Ziqiang Wang

List of Publications by Year
in descending order

91 papers	3,410 citations	126907 33 h-index	161849 54 g-index
91 all docs	91 docs citations	91 times ranked	2689 citing authors

#	Article	IF	Citations
1	Nanosized Cu-MOFs induced by graphene oxide and enhanced gas storage capacity. Energy and Environmental Science, 2013, 6, 818.	30.8	248
2	Ambient Electrochemical Synthesis of Ammonia from Nitrogen and Water Catalyzed by Flowerâ€Like Gold Microstructures. ChemSusChem, 2018, 11, 3480-3485.	6.8	176
3	Defectâ€Rich Porous Palladium Metallene for Enhanced Alkaline Oxygen Reduction Electrocatalysis. Angewandte Chemie - International Edition, 2021, 60, 12027-12031.	13.8	173
4	One-pot synthesis of bi-metallic PdRu tripods as an efficient catalyst for electrocatalytic nitrogen reduction to ammonia. Journal of Materials Chemistry A, 2019, 7, 801-805.	10.3	136
5	Electrochemical Fabrication of Porous Au Film on Ni Foam for Nitrogen Reduction to Ammonia. Small, 2019, 15, e1804769.	10.0	132
6	Ir-Doped Ni-based metalâ€“organic framework ultrathin nanosheets on Ni foam for enhanced urea electro-oxidation. Chemical Communications, 2020, 56, 2151-2154.	4.1	101
7	Surface Engineering of Defective and Porous Ir Metallene with Polyallylamine for Hydrogen Evolution Electrocatalysis. Advanced Materials, 2022, 34, e2110680.	21.0	95
8	Ambient Nitrogen Reduction to Ammonia Electrocatalyzed by Bimetallic PdRu Porous Nanostructures. ACS Sustainable Chemistry and Engineering, 2019, 7, 2400-2405.	6.7	94
9	Atomic defects in pothole-rich two-dimensional copper nanoplates triggering enhanced electrocatalytic selective nitrate-to-ammonia transformation. Journal of Materials Chemistry A, 2021, 9, 16411-16417.	10.3	82
10	Electrocatalytic Nitrogen Reduction to Ammonia by Fe₂O₃ Nanorod Array on Carbon Cloth. ACS Sustainable Chemistry and Engineering, 2019, 7, 11754-11759.	6.7	77
11	Cooperativity of Cu and Pd active sites in CuPd aerogels enhances nitrate electroreduction to ammonia. Chemical Communications, 2021, 57, 7525-7528.	4.1	73
12	A platinum oxide decorated amorphous cobalt oxide hydroxide nanosheet array towards alkaline hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 3864-3868.	10.3	67
13	Bimetallic Ag₃Cu porous networks for ambient electrolysis of nitrogen to ammonia. Journal of Materials Chemistry A, 2019, 7, 12526-12531.	10.3	67
14	Nitrogen-doped porous carbons with high performance for hydrogen storage. International Journal of Hydrogen Energy, 2016, 41, 8489-8497.	7.1	65
15	Ultrafine PtO₂ nanoparticles coupled with a Co(OH)F nanowire array for enhanced hydrogen evolution. Chemical Communications, 2018, 54, 810-813.	4.1	65
16	Hydrophilic/Aerophobic Hydrogen-Evolving Electrode: NiRu-Based Metalâ€“Organic Framework Nanosheets In Situ Grown on Conductive Substrates. ACS Applied Materials & Interfaces, 2020, 12, 34728-34735.	8.0	65
17	Synergism of Interfaces and Defects: Cu/Oxygen Vacancy-Rich Cu-Mn₃O₄ Heterostructured Ultrathin Nanosheet Arrays for Selective Nitrate Electroreduction to Ammonia. ACS Applied Materials & Interfaces, 2021, 13, 44733-44741.	8.0	64
18	Ptâ€“Niâ€“P nanocages with surface porosity as efficient bifunctional electrocatalysts for oxygen reduction and methanol oxidation. Journal of Materials Chemistry A, 2019, 7, 9791-9797.	10.3	63

#	Article	IF	Citations
19	PtM (M = Co, Ni) Mesoporous Nanotubes as Bifunctional Electrocatalysts for Oxygen Reduction and Methanol Oxidation. ACS Sustainable Chemistry and Engineering, 2019, 7, 7960-7968.	6.7	58
20	Trimetallic PtPdNi-Truncated Octahedral Nanocages with a Well-Defined Mesoporous Surface for Enhanced Oxygen Reduction Electrocatalysis. ACS Applied Materials & Interfaces, 2019, 11, 4252-4257.	8.0	57
21	In Situ Reconstruction of Partially Hydroxylated Porous Rh Metallene for Ethylene Glycolâ€Assisted Seawater Splitting. Advanced Functional Materials, 2022, 32, .	14.9	57
22	Mesoporous Au₃Pd Film on Ni Foam: A Self-Supported Electrocatalyst for Efficient Synthesis of Ammonia. ACS Applied Materials & Interfaces, 2020, 12, 436-442.	8.0	49
23	Three-dimensional Pdâ€“Agâ€“S porous nanosponges for electrocatalytic nitrogen reduction to ammonia. Nanoscale, 2020, 12, 13507-13512.	5.6	49
24	Direct synthesis of superlong Pt|Te mesoporous nanotubes for electrocatalytic oxygen reduction. Journal of Materials Chemistry A, 2019, 7, 1711-1717.	10.3	46
25	Trimetallic PdCuIr with long-spined sea-urchin-like morphology for ambient electroreduction of nitrogen to ammonia. Journal of Materials Chemistry A, 2019, 7, 3190-3196.	10.3	45
26	Engineering bunched RhTe nanochains for efficient methanol oxidation electrocatalysis. Chemical Communications, 2020, 56, 13595-13598.	4.1	43
27	Phosphorus-triggered modification of the electronic structure and surface properties of Pd₄S nanowires for robust hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 19873-19878.	10.3	42
28	Metalâ€“nonmetal nanoarchitectures: quaternary PtPdNiP mesoporous nanospheres for enhanced oxygen reduction electrocatalysis. Journal of Materials Chemistry A, 2019, 7, 3910-3916.	10.3	38
29	Metalâ€“Nonmetal One-Dimensional Electrocatalyst: AuPdP Nanowires for Ambient Nitrogen Reduction to Ammonia. ACS Sustainable Chemistry and Engineering, 2019, 7, 15772-15777.	6.7	37
30	Ultrafine rutheniumâ€“iridiumâ€“tellurium nanotubes for boosting overall water splitting in acidic media. Journal of Materials Chemistry A, 2022, 10, 2021-2026.	10.3	36
31	Synthesis of N-doped hierarchical carbon spheres for CO₂ capture and supercapacitors. RSC Advances, 2016, 6, 1422-1427.	3.6	35
32	Synergism of Interface and Electronic Effects: Bifunctional Nâ€Doped Ni₃S₂/Nâ€Doped MoS₂ Heteroâ€Nanowires for Efficient Electrocatalytic Overall Water Splitting. Chemistry - A European Journal, 2019, 25, 16074-16080.	3.3	35
33	Boosting Electrocatalytic Activities of Pt-Based Mesoporous Nanoparticles for Overall Water Splitting by a Facile Ni, P Co-Incorporation Strategy. ACS Sustainable Chemistry and Engineering, 2019, 7, 9709-9716.	6.7	35
34	A mesoporous Au film with surface sulfur modification for efficient ammonia electrosynthesis. Journal of Materials Chemistry A, 2020, 8, 20414-20419.	10.3	34
35	Hyperbranched PdRu nanospine assemblies: an efficient electrocatalyst for formic acid oxidation. Journal of Materials Chemistry A, 2018, 6, 17514-17518.	10.3	33
36	Mesoporous Bimetallic Au@Rh Coreâ€“Shell Nanowires as Efficient Electrocatalysts for pH-Universal Hydrogen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 30479-30485.	8.0	33

#	Article	IF	Citations
37	Defectâ€Rich Porous Palladium Metallene for Enhanced Alkaline Oxygen Reduction Electrocatalysis. Angewandte Chemie, 2021, 133, 12134-12138.	2.0	32
38	Facile Construction of IrRh Nanosheet Assemblies As Efficient and Robust Bifunctional Electrocatalysts for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2019, 7, 15747-15754.	6.7	31
39	Transition metal M (M = Co, Ni, and Fe) and boron co-modulation in Rh-based aerogels for highly efficient and pH-universal hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 5595-5600.	10.3	30
40	Pt@Mesoporous PtRu Yolkâ€“Shell Nanostructured Electrocatalyst for Methanol Oxidation Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 14867-14873.	6.7	29
41	A quaternary metalâ€“metalloidâ€“nonmetal electrocatalyst: B, P-co-doping into PdRu nanospine assemblies boosts the electrocatalytic capability toward formic acid oxidation. Journal of Materials Chemistry A, 2020, 8, 2424-2429.	10.3	29
42	Polyethylenimine-modified bimetallic Au@Rh coreâ€“shell mesoporous nanospheres surpass Pt for pH-universal hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2021, 9, 13080-13086.	10.3	29
43	PtPdRh Mesoporous Nanospheres: An Efficient Catalyst for Methanol Electro-Oxidation. Langmuir, 2019, 35, 413-419.	3.5	26
44	Crystalline coreâ€“amorphous shell heterostructures: epitaxial assembly of NiB nanosheets onto PtPd mesoporous hollow nanopolyhedra for enhanced hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 8927-8933.	10.3	25
45	Rational construction of Au₃Cu@Cu nanocages with porous coreâ€“shell heterostructured walls for enhanced electrocatalytic N₂fixation. Journal of Materials Chemistry A, 2021, 9, 8372-8377.	10.3	25
46	Enhanced Dual Fuel Cell Electrocatalysis with Trimetallic PtPdCo Mesoporous Nanoparticles. Chemistry - an Asian Journal, 2018, 13, 2939-2946.	3.3	24
47	Construction of hierarchical IrTe nanotubes with assembled nanosheets for overall water splitting electrocatalysis. Journal of Materials Chemistry A, 2021, 9, 18576-18581.	10.3	24
48	Two-Dimensional Heterojunction Electrocatalyst: Au-Bi₂Te₃ Nanosheets for Electrochemical Ammonia Synthesis. ACS Applied Materials & Interfaces, 2021, 13, 47458-47464.	8.0	24
49	Phosphorus incorporation accelerates ammonia electrosynthesis over a mesoporous Au film. Chemical Communications, 2022, 58, 6088-6091.	4.1	24
50	B-Doped PdRu nanopillar assemblies for enhanced formic acid oxidation electrocatalysis. Nanoscale, 2020, 12, 19159-19164.	5.6	21
51	Flexible synthesis of Au@Pd coreâ€“shell mesoporous nanoflowers for efficient methanol oxidation. Nanoscale, 2021, 13, 3208-3213.	5.6	21
52	Anodic hydrazine oxidation assisted hydrogen evolution over bimetallic RhIr mesoporous nanospheres. Journal of Materials Chemistry A, 2021, 9, 18323-18328.	10.3	21
53	Phosphorus-modified rutheniumâ€“tellurium dendritic nanotubes outperform platinum for alkaline hydrogen evolution. Journal of Materials Chemistry A, 2021, 9, 5026-5032.	10.3	20
54	Self-assembly synthesis of nitrogen-doped mesoporous carbons used as high-performance electrode materials in lithium-ion batteries and supercapacitors. New Journal of Chemistry, 2017, 41, 12901-12909.	2.8	19

#	Article	IF	Citations
55	Mesoporous Rh nanotubes for efficient electro-oxidation of methanol. Journal of Materials Chemistry A, 2021, 9, 4744-4750.	10.3	19
56	N-doping induced lattice-strained porous PdIr bimetallene for pH-universal hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2022, 10, 8364-8370.	10.3	19
57	Liquid Metal Interfacial Growth and Exfoliation to Form Mesoporous Metallic Nanosheets for Alkaline Methanol Electroreforming. ACS Nano, 2022, 16, 2978-2987.	14.6	17
58	Ultralong Ternary PtRuTe Mesoporous Nanotubes Fabricated by Micelle Assembly with a Selfâ€Sacrificial Template. Chemistry - A European Journal, 2019, 25, 5316-5321.	3.3	16
59	Effects of AuCuB Catalysts with Porous Nanostructures on Electrosynthesis of Ammonia. ACS Sustainable Chemistry and Engineering, 2020, 8, 12588-12594.	6.7	16
60	Twoâ€Dimensional NiIr@Nâ€Doped Carbon Nanocomposites Supported on Ni Foam for Electrocatalytic Overall Water Splitting. Chemistry - A European Journal, 2020, 26, 14496-14501.	3.3	16
61	Engineering One-Dimensional AuPd Nanospikes for Efficient Electrocatalytic Nitrogen Fixation. ACS Applied Materials & Interfaces, 2021, 13, 20233-20239.	8.0	16
62	Electroreduction of Nitrate to Ammonia on Palladiumâ€“Cobaltâ€“Oxygen Nanowire Arrays. ACS Applied Materials & Interfaces, 2022, 14, 13169-13176.	8.0	16
63	Enhanced Oxygen Reduction and Methanol Oxidation Electrocatalysis over Bifunctional PtPdIr Mesoporous Hollow Nanospheres. Chemistry - an Asian Journal, 2019, 14, 3868-3874.	3.3	15
64	<i>In situ</i> electrochemical reduction-assisted exfoliation: conversion of BiOCl nanoplates into Bi nanosheets enables efficient electrocatalytic nitrogen fixation. Sustainable Energy and Fuels, 2020, 4, 3334-3339.	4.9	15
65	Boronâ€Doped PdCuAu Nanospine Assembly as an Efficient Electrocatalyst toward Formic Acid Oxidation. Chemistry - A European Journal, 2020, 26, 2493-2498.	3.3	12
66	Anchoring Au nanoparticles on Bi ultrathin nanosheets for use as an efficient heterogeneous catalyst for ambient-condition electrochemical ammonia synthesis. Sustainable Energy and Fuels, 2020, 4, 4516-4521.	4.9	12
67	PdNi/Ni Nanotubes Assembled by Mesoporous Nanoparticles for Efficient Alkaline Ethanol Oxidation Reaction. Chemistry - A European Journal, 2021, 27, 14472-14477.	3.3	11
68	Palladium Nanothorn Assembly Array for Efficient Electroreduction of Nitrogen to Ammonia. ACS Sustainable Chemistry and Engineering, 2020, 8, 14228-14233.	6.7	10
69	Tannic acid decorated AuPd lavender-like nanochains for enhanced oxygen reduction electrocatalysis. Journal of Materials Chemistry A, 2021, 9, 15678-15683.	10.3	10
70	Regulation of the surface micro-structure and crystal phase of Pd₂B mesoporous nanoparticles for enhanced hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2021, 9, 21123-21131.	10.3	10
71	A phosphorus modified mesoporous AuRh film as an efficient bifunctional electrocatalyst for urea-assisted energy-saving hydrogen production. Journal of Materials Chemistry A, 2022, 10, 3086-3092.	10.3	10
72	Hollow PtPd Nanorods with Mesoporous Shells as an Efficient Electrocatalyst for the Methanolâ€Oxidation Reaction. Chemistry - an Asian Journal, 2019, 14, 3019-3024.	3.3	9

#	Article	IF	Citations
73	Pore-Size-Tuned Pd Films Grown on Ni Foam as an Advanced Catalyst for Electrosynthesis of Ammonia. ACS Sustainable Chemistry and Engineering, 2020, 8, 11827-11833.	6.7	9
74	A P-doped PtTe mesoporous nanotube electrocatalyst. Sustainable Energy and Fuels, 2020, 4, 2950-2955.	4.9	9
75	Mesoporous Pt@PtM (M = Co, Ni) cage-bell nanostructures toward methanol electro-oxidation. Nanoscale Advances, 2020, 2, 1084-1089.	4.6	8
76	ZIF-derived porous carbon composites coated on NiCo₂S₄ nanotubes array toward efficient water splitting. Nanotechnology, 2020, 31, 195402.	2.6	8
77	Direct fabrication of bimetallic AuPt nanobrick spherical nanoarchitectonics for the oxygen reduction reaction. New Journal of Chemistry, 2019, 43, 9628-9633.	2.8	7
78	In-situ Formation of Amorphous Co-Al-P Layer on CoAl Layered Double Hydroxide Nanoarray as Neutral Electrocatalysts for Hydrogen Evolution Reaction. Frontiers in Chemistry, 2020, 8, 552795.	3.6	7
79	Bimetallic mesoporous RhRu film for electrocatalytic nitrogen reduction to ammonia. Inorganic Chemistry Frontiers, 2021, 8, 4276-4281.	6.0	7
80	Phosphorus-triggered activation of PdPb nanoflowers for enhanced oxygen reduction electrocatalysis. Journal of Materials Chemistry A, 2022, 10, 15528-15534.	10.3	7
81	Multinary PtPdNiP truncated octahedral mesoporous nanocages for enhanced methanol oxidation electrocatalysis. New Journal of Chemistry, 2020, 44, 15492-15497.	2.8	6
82	Phosphorus modulation of a mesoporous rhodium film for enhanced nitrogen electroreduction. Nanoscale, 2021, 13, 13809-13815.	5.6	6
83	Ternary AuPS Alloy Mesoporous Film for Efficient Electroreduction of Nitrogen to Ammonia. ACS Applied Materials & Interfaces, 2021, 13, 28057-28063.	8.0	6
84	Interface functionalization of mesoporous ruthenium films with polyaniline for enhanced hydrogen evolution electrocatalysis at all pH values. Journal of Materials Chemistry A, 2022, 10, 14435-14440.	10.3	6
85	A Mesoporous Nanorattleâ€Structured Pd@PtRu Electrocatalyst. Chemistry - an Asian Journal, 2019, 14, 3397-3403.	3.3	4
86	Ultrathin Porous WPdH Nanosheet Assemblies for Efficient Alkaline Oxygen Reduction. Energy & Fuels, 2022, 36, 7775-7781.	5.1	4
87	An interconnected porous Au₃Pt film on Ni foam: an efficient electrocatalyst for alkaline hydrogen evolution reaction. Sustainable Energy and Fuels, 2020, 4, 4878-4883.	4.9	2
88	Mesoporous PdRu Nanocrystals for Oxygen Reduction Electrocatalysis. Energy & Fuels, 2021, 35, 13382-13388.	5.1	2
89	Urchin-like PdOs nanostructure for hydrogen evolution electrocatalysis. Nanotechnology, 2022, 33, 325401.	2.6	2
90	Rational synthesis of Pt-based dandelion-like yolkâ€“shell nanoparticles with enhanced oxygen reduction properties. Sustainable Energy and Fuels, 2019, 3, 3329-3334.	4.9	1

#	Article	IF	Citations
91	Porous PdAg alloy nanostructures with a concave surface for efficient electrocatalytic methanol oxidation. Nanotechnology, 2021, 32, 355402.	2.6	1