Tao Zhang

List of Publications by Year
in descending order

41 papers	20,348 citations	159585 30 h-index	276875 41 g-index
41 all docs	41 docs citations	41 times ranked	14077 citing authors

#	Article	IF	Citations
1	Single-atom catalysis of CO oxidation using Pt1/FeOx. Nature Chemistry, 2011, 3, 634-641.	13.6	5,149
2	Single-Atom Catalysts: A New Frontier in Heterogeneous Catalysis. Accounts of Chemical Research, 2013, 46, 1740-1748.	15.6	3,405
3	Heterogeneous single-atom catalysis. Nature Reviews Chemistry, 2018, 2, 65-81.	30.2	2,728
4	Atomically dispersed Ni(i) as the active site for electrochemical CO2 reduction. Nature Energy, 2018, 3, 140-147.	39.5	1,594
5	Single Cobalt Atoms Anchored on Porous N-Doped Graphene with Dual Reaction Sites for Efficient Fenton-like Catalysis. Journal of the American Chemical Society, 2018, 140, 12469-12475.	13.7	1,044
6	FeOx-supported platinum single-atom and pseudo-single-atom catalysts for chemoselective hydrogenation of functionalized nitroarenes. Nature Communications, 2014, 5, 5634.	12.8	890
7	Remarkable Performance of Ir₁/FeO_{<i>x</i>} Single-Atom Catalyst in Water Gas Shift Reaction. Journal of the American Chemical Society, 2013, 135, 15314-15317.	13.7	811
8	Ag Alloyed Pd Single-Atom Catalysts for Efficient Selective Hydrogenation of Acetylene to Ethylene in Excess Ethylene. ACS Catalysis, 2015, 5, 3717-3725.	11.2	545
9	Non defect-stabilized thermally stable single-atom catalyst. Nature Communications, 2019, 10, 234.	12.8	452
10	Ultrastable single-atom gold catalysts with strong covalent metal-support interaction (CMSI). Nano Research, 2015, 8, 2913-2924.	10.4	422
11	Highly Efficient Catalysis of Preferential Oxidation of CO in H₂-Rich Stream by Gold Single-Atom Catalysts. ACS Catalysis, 2015, 5, 6249-6254.	11.2	380
12	Performance of Cu-Alloyed Pd Single-Atom Catalyst for Semihydrogenation of Acetylene under Simulated Front-End Conditions. ACS Catalysis, 2017, 7, 1491-1500.	11.2	374
13	Single-Atom Catalysis toward Efficient CO₂ Conversion to CO and Formate Products. Accounts of Chemical Research, 2019, 52, 656-664.	15.6	348
14	PdZn Intermetallic Nanostructure with Pdâ€"Znâ€"Pd Ensembles for Highly Active and Chemoselective Semi-Hydrogenation of Acetylene. ACS Catalysis, 2016, 6, 1054-1061.	11.2	334
15	Supported Nobleâ€Metal Single Atoms for Heterogeneous Catalysis. Advanced Materials, 2019, 31, e1902031.	21.0	207
16	Theoretical understanding of the stability of single-atom catalysts. National Science Review, 2018, 5, 638-641.	9.5	194
17	Iridium Single-Atom Catalyst Performing a Quasi-homogeneous Hydrogenation Transformation of CO2 to Formate. CheM, 2019, 5, 693-705.	11.7	181
18	Origin of the high activity of Au/FeOx for low-temperature CO oxidation: Direct evidence for a redox mechanism. Journal of Catalysis, 2013, 299, 90-100.	6.2	170

#	Article	IF	Citations
19	Promotional effect of Pd single atoms on Au nanoparticles supported on silica for the selective hydrogenation of acetylene in excess ethylene. New Journal of Chemistry, 2014, 38, 2043.	2.8	151
20	Hydrogenolysis of Glycerol to 1,3â€propanediol under Low Hydrogen Pressure over WO_{<i>x</i>}â€Supported Single/Pseudoâ€Single Atom Pt Catalyst. ChemSusChem, 2016, 9, 784-790.	6.8	140
21	Theoretical Insights and the Corresponding Construction of Supported Metal Catalysts for Highly Selective CO₂ to CO Conversion. ACS Catalysis, 2017, 7, 4613-4620.	11.2	104
22	Recent progress in CO oxidation over Pt-group-metal catalysts at low temperatures. Chinese Journal of Catalysis, 2016, 37, 1805-1813.	14.0	97
23	Remarkable effect of alkalis on the chemoselective hydrogenation of functionalized nitroarenes over high-loading Pt/FeO_x catalysts. Chemical Science, 2017, 8, 5126-5131.	7.4	90
24	Selective Hydrogenolysis of Glycerol to 1,3â€Propanediol: Manipulating the Frustrated Lewis Pairs by Introducing Gold to Pt/WO_{<i>x</i>}. ChemSusChem, 2017, 10, 819-824.	6.8	89
25	Enhanced performance of Rh₁/TiO₂ catalyst without methanation in waterâ€gas shift reaction. AIChE Journal, 2017, 63, 2081-2088.	3.6	74
26	Unveiling the In Situ Generation of a Monovalent Fe(I) Site in the Single-Fe-Atom Catalyst for Electrochemical CO₂ Reduction. ACS Catalysis, 2021, 11, 7292-7301.	11.2	51
27	Spectroscopic Characterization and Mechanistic Studies on Visible Light Photoredox Carbonâ€"Carbon Bond Formation by Bis(arylimino)acenaphthene Copper Photosensitizers. ACS Catalysis, 2018, 8, 11277-11286.	11.2	42
28	Single Coâ€Atoms as Electrocatalysts for Efficient Hydrazine Oxidation Reaction. Small, 2021, 17, e2006477.	10.0	40
29	Efficient Near Infrared Modulation with High Visible Transparency Using SnO₂â€"WO₃ Nanostructure for Advanced Smart Windows. Advanced Optical Materials, 2019, 7, 1801389.	7.3	38
30	TiO₂â€"WO₃ coreâ€"shell inverse opal structure with enhanced electrochromic performance in NIR region. Journal of Materials Chemistry C, 2018, 6, 8488-8494.	5.5	34
31	Electrochromic photonic crystal displays with versatile color tunability. Electrochemistry Communications, 2011, 13, 1163-1165.	4.7	33
32	Mechanistic understanding and design of non-noble metal-based single-atom catalysts supported on two-dimensional materials for CO₂ electroreduction. Journal of Materials Chemistry A, 2022, 10, 5813-5834.	10.3	28
33	Electrochromic smart glass coating on functional nano-frameworks for effective building energy conservation. Materials Today Energy, 2020, 18, 100496.	4.7	21
34	Novel Ndâ€"Mo co-doped SnO2/Î±-WO3 electrochromic materials (ECs) for enhanced smart window performance. Ceramics International, 2021, 47, 18433-18442.	4.8	21
35	Electrodeposition of amorphous WO₃on SnO₂â€"TiO₂inverse opal nano-framework for highly transparent, effective and stable electrochromic smart window. RSC Advances, 2019, 9, 16730-16737.	3.6	13
36	Electrophoretic deposition of reduced graphene oxide thin films for reduction of cross-sectional heat diffusion in glass windows. Journal of Science: Advanced Materials and Devices, 2019, 4, 252-259.	3.1	12

#	ARTICLE	IF	CITATIONS
37	Atomic layer deposition of rhodium and palladium thin film using low-concentration ozone. RSC Advances, 2021, 11, 22773-22779.	3.6	12
38	Noble metal alloy thin films by atomic layer deposition and rapid Joule heating. Scientific Reports, 2022, 12, 2522.	3.3	12
39	Ndâ€“Nb Co-doped SnO₂/Î±-WO₃ Electrochromic Materials: Enhanced Stability and Switching Properties. ACS Omega, 2021, 6, 26251-26261.	3.5	10
40	Development of Core-Shell Rh@Pt and Rh@Ir Nanoparticle Thin Film Using Atomic Layer Deposition for HER Electrocatalysis Applications. Processes, 2022, 10, 1008.	2.8	6
41	Adsorption and Reaction Mechanisms of Direct Palladium Synthesis by ALD Using Pd(hfac)2 and Ozone on Si (100) Surface. Processes, 2021, 9, 2246.	2.8	2