Electronic Metal–Support Interaction of Singleâ€Ato Electrocatalysis

Advanced Materials 32, e2003300 DOI: 10.1002/adma.202003300

Citation Report

#	Article	IF	CITATIONS
1	Design of a Singleâ€Atom Indium ^{δ+} –N ₄ Interface for Efficient Electroreduction of CO ₂ to Formate. Angewandte Chemie - International Edition, 2020, 59, 22465-22469.	7.2	232
2	Design of a Singleâ€Atom Indium Î′+ –N 4 Interface for Efficient Electroreduction of CO 2 to Formate. Angewandte Chemie, 2020, 132, 22651-22655.	1.6	29
3	The synthetic strategies for single atomic site catalysts based on metal–organic frameworks. Nanoscale, 2020, 12, 20580-20589.	2.8	17
4	Confinement and antenna effect for ultrasmall Y2O3:Eu3+ nanocrystals supported by MOF with enhanced near-UV light absorption thereby enhanced luminescence and excellently multifunctional applications. Nano Research, 2021, 14, 720-729.	5.8	29
5	Effect of Zn atom in Fe-N-C catalysts for electro-catalytic reactions: theoretical considerations. Nano Research, 2021, 14, 611-619.	5.8	52
6	Nanovilli electrode boosts hydrogen evolution: A surface with superaerophobicity and superhydrophilicity. Nano Research, 2021, 14, 961-968.	5.8	24
7	Optimizing the oxygen reduction catalytic activity of a bipyridine-based polymer through tuning the molecular weight. Journal of Materials Chemistry A, 2021, 9, 3322-3327.	5.2	6
8	Enabling multifunctional electrocatalysts by modifying the basal plane of unifunctional 1T′-MoS ₂ with anchored transition metal single atoms. Nanoscale, 2021, 13, 13390-13400.	2.8	69
9	A rational design of an efficient counter electrode with the Co/Co ₁ P ₁ N ₃ atomic interface for promoting catalytic performance. Materials Chemistry Frontiers, 2021, 5, 3085-3092.	3.2	8
10	Ir-based bifunctional electrocatalysts for overall water splitting. Catalysis Science and Technology, 2021, 11, 4673-4689.	2.1	53
11	Synthesis Strategies, Catalytic Applications, and Performance Regulation of Singleâ€Atom Catalysts. Advanced Functional Materials, 2021, 31, 2008318.	7.8	133
12	Ru single atoms and nanoclusters on highly porous N-doped carbon as a hydrogen evolution catalyst in alkaline solutions with ultrahigh mass activity and turnover frequency. Journal of Materials Chemistry A, 2021, 9, 12196-12202.	5.2	28
13	Cobalt single atom site catalysts with ultrahigh metal loading for enhanced aerobic oxidation of ethylbenzene. Nano Research, 2021, 14, 2418-2423.	5.8	248
14	Activation of phosphorene-like two-dimensional GeSe for efficient electrocatalytic nitrogen reduction <i>via</i> states filtering of Ru. Journal of Materials Chemistry A, 2021, 9, 16056-16064.	5.2	19
15	Carbon-supported catalysts with atomically dispersed metal sites for oxygen electroreduction: present and future perspectives. Journal of Materials Chemistry A, 2021, 9, 15919-15936.	5.2	24
16	Theoretical Research on Catalytic Performance of TMNxCy Catalyst for Nitrogen Reduction in Actual Water Solvent. Acta Chimica Sinica, 2021, 79, 1138.	0.5	1
17	Construction of Dualâ€Activeâ€6ite Copper Catalyst Containing both CuN ₃ and CuN ₄ Sites. Small, 2021, 17, e2006834.	5.2	52
18	Operando XAS/SAXS: Guiding Design of Singleâ€Atom and Subnanocluster Catalysts. Small Methods, 2021, 5, e2001194.	4.6	41

#	Article	IF	CITATIONS
19	Highly efficient oxygen evolution and stable water splitting by coupling NiFe LDH with metal phosphides. Science China Materials, 2021, 64, 1662-1670.	3.5	52
20	Pd single-atom monolithic catalyst: Functional 3D structure and unique chemical selectivity in hydrogenation reaction. Science China Materials, 2021, 64, 1919-1929.	3.5	75
21	Metal-support interactions in designing noble metal-based catalysts for electrochemical CO2 reduction: Recent advances and future perspectives. Nano Research, 2021, 14, 3795-3809.	5.8	80
22	Elucidating the electro-catalytic oxidation of hydrazine over carbon nanotube-based transition metal single atom catalysts. Nano Research, 2021, 14, 4650-4657.	5.8	23
23	Recent Advancements of Porphyrin‣ike Singleâ€Atom Catalysts: Synthesis and Applications. Small Structures, 2021, 2, 2100007.	6.9	77
24	Synergistic catalysis of cluster and atomic copper induced by copper-silica interface in transfer-hydrogenation. Nano Research, 2021, 14, 4601-4609.	5.8	12
25	A highly accessible copper single-atom catalyst for wound antibacterial application. Nano Research, 2021, 14, 4808-4813.	5.8	35
26	High-Loading Single-Atomic-Site Silver Catalysts with an Ag ₁ –C ₂ N ₁ Structure Showing Superior Performance for Epoxidation of Styrene. ACS Catalysis, 2021, 11, 4946-4954.	5.5	62
27	Tuned single atom coordination structures mediated by polarization force and sulfur anions for photovoltaics. Nano Research, 2021, 14, 4025-4032.	5.8	14
28	A review of synthesis strategies for MOF-derived single atom catalysts. Korean Journal of Chemical Engineering, 2021, 38, 1104-1116.	1.2	22
29	Density Functional Theory Study of a Graphdiyne-Supported Single Au Atom Catalyst for Highly Efficient Acetylene Hydrochlorination. ACS Applied Nano Materials, 2021, 4, 6152-6159.	2.4	22
30	Tailoring the Electronic Metal–Support Interactions in Supported Atomically Dispersed Gold Catalysts for Efficient Fentonâ€like Reaction. Angewandte Chemie, 2021, 133, 14491-14496.	1.6	15
31	A Unique Gas-Migration, Trapping, and Emitting Strategy for High-Loading Single Atomic Cd Sites for Carbon Dioxide Electroreduction. Nano Letters, 2021, 21, 4262-4269.	4.5	48
32	Tailoring the Electronic Metal–Support Interactions in Supported Atomically Dispersed Gold Catalysts for Efficient Fentonâ€like Reaction. Angewandte Chemie - International Edition, 2021, 60, 14370-14375.	7.2	46
33	Single Mn Atom Anchored on Nitrogenâ€Doped Graphene as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction. Chemistry - A European Journal, 2021, 27, 9686-9693.	1.7	15
34	Boosting Selective Nitrogen Reduction via Geometric Coordination Engineering on Singleâ€Tungstenâ€Atom Catalysts. Advanced Materials, 2021, 33, e2100429.	11.1	128
35	Electronic metal–support interaction modulates single-atom platinum catalysis for hydrogen evolution reaction. Nature Communications, 2021, 12, 3021.	5.8	397
36	Biocatalysts at atom level: From coordination structure to medical applications. Applied Materials Today, 2021, 23, 101029.	2.3	12

#	Article	IF	CITATIONS
37	Interplay between invasive single atom Pt and native oxygen vacancy in rutile TiO2(110) surface: A theoretical study. Nano Research, 2022, 15, 669-676.	5.8	15
38	Machine learning: The trends of developing high-efficiency single-atom materials. Chem Catalysis, 2021, 1, 24-26.	2.9	9
39	Exceptional Electrochemical HER Performance with Enhanced Electron Transfer between Ru Nanoparticles and Single Atoms Dispersed on a Carbon Substrate. Angewandte Chemie - International Edition, 2021, 60, 16044-16050.	7.2	200
40	Exceptional Electrochemical HER Performance with Enhanced Electron Transfer between Ru Nanoparticles and Single Atoms Dispersed on a Carbon Substrate. Angewandte Chemie, 2021, 133, 16180-16186.	1.6	31
41	Carbon nanosheets supporting Ni–N3S single-atom sites for efficient electrocatalytic CO2 reduction. Carbon, 2021, 178, 488-496.	5.4	48
42	Engineering the Local Coordination Environment of Single-Atom Catalysts and Their Applications in Photocatalytic Water Splitting: A Review. Transactions of Tianjin University, 2021, 27, 313-330.	3.3	37
43	Support Effect of Ru Catalysts for Efficient Conversion of Biomass-Derived 2,5-Hexanedione to Different Products. ACS Catalysis, 2021, 11, 7685-7693.	5.5	22
44	Electronic structure regulations of single-atom site catalysts and their effects on the electrocatalytic performances. Applied Physics Reviews, 2021, 8, .	5.5	29
45	Engineering the atomic interface of porous ceria nanorod with single palladium atoms for hydrodehalogenation reaction. Nano Research, 2022, 15, 1338-1346.	5.8	15
46	Engineering the Electronic Interaction between Metals and Carbon Supports for Oxygen/Hydrogen Electrocatalysis. , 2021, 3, 1197-1212.		27
47	The Electronic Metal–Support Interaction Directing the Design of Single Atomic Site Catalysts: Achieving High Efficiency Towards Hydrogen Evolution. Angewandte Chemie, 2021, 133, 19233-19239.	1.6	149
48	An Adjacent Atomic Platinum Site Enables Singleâ€Atom Iron with High Oxygen Reduction Reaction Performance. Angewandte Chemie - International Edition, 2021, 60, 19262-19271.	7.2	275
49	An Adjacent Atomic Platinum Site Enables Singleâ€Atom Iron with High Oxygen Reduction Reaction Performance. Angewandte Chemie, 2021, 133, 19411-19420.	1.6	32
50	Emerging Dualâ€Atomicâ€Site Catalysts for Efficient Energy Catalysis. Advanced Materials, 2021, 33, e2102576.	11.1	226
51	High-throughput screening of carbon-supported single metal atom catalysts for oxygen reduction reaction. Nano Research, 2022, 15, 1054-1060.	5.8	34
52	Ionic-liquid-assisted synthesis of metal single-atom catalysts for benzene oxidation to phenol. Science China Materials, 2022, 65, 163-169.	3.5	13
53	Rational Design of Singleâ€Atom Site Electrocatalysts: From Theoretical Understandings to Practical Applications. Advanced Materials, 2021, 33, e2008151.	11.1	175
54	The Electronic Metal–Support Interaction Directing the Design of Single Atomic Site Catalysts: Achieving High Efficiency Towards Hydrogen Evolution. Angewandte Chemie - International Edition, 2021, 60, 19085-19091.	7.2	189

#	Article	IF	CITATIONS
55	Recent Advances in Electrode Design for Rechargeable Zinc–Air Batteries. Small Science, 2021, 1, 2100044.	5.8	47
56	Electrocatalytic acidic oxygen evolution reaction: From nanocrystals to single atoms. Aggregate, 2021, 2, e106.	5.2	27
57	Electronic Metal–Support Interactions for Electrochemiluminescence Signal Amplification. Analytical Chemistry, 2021, 93, 11291-11297.	3.2	9
58	Engineering Single Atom Catalysts to Tune Properties for Electrochemical Reduction and Evolution Reactions. Advanced Energy Materials, 2021, 11, 2101670.	10.2	42
59	Synthesis of Co-Doped Tungsten Phosphide Nanoparticles Supported on Carbon Supports as High-Efficiency HER Catalysts. ACS Sustainable Chemistry and Engineering, 2021, 9, 12311-12322.	3.2	26
60	Atomic CoN3S1 sites for boosting oxygen reduction reaction via an atomic exchange strategy. Nano Research, 2022, 15, 1803-1808.	5.8	9
61	Prediction Descriptor for Catalytic Activity of Platinum Nanoparticles/Metal–Organic Framework Composites. ACS Applied Materials & Interfaces, 2021, 13, 38325-38332.	4.0	14
62	Crystal plane effect of ceria on supported copper catalyst for liquid-phase hydrogenation of unsaturated aldehyde. Journal of Colloid and Interface Science, 2021, 596, 34-43.	5.0	10
63	Large-scale production of holey carbon nanosheets implanted with atomically dispersed Fe sites for boosting oxygen reduction electrocatalysis. Nano Research, 2022, 15, 1926-1933.	5.8	17
64	Design concept for electrocatalysts. Nano Research, 2022, 15, 1730-1752.	5.8	396
65	Sulfurâ€Dopantâ€Promoted Electroreduction of CO ₂ over Coordinatively Unsaturated Niâ€N ₂ Moieties. Angewandte Chemie - International Edition, 2021, 60, 23342-23348.	7.2	98
66	Interface engineering of plasmonic induced Fe/N/C-F catalyst with enhanced oxygen catalysis performance for fuel cells application. Nano Research, 2022, 15, 2138-2146.	5.8	25
67	Polystyrene Microspheres Decorated with Au ₄ Cu ₅ Nanoclusters and their Application in Catalytic Reduction of 4â€Nitrophenol. ChemistrySelect, 2021, 6, 8843-8847.	0.7	4
68	Atomically Isolated Rh Sites within Highly Branched Rh ₂ Sb Nanostructures Enhance Bifunctional Hydrogen Electrocatalysis. Advanced Materials, 2021, 33, e2105049.	11.1	48
69	Creating High Regioselectivity by Electronic Metal–Support Interaction of a Single-Atomic-Site Catalyst. Journal of the American Chemical Society, 2021, 143, 15453-15461.	6.6	88
70	Facile, general and environmental-friendly fabrication of O/N-codoped porous carbon as a universal matrix for efficient hydrogen evolution electrocatalysts. Chemical Engineering Journal, 2021, 420, 130483.	6.6	32
71	Atomically dispersed dual Fe centers on nitrogen-doped bamboo-like carbon nanotubes for efficient oxygen reduction. Nano Research, 2022, 15, 1966-1972.	5.8	31
72	Engineering Pt Nanoparticles onto Resinâ€Derived Iron and Nitrogen Coâ€Doped Porous Carbon Nanostructure Boosts Oxygen Reduction Catalysis. ChemCatChem, 0, , .	1.8	6

#	Article	IF	CITATIONS
73	Design and structural engineering of single-atomic-site catalysts for acidic oxygen reduction reaction. Trends in Chemistry, 2021, 3, 954-968.	4.4	20
74	Sulfurâ€Dopantâ€Promoted Electroreduction of CO 2 over Coordinatively Unsaturated Niâ€N 2 Moieties. Angewandte Chemie, 0, , .	1.6	9
75	M-N-C-based single-atom catalysts for H2, O2 & amp; CO2 electrocatalysis: activity descriptors, active sites identification, challenges and prospects. Fuel, 2021, 304, 121420.	3.4	63
76	Mechanistic insight into the dispersion behavior of single platinum atom on monolayer g-C3N4 in single-atom catalysts from density functional theory calculations. Applied Surface Science, 2021, 566, 150697.	3.1	19
77	Dual active site tandem catalysis of metal hydroxyl oxides and single atoms for boosting oxygen evolution reaction. Applied Catalysis B: Environmental, 2021, 297, 120451.	10.8	44
78	Electronics and coordination engineering of atomic cobalt trapped by oxygen-driven defects for efficient cathode in solar cells. Nano Energy, 2021, 89, 106365.	8.2	25
79	Atomically dispersed Au catalysts for preferential oxidation of CO in H2-rich stream. Applied Catalysis B: Environmental, 2021, 296, 120385.	10.8	40
80	Carbon monoxide-resistant copper-cobalt nanocrystal@ nitrogen-doped carbon electrocatalysts for methanol oxidation reaction. Journal of Alloys and Compounds, 2021, 888, 161563.	2.8	13
81	Single-atom catalysts for CO oxidation, CO2 reduction, and O2 electrochemistry. Journal of Energy Chemistry, 2022, 65, 254-279.	7.1	56
82	Atom-level interfacial synergy of single-atom site catalysts for electrocatalysis. Journal of Energy Chemistry, 2022, 65, 103-115.	7.1	35
83	Ar/H ₂ /O ₂ â€Controlled Growth Thermodynamics and Kinetics to Create Zeroâ€, Oneâ€, and Twoâ€Dimensional Ruthenium Nanocrystals towards Acidic Overall Water Splitting. Advanced Functional Materials, 2021, 31, 2007344.	7.8	16
84	Carbon‣upported Singleâ€Atom Catalysts for Formic Acid Oxidation and Oxygen Reduction Reactions. Small, 2021, 17, e2004500.	5.2	63
85	Improving the performance stability of direct seawater electrolysis: from catalyst design to electrode engineering. Nanoscale, 2021, 13, 15177-15187.	2.8	48
86	Non-carbon-supported single-atom site catalysts for electrocatalysis. Energy and Environmental Science, 2021, 14, 2809-2858.	15.6	198
87	The atomic-level regulation of single-atom site catalysts for the electrochemical CO ₂ reduction reaction. Chemical Science, 2021, 12, 4201-4215.	3.7	61
88	Tandem catalyzing the hydrodeoxygenation of 5-hydroxymethylfurfural over a Ni ₃ Fe intermetallic supported Pt single-atom site catalyst. Chemical Science, 2021, 12, 4139-4146.	3.7	33
89	Progress in batch preparation of single-atom catalysts and application in sustainable synthesis of fine chemicals. Green Chemistry, 2021, 23, 8754-8794.	4.6	39
90	Recent Progress of 3d Transition Metal Singleâ€Atom Catalysts for Electrochemical CO ₂ Reduction. Advanced Materials Interfaces, 2021, 8, 2001904.	1.9	40

#	Article	IF	Citations
91	Perspectives for Single-Atom Nanozymes: Advanced Synthesis, Functional Mechanisms, and Biomedical Applications. Analytical Chemistry, 2021, 93, 1221-1231.	3.2	86
92	Atomically dispersed Pd catalysts promote the oxygen evolution reaction in acidic media. Chemical Communications, 2021, 57, 11561-11564.	2.2	10
93	Single-Atom (Iron-Based) Catalysts: Synthesis and Applications. Chemical Reviews, 2021, 121, 13620-13697.	23.0	136
94	Recent Advances in Interface Engineering for Electrocatalytic CO2 Reduction Reaction. Nano-Micro Letters, 2021, 13, 216.	14.4	58
95	Bringing catalytic order out of chaos with nitrogen-doped ordered mesoporous carbon. Matter, 2021, 4, 3161-3194.	5.0	117
96	Coupling the Atomically Dispersed Feâ€N ₃ Sites with Subâ€5Ânm Pd Nanocrystals Confined in Nâ€Doped Carbon Nanobelts to Boost the Oxygen Reduction for Microbial Fuel Cells. Advanced Functional Materials, 2022, 32, 2107683.	7.8	24
97	Synergistic Modulation of the Separation of Photoâ€Generated Carriers via Engineering of Dual Atomic Sites for Promoting Photocatalytic Performance. Advanced Materials, 2021, 33, e2105904.	11.1	117
98	Atomic Structure Evolution of Pt–Co Binary Catalysts: Single Metal Sites versus Intermetallic Nanocrystals. Advanced Materials, 2021, 33, e2106371.	11.1	62
99	Platinum group metal free nano-catalysts for proton exchange membrane water electrolysis. Current Opinion in Chemical Engineering, 2021, 34, 100743.	3.8	23
100	Tremella-like manganese dioxide complex (Fe,Ni)3S4 hybrid catalyst for highly efficient oxygen evolution reaction. Journal of Power Sources, 2021, 515, 230627.	4.0	17
101	Supports promote single-atom catalysts toward advanced electrocatalysis. Coordination Chemistry Reviews, 2022, 451, 214261.	9.5	187
102	Axial chlorine coordinated iron-nitrogen-carbon single-atom catalysts for efficient electrochemical CO2 reduction. Chemical Engineering Journal, 2022, 430, 132882.	6.6	51
103	Multiple catalytic sites of Fe-N and Fe-N-C single atoms embedded N-doped carbon heterostructures for high-efficiency removal of malachite green. Chemical Engineering Journal, 2022, 430, 132933.	6.6	35
104	Single atoms supported on metal oxides for energy catalysis. Journal of Materials Chemistry A, 2022, 10, 5717-5742.	5.2	29
105	Development of Carbonâ€Based Electrocatalysts for Ambient Nitrogen Reduction Reaction: Challenges and Perspectives. ChemElectroChem, 2022, 9, .	1.7	9
106	Electronic Structure Regulation of Singleâ€Atom Catalysts for Electrochemical Oxygen Reduction to H ₂ O ₂ . Small, 2022, 18, e2103824.	5.2	49
107	Highly-dispersed and high-metal-density electrocatalysts on carbon supports for the oxygen reduction reaction: from nanoparticles to atomic-level architectures. Materials Advances, 2022, 3, 779-809.	2.6	45
108	Understanding Single-Atom Catalysis in View of Theory. Jacs Au, 2021, 1, 2130-2145.	3.6	86

#	Article	IF	CITATIONS
109	Advanced Support Materials and Interactions for Atomically Dispersed Nobleâ€Metal Catalysts: From Support Effects to Design Strategies. Advanced Energy Materials, 2022, 12, 2102556.	10.2	78
110	Heterogeneous Single Atom Environmental Catalysis: Fundamentals, Applications, and Opportunities. Advanced Functional Materials, 2022, 32, 2108381.	7.8	51
111	Electronically and Geometrically Modified Singleâ€Atom Fe Sites by Adjacent Fe Nanoparticles for Enhanced Oxygen Reduction. Advanced Materials, 2022, 34, e2107291.	11.1	123
112	Striding the threshold of an atom era of organic synthesis by single-atom catalysis. CheM, 2022, 8, 119-140.	5.8	71
113	Theory-oriented screening and discovery of advanced energy transformation materials in electrocatalysis. , 2022, 1, 100013.		273
114	Atomic‣evel Metal Electrodeposition: Synthetic Strategies, Applications, and Catalytic Mechanism in Electrochemical Energy Conversion. Small Structures, 2022, 3, 2100185.	6.9	29
115	Elucidating the Critical Role of Ruthenium Single Atom Sites in Water Dissociation and Dehydrogenation Behaviors for Robust Hydrazine Oxidationâ€Boosted Alkaline Hydrogen Evolution. Advanced Functional Materials, 2022, 32, .	7.8	77
116	Coupling isolated Ni single atoms with sub-10 nm Pd nanocrystals embedded in porous carbon frameworks to boost oxygen electrocatalysis for Zn–air batteries. Journal of Materials Chemistry A, 2022, 10, 6086-6095.	5.2	9
117	Synchrotron-radiation spectroscopic identification towards diverse local environments of single-atom catalysts. Journal of Materials Chemistry A, 2022, 10, 5771-5791.	5.2	19
118	Atomically dispersed cobalt anchored on N-doped graphene aerogels for efficient electromagnetic wave absorption with an ultralow filler ratio. Applied Physics Reviews, 2022, 9, .	5.5	86
119	Computational evaluation of FeMo heteroatom coeffect induced high electroreduction activity of N2-to-NH3. Applied Surface Science, 2022, 579, 152214.	3.1	15
120	Insights into mechanism of Fe-dominated active sites via phosphorus bridging in Fe-Ni bimetal single atom photocatalysts. Separation and Purification Technology, 2022, 286, 120443.	3.9	23
121	Atomically dispersed catalysts for small molecule electrooxidation in direct liquid fuel cells. Journal of Energy Chemistry, 2022, 68, 439-453.	7.1	18
122	Pt NPs-loaded siloxene nanosheets for hydrogen co-evolutions from Zn-H2O fuel cells-powered water-splitting. Applied Catalysis B: Environmental, 2022, 304, 121008.	10.8	27
123	Double-atom catalysts for energy-related electrocatalysis applications: a theoretical perspective. Journal Physics D: Applied Physics, 2022, 55, 203001.	1.3	57
124	Electronic Metal–Support Interaction Modulation of Singleâ€Atom Electrocatalysts for Rechargeable Zinc–Air Batteries. Small Methods, 2022, 6, e2100947	4.6	29
125	Superiority of Dualâ€Atom Catalysts in Electrocatalysis: One Step Further Than Singleâ€Atom Catalysts. Advanced Energy Materials, 2022, 12, .	10.2	189
126	MXene-Based Aerogel Anchored with Antimony Single Atoms and Quantum Dots for High-Performance Potassium-Ion Batteries. Nano Letters, 2022, 22, 1225-1232.	4.5	64

#	Article	IF	CITATIONS
127	Stability of single-atom catalysts for electrocatalysis. Journal of Materials Chemistry A, 2022, 10, 5835-5849.	5.2	40
128	Synergistic combination of Pd nanosheets and porous Bi(OH)3 boosts activity and durability for ethanol oxidation reaction. Nano Research, 2022, 15, 3920-3926.	5.8	28
129	Understanding of the Dual Roles of Phosphorus in Atomically Distributed Fe/Co-N ₄ P ₂ over Carbon Nitride for Photocatalytic Debromination from Tetrabromobisphenol A. ACS Applied Materials & Interfaces, 2022, 14, 5376-5383.	4.0	11
130	High-ammonia selective metal–organic framework–derived Co-doped Fe/Fe ₂ O ₃ catalysts for electrochemical nitrate reduction. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	75
131	Synergistic effects on d-band center via coordination sites of M-N3P1 (M = Co and Ni) in dual single atoms that enhances photocatalytic dechlorination from tetrachlorobispheonl A. Journal of Hazardous Materials, 2022, 430, 128419.	6.5	26
132	Impacts of Metal–Support Interaction on Hydrogen Evolution Reaction of Cobalt-Nitride-Carbide Catalyst. Frontiers in Chemistry, 2021, 9, 828964.	1.8	8
133	A Universal Singleâ€Atom Coating Strategy Based on Tannic Acid Chemistry for Multifunctional Heterogeneous Catalysis. Angewandte Chemie, 2022, 134, .	1.6	9
134	A Universal Singleâ€Atom Coating Strategy Based on Tannic Acid Chemistry for Multifunctional Heterogeneous Catalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	34
135	Advances in single-atom catalysts: Design, synthesis and environmental applications. Journal of Hazardous Materials, 2022, 429, 128285.	6.5	26
136	Single palladium site in ordered porous heteroatom-doped carbon for high-performance alkaline hydrogen oxidation. Applied Catalysis B: Environmental, 2022, 306, 121029.	10.8	67
137	Molecular‣evel Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0, , .	1.6	0
137 138	Molecular‣evel Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0, , . Single Co Sites in Ordered SiO ₂ Channels for Boosting Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 2632-2638.	1.6 5.5	0 52
137 138 139	Molecular‣evel Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0, , . Single Co Sites in Ordered SiO ₂ Channels for Boosting Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 2632-2638. Stabilization of Cu ₂ O through Site-Selective Formation of a Co ₁ Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320.	1.6 5.5 3.2	0 52 5
 137 138 139 140 	Molecular‣evel Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0, , . Single Co Sites in Ordered SiO ₂ Channels for Boosting Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 2632-2638. Stabilization of Cu ₂ O through Site-Selective Formation of a Co ₁ Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320. Molecular‣evel Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie - International Edition, 2022, 61,.	1.6 5.5 3.2 7.2	0 52 5 30
 137 138 139 140 141 	Molecularâ€Level Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0,,.Single Co Sites in Ordered SiO ₂ Channels for Boosting Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 2632-2638.Stabilization of Cu ₂ O through Site-Selective Formation of a Co ₁ Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320.Molecularâ€Level Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie - International Edition, 2022, 61,.Regulating the Tip Effect on Singleâ€Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61,.	1.6 5.5 3.2 7.2 7.2	0 52 5 30 76
 137 138 139 140 141 142 	Molecularâ€Level Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0,Single Co Sites in Ordered SiO ₂ Channels for Boosting Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 2632-2638.Stabilization of Cu ₂ O through Site-Selective Formation of a Co ₁ Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320.Molecularâ€Level Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie - International Edition, 2022, 61, .Regulating the Tip Effect on Singleâ€Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61, .Regulating the Tip Effect on Singleâ€Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61, .	1.6 5.5 3.2 7.2 7.2 1.6	0 52 5 30 76 25
 137 138 139 140 141 142 143 	Molecularâ€Level Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie, 0, , .Single Co Sites in Ordered SiO ₂ Channels for Boosting Nonoxidative Propane Dehydrogenation. ACS Catalysis, 2022, 12, 2632-2638.Stabilization of Cu ₂ O through Site-Selective Formation of a Co ₁ Cu Hybrid Single-Atom Catalyst. Chemistry of Materials, 2022, 34, 2313-2320.Molecularâ€Level Insights into the Notorious CO Poisoning of Platinum Catalyst. Angewandte Chemie - International Edition, 2022, 61, .Regulating the Tip Effect on Singleâ€Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61, .Regulating the Tip Effect on Singleâ€Atom and Cluster Catalysts: Forming Reversible Oxygen Species with High Efficiency in Chlorine Evolution Reaction. Angewandte Chemie, 2022, 134, .Coordination environments tune the activity of oxygen catalysis on single atom catalysts: A computational study. Nano Research, 2022, 15, 3073-3081.	1.6 5.5 3.2 7.2 7.2 1.6 5.8	0 52 5 30 76 25 58

#	Article	IF	CITATIONS
145	Atomic bridging modulation of Ir–N, S co-doped MXene for accelerating hydrogen evolution. Journal of Materials Chemistry A, 2022, 10, 9878-9885.	5.2	31
146	An <i>in situ</i> generated 3D porous nanostructure on 2D nanosheets to boost the oxygen evolution reaction for water-splitting. Nanoscale, 2022, 14, 4566-4572.	2.8	36
147	Single metal atoms catalystsâ \in "Promising candidates for next generation energy storage and conversion devices. EcoMat, 2022, 4, .	6.8	28
148	Ir Single Atoms Doped Cuboctahedral Pd for Boosted Methanol Oxidation Reaction. Particle and Particle Systems Characterization, 2022, 39, .	1.2	4
149	Applications of Nickelâ€Based Electrocatalysts for Hydrogen Evolution Reaction. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	17
150	A General Strategy for Engineering Single-Metal Sites on 3D Porous N, P Co-Doped Ti ₃ C ₂ T _X MXene. ACS Nano, 2022, 16, 4116-4125.	7.3	63
151	Constructing Synergistic Znâ€N ₄ and Feâ€N ₄ O Dualâ€Sites from the COF@MOF Derived Hollow Carbon for Oxygen Reduction Reaction. Small Structures, 2022, 3, .	6.9	46
152	Single-atom sites on perovskite chips for record-high sensitivity and quantification in SERS. Science China Materials, 2022, 65, 1601-1614.	3.5	6
153	Advances in the Development of Singleâ€Atom Catalysts for Highâ€Energyâ€Đensity Lithium–Sulfur Batteries. Advanced Materials, 2022, 34, e2200102.	11.1	202
154	A single-Pt-atom-on-Ru-nanoparticle electrocatalyst for CO-resilient methanol oxidation. Nature Catalysis, 2022, 5, 231-237.	16.1	133
155	Emerging Ultrahighâ€Density Singleâ€Atom Catalysts for Versatile Heterogeneous Catalysis Applications: Redefinition, Recent Progress, and Challenges. Small Structures, 2022, 3, .	6.9	41
156	Geometric Engineering of Porous PtCu Nanotubes with Ultrahigh Methanol Oxidation and Oxygen Reduction Capability. Small, 2022, 18, e2107387.	5.2	61
157	Top-down synthetic strategies toward single atoms on the rise. Matter, 2022, 5, 788-807.	5.0	28
158	Efficient Catalytic Elimination of CH ₃ SH by a Wet-Piezotronics System over Ag Cluster-Deposited BaTiO ₃ with Electronic Metal–Support Interaction. ACS ES&T Engineering, 2022, 2, 1179-1187.	3.7	10
159	Atomically dispersed ultralow-platinum loading on Ti3C2T MXene as efficient catalyst for hydrogen evolution reaction. Electrochimica Acta, 2022, 411, 140091.	2.6	8
160	Review—Single-Atom Catalysts as Promising Candidates for Electrochemical Applications. Journal of the Electrochemical Society, 2022, 169, 046504.	1.3	12
161	Microwave-assisted molybdenum-nickel alloy for efficient water electrolysis under large current density through spillover and Fe doping. Nano Research, 2022, 15, 5873-5883.	5.8	17
162	Single–atom Ir1 supported on rutile TiO2 for excellent selective catalytic oxidation of ammonia. Journal of Hazardous Materials, 2022, 432, 128670.	6.5	19

#	ARTICLE	IF	CITATIONS
163	Coordination environment engineering to boost electrocatalytic CO2 reduction performance by introducing boron into single-Fe-atomic catalyst. Chemical Engineering Journal, 2022, 437, 135294.	6.6	77
164	Electrochemical interfaces on chalcogenides: Some structural perspectives and synergistic effects of single-surface active sites. Current Opinion in Electrochemistry, 2022, 33, 100955.	2.5	3
165	Nitrogen-doped carbon black supported synergistic palladium single atoms and nanoparticles for electrocatalytic oxidation of methanol. Chemical Engineering Journal, 2022, 438, 135585.	6.6	19
166	Single-atom Ir and Ru anchored on graphitic carbon nitride for efficient and stable electrocatalytic/photocatalytic hydrogen evolution. Applied Catalysis B: Environmental, 2022, 310, 121318.	10.8	72
167	Recent advances in highâ€loading catalysts for lowâ€ŧemperature fuel cells: From nanoparticle to single atom. SusMat, 2021, 1, 569-592.	7.8	35
168	Study on the Structureâ€Activity Relationship Between Singleâ€Atom, Cluster and Nanoparticle Catalysts in a Hierarchical Structure for the Oxygen Reduction Reaction. Small, 2022, 18, e2105487.	5.2	16
169	Corrosive-coordinate engineering to construct 2D-3D nanostructure with trace Pt as efficient bifunctional electrocatalyst for overall water splitting. Science China Materials, 2022, 65, 1217-1224.	3.5	34
170	Highly Active Atomically Dispersed Co–N _{<i>x</i>Sites Anchored on Ultrathin N-Doped Carbon Nanosheets with Durability Oxygen Reduction Reaction of Zinc–Air Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 16956-16964.}	3.2	11
171	Engineering single-atom catalysts toward biomedical applications. Chemical Society Reviews, 2022, 51, 3688-3734.	18.7	43
172	Highâ€entropy alloy stabilized and activated Pt clusters for highly efficient electrocatalysis. SusMat, 2022, 2, 186-196.	7.8	41
173	Highly efficient and anti-poisoning single-atom cobalt catalyst for selective hydrogenation of nitroarenes. Nano Research, 2022, 15, 10006-10013.	5.8	7
174	Performance descriptors of nanostructured metal catalysts for acetylene hydrochlorination. Nature Nanotechnology, 2022, 17, 606-612.	15.6	39
175	Experimental and Theoretical Advances on Single Atom and Atomic Clusterâ€Đecorated Lowâ€Dimensional Platforms towards Superior Electrocatalysts. Advanced Energy Materials, 2022, 12, .	10.2	25
176	Metal-metal interactions in correlated single-atom catalysts. Science Advances, 2022, 8, eabo0762.	4.7	142
177	Reversing the Catalytic Selectivity of Single-Atom Ru via Support Amorphization. Jacs Au, 2022, 2, 1078-1083.	3.6	5
178	Ligand Charge Donation–Acquisition Balance: A Unique Strategy to Boost Single Pt Atom Catalyst Mass Activity toward the Hydrogen Evolution Reaction. ACS Catalysis, 2022, 12, 5970-5978.	5.5	18
179	Carbon Catalysts for Electrochemical CO ₂ Reduction toward Multicarbon Products. Advanced Energy Materials, 2022, 12, .	10.2	50
180	Tuning metal-support interaction of NiCu/graphene cocatalysts for enhanced dye-sensitized photocatalytic H2 evolution. Applied Surface Science, 2022, 593, 153459.	3.1	14

		CITATION R	EPORT	
#	Article		IF	Citations
181	Isolating Single and Few Atoms for Enhanced Catalysis. Advanced Materials, 2022, 34,	e2201796.	11.1	84
182	Optimizing Atomically Dispersed Metal Electrocatalysts for Hydrogen Evolution: Chem Coordination Effect and Electronic Metal Support Interaction. Chemistry - an Asian Jou	ical rnal, 2022, , .	1.7	2
183	Synthetic Strategies to Enhance the Electrocatalytic Properties of Branched Metal Nan Accounts of Chemical Research, 2022, 55, 1693-1702.	ioparticles.	7.6	12
184	Prospects of non-noble metal single atoms embedded in two-dimensional (2D) carbon non-carbon-based structures in electrocatalytic applications. Coordination Chemistry F 467, 214613.	and Reviews, 2022,	9.5	13
185	Highly efficient CeO2-supported noble-metal catalysts: From single atoms to nanoclus Catalysis, 2022, 2, 1594-1623.	ters. Chem	2.9	39
186	Hydrogen production byÂelectrocatalysis using the reaction ofÂacidic oxygen evolutio Environmental Chemistry Letters, 2022, 20, 3429-3452.	n: a review.	8.3	18
187	Highly active and thermostable submonolayer La(NiCo)OΔ catalyst stabilized by a pero support. Communications Chemistry, 2022, 5, .	ovskite LaCrO3	2.0	4
188	Emerging low-nuclearity supported metal catalysts with atomic level precision for effic heterogeneous catalysis. Nano Research, 2022, 15, 7806-7839.	ient	5.8	201
189	Understanding the structure-performance relationship of active sites at atomic scale. N 2022, 15, 6888-6923.	Nano Research,	5.8	391
190	Solid-State Reaction Synthesis of Nanoscale Materials: Strategies and Applications. Ch 2022, 122, 12748-12863.	emical Reviews,	23.0	35
191	Asymmetric N, <scp>O oordinated</scp> Single Atomic Co Sites for Stable Lithium Energy and Environmental Materials, 2023, 6, .	Metal Anodes.	7.3	11
192	Delicate surface vacancies engineering of Ru doped MOF-derived Ni-NiO@C hollow min superstructure to achieve outstanding hydrogen oxidation performance. Journal of Ene Chemistry, 2022, 72, 395-404.	crosphere ergy	7.1	29
193	Computational screening and catalytic origin of transition metal supported on g-t-C3N single-atom catalysts for nitrogen reduction reaction. Applied Surface Science, 2022, 5	l4 as 599, 153880.	3.1	19
194	Exploiting the trade-offs of electron transfer in MOF-derived single Zn/Co atomic coup performance-enhanced zinc-air battery. Applied Catalysis B: Environmental, 2022, 316	les for , 121591.	10.8	51
195	Metal-Organic-Framework-Induced Construction of Carbon Nanotube Super-Assembly Fenton-Like Catalysis: Insights into Electron-Rich/Poor Centers Over C–Co Bond Brid Electronic Journal, 0, , .	for Enhanced ges. SSRN	0.4	0
196	Single atoms meet metal–organic frameworks: collaborative efforts for efficient pho Energy and Environmental Science, 2022, 15, 3722-3749.	tocatalysis.	15.6	107
197	Direct conversion of glycerol to <i>n</i> -propanol over a tandem catalytic dehydration–hydrogenation system. Catalysis Science and Technology, 0, , .		2.1	1
198	Single atoms (Pt, Ir and Rh) anchored on activated NiCo LDH for alkaline hydrogen evo Chemical Communications, 2022, 58, 8254-8257.	lution reaction.	2.2	15

#	Article	IF	CITATIONS
199	Emerging ruthenium single-atom catalysts for the electrocatalytic hydrogen evolution reaction. Journal of Materials Chemistry A, 2022, 10, 15370-15389.	5.2	19
200	Rareâ€Earth Singleâ€Atom Catalysts: A New Frontier in Photo/Electrocatalysis. Small Methods, 2022, 6, .	4.6	63
201	Robust Oxygen Reduction Electrocatalysis Enabled by Platinum Rooted on Molybdenum Nitride Microrods. Inorganic Chemistry, 0, , .	1.9	3
202	Metalâ€Organicâ€Frameworkâ€derived Co Nanoparticles Embedded in P, Nâ€Dualâ€doped Porous Carbon/rGO Catalyst for Water Splitting and Oxygen Reduction. ChemNanoMat, 2022, 8, .	1.5	2
203	Triazine organic framework derived Fe single-atom bifunctional electrocatalyst for high performance zinc air batteries. Journal of Power Sources, 2022, 542, 231583.	4.0	11
204	Colloidal growth of titania in nanoporous gold toward electrochemical applications. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 651, 129700.	2.3	0
205	Tailoring Bond Microenvironments and Reaction Pathways of Singleâ€Atom Catalysts for Efficient Water Electrolysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	28
206	Electronic Metalâ€Support Interaction Directing the Design of Fe(III)â€Based Catalysts for Efficient Advanced Oxidation Processes by Dual Reaction Paths. Small, 2022, 18, .	5.2	5
207	Tailoring Bond Microenvironments and Reaction Pathways of Singleâ€Atom Catalysts for Efficient Water Electrolysis. Angewandte Chemie, 2022, 134, .	1.6	5
208	Engineering the strong metal support interaction of titanium nitride and ruthenium nanorods for effective hydrogen evolution reaction. Applied Catalysis B: Environmental, 2022, 317, 121796.	10.8	47
209	Confined Gold Single Atoms–MXene Heterostructure-Based Electrochemiluminescence Functional Material and Its Sensing Application. Analytical Chemistry, 2022, 94, 11016-11022.	3.2	18
210	Twoâ^'dimensional nanomaterials confined single atoms: New opportunities for environmental remediation. Nano Materials Science, 2023, 5, 15-38.	3.9	10
211	Synergetic Pt Atoms and Nanoparticles Anchored in Standing Carbonâ€Derived from Covalent Organic Frameworks for Catalyzing ORR. Advanced Materials Interfaces, 0, , 2201263.	1.9	4
212	Enhancing carbon dioxide reduction electrocatalysis by tuning metal-support interactions: A first principles study. Green Chemical Engineering, 2022, , .	3.3	1
213	Highly efficient overall urea electrolysis via single-atomically active centers on layered double hydroxide. Science Bulletin, 2022, 67, 1763-1775.	4.3	63
214	Carbonâ€Shielded Singleâ€Atom Alloy Material Family for Multiâ€Functional Electrocatalysis. Advanced Functional Materials, 2022, 32, .	7.8	20
215	Electronic Metalâ€Support Interaction Strengthened Pt/CoAl‣DHs Catalyst for Selective Cinnamaldehyde Hydrogenation. ChemCatChem, 2022, 14, .	1.8	4
216	Strong Metal–Support Interaction in Heterogeneous Catalysts. Advanced Energy Materials, 2022, 12, .	10.2	109

#	Article	IF	Citations
217	Co single-atom confined in N-doped hollow carbon sphere with superb stability for rapid degradation of organic pollutants. Chemical Engineering Journal, 2023, 452, 139229.	6.6	14
218	Tuned layered double hydroxide-based catalysts inducing singlet oxygen evolution: Reactive oxygen species evolution mechanism exploration, norfloxacin degradation and catalysts screen based on machine learning. Applied Catalysis B: Environmental, 2023, 320, 121880.	10.8	19
219	Understanding and application of metal–support interactions in catalysts for CO-PROX. Physical Chemistry Chemical Physics, 2022, 24, 18454-18468.	1.3	3
221	Multi-atom cluster catalysts for efficient electrocatalysis. Chemical Society Reviews, 2022, 51, 8923-8956.	18.7	68
222	Tailoring the selectivity and activity of oxygen reduction by regulating the coordination environments of carbon-supported atomically dispersed metal sites. Journal of Materials Chemistry A, 2022, 10, 17948-17967.	5.2	18
223	Catalytic Effect of Carbon-Based Nanomaterials in Electrochemical Catalysis. Springer Series in Materials Science, 2022, , 83-101.	0.4	0
224	<i>In situ</i> precise anchoring of Pt single atoms in spinel Mn ₃ O ₄ for a highly efficient hydrogen evolution reaction. Energy and Environmental Science, 2022, 15, 4592-4600.	15.6	84
225	Particle-Size-Dependent Electronic Metal–Support Interaction in Pd/TiO ₂ Catalysts for Selective Hydrogenation of 3-Nitrostyrene. Journal of Physical Chemistry C, 2022, 126, 15167-15174.	1.5	4
226	Heteroâ€Atomic Pairs with a Distal Fe ³⁺ â€6ite Boost Water Oxidation. Angewandte Chemie, 2022, 134, .	1.6	4
227	Heteroâ€Atomic Pairs with a Distal Fe ³⁺ â€Site Boost Water Oxidation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	29
228	Investigation on the Reaction Mechanism of Methane Oxidation over MgAl2O4â€supported Singleâ€Atom Catalyst Prepared at High Temperature. ChemCatChem, 0, , .	1.8	2
229	Electronic Metal–Support Interaction Triggering Interfacial Charge Polarization over CuPd/Nâ€Đoped Nanohybrids Drives Selectively Electrocatalytic Conversion of Nitrate to Ammonia. Small, 2022, 18, .	5.2	28
230	Electroâ€assisted Molecular Assembly Endowing the Atomicâ€Scaled Catalytic Active Site Detection. Chemistry - A European Journal, 0, , .	1.7	0
231	Achieving rhodium-like activity for olefin hydroformylation by electronic metal-support interaction of single atomic cobalt catalyst. Cell Reports Physical Science, 2022, 3, 101016.	2.8	4
232	Longâ€Range Interactions in Diatomic Catalysts Boosting Electrocatalysis. Angewandte Chemie, 2022, 134, .	1.6	18
233	Strong Electronic Metal–Support Interaction between Iridium Single Atoms and a WO ₃ Support Promotes Highly Efficient and Robust CO ₂ Cycloaddition. Advanced Materials, 2022, 34, .	11.1	36
234	Ultrathin Cageâ€based Covalent Organic Framework Nanosheets as Precursor for Pyrolysisâ€Free Oxygen Evolution Reaction Electrocatalyst. ChemNanoMat, 2022, 8, .	1.5	4
235	Longâ€Range Interactions in Diatomic Catalysts Boosting Electrocatalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	142

#	Article	IF	CITATIONS
236	Theoretically revealing the activity origin of the hydrogen evolution reaction on carbon-based single-atom catalysts and finding ideal catalysts for water splitting. Journal of Materials Chemistry A, 2022, 10, 24362-24372.	5.2	5
237	Plasma-enabled synthesis of ordered PtFe alloy nanoparticles encapsulated with ultrathin N-doped carbon shells for efficient methanol electrooxidation. Nano Research, 2023, 16, 2065-2075.	5.8	5
238	Optimizing the semiconductor–metal-single-atom interaction for photocatalytic reactivity. Nature Reviews Chemistry, 2022, 6, 823-838.	13.8	42
239	Highly Strong Interaction between Fe/Fe ₃ C Nanoparticles and Nâ€Doped Carbon toward Enhanced Oxygen Reduction Reaction Performance. Particle and Particle Systems Characterization, 2023, 40, .	1.2	1
240	Emerging dual-atomic-site catalysts for electrocatalytic CO2 reduction. Science China Materials, 2022, 65, 3302-3323.	3.5	31
241	Structure, synthesis, and properties of single-metal-atom chains. Cell Reports Physical Science, 2022, 3, 101124.	2.8	2
242	Single Nickel Atom Catalysts Enable Fast Polysulfide Redox for Safe and Long ycle Lithium–Sulfur Batteries. Small, 2022, 18, .	5.2	14
243	Facet-dependent electronic state of Pt single atoms anchoring on CeO2 nanocrystal for CO (preferential) oxidation. Journal of Catalysis, 2022, 415, 174-185.	3.1	24
244	Identifying the roles of Ru single atoms and nanoclusters for energy-efficient hydrogen production assisted by electrocatalytic hydrazine oxidation. Applied Catalysis B: Environmental, 2023, 323, 122145.	10.8	35
245	Room-temperature hydrogenation of halogenated nitrobenzenes over metal—organic-framework-derived ultra-dispersed Ni stabilized by N-doped carbon nanoneedles. Frontiers of Chemical Science and Engineering, 2022, 16, 1782-1792.	2.3	2
246	Bioinspired and Bioderived Aqueous Electrocatalysis. Chemical Reviews, 2023, 123, 2311-2348.	23.0	22
247	Ultrahigh Mass Activity for the Hydrogen Evolution Reaction by Anchoring Platinum Single Atoms on Active {100} Facets of TiC via Cation Defect Engineering. Advanced Functional Materials, 2023, 33, .	7.8	11
249	In situ S-doped Co@NC catalyst for efficient and selective catalytic hydrogenation of nitroarenes. Applied Surface Science, 2023, 611, 155722.	3.1	6
250	A simple descriptor for the nitrogen reduction reaction over single atom catalysts. Materials Horizons, 2023, 10, 852-858.	6.4	13
251	Theoretical insights into the hydrogen oxidation reaction on single metal atoms anchored on the edge of MoS2 nanosheets. Computational Materials Science, 2023, 218, 111921.	1.4	0
252	Localizing electrons on atomic platinum by metal phosphides for accelerating electrocatalytic hydrogen evolution. Chemical Engineering Journal, 2023, 454, 140557.	6.6	7
253	Recent advances in heterogeneous single-atom nanomaterials: From engineered metal-support interaction to applications in sensors. Coordination Chemistry Reviews, 2023, 478, 214976.	9.5	33
254	Optimizing electrocatalytic oxygen reduction by adjacent C-O-C structure-driven charge separation on FeN4 active sites. Applied Catalysis B: Environmental, 2023, 324, 122251.	10.8	10

#	Article	IF	CITATIONS
255	Ternary Synergism of Heterogeneous M ¹ N ₄ â€Câ€M ² N ₄ â€Câ€M ³ N ₄ S Sites to Manipulate the Electrocatalytic Pathway for Znâ€Air Battery and Water Splitting. Advanced Energy Materials, 2023, 13, .	Singleâ€At	om ₆
256	Integrating Interactive Noble Metal Single-Atom Catalysts into Transition Metal Oxide Lattices. Journal of the American Chemical Society, 2022, 144, 23214-23222.	6.6	55
257	Tuning the CO ₂ Hydrogenation Selectivity of Rhodium Singleâ€Atom Catalysts on Zirconium Dioxide with Alkali Ions. Angewandte Chemie, 2023, 135, .	1.6	2
258	On the Road from Single-Atom Materials to Highly Sensitive Electrochemical Sensing and Biosensing. Analytical Chemistry, 2023, 95, 433-443.	3.2	19
259	Role of the Support Effects in Singleâ€Atom Catalysts. Chemistry - an Asian Journal, 2023, 18, .	1.7	5
260	Graphene electrochemical transistors decorated by Ag nanoparticles exhibiting high sensitivity for the detection of paraquat over a wide concentration range. Analytical Methods, 2023, 15, 959-968.	1.3	3
262	Tuning the CO ₂ Hydrogenation Selectivity of Rhodium Singleâ€Atom Catalysts on Zirconium Dioxide with Alkali Ions. Angewandte Chemie - International Edition, 2023, 62, .	7.2	22
263	Strong precious metal–metal oxide interaction for oxygen reduction reaction: A strategy for efficient catalyst design. SusMat, 2023, 3, 2-20.	7.8	17
264	VSe _{2–<i>x</i>} O _{<i>x</i>} @Pd Sensor for Operando Self-Monitoring of Palladium-Catalyzed Reactions. Jacs Au, 2023, 3, 468-475.	3.6	4
265	Surface immobilization of nitrogen-coordinated iron atoms: a facile and efficient strategy toward MNC sites with superior catalytic activities. Inorganic Chemistry Frontiers, 2023, 10, 1143-1152.	3.0	3
266	Single-atom catalysts for electrochemical applications. Chemical Communications, 2023, 59, 2560-2570.	2.2	6
267	Site-Selective Polyolefin Hydrogenolysis on Atomic Ru for Methanation Suppression and Liquid Fuel Production. Research, 2023, 6, .	2.8	15
268	Atomically dispersed Pt single sites and nanoengineered structural defects enable a high electrocatalytic activity and durability for hydrogen evolution reaction and overall urea electrolysis. Journal of Power Sources, 2023, 558, 232563.	4.0	10
269	Dynamically-evolved surface heterojunction in iridium nanocrystals boosting acidic oxygen evolution and overall water splitting. Journal of Energy Chemistry, 2023, 78, 374-380.	7.1	19
270	Nanosheets/nanoparticles-composed hierarchical manganese oxides enabled by molybdenum nitride rods for boosted oxygen reduction reaction electrocatalysis. Journal of Alloys and Compounds, 2023, 938, 168627.	2.8	1
271	Single-atom catalysts for electrochemical N2 reduction to NH3. Rare Metals, 2023, 42, 1075-1097.	3.6	28
272	Local chemical environment effect in single-atom catalysis. Chem Catalysis, 2023, 3, 100492.	2.9	8
273	Rational Design of Atomically Dispersed Metal Site Electrocatalysts for Oxygen Reduction Reaction.	5.6	14

#	Article	IF	Citations
274	Metal–support interactions for heterogeneous catalysis: mechanisms, characterization techniques and applications. Journal of Materials Chemistry A, 2023, 11, 8540-8572.	5.2	13
275	Single-atom catalysts for proton exchange membrane fuel cell: Anode anti-poisoning & characterization technology. Electrochimica Acta, 2023, 446, 142120.	2.6	5
276	Suppressing Universal Cathode Crossover in Highâ€Energy Lithium Metal Batteries via a Versatile Interlayer Design**. Angewandte Chemie - International Edition, 2023, 62, .	7.2	5
277	Suppressing Universal Cathode Crossover in Highâ€Energy Lithium Metal Batteries via a Versatile Interlayer Design**. Angewandte Chemie, 2023, 135, .	1.6	0
278	S and N coordinated single-atom catalysts for electrochemical CO2 reduction with superior activity and selectivity. Applied Surface Science, 2023, 619, 156747.	3.1	8
279	Modulation the metal-support interactions of potassium molybdenum-based catalysts for tuned catalytic performance of synthesizing CH3SH. Separation and Purification Technology, 2023, 316, 123815.	3.9	3
280	A pathway for promoting bioelectrochemical performance of microbial fuel cell by synthesizing graphite carbon nitride doped on single atom catalyst copper as cathode catalyst. Bioresource Technology, 2023, 372, 128677.	4.8	6
281	Single Atoms in Photocatalysis: Low Loading Is Good Enough!. ACS Energy Letters, 2023, 8, 1209-1214.	8.8	17
282	Atomically precise electrocatalysts for oxygen reduction reaction. CheM, 2023, 9, 280-342.	5.8	36
283	A Single-Atom Pd Catalyst Anchored on a Porous Organic Polymer for Highly Efficient Telomerization of 1,3-Butadiene with Methanol. Industrial & Engineering Chemistry Research, 2023, 62, 3151-3156.	1.8	3
284	Microwave Synthesis of Pt Clusters on Black TiO ₂ with Abundant Oxygen Vacancies for Efficient Acidic Electrocatalytic Hydrogen Evolution. Angewandte Chemie, 2023, 135, .	1.6	22
285	Multi-Center Cooperativity Enables Facile C–C Coupling in Electrochemical CO ₂ Reduction on a Ni ₂ P Catalyst. ACS Catalysis, 2023, 13, 2847-2856.	5.5	10
286	Microwave Synthesis of Pt Clusters on Black TiO ₂ with Abundant Oxygen Vacancies for Efficient Acidic Electrocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2023, 62, .	7.2	72
287	Lattice confined Ru single sites in hollow Co9S8 polyhedron triggering Co-S-Ru catalytic centers for rechargeable Zn-air battery. Nano Research, 2023, 16, 6701-6709.	5.8	6
288	Tuning the Coordination Environment of Carbonâ€Based Singleâ€Atom Catalysts via Doping with Multiple Heteroatoms and Their Applications in Electrocatalysis. Advanced Materials, 2023, 35, .	11.1	27
289	Insights into the electronic structure coupling effect of dual-metal atomic electrocatalytic platform for efficient clean energy conversion. Chemical Engineering Journal, 2023, 461, 141911.	6.6	11
290	Intermolecular Metallic Single‣ite Complexes Dispersed on Mo ₂ TiC ₂ TiiCsub>2Tiice: Boosted Solarâ€Driven Water Splitting. Advanced Energy Materials, 2023, 13, .	10.2	17
291	Challenges and Opportunities in Engineering the Electronic Structure of Single-Atom Catalysts. ACS Catalysis, 2023, 13, 2981-2997.	5.5	46

#	Article	IF	CITATIONS
292	Microenvironment Engineering of Single/Dualâ€Atom Catalysts for Electrocatalytic Application. Advanced Materials, 2023, 35, .	11.1	56
293	Selfâ€Accommodation Induced Electronic Metal–Support Interaction on Ruthenium Site for Alkaline Hydrogen Evolution Reaction. Advanced Materials, 2023, 35, .	11.1	35
294	Regulating the electronic structure of single-atom catalysts for electrochemical energy conversion. Journal of Materials Chemistry A, 2023, 11, 12643-12658.	5.2	14
295	Recent advances in the regulation of the coordination structures and environment of single-atom catalysts for carbon dioxide reduction reaction. Journal of Materials Chemistry A, 2023, 11, 7949-7986.	5.2	6
296	Catalyst-Support Interactions Promoted Acidic Electrochemical Oxygen Evolution Catalysis: A Mini Review. Molecules, 2023, 28, 2262.	1.7	1
297	Research progress on single atom and particle synergistic catalysts for electrocatalytic reactions. Materials Chemistry Frontiers, 2023, 7, 1992-2013.	3.2	7
298	Interface synergism and engineering of Pd/Co@N-C for direct ethanol fuel cells. Nature Communications, 2023, 14, .	5.8	33
299	Ptychographic measurements of varying size and shape along zeolite channels. Science Advances, 2023, 9, .	4.7	8
300	Oxygen Evolution/Reduction Reaction Catalysts: From <i>In Situ</i> Monitoring and Reaction Mechanisms to Rational Design. Chemical Reviews, 2023, 123, 6257-6358.	23.0	81
301	A Direct Formaldehyde Fuel Cell for CO ₂ â€Emission Free Coâ€generation of Electrical Energy and Valuable Chemical/Hydrogen. Angewandte Chemie - International Edition, 2023, 62, .	7.2	7
302	A Direct Formaldehyde Fuel Cell for CO ₂ â€Emission Free Coâ€generation of Electrical Energy and Valuable Chemical/Hydrogen. Angewandte Chemie, 2023, 135, .	1.6	0
303	Atomically Dispersed NiN _{<i>x</i>} Site with High Oxygen Electrocatalysis Performance Facilely Produced via a Surface Immobilization Strategy. ACS Applied Materials & Interfaces, 2023, 15, 16809-16817.	4.0	1
304	Atomic design of carbon-based dual-metal site catalysts for energy applications. Nano Research, 2023, 16, 6477-6506.	5.8	25
305	Single platinum atoms anchored on N-doped carbon materials composed of bipyridine as efficient hydrogen evolution electrocatalysts. Materials Chemistry Frontiers, 2023, 7, 2889-2895.	3.2	4
306	Atomic-level regulation strategies of single-atom catalysts: Nonmetal heteroatom doping and polymetallic active site construction. Chem Catalysis, 2023, 3, 100586.	2.9	1
307	DFTç"ç©¶ä,‰å•原åå,¬åŒ–å‰,用于ä,€æ¥N–C–Nå¶è³åîæ^å°¿ç´. Science China Materials, 2023, 66, 2346 	5- 23 553.	3
308	Recent progress of Cu-based electrocatalysts for upgrading biomass-derived furanic compounds. Catalysis Science and Technology, 2023, 13, 2899-2921.	2.1	4
309	Recent advances in regulating the local environment of M-N4 structure for tailored chemical reactions. Nano Research, 2023, 16, 8596-8613.	5.8	2

ARTICLE IF CITATIONS # Improving Electrocatalytic Nitrogen Reduction Selectivity and Yield by Suppressing Hydrogen 310 10.2 9 Evolution Reaction via Electronic Metalâ€"Support Interaction. Advanced Energy Materials, 2023, 13, . Recent Progress on Nonâ€Carbonâ€Supported Singleâ€Atom Catalysts for Electrochemical Conversion of 311 5.8 Green Energy. Small Science, 2023, 3, . Revealing Atomic Configuration and Synergistic Interaction of Singleâ€Atomâ€Based Znâ€Coâ€Fe Trimetallic 312 5.215 Sites for Enhancing Oxygen Reduction and Evolution Reactions. Small, 2023, 19, . Micellar Nanoreactors Enabled Siteâ€Selective Decoration of Pt Nanoparticles Functionalized Mesoporous SiO₂/WO_{3â€x} Composites for Improved CO Sensing. Small, 2023, 19, Recent Advance of Atomically Dispersed Dualâ€Metal Sites Carbocatalysts: Properties, Synthetic 314 Materials, Catalytic Mechanisms, and Applications in Persulfateâ€Based Advanced Oxidation Process. 7.8 3 Advanced Functional Materials, 2023, 33, . Synergetic modulation of molecular oxygen activation and surface acidity/basicity on defective $\dot{M}/UiO-66m$ (M = Pt, Pd) for advanced oxidation of gaseous formaldehyde at room temperature. Applied 10.8 Catalysis B: Environmental, 2023, 333, 122789. Review of Carbon Support Coordination Environments for Single Metal Atom Electrocatalysts (SACS). 316 11.1 13 Advanced Materials, 2024, 36, . Dopant triggered atomic configuration activates water splitting to hydrogen. Nature 318 5.8 Communications, 2023, 14, . Bioinspired Singleâ€Atom Sites Enable Efficient Oxygen Activation for Switching Anodic/Cathodic 319 7.2 11 Electrochemiluminescence. Angewandte Chemie - International Edition, 2023, 62, . Bioinspired Singleâ€Atom Sites Enable Efficient Oxygen Activation for Switching Anodic/Cathodic 1.6 Electrochemiluminescence. Angewandte Chemie, 0, , Advanced dual-atom catalysts for efficient oxygen evolution reaction., 2023, 1, 665-676. 321 2 Electrocatalysts for the oxygen evolution reaction: mechanism, innovative strategies, and beyond. 334 3.2 Materials Chemistry Frontiers, 2023, 7, 4833-4864. Synthesis and advantages of spinel-type composites. Materials Chemistry Frontiers, 2023, 7, 5288-5308. 355 3.2 1 Two-Dimensional Geometry-Dependent Interfaces for Enhanced Water Splitting Kinetics., 0, , 2216-2225. Progress and prospect of Pt-based catalysts for electrocatalytic hydrogen oxidation reactions. Nano 364 5.8 1 Research, 2024, 17, 960-981. Sustainable zinc–air battery chemistry: advances, challenges and prospects. Chemical Society Reviews, 24 2023, 52, 6139-6190. The reformation of catalyst: From a trial-and-error synthesis to rational design. Nano Research, 0, , . 368 5.8 16 Recent progress in high-loading single-atom catalysts and their applications. , 2023, 1, 486-500.

#	Article	IF	CITATIONS
398	Exploring the Roles of Single Atom in Hydrogen Peroxide Photosynthesis. Nano-Micro Letters, 2024, 16,	14.4	2
409	Strategies for the proton-coupled multi-electron reduction of CO ₂ on single-atom catalysts. Catalysis Science and Technology, 0, , .	2.1	0
421	Co-catalytic metal–support interactions in single-atom electrocatalysts. Nature Reviews Materials, 2024, 9, 173-189.	23.3	1
439	Introduction to single-atom catalysts. , 2024, , 1-33.		0
453	Single-Atom Catalyst for Electrochemical Water Splitting. Materials Horizons, 2024, , 217-242.	0.3	0