Zhi-Peng Wu

List of Publications by Year
in descending order

34 papers	3,163 citations	318942 23 h-index	425179 34 g-index
34 all docs	34 docs citations	34 times ranked	3193 citing authors

#	Article	IF	Citations
1	Lattice Strain and Surface Activity of Ternary Nanoalloys under the Propane Oxidation Condition. ACS Applied Materials & Interfaces, 2022, 14, 11435-11447.	4.0	6
2	Surface Modification of 2D Photocatalysts for Solar Energy Conversion. Advanced Materials, 2022, 34, e2200180.	11.1	184
3	Alloyingâ€“realloying enabled high durability for Ptâ€“Pd-3d-transition metal nanoparticle fuel cell catalysts. Nature Communications, 2021, 12, 859.	5.8	137
4	Recent Advances in Electrocatalysts for Proton Exchange Membrane Fuel Cells and Alkaline Membrane Fuel Cells. Advanced Materials, 2021, 33, e2006292.	11.1	300
5	Trimetallic Spinel NiCo_{2âˆ’<i>x</i>}Fe_{<i>x</i>}O₄ Nanoboxes for Highly Efficient Electrocatalytic Oxygen Evolution. Angewandte Chemie, 2021, 133, 11947-11952.	1.6	33
6	Trimetallic Spinel NiCo_{2âˆ’<i>x</i>}Fe_{<i>x</i>}O₄ Nanoboxes for Highly Efficient Electrocatalytic Oxygen Evolution. Angewandte Chemie - International Edition, 2021, 60, 11841-11846.	7.2	247
7	A highly stable lithium metal anode enabled by Ag nanoparticleâ€“embedded nitrogen-doped carbon macroporous fibers. Science Advances, 2021, 7, .	4.7	212
8	Engineering Platinumâ€“Cobalt Nanoâ€alloys in Porous Nitrogenâ€Doped Carbon Nanotubes for Highly Efficient Electrocatalytic Hydrogen Evolution. Angewandte Chemie, 2021, 133, 19216-19221.	1.6	9
9	Engineering Platinumâ€“Cobalt Nanoâ€alloys in Porous Nitrogenâ€Doped Carbon Nanotubes for Highly Efficient Electrocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2021, 60, 19068-19073.	7.2	149
10	Manipulating the Local Coordination and Electronic Structures for Efficient Electrocatalytic Oxygen Evolution. Advanced Materials, 2021, 33, e2103004.	11.1	142
11	Multimetallic Catalysts and Electrocatalysts: Dynamic Coreâ€“Shell Nanostructures. Nanostructure Science and Technology, 2021, , 61-82.	0.1	1
12	Synergetic Cobaltâ€Copperâ€Based Bimetalâ€“Organic Framework Nanoboxes toward Efficient Electrochemical Oxygen Evolution. Angewandte Chemie, 2021, 133, 26601-26606.	1.6	14
13	Synergetic Cobaltâ€Copperâ€Based Bimetalâ€“Organic Framework Nanoboxes toward Efficient Electrochemical Oxygen Evolution. Angewandte Chemie - International Edition, 2021, 60, 26397-26402.	7.2	105
14	In situ activation of Br-confined Ni-based metal-organic framework hollow prisms toward efficient electrochemical oxygen evolution. Science Advances, 2021, 7, eabk0919.	4.7	87
15	Origin of High Activity and Durability of Twisty Nanowire Alloy Catalysts under Oxygen Reduction and Fuel Cell Operating Conditions. Journal of the American Chemical Society, 2020, 142, 1287-1299.	6.6	102
16	Dynamic Coreâ€“Shell and Alloy Structures of Multimetallic Nanomaterials and Their Catalytic Synergies. Accounts of Chemical Research, 2020, 53, 2913-2924.	7.6	79
17	Surfaceâ€Mediated Interconnections of Nanoparticles in Cellulosic Fibrous Materials toward 3D Sensors. Advanced Materials, 2020, 32, e2002171.	11.1	18
18	Surface oxygenation of multicomponent nanoparticles toward active and stable oxidation catalysts. Nature Communications, 2020, 11, 4201.	5.8	25

#	Article	IF	Citations
19	Emerging Multifunctional Single-Atom Catalysts/Nanozymes. ACS Central Science, 2020, 6, 1288-1301.	5.3	159
20	Nonâ€Nobleâ€Metalâ€Based Electrocatalysts toward the Oxygen Evolution Reaction. Advanced Functional Materials, 2020, 30, 1910274.	7.8	760
21	Nano-Silicon composite materials with N-doped graphene of controllable and optimal pyridinic-to-pyrrolic structural ratios for lithium ion battery. Electrochimica Acta, 2019, 321, 134742.	2.6	39
22	Poisonous Species in Complete Ethanol Oxidation Reaction on Palladium Catalysts. Journal of Physical Chemistry C, 2019, 123, 20853-20868.	1.5	39
23	A simple vaporous probe with atomic-scale sensitivity to structural ordering and orientation of molecular assembly. Chemical Science, 2019, 10, 7104-7110.	3.7	7
24	Deviations from Vegard's law and evolution of the electrocatalytic activity and stability of Pt-based nanoalloys inside fuel cells by<i>in operando</i>X-ray spectroscopy and total scattering. Nanoscale, 2019, 11, 5512-5525.	2.8	33
25	DFT studies on the key competing reaction steps towards complete ethanol oxidation on transition metal catalysts. Computational Materials Science, 2019, 156, 175-186.	1.4	29
26	From a Au-rich core/PtNi-rich shell to a Ni-rich core/PtAu-rich shell: an effective thermochemical pathway to nanoengineering catalysts for fuel cells. Journal of Materials Chemistry A, 2018, 6, 5143-5155.	5.2	25
27	Evolution of surface catalytic sites on thermochemically-tuned goldâ€“palladium nanoalloys. Nanoscale, 2018, 10, 3849-3862.	2.8	5
28	Catalytic oxidation of propane over palladium alloyed with gold: an assessment of the chemical and intermediate species. Catalysis Science and Technology, 2018, 8, 6228-6240.	2.1	12
29	Revealing the Role of Phase Structures of Bimetallic Nanocatalysts in the Oxygen Reduction Reaction. ACS Catalysis, 2018, 8, 11302-11313.	5.5	51
30	Role of Ni in Bimetallic PdNi Catalysts for Ethanol Oxidation Reaction. Journal of Physical Chemistry C, 2018, 122, 22448-22459.	1.5	43
31	Competitive Câ€“C and Câ€“H bond scission in the ethanol oxidation reaction on Cu(100) and the effect of an alkaline environment. Physical Chemistry Chemical Physics, 2017, 19, 15444-15453.	1.3	25
32	Charting the relationship between phase type-surface area-interactions between the constituent atoms and oxygen reduction activity of Pdâ€“Cu nanocatalysts inside fuel cells by in operando high-energy X-ray diffraction. Journal of Materials Chemistry A, 2017, 5, 7355-7365.	5.2	14
33	Exploring the Origin of High Dechlorination Activity in Polar Materials M₂B₅O₉Cl (M = Ca, Sr, Ba, Pb) with Built-In Electric Field. Chemistry of Materials, 2017, 29, 639-647.	3.2	53
34	Ir catalysts: Preventing CH3COOH formation in ethanol oxidation. Chemical Physics Letters, 2017, 688, 92-97.	1.2	19