Wei Zhu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2546653/publications.pdf

Version: 2024-02-01

81	6,675	94415 37	62593 80
papers	citations	h-index	g-index

84	84	84	9129
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Improving the water electrolysis performance by manipulating the generated nano/micro-bubbles using surfactants. Nano Research, 2023, 16, 420-426.	10.4	9
2	Nickel chalcogenides as selective ethanol oxidation electro-catalysts and their structureâ€“performance relationships. Chemical Communications, 2022, 58, 2496-2499.	4.1	9
3	Insights into the Effect of Precursors on the FeP-Catalyzed Hydrogen Evolution Reaction. Inorganic Chemistry, 2022, , .	4.0	8
4	Defective Ni3S2 nanowires as highly active electrocatalysts for ethanol oxidative upgrading. Nano Research, 2022, 15, 2987-2993.	10.4	11
5	Amorphous palladium-based alloy nanoparticles as highly active electrocatalysts for ethanol oxidation. Chemical Communications, 2022, 58, 4488-4491.	4.1	7
6	Silver based single atom catalyst with heteroatom coordination environment as high performance oxygen reduction reaction catalyst. Nano Research, 2022, 15, 7968-7975.	10.4	20
7	IrCuNi Deeply Concave Nanocubes as Highly Active Oxygen Evolution Reaction Electrocatalyst in Acid Electrolyte. Nano Letters, 2021, 21, 2809-2816.	9.1	49
8	Engineering Agâ€“N_x Single-Atom Sites on Porous Concave N-Doped Carbon for Boosting CO₂ Electroreduction. ACS Applied Materials & Interfaces, 2021, 13, 17736-17744.	8.0	45
9	Synthesis of Agâ€“Niâ€“Feâ€“P Multielemental Nanoparticles as Bifunctional Oxygen Reduction/Evolution Reaction Electrocatalysts. ACS Nano, 2021, 15, 7131-7138.	14.6	45
10	Atomic Co/Ni dual sites with N/P-coordination as bifunctional oxygen electrocatalyst for rechargeable zinc-air batteries. Nano Research, 2021, 14, 3482-3488.	10.4	113
11	Sulfateâ€Functionalized RuFeO_x as Highly Efficient Oxygen Evolution Reaction Electrocatalyst in Acid. Advanced Functional Materials, 2021, 31, 2101405.	14.9	67
12	Crâ€Doped CoP Nanorod Arrays as Highâ€Performance Hydrogen Evolution Reaction Catalysts at High Current Density. Small, 2021, 17, e2100832.	10.0	48
13	BiPO₄ Nanorod/Graphene Composite Heterojunctions for Photocatalytic Degradation of Tetracycline Hydrochloride. ACS Applied Nano Materials, 2021, 4, 8680-8689.	5.0	26
14	Encapsulate Î±-MnO2 nanofiber within graphene layer to tune surface electronic structure for efficient ozone decomposition. Nature Communications, 2021, 12, 4152.	12.8	106
15	N-Bridged Coâ€“Nâ€“Ni: new bimetallic sites for promoting electrochemical CO₂ reduction. Energy and Environmental Science, 2021, 14, 3019-3028.	30.8	128
16	Single-Atom Ru on Al₂O₃ for Highly Active and Selective 1,2-Dichloroethane Catalytic Degradation. ACS Applied Materials & Interfaces, 2021, 13, 53683-53690.	8.0	16
17	A hierarchical hollow-on-hollow NiCoP electrocatalyst for efficient hydrogen evolution reaction. Chemical Communications, 2020, 56, 90-93.	4.1	34
18	Converting biomass into efficient oxygen reduction reaction catalysts for proton exchange membrane fuel cells. Science China Materials, 2020, 63, 524-532.	6.3	30

#	Article	IF	Citations
19	A highly-active, stable and low-cost platinum-free anode catalyst based on RuNi for hydroxide exchange membrane fuel cells. Nature Communications, 2020, 11, 5651.	12.8	142
20	Iridium single-atom catalyst on nitrogen-doped carbon for formic acid oxidation synthesized using a general hostâ€“guest strategy. Nature Chemistry, 2020, 12, 764-772.	13.6	452
21	A metal and nitrogen doped carbon composite with both oxygen reduction and evolution active sites for rechargeable zincâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 15752-15759.	10.3	28
22	Functionalization of Hollow Nanomaterials for Catalytic Applications: Nanoreactor Construction. Advanced Materials, 2019, 31, e1800426.	21.0	239
23	Hollow bimetallic M-Fe-P (M=Mn, Co, Cu) nanoparticles as efficient electrocatalysts for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 22806-22815.	7.1	19
24	PdAg bimetallic electrocatalyst for highly selective reduction of CO2 with low COOH* formation energy and facile CO desorption. Nano Research, 2019, 12, 2866-2871.	10.4	61
25	Reaction: Open Up the Era of Atomically Precise Catalysis. CheM, 2019, 5, 2737-2739.	11.7	10
26	Topological self-template directed synthesis of multi-shelled intermetallic Ni₃Ga hollow microspheres for the selective hydrogenation of alkyne. Chemical Science, 2019, 10, 614-619.	7.4	31
27	One-pot synthesis of IrNi@Ir core-shell nanoparticles as highly active hydrogen oxidation reaction electrocatalyst in alkaline electrolyte. Nano Energy, 2019, 59, 26-32.	16.0	72
28	Impacts of anions on the electrochemical oxygen reduction reaction activity and stability of Pt/C in alkaline electrolyte. International Journal of Hydrogen Energy, 2019, 44, 13373-13382.	7.1	17
29	Insights into the Oxidative Dehydrogenation of Ethylbenzene with CO2 Catalyzed by the Ordered Mesoporous V2O5â€“Ce0.5Zr0.5O2â€“Al2O3. Industrial & Engineering Chemistry Research, 2019, 58, 21372-21381.	3.7	5
30	Evolution of surface of Pd-Rh bimetallic nanocubes and its correlation with CO oxidation. Science China Materials, 2019, 62, 103-114.	6.3	7
31	Design of Single-Atom Coâ€“N₅ Catalytic Site: A Robust Electrocatalyst for CO₂ Reduction with Nearly 100% CO Selectivity and Remarkable Stability. Journal of the American Chemical Society, 2018, 140, 4218-4221.	13.7	945
32	Ir-Pd nanoalloys with enhanced surface-microstructure-sensitive catalytic activity for oxygen evolution reaction in acidic and alkaline media. Science China Materials, 2018, 61, 926-938.	6.3	45
33	Sub-nm ruthenium cluster as an efficient and robust catalyst for decomposition and synthesis of ammonia: Break the â€œsize shacklesâ€. Nano Research, 2018, 11, 4774-4785.	10.4	49
34	The promoting effect of low-level sulfidation in PdCuS nanoparticles catalyzed alkyne semihydrogenation. Nano Research, 2018, 11, 4883-4889.	10.4	6
35	50 ppm of Pd dispersed on Ni(OH)2 nanosheets catalyzing semi-hydrogenation of acetylene with high activity and selectivity. Nano Research, 2018, 11, 905-912.	10.4	48
36	Probing Ligand-Induced Cooperative Orbital Redistribution That Dominates Nanoscale Moleculeâ€“Surface Interactions with One-Unit-Thin TiO₂ Nanosheets. Nano Letters, 2018, 18, 7809-7815.	9.1	30

#	Article	IF	Citations
37	Mesoporous S doped Feâ€“Nâ€“C materials as highly active oxygen reduction reaction catalyst. Chemical Communications, 2018, 54, 12073-12076.	4.1	44
38	A photochromic composite with enhanced carrier separation for the photocatalytic activation of benzylic Câ€“H bonds in toluene. Nature Catalysis, 2018, 1, 704-710.	34.4	273
39	MOFâ€Confined Subâ€2 nm Atomically Ordered Intermetallic PdZn Nanoparticles as Highâ€Performance Catalysts for Selective Hydrogenation of Acetylene. Advanced Materials, 2018, 30, e1801878.	21.0	133
40	Porphyrin-like Fe-N4 sites with sulfur adjustment on hierarchical porous carbon for different rate-determining steps in oxygen reduction reaction. Nano Research, 2018, 11, 6260-6269.	10.4	118
41	Phaseâ€Controlled Synthesis of Nickel Phosphide Nanocrystals and Their Electrocatalytic Performance for the Hydrogen Evolution Reaction. Chemistry - A European Journal, 2018, 24, 11748-11754.	3.3	55
42	Controlled Fabrication of Functional Capsules Based on the Synergistic Interaction between Polyphenols and MOFs under Weak Basic Condition. ACS Applied Materials & Interfaces, 2017, 9, 14258-14264.	8.0	37
43	Guanidinium-Based Polymerizable Surfactant as a Multifunctional Molecule for Controlled Synthesis of Nanostructured Materials with Tunable Morphologies. ACS Applied Materials & Interfaces, 2017, 9, 19124-19134.	8.0	12
44	Shape-tunable Ptâ€“Ir alloy nanocatalysts with high performance in oxygen electrode reactions. Nanoscale, 2017, 9, 1154-1165.	5.6	69
45	Dye@bio-MOF-1 Composite as a Dual-Emitting Platform for Enhanced Detection of a Wide Range of Explosive Molecules. ACS Applied Materials & Interfaces, 2017, 9, 20076-20085.	8.0	117
46	Heterogeneous synergistic catalysis by Ru-RuO x nanoparticles for Seâ€“Se bond activation. Nano Research, 2017, 10, 922-932.	10.4	18
47	Photonic Janus Films with Highly Tunable Janus Balance. Advanced Materials Interfaces, 2016, 3, 1600225.	3.7	14
48	Pyrrole-Terminated Ionic Liquid Surfactant: One Molecule with Multiple Functions for Controlled Synthesis of Diverse Multispecies Co-Doped Porous Hollow Carbon Spheres. ACS Applied Materials & Interfaces, 2016, 8, 11008-11017.	8.0	6
49	Chaperone-Assisted Formation of Cucurbit[8]uril-Based Molecular Porous Materials with One-Dimensional Channel Structure. Langmuir, 2016, 32, 9045-9052.	3.5	12
50	Free-standing iridium and rhodium-based hierarchically-coiled ultrathin nanosheets for highly selective reduction of nitrobenzene to azoxybenzene under ambient conditions. Nanoscale, 2016, 8, 15744-15752.	5.6	40
51	Ultrasensitive detection of aliphatic nitro-organics based on â€œturn-onâ€•fluorescent sensor array. Science China Chemistry, 2016, 59, 89-94.	8.2	10
52	Iridium ultrasmall nanoparticles, worm-like chain nanowires, and porous nanodendrites: One-pot solvothermal synthesis and catalytic CO oxidation activity. Surface Science, 2016, 648, 319-327.	1.9	21
53	Solution synthesis protocols for shaping mixed valent oxide crystalline particles as robust catalytic materials. Inorganic Chemistry Frontiers, 2016, 3, 9-25.	6.0	8
54	Shaping Single-Crystalline Trimetallic Ptâ€“Pdâ€“Rh Nanocrystals toward High-Efficiency Câ€“C Splitting of Ethanol in Conversion to CO₂. ACS Catalysis, 2015, 5, 1995-2008.	11.2	80

#	Article	IF	Citations
55	Robust Phase Control through Hetero-Seeded Epitaxial Growth for Face-Centered Cubic Pt@Ru Nanotetrahedrons with Superior Hydrogen Electro-Oxidation Activity. Journal of Physical Chemistry C, 2015, 119, 17697-17706.	3.1	73
56	Self-supported composites of thin Ptâ€“Sn crosslinked nanowires for the highly chemoselective hydrogenation of cinnamaldehyde under ambient conditions. Inorganic Chemistry Frontiers, 2015, 2, 949-956.	6.0	20
57	Shaped Pt-Ni nanocrystals with an ultrathin Pt-enriched shell derived from one-pot hydrothermal synthesis as active electrocatalysts for oxygen reduction. Nano Research, 2015, 8, 1480-1496.	10.4	38
58	Development of 3,5-dinitrobenzoate-based 5-lipoxygenase inhibitors. Bioorganic and Medicinal Chemistry, 2014, 22, 2396-2402.	3.0	9
59	Self-assembled main-chain poly(bile acid) membranes that wrinkle. Polymer Chemistry, 2014, 5, 743-751.	3.9	9
60	Pt/Ru/C nanocomposites for methanol electrooxidation: how Ru nanocrystalsâ€™ surface structure affects catalytic performance of deposited Pt particles. Inorganic Chemistry Frontiers, 2014, 1, 109-117.	6.0	12
61	Benzo[d]isothiazole 1,1-dioxide derivatives as dual functional inhibitors of 5-lipoxygenase and microsomal prostaglandin E2 synthase-1. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 2764-2767.	2.2	31
62	A new strategy for selective detection of nitrated explosives based on a confinement effect of nanocavity. Journal of Materials Chemistry A, 2013, 1, 11741.	10.3	9
63	Metal-free click approach for facile production of main chain poly(bile acid)s. Polymer Chemistry, 2013, 4, 3057.	3.9	22
64	A Rapid and Efficient Way to Dynamic Creation of Crossâ€Reactive Sensor Arrays Based on Ionic Liquids. Chemistry - A European Journal, 2013, 19, 11603-11612.	3.3	19
65	Hierarchical Ni0.25Co0.75(OH)2 nanoarrays for a high-performance supercapacitor electrode prepared by an in situ conversion process. Journal of Materials Chemistry A, 2013, 1, 8327.	10.3	74
66	CB[8]-based rotaxane as a useful platform for sensitive detection and discrimination of explosives. Chemical Science, 2013, 4, 3583.	7.4	39
67	Rational design of molecularly imprinted photonic films assisted by chemometrics. Journal of Materials Chemistry, 2012, 22, 16572.	6.7	17
68	Electrospun fibrous mats as a skeleton for fabricating hierarchically structured materials as sorbents for Cu2+. Journal of Materials Chemistry, 2012, 22, 5089.	6.7	28
69	Electrospun fibrous mats as skeletons to produce free-standing MOF membranes. Journal of Materials Chemistry, 2012, 22, 16971.	6.7	121
70	Isobaric Vaporâ€“Liquid Equilibrium for Methanol + Dimethyl Carbonate + 1-Octyl-3-methylimidazolium Tetrafluoroborate. Journal of Chemical & Engineering Data, 2012, 57, 1602-1606.	1.9	31
71	Highly Shapeâ€Selective Synthesis of Monodispersed Fivefold Twinned Platinum Nanodecahedrons and Nanoicosahedrons. Chemistry - A European Journal, 2012, 18, 12222-12226.	3.3	23
72	Hierarchical Co₃O₄nanosheet@nanowire arrays with enhanced pseudocapacitive performance. RSC Advances, 2012, 2, 1663-1668.	3.6	125

#	Article	IF	Citations
73	Polydopamine-coated nanofibrous mats as a versatile platform for producing porous functional membranes. Journal of Materials Chemistry, 2012, 22, 16994.	6.7	100
74	Isobaric Vaporâ€“Liquid Equilibrium for the Ethanol + Water + 1,3-Dimethylimidazolium Dimethylphosphate System at 101.3 kPa. Journal of Chemical & Engineering Data, 2012, 57, 696-700.	1.9	37
75	Hierarchical Co3O4@Ni-Co-O supercapacitor electrodes with ultrahigh specific capacitance per area. Nano Research, 2012, 5, 369-378.	10.4	156
76	Isobaric vapor-liquid equilibrium for methanol+benzene+1-octyl-3-methylimidazolium tetrafluoroborate. Korean Journal of Chemical Engineering, 2012, 29, 941-945.	2.7	7
77	Pt¿Cu and Pt£¿Pd£¿Cu Concave Nanocubes with Highâ€Index Facets and Superior Electrocatalytic Activity. Chemistry - A European Journal, 2012, 18, 777-782.	3.3	177
78	Coupling of Nanoparticle Plasmons with Colloidal Photonic Crystals as a New Strategy to Efficiently Enhance Fluorescence. Journal of Physical Chemistry C, 2011, 115, 20053-20060.	3.1	41
79	Ionic Liquidâ€“Mediated Selective Conversion of CO ₂ to CO at Low Overpotentials. Science, 2011, 334, 643-644.	12.6	1,293
80	Hierarchically Imprinted Porous Films for Rapid and Selective Detection of Explosives. Langmuir, 2011, 27, 8451-8457.	3.5	34
81	Theoretical Demonstration of Efficiency Enhancement of Dye-Sensitized Solar Cells with Double-Inverse Opal as Mirrors. Journal of Physical Chemistry C, 2010, 114, 10641-10647.	3.1	21