

# Tao Zhang

## List of Publications by Year in descending order

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41  
papers

20,348  
citations

159358

30  
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276539

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41  
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41  
docs citations

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times ranked

14077  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanistic understanding and design of non-noble metal-based single-atom catalysts supported on two-dimensional materials for CO <sub>2</sub> electroreduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5813-5834.	5.2	28
2	Noble metal alloy thin films by atomic layer deposition and rapid Joule heating. <i>Scientific Reports</i> , 2022, 12, 2522.	1.6	12
3	Development of Core-Shell Rh@Pt and Rh@Ir Nanoparticle Thin Film Using Atomic Layer Deposition for HER Electrocatalysis Applications. <i>Processes</i> , 2022, 10, 1008.	1.3	6
4	Single Co Atoms as Electrocatalysts for Efficient Hydrazine Oxidation Reaction. <i>Small</i> , 2021, 17, e2006477.	5.2	40
5	Unveiling the In Situ Generation of a Monovalent Fe(I) Site in the Single-Fe-Atom Catalyst for Electrochemical CO <sub>2</sub> Reduction. <i>ACS Catalysis</i> , 2021, 11, 7292-7301.	5.5	51
6	Novel Nd-Mo co-doped SnO <sub>2</sub> /WO <sub>3</sub> electrochromic materials (ECs) for enhanced smart window performance. <i>Ceramics International</i> , 2021, 47, 18433-18442.	2.3	21
7	Nd-Nb Co-doped SnO <sub>2</sub> /WO <sub>3</sub> Electrochromic Materials: Enhanced Stability and Switching Properties. <i>ACS Omega</i> , 2021, 6, 26251-26261.	1.6	10
8	Atomic layer deposition of rhodium and palladium thin film using low-concentration ozone. <i>RSC Advances</i> , 2021, 11, 22773-22779.	1.7	12
9	Adsorption and Reaction Mechanisms of Direct Palladium Synthesis by ALD Using Pd(hfac) <sub>2</sub> and Ozone on Si (100) Surface. <i>Processes</i> , 2021, 9, 2246.	1.3	2
10	Electrochromic smart glass coating on functional nano-frameworks for effective building energy conservation. <i>Materials Today Energy</i> , 2020, 18, 100496.	2.5	21
11	Electrodeposition of amorphous WO <sub>3</sub> on SnO <sub>2</sub> -TiO <sub>2</sub> inverse opal nano-framework for highly transparent, effective and stable electrochromic smart window. <i>RSC Advances</i> , 2019, 9, 16730-16737.	1.7	13
12	Supported Noble-Metal Single Atoms for Heterogeneous Catalysis. <i>Advanced Materials</i> , 2019, 31, e1902031.	11.1	207
13	Efficient Near Infrared Modulation with High Visible Transparency Using SnO <sub>2</sub> -WO <sub>3</sub> Nanostructure for Advanced Smart Windows. <i>Advanced Optical Materials</i> , 2019, 7, 1801389.	3.6	38
14	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
15	Electrophoretic deposition of reduced graphene oxide thin films for reduction of cross-sectional heat diffusion in glass windows. <i>Journal of Science: Advanced Materials and Devices</i> , 2019, 4, 252-259.	1.5	12
16	Non defect-stabilized thermally stable single-atom catalyst. <i>Nature Communications</i> , 2019, 10, 234.	5.8	452
17	Single-Atom Catalysis toward Efficient CO <sub>2</sub> Conversion to CO and Formate Products. <i>Accounts of Chemical Research</i> , 2019, 52, 656-664.	7.6	348
18	Atomically dispersed Ni(i) as the active site for electrochemical CO <sub>2</sub> reduction. <i>Nature Energy</i> , 2018, 3, 140-147.	19.8	1,594

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19	Spectroscopic Characterization and Mechanistic Studies on Visible Light Photoredox Carbon-Carbon Bond Formation by Bis(arylimino)acenaphthene Copper Photosensitizers. <i>ACS Catalysis</i> , 2018, 8, 11277-11286.	5.5	42
20	Theoretical understanding of the stability of single-atom catalysts. <i>National Science Review</i> , 2018, 5, 638-641.	4.6	194
21	Single Cobalt Atoms Anchored on Porous N-Doped Graphene with Dual Reaction Sites for Efficient Fenton-like Catalysis. <i>Journal of the American Chemical Society</i> , 2018, 140, 12469-12475.	6.6	1,044
22	Heterogeneous single-atom catalysis. <i>Nature Reviews Chemistry</i> , 2018, 2, 65-81.	13.8	2,728
23	TiO <sub>2</sub> WO <sub>3</sub> core-shell inverse opal structure with enhanced electrochromic performance in NIR region. <i>Journal of Materials Chemistry C</i> , 2018, 6, 8488-8494.	2.7	34
24	Performance of Cu-Alloyed Pd Single-Atom Catalyst for Semihydrogenation of Acetylene under Simulated Front-End Conditions. <i>ACS Catalysis</i> , 2017, 7, 1491-1500.	5.5	374
25	Remarkable effect of alkalis on the chemoselective hydrogenation of functionalized nitroarenes over high-loading Pt/FeO <sub>x</sub> catalysts. <i>Chemical Science</i> , 2017, 8, 5126-5131.	3.7	90
26	Theoretical Insights and the Corresponding Construction of Supported Metal Catalysts for Highly Selective CO <sub>2</sub> to CO Conversion. <i>ACS Catalysis</i> , 2017, 7, 4613-4620.	5.5	104
27	Enhanced performance of Rh <sub>1</sub> /TiO <sub>2</sub> catalyst without methanation in water-gas shift reaction. <i>AIChE Journal</i> , 2017, 63, 2081-2088.	1.8	74
28	Selective Hydrogenolysis of Glycerol to 1,3-Propanediol: Manipulating the Frustrated Lewis Pairs by Introducing Gold to Pt/WO <sub>x</sub> . <i>ChemSusChem</i> , 2017, 10, 819-824.	3.6	89
29	Hydrogenolysis of Glycerol to 1,3-Propanediol under Low Hydrogen Pressure over WO <sub>x</sub> -Supported Single/Pseudo-Single Atom Pt Catalyst. <i>ChemSusChem</i> , 2016, 9, 784-790.	3.6	140
30	Recent progress in CO oxidation over Pt-group-metal catalysts at low temperatures. <i>Chinese Journal of Catalysis</i> , 2016, 37, 1805-1813.	6.9	97
31	PdZn Intermetallic Nanostructure with Pd-Zn Pd Ensembles for Highly Active and Chemoselective Semi-Hydrogenation of Acetylene. <i>ACS Catalysis</i> , 2016, 6, 1054-1061.	5.5	334
32	Ultrastable single-atom gold catalysts with strong covalent metal-support interaction (CMSI). <i>Nano Research</i> , 2015, 8, 2913-2924.	5.8	422
33	Ag Alloyed Pd Single-Atom Catalysts for Efficient Selective Hydrogenation of Acetylene to Ethylene in Excess Ethylene. <i>ACS Catalysis</i> , 2015, 5, 3717-3725.	5.5	545
34	Highly Efficient Catalysis of Preferential Oxidation of CO in H <sub>2</sub> -Rich Stream by Gold Single-Atom Catalysts. <i>ACS Catalysis</i> , 2015, 5, 6249-6254.	5.5	380
35	FeO <sub>x</sub> -supported platinum single-atom and pseudo-single-atom catalysts for chemoselective hydrogenation of functionalized nitroarenes. <i>Nature Communications</i> , 2014, 5, 5634.	5.8	890
36	Promotional effect of Pd single atoms on Au nanoparticles supported on silica for the selective hydrogenation of acetylene in excess ethylene. <i>New Journal of Chemistry</i> , 2014, 38, 2043.	1.4	151

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37	Remarkable Performance of Ir <sub>1</sub> /FeO <sub>x</sub> Single-Atom Catalyst in Water Gas Shift Reaction. <i>Journal of the American Chemical Society</i> , 2013, 135, 15314-15317.	6.6	811
38	Origin of the high activity of Au/FeO <sub>x</sub> for low-temperature CO oxidation: Direct evidence for a redox mechanism. <i>Journal of Catalysis</i> , 2013, 299, 90-100.	3.1	170
39	Single-Atom Catalysts: A New Frontier in Heterogeneous Catalysis. <i>Accounts of Chemical Research</i> , 2013, 46, 1740-1748.	7.6	3,405
40	Single-atom catalysis of CO oxidation using Pt <sub>1</sub> /FeO <sub>x</sub> . <i>Nature Chemistry</i> , 2011, 3, 634-641.	6.6	5,149
41	Electrochromic photonic crystal displays with versatile color tunability. <i>Electrochemistry Communications</i> , 2011, 13, 1163-1165.	2.3	33