

# Dingsheng Wang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7216682/publications.pdf>

Version: 2024-02-01

346  
papers

52,250  
citations

668

122  
h-index

1627

215  
g-index

367  
all docs

367  
docs citations

367  
times ranked

27547  
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-Atom Catalysts: Synthetic Strategies and Electrochemical Applications. <i>Joule</i> , 2018, 2, 1242-1264.	11.7	1,618
2	Core-Shell ZIF-8@ZIF-67-Derived CoP Nanoparticle-Embedded N-Doped Carbon Nanotube Hollow Polyhedron for Efficient Overall Water Splitting. <i>Journal of the American Chemical Society</i> , 2018, 140, 2610-2618.	6.6	1,556
3	Isolated Single Iron Atoms Anchored on N-Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6937-6941.	7.2	1,542
4	Bimetallic Nanocrystals: Liquid-Phase Synthesis and Catalytic Applications. <i>Advanced Materials</i> , 2011, 23, 1044-1060.	11.1	1,009
5	Design of Single-Atom Co <sup>N<sub>5</sub></sup> Catalytic Site: A Robust Electrocatalyst for CO <sub>2</sub> Reduction with Nearly 100% CO Selectivity and Remarkable Stability. <i>Journal of the American Chemical Society</i> , 2018, 140, 4218-4221.	6.6	945
6	Green chemistry for nanoparticle synthesis. <i>Chemical Society Reviews</i> , 2015, 44, 5778-5792.	18.7	863
7	Chemical Synthesis of Single Atomic Site Catalysts. <i>Chemical Reviews</i> , 2020, 120, 11900-11955.	23.0	806
8	Defect Effects on TiO <sub>2</sub> Nanosheets: Stabilizing Single Atomic Site Au and Promoting Catalytic Properties. <i>Advanced Materials</i> , 2018, 30, 1705369.	11.1	751
9	Direct observation of noble metal nanoparticles transforming to thermally stable single atoms. <i>Nature Nanotechnology</i> , 2018, 13, 856-861.	15.6	741
10	Enhanced oxygen reduction with single-atomic-site iron catalysts for a zinc-air battery and hydrogen-air fuel cell. <i>Nature Communications</i> , 2018, 9, 5422.	5.8	696
11	Copper atom-pair catalyst anchored on alloy nanowires for selective and efficient electrochemical reduction of CO <sub>2</sub> . <i>Nature Chemistry</i> , 2019, 11, 222-228.	6.6	571
12	Hollow N-Doped Carbon Spheres with Isolated Cobalt Single Atomic Sites: Superior Electrocatalysts for Oxygen Reduction. <i>Journal of the American Chemical Society</i> , 2017, 139, 17269-17272.	6.6	556
13	Engineering unsymmetrically coordinated Cu-S <sub>1</sub> N <sub>3</sub> single atom sites with enhanced oxygen reduction activity. <i>Nature Communications</i> , 2020, 11, 3049.	5.8	537
14	Modulating the local coordination environment of single-atom catalysts for enhanced catalytic performance. <i>Nano Research</i> , 2020, 13, 1842-1855.	5.8	532
15	Matching the kinetics of natural enzymes with a single-atom iron nanozyme. <i>Nature Catalysis</i> , 2021, 4, 407-417.	16.1	517
16	Fe Isolated Single Atoms on S, N Codoped Carbon by Copolymer Pyrolysis Strategy for Highly Efficient Oxygen Reduction Reaction. <i>Advanced Materials</i> , 2018, 30, e1800588.	11.1	511
17	Bismuth Single Atoms Resulting from Transformation of Metal-Organic Frameworks and Their Use as Electrocatalysts for CO <sub>2</sub> Reduction. <i>Journal of the American Chemical Society</i> , 2019, 141, 16569-16573.	6.6	501
18	MXene (Ti <sub>3</sub> C <sub>2</sub> ) Vacancy-Confined Single-Atom Catalyst for Efficient Functionalization of CO <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2019, 141, 4086-4093.	6.6	479

#	ARTICLE	IF	CITATIONS
19	Synthesis and catalytic properties of bimetallic nanomaterials with various architectures. Nano Today, 2012, 7, 448-466.	6.2	463
20	Electronic Metal-Support Interaction of Single-Atom Catalysts and Applications in Electrocatalysis. Advanced Materials, 2020, 32, e2003300.	11.1	459
21	A Bimetallic Zn/Fe Polyphthalocyanine-Derived Single-Atom Fe <sub>4</sub> Catalytic Site: A Superior Trifunctional Catalyst for Overall Water Splitting and Zn-Air Batteries. Angewandte Chemie - International Edition, 2018, 57, 8614-8618.	7.2	455
22	Iridium single-atom catalyst on nitrogen-doped carbon for formic acid oxidation synthesized using a general host-guest strategy. Nature Chemistry, 2020, 12, 764-772.	6.6	452
23	Metal organic frameworks derived single atom catalysts for electrocatalytic energy conversion. Nano Research, 2019, 12, 2067-2080.	5.8	448
24	Atomic-Level Modulation of Electronic Density at Cobalt Single-Atom Sites Derived from Metal-Organic Frameworks: Enhanced Oxygen Reduction Performance. Angewandte Chemie - International Edition, 2021, 60, 3212-3221.	7.2	445
25	Defect engineering in earth-abundant electrocatalysts for CO <sub>2</sub> and N <sub>2</sub> reduction. Energy and Environmental Science, 2019, 12, 1730-1750.	15.6	439
26	Rational Design of Single Molybdenum Atoms Anchored on N-Doped Carbon for Effective Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 16086-16090.	7.2	431
27	Single Tungsten Atoms Supported on MOF-Derived N-Doped Carbon for Robust Electrochemical Hydrogen Evolution. Advanced Materials, 2018, 30, e1800396.	11.1	427
28	Electronic structure and d-band center control engineering over M-doped CoP (M = Ni, Mn, Fe) hollow polyhedron frames for boosting hydrogen production. Nano Energy, 2019, 56, 411-419.	8.2	421
29	Single-atom Rh/N-doped carbon electrocatalyst for formic acid oxidation. Nature Nanotechnology, 2020, 15, 390-397.	15.6	420
30	Design concept for electrocatalysts. Nano Research, 2022, 15, 1730-1752.	5.8	396
31	Understanding the structure-performance relationship of active sites at atomic scale. Nano Research, 2022, 15, 6888-6923.	5.8	391
32	Photoinduction of Cu Single Atoms Decorated on UiO-66-NH <sub>2</sub> for Enhanced Photocatalytic Reduction of CO <sub>2</sub> to Liquid Fuels. Journal of the American Chemical Society, 2020, 142, 19339-19345.	6.6	373
33	Engineering Dual Single-Atom Sites on 2D Ultrathin N-Doped Carbon Nanosheets Attaining Ultra-Low-Temperature Zinc-Air Battery. Angewandte Chemie - International Edition, 2022, 61, .	7.2	355
34	Isolated Single-Atom Pd Sites in Intermetallic Nanostructures: High Catalytic Selectivity for Semihydrogenation of Alkynes. Journal of the American Chemical Society, 2017, 139, 7294-7301.	6.6	354
35	Engineering the Atomic Interface with Single Platinum Atoms for Enhanced Photocatalytic Hydrogen Production. Angewandte Chemie - International Edition, 2020, 59, 1295-1301.	7.2	344
36	Shape-Dependent Catalytic Activity of Silver Nanoparticles for the Oxidation of Styrene. Chemistry - an Asian Journal, 2006, 1, 888-893.	1.7	343

#	ARTICLE	IF	CITATIONS
37	Electronic structure engineering to boost oxygen reduction activity by controlling the coordination of the central metal. <i>Energy and Environmental Science</i> , 2018, 11, 2348-2352.	15.6	336
38	Regulating the coordination structure of single-atom Fe-NxCy catalytic sites for benzene oxidation. <i>Nature Communications</i> , 2019, 10, 4290.	5.8	326
39	Single-atomic cobalt sites embedded in hierarchically ordered porous nitrogen-doped carbon as a superior bifunctional electrocatalyst. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 12692-12697.	3.3	325
40	Syntheses of Water-Soluble Octahedral, Truncated Octahedral, and Cubic Pt@Ni Nanocrystals and Their Structure-Activity Study in Model Hydrogenation Reactions. <i>Journal of the American Chemical Society</i> , 2012, 134, 8975-8981.	6.6	322
41	Rare-Earth Single Erbium Atoms for Enhanced Photocatalytic CO <sub>2</sub> Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10651-10657.	7.2	314
42	A Versatile Bottom-Up Assembly Approach to Colloidal Spheres from Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 6650-6653.	7.2	310
43	Constructing NiCo/Fe <sub>3</sub> O <sub>4</sub> Heteroparticles within MOF-74 for Efficient Oxygen Evolution Reactions. <i>Journal of the American Chemical Society</i> , 2018, 140, 15336-15341.	6.6	310
44	Isolated Single Iron Atoms Anchored on N-Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2017, 129, 7041-7045.	1.6	306
45	High-Concentration Single Atomic Pt Sites on Hollow CuSx for Selective O <sub>2</sub> Reduction to H <sub>2</sub> O <sub>2</sub> in Acid Solution. <i>CheM</i> , 2019, 5, 2099-2110.	5.8	279
46	Carbon nitride supported Fe <sub>2</sub> cluster catalysts with superior performance for alkene epoxidation. <i>Nature Communications</i> , 2018, 9, 2353.	5.8	278
47	Atomic interface effect of a single atom copper catalyst for enhanced oxygen reduction reactions. <i>Energy and Environmental Science</i> , 2019, 12, 3508-3514.	15.6	278
48	One-Pot Protocol for Au-Based Hybrid Magnetic Nanostructures via a Noble-Metal-Induced Reduction Process. <i>Journal of the American Chemical Society</i> , 2010, 132, 6280-6281.	6.6	275
49	An Adjacent Atomic Platinum Site Enables Single-Atom Iron with High Oxygen Reduction Reaction Performance. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19262-19271.	7.2	275
50	A photochromic composite with enhanced carrier separation for the photocatalytic activation of benzylic C-H bonds in toluene. <i>Nature Catalysis</i> , 2018, 1, 704-710.	16.1	273
51	Theory-oriented screening and discovery of advanced energy transformation materials in electrocatalysis. , 2022, 1, 100013.		273
52	A Polymer Encapsulation Strategy to Synthesize Porous Nitrogen-Doped Carbon-Nanosphere-Supported Metal Isolated-Single-Atomic-Site Catalysts. <i>Advanced Materials</i> , 2018, 30, e1706508.	11.1	266
53	Accelerating water dissociation kinetics by isolating cobalt atoms into ruthenium lattice. <i>Nature Communications</i> , 2018, 9, 4958.	5.8	264
54	Synergistically Interactive Pyridinic-N@MoP Sites: Identified Active Centers for Enhanced Hydrogen Evolution in Alkaline Solution. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8982-8990.	7.2	263

#	ARTICLE	IF	CITATIONS
55	In Situ Phosphatizing of Triphenylphosphine Encapsulated within Metal-Organic Frameworks to Design Atomic Co <sub>1</sub> P <sub>1</sub> N <sub>3</sub> Interfacial Structure for Promoting Catalytic Performance. <i>Journal of the American Chemical Society</i> , 2020, 142, 8431-8439.	6.6	259
56	Confined Pyrolysis within Metal-Organic Frameworks To Form Uniform Ru <sub>3</sub> Clusters for Efficient Oxidation of Alcohols. <i>Journal of the American Chemical Society</i> , 2017, 139, 9795-9798.	6.6	258
57	Metal (Hydr)oxides@Polymer Core-Shell Strategy to Metal Single-Atom Materials. <i>Journal of the American Chemical Society</i> , 2017, 139, 10976-10979.	6.6	257
58	Designing Atomic Active Centers for Hydrogen Evolution Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 20794-20812.	7.2	257
59	Single-atom catalysis enables long-life, high-energy lithium-sulfur batteries. <i>Nano Research</i> , 2020, 13, 1856-1866.	5.8	257
60	Cation vacancy stabilization of single-atomic-site Pt <sub>1</sub> /Ni(OH) <sub>x</sub> catalyst for diboration of alkynes and alkenes. <i>Nature Communications</i> , 2018, 9, 1002.	5.8	255
61	Three-dimensional open nano-netcage electrocatalysts for efficient pH-universal overall water splitting. <i>Nature Communications</i> , 2019, 10, 4875.	5.8	253
62	Single-atom site catalysts for environmental catalysis. <i>Nano Research</i> , 2020, 13, 3165-3182.	5.8	252
63	Engineering Isolated Mn <sub>2</sub> C <sub>2</sub> Atomic Interface Sites for Efficient Bifunctional Oxygen Reduction and Evolution Reaction. <i>Nano Letters</i> , 2020, 20, 5443-5450.	4.5	249
64	Cobalt single atom site catalysts with ultrahigh metal loading for enhanced aerobic oxidation of ethylbenzene. <i>Nano Research</i> , 2021, 14, 2418-2423.	5.8	248
65	Discovery of main group single Sb <sub>4</sub> active sites for CO <sub>2</sub> electroreduction to formate with high efficiency. <i>Energy and Environmental Science</i> , 2020, 13, 2856-2863.	15.6	245
66	Surface structure effects in nanocrystal MnO <sub>2</sub> and Ag/MnO <sub>2</sub> catalytic oxidation of CO. <i>Journal of Catalysis</i> , 2006, 237, 426-430.	3.1	244
67	Ag, Ag <sub>2</sub> S, and Ag <sub>2</sub> Se Nanocrystals: Synthesis, Assembly, and Construction of Mesoporous Structures. <i>Journal of the American Chemical Society</i> , 2008, 130, 4016-4022.	6.6	243
68	Regulations of active moiety in single atom catalysts for electrochemical hydrogen evolution reaction. <i>Nano Research</i> , 2022, 15, 5792-5815.	5.8	242
69	Functionalization of Hollow Nanomaterials for Catalytic Applications: Nanoreactor Construction. <i>Advanced Materials</i> , 2019, 31, e1800426.	11.1	239
70	Silver Single-Atom Catalyst for Efficient Electrochemical CO <sub>2</sub> Reduction Synthesized from Thermal Transformation and Surface Reconstruction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6170-6176.	7.2	236
71	Design of a Single-Atom Indium <sup>+</sup> -N <sub>4</sub> Interface for Efficient Electroreduction of CO <sub>2</sub> to Formate. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22465-22469.	7.2	232
72	Design of ultrathin Pt-Mo-Ni nanowire catalysts for ethanol electrooxidation. <i>Science Advances</i> , 2017, 3, e1603068.	4.7	224

#	ARTICLE	IF	CITATIONS
73	Discovering Partially Charged Single-Atom Pt for Enhanced Anti-Markovnikov Alkene Hydrosilylation. <i>Journal of the American Chemical Society</i> , 2018, 140, 7407-7410.	6.6	218
74	Sophisticated Construction of Au Islands on Pt@Ni: An Ideal Trimetallic Nanoframe Catalyst. <i>Journal of the American Chemical Society</i> , 2014, 136, 11594-11597.	6.6	216
75	Controlling N-doping type in carbon to boost single-atom site Cu catalyzed transfer hydrogenation of quinoline. <i>Nano Research</i> , 2020, 13, 3082-3087.	5.8	215
76	A cocoon silk chemistry strategy to ultrathin N-doped carbon nanosheet with metal single-site catalysts. <i>Nature Communications</i> , 2018, 9, 3861.	5.8	210
77	Quantitative Study of Charge Carrier Dynamics in Well-Defined WO <sub>3</sub> Nanowires and Nanosheets: Insight into the Crystal Facet Effect in Photocatalysis. <i>Journal of the American Chemical Society</i> , 2018, 140, 9078-9082.	6.6	209
78	Single-Crystalline Octahedral Au@Ag Nanoframes. <i>Journal of the American Chemical Society</i> , 2012, 134, 18165-18168.	6.6	206
79	A Supported Pd <sub>2</sub> Dual-Atom Site Catalyst for Efficient Electrochemical CO <sub>2</sub> Reduction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13388-13393.	7.2	201
80	Emerging low-nuclearity supported metal catalysts with atomic level precision for efficient heterogeneous catalysis. <i>Nano Research</i> , 2022, 15, 7806-7839.	5.8	201
81	Temperature-Controlled Selectivity of Hydrogenation and Hydrodeoxygenation in the Conversion of Biomass Molecule by the Ru <sub>1</sub> /mpg-C <sub>3</sub> N <sub>4</sub> Catalyst. <i>Journal of the American Chemical Society</i> , 2018, 140, 11161-11164.	6.6	199
82	Non-carbon-supported single-atom site catalysts for electrocatalysis. <i>Energy and Environmental Science</i> , 2021, 14, 2809-2858.	15.6	198
83	Phosphorus Induced Electron Localization of Single Iron Sites for Boosted CO <sub>2</sub> Electroreduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 23614-23618.	7.2	197
84	Single-Atom Materials: Small Structures Determine Macroproperties. <i>Small Structures</i> , 2021, 2, 2000051.	6.9	195
85	Strain Engineering to Enhance the Electrooxidation Performance of Atomic-Layer Pt on Intermetallic Pt <sub>3</sub> Ga. <i>Journal of the American Chemical Society</i> , 2018, 140, 2773-2776.	6.6	193
86	A General Strategy for Fabricating Isolated Single Metal Atomic Site Catalysts in Y Zeolite. <i>Journal of the American Chemical Society</i> , 2019, 141, 9305-9311.	6.6	191
87	Nanocrystalline intermetallics and alloys. <i>Nano Research</i> , 2010, 3, 574-580.	5.8	190
88	The Electronic Metal-Support Interaction Directing the Design of Single Atomic Site Catalysts: Achieving High Efficiency Towards Hydrogen Evolution. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 19085-19091.	7.2	189
89	Superiority of Dual-Atom Catalysts in Electrocatalysis: One Step Further Than Single-Atom Catalysts. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	189
90	Regulating the coordination structure of metal single atoms for efficient electrocatalytic CO <sub>2</sub> reduction. <i>Energy and Environmental Science</i> , 2020, 13, 4609-4624.	15.6	188

#	ARTICLE	IF	CITATIONS
91	Nanocrystals from solutions: catalysts. <i>Chemical Society Reviews</i> , 2014, 43, 2112-2124.	18.7	185
92	Platinum–nickel frame within metal-organic framework fabricated in situ for hydrogen enrichment and molecular sieving. <i>Nature Communications</i> , 2015, 6, 8248.	5.8	184
93	Single-Atom Co <sup>4+</sup> Electrocatalyst Enabling Four-Electron Oxygen Reduction with Enhanced Hydrogen Peroxide Tolerance for Selective Sensing. <i>Journal of the American Chemical Society</i> , 2020, 142, 16861-16867.	6.6	184
94	Magnetic Tuning of Upconversion Luminescence in Lanthanide-Doped Bifunctional Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4366-4369.	7.2	182
95	Gram-Scale Synthesis of High-Loading Single-Atom Site Fe Catalysts for Effective Epoxidation of Styrene. <i>Advanced Materials</i> , 2020, 32, e2000896.	11.1	181
96	Engineering of Coordination Environment and Multiscale Structure in Single-Site Copper Catalyst for Superior Electrocatalytic Oxygen Reduction. <i>Nano Letters</i> , 2020, 20, 6206-6214.	4.5	178
97	A Strategy for Designing a Concave Pt–Ni Alloy through Controllable Chemical Etching. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12524-12528.	7.2	176
98	Rational Design of Single-Atom Site Electrocatalysts: From Theoretical Understandings to Practical Applications. <i>Advanced Materials</i> , 2021, 33, e2008151.	11.1	175
99	Reversely trapping atoms from a perovskite surface for high-performance and durable fuel cell cathodes. <i>Nature Catalysis</i> , 2022, 5, 300-310.	16.1	175
100	Synthetic strategies of supported atomic clusters for heterogeneous catalysis. <i>Nature Communications</i> , 2020, 11, 5884.	5.8	174
101	Thermal Atomization of Platinum Nanoparticles into Single Atoms: An Effective Strategy for Engineering High-Performance Nanozymes. <i>Journal of the American Chemical Society</i> , 2021, 143, 18643-18651.	6.6	174
102	Isolated Ni Atoms Dispersed on Ru Nanosheets: High-Performance Electrocatalysts toward Hydrogen Oxidation Reaction. <i>Nano Letters</i> , 2020, 20, 3442-3448.	4.5	172
103	Nanocrystals: Solution-based synthesis and applications as nanocatalysts. <i>Nano Research</i> , 2009, 2, 30-46.	5.8	170
104	MOF Encapsulating N-Heterocyclic Carbene-Ligated Copper Single-Atom Site Catalyst towards Efficient Methane Electrosynthesis. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	170
105	Highly Active and Selective Catalysis of Bimetallic Rh <sub>3</sub> Ni Nanoparticles in the Hydrogenation of Nitroarenes. <i>ACS Catalysis</i> , 2013, 3, 608-612.	5.5	167
106	Isolated Single-Atom Ni <sup>5+</sup> Catalytic Site in Hollow Porous Carbon Capsules for Efficient Lithium–Sulfur Batteries. <i>Nano Letters</i> , 2021, 21, 9691-9698.	4.5	167
107	Atomic-scale engineering of chemical-vapor-deposition-grown 2D transition metal dichalcogenides for electrocatalysis. <i>Energy and Environmental Science</i> , 2020, 13, 1593-1616.	15.6	166
108	NiO nanorings and their unexpected catalytic property for CO oxidation. <i>Nanotechnology</i> , 2006, 17, 979-983.	1.3	165

#	ARTICLE	IF	CITATIONS
109	Ordered Porous Nitrogen-Doped Carbon Matrix with Atomically Dispersed Cobalt Sites as an Efficient Catalyst for Dehydrogenation and Transfer Hydrogenation of N-Heterocycles. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11262-11266.	7.2	165
110	Atomically Dispersed Ruthenium Species Inside Metal-Organic Frameworks: Combining the High Activity of Atomic Sites and the Molecular Sieving Effect of MOFs. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4271-4275.	7.2	162
111	A MnO <sub>2</sub> -based catalyst with H <sub>2</sub> O resistance for NH <sub>3</sub> -SCR: Study of catalytic activity and reactants-H <sub>2</sub> O competitive adsorption. <i>Applied Catalysis B: Environmental</i> , 2020, 270, 118860.	10.8	159
112	Single-Atom Fe Catalysts for Fenton-Like Reactions: Roles of Different N Species. <i>Advanced Materials</i> , 2022, 34, e2110653.	11.1	158
113	Dual-atom Pt heterogeneous catalyst with excellent catalytic performances for the selective hydrogenation and epoxidation. <i>Nature Communications</i> , 2021, 12, 3181.	5.8	156
114	Ru-Co Pair Sites Catalyst Boosts the Energetics for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	154
115	The Electronic Metal-Support Interaction Directing the Design of Single Atomic Site Catalysts: Achieving High Efficiency Towards Hydrogen Evolution. <i>Angewandte Chemie</i> , 2021, 133, 19233-19239.	1.6	149
116	Highly branched Pt-Ni nanocrystals enclosed by stepped surface for methanol oxidation. <i>Chemical Science</i> , 2012, 3, 1925.	3.7	146
117	Mesoporous Nitrogen-Doped Carbon-Nanosphere-Supported Isolated Single-Atom Pd Catalyst for Highly Efficient Semihydrogenation of Acetylene. <i>Advanced Materials</i> , 2019, 31, e1901024.	11.1	146
118	Intermetallic Ni <sub>x</sub> M <sub>y</sub> (M = Ga and Sn) Nanocrystals: A Non-Precious Metal Catalyst for Semi-Hydrogenation of Alkynes. <i>Advanced Materials</i> , 2016, 28, 4747-4754.	11.1	145
119	A fundamental comprehension and recent progress in advanced Pt-based ORR nanocatalysts. <i>SmartMat</i> , 2021, 2, 56-75.	6.4	141
120	One-step synthesis of single-site vanadium substitution in 1T-WS <sub>2</sub> monolayers for enhanced hydrogen evolution catalysis. <i>Nature Communications</i> , 2021, 12, 709.	5.8	137
121	In situ embedding Co <sub>9</sub> S <sub>8</sub> into nitrogen and sulfur codoped hollow porous carbon as a bifunctional electrocatalyst for oxygen reduction and hydrogen evolution reactions. <i>Applied Catalysis B: Environmental</i> , 2019, 254, 186-193.	10.8	135
122	d Orbital Hybridization Induced by a Monodispersed Ga Site on a Pt <sub>3</sub> Mn Nanocatalyst Boosts Ethanol Electrooxidation. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	134
123	Room Temperature Activation of Oxygen by Monodispersed Metal Nanoparticles: Oxidative Dehydrogenative Coupling of Anilines for Azobenzene Syntheses. <i>ACS Catalysis</i> , 2013, 3, 478-486.	5.5	133
124	Lewis Acid Site-Promoted Single-Atomic Cu Catalyzes Electrochemical CO <sub>2</sub> Methanation. <i>Nano Letters</i> , 2021, 21, 7325-7331.	4.5	133
125	Atomically dispersed nonmagnetic electron traps improve oxygen reduction activity of perovskite oxides. <i>Energy and Environmental Science</i> , 2021, 14, 1016-1028.	15.6	130
126	Engineering the Local Atomic Environments of Indium Single-Atom Catalysts for Efficient Electrochemical Production of Hydrogen Peroxide. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	127



#	ARTICLE	IF	CITATIONS
127	High performance electrocatalyst: Pt@Cu hollow nanocrystals. <i>Chemical Communications</i> , 2011, 47, 8094.	2.2	125
128	General synthesis of III-V <sub>2</sub> ternary semiconductor nanocrystals. <i>Chemical Communications</i> , 2008, , 2556.	2.2	123
129	Ultralong Single-Crystalline Ag <sub>2</sub> S Nanowires: Promising Candidates for Photoswitches and Room-temperature Oxygen Sensors. <i>Advanced Materials</i> , 2008, 20, 2628-2632.	11.1	121
130	One-Pot Pyrolysis to N-Doped Graphene with High-Density Pt Single Atomic Sites as Heterogeneous Catalyst for Alkene Hydrosilylation. <i>ACS Catalysis</i> , 2018, 8, 10004-10011.	5.5	121
131	Strain Regulation to Optimize the Acidic Water Oxidation Performance of Atomic-Layer IrO <sub>x</sub> . <i>Advanced Materials</i> , 2019, 31, e1903616.	11.1	121
132	Atomically Dispersed Pt <sub>3</sub> C <sub>1</sub> Sites Enabling Efficient and Selective Electrocatalytic C-C Bond Cleavage in Lignin Models under Ambient Conditions. <i>Journal of the American Chemical Society</i> , 2021, 143, 9429-9439.	6.6	120
133	Isolating contiguous Pt atoms and forming Pt-Zn intermetallic nanoparticles to regulate selectivity in 4-nitrophenylacetylene hydrogenation. <i>Nature Communications</i> , 2019, 10, 3787.	5.8	119
134	Hydroformylation of alkenes over rhodium supported on the metal-organic framework ZIF-8. <i>Nano Research</i> , 2014, 7, 1364-1369.	5.8	118
135	Porphyrin-like Fe-N <sub>4</sub> sites with sulfur adjustment on hierarchical porous carbon for different rate-determining steps in oxygen reduction reaction. <i>Nano Research</i> , 2018, 11, 6260-6269.	5.8	118
136	Bringing catalytic order out of chaos with nitrogen-doped ordered mesoporous carbon. <i>Matter</i> , 2021, 4, 3161-3194.	5.0	117
137	Synergistic Modulation of the Separation of Photo-Generated Carriers via Engineering of Dual Atomic Sites for Promoting Photocatalytic Performance. <i>Advanced Materials</i> , 2021, 33, e2105904.	11.1	117
138	Atomically dispersed Ni-Ru-P interface sites for high-efficiency pH-universal electrocatalysis of hydrogen evolution. <i>Nano Energy</i> , 2021, 80, 105467.	8.2	114
139	Complementary Operando Spectroscopy identification of in-situ generated metastable charge-asymmetry Cu <sub>2</sub> -CuN <sub>3</sub> clusters for CO <sub>2</sub> reduction to ethanol. <i>Nature Communications</i> , 2022, 13, 1322.	5.8	113
140	Single-Site Au <sup>I</sup> Catalyst for Silane Oxidation with Water. <i>Advanced Materials</i> , 2018, 30, 1704720.	11.1	112
141	Scale-Up Biomass Pathway to Cobalt Single-Site Catalysts Anchored on N-Doped Porous Carbon Nanobelt with Ultrahigh Surface Area. <i>Advanced Functional Materials</i> , 2018, 28, 1802167.	7.8	112
142	Polyoxometalate-Based Metal-Organic Framework as Molecular Sieve for Highly Selective Semi-Hydrogenation of Acetylene on Isolated Single Pd Atom Sites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22522-22528.	7.2	112
143	General preparation for Pt-based alloy nanoporous nanoparticles as potential nanocatalysts. <i>Scientific Reports</i> , 2011, 1, 37.	1.6	111
144	Adsorption Site Regulation to Guide Atomic Design of Ni-Ga Catalysts for Acetylene Semi-Hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11647-11652.	7.2	111

#	ARTICLE	IF	CITATIONS
145	Pt <sub>1-x</sub> M <sub>x</sub> (M=Cu, Co, Ni, Fe) Nanocrystals: From Small Nanoparticles to Wormlike Nanowires by Oriented Attachment. <i>Chemistry - A European Journal</i> , 2013, 19, 233-239.	1.7	110
146	Atomically dispersed Fe atoms anchored on COF-derived N-doped carbon nanospheres as efficient multi-functional catalysts. <i>Chemical Science</i> , 2020, 11, 786-790.	3.7	110
147	Monodispersed Pd <sup>0</sup> /Ni Nanoparticles: Composition Control Synthesis and Catalytic Properties in the Miyaura-Suzuki Reaction. <i>Inorganic Chemistry</i> , 2011, 50, 2046-2048.	1.9	107
148	An efficient multifunctional hybrid electrocatalyst: Ni <sub>2</sub> P nanoparticles on MOF-derived Co,N-doped porous carbon polyhedrons for oxygen reduction and water splitting. <i>Chemical Communications</i> , 2018, 54, 12101-12104.	2.2	107
149	A Site Distance Effect Induced by Reactant Molecule Matchup in Single-Atom Catalysts for Fenton-Like Reactions. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	105
150	A heterogeneous iridium single-atom-site catalyst for highly regioselective carbenoid O-H bond insertion. <i>Nature Catalysis</i> , 2021, 4, 523-531.	16.1	103
151	Mesoporous Multicomponent Nanocomposite Colloidal Spheres: Ideal High-Temperature Stable Model Catalysts. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3725-3729.	7.2	101
152	Engineering of Electronic States on Co <sub>3</sub> O <sub>4</sub> Ultrathin Nanosheets by Cation Substitution and Anion Vacancies for Oxygen Evolution Reaction. <i>Small</i> , 2020, 16, e2001571.	5.2	98
153	Single-atom Fe with Fe <sub>1</sub> N <sub>3</sub> structure showing superior performances for both hydrogenation and transfer hydrogenation of nitrobenzene. <i>Science China Materials</i> , 2021, 64, 642-650.	3.5	98
154	Defect-Dominated Shape Recovery of Nanocrystals: A New Strategy for Trimetallic Catalysts. <i>Journal of the American Chemical Society</i> , 2013, 135, 12220-12223.	6.6	96
155	Convenient fabrication of BiOBr ultrathin nanosheets with rich oxygen vacancies for photocatalytic selective oxidation of secondary amines. <i>Nano Research</i> , 2019, 12, 1625-1630.	5.8	96
156	Single-atom catalysis for carbon neutrality. , 2022, 4, 1021-1079.		96
157	Pt <sup>0</sup> /Ni nanodendrites with high hydrogenation activity. <i>Chemical Communications</i> , 2013, 49, 2903.	2.2	95
158	Kinetically Controlling Surface Structure to Construct Defect-Rich Intermetallic Nanocrystals: Effective and Stable Catalysts. <i>Advanced Materials</i> , 2016, 28, 2540-2546.	11.1	95
159	Construction of Pd-Zn dual sites to enhance the performance for ethanol electro-oxidation reaction. <i>Nature Communications</i> , 2021, 12, 5273.	5.8	94
160	Strain Relaxation in Metal Alloy Catalysts Steers the Product Selectivity of Electrocatalytic CO <sub>2</sub> Reduction. <i>ACS Nano</i> , 2022, 16, 3251-3263.	7.3	94
161	Rational Control of the Selectivity of a Ruthenium Catalyst for Hydrogenation of 4-Nitrostyrene by Strain Regulation. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11971-11975.	7.2	93
162	Revealing the Active Species for Aerobic Alcohol Oxidation by Using Uniform Supported Palladium Catalysts. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4642-4646.	7.2	93

#	ARTICLE	IF	CITATIONS
163	Single atom alloy: An emerging atomic site material for catalytic applications. <i>Nano Today</i> , 2020, 34, 100917.	6.2	91
164	Creating High Regioselectivity by Electronic Metal-Support Interaction of a Single-Atomic-Site Catalyst. <i>Journal of the American Chemical Society</i> , 2021, 143, 15453-15461.	6.6	88
165	Regulating the Catalytic Performance of Single-Atomic-Site Ir Catalyst for Biomass Conversion by Metal-Support Interactions. <i>ACS Catalysis</i> , 2019, 9, 5223-5230.	5.5	87
166	Tuning Polarity of Cu-O Bond in Heterogeneous Cu Catalyst to Promote Additive-free Hydroboration of Alkynes. <i>Chem</i> , 2020, 6, 725-737.	5.8	87
167	Understanding of the major reactions in solution synthesis of functional nanomaterials. <i>Science China Materials</i> , 2016, 59, 938-996.	3.5	86
168	Carbon nanotube-encapsulated cobalt for oxygen reduction: integration of space confinement and N-doping. <i>Chemical Communications</i> , 2019, 55, 14801-14804.	2.2	85
169	Mn <sub>4</sub> Oxygen Reduction Electrocatalyst: Operando Investigation of Active Sites and High Performance in Zinc-Air Battery. <i>Advanced Energy Materials</i> , 2021, 11, 2002753.	10.2	83
170	Rational Design of Single Molybdenum Atoms Anchored on N-Doped Carbon for Effective Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2017, 129, 16302-16306.	1.6	82
171	How to select effective electrocatalysts: Nano or single atom?. <i>Nano Select</i> , 2021, 2, 492-511.	1.9	82
172	Tunable Selectivity for Electrochemical CO <sub>2</sub> Reduction by Bimetallic Cu-Sn Catalysts: Elucidating the Roles of Cu and Sn. <i>ACS Catalysis</i> , 2021, 11, 11103-11108.	5.5	82
173	Carbon Nitride Photocatalysts with Integrated Oxidation and Reduction Atomic Active Centers for Improved CO <sub>2</sub> Conversion. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	81
174	Ag/CeO <sub>2</sub> nanospheres: Efficient catalysts for formaldehyde oxidation. <i>Applied Catalysis B: Environmental</i> , 2014, 148-149, 36-43.	10.8	77
175	Low-Temperature Synthesis of Single Palladium Atoms Supported on Defective Hexagonal Boron Nitride Nanosheet for Chemoselective Hydrogenation of Cinnamaldehyde. <i>ACS Nano</i> , 2021, 15, 10175-10184.	7.3	77
176	Bi <sub>2</sub> S <sub>3</sub> nanotubes: Facile synthesis and growth mechanism. <i>Nano Research</i> , 2009, 2, 130-134.	5.8	76
177	Shape control of CoO and LiCoO <sub>2</sub> nanocrystals. <i>Nano Research</i> , 2010, 3, 1-7.	5.8	76
178	Single-Atom Au <sup>I</sup> -N <sub>3</sub> Site for Acetylene Hydrochlorination Reaction. <i>ACS Catalysis</i> , 2020, 10, 1865-1870.	5.5	76
179	Regulating the Tip Effect on Single-Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	76
180	Pd single-atom monolithic catalyst: Functional 3D structure and unique chemical selectivity in hydrogenation reaction. <i>Science China Materials</i> , 2021, 64, 1919-1929.	3.5	75

#	ARTICLE	IF	CITATIONS
181	Pd@Cu <sub>2</sub> O and Ag@Cu <sub>2</sub> O Hybrid Concave Nanomaterials for an Effective Synergistic Catalyst. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11049-11053.	7.2	74
182	Bamboo-Like Nitrogen-Doped Carbon Nanotubes with Co Nanoparticles Encapsulated at the Tips: Uniform and Large-Scale Synthesis and High-Performance Electrocatalysts for Oxygen Reduction. <i>Chemistry - A European Journal</i> , 2015, 21, 14022-14029.	1.7	74
183	Isolated Iron Single-Atomic Site-Catalyzed Chemoselective Transfer Hydrogenation of Nitroarenes to Arylamines. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 33819-33824.	4.0	74
184	Coordination structure dominated performance of single-atomic Pt catalyst for anti-Markovnikov hydroboration of alkenes. <i>Science China Materials</i> , 2020, 63, 972-981.	3.5	74
185	Engineering Water Molecules Activation Center on Multisite Electrocatalysts for Enhanced CO <sub>2</sub> Methanation. <i>Journal of the American Chemical Society</i> , 2022, 144, 12807-12815.	6.6	74
186	Ir@Cu nanoframes: one-pot synthesis and efficient electrocatalysts for oxygen evolution reaction. <i>Chemical Communications</i> , 2016, 52, 3793-3796.	2.2	73
187	Co-MOF as an electron donor for promoting visible-light photoactivities of g-C <sub>3</sub> N <sub>4</sub> nanosheets for CO <sub>2</sub> reduction. <i>Chinese Journal of Catalysis</i> , 2020, 41, 514-523.	6.9	72
188	Toward Bifunctional Overall Water Splitting Electrocatalyst: General Preparation of Transition Metal Phosphide Nanoparticles Decorated N-Doped Porous Carbon Spheres. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 44201-44208.	4.0	71
189	Interface Engineering of Partially Phosphidated Co@Co@P@NPCNTs for Highly Enhanced Electrochemical Overall Water Splitting. <i>Small</i> , 2020, 16, e2002124.	5.2	71
190	Striding the threshold of an atom era of organic synthesis by single-atom catalysis. <i>CheM</i> , 2022, 8, 119-140.	5.8	71
191	Porous organic cage stabilised palladium nanoparticles: efficient heterogeneous catalysts for carbonylation reaction of aryl halides. <i>Chemical Communications</i> , 2018, 54, 2796-2799.	2.2	70
192	Ultrathin Au@Ag bimetallic nanowires with Coulomb blockade effects. <i>Chemical Communications</i> , 2011, 47, 5160.	2.2	69
193	Fabricating polyoxometalates-stabilized single-atom site catalysts in confined space with enhanced activity for alkynes diboration. <i>Nature Communications</i> , 2021, 12, 4205.	5.8	69
194	One-Pot Protocol for Bimetallic Pt/Cu Hexapod Concave Nanocrystals with Enhanced Electrocatalytic Activity. <i>Scientific Reports</i> , 2013, 3, 1404.	1.6	68
195	Bimetallic Pd@Cu nanocrystals and their tunable catalytic properties. <i>Chemical Communications</i> , 2014, 50, 4588.	2.2	68
196	Effective Octadecylamine System for Nanocrystal Synthesis. <i>Inorganic Chemistry</i> , 2011, 50, 5196-5202.	1.9	65
197	Fabricating Pd isolated single atom sites on C <sub>3</sub> N <sub>4</sub> /rGO for heterogenization of homogeneous catalysis. <i>Nano Research</i> , 2020, 13, 947-951.	5.8	65
198	Preparation of hexagonal ultrathin WO <sub>3</sub> nano-ribbons and their electrochemical performance as an anode material in lithium ion batteries. <i>Nano Research</i> , 2016, 9, 435-441.	5.8	64

#	ARTICLE	IF	CITATIONS
199	Carbon-Supported Single-Atom Catalysts for Formic Acid Oxidation and Oxygen Reduction Reactions. <i>Small</i> , 2021, 17, e2004500.	5.2	63
200	Electronically Engineering Water Resistance in Methane Combustion with an Atomically Dispersed Tungsten on PdO Catalyst. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	63
201	Downstream Processing Strategies for Lignin-First Biorefinery. <i>ChemSusChem</i> , 2020, 13, 5199-5212.	3.6	62
202	High-Loading Single-Atomic-Site Silver Catalysts with an Ag <sub>1</sub> –C <sub>2</sub> N <sub>1</sub> Structure Showing Superior Performance for Epoxidation of Styrene. <i>ACS Catalysis</i> , 2021, 11, 4946-4954.	5.5	62
203	PdAg bimetallic electrocatalyst for highly selective reduction of CO <sub>2</sub> with low COOH* formation energy and facile CO desorption. <i>Nano Research</i> , 2019, 12, 2866-2871.	5.8	61
204	The atomic-level regulation of single-atom site catalysts for the electrochemical CO <sub>2</sub> reduction reaction. <i>Chemical Science</i> , 2021, 12, 4201-4215.	3.7	61
205	Pt–M (M = Cu, Fe, Zn, etc.) bimetallic nanomaterials with abundant surface defects and robust catalytic properties. <i>Chemical Communications</i> , 2016, 52, 5985-5988.	2.2	60
206	Hydrothermal synthesis of orthorhombic LiMnO <sub>2</sub> nano-particles and LiMnO <sub>2</sub> nanorods and comparison of their electrochemical performances. <i>Nano Research</i> , 2009, 2, 923-930.	5.8	59
207	Heterogeneous catalysis for green chemistry based on nanocrystals. <i>National Science Review</i> , 2015, 2, 150-166.	4.6	59
208	Engineering the Atomic Interface with Single Platinum Atoms for Enhanced Photocatalytic Hydrogen Production. <i>Angewandte Chemie</i> , 2020, 132, 1311-1317.	1.6	59
209	Single-atom electrocatalysis: a new approach to in vivo electrochemical biosensing. <i>Science China Chemistry</i> , 2019, 62, 1720-1724.	4.2	57
210	Promoting electrocatalytic methanol oxidation of platinum nanoparticles by cerium modification. <i>Nano Energy</i> , 2020, 73, 104784.	8.2	54
211	Single atomic site catalysts: synthesis, characterization, and applications. <i>Chemical Communications</i> , 2020, 56, 7687-7697.	2.2	53
212	Directly Assembling Ligand-Free ZnO Nanocrystals into Three-Dimensional Mesoporous Structures by Oriented Attachment. <i>Inorganic Chemistry</i> , 2011, 50, 5841-5847.	1.9	52
213	Ultrathin Pt–Zn Nanowires: High-Performance Catalysts for Electrooxidation of Methanol and Formic Acid. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 77-81.	3.2	52
214	Construction of Dual-Active-Site Copper Catalyst Containing both Cu <sub>1</sub> –N <sub>3</sub> and Cu <sub>1</sub> –N <sub>4</sub> Sites. <i>Small</i> , 2021, 17, e2006834.	5.2	52
215	A Bimetallic Zn/Fe Polyphthalocyanine-Derived Single-Atom Fe–N <sub>4</sub> Catalytic Site: A Superior Trifunctional Catalyst for Overall Water Splitting and Zn–Air Batteries. <i>Angewandte Chemie</i> , 2018, 130, 8750-8754.	1.6	51
216	Heterogeneous Single Atom Environmental Catalysis: Fundamentals, Applications, and Opportunities. <i>Advanced Functional Materials</i> , 2022, 32, 2108381.	7.8	51

#	ARTICLE	IF	CITATIONS
217	Phase-transfer interface promoted corrosion from PtNi <sub>10</sub> nanooctahedra to Pt <sub>4</sub> Ni nanoframes. Nano Research, 2015, 8, 140-155.	5.8	50
218	Copper Nanocrystal Plane Effect on Stereoselectivity of Catalytic Deoxygenation of Aromatic Epoxides. Journal of the American Chemical Society, 2015, 137, 3791-3794.	6.6	50
219	Porous bimetallic Pt-Fe nanocatalysts for highly efficient hydrogenation of acetone. Nano Research, 2015, 8, 2706-2713.	5.8	49
220	ZIF-derived porous carbon supported Pd nanoparticles within mesoporous silica shells: sintering- and leaching-resistant core-shell nanocatalysts. Chemical Communications, 2017, 53, 9490-9493.	2.2	49
221	Sub-nm ruthenium cluster as an efficient and robust catalyst for decomposition and synthesis of ammonia: Break the "size shackles". Nano Research, 2018, 11, 4774-4785.	5.8	49
222	Surface Hexagonal Pt <sub>1</sub> Sn <sub>1</sub> Intermetallic on Pt Nanoparticles for Selective Propane Dehydrogenation. ACS Applied Materials & Interfaces, 2020, 12, 25903-25909.	4.0	49
223	Rare-Earth Single Erbium Atoms for Enhanced Photocatalytic CO <sub>2</sub> Reduction. Angewandte Chemie, 2020, 132, 10738-10744.	1.6	49
224	Ru <sub>1</sub> Co <sub>n</sub> Single-Atom Alloy for Enhancing Fischer-Tropsch Synthesis. ACS Catalysis, 2021, 11, 1886-1896.	5.5	49
225	Controllable synthesis of Cu-based nanocrystals in ODA solvent. Chemical Communications, 2011, 47, 3604.	2.2	48
226	Heterogeneous selective hydrogenation of ethylene carbonate to methanol and ethylene glycol over a copper chromite nanocatalyst. Chemical Communications, 2015, 51, 1252-1254.	2.2	48
227	Porous $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticle decorated with atomically dispersed platinum: Study on atomic site structural change and gas sensor activity evolution. Nano Research, 2021, 14, 1435-1442.	5.8	46
228	Low-dimensional material supported single-atom catalysts for electrochemical CO <sub>2</sub> reduction. SmartMat, 2022, 3, 84-110.	6.4	46
229	Free-standing palladium-nickel alloy wavy nanosheets. Nano Research, 2016, 9, 2244-2250.	5.8	45
230	Synergistically Interactive Pyridinic-N MoP Sites: Identified Active Centers for Enhanced Hydrogen Evolution in Alkaline Solution. Angewandte Chemie, 2020, 132, 9067-9075.	1.6	45
231	Anion-exchange-mediated internal electric field for boosting photogenerated carrier separation and utilization. Nature Communications, 2021, 12, 4952.	5.8	45
232	Atomic-Level Modulation of Electronic Density at Cobalt Single-Atom Sites Derived from Metal-Organic Frameworks: Enhanced Oxygen Reduction Performance. Angewandte Chemie, 2021, 133, 3249-3258.	1.6	44
233	Recent Progress in Thermal Conversion of CO <sub>2</sub> via Single-Atom Site Catalysis. Small Structures, 2022, 3, .	6.9	44
234	Preparation and electrochemical characterization of ultrathin WO <sub>3</sub> <sub>x</sub> /C nanosheets as anode materials in lithium ion batteries. Nano Research, 2017, 10, 1903-1911.	5.8	43

#	ARTICLE	IF	CITATIONS
235	Two-dimensional SnO <sub>2</sub> /graphene heterostructures for highly reversible electrochemical lithium storage. <i>Science China Materials</i> , 2018, 61, 1527-1535.	3.5	42
236	Modulating the photoelectrons of g-C <sub>3</sub> N <sub>4</sub> via coupling MgTi <sub>2</sub> O <sub>5</sub> as appropriate platform for visible-light-driven photocatalytic solar energy conversion. <i>Nano Research</i> , 2019, 12, 1931-1936.	5.8	42
237	Challenges and opportunities for manganese oxides in low-temperature selective catalytic reduction of NO <sub>x</sub> with NH <sub>3</sub> : H <sub>2</sub> O resistance ability. <i>Journal of Solid State Chemistry</i> , 2020, 289, 121464.	1.4	42
238	Progress in organic reactions catalyzed by bimetallic nanomaterials. <i>Chinese Journal of Catalysis</i> , 2013, 34, 1964-1974.	6.9	40
239	Rhodium-nickel bimetallic nanocatalysts: high performance of room-temperature hydrogenation. <i>Chemical Communications</i> , 2013, 49, 303-305.	2.2	40
240	Highly efficient CeO <sub>2</sub> -supported noble-metal catalysts: From single atoms to nanoclusters. <i>Chem Catalysis</i> , 2022, 2, 1594-1623.	2.9	39
241	Template-Free Synthesis and Characterization of Single-Phase Voided Poly( <i>o</i> -anisidine) and Polyaniline Colloidal Spheres. <i>Chemistry of Materials</i> , 2007, 19, 5773-5778.	3.2	38
242	Semiconductor-noble metal hybrid nanomaterials with controlled structures. <i>Journal of Materials Chemistry A</i> , 2013, 1, 1587-1590.	5.2	38
243	Single-atom site catalysts supported on two-dimensional materials for energy applications. <i>Chinese Chemical Letters</i> , 2021, 32, 3771-3781.	4.8	38
244	Bi/Zn Dual Single-Atom Catalysts for Electroreduction of CO <sub>2</sub> to Syngas. <i>ChemCatChem</i> , 2022, 14, .	1.8	37
245	Kinked gold nanowires and their SPR/SERS properties. <i>Chemical Communications</i> , 2011, 47, 9909.	2.2	36
246	Energy Upconversion in Lanthanide-Doped Core/Porous-Shell Nanoparticles. <i>Inorganic Chemistry</i> , 2014, 53, 3257-3259.	1.9	35
247	Ultra-thin Cu <sub>2</sub> S nanosheets: effective cocatalysts for photocatalytic hydrogen production. <i>Chemical Communications</i> , 2015, 51, 13305-13308.	2.2	35
248	Pd-dispersed CuS hetero-nanoplates for selective hydrogenation of phenylacetylene. <i>Nano Research</i> , 2016, 9, 1209-1219.	5.8	35
249	Atom-level interfacial synergy of single-atom site catalysts for electrocatalysis. <i>Journal of Energy Chemistry</i> , 2022, 65, 103-115.	7.1	35
250	Pd and Au@Pd nanodendrites: a one-pot synthesis and their superior catalytic properties. <i>Chemical Communications</i> , 2014, 50, 6141.	2.2	34
251	Notched-Polyoxometalate Strategy to Fabricate Atomically Dispersed Ru Catalysts for Biomass Conversion. <i>ACS Catalysis</i> , 2021, 11, 2669-2675.	5.5	34
252	Metal-organic frameworks-derived nitrogen-doped carbon supported nanostructured PtNi catalyst for enhanced hydrosilylation of 1-octene. <i>Nano Research</i> , 2019, 12, 2584-2588.	5.8	33

#	ARTICLE	IF	CITATIONS
253	Structure regulation of noble-metal-based nanomaterials at an atomic level. <i>Nano Today</i> , 2019, 26, 164-175.	6.2	33
254	Tandem catalyzing the hydrodeoxygenation of 5-hydroxymethylfurfural over a Ni <sub>3</sub> Fe intermetallic supported Pt single-atom site catalyst. <i>Chemical Science</i> , 2021, 12, 4139-4146.	3.7	33
255	2D materials modulating layered double hydroxides for electrocatalytic water splitting. <i>Chinese Journal of Catalysis</i> , 2022, 43, 1380-1398.	6.9	33
256	Atomic Thickness Catalysts: Synthesis and Applications. <i>Small Methods</i> , 2020, 4, 2000248.	4.6	32
257	Facet engineering in metal organic frameworks to improve their electrochemical activity for water oxidation. <i>Chemical Communications</i> , 2020, 56, 4316-4319.	2.2	32
258	An Adjacent Atomic Platinum Site Enables Single-Atom Iron with High Oxygen Reduction Reaction Performance. <i>Angewandte Chemie</i> , 2021, 133, 19411-19420.	1.6	32
259	Al <sup>3+</sup> Dopants Induced Mg <sup>2+</sup> Vacancies Stabilizing Single-Atom Cu Catalyst for Efficient Free-Radical Hydrophosphinylation of Alkenes. <i>Journal of the American Chemical Society</i> , 2022, 144, 4321-4326.	6.6	32
260	Ultrathin CuO nanorods: controllable synthesis and superior catalytic properties in styrene epoxidation. <i>Chemical Communications</i> , 2015, 51, 8817-8820.	2.2	31
261	Adsorption Site Regulation to Guide Atomic Design of Ni-Ga Catalysts for Acetylene Semi-Hydrogenation. <i>Angewandte Chemie</i> , 2020, 132, 11744-11749.	1.6	31
262	An efficient, controllable and facile two-step synthesis strategy: Fe <sub>3</sub> O <sub>4</sub> @RGO composites with various Fe <sub>3</sub> O <sub>4</sub> nanoparticles and their supercapacitance properties. <i>Nano Research</i> , 2017, 10, 3303-3313.	5.8	29
263	Revealing the Active Species for Aerobic Alcohol Oxidation by Using Uniform Supported Palladium Catalysts. <i>Angewandte Chemie</i> , 2018, 130, 4732-4736.	1.6	29
264	Single-atomic-site cobalt stabilized on nitrogen and phosphorus co-doped carbon for selective oxidation of primary alcohols. <i>Nanoscale Horizons</i> , 2019, 4, 902-906.	4.1	29
265	Design of a Single-Atom Indium N <sub>4</sub> Interface for Efficient Electroreduction of CO <sub>2</sub> to Formate. <i>Angewandte Chemie</i> , 2020, 132, 22651-22655.	1.6	29
266	A Supported Pd <sub>2</sub> Dual-Atom Site Catalyst for Efficient Electrochemical CO <sub>2</sub> Reduction. <i>Angewandte Chemie</i> , 2021, 133, 13500-13505.	1.6	29
267	Electronic structure regulations of single-atom site catalysts and their effects on the electrocatalytic performances. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	29
268	Rare-earth single atom based luminescent composite nanomaterials: Tunable full-color single phosphor and applications in WLEDs. <i>Nano Research</i> , 2022, 15, 3594-3605.	5.8	28
269	Engineering the Local Atomic Environments of Indium Single-Atom Catalysts for Efficient Electrochemical Production of Hydrogen Peroxide. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	27
270	Synthetic strategies for MOF-based single-atom catalysts for photo- and electro-catalytic CO <sub>2</sub> reduction. <i>IScience</i> , 2022, 25, 104177.	1.9	26



#	ARTICLE	IF	CITATIONS
271	Atomically Dispersed Ruthenium Species Inside Metal-Organic Frameworks: Combining the High Activity of Atomic Sites and the Molecular Sieving Effect of MOFs. <i>Angewandte Chemie</i> , 2019, 131, 4315-4319.	1.6	25
272	Electronics and coordination engineering of atomic cobalt trapped by oxygen-driven defects for efficient cathode in solar cells. <i>Nano Energy</i> , 2021, 89, 106365.	8.2	25
273	Regulating the Tip Effect on Single-Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	25
274	Platinum-Copper Nanoframes: One-Pot Synthesis and Enhanced Electrocatalytic Activity. <i>Chemistry - A European Journal</i> , 2016, 22, 4960-4965.	1.7	24
275	Ordered Porous Nitrogen-Doped Carbon Matrix with Atomically Dispersed Cobalt Sites as an Efficient Catalyst for Dehydrogenation and Transfer Hydrogenation of N-Heterocycles. <i>Angewandte Chemie</i> , 2018, 130, 11432-11436.	1.6	24
276	Engineering Dual Single-Atom Sites on 2D Ultrathin N-Doped Carbon Nanosheets Attaining Ultra-Low-Temperature Zinc-Air Battery. <i>Angewandte Chemie</i> , 0, , .	1.6	24
277	A Site Distance Effect Induced by Reactant Molecule Matchup in Single-Atom Catalysts for Fenton-Like Reactions. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	24
278	Seed-mediated synthesis of hexameric octahedral PtPdCu nanocrystals with high electrocatalytic performance. <i>Chemical Communications</i> , 2015, 51, 15406-15409.	2.2	23
279	Nano PdAu Bimetallic Alloy as an Effective Catalyst for the Buchwald-Hartwig Reaction. <i>Chemistry - an Asian Journal</i> , 2016, 11, 351-355.	1.7	23
280	Constructing radially oriented macroporous spheres with central cavities as ultrastable lithium-ion battery anodes. <i>Energy Storage Materials</i> , 2019, 17, 242-252.	9.5	23
281	Synthesis of Luminescent Cubic Phase One-Dimensional CuI Nanostructures in Solution. <i>Crystal Growth and Design</i> , 2010, 10, 3387-3390.	1.4	22
282	Silver Single-Atom Catalyst for Efficient Electrochemical CO <sub>2</sub> Reduction Synthesized from Thermal Transformation and Surface Reconstruction. <i>Angewandte Chemie</i> , 2021, 133, 6235-6241.	1.6	22
283	Phosphorus Induced Electron Localization of Single Iron Sites for Boosted CO <sub>2</sub> Electroreduction Reaction. <i>Angewandte Chemie</i> , 2021, 133, 23806-23810.	1.6	22
284	Atomic-level insights into the steric hindrance effect of single-atom Pd catalyst to boost the synthesis of dimethyl carbonate. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120922.	10.8	22
285	Boosting Electrochemical Styrene Transformation via Tandem Water Oxidation over a Single-Atom Cr <sub>1</sub> /CoSe <sub>2</sub> Catalyst. <i>Advanced Materials</i> , 2022, 34, e2200302.	11.1	22
286	Palladium/tin bimetallic single-crystalline hollow nanospheres. <i>Chemical Communications</i> , 2012, 48, 1683-1685.	2.2	20
287	Facile synthesis of CoNi <sub>x</sub> nanoparticles embedded in nitrogen-carbon frameworks for highly efficient electrocatalytic oxygen evolution. <i>Chemical Communications</i> , 2017, 53, 12177-12180.	2.2	20
288	Design and structural engineering of single-atomic-site catalysts for acidic oxygen reduction reaction. <i>Trends in Chemistry</i> , 2021, 3, 954-968.	4.4	20

#	ARTICLE	IF	CITATIONS
289	Decreasing the coordinated N atoms in a single-atom Cu catalyst to achieve selective transfer hydrogenation of alkyne. <i>Chemical Science</i> , 2021, 12, 14599-14605.	3.7	20
290	Systematic Synthesis of ZnO Nanostructures. <i>Chemistry - A European Journal</i> , 2013, 19, 3735-3740.	1.7	19
291	Facile synthesis of Ag-doped ZnCdS nanocrystals and transformation into Ag-doped ZnCdSSe nanocrystals with Se treatment. <i>RSC Advances</i> , 2015, 5, 1083-1090.	1.7	19
292	Au/CuSiO <sub>3</sub> nanotubes: High-performance robust catalysts for selective oxidation of ethanol to acetaldehyde. <i>Nano Research</i> , 2016, 9, 2681-2686.	5.8	19
293	MOF derived high-density atomic platinum heterogeneous catalyst for C-H bond activation. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1158-1163.	3.2	19
294	Transforming cobalt hydroxide nanowires into single atom site catalysts. <i>Nano Energy</i> , 2021, 83, 105799.	8.2	19
295	d Orbital Hybridization Induced by a Monodispersed Ga Site on a Pt <sub>3</sub> Mn Nanocatalyst Boosts Ethanol Electrooxidation. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	19
296	Carbon Nitride Photocatalysts with Integrated Oxidation and Reduction Atomic Active Centers for Improved CO <sub>2</sub> Conversion. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	19
297	Fabrication of 1D nickel sulfide nanocrystals with high capacitances and remarkable durability. <i>RSC Advances</i> , 2014, 4, 47513-47516.	1.7	18
298	Design aktiver atomarer Zentren für HER-Elektrokatalysatoren. <i>Angewandte Chemie</i> , 2020, 132, 20978-20998.	1.6	18
299	Atomically dispersed Ni anchored on polymer-derived mesh-like N-doped carbon nanofibers as an efficient CO <sub>2</sub> electrocatalytic reduction catalyst. <i>Nano Research</i> , 2022, 15, 3959-3963.	5.8	18
300	Bimetallic PdCo catalyst for selective direct formylation of amines by carbon monoxide. <i>Nano Research</i> , 2017, 10, 890-896.	5.8	17
301	A general bottom-up synthesis of CuO-based trimetallic oxide mesocrystal superstructures for efficient catalytic production of trichlorosilane. <i>Nano Research</i> , 2020, 13, 2819-2827.	5.8	17
302	The synthetic strategies for single atomic site catalysts based on metal-organic frameworks. <i>Nanoscale</i> , 2020, 12, 20580-20589.	2.8	17
303	Surface-structure tailoring of ultrafine PtCu nanowires for enhanced electrooxidation of alcohols. <i>Science China Materials</i> , 2021, 64, 601-610.	3.5	17
304	Platinum-Ruthenium Single Atom Alloy as a Bifunctional Electrocatalyst toward Methanol and Hydrogen Oxidation Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 27814-27822.	4.0	17
305	Interface-induced formation of onion-like alloy nanocrystals by defects engineering. <i>Nano Research</i> , 2016, 9, 584-592.	5.8	15
306	Single-atom catalysts: stimulating electrochemical CO <sub>2</sub> reduction reaction in the industrial era. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5863-5877.	5.2	15

#	ARTICLE	IF	CITATIONS
307	MOF Encapsulating Nâ€Heterocyclic Carbeneâ€Ligated Copper Singleâ€Atom Site Catalyst towards Efficient Methane Electrosynthesis. <i>Angewandte Chemie</i> , 2022, 134, e202114450.	1.6	15
308	BaWO <sub>4</sub> :Ln <sup>3+</sup> Nanocrystals: Controllable Synthesis, Theoretical Investigation on the Substitution Site, and Bright Upconversion Luminescence as a Sensor for Glucose Detection. <i>ACS Applied Nano Materials</i> , 2018, 1, 4762-4770.	2.4	14
309	Enhanced Visibleâ€Light Photoactivities of Perovskiteâ€Type LaFeO <sub>3</sub> Nanocrystals by Simultaneously Doping Er <sup>3+</sup> and Coupling MgO for CO <sub>2</sub> Reduction. <i>ChemCatChem</i> , 2020, 12, 623-630.	1.8	14
310	Rareâ€Earth Oxide Nanostructures: Rules of Rareâ€Earth Nitrate Thermolysis in Octadecylamine. <i>Chemistry - an Asian Journal</i> , 2010, 5, 925-931.	1.7	13
311	Silver Iodide Nanospheres Wrapped in Reduced Graphene Oxide for Enhanced Photocatalysis. <i>ChemCatChem</i> , 2015, 7, 2918-2923.	1.8	13
312	Highly chemoselective hydrogenation of active benzaldehydes to benzyl alcohols catalyzed by bimetallic nanoparticles. <i>Tetrahedron Letters</i> , 2015, 56, 6460-6462.	0.7	13
313	Atomic Evolution of Metalâ€Organic Frameworks into Coâ€N <sub>3</sub> Coupling Vacancies by Cooperative Cascade Protection Strategy for Promoting Triiodide Reduction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6147-6156.	1.5	13
314	Preparation of Nearly Monodisperse Nanoscale Inorganic Pigments. <i>Chemistry - an Asian Journal</i> , 2006, 1, 91-94.	1.7	12
315	A used battery supported Ag catalyst for efficient oxidation of alcohols and carbon oxide. <i>RSC Advances</i> , 2014, 4, 25384-25388.	1.7	12
316	Rational Control of the Selectivity of a Ruthenium Catalyst for Hydrogenation of 4â€Nitrostyrene by Strain Regulation. <i>Angewandte Chemie</i> , 2017, 129, 12133-12137.	1.6	12
317	PtAl truncated octahedron nanocrystals for improved formic acid electrooxidation. <i>Chemical Communications</i> , 2018, 54, 3951-3954.	2.2	12
318	Identifying the Types and Characterization of the Active Sites on Mâ€Xâ€C Singleâ€Atom Catalysts. <i>ChemPhysChem</i> , 2020, 21, 2486-2496.	1.0	12
319	Ruâ€Co Pair Sites Catalyst Boosts the Energetics for Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 0, , .	1.6	12
320	Synthesis of palladium and palladium sulfide nanocrystals via thermolysis of a Pdâ€thiolate cluster. <i>Science China Materials</i> , 2015, 58, 936-943.	3.5	11
321	Revealing the surface atomic arrangement of noble metal alkane dehydrogenation catalysts by a stepwise reduction-oxidation approach. <i>Nano Research</i> , 2023, 16, 4499-4505.	5.8	11
322	Synthesis, Structures of <sup>2D</sup> Coordination Layers <sup>Metalâ€Organic</sup> Frameworks with Highly Selective <sup>CO</sup> Uptake<sup>â€</sup>. <i>Chinese Journal of Chemistry</i> , 2021, 39, 2789-2794.	2.6	11
323	Growth and assembly of monodisperse Ag nanoparticles by exchanging the organic capping ligands. <i>Journal of Materials Research</i> , 2009, 24, 352-356.	1.2	10
324	C/N-sensitized self-assembly of mesostructured TiO <sub>2</sub> nanospheres with significantly enhanced photocatalytic activity. <i>New Journal of Chemistry</i> , 2013, 37, 2582.	1.4	10

#	ARTICLE	IF	CITATIONS
325	Interface-Mediated Synthesis of Transition-Metal (Mn, Co, and Ni) Hydroxide Nanoplates. <i>Crystal Growth and Design</i> , 2013, 13, 1949-1954.	1.4	10
326	Polyoxometalate-Based Metal-Organic Framework as Molecular Sieve for Highly Selective Semi-Hydrogenation of Acetylene on Isolated Single Pd Atom Sites. <i>Angewandte Chemie</i> , 2021, 133, 22696-22702.	1.6	10
327	Bimetallic Nanocrystals: Bimetallic Nanocrystals: Liquid-Phase Synthesis and Catalytic Applications ( <i>Adv. Mater.</i> 9/2011). <i>Advanced Materials</i> , 2011, 23, 1036-1036.	11.1	9
328	Machine learning: The trends of developing high-efficiency single-atom materials. <i>Chem Catalysis</i> , 2021, 1, 24-26.	2.9	9
329	Electronically Engineering Water Resistance in Methane Combustion with an Atomically Dispersed Tungsten on PdO Catalyst. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	9
330	Preparation of bimetallic nanocrystals by coreduction of mixed metal ions in a liquid-solid solution synthetic system according to the electronegativity of alloys. <i>CrystEngComm</i> , 2013, 15, 4806.	1.3	8
331	Hydrogenation of (N,N-disubstituted aminomethyl)nitrobenzenes to (N,N-disubstituted) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 5 47125-47130.	1.7	7
332	A facile strategy for the synthesis of branched Pt-Pd-M (M = Co, Ni) trimetallic nanocrystals. <i>CrystEngComm</i> , 2016, 18, 4023-4026.	1.3	7
333	Luminescent material with functionalized graphitic carbon nitride as a photovoltaic booster in DSSCs: Enhanced charge separation and transfer. <i>Journal of Materials Research</i> , 2019, 34, 616-625.	1.2	7
334	Single-Atom Materials: Small Structures Determine Macroproperties. <i>Small Structures</i> , 2021, 2, 2170006.	6.9	7
335	Stable, Efficient, Copper Coordination Polymer-Derived Heterostructured Catalyst for Oxygen Evolution under pH-Universal Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 25461-25471.	4.0	7
336	Controllable synthesis of Pt-Cu nanocrystals and their tunable catalytic properties. <i>CrystEngComm</i> , 2016, 18, 3764-3767.	1.3	6
337	Innenr&4cktitelbild: Isolated Single Iron Atoms Anchored on N-Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction ( <i>Angew. Chem.</i> 24/2017). <i>Angewandte Chemie</i> , 2017, 129, 7107-7107.	1.6	6
338	Hydrothermal Synthesis of Mn-Doped ZnSe Quantum Dots and Effects of Surface Overcoating on Their Optical Properties. <i>Science of Advanced Materials</i> , 2014, 6, 2275-2280.	0.1	6
339	Shape-Dependent Catalytic Activity of CuO/MgO Nanocatalysts. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 3602-3606.	0.9	5
340	Room-Temperature Hydrogenation of Citral Catalyzed by Palladium-Silver Nanocrystals Supported on SnO2. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 2120-2124.	1.0	5
341	Chemoselective hydrogenation of nitrobenzyl ethers to aminobenzyl ethers catalyzed by palladium-nickel bimetallic nanoparticles. <i>Tetrahedron</i> , 2015, 71, 9240-9244.	1.0	5
342	Synthesis of LiV3O8 nanorods and shape-dependent electrochemical performance. <i>Journal of Materials Research</i> , 2011, 26, 424-429.	1.2	3

#	ARTICLE	IF	CITATIONS
343	A general strategy to prepare atomically dispersed biomimetic catalysts based on host-guest chemistry. <i>Chemical Communications</i> , 2021, 57, 1895-1898.	2.2	2
344	Enhanced luminescence through interface energy transfer in hierarchical heterogeneous nanocomposites and application in white LEDs. <i>Journal of Colloid and Interface Science</i> , 2021, 583, 204-213.	5.0	1
345	Bimetal catalytic nanomaterials. <i>Scientia Sinica Chimica</i> , 2014, 44, 85-99.	0.2	1
346	Oxygen Reduction Reaction: Mn <sub>4</sub> N Oxygen Reduction Electrocatalyst: Operando Investigation of Active Sites and High Performance in Zinc-Air Battery ( <i>Adv. Energy Mater.</i> 6/2021). <i>Advanced Energy Materials</i> , 2021, 11, 2170025.	10.2	0