

# Bridging homogeneous and heterogeneous catalysis by catalysts

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Single Atom Catalysts on Carbon-Based Materials. <i>ChemCatChem</i> , 2018, 10, 5058-5091.	1.8	148
2	Highly Stable Single-Atom Catalyst with Ionic Pd Active Sites Supported on N-Doped Carbon Nanotubes for Formic Acid Decomposition. <i>ChemSusChem</i> , 2018, 11, 3724-3727.	3.6	99
3	Single-Atom Iron as Lithiophilic Site To Minimize Lithium Nucleation Overpotential for Stable Lithium Metal Full Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 32008-32014.	4.0	64
4	A versatile route to fabricate single atom catalysts with high chemoselectivity and regioselectivity in hydrogenation. <i>Nature Communications</i> , 2019, 10, 3663.	5.8	270
5	Enantioselective hydrogenation of $\alpha$ -ketoesters catalyzed by cinchona alkaloid stabilized Rh nanoparticles in ionic liquid. <i>Chirality</i> , 2019, 31, 818-823.	1.3	2
6	Theoretical insights into selective electrochemical conversion of carbon dioxide. <i>Nano Convergence</i> , 2019, 6, 8.	6.3	22
7	Catalytic CO Oxidation by Gas-Phase Metal Oxide Clusters. <i>Journal of Physical Chemistry A</i> , 2019, 123, 9257-9267.	1.1	45
8	Understanding the Nature and Activity of Supported Platinum Catalysts for the Water-Gas Shift Reaction: From Metallic Nanoclusters to Alkali-Stabilized Single-Atom Cations. <i>ACS Catalysis</i> , 2019, 9, 7721-7740.	5.5	48
9	Nanocatalytic Medicine. <i>Advanced Materials</i> , 2019, 31, e1901778.	11.1	396
10	Local Structure and Coordination Define Adsorption in a Model $\text{Ir}_1/\text{Fe}_3\text{O}_4$ Single-Atom Catalyst. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 13961-13968.	7.2	93
11	The Role of Single-Atom Catalysis in Potentially Disruptive Technologies. , 2019, , 21-46.		0
12	Local Structure and Coordination Define Adsorption in a Model $\text{Ir}_1/\text{Fe}_3\text{O}_4$ Single-Atom Catalyst. <i>Angewandte Chemie</i> , 2019, 131, 14099-14106.	1.6	44
13	Atomically Dispersed Reduced Graphene Aerogel-Supported Iridium Catalyst with an Iridium Loading of 14.8 wt %. <i>ACS Catalysis</i> , 2019, 9, 9905-9913.	5.5	55
14	Ambient Synthesis of Single-Atom Catalysts from Bulk Metal via Trapping of Atoms by Surface Dangling Bonds. <i>Advanced Materials</i> , 2019, 31, e1904496.	11.1	114
15	In-Situ Nanostructuring and Stabilization of Polycrystalline Copper by an Organic Salt Additive Promotes Electrocatalytic $\text{CO}_2$ Reduction to Ethylene. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16952-16958.	7.2	103
16	Enhanced Electrocatalytic Performance through Body Enrichment of Co-Based Bimetallic Nanoparticles In Situ Embedded Porous N-Doped Carbon Spheres. <i>Small</i> , 2019, 15, e1903395.	5.2	70
17	Computational Exploration of NO Single-Site Disproportionation on Fe-MOF-5. <i>Chemistry of Materials</i> , 2019, 31, 8875-8885.	3.2	20
18	Rapid, High-Temperature, In Situ Microwave Synthesis of Bulk Nanocatalysts. <i>Small</i> , 2019, 15, e1904881.	5.2	28

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19	Predicting Metal-Support Interactions in Oxide-Supported Single-Atom Catalysts. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 20236-20246.	1.8	25
20	Single-Atom Ru Doping Induced Phase Transition of MoS <sub>2</sub> and S Vacancy for Hydrogen Evolution Reaction. <i>Small Methods</i> , 2019, 3, 1900653.	4.6	206
21	Standing Carbon-Supported Trace Levels of Metal Derived from Covalent Organic Framework for Electrocatalysis. <i>Small</i> , 2019, 15, e1905363.	5.2	32
22	Dual-Ionically Bound Single-Site Rhodium on Porous Ionic Polymer Rivals Commercial Methanol Carbonylation Catalysts. <i>Advanced Materials</i> , 2019, 31, e1904976.	11.1	26
23	A MOF-templated approach for designing ruthenium-cesium catalysts for hydrogen generation from ammonia. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 30108-30118.	3.8	22
24	High-Density Isolated Fe <sub>1</sub> O <sub>3</sub> Sites on a Single-Crystal Cu <sub>2</sub> O(100) Surface. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7318-7323.	2.1	8
25	In-Situ Nanostructuring and Stabilization of Polycrystalline Copper by an Organic Salt Additive Promotes Electrocatalytic CO <sub>2</sub> Reduction to Ethylene. <i>Angewandte Chemie</i> , 2019, 131, 17108-17114.	1.6	20
26	A sulfur-tethering synthesis strategy toward high-loading atomically dispersed noble metal catalysts. <i>Science Advances</i> , 2019, 5, eaax6322.	4.7	177
27	Unraveling the coordination structure-performance relationship in Pt <sub>1</sub> /Fe <sub>2</sub> O <sub>3</sub> single-atom catalyst. <i>Nature Communications</i> , 2019, 10, 4500.	5.8	279
28	Single Metal Atom Photocatalysis. <i>Small Methods</i> , 2019, 3, 1800447.	4.6	140
29	Iridium Single-Atom Catalyst Performing a Quasi-homogeneous Hydrogenation Transformation of CO <sub>2</sub> to Formate. <i>Chem</i> , 2019, 5, 693-705.	5.8	181
30	Controlling catalytic activity and selectivity for partial hydrogenation by tuning the environment around active sites in iridium complexes bonded to supports. <i>Chemical Science</i> , 2019, 10, 2623-2632.	3.7	40
31	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , 2019, 131, 9742-9747.	1.6	59
32	Comprehensive review and future perspectives on the photocatalytic hydrogen production. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 3049-3063.	1.6	136
33	Catalytic sites are finally in sight. <i>Nature Materials</i> , 2019, 18, 663-664.	13.3	6
34	Charting stability space. <i>Nature Materials</i> , 2019, 18, 664-665.	13.3	6
35	Metal-organic frameworks as emerging platform for supporting isolated single-site catalysts. <i>Nano Today</i> , 2019, 27, 178-197.	6.2	66
36	Acetylene-Selective Hydrogenation Catalyzed by Cationic Nickel Confined in Zeolite. <i>Journal of the American Chemical Society</i> , 2019, 141, 9920-9927.	6.6	112

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37	Ring-Opening Transformation of 5-Hydroxymethylfurfural Using a Golden Single-Atomic-Site Palladium Catalyst. <i>ACS Catalysis</i> , 2019, 9, 6212-6222.	5.5	60
38	A Single-Atom Iridium Heterogeneous Catalyst in Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9640-9645.	7.2	312
39	Carbon-Rich Nonprecious Metal Single Atom Electrocatalysts for CO <sub>2</sub> Reduction and Hydrogen Evolution. <i>Small Methods</i> , 2019, 3, 1900210.	4.6	136
40	Design of atomically dispersed catalytic sites for photocatalytic CO <sub>2</sub> reduction. <i>Nanoscale</i> , 2019, 11, 11064-11070.	2.8	57
41	Dynamics of Single Pt Atoms on Alumina during CO Oxidation Monitored by <i>Operando</i> X-ray and Infrared Spectroscopies. <i>ACS Catalysis</i> , 2019, 9, 5752-5759.	5.5	94
42	Electronic Metal-Support Interaction To Modulate MoS <sub>2</sub> -Supported Pd Nanoparticles for the Degradation of Organic Dyes. <i>ACS Applied Nano Materials</i> , 2019, 2, 3385-3393.	2.4	43
43	Cobalt single atoms anchored on N-doped ultrathin carbon nanosheets for selective transfer hydrogenation of nitroarenes. <i>Science China Materials</i> , 2019, 62, 1306-1314.	3.5	44
44	Gas reactions under intrapore condensation regime within tailored metal-organic framework catalysts. <i>Nature Communications</i> , 2019, 10, 2076.	5.8	45
45	Supported organometallic palladium catalyst into mesoporous channels of magnetic MCM-41 nanoparticles for phosphine-free C-C coupling reactions. <i>Microporous and Mesoporous Materials</i> , 2019, 284, 366-377.	2.2	56
46	Atomically Dispersed Supported Metal Catalysts: Seeing Is Believing. <i>Trends in Chemistry</i> , 2019, 1, 99-110.	4.4	55
47	Single-Atom Catalysis: How Structure Influences Catalytic Performance. <i>Catalysis Letters</i> , 2019, 149, 1137-1146.	1.4	85
48	Atomically dispersed Mo atoms on amorphous g-C <sub>3</sub> N <sub>4</sub> promotes visible-light absorption and charge carriers transfer. <i>Applied Catalysis B: Environmental</i> , 2019, 250, 273-279.	10.8	92
49	Reactive Oxygen Species (ROS)-Based Nanomedicine. <i>Chemical Reviews</i> , 2019, 119, 4881-4985.	23.0	1,519
50	Optimising surface charge of AuPd nanoalloy catalysts for enhanced catalytic activity. <i>Nature Communications</i> , 2019, 10, 1428.	5.8	149
51	Ultimate dispersion of metallic and ionic platinum on ceria. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13019-13028.	5.2	21
52	Nanocatalysis by noble metal nanoparticles: controlled synthesis for the optimization and understanding of activities. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5857-5874.	5.2	229
53	Insights into Single-Atom Metal-Support Interactions in Electrocatalytic Water Splitting. <i>Small Methods</i> , 2019, 3, 1800481.	4.6	94
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56	Recent Advances for MOF-Derived Carbon-Supported Single-Atom Catalysts. <i>Small Methods</i> , 2019, 3, 1800471.	4.6	315
57	Superparamagnetic nanoparticle-catalyzed coupling of 2-amino pyridines/pyrimidines with <i>trans</i> -chalcones. <i>RSC Advances</i> , 2019, 9, 5501-5511.	1.7	23
58	Electro- and Solar-Driven Fuel Synthesis with First Row Transition Metal Complexes. <i>Chemical Reviews</i> , 2019, 119, 2752-2875.	23.0	615
59	Oxiranes and Oxirenes: Monocyclic. , 2019, , 199-199.		0
60	Cobalt Single Atom Heterogeneous Catalyst: Method of Preparation, Characterization, Catalysis, and Mechanism. , 2019, , .		3
61	Facile synthesis of impurity-free iron single atom catalysts for highly efficient oxygen reduction reaction and active-site identification. <i>Catalysis Science and Technology</i> , 2019, 9, 6556-6560.	2.1	10
62	Atomic-level active sites of efficient imidazolate framework-derived nickel catalysts for CO <sub>2</sub> reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26231-26237.	5.2	72
63	Platinum-copper single atom alloy catalysts with high performance towards glycerol hydrogenolysis. <i>Nature Communications</i> , 2019, 10, 5812.	5.8	277
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65	Revealing the Intrinsic Peroxidase-Like Catalytic Mechanism of Heterogeneous Single-Atom Co-MoS <sub>2</sub> . <i>Nano-Micro Letters</i> , 2019, 11, 102.	14.4	114
66	In situ formation of mononuclear complexes by reaction-induced atomic dispersion of supported noble metal nanoparticles. <i>Nature Communications</i> , 2019, 10, 5281.	5.8	57
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69	Polymer-supported metal catalysts for the heterogeneous polymerisation of lactones. <i>Polymer Chemistry</i> , 2019, 10, 5894-5904.	1.9	14
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71	Static Regulation and Dynamic Evolution of Single-Atom Catalysts in Thermal Catalytic Reactions. <i>Advanced Science</i> , 2019, 6, 1801471.	5.6	39
72	Metal Nanoclusters: New Paradigm in Catalysis for Water Splitting, Solar and Chemical Energy Conversion. <i>ChemSusChem</i> , 2019, 12, 1517-1548.	3.6	81

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76	First-row transition metal polypyridine complexes that catalyze proton to hydrogen reduction. <i>Coordination Chemistry Reviews</i> , 2020, 402, 213079.	9.5	66
77	The Comparison between Single Atom Catalysis and Surface Organometallic Catalysis. <i>Chemical Reviews</i> , 2020, 120, 734-813.	23.0	201
78	On the active sites for the oxygen reduction reaction catalyzed by graphene-based materials. <i>Carbon</i> , 2020, 156, 389-398.	5.4	15
79	Paths towards enhanced electrochemical CO <sub>2</sub> reduction. <i>National Science Review</i> , 2020, 7, 7-9.	4.6	47
80	Carbon-Based Single-Atom Catalysts for Advanced Applications. <i>ACS Catalysis</i> , 2020, 10, 2231-2259.	5.5	426
81	Designing Atomic Active Centers for Hydrogen Evolution Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 20794-20812.	7.2	257
82	Structural Regulation with Atomic-Level Precision: From Single-Atomic Site to Diatomic and Atomic Interface Catalysis. <i>Matter</i> , 2020, 2, 78-110.	5.0	221
83	Sequential immobilization of ansa-hafnocene complexes for propene polymerization. <i>Journal of Organometallic Chemistry</i> , 2020, 909, 121075.	0.8	2
84	Well-Defined Materials for Heterogeneous Catalysis: From Nanoparticles to Isolated Single-Atom Sites. <i>Chemical Reviews</i> , 2020, 120, 623-682.	23.0	794
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86	Copper-catalyzed [4 + 2] annulation reaction of $\hat{I}^2$ -enaminones and aryl diazonium salts without external oxidant: synthesis of highly functionalized 3 <i>H</i> -1,2,4-triazines <i>via</i> homogeneous or heterogeneous strategy. <i>Organic Chemistry Frontiers</i> , 2020, 7, 457-463.	2.3	17
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89	Mechanochemical Kilogram-Scale Synthesis of Noble Metal Single-Atom Catalysts. <i>Cell Reports Physical Science</i> , 2020, 1, 100004.	2.8	139
90	Catalysis of a Single Transition Metal Site for Water Oxidation: From Mononuclear Molecules to Single Atoms. <i>Advanced Materials</i> , 2020, 32, e1904037.	11.1	78

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91	Toward Efficient Carbon and Water Cycles: Emerging Opportunities with Single-Site Catalysts Made of 3d Transition Metals. <i>Advanced Materials</i> , 2020, 32, e1905548.	11.1	23
92	Enhancement of photocatalytic H <sub>2</sub> evolution from water splitting by construction of two dimensional gC <sub>3</sub> N <sub>4</sub> /NiAl layered double hydroxides. <i>Applied Surface Science</i> , 2020, 509, 144656.	3.1	59
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97	Transforming Hydroxide-Containing Metal-Organic Framework Nodes for Transition Metal Catalysis. <i>Trends in Chemistry</i> , 2020, 2, 965-979.	4.4	14
98	Electronic Structure of Atomically Dispersed Supported Iridium Catalyst Controls Iridium Aggregation. <i>ACS Catalysis</i> , 2020, 10, 12354-12358.	5.5	17
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101	Thermal defect engineering of precious group metal-organic frameworks: impact on the catalytic cyclopropanation reaction. <i>Catalysis Science and Technology</i> , 2020, 10, 8077-8085.	2.1	4
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103	Stabilization of atomically dispersed rhodium sites on ceria-based supports under reaction conditions probed by in situ infrared spectroscopy. <i>Materials Letters</i> , 2020, 277, 128354.	1.3	7
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105	PtN <sub>3</sub> -Embedded graphene as an efficient catalyst for electrochemical reduction of nitrobenzene to aniline: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 17639-17645.	1.3	11
106	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
107	Structural Regulation and Support Coupling Effect of Single-Atom Catalysts for Heterogeneous Catalysis. <i>Advanced Energy Materials</i> , 2020, 10, 2001482.	10.2	172
108	Direct Synthesis of Atomically Dispersed Palladium Atoms Supported on Graphitic Carbon Nitride for Efficient Selective Hydrogenation Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 54146-54154.	4.0	31

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109	Multilayer stabilization for fabricating high-loading single-atom catalysts. <i>Nature Communications</i> , 2020, 11, 5892.	5.8	195
110	Ligand Stabilized Ni <sub>1</sub> Catalyst for Efficient CO Oxidation. <i>ChemPhysChem</i> , 2020, 21, 2417-2425.	1.0	4
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118	Phenoxide-Modified Half-Titanocenes Supported on Star-Shaped ROMP Polymers as Catalyst Precursors for Ethylene Copolymerization. <i>Organometallics</i> , 2020, 39, 2998-3009.	1.1	8
119	High-Density and Thermally Stable Palladium Single-Atom Catalysts for Chemoselective Hydrogenations. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21613-21619.	7.2	103
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123	High-Density and Thermally Stable Palladium Single-Atom Catalysts for Chemoselective Hydrogenations. <i>Angewandte Chemie</i> , 2020, 132, 21797-21803.	1.6	19
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132	A perspective on oxide-supported single-atom catalysts. <i>Nanoscale Advances</i> , 2020, 2, 3624-3631.	2.2	12
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138	Single-Atom Catalysis: An Analogy between Heterogeneous and Homogeneous Catalysts. <i>ACS Symposium Series</i> , 2020, , 1-15.	0.5	1
139	Recent Advances in the Development of Single-Atom Catalysts for Oxygen Electrocatalysis and Zinc–Air Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2003018.	10.2	181
140	Rare-Earth Single-Atom La–N Charge-Transfer Bridge on Carbon Nitride for Highly Efficient and Selective Photocatalytic CO <sub>2</sub> Reduction. <i>ACS Nano</i> , 2020, 14, 15841-15852.	7.3	283
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