

# Single-Atom Catalysts across the Periodic Table

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Citation Report

#	ARTICLE	IF	CITATIONS
1	FeS <sub>2</sub> -anchored transition metal single atoms for highly efficient overall water splitting: a DFT computational screening study. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2438-2447.	5.2	73
2	Polymeric carbon nitride-based photocatalysts for photoreforming of biomass derivatives. <i>Green Chemistry</i> , 2021, 23, 7435-7457.	4.6	39
3	Recent advances in understanding oxygen evolution reaction mechanisms over iridium oxide. <i>Inorganic Chemistry Frontiers</i> , 2021, 8, 2900-2917.	3.0	75
4	Recent advances of noble-metal-free bifunctional oxygen reduction and evolution electrocatalysts. <i>Chemical Society Reviews</i> , 2021, 50, 7745-7778.	18.7	385
5	Protein powder derived nitrogen-doped carbon supported atomically dispersed iron sites for selective oxidation of ethylbenzene. <i>Dalton Transactions</i> , 2021, 50, 11711-11715.	1.6	8
6	Cooperativity in supported metal single atom catalysis. <i>Nanoscale</i> , 2021, 13, 5985-6004.	2.8	29
7	Photoredox catalysis over semiconductors for light-driven hydrogen peroxide production. <i>Green Chemistry</i> , 2021, 23, 1466-1494.	4.6	166
8	Recent advances in metal-free heteroatom-doped carbon heterogonous catalysts. <i>RSC Advances</i> , 2021, 11, 23725-23778.	1.7	28
9	Structure Sensitivity in Single-Atom Catalysis toward CO <sub>2</sub> Electroreduction. <i>ACS Energy Letters</i> , 2021, 6, 713-727.	8.8	149
10	First-principles investigation of two-dimensional covalent-organic framework electrocatalysts for oxygen evolution/reduction and hydrogen evolution reactions. <i>Sustainable Energy and Fuels</i> , 2021, 5, 5615-5626.	2.5	13
11	Single Nb or W Atom-Embedded BP Monolayers as Highly Selective and Stable Electrocatalysts for Nitrogen Fixation with Low-Onset Potentials. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 10026-10036.	4.0	74
12	Catalytic Nanomaterials toward Atomic Levels for Biomedical Applications: From Metal Clusters to Single-Atom Catalysts. <i>ACS Nano</i> , 2021, 15, 2005-2037.	7.3	148
13	Regulation of CO oxidation with Pd additives on Nb <sub>2</sub> CO <sub>2</sub> MXene. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 8477-8485.	3.8	16
14	Catalysts with single metal atoms for the hydrogen production from formic acid. <i>Catalysis Reviews - Science and Engineering</i> , 2022, 64, 835-874.	5.7	33
15	Self-Validated Machine Learning Study of Graphdiyne-Based Dual Atomic Catalyst. <i>Advanced Energy Materials</i> , 2021, 11, 2003796.	10.2	57
16	Single-Atom Catalysts: A Sustainable Pathway for the Advanced Catalytic Applications. <i>Small</i> , 2021, 17, e2006473.	5.2	135
17	Tuning the Spin Density of Cobalt Single-Atom Catalysts for Efficient Oxygen Evolution. <i>ACS Nano</i> , 2021, 15, 7105-7113.	7.3	90
18	Comparative study of single-atom gold and iridium on CeO <sub>2</sub> {111}. <i>Journal of Chemical Physics</i> , 2021, 154, 164703.	1.2	2

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19	Theoretical Exploration of Electrochemical Nitrate Reduction Reaction Activities on Transition-Metal-Doped <i>h</i> -BP. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3968-3975.	2.1	68
20	Single-Atom Pd Nanozyme for Ferroptosis-Boosted Mild-Temperature Photothermal Therapy. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12971-12979.	7.2	375
21	Single-Atom Pd Nanozyme for Ferroptosis-Boosted Mild-Temperature Photothermal Therapy. <i>Angewandte Chemie</i> , 2021, 133, 13081-13089.	1.6	33
22	Concepts, models, and methods in computational heterogeneous catalysis illustrated through $\text{CO}_2$ conversion. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2021, 11, e1530.	6.2	24
23	Electrocatalysis for the Oxygen Evolution Reaction in Acidic Media: Progress and Challenges. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4320.	1.3	41
24	Room-Temperature Synthesis of a Hollow Microporous Organic Polymer Bearing Activated Alkyne IR Probes for Nonradical Thiol-yne Click-Based Post-Functionalization. <i>Chemistry - an Asian Journal</i> , 2021, 16, 1398-1402.	1.7	8
25	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
26	Turning metal-organic frameworks into efficient single-atom catalysts via pyrolysis with a focus on oxygen reduction reaction catalysts. <i>EnergyChem</i> , 2021, 3, 100056.	10.1	51
27	Precursor Nuclearity and Ligand Effects in Atomically-Dispersed Heterogeneous Iron Catalysts for Alkyne Semi-Hydrogenation. <i>ChemCatChem</i> , 2021, 13, 3247-3256.	1.8	11
28	Single Mn Atom Anchored on Nitrogen-Doped Graphene as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction. <i>Chemistry - A European Journal</i> , 2021, 27, 9686-9693.	1.7	15
29	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
30	Applications of single-atom catalysts. <i>Nano Research</i> , 2022, 15, 38-70.	5.8	115
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32	An Earth-Abundant Ni-Based Single-Atom Catalyst for Selective Photodegradation of Pollutants. <i>Solar Rrl</i> , 2021, 5, 2100176.	3.1	39
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34	Room-Temperature Methane Activation Mediated by Free Tantalum Cluster Cations: Size-by-Size Reactivity. <i>Journal of Physical Chemistry A</i> , 2021, 125, 5289-5302.	1.1	9
35	Stepping Out of Transition Metals: Activating the Dual Atomic Catalyst through Main Group Elements. <i>Advanced Energy Materials</i> , 2021, 11, 2101404.	10.2	33
36	Design of carbon supports for metal-catalyzed acetylene hydrochlorination. <i>Nature Communications</i> , 2021, 12, 4016.	5.8	35

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37	Direct Observation of Metal Oxide Nanoparticles Being Transformed into Metal Single Atoms with Oxygenâ€Coordinated Structure and Highâ€Loadings. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15248-15253.	7.2	38
38	Direct Observation of Metal Oxide Nanoparticles Being Transformed into Metal Single Atoms with Oxygenâ€Coordinated Structure and Highâ€Loadings. <i>Angewandte Chemie</i> , 2021, 133, 15376-15381.	1.6	24
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45	Research progress on methane conversion coupling photocatalysis and thermocatalysis. , 2021, 3, 519-540.		67
46	Zeroâ€Valent Palladium Singleâ€Atoms Catalysts Confined in Black Phosphorus for Efficient Semiâ€Hydrogenation. <i>Advanced Materials</i> , 2021, 33, e2008471.	11.1	55
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56	Construction of a Single-Atom Nanozyme for Enhanced Chemodynamic Therapy and Chemotherapy. <i>Chemistry - A European Journal</i> , 2021, 27, 13418-13425.	1.7	19
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65	Direct conversion of methane to oxygenates on porous organic polymers supported Rh mononuclear complex catalyst under mild conditions. <i>Applied Catalysis B: Environmental</i> , 2021, 293, 120208.	10.8	15
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75	Single-Atom Catalysts Enabled Reductive Upgrading of CO <sub>2</sub> . <i>ChemCatChem</i> , 2021, 13, 4859-4877.	1.8	10
76	Boosting the Electrocatalytic Activity of Fe-Co Dual-Atom Catalysts for Oxygen Reduction Reaction by Ligand-Modification Engineering. <i>ChemCatChem</i> , 2021, 13, 4645-4651.	1.8	11
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79	Singlet-to-Triplet Spin Transitions Facilitate Selective 1-Butene Formation during Ethylene Dimerization in Ni(II)-MFU-4 <i>l</i> . <i>Journal of Physical Chemistry C</i> , 2021, 125, 22036-22043.	1.5	5
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110	Single-atom-based catalysts for photoelectrocatalysis: challenges and opportunities. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5878-5888.	5.2	17
111	Reduction of N <sub>2</sub> to NH <sub>3</sub> catalyzed by a Keggin-type polyoxometalate-supported dual-atom catalyst. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 845-858.	3.0	7
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128	Biomass-assisted approach for large-scale construction of multi-functional isolated single-atom site catalysts. <i>Nano Research</i> , 2022, 15, 3980-3990.	5.8	20
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131	Noble-metal based single-atom catalysts for the water-gas shift reaction. <i>Chemical Communications</i> , 2021, 58, 208-222.	2.2	13
132	Single-atom catalysts for photocatalytic energy conversion. <i>Joule</i> , 2022, 6, 92-133.	11.7	229
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134	Modulating the Local Coordination Environment of Single-Atom Catalysts for Enhanced Catalytic Performance in Hydrogen/Oxygen Evolution Reaction. <i>Small</i> , 2022, 18, e2105680.	5.2	56
135	Copper and palladium bimetallic sub-nanoparticles were stabilized on modified polyaniline materials as an efficient catalyst to promote C-C coupling reactions in aqueous solution. <i>Nanoscale</i> , 2022, 14, 2256-2265.	2.8	17
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