Luwei Chen

List of Publications by Year
in descending order

75 papers	5,366 citations	76196 40 h-index	79541 73 g-index
75 all docs	75 docs citations	75 times ranked	7474 citing authors

#	ARTICLE	IF	CITATIONS
1	Theoryâ€Guided Machine Learning to Predict the Performance of Noble Metal Catalysts in the Waterâ€Gas Shift Reaction. ChemCatChem, 2022, 14, .	1.8	4
2	Enhanced selectivity and stability of Pt-Ge/Al2O3 catalysts by Ca promotion in propane dehydrogenation. Chemical Engineering Journal, 2021, 405, 126656.	6.6	49
3	Direct methanation with supported MoS2 nano-flakes: Relationship between structure and activity. Catalysis Today, 2020, 342, 21-31.	2.2	13
4	Plasma-catalytic conversion of CO2 to CO over binary metal oxide catalysts at low temperatures. Applied Catalysis B: Environmental, 2020, 276, 119110.	10.8	60
5	Design of hollow spherical Co@hsZSM5@metal dual-layer nanocatalysts for tandem CO₂ hydrogenation to increase C₂₊ hydrocarbon selectivity. Journal of Materials Chemistry A, 2020, 8, 12757-12766.	5.2	22
6	Low-Olefin Production Process Based on Fischerâ€“Tropsch Synthesis: Process Synthesis, Optimization, and Techno-Economic Analysis. Industrial & Engineering Chemistry Research, 2020, 59, 8728-8739.	1.8	19
7	Promoting effect of Ge on Pt-based catalysts for dehydrogenation of propane to propylene. Applied Catalysis A: General, 2019, 588, 117266.	2.2	51
8	In Situ-Generated Supported Potassium Lactate: Stable Catalysis for Vapor-Phase Dehydration of Lactic Acid to Acrylic Acid. ACS Omega, 2019, 4, 8146-8166.	1.6	6
9	Transformation of StÃ¶ber Silica Spheres to Hollow Hierarchical Single-Crystal ZSM-5 Zeolites with Encapsulated Metal Nanocatalysts for Selective Catalysis. ACS Applied Materials & Interfaces, 2019, 11, 14774-14785.	4.0	47
10	Dispersed and high loading Ni catalyst stabilized in porous SiO2 matrix for substituted natural gas production. Catalysis Today, 2018, 299, 193-200.	2.2	27
11	Constrained Growth of MoS₂ Nanosheets within a Mesoporous Silica Shell and Its Effects on Defect Sites and Catalyst Stability for H₂S Decomposition. ACS Catalysis, 2018, 8, 714-724.	5.5	58
12	Simple fabrication of porous NiO nanoflowers: Growth mechanism, shape evolution and their application into Li-ion batteries. International Journal of Hydrogen Energy, 2017, 42, 7202-7211.	3.8	42
13	Free-standing vertically-aligned nitrogen-doped carbon nanotube arrays/graphene as air-breathing electrodes for rechargeable zincâ€“air batteries. Journal of Materials Chemistry A, 2017, 5, 2488-2495.	5.2	83
14	Hydrogenâ€Free Gasâ€Phase Deoxydehydration of 2,3â€Butanediol to Butene on Silicaâ€Supported Vanadium Catalysts. ChemCatChem, 2017, 9, 2443-2447.	1.8	28
15	Cobalt-platinum heterometallic clusters containing N-heterocyclic carbene ligands. Journal of Organometallic Chemistry, 2017, 849-850, 48-53.	0.8	2
16	Silica nanowires encapsulated Ru nanoparticles as stable nanocatalysts for selective hydrogenation of CO2 to CO. Applied Catalysis B: Environmental, 2017, 219, 580-591.	10.8	54
17	Selective conversion of lactic acid to acrylic acid over alkali and alkaline-earth metal co-modified NaY zeolites. Catalysis Science and Technology, 2017, 7, 6101-6111.	2.1	26
18	The role of metalâ€“support interaction for CO-free hydrogen from low temperature ethanol steam reforming on Rhâ€“Fe catalysts. Physical Chemistry Chemical Physics, 2017, 19, 4199-4207.	1.3	25

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19	Lewis Acid Sites Stabilized Nickel Catalysts for Dry (CO₂) Reforming of Methane. ChemCatChem, 2016, 8, 3732-3739.	1.8	42
20	Graphene-supported non-precious metal electrocatalysts for oxygen reduction reactions: the active center and catalytic mechanism. Journal of Materials Chemistry A, 2016, 4, 7148-7154.	5.2	17
21	Oxide-supported Rh catalysts for H2 generation from low-temperature ethanol steam reforming: effects of support, Rh precursor and Rh loading on catalytic performance. RSC Advances, 2015, 5, 99461-99482.	1.7	3
22	Binary metal sulfides and polypyrrole on vertically aligned carbon nanotube arrays/carbon fiber paper as high-performance electrodes. Journal of Materials Chemistry A, 2015, 3, 22043-22052.	5.2	36
23	Molecular catalysis for the steam reforming of ethanol. Science China Chemistry, 2015, 58, 60-78.	4.2	24
24	Loading MIL-53(Al) with Ag nanoparticles: Synthesis, structural stability and catalytic properties. International Journal of Hydrogen Energy, 2014, 39, 14496-14502.	3.8	22
25	Ethanol Steam Reforming on Rh Catalysts: Theoretical and Experimental Understanding. ACS Catalysis, 2014, 4, 448-456.	5.5	44
26	Infrared Evidence of a Formate-Intermediate Mechanism over Ca-Modified Supports in Low-Temperature Ethanol Steam Reforming. ACS Catalysis, 2014, 4, 2359-2363.	5.5	29
27	Rhâ€“Fe/Caâ€“Al2O3: A Unique Catalyst for CO-Free Hydrogen Production in Low Temperature Ethanol Steam Reforming. Topics in Catalysis, 2014, 57, 627-636.	1.3	10
28	Syngas production by catalytic partial oxidation of methane over (La0.7A0.3)BO3 (AÂ=ÂBa, Ca, Mg, Sr, and) Tj ETQq0 0 0 rgBT /Overlock Energy, 2013, 38, 13300-13308.	3.8	76
29	High performance of Mgâ€“La mixed oxides supported Ni catalysts for dry reforming of methane: The effect of crystal structure. International Journal of Hydrogen Energy, 2013, 38, 13631-13642.	3.8	108
30	Monometallic Carbonylâ€Derived CeO₂â€Supported Rh and Co Bicomponent Catalysts for COâ€Free, Highâ€Yield H₂ Generation from Lowâ€Temperature Ethanol Steam Reforming. ChemCatChem, 2013, 5, 220-234.	1.8	19
31	Nanostructured Cu/ZnO Coupled Composites: Toward Tunable Cu Nanoparticle Sizes and Plasmon Absorption. Journal of Physical Chemistry C, 2013, 117, 10780-10787.	1.5	21
32	Morphology and composition controllable synthesis of Mgâ€“Alâ€“CO3 hydrotalcites by tuning the synthesis pH and the CO2 capture capacity. Applied Clay Science, 2012, 55, 18-26.	2.6	190
33	Support and alloy effects on activity and product selectivity for ethanol steam reforming over supported nickel cobalt catalysts. International Journal of Hydrogen Energy, 2012, 37, 16321-16332.	3.8	62
34	Carbon deposition on borated alumina supported nano-sized Ni catalysts for dry reforming of CH4. Nano Energy, 2012, 1, 674-686.	8.2	144
35	Preparation of Supercapacitor Electrodes through Selection of Graphene Surface Functionalities. ACS Nano, 2012, 6, 5941-5951.	7.3	310
36	Antisolvent Precipitation for the Synthesis of Monodisperse Mesoporous Niobium Oxide Spheres as Highly Effective Solid Acid Catalysts. ChemCatChem, 2012, 4, 1675-1682.	1.8	25

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37	Effect of calcium addition on catalytic ethanol steam reforming of Ni/Al2O3: I. Catalytic stability, electronic properties and coking mechanism. Applied Catalysis A: General, 2011, 407, 145-154.	2.2	112
38	Effect of calcium addition on catalytic ethanol steam reforming of Ni/Al2O3: II. Acidity/basicity, water adsorption and catalytic activity. Applied Catalysis A: General, 2011, 407, 155-162.	2.2	87
39	High temperature adsorption of CO2 on Mgâ€“Al hydrotalcite: Effect of the charge compensating anions and the synthesis pH. Catalysis Today, 2011, 164, 198-203.	2.2	143
40	One-step synthesis of NH2-graphene from in situ graphene-oxide reduction and its improved electrochemical properties. Carbon, 2011, 49, 3250-3257.	5.4	372
41	Carbon monoxide-free hydrogen production via low-temperature steam reforming of ethanol over iron-promoted Rh catalyst. Journal of Catalysis, 2010, 276, 197-200.	3.1	59
42	The Effect of Trivalent Cations on the Performance of Mgâ€•Mâ€•CO₃ Layered Double Hydroxides for Highâ€•Temperature CO₂ Capture. ChemSusChem, 2010, 3, 965-973.	3.6	139
43	Effect of boron on the stability of Ni catalysts during steam methane reforming. Journal of Catalysis, 2009, 261, 158-165.	3.1	143
44	Ethanol steam reforming over supported ruthenium and rutheniumâ€“platinum catalysts: Comparison of organometallic clusters and inorganic salts as catalyst precursors. International Journal of Hydrogen Energy, 2009, 34, 5691-5703.	3.8	42
45	The role of acidic sites and the catalytic reaction pathways on the Rh/ZrO₂catalysts for ethanol steam reforming. Physical Chemistry Chemical Physics, 2009, 11, 872-880.	1.3	42
46	Coral-like nanostructured Î±-Mn2O3 nanaocrystals for catalytic combustion of methane. Catalysis Today, 2008, 131, 35-41.	2.2	52
47	Re-investigating the CO oxidation mechanism over unsupported MnO, Mn2O3 and MnO2 catalysts. Catalysis Today, 2008, 131, 477-482.	2.2	342
48	Kinetic and spectroscopic study of methane combustion over Î±-Mn2O3 nanocrystal catalysts. Journal of Catalysis, 2008, 253, 261-268.	3.1	76
49	Highly efficient ruthenium and rutheniumâ€“platinum cluster-derived nanocatalysts for hydrogen production via ethanol steam reforming. Catalysis Communications, 2008, 9, 170-175.	1.6	57
50	X-RAY ABSORPTION SPECTROSCOPY STUDY OF Mn2O3 AND Mn3O4 NANOPARTICLES SUPPORTED ON MESOPOROUS SILICA SBA-15. Advances in Synchrotron Radiation, 2008, 01, 67-78.	0.0	5
51	Observation of the Reversible Phase-Transformation of Î±-Mn2O3 Nanocrystals during the Catalytic Combustion of Methane by in Situ Raman Spectroscopy. Journal of Physical Chemistry C, 2007, 111, 2830-2833.	1.5	70
52	Au Promotional Effects on the Synthesis of H2O2Directly from H2and O2on Supported Pdâ^'Au Alloy Catalysts. Journal of Physical Chemistry C, 2007, 111, 8410-8413.	1.5	121
53	Preparation and characterization of coral-like nanostructured Î±-Mn2O3 catalyst for catalytic combustion of methane. Catalysis Communications, 2007, 8, 1421-1426.	1.6	45
54	Preparation of nanosized Mn3O4/SBA-15 catalyst for complete oxidation of low concentration EtOH in aqueous solution with H2O2. Applied Catalysis B: Environmental, 2007, 76, 227-234.	10.8	72

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55	Complete oxidation of low concentration ethanol in aqueous solution with H2O2 on nanosized Mn3O4/SBA-15 catalyst. Chemical Engineering Journal, 2007, 134, 276-281.	6.6	22
56	Hydrogen or synthesis gas production via the partial oxidation of methane over supported nickelâ€"cobalt catalysts. International Journal of Hydrogen Energy, 2007, 32, 725-730.	3.8	153
57	Hydrogen production by coupled catalytic partial oxidation and steam methane reforming at elevated pressure and temperature. Journal of Power Sources, 2007, 164, 803-808.	4.0	25
58	Acoustic cavitationâ€"an efficient energetic tool to synthesize nanosized CuOâ€"ZrO2catalysts with a mesoporous distribution. New Journal of Chemistry, 2006, 30, 102-107.	1.4	19
59	Synthesis and characterization of Mn3O4 and Mn2O3 nanocrystals on SBA-15: Novel combustion catalysts at low reaction temperatures. Catalysis Communications, 2006, 7, 739-744.	1.6	94
60	Controlled Synthesis, Characterization, and Catalytic Properties of Mn2O3and Mn3O4Nanoparticles Supported on Mesoporous Silica SBA-15. Journal of Physical Chemistry B, 2006, 110, 24450-24456.	1.2	267
61	Catalytic partial oxidation of methane to syngas over Ca-decorated-Al2O3-supported Ni and NiB catalysts. Applied Catalysis A: General, 2005, 292, 295-304.	2.2	89
62	Sonochemically Prepared high Dispersed Ru/TiO2 Mesoporous Catalyst for Partial Oxidation of Methane to Syngas. Catalysis Letters, 2005, 103, 9-14.	1.4	64
63	Synthesis, characterization and application of nano-structured Mo2C thin films. Catalysis Today, 2004, 96, 161-164.	2.2	24
64	Ultrasound-Assisted Polyol Method for the Preparation of SBA-15-Supported Ruthenium Nanoparticles and the Study of Their Catalytic Activity on the Partial Oxidation of Methane. Langmuir, 2004, 20, 8352-8356.	1.6	64
65	Non-oxidative methane conversion into aromatics on mechanically mixed Mo/HZSM-5 catalysts. Catalysis Communications, 2001, 2, 201-206.	1.6	25
66	XPS AND FTIR STUDIES OF Mo/ZSM-5 CATALYSTS FOR NONOXIDATIVE CONVERSION OF METHANE TO AROMATICS. Surface Review and Letters, 2001, 08, 627-632.	0.5	3
67	Synergism between Cu and Zn sites in Cu/Zn catalysts for methanol synthesis. Applied Surface Science, 1999, 152, 193-199.	3.1	94
68	FTIR, XPS and TPR studies of N2O decomposition over Cu-ZSM-5. Surface and Interface Analysis, 1999, 28, 115-118.	0.8	30
69	Comparative Surface Studies of High-Zn-level and Commercial Cu/ZnO/Al2O3Catalysts. Journal of Physical Chemistry B, 1998, 102, 1994-2000.	1.2	13
70	Copper Sites in Cu-ZSM-5 Zeolites. Part II. An Identification of Defective AlOCu+Sites by FTIR. Inorganic Chemistry, 1998, 37, 5294-5298.	1.9	15
71	Platinum Deposition on Carbon Nanotubes via Chemical Modification. Chemistry of Materials, 1998, 10, 718-722.	3.2	479
72	AN FTIR AND STATIC SIMS STUDY OF THE ADSORPTION OF PROPYLENE ON Cu-ZSM-5 CATALYSTS. Surface Review and Letters, 1997, 04, 607-611.	0.5	2

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73	Copper Sites in Copper-Exchanged ZSM-5 for CO Activation and Methanol Synthesis:â€‰ XPS and FTIR Studies. Inorganic Chemistry, 1997, 36, 1417-1423.	1.9	72
74	N2O decomposition over ZrO2 â€” an in-situ DRIFT, TPR, TPD and XPS study. Applied Surface Science, 1996, 103, 307-314.	3.1	28
75	Lattice Dynamics of Î²-Si ₃ N ₄. Chinese Physics Letters, 1994, 11, 281-284.	1.3	7