Lichen Liu

List of Publications by Year
in descending order

59 papers	8,307 citations	71102 41 h-index	128289 60 g-index
62 all docs	62 docs citations	62 times ranked	10193 citing authors

#	Article	IF	Citations
1	Direct assessment of confinement effect in zeolite-encapsulated subnanometric metal species. Nature Communications, 2022, 13, 821.	12.8	30
2	A Career in Catalysis: Avelino Corma. ACS Catalysis, 2022, 12, 7054-7123.	11.2	14
3	Single-Atom Ce-Modified Î±-Fe₂O₃ for Selective Catalytic Reduction of NO with NH₃. Environmental Science & Technology, 2022, 56, 10442-10453.	10.0	52
4	Confining isolated atoms and clusters in crystalline porous materials forÂcatalysis. Nature Reviews Materials, 2021, 6, 244-263.	48.7	219
5	Tutorial: structural characterization of isolated metal atoms and subnanometric metal clusters in zeolites. Nature Protocols, 2021, 16, 1871-1906.	12.0	30
6	Bimetallic CuFe nanoparticles as active and stable catalysts for chemoselective hydrogenation of biomass-derived platform molecules. Catalysis Science and Technology, 2021, 11, 3353-3363.	4.1	12
7	Structural transformations of solid electrocatalysts and photocatalysts. Nature Reviews Chemistry, 2021, 5, 256-276.	30.2	93
8	Identification of the active sites in supported subnanometric metal catalysts. Nature Catalysis, 2021, 4, 453-456.	34.4	58
9	Tuning the Catalytic Performance of Cobalt Nanoparticles by Tungsten Doping for Efficient and Selective Hydrogenation of Quinolines under Mild Conditions. ACS Catalysis, 2021, 11, 8197-8210.	11.2	46
10	Isolated metal atoms and clusters for alkane activation: Translating knowledge from enzymatic and homogeneous to heterogeneous systems. CheM, 2021, 7, 2347-2384.	11.7	25
11	Multiscale structural characterization of shaped catalysts. Trends in Chemistry, 2021, 3, 898-901.	8.5	1
12	Assessment of metal-metal interactions and catalytic behavior in platinum-tin bimetallic subnanometric clusters by using reactive characterizations. Journal of Catalysis, 2021, 404, 393-399.	6.2	10
13	Direct synthesis of the organic and Ge free Al containing BOG zeolite (ITQ-47) and its application for transformation of biomass derived molecules. Chemical Science, 2020, 11, 12103-12108.	7.4	14
14	Atomic-level understanding on the evolution behavior of subnanometric Pt and Sn species during high-temperature treatments for generation of dense PtSn clusters in zeolites. Journal of Catalysis, 2020, 391, 11-24.	6.2	30
15	Structural modulation and direct measurement of subnanometric bimetallic PtSn clusters confined in zeolites. Nature Catalysis, 2020, 3, 628-638.	34.4	182
16	Evolution of Isolated Atoms and Clusters in Catalysis. Trends in Chemistry, 2020, 2, 383-400.	8.5	138
17	Regioselective Generation of Singleâ€Site Iridium Atoms and Their Evolution into Stabilized Subnanometric Iridium Clusters in MWW Zeolite. Angewandte Chemie, 2020, 132, 15825-15832.	2.0	5
18	Regioselective Generation of Singleâ€Site Iridium Atoms and Their Evolution into Stabilized Subnanometric Iridium Clusters in MWW Zeolite. Angewandte Chemie - International Edition, 2020, 59, 15695-15702.	13.8	46

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19	Getting Insights into the Temperature-Specific Active Sites on Platinum Nanoparticles for CO Oxidation: A Combined in Situ Spectroscopic and ab Initio Density Functional Theory Study. ACS Catalysis, 2019, 9, 7759-7768.	11.2	33
20	Regioselective generation and reactivity control of subnanometric platinum clusters in zeolites for high-temperature catalysis. Nature Materials, 2019, 18, 866-873.	27.5	339
21	Determination of the Evolution of Heterogeneous Single Metal Atoms and Nanoclusters under Reaction Conditions: Which Are the Working Catalytic Sites?. ACS Catalysis, 2019, 9, 10626-10639.	11.2	197
22	Controlling Dynamic Structural Transformation of Atomically Dispersed CuO_x Species and Influence on Their Catalytic Performances. ACS Catalysis, 2019, 9, 9840-9851.	11.2	52
23	Generation of gold nanoclusters encapsulated in an MCM-22 zeolite for the aerobic oxidation of cyclohexane. Chemical Communications, 2019, 55, 1607-1610.	4.1	48
24	Low-Temperature Catalytic NO Reduction with CO by Subnanometric Pt Clusters. ACS Catalysis, 2019, 9, 11530-11541.	11.2	70
25	Hydrothermal Synthesis of Ruthenium Nanoparticles with a Metallic Core and a Ruthenium Carbide Shell for Low-Temperature Activation of CO₂ to Methane. Journal of the American Chemical Society, 2019, 141, 19304-19311.	13.7	86
26	Base-Controlled Heck, Suzuki, and Sonogashira Reactions Catalyzed by Ligand-Free Platinum or Palladium Single Atom and Sub-Nanometer Clusters. Journal of the American Chemical Society, 2019, 141, 1928-1940.	13.7	107
27	Modulating the catalytic behavior of non-noble metal nanoparticles by inter-particle interaction for chemoselective hydrogenation of nitroarenes into corresponding azoxy or azo compounds. Journal of Catalysis, 2019, 369, 312-323.	6.2	43
28	Metal Catalysts for Heterogeneous Catalysis: From Single Atoms to Nanoclusters and Nanoparticles. Chemical Reviews, 2018, 118, 4981-5079.	47.7	3,103
29	Nanolayered Cobaltâ€“Molybdenum Sulfides as Highly Chemo- and Regioselective Catalysts for the Hydrogenation of Quinoline Derivatives. ACS Catalysis, 2018, 8, 4545-4557.	11.2	78
30	Evolution and stabilization of subnanometric metal species in confined space by in situ TEM. Nature Communications, 2018, 9, 574.	12.8	140
31	Sunlight-assisted hydrogenation of CO 2 into ethanol and C2+ hydrocarbons by sodium-promoted Co@C nanocomposites. Applied Catalysis B: Environmental, 2018, 235, 186-196.	20.2	101
32	A new molecular pathway allows the chemoselective reduction of nitroaromatics on non-noble metal catalysts. Journal of Catalysis, 2018, 364, 19-30.	6.2	57
33	Nanolayered Coâ€“Moâ€“S Catalysts for the Chemoselective Hydrogenation of Nitroarenes. ACS Catalysis, 2017, 7, 2698-2708.	11.2	107
34	A new strategy to transform mono and bimetallic non-noble metal nanoparticles into highly active and chemoselective hydrogenation catalysts. Journal of Catalysis, 2017, 350, 218-225.	6.2	95
35	Generation of subnanometric platinum with high stability during transformation of a 2D zeolite intoÂ3D. Nature Materials, 2017, 16, 132-138.	27.5	505
36	Non-noble metal catalysts for hydrogenation: A facile method for preparing Co nanoparticles covered with thin layered carbon. Journal of Catalysis, 2016, 340, 1-9.	6.2	181

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37	Facile Synthesis of Surface-Clean Monodispersed CuOx Nanoparticles and Their Catalytic Properties for Oxidative Coupling of Alkynes. ACS Catalysis, 2016, 6, 2211-2221.	11.2	38
38	Engineering the Cu2Oâ€“reduced graphene oxide interface to enhance photocatalytic degradation of organic pollutants under visible light. Applied Catalysis B: Environmental, 2016, 181, 495-503.	20.2	163
39	Crystal-plane-dependent metalâ€“support interaction in Au/TiO₂. Physical Chemistry Chemical Physics, 2015, 17, 5133-5140.	2.8	23
40	Stabilized Naked Sub-nanometric Cu Clusters within a Polymeric Film Catalyze Câ€“N, Câ€“C, Câ€“O, Câ€“S, and Câ€“P Bond-Forming Reactions. Journal of the American Chemical Society, 2015, 137, 3894-3900.	13.7	71
41	Crystal-plane effects on surface and catalytic properties of Cu2O nanocrystals for NO reduction by CO. Applied Catalysis A: General, 2015, 505, 334-343.	4.3	65
42	Improving the dispersion of CeO2 on Î³-Al2O3 to enhance the catalytic performances of CuO/CeO2/Î³-Al2O3 catalysts for NO removal by CO. Catalysis Communications, 2014, 51, 95-99.	3.3	33
43	Promotional effect of CO pretreatment on CuO/CeO2 catalyst for catalytic reduction of NO by CO. Journal of Rare Earths, 2014, 32, 139-145.	4.8	42
44	Engineering the TiO₂â€“Graphene Interface to Enhance Photocatalytic H₂ Production. ChemSusChem, 2014, 7, 618-626.	6.8	81
45	Complete Photocatalytic Reduction of CO₂ to Methane by H₂ under Solar Light Irradiation. Journal of the American Chemical Society, 2014, 136, 6798-6801.	13.7	247
46	Hierarchical Mordenite Dedicated to the Fluid Catalytic Cracking Process: Catalytic Performance Regarding Textural and Acidic Properties. Journal of Physical Chemistry C, 2014, 118, 28043-28054.	3.1	33
47	Investigation of the structure, acidity, and catalytic performance of CuO/Ti0.95Ce0.05O2 catalyst for the selective catalytic reduction of NO by NH3 at low temperature. Applied Catalysis B: Environmental, 2014, 150-151, 315-329.	20.2	221
48	Efficient fabrication of active CuO-CeO2/SBA-15 catalysts for preferential oxidation of CO by solid state impregnation. Applied Catalysis B: Environmental, 2014, 146, 201-212.	20.2	105
49	In Situ Loading Transition Metal Oxide Clusters on TiO₂ Nanosheets As Co-catalysts for Exceptional High Photoactivity. ACS Catalysis, 2013, 3, 2052-2061.	11.2	151
50	Anion-Assisted Synthesis of TiO₂ Nanocrystals with Tunable Crystal Forms and Crystal Facets and Their Photocatalytic Redox Activities in Organic Reactions. Journal of Physical Chemistry C, 2013, 117, 18578-18587.	3.1	92
51	Crystal-Plane Effects on the Catalytic Properties of Au/TiO₂. ACS Catalysis, 2013, 3, 2768-2775.	11.2	120
52	A PdAg bimetallic nanocatalyst for selective reductive amination of nitroarenes. Chemical Communications, 2013, 49, 6843.	4.1	65
53	Investigation of surface synergetic oxygen vacancy in CuOâ€“CoO binary metal oxides supported on Î³-Al2O3 for NO removal by CO. Journal of Colloid and Interface Science, 2013, 390, 158-169.	9.4	67
54	Synthesis of sandwich-like TiO2@C composite hollow spheres with high rate capability and stability for lithium-ion batteries. Journal of Power Sources, 2013, 221, 141-148.	7.8	90

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55	Influence of cerium modification methods on catalytic performance of Au/mordenite catalysts in CO oxidation. Applied Catalysis B: Environmental, 2012, 127, 234-245.	20.2	26
56	In situ loading of ultra-small Cu2O particles on TiO2 nanosheets to enhance the visible-light photoactivity. Nanoscale, 2012, 4, 6351.	5.6	106
57	Promotion effect of tungsten oxide on SCR of NO with NH3 for the V2O5â€“WO3/Ti0.5Sn0.5O2 catalyst: Experiments combined with DFT calculations. Journal of Molecular Catalysis A, 2011, 346, 29-38.	4.8	56
58	Efficient fabrication of ZrO2-doped TiO2 hollow nanospheres with enhanced photocatalytic activity of rhodamine B degradation. Journal of Colloid and Interface Science, 2011, 364, 288-297.	9.4	50
59	Two-dimensional PdOx rafts as superior catalysts for methane combustion. Science China Chemistry, 0, , 1.	8.2	0