Yunxi Yao

List of Publications by Year
in descending order

50 papers	2,055 citations	394421 19 h-index	233421 45 g-index
51 all docs	51 docs citations	51 times ranked	3452 citing authors

#	Article	IF	Citations
1	Interface-Confined Ferrous Centers for Catalytic Oxidation. Science, 2010, 328, 1141-1144.	12.6	866
2	Graphene cover-promoted metal-catalyzed reactions. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17023-17028.	7.1	183
3	Insights into catalysis by gold nanoparticles and their support effects through surface science studies of model catalysts. Faraday Discussions, 2011, 152, 227.	3.2	78
4	Direct evidence of hydrogen spillover from Ni to Cu on Niâ€“Cu bimetallic catalysts. Journal of Molecular Catalysis A, 2014, 383-384, 239-242.	4.8	65
5	Growth and Characterization of Two-Dimensional FeO Nanoislands Supported on Pt(111). Journal of Physical Chemistry C, 2010, 114, 17069-17079.	3.1	63
6	Structural and Functional Characterizations of the Proteasome-activating Protein PA26 from Trypanosoma brucei. Journal of Biological Chemistry, 1999, 274, 33921-33930.	3.4	60
7	Highly active Ptâ€“Fe bicomponent catalysts for CO oxidation in the presence and absence of H₂. Energy and Environmental Science, 2012, 5, 6313-6320.	30.8	60
8	The 2-D growth of gold on single-layer graphene/Ru(0001): Enhancement of CO adsorption. Surface Science, 2011, 605, L47-L50.	1.9	56
9	Reversible structural transformation of FeOx nanostructures on Pt under cycling redox conditions and its effect on oxidation catalysis. Physical Chemistry Chemical Physics, 2013, 15, 14708.	2.8	48
10	Size-Dependent Surface Reactions of Ag Nanoparticles Supported on Highly Oriented Pyrolytic Graphite. Langmuir, 2008, 24, 10874-10878.	3.5	47
11	In situ IR spectroscopic studies of Ni surface segregation induced by CO adsorption on Cuâ€“Ni/SiO2 bimetallic catalysts. Physical Chemistry Chemical Physics, 2014, 16, 3823.	2.8	38
12	Preparation and characterization of atomically flat and ordered silica films on a Pd(100) surface. Thin Solid Films, 2008, 516, 3741-3746.	1.8	34
13	Dynamic molecular oxygen production in cometary comae. Nature Communications, 2017, 8, 15298.	12.8	34
14	Adsorption and thermal chemistry of formic acid on clean and oxygen-predosed Cu(110) single-crystal surfaces revisited. Surface Science, 2016, 646, 37-44.	1.9	31
15	Thermal Chemistry of Cu(I)-Iminopyrrolidinate and Cu(I)-Guanidinate Atomic Layer Deposition (ALD) Precursors on Ni(110) Single-Crystal Surfaces. Chemistry of Materials, 2013, 25, 3630-3639.	6.7	26
16	Hierarchically porous Fe/Nâ€“C hollow spheres derived from melamine/Fe-incorporated polydopamine for efficient oxygen reduction reaction electrocatalysis. Sustainable Energy and Fuels, 2019, 3, 3455-3461.	4.9	25
17	Unique Reactivity of Confined Metal Atoms on a Silicon Substrate. ChemPhysChem, 2008, 9, 975-979.	2.1	24
18	Silver Nanoparticles on Fe₃O₄(111): Energetics by Ag Adsorption Calorimetry and Structure by Surface Spectroscopies. Journal of Physical Chemistry C, 2013, 117, 24932-24936.	3.1	23

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19	Dehydrogenation of Propane to Propylene over Supported Model Niâ€“Au Catalysts. Catalysis Letters, 2012, 142, 714-717.	2.6	21
20	Nickel Particle Size Effects on Cyclohexane Dehydrogenation: A Combined Reaction Kinetics and Surface Science Study. Catalysis Letters, 2012, 142, 1437-1444.	2.6	20
21	Structure control of Ptâ€“Sn bimetallic catalysts supported on highly oriented pyrolytic graphite (HOPG). Applied Surface Science, 2008, 254, 3808-3812.	6.1	19
22	Preparation and characterization of planar Niâ€“Au bimetallic model catalysts. Applied Surface Science, 2013, 283, 263-268.	6.1	18
23	Enhanced Methanol Dissociation on Nanostructured 2D Al Overlayers. Journal of Physical Chemistry C, 2007, 111, 13524-13530.	3.1	17
24	Thermal chemistry of copper acetamidinate atomic layer deposition precursors on silicon oxide surfaces studied by XPS. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	16
25	Coadsorption of Formic Acid and Hydrazine on Cu(110) Single-Crystal Surfaces. Journal of Physical Chemistry C, 2019, 123, 7584-7593.	3.1	16
26	Direct dioxygen evolution in collisions of carbon dioxide with surfaces. Nature Communications, 2019, 10, 2294.	12.8	16
27	Effect of the nature of the substrate on the surface chemistry of atomic layer deposition precursors. Journal of Chemical Physics, 2017, 146, 052806.	3.0	15
28	New insights into structureâ€“activity relationships for propane hydrogenolysis over Niâ€“Cu bimetallic catalysts. RSC Advances, 2015, 5, 43547-43551.	3.6	14
29	Thermal Decomposition of Copper Iminopyrrolidinate Atomic Layer Deposition (ALD) Precursors on Silicon Oxide Surfaces. Journal of Physical Chemistry C, 2016, 120, 14149-14156.	3.1	14
30	Activation of the dimers and tetramers of metal amidinate atomic layer deposition precursors upon adsorption on silicon oxide surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	12
31	Modulation of surface reactivity via electron confinement in metal quantum well films: O2 adsorption on Pbâ•Si(111). Journal of Chemical Physics, 2008, 129, 014704.	3.0	11
32	Surface and Subsurface Structures of the Ptâ€“Fe Surface Alloy on Pt(111). Journal of Physical Chemistry C, 2019, 123, 17225-17231.	3.1	10
33	Kinematics of Eley-Rideal Reactions at Hyperthermal Energies. Physical Review Letters, 2016, 116, 253202.	7.8	9
34	In Situ PM-IRRAS Study of CO Adsorption on Au Surfaces: Solving the Puzzle. Journal of Physical Chemistry C, 2021, 125, 8606-8619.	3.1	9
35	CO and H2 adsorption on Au-Ni bimetallic surfaces: a combined experimental and DFT theoretical study. Surface Science, 2021, 712, 121892.	1.9	6
36	Tuning Charge Transfer in Ionâ€“Surface Collisions at Hyperthermal Energies. ChemPhysChem, 2016, 17, 1430-1434.	2.1	5

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37	Dynamic nitroxyl formation in the ammonia oxidation on platinum via Eleyâ€“Rideal reactions. Physical Chemistry Chemical Physics, 2016, 18, 29858-29863.	2.8	5
38	Direct Hydrogenation of Dinitrogen and Dioxygen via Eleyâ€“Rideal Reactions. Angewandte Chemie - International Edition, 2016, 55, 11595-11599.	13.8	5
39	Intramolecular water-splitting reaction in single collisions of water ions with surfaces. Chemical Science, 2017, 8, 2852-2858.	7.4	5
40	Insights into the lanthanum doping effect on the hydriding of cerium-lanthanum alloy. Journal of Nuclear Materials, 2019, 521, 81-88.	2.7	5
41	Thermal chemistry of hydrazine on clean and oxygen- and water-predosed Cu(110) single-crystal surfaces. Surface Science, 2016, 650, 263-271.	1.9	4
42	DYNAMIC DEUTERIUM ENRICHMENT IN COMETARY WATER VIA ELEYâ€“RIDEAL REACTIONS. Astrophysical Journal, 2017, 835, 67.	4.5	4
43	In situ NAP-XPS study of CO2 and H2O adsorption on cerium oxide thin films. Chemical Physics Letters, 2022, 794, 139496.	2.6	4
44	Photoemission study of CCl4 adsorption on Si(111)-7Ã—7. Surface Science, 2008, 602, 2183-2188.	1.9	3
45	Reply to â€œOn the origin of molecular oxygen in cometary comaeâ€• Nature Communications, 2018, 9, 2581.	12.8	3
46	Formation of Periodic Arrays of O Vacancy Clusters on Monolayer FeO Islands Grown on Pt(111). Chinese Journal of Catalysis, 2010, 31, 1013-1018.	14.0	2
47	Lowâ€Temperature CO Oxidation over the Ptâˆ’TiN Interfacial Dual Sites. ChemCatChem, 2021, 13, 4610-4617.	3.7	2
48	A comparative study of CCl₄reactions on Ag and Si surfaces byin situultraviolet photoemission electron microscopy. Journal of Physics Condensed Matter, 2009, 21, 314014.	1.8	1
49	Direct Hydrogenation of Dinitrogen and Dioxygen via Eleyâ€“Rideal Reactions. Angewandte Chemie, 2016, 128, 11767-11771.	2.0	1
50	Effect of the coexistence of CO2 and H2 on the kinetics of cerium hydriding. International Journal of Hydrogen Energy, 2022, 47, 2520-2531.	7.1	1