

Zhenmeng Peng

List of Publications by Citations

Source: <https://exaly.com/author-pdf/7770027/zhenmeng-peng-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

95
papers

8,048
citations

42
h-index

89
g-index

101
ext. papers

9,004
ext. citations

10.1
avg, IF

6.38
L-index

#	Paper	IF	Citations
95	Designer platinum nanoparticles: Control of shape, composition in alloy, nanostructure and electrocatalytic property. <i>Nano Today</i> , 2009 , 4, 143-164	17.9	925
94	Metallic nickel nitride nanosheets realizing enhanced electrochemical water oxidation. <i>Journal of the American Chemical Society</i> , 2015 , 137, 4119-25	16.4	844
93	Synthesis and oxygen reduction electrocatalytic property of Pt-on-Pd bimetallic heteronanostructures. <i>Journal of the American Chemical Society</i> , 2009 , 131, 7542-3	16.4	565
92	Truncated octahedral Pt(3)Ni oxygen reduction reaction electrocatalysts. <i>Journal of the American Chemical Society</i> , 2010 , 132, 4984-5	16.4	459
91	Octahedral Pd@Pt _{1.8} Ni core-shell nanocrystals with ultrathin PtNi alloy shells as active catalysts for oxygen reduction reaction. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2804-7	16.4	273
90	High-Performance Transition Metal Phosphide Alloy Catalyst for Oxygen Evolution Reaction. <i>ACS Nano</i> , 2018 , 12, 158-167	16.7	231
89	Elemental two-dimensional nanosheets beyond graphene. <i>Chemical Society Reviews</i> , 2017 , 46, 2127-2153	38.5	220
88	Free-Standing Two-Dimensional Ru Nanosheets with High Activity toward Water Splitting. <i>ACS Catalysis</i> , 2016 , 6, 1487-1492	13.1	217
87	Achieving Remarkable Activity and Durability toward Oxygen Reduction Reaction Based on Ultrathin Rh-Doped Pt Nanowires. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8152-8159	16.4	210
86	Solid-state chemistry-enabled scalable production of octahedral Pt-Ni alloy electrocatalyst for oxygen reduction reaction. <i>Journal of the American Chemical Society</i> , 2014 , 136, 7805-8	16.4	189
85	Engineering the electronic state of a perovskite electrocatalyst for synergistically enhanced oxygen evolution reaction. <i>Advanced Materials</i> , 2015 , 27, 5989-94	24	187
84	Growing Pt nanowires as a densely packed array on metal gauze. <i>Journal of the American Chemical Society</i> , 2007 , 129, 10634-5	16.4	168
83	Synthesis and characterization of ordered intermetallic PtPb nanorods. <i>Journal of the American Chemical Society</i> , 2007 , 129, 8684-5	16.4	146
82	Engineering the Electrical Conductivity of Lamellar Silver-Doped Cobalt(II) Selenide Nanobelts for Enhanced Oxygen Evolution. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 328-332	16.4	141
81	Synthesis and Oxygen Reduction Electrocatalytic Property of Platinum Hollow and Platinum-on-Silver Nanoparticles. <i>Chemistry of Materials</i> , 2010 , 22, 1098-1106	9.6	138
80	Composition-dependent formation of platinum silver nanowires. <i>ACS Nano</i> , 2010 , 4, 1501-10	16.7	126
79	Electrochemical synthesis and catalytic property of sub-10 nm platinum cubic nanoboxes. <i>Nano Letters</i> , 2010 , 10, 1492-6	11.5	123

78	PtAu bimetallic heteronanostructures made by post-synthesis modification of Pt-on-Au nanoparticles. <i>Nano Research</i> , 2009 , 2, 406-415	10	120
77	A nitrogen-doped ordered mesoporous carbon/graphene framework as bifunctional electrocatalyst for oxygen reduction and evolution reactions. <i>Nano Energy</i> , 2016 , 30, 503-510	17.1	119
76	Effects of surface chemistry on the generation of reactive oxygen species by copper nanoparticles. <i>ACS Nano</i> , 2012 , 6, 2157-64	16.7	116
75	A review of Pt-based electrocatalysts for oxygen reduction reaction. <i>Frontiers in Energy</i> , 2017 , 11, 268-285	15.6	110
74	Unconventional p-d Hybridization Interaction in PtGa Ultrathin Nanowires Boosts Oxygen Reduction Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019 , 141, 18083-18090	16.4	107
73	Electrocatalytic properties of Pt nanowires supported on Pt and W gauzes. <i>ACS Nano</i> , 2008 , 2, 2167-73	16.7	104
72	Octahedral Pt ₂ CuNi Uniform Alloy Nanoparticle Catalyst with High Activity and Promising Stability for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2015 , 5, 2296-2300	13.1	99
71	An Electrochemical Approach to PtAg Alloy Nanostructures Rich in Pt at the Surface. <i>Advanced Functional Materials</i> , 2010 , 20, 3734-3741	15.6	99
70	Direct Oxidation of Methanol on Pt Nanostructures Supported on Electrospun Nanofibers of Anatase. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 9970-9975	3.8	92
69	High-resolution in situ and ex situ TEM studies on graphene formation and growth on Pt nanoparticles. <i>Journal of Catalysis</i> , 2012 , 286, 22-29	7.3	85
68	Effects of composition and metal particle size on ethane dehydrogenation over Pt _x Sn _{100-x} /Mg(Al)O (70?x?100). <i>Journal of Catalysis</i> , 2014 , 311, 161-168	7.3	83
67	AgPt alloy nanoparticles with the compositions in the miscibility gap. <i>Journal of Solid State Chemistry</i> , 2008 , 181, 1546-1551	3.3	76
66	Free-Standing Holey Ni(OH) Nanosheets with Enhanced Activity for Water Oxidation. <i>Small</i> , 2017 , 13, 1700334	11	75
65	Synthesis and magnetic properties of Zn _{1-x} MnxFe ₂ O ₄ nanoparticles. <i>Physica B: Condensed Matter</i> , 2004 , 349, 124-128	2.8	74
64	Growth of magnetite nanorods along its easy-magnetization axis of [110]. <i>Journal of Crystal Growth</i> , 2004 , 263, 616-619	1.6	69
63	Distribution and Valence State of Ru Species on CeO ₂ Supports: Support Shape Effect and Its Influence on CO Oxidation. <i>ACS Catalysis</i> , 2019 , 9, 11088-11103	13.1	67
62	Synthesis and Magnetic Properties of Single-Crystals of MnFe ₂ O ₄ Nanorods. <i>European Journal of Inorganic Chemistry</i> , 2004 , 2004, 1165-1168	2.3	60
61	Synergy between active sites of Cu-In-Zr-O catalyst in CO ₂ hydrogenation to methanol. <i>Journal of Catalysis</i> , 2019 , 372, 74-85	7.3	54

60	Size-dependent oxygen reduction property of octahedral PtNi nanoparticle electrocatalysts. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 19778-19787	13	52
59	Hydrothermal Synthesis and Characterization of Bi ₂ Fe ₄ O ₉ Nanoparticles. <i>Chemistry Letters</i> , 2004 , 33, 502-503	1.7	50
58	Designing Champion Nanostructures of Tungsten Dichalcogenides for Electrocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2020 , 32, e2002584	24	48
57	Noble-Metal Nanotubes Prepared via a Galvanic Replacement Reaction Between Cu Nanowires and Aqueous HAuCl ₄ , H ₂ PtCl ₆ , or Na ₂ PdCl ₄ . <i>Science of Advanced Materials</i> , 2010 , 2, 413-420	2.3	44
56	Surfactant-free preparation of supported cubic platinum nanoparticles. <i>Chemical Communications</i> , 2012 , 48, 1854-6	5.8	43
55	Platinum Lead Nanostructures: Formation, Phase Behavior, and Electrocatalytic Properties. <i>Advanced Functional Materials</i> , 2008 , 18, 2745-2753	15.6	43
54	Gold atom-decorated CoSe ₂ nanobelts with engineered active sites for enhanced oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 20202-20207	13	42
53	A Generic Wet Impregnation Method for Preparing Substrate-Supported Platinum Group Metal and Alloy Nanoparticles with Controlled Particle Morphology. <i>Nano Letters</i> , 2016 , 16, 164-9	11.5	38
52	Platinum Alloy Catalysts for Oxygen Reduction Reaction: Advances, Challenges and Perspectives. <i>ChemNanoMat</i> , 2020 , 6, 32-41	3.5	38
51	Dual-Site Cascade Oxygen Reduction Mechanism on SnO ₂ /Pt-Cu-Ni for Promoting Reaction Kinetics. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9463-9467	16.4	37
50	Designing Highly Efficient and Long-Term Durable Electrocatalyst for Oxygen Evolution by Coupling B and P into Amorphous Porous NiFe-Based Material. <i>Small</i> , 2019 , 15, e1901020	11	36
49	Hydrogen Production via Hydrazine Decomposition on Model Platinum-Nickel Nanocatalyst with a Single (111) Facet. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9764-9772	3.8	35
48	n-Butane dehydrogenation over Pt/Mg(In)(Al)O. <i>Applied Catalysis A: General</i> , 2014 , 470, 208-214	5.1	34
47	Disappearing of the Verwey transition in magnetite nanoparticles synthesized under a magnetic field: implications for the origin of charge ordering. <i>Chemical Physics Letters</i> , 2004 , 390, 55-58	2.5	33
46	Growth of encapsulating carbon on supported Pt nanoparticles studied by in situ TEM. <i>Journal of Catalysis</i> , 2016 , 338, 295-304	7.3	33
45	Active Sites in Heterogeneous Catalytic Reaction on Metal and Metal Oxide: Theory and Practice. <i>Catalysts</i> , 2018 , 8, 478	4	33
44	Shape-enhanced ammonia electro-oxidation property of a cubic platinum nanocrystal catalyst prepared by surfactant-free synthesis. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14402	13	31
43	Synthesis of Magnetite Nanorods through Reduction of FeOOH. <i>Chemistry Letters</i> , 2005 , 34, 636-637	1.7	30

42	Structural and energetic insight into the cross-seeding amyloid assemblies of human IAPP and rat IAPP. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 7026-36	3.4	29
41	More accurate depiction of adsorption energy on transition metals using work function as one additional descriptor. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 12628-12632	3.6	28
40	Engineering the Electrical Conductivity of Lamellar Silver-Doped Cobalt(II) Selenide Nanobelts for Enhanced Oxygen Evolution. <i>Angewandte Chemie</i> , 2017 , 129, 334-338	3.6	27
39	Effects of the Synthesis Parameters on the Size and Composition of PtSn Nanoparticles Prepared by the Polyalcohol Reduction Method. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 19084-19090	3.8	26
38	Lattice contracted AgPt nanoparticles. <i>Chemical Communications</i> , 2011 , 47, 12595-7	5.8	25
37	Deconvolution of octahedral PtNi nanoparticle growth pathway from in situ characterizations. <i>Nature Communications</i> , 2018 , 9, 4485	17.4	25
36	Property of PtAg Alloy Nanoparticle Catalysts in Carbon Monoxide Oxidation. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 28739-28745	3.8	24
35	Phase engineering of cobalt hydroxides using magnetic fields for enhanced supercapacitor performance. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19203-19209	13	23
34	Tuning Electronic Structure and Lattice Diffusion Barrier of Ternary PtCuNi for Both Improved Activity and Stability Properties in Oxygen Reduction Electrocatalysis. <i>ACS Catalysis</i> , 2019 , 9, 11431-11437	13.1	21
33	Engineering active sites of two-dimensional MoS ₂ nanosheets for improving hydrogen evolution. <i>Inorganic Chemistry Frontiers</i> , 2016 , 3, 1376-1380	6.8	21
32	Oxidation-Induced Atom Diffusion and Surface Restructuring in Faceted Ternary PtCuNi Nanoparticles. <i>Chemistry of Materials</i> , 2019 , 31, 1720-1728	9.6	21
31	Synthesis and application of RuSe ₂ + nanotubes as a methanol tolerant electrocatalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry</i> , 2009 , 19, 1024-1030		20
30	Porous amorphous NiFeOx/NiFeP framework with dual electrocatalytic functions for water electrolysis. <i>Journal of Power Sources</i> , 2019 , 428, 76-81	8.9	19
29	In Situ Atomic-Scale Observation of the Two-Dimensional Co(OH) ₂ Transition at Atmospheric Pressure. <i>Chemistry of Materials</i> , 2017 , 29, 4572-4579	9.6	17
28	Synthesis of freestanding amorphous giant carbon tubes with outstanding oil sorption and water oxidation properties. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 3996-4002	13	17
27	Computation-Guided Development of Platinum Alloy Catalyst for Carbon Monoxide Preferential Oxidation. <i>ACS Catalysis</i> , 2018 , 8, 5777-5786	13.1	17
26	Unravelling Proximity-Driven Synergetic Effect within CIZOBAPO Bifunctional Catalyst for CO ₂ Hydrogenation to DME. <i>Energy & Fuels</i> , 2020 , 34, 8635-8643	4.1	16
25	Carbon monoxide in controlling the surface formation of Group VIII metal nanoparticles. <i>Chemical Communications</i> , 2014 , 50, 14013-6	5.8	15

24	Low-Temperature Preferential Oxidation of Carbon Monoxide on Pt3Ni Alloy Nanoparticle Catalyst with Engineered Surface. <i>ChemCatChem</i> , 2016 , 8, 97-101	5.2	15
23	Non-thermal plasma-assisted hydrogenolysis of polyethylene to light hydrocarbons. <i>Catalysis Communications</i> , 2021 , 150, 106274	3.2	14
22	Low-dimensional materials for alkaline oxygen evolution electrocatalysis. <i>Materials Today Chemistry</i> , 2019 , 11, 119-132	6.2	13
21	Size and composition control of Pt-In nanoparticles prepared by seed-mediated growth using bimetallic seeds. <i>Langmuir</i> , 2012 , 28, 3345-9	4	12
20	The enhanced coercivity for the magnetite/silica nanocomposite at room temperature. <i>Materials Research Bulletin</i> , 2004 , 39, 1875-1880	5.1	12
19	Supportless oxygen reduction electrocatalysts of CoCuPt hollow nanoparticles. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010 , 368, 4261-74	3	10
18	Magnetic Field-induced Increasing of the Reaction Rates Controlled by the Diffusion of Paramagnetic Gases. <i>Chemical Engineering and Technology</i> , 2004 , 27, 1273-1276	2	9
17	Proximity to Graphene Dramatically Alters Polymer Dynamics. <i>Macromolecules</i> , 2019 , 52, 5074-5085	5.5	8
16	A vacuum impregnation method for synthesizing octahedral PtCuNi nanoparticles on mesoporous carbon support and the oxygen reduction reaction electrocatalytic properties. <i>Journal of Colloid and Interface Science</i> , 2020 , 564, 245-253	9.3	8
15	Synthesis and property of a Helwingia-structured nickel nitride/ nickel hydroxide nanocatalyst in hydrazine decomposition. <i>RSC Advances</i> , 2016 , 6, 38494-38498	3.7	6
14	Utilizing hydrogen underpotential deposition in CO reduction for highly selective formaldehyde production under ambient conditions. <i>Green Chemistry</i> , 2020 , 22, 5639-5647	10	5
13	Nitrogen-inserted nickel nanosheets with controlled orbital hybridization and strain fields for boosted hydrogen oxidation in alkaline electrolytes. <i>Energy and Environmental Science</i> ,	35.4	4
12	Two-Dimensional Metal Organic Framework Nanosheets as Bifunctional Catalyst for Electrochemical and Photoelectrochemical Water Oxidation. <i>Frontiers in Chemistry</i> , 2020 , 8, 604239	5	4
11	Properties of amorphous iron phosphate in pseudocapacitive sodium ion removal for water desalination.. <i>RSC Advances</i> , 2020 , 10, 16875-16880	3.7	3
10	Non-thermal plasma-assisted rapid hydrogenolysis of polystyrene to high yield ethylene.. <i>Nature Communications</i> , 2022 , 13, 885	17.4	2
9	Oscillation of Work Function during Reducible Metal Oxide Catalysis and Correlation with the Activity Property. <i>ChemCatChem</i> , 2020 , 12, 85-89	5.2	1
8	Low-Temperature Preferential Oxidation of Carbon Monoxide on Pt3Ni Alloy Nanoparticle Catalyst with Engineered Surface. <i>ChemCatChem</i> , 2016 , 8, 3-3	5.2	1
7	Approaching full-range selectivity control in CO2 hydrogenation to methanol and carbon monoxide with catalyst composition regulation. <i>Inorganic Chemistry Frontiers</i> , 2021 , 8, 2433-2441	6.8	1

6	An Electrochemical Ethylamine/Acetonitrile Redox Method for Ambient Hydrogen Storage. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 55292-55298	9.5	o
5	Competitive Transient Electrostatic Adsorption for In Situ Regeneration of Poisoned Catalyst. <i>ChemCatChem</i> , 2019 , 11, 1179-1184	5.2	o
4	Fingerprinting the Ammonia Synthesis Pathway Using Spatiotemporal Electrostatic Potential Distribution of Intermediates. <i>ACS Omega</i> , 2021 , 6, 6292-6296	3.9	o
3	Ambient Synthesis of Pt-Reactive Metal Alloy and High-Entropy Alloy Nanocatalysts Utilizing Hydrogen Cold Plasma. <i>Chemistry of Materials</i> , 2022 , 34, 266-272	9.6	o
2	Metallic Nanostructures for Electrocatalysis 2015 , 205-241		
1	Balancing CO chemisorption with hydrogen electrochemical adsorption on Pt alloy catalyst for improving direct CO reduction to formaldehyde. <i>Chemical Engineering Journal</i> , 2022 , 446, 137131	14.7	