Zili Wu

List of Publications by Year
in descending order

253	16,714	14614 66	18075 120
papers	citations	h-index	g-index

267	267	267	18325
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probing Defect Sites on CeO₂ Nanocrystals with Well-Defined Surface Planes by Raman Spectroscopy and O₂ Adsorption. Langmuir, 2010, 26, 16595-16606.	1.6	889
2	Role of Interfaces in Two-Dimensional Photocatalyst for Water Splitting. ACS Catalysis, 2018, 8, 2253-2276.	5.5	773
3	Anomalous High Ionic Conductivity of Nanoporous Î²-Li₃PS₄. Journal of the American Chemical Society, 2013, 135, 975-978.	6.6	709
4	On the structure dependence of CO oxidation over CeO2 nanocrystals with well-defined surface planes. Journal of Catalysis, 2012, 285, 61-73.	3.1	553
5	CO Oxidation on Supported Single Pt Atoms: Experimental and ab Initio Density Functional Studies of CO Interaction with Pt Atom on Î¸-Al₂O₃(010) Surface. Journal of the American Chemical Society, 2013, 135, 12634-12645.	6.6	535
6	Introduction of Ï€-Complexation into Porous Aromatic Framework for Highly Selective Adsorption of Ethylene over Ethane. Journal of the American Chemical Society, 2014, 136, 8654-8660.	6.6	383
7	Oneâ€Step Synthesis of Nb₂O₅/C/Nb₂C (MXene) Composites and Their Use as Photocatalysts for Hydrogen Evolution. ChemSusChem, 2018, 11, 688-699.	3.6	315
8	2D/2D heterojunction of Ti₃C₂/g-C₃N₄ nanosheets for enhanced photocatalytic hydrogen evolution. Nanoscale, 2019, 11, 8138-8149.	2.8	289
9	Nature of Active Sites and Surface Intermediates during SCR of NO with NH₃ by Supported V₂O₅â€“WO₃/TiO₂ Catalysts. Journal of the American Chemical Society, 2017, 139, 15624-15627.	6.6	266
10	A physical catalyst for the electrolysis of nitrogen to ammonia. Science Advances, 2018, 4, e1700336.	4.7	264
11	Vibrational spectra of alumina- and silica-supported vanadia revisited: An experimental and theoretical model catalyst study. Journal of Catalysis, 2004, 226, 88-100.	3.1	258
12	Titania Composites with 2â€‰D Transition Metal Carbides as Photocatalysts for Hydrogen Production under Visibleâ€Light Irradiation. ChemSusChem, 2016, 9, 1490-1497.	3.6	253
13	Highâ€Selectivity Electrochemical Conversion of CO₂ to Ethanol using a Copper Nanoparticle/Nâ€Doped Graphene Electrode. ChemistrySelect, 2016, 1, 6055-6061.	0.7	251
14	Thiolate Ligands as a Double-Edged Sword for CO Oxidation on CeO₂ Supported Au₂₅(SCH₂CH₂Ph)₁₈ Nanoclusters. Journal of the American Chemical Society, 2014, 136, 6111-6122.	6.6	245
15	Mesoporous MnCeOx solid solutions for low temperature and selective oxidation of hydrocarbons. Nature Communications, 2015, 6, 8446.	5.8	241
16	Understanding complete oxidation of methane on spinel oxides at a molecular level. Nature Communications, 2015, 6, 7798.	5.8	237
17	High-rate in-plane micro-supercapacitors scribed onto photo paper using in situ femtolaser-reduced graphene oxide/Au nanoparticle microelectrodes. Energy and Environmental Science, 2016, 9, 1458-1467.	15.6	202
18	Taming interfacial electronic properties of platinum nanoparticles on vacancy-abundant boron nitride nanosheets for enhanced catalysis. Nature Communications, 2017, 8, 15291.	5.8	200

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19	Imaging the Atomic Surface Structures of CeO₂ Nanoparticles. Nano Letters, 2014, 14, 191-196.	4.5	183
20	Monolayer Ti₃C₂T_x as an Effective Co-catalyst for Enhanced Photocatalytic Hydrogen Production over TiO₂. ACS Applied Energy Materials, 2019, 2, 4640-4651.	2.5	177
21	In situ spectroscopy-guided engineering of rhodium single-atom catalysts for CO oxidation. Nature Communications, 2019, 10, 1330.	5.8	177
22	Shapeâ€Controlled Ceriaâ€based Nanostructures for Catalysis Applications. ChemSusChem, 2013, 6, 1821-1833.	3.6	176
23	Low temperature propane oxidation over Co3O4 based nano-array catalysts: Ni dopant effect, reaction mechanism and structural stability. Applied Catalysis B: Environmental, 2016, 180, 150-160.	10.8	174
24	On the Structure of Vanadium Oxide Supported on Aluminas:Â UV and Visible Raman Spectroscopy, UVâ^Visible Diffuse Reflectance Spectroscopy, and Temperature-Programmed Reduction Studies. Journal of Physical Chemistry B, 2005, 109, 2793-2800.	1.2	167
25	Probing the Surface Sites of CeO₂ Nanocrystals with Well-Defined Surface Planes via Methanol Adsorption and Desorption. ACS Catalysis, 2012, 2, 2224-2234.	5.5	165
26	Spectroscopic Investigation of Surface-Dependent Acidâ€“Base Property of Ceria Nanoshapes. Journal of Physical Chemistry C, 2015, 119, 7340-7350.	1.5	156
27	Dibenzothiophene hydrodesulfurization activity and surface sites of silica-supported MoP, Ni2P, and NiMoP catalysts. Journal of Catalysis, 2004, 228, 298-310.	3.1	154
28	Highly selective adsorption of ethylene over ethane in a MOF featuring the combination of open metal site and Ï€-complexation. Chemical Communications, 2015, 51, 2714-2717.	2.2	151
29	Direct Neutron Spectroscopy Observation of Cerium Hydride Species on a Cerium Oxide Catalyst. Journal of the American Chemical Society, 2017, 139, 9721-9727.	6.6	138
30	Influence of catalyst synthesis method on selective catalytic reduction (SCR) of NO by NH3 with V2O5-WO3/TiO2 catalysts. Applied Catalysis B: Environmental, 2016, 193, 141-150.	10.8	136
31	Fabrication of Au₂₅(SG)₁₈â€“ZIFâ€8 Nanocomposites: A Facile Strategy to Position Au₂₅(SG)₁₈ Nanoclusters Inside and Outside ZIFâ€8. Advanced Materials, 2018, 30, 1704576.	11.1	129
32	Adsorption and Reaction of Acetaldehyde on Shape-Controlled CeO₂ Nanocrystals: Elucidation of Structureâ€“Function Relationships. ACS Catalysis, 2014, 4, 2437-2448.	5.5	128
33	Surface Reconstructions of Metal Oxides and the Consequences on Catalytic Chemistry. ACS Catalysis, 2019, 9, 5692-5707.	5.5	127
34	In-Plane Heterojunctions Enable Multiphasic Two-Dimensional (2D) MoS₂ Nanosheets As Efficient Photocatalysts for Hydrogen Evolution from Water Reduction. ACS Catalysis, 2016, 6, 6723-6729.	5.5	116
35	Preparation and Characterization of PdFe Nanoleaves as Electrocatalysts for Oxygen Reduction Reaction. Chemistry of Materials, 2011, 23, 1570-1577.	3.2	106
36	Acidâ€“base catalysis over perovskites: a review. Journal of Materials Chemistry A, 2018, 6, 2877-2894.	5.2	101

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37	The reaction route and active site of catalytic decomposition of hydrazine over molybdenum nitride catalyst. Journal of Catalysis, 2004, 224, 473-478.	3.1	100
38	Vacancy engineering of the nickel-based catalysts for enhanced CO2 methanation. Applied Catalysis B: Environmental, 2021, 282, 119561.	10.8	100
39	Adhesion and Atomic Structures of Gold on Ceria Nanostructures: The Role of Surface Structure and Oxidation State of Ceria Supports. Nano Letters, 2015, 15, 5375-5381.	4.5	98
40	Towards ALD thin film stabilized single-atom Pd₁catalysts. Nanoscale, 2016, 8, 15348-15356.	2.8	98
41	Oxidative Dehydrogenation of Propane to Propylene with Soft Oxidants via Heterogeneous Catalysis. ACS Catalysis, 2021, 11, 2182-2234.	5.5	97
42	Surface structure dependence of selective oxidation of ethanol on faceted CeO2 nanocrystals. Journal of Catalysis, 2013, 306, 164-176.	3.1	95
43	High-performance stacked in-plane supercapacitors and supercapacitor array fabricated by femtosecond laser 3D direct writing on polyimide sheets. Electrochimica Acta, 2017, 241, 153-161.	2.6	93
44	Synthesis of silica supported AuCu nanoparticle catalysts and the effects of pretreatment conditions for the CO oxidation reaction. Physical Chemistry Chemical Physics, 2011, 13, 2571.	1.3	92
45	Extraction, antioxidant and antibacterial activities of Broussonetia papyrifera fruits polysaccharides. International Journal of Biological Macromolecules, 2016, 92, 116-124.	3.6	92
46	In Situ Phase Separation of NiAu Alloy Nanoparticles for Preparing Highly Active Au/NiO CO Oxidation Catalysts. ChemPhysChem, 2008, 9, 2475-2479.	1.0	91
47	Structure of Vanadium Oxide Supported on Ceria by Multiwavelength Raman Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 25368-25378.	1.5	91
48	Role Of CO₂ As a Soft Oxidant For Dehydrogenation of Ethylbenzene to Styrene over a High-Surface-Area Ceria Catalyst. ACS Catalysis, 2015, 5, 6426-6435.	5.5	90
49	Diphosphine-Protected Au₂₂ Nanoclusters on Oxide Supports Are Active for Gas-Phase Catalysis without Ligand Removal. Nano Letters, 2016, 16, 6560-6567.	4.5	88
50	Constructing Hierarchical Interfaces: TiO₂-Supported PtFeâ€“FeO_x Nanowires for Room Temperature CO Oxidation. Journal of the American Chemical Society, 2015, 137, 10156-10159.	6.6	86
51	Photoinduced Strong Metalâ€“Support Interaction for Enhanced Catalysis. Journal of the American Chemical Society, 2021, 143, 8521-8526.	6.6	85
52	Harnessing strong metalâ€“support interactions via a reverse route. Nature Communications, 2020, 11, 3042.	5.8	84
53	Radical Chemistry and Reaction Mechanisms of Propane Oxidative Dehydrogenation over Hexagonal Boron Nitride Catalysts. Angewandte Chemie - International Edition, 2020, 59, 8042-8046.	7.2	83
54	Acidâ€“Base Reactivity of Perovskite Catalysts Probed via Conversion of 2-Propanol over Titanates and Zirconates. ACS Catalysis, 2017, 7, 4423-4434.	5.5	81

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55	Catalysis on Singly Dispersed Rh Atoms Anchored on an Inert Support. ACS Catalysis, 2018, 8, 110-121.	5.5	81
56	Multiwavelength Raman Spectroscopic Study of Silica-Supported Vanadium Oxide Catalysts. Journal of Physical Chemistry C, 2010, 114, 412-422.	1.5	80
57	DRIFTS-QMS Study of Room Temperature CO Oxidation on Au/SiO₂ Catalyst: Nature and Role of Different Au Species. Journal of Physical Chemistry C, 2009, 113, 3726-3734.	1.5	79
58	Synergistic Effects of Water and SO₂ on Degradation of MIL-125 in the Presence of Acid Gases. Journal of Physical Chemistry C, 2016, 120, 27230-27240.	1.5	79
59	Reaction Pathways and Kinetics for Selective Catalytic Reduction (SCR) of Acidic NO_x Emissions from Power Plants with NH₃. ACS Catalysis, 2017, 7, 8358-8361.	5.5	78
60	Effects of Surface Terminations of 2D Bi₂WO₆ on Photocatalytic Hydrogen Evolution from Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 20067-20074.	4.0	78
61	Descriptors for Hydrogen Evolution on Single Atom Catalysts in Nitrogen-Doped Graphene. Journal of Physical Chemistry C, 2020, 124, 19571-19578.	1.5	75
62	Support Shape Effect in Metal Oxide Catalysis: Ceria-Nanoshape-Supported Vanadia Catalysts for Oxidative Dehydrogenation of Isobutane. Journal of Physical Chemistry Letters, 2012, 3, 1517-1522.	2.1	72
63	In Situ FT-IR Spectroscopic Studies of CO Adsorption on Fresh Mo2C/Al2O3Catalyst. Journal of Physical Chemistry B, 2003, 107, 7088-7094.	1.2	71
64	Robust Ag nanoplate ink for flexible electronics packaging. Nanoscale, 2015, 7, 7368-7377.	2.8	71
65	Metallic Hydrogen in Atomically Precise Gold Nanoclusters. Chemistry of Materials, 2017, 29, 4840-4847.	3.2	70
66	Discriminating the Role of Surface Hydride and Hydroxyl for Acetylene Semihydrogenation over Ceria through In Situ Neutron and Infrared Spectroscopy. ACS Catalysis, 2020, 10, 5278-5287.	5.5	70
67	Aminopolymer functionalization of boron nitride nanosheets for highly efficient capture of carbon dioxide. Journal of Materials Chemistry A, 2017, 5, 16241-16248.	5.2	67
68	An overview of photocatalysis facilitated by 2D heterojunctions. Nanotechnology, 2019, 30, 502002.	1.3	66
69	Quantitative Analysis of the Morphology of {101} and {001} Faceted Anatase TiO₂ Nanocrystals and Its Implication on Photocatalytic Activity. Chemistry of Materials, 2017, 29, 5591-5604.	3.2	65
70	On the surface sites of MoP/SiO2 catalyst under sulfiding conditions: IR spectroscopy and catalytic reactivity studies. Journal of Catalysis, 2004, 222, 41-52.	3.1	64
71	Stronger-than-Pt hydrogen adsorption in a Au₂₂ nanocluster for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 7532-7537.	5.2	63
72	Oxygenâ€Functionalized Fewâ€Layer Graphene Sheets as Active Catalysts for Oxidative Dehydrogenation Reactions. ChemSusChem, 2013, 6, 840-846.	3.6	61

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73	Effect of Dopants on the Adsorption of Carbon Dioxide on Ceria Surfaces. ChemSusChem, 2015, 8, 3651-3660.	3.6	61
74	UV Raman spectroscopic studies of V/Î¸-Al2O3 catalysts in butane dehydrogenation. Journal of Catalysis, 2006, 237, 220-229.	3.1	60
75	Elucidation of the Reaction Mechanism for High-Temperature Water Gas Shift over an Industrial-Type Copperâ€“Chromiumâ€“Iron Oxide Catalyst. Journal of the American Chemical Society, 2019, 141, 7990-7999.	6.6	60
76	Shape Effect Undermined by Surface Reconstruction: Ethanol Dehydrogenation over Shape-Controlled SrTiO₃ Nanocrystals. ACS Catalysis, 2018, 8, 555-565.	5.5	59
77	Nature of Reactive Hydrogen for Ammonia Synthesis over a Ru/C12A7 Electride Catalyst. Journal of the American Chemical Society, 2020, 142, 7655-7667.	6.6	59
78	Enhanced visible light photocatalytic water reduction from a g-C3N4/SrTa2O6 heterojunction. Applied Catalysis B: Environmental, 2017, 217, 448-458.	10.8	58
79	Selective conversion of bio-derived ethanol to renewable BTX over Ga-ZSM-5. Green Chemistry, 2017, 19, 4344-4352.	4.6	57
80	CO oxidation on Au/FePO4 catalyst: Reaction pathways and nature of Au sites. Journal of Catalysis, 2009, 266, 98-105.	3.1	56
81	Title is missing!. Catalysis Letters, 2002, 79, 21-25.	1.4	55
82	Visible-light-driven Bi₂O₃/WO₃ composites with enhanced photocatalytic activity. RSC Advances, 2015, 5, 91094-91102.	1.7	54
83	Raman Spectroscopic Study of V/Î¸-Al2O3Catalysts:â€‰ Quantification of Surface Vanadia Species and Their Structure Reduced by Hydrogen. Journal of Physical Chemistry C, 2007, 111, 16460-16469.	1.5	53
84	Interface Engineering of Earth-Abundant Transition Metals Using Boron Nitride for Selective Electroreduction of CO₂. ACS Applied Materials & Interfaces, 2018, 10, 6694-6700.	4.0	52
85	Effects of Sodium and Tungsten Promoters on Mg₆MnO₈-Based Coreâ€“Shell Redox Catalysts for Chemical Loopingâ€”Oxidative Dehydrogenation of Ethane. ACS Catalysis, 2019, 9, 3174-3186.	5.5	52
86	Selective catalytic reduction of NO by NH3 with WO3-TiO2 catalysts: Influence of catalyst synthesis method. Applied Catalysis B: Environmental, 2016, 188, 123-133.	10.8	51
87	DMOF-1 as a Representative MOF for SO₂ Adsorption in Both Humid and Dry Conditions. Journal of Physical Chemistry C, 2018, 122, 23493-23500.	1.5	51
88	FT-IR Spectroscopic Studies of Thiophene Adsorption and Reactions on Mo2N/Î³-Al2O3 Catalysts. Journal of Physical Chemistry B, 2002, 106, 979-987.	1.2	50
89	Low-Temperature Solution-Phase Synthesis of NiAu Alloy Nanoparticles via Butyllithium Reduction: Influences of Synthesis Details and Application As the Precursor to Active Au-NiO/SiO₂ Catalysts through Proper Pretreatment. Journal of Physical Chemistry C, 2009, 113, 5758-5765.	1.5	50
90	Ultra-thin PtFe-nanowires as durable electrocatalysts for fuel cells. Nanotechnology, 2011, 22, 015602.	1.3	50

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91	Origin of Active Oxygen in a Ternary CuO_x/Co₃O₄â€“CeO₂ Catalyst for CO Oxidation. Journal of Physical Chemistry C, 2014, 118, 27870-27877.	1.5	50
92	Understanding the Impact of Surface Reconstruction of Perovskite Catalysts on CH₄ Activation and Combustion. ACS Catalysis, 2018, 8, 10306-10315.	5.5	50
93	In Situ Strong Metalâ€“Support Interaction (SMSI) Affects Catalytic Alcohol Conversion. ACS Catalysis, 2021, 11, 1938-1945.	5.5	50
94	Raman study of Fano interference in pâ€type doped silicon. Journal of Raman Spectroscopy, 2010, 41, 1759-1764.	1.2	49
95	Effect of Surface Structure of TiO₂ Nanoparticles on CO₂ Adsorption and SO₂ Resistance. ACS Sustainable Chemistry and Engineering, 2017, 5, 9295-9306.	3.2	49
96	Heterometal Incorporation in Metal-Exchanged Zeolites Enables Low-Temperature Catalytic Activity of NO_x Reduction. Journal of Physical Chemistry C, 2012, 116, 23322-23331.	1.5	48
97	Effect of metal oxides modification on CO2 adsorption performance over mesoporous carbon. Microporous and Mesoporous Materials, 2017, 249, 34-41.	2.2	47
98	Controlling Reaction Selectivity through the Surface Termination of Perovskite Catalysts. Angewandte Chemie - International Edition, 2017, 56, 9820-9824.	7.2	47
99	All-solid-state supercapacitors from natural lignin-based composite film by laser direct writing. Applied Physics Letters, 2019, 115, .	1.5	46
100	Direct Visualization and Control of Atomic Mobility at {100} Surfaces of Ceria in the Environmental Transmission Electron Microscope. Nano Letters, 2017, 17, 7652-7658.	4.5	45
101	CO oxidation over ceria supported Au22 nanoclusters: Shape effect of the support. Chinese Chemical Letters, 2018, 29, 795-799.	4.8	45
102	First Principles Insight into H₂ Activation and Hydride Species on TiO₂ Surfaces. Journal of Physical Chemistry C, 2018, 122, 20323-20328.	1.5	44
103	Solar-driven efficient methane catalytic oxidation over epitaxial ZnO/La0.8Sr0.2CoO3 heterojunctions. Applied Catalysis B: Environmental, 2020, 265, 118469.	10.8	44
104	Investigation of the selective sites on graphitic carbons for oxidative dehydrogenation of isobutane. Journal of Catalysis, 2009, 267, 158-166.	3.1	42
105	CO oxidation on phosphate-supported Au catalysts: Effect of support reducibility on surface reactions. Journal of Catalysis, 2011, 278, 133-142.	3.1	42
106	Impact of Surface Composition of SrTiO₃ Catalysts for Oxidative Coupling of Methane. ChemCatChem, 2019, 11, 2107-2117.	1.8	41
107	Surface engineering of MXenes for energy and environmental applications. Journal of Materials Chemistry A, 2022, 10, 10265-10296.	5.2	41
108	A Raman Spectroscopic Study of the Speciation of Vanadia Supported on Ceria Nanocrystals with Defined Surface Planes. ChemCatChem, 2012, 4, 1653-1661.	1.8	40

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109	Toward the Design of a Hierarchical Perovskite Support: Ultra-Sintering-Resistant Gold Nanocatalysts for CO Oxidation. ACS Catalysis, 2017, 7, 3388-3393.	5.5	40
110	Ultrathin platinum nanowire based electrodes for high-efficiency hydrogen generation in practical electrolyzer cells. Chemical Engineering Journal, 2021, 410, 128333.	6.6	40
111	A review of the interactions between ceria and H2 and the applications to selective hydrogenation of alkynes. Chinese Journal of Catalysis, 2020, 41, 901-914.	6.9	40
112	Weak Sharp Solutions of Variational Inequalities in Hilbert Spaces. SIAM Journal on Optimization, 2004, 14, 1011-1027.	1.2	38
113	Effects of TiO₂ in Low Temperature Propylene Epoxidation Using Gold Catalysts. Journal of Physical Chemistry C, 2018, 122, 1688-1698.	1.5	37
114	New Bonding Model of Radical Adsorbate on Lattice Oxygen of Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 6321-6325.	2.1	37
115	Influence of absorption on quantitative analysis in Raman spectroscopy. Catalysis Today, 2006, 113, 40-47.	2.2	36
116	PdPt-TiO2 nanowires: correlating composition, electronic effects and O-vacancies with activities towards water splitting and oxygen reduction. Applied Catalysis B: Environmental, 2020, 277, 119177.	10.8	36
117	A Review on the Impact of SO₂ on the Oxidation of NO, Hydrocarbons, and CO in Diesel Emission Control Catalysis. ACS Catalysis, 2021, 11, 12446-12468.	5.5	36
118	The role of surface vanadia species in butane dehydrogenation over VOx/Al2O3. Catalysis Today, 2009, 142, 143-151.	2.2	35
119	In situ studies of surface of NiFe2O4 catalyst during complete oxidation of methane. Surface Science, 2016, 648, 156-162.	0.8	35
120	A tailored multi-functional catalyst for ultra-efficient styrene production under a cyclic redox scheme. Nature Communications, 2021, 12, 1329.	5.8	35
121	Exploring perovskites for methane activation from first principles. Catalysis Science and Technology, 2018, 8, 702-709.	2.1	35
122	An IR Study on Selective Hydrogenation of 1,3-Butadiene on Transition Metal Nitrides:Â 1,3-Butadiene and 1-Butene Adsorption on Mo2N/Î³-Al2O3Catalyst. Journal of Physical Chemistry B, 2000, 104, 12275-12281.	1.2	34
123	An IR study on the surface passivation of Mo2C/Al2O3 catalyst with O2, H2O and CO2. Physical Chemistry Chemical Physics, 2004, 6, 5603.	1.3	33
124	The synergic effect between Mo species and acid sites in Mo/HMCM-22 catalysts for methane aromatization. Physical Chemistry Chemical Physics, 2005, 7, 3102.	1.3	33
125	High Internal Quantum Efficiency of Nonpolar a-Plane AlGaN-Based Multiple Quantum Wells Grown on r-Plane Sapphire Substrate. ACS Photonics, 2018, 5, 1903-1906.	3.2	33
126	MoS2 nanosheet integrated electrodes with engineered 1T-2H phases and defects for efficient hydrogen production in practical PEM electrolysis. Applied Catalysis B: Environmental, 2022, 313, 121458.	10.8	33

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127	Solvent-free and one-pot synthesis of ultramicroporous carbons with ultrahigh nitrogen contents for sulfur dioxide capture. Chemical Engineering Journal, 2020, 391, 123579.	6.6	32
128	Engineering Porous Organic Cage Crystals with Increased Acid Gas Resistance. Chemistry - A European Journal, 2016, 22, 10743-10747.	1.7	31
129	Kinetics and Mechanism of Methanol Conversion over Anatase Titania Nanoshapes. ACS Catalysis, 2017, 7, 5345-5356.	5.5	31
130	A new trick for an old support: Stabilizing gold single atoms on LaFeO3 perovskite. Applied Catalysis B: Environmental, 2020, 261, 118178.	10.8	31
131	Perovskite-supported Pt single atoms for methane activation. Journal of Materials Chemistry A, 2020, 8, 4362-4368.	5.2	31
132	Pd-promoted WO3-ZrO2 for low temperature NOx storage. Applied Catalysis B: Environmental, 2020, 264, 118499.	10.8	30
133	A Principle for Highly Active Metal Oxide Catalysts via NaCl-Based Solid Solution. CheM, 2020, 6, 1723-1741.	5.8	30
134	Oxygen-assisted reduction of Au species on Au/SiO2 catalyst in room temperature CO oxidation. Chemical Communications, 2008, , 3308.	2.2	29
135	Role of defects and metal coordination on adsorption of acid gases in MOFs and metal oxides: An in situ IR spectroscopic study. Microporous and Mesoporous Materials, 2016, 227, 65-75.	2.2	29
136	Neutron Scattering Investigations of Hydride Species in Heterogeneous Catalysis. ChemSusChem, 2019, 12, 93-103.	3.6	29
137	Threeâ€Phase Catalytic System of H₂O, Ionic Liquid, and VOPO₄â€“SiO₂ Solid Acid for Conversion of Fructose to 5â€Hydroxymethylfurfural. ChemSusChem, 2014, 7, 1703-1709.	3.6	28
138	Carbon Monoxide Adsorption on Molybdenum Phosphides:Â Fourier Transform Infrared Spectroscopic and Density Functional Theory Studies. Journal of Physical Chemistry B, 2003, 107, 13698-13702.	1.2	26
139	Surface Structure Dependence of SO₂ Interaction with Ceria Nanocrystals with Well-Defined Surface Facets. Journal of Physical Chemistry C, 2015, 119, 28895-28905.	1.5	26
140	Fundamental Understanding of the Interaction of Acid Gases with CeO₂: From Surface Science to Practical Catalysis. Industrial & Engineering Chemistry Research, 2016, 55, 3909-3919.	1.8	26
141	Defects reduction in a-plane AlGaN epi-layers grown on r-plane sapphire substrates by metal organic chemical vapor deposition. Applied Physics Express, 2017, 10, 011002.	1.1	25
142	Construction of 2D BiVO₄â”CdSâ”Ti₃C₂T_x Heterostructures for Enhanced Photoâ€redox Activities. ChemCatChem, 2020, 12, 3496-3503.	1.8	25
143	Defect Engineering of Ceria Nanocrystals for Enhanced Catalysis via a High-Entropy Oxide Strategy. ACS Central Science, 2022, 8, 1081-1090.	5.3	25
144	Growth and Electrochemical Characterization of Carbon Nanospike Thin Film Electrodes. Journal of the Electrochemical Society, 2014, 161, H558-H563.	1.3	24

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145	New Insights into the Bulk and Surface Defect Structures of Ceria Nanocrystals from Neutron Scattering Study. Chemistry of Materials, 2021, 33, 3959-3970.	3.2	24
146	Isolated Metal Sites in Cuâ€“Znâ€“Y/Beta for Direct and Selective Butene-Rich C₃₊ Olefin Formation from Ethanol. ACS Catalysis, 2021, 11, 9885-9897.	5.5	24
147	Sulfur Effect on Mo2N/Î³-Al2O3 Catalyst Studied by in Situ FT-IR Spectroscopy. Journal of Catalysis, 2000, 194, 23-32.	3.1	23
148	Low-Temperature Isomerization of 1-Butene on Mo2N/Î³-Al2O3 Catalyst Studied by in Situ FT-IR Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 9183-9190.	1.2	23
149	Deep Learning Accelerated Determination of Hydride Locations in Metal Nanoclusters. Angewandte Chemie - International Edition, 2021, 60, 12289-12292.	7.2	23
150	Self-Assembly of Metal Oxide Nanoparticles into Hierarchically Patterned Porous Architectures Using Ionic Liquid/Oil Emulsions. Langmuir, 2009, 25, 7229-7233.	1.6	22
151	Activation and surface reactions of CO and H2 on ZnO powders and nanoplates under CO hydrogenation reaction conditions. Journal of Energy Chemistry, 2020, 50, 351-357.	7.1	22
152	A comparison of catalyst deactivation of vanadia catalysts used for alkane dehydrogenation. Chemical Engineering Journal, 2006, 120, 127-132.	6.6	21
153	Interaction of SO₂ with ZnO Nanoshapes: Impact of Surface Polarity. Journal of Physical Chemistry C, 2019, 123, 11772-11780.	1.5	21
154	Elucidating the origin of selective dehydrogenation of propane on Î³-alumina under H2S treatment and co-feed. Journal of Catalysis, 2021, 394, 142-156.	3.1	21
155	Inelastic Neutron Scattering Observation of Plasma-Promoted Nitrogen Reduction Intermediates on Ni/Î³-Al₂O₃. ACS Energy Letters, 2021, 6, 2048-2053.	8.8	20
156	Multiple Promotional Effects of Vanadium Oxide on Boron Nitride for Oxidative Dehydrogenation of Propane. Jacs Au, 2022, 2, 1096-1104.	3.6	20
157	In Situ High Temperature Surface Enhanced Raman Spectroscopy for the Study of Interface Phenomena: Probing a Solid Acid on Alumina. Journal of Physical Chemistry C, 2011, 115, 9068-9073.	1.5	19
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