Tao Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9312722/publications.pdf

Version: 2024-02-01

26 papers	1,402 citations	471509 17 h-index	580821 25 g-index
26 all docs	26 docs citations	26 times ranked	1739 citing authors

#	Article	IF	Citations
1	Bismuth Single Atoms Resulting from Transformation of Metalâ€“Organic Frameworks and Their Use as Electrocatalysts for CO₂ Reduction. Journal of the American Chemical Society, 2019, 141, 16569-16573.	13.7	501
2	Discovery of main group single Sbâ€“N₄ active sites for CO₂ electroreduction to formate with high efficiency. Energy and Environmental Science, 2020, 13, 2856-2863.	30.8	245
3	Promoted oxygen reduction kinetics on nitrogen-doped hierarchically porous carbon by engineering proton-feeding centers. Energy and Environmental Science, 2020, 13, 2849-2855.	30.8	101
4	Selective electrocatalytic semihydrogenation of acetylene impurities for the production of polymer-grade ethylene. Nature Catalysis, 2021, 4, 557-564.	34.4	90
5	Rational design of selective metal catalysts for alcohol amination with ammonia. Nature Catalysis, 2019, 2, 773-779.	34.4	70
6	Progress of Experimental and Computational Catalyst Design for Electrochemical Nitrogen Fixation. ACS Catalysis, 2022, 12, 8936-8975.	11.2	41
7	Achieving industrial ammonia synthesis rates at near-ambient conditions through modified scaling relations on a confined dual site. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	34
8	Acceptorless dehydrogenation and hydrogenation of N- and O-containing compounds on Pd ₃ Au ₁ (111) facets. Science Advances, 2020, 6, .	10.3	31
9	Efficient electrocatalytic acetylene semihydrogenation by electronâ€“rich metal sites in Nâ€“heterocyclic carbene metal complexes. Nature Communications, 2021, 12, 6574.	12.8	30
10	Direct n-octanol amination by ammonia on supported Ni and Pd catalysts: activity is enhanced by â€œspectatorâ€•ammonia adsorbates. Catalysis Science and Technology, 2018, 8, 611-621.	4.1	26
11	Activating copper oxide for stable electrocatalytic ammonia oxidation reaction via in-situ introducing oxygen vacancies. Nano Research, 2022, 15, 5987-5994.	10.4	26
12	Active catalyst construction for CO2 recycling via catalytic synthesis of N-doped carbon on supported Cu. Nature Communications, 2019, 10, 2599.	12.8	23
13	Theory-Aided Discovery of Metallic Catalysts for Selective Propane Dehydrogenation to Propylene. ACS Catalysis, 2021, 11, 6290-6297.	11.2	21
14	Identification of active catalysts for the acceptorless dehydrogenation of alcohols to carbonyls. Nature Communications, 2021, 12, 5100.	12.8	21
15	Machine Learning-Assisted Screening of Stepped Alloy Surfaces for C₁ Catalysis. ACS Catalysis, 2022, 12, 4252-4260.	11.2	20
16	Trends and Control in the Nitridation of Transition-Metal Surfaces. ACS Catalysis, 2018, 8, 63-68.	11.2	19
17	Single-Crystalline Mo-Nanowire-Mediated Directional Growth of High-Index-Faceted MoNi Electrocatalyst for Ultralong-Term Alkaline Hydrogen Evolution. ACS Applied Materials & Interfaces, 2020, 12, 36259-36267.	8.0	18
18	Promoting defective-Li₂O₂ formation via Na doping for Liâ€“O₂ batteries with low charge overpotentials. Journal of Materials Chemistry A, 2019, 7, 10389-10396.	10.3	17

#	Article	IF	Citations
19	Metal phthalocyanines as efficient electrocatalysts for acetylene semihydrogenation. Chemical Engineering Journal, 2022, 431, 134129.	12.7	14
20	Morphology of MoP catalyst under hydrogenation conditions: A DFT based thermodynamics study. Molecular Catalysis, 2019, 464, 57-62.	2.0	10
21	Identification of earth-abundant materials for selective dehydrogenation of light alkanes to olefins. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	10
22	Identification of Copper as an Ideal Catalyst for Electrochemical Alkyne Semi-hydrogenation. Journal of Physical Chemistry C, 2022, 126, 3037-3042.	3.1	10
23	Coverage dependent CO adsorption manners on seven MoP surfaces with DFT based thermodynamics method. Applied Surface Science, 2019, 480, 172-176.	6.1	9
24	Identifying factors controlling the selective ethane dehydrogenation on Pt-based catalysts from DFT based micro-kinetic modeling. Journal of Energy Chemistry, 2021, 58, 37-40.	12.9	8
25	Formic Acid as a Bio-CO Carrier: Selective Dehydration with Î³-Mo2N Catalysts at Low Temperatures. ACS Sustainable Chemistry and Engineering, 2020, 8, 13956-13963.	6.7	7
26	Stable CO/H2 ratio on MoP surfaces under working condition: A DFT based thermodynamics study. Surface Science, 2021, 703, 121738.	1.9	0