen evolution reaction: Insights into the active centers. *Nano Energy*, **2017**, 41, 417-425	17.1	274
29	In situ growth of cobalt@cobalt-borate core-shell nanosheets as highly-efficient electrocatalysts for oxygen evolution reaction in alkaline/neutral medium. *Nanoscale*, **2017**, 9, 16059-16065	7.7	57
28	In situ evolution of highly dispersed amorphous CoO clusters for oxygen evolution reaction. *Nanoscale*, **2017**, 9, 11969-11975	7.7	110
27	Atomic-Scale CoOx Species in Metal–Organic Frameworks for Oxygen Evolution Reaction. *Advanced Functional Materials*, **2017**, 27, 1702546	15.6	279
26	Sandwiched Thin-Film Anode of Chemically Bonded Black Phosphorus/Graphene Hybrid for Lithium-Ion Battery. *Small*, **2017**, 13, 1700758	11	112
25	In situ confined synthesis of molybdenum oxide decorated nickel–iron alloy nanosheets from MoO_4^{2-} intercalated layered double hydroxides for the oxygen evolution reaction. *Journal of Materials Chemistry A*, **2017**, 5, 87-91	13	122
24	Bridging Covalently Functionalized Black Phosphorus on Graphene for High-Performance Sodium-Ion Battery. *ACS Applied Materials & Interfaces*, **2017**, 9, 36849-36856	9.5	106
23	Etched and doped Co9S8/graphene hybrid for oxygen electrocatalysis. *Energy and Environmental Science*, **2016**, 9, 1320-1326	35.4	652
22	Directional coalescence growth of ultralong Au93Pt7 alloy nanowires and their superior electrocatalytic performance in ethanol oxidation. *Chemical Communications*, **2016**, 52, 5164-6	5.8	25
21	Carbon-coated MoS2 nanosheets as highly efficient electrocatalysts for the hydrogen evolution reaction. *Nanotechnology*, **2016**, 27, 045402	3.4	29
20	Edge-rich and dopant-free graphene as a highly efficient metal-free electrocatalyst for the oxygen reduction reaction. *Chemical Communications*, **2016**, 52, 2764-7	5.8	443
19	Sulfur-Doped Fe/N/C Nanosheets as Highly Efficient Electrocatalysts for Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces*, **2016**, 8, 19379-85	9.5	135
18	Cobalt nanoparticle-embedded carbon nanotube/porous carbon hybrid derived from MOF-encapsulated Co3O4 for oxygen electrocatalysis. *Chemical Communications*, **2016**, 52, 9727-30	5.8	254
17	Nonporous MOF-derived dopant-free mesoporous carbon as an efficient metal-free electrocatalyst for the oxygen reduction reaction. *Journal of Materials Chemistry A*, **2016**, 4, 9370-9374	13	68
16	Electropolymerized supermolecule derived N, P co-doped carbon nanofiber networks as a highly efficient metal-free electrocatalyst for the hydrogen evolution reaction. *Journal of Materials Chemistry A*, **2016**, 4, 13726-13730	13	109
15	N-, P- and S-tridoped graphene as metal-free electrocatalyst for oxygen reduction reaction. *Journal of Electroanalytical Chemistry*, **2015**, 753, 21-27	4.1	54

14	Plasma-engineered MoS2 thin-film as an efficient electrocatalyst for hydrogen evolution reaction. *Chemical Communications*, **2015**, 51, 7470-3	5.8	207
13	Sulfur-doped graphene derived from cycled lithium-sulfur batteries as a metal-free electrocatalyst for the oxygen reduction reaction. *Angewandte Chemie - International Edition*, **2015**, 54, 1888-92	16.4	293
12	Sulfur-Doped Graphene Derived from Cycled Lithium–Sulfur Batteries as a Metal-Free Electrocatalyst for the Oxygen Reduction Reaction. *Angewandte Chemie*, **2015**, 127, 1908-1912	3.6	50
11	One-pot synthesis of nitrogen and sulfur co-doped graphene supported MoS 2 as high performance anode materials for lithium-ion batteries. *Electrochimica Acta*, **2015**, 177, 298-303	6.7	41
10	Platinum Nanoparticles Supported on Nitrobenzene-Functionalized Multiwalled Carbon Nanotube as Efficient Electrocatalysts for Methanol Oxidation Reaction. *Electrochimica Acta*, **2015**, 157, 46-53	6.7	27
9	Molecular doping of graphene as metal-free electrocatalyst for oxygen reduction reaction. *Chemical Communications*, **2014**, 50, 10672-5	5.8	73
8	One-pot synthesis of nitrogen and sulfur co-doped graphene as efficient metal-free electrocatalysts for the oxygen reduction reaction. *Chemical Communications*, **2014**, 50, 4839-42	5.8	266
7	Silica-facilitated proton transfer for high-temperature proton-exchange membrane fuel cells. *Science China Chemistry*,1	7.9	3
6	FeP Modulated Adsorption with Hydrogen and Phosphate Species for Hydrogen Oxidation in High-Temperature Polymer Electrolyte Membrane Fuel Cells. *Advanced Functional Materials*,2106758	15.6	2
5	Doping-Modulated Strain Enhancing the Phosphate Tolerance on PtFe Alloys for High-Temperature Proton Exchange Membrane Fuel Cells. *Advanced Functional Materials*,2109244	15.6	7
4	Fluorination-enabled interface of PtNi electrocatalysts for high-performance high-temperature proton exchange membrane fuel cells. *Science China Materials*,1	7.1	1
3	Advanced Cathode Electrocatalysts for Fuel Cells: Understanding, Construction, and Application of Carbon-Based and Platinum-Based Nanomaterials1610-1634		9
2	Construction of Nickel-Based Dual Heterointerfaces towards Accelerated Alkaline Hydrogen Evolution via Boosting Multi-Step Elementary Reaction. *Advanced Functional Materials*,2104827	15.6	4
1	Defect Engineering on CeO2-Based Catalysts for Heterogeneous Catalytic Applications. *Small Structures*,2100058	8.7	14