Liang Wang

List of Publications by Year
in descending order

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Version: 2024-02-01

97 papers	7,200 citations	53794 45 h-index	58581 82 g-index
116 all docs	116 docs citations	116 times ranked	7687 citing authors

#	Article	IF	Citations
1	Hydrophobic zeolite modification for in situ peroxide formation in methane oxidation to methanol. Science, 2020, 367, 193-197.	12.6	470
2	A mechanically driven form of Kirigami as a route to 3D mesostructures in micro/nanomembranes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11757-11764.	7.1	429
3	Sinter-resistant metal nanoparticle catalysts achieved by immobilization within zeolite crystals via seed-directed growth. Nature Catalysis, 2018, 1, 540-546.	34.4	297
4	Wet-Chemistry Strong Metalâ€“Support Interactions in Titania-Supported Au Catalysts. Journal of the American Chemical Society, 2019, 141, 2975-2983.	13.7	280
5	Product Selectivity Controlled by Zeolite Crystals in Biomass Hydrogenation over a Palladium Catalyst. Journal of the American Chemical Society, 2016, 138, 7880-7883.	13.7	262
6	A Pd@Zeolite Catalyst for Nitroarene Hydrogenation with High Product Selectivity by Sterically Controlled Adsorption in the Zeolite Micropores. Angewandte Chemie - International Edition, 2017, 56, 9747-9751.	13.8	248
7	Product Selectivity Controlled by Nanoporous Environments in Zeolite Crystals Enveloping Rhodium Nanoparticle Catalysts for CO₂ Hydrogenation. Journal of the American Chemical Society, 2019, 141, 8482-8488.	13.7	242
8	Selective Hydrogenation of CO₂ to Ethanol over Cobalt Catalysts. Angewandte Chemie - International Edition, 2018, 57, 6104-6108.	13.8	241
9	New Strategies for the Preparation of Sinterâ€Resistant Metalâ€Nanoparticleâ€Based Catalysts. Advanced Materials, 2019, 31, e1901905.	21.0	203
10	Palladium-Catalyzed Homocoupling and Cross-Coupling Reactions of Aryl Halides in Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.2	176
11	Single-site catalyst promoters accelerate metal-catalyzed nitroarene hydrogenation. Nature Communications, 2018, 9, 1362.	12.8	161
12	Strong Metalâ€“Support Interactions Achieved by Hydroxide-to-Oxide Support Transformation for Preparation of Sinter-Resistant Gold Nanoparticle Catalysts. ACS Catalysis, 2017, 7, 7461-7465.	11.2	158
13	Isolated boron in zeolite for oxidative dehydrogenation of propane. Science, 2021, 372, 76-80.	12.6	155
14	Task-Specific Design of Porous Polymer Heterogeneous Catalysts beyond Homogeneous Counterparts. ACS Catalysis, 2015, 5, 4556-4567.	11.2	152
15	Mesoporous ZSM-5 Zeolite-Supported Ru Nanoparticles as Highly Efficient Catalysts for Upgrading Phenolic Biomolecules. ACS Catalysis, 2015, 5, 2727-2734.	11.2	147
16	Importance of Zeolite Wettability for Selective Hydrogenation of Furfural over Pd@Zeolite Catalysts. ACS Catalysis, 2018, 8, 474-481.	11.2	146
17	Metal@Zeolite Hybrid Materials for Catalysis. ACS Central Science, 2020, 6, 1685-1697.	11.3	146
18	Strong metalâ€“support interactions on gold nanoparticle catalysts achieved through Le Chatelierâ€™s principle. Nature Catalysis, 2021, 4, 418-424.	34.4	146

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19	Two-dimensional gold nanostructures with high activity for selective oxidation of carbonâ€“hydrogen bonds. Nature Communications, 2015, 6, 6957.	12.8	133
20	Silica accelerates the selective hydrogenation of CO2 to methanol on cobalt catalysts. Nature Communications, 2020, 11, 1033.	12.8	124
21	Direct Conversion of Syngas to Ethanol within Zeolite Crystals. CheM, 2020, 6, 646-657.	11.7	123
22	Coking-Resistant Iron Catalyst in Ethane Dehydrogenation Achieved through Siliceous Zeolite Modulation. Journal of the American Chemical Society, 2020, 142, 16429-16436.	13.7	120
23	Zeolite Fixed Metal Nanoparticles: New Perspective in Catalysis. Accounts of Chemical Research, 2021, 54, 2579-2590.	15.6	117
24	Rational construction of metal nanoparticles fixed in zeolite crystals as highly efficient heterogeneous catalysts. Nano Today, 2018, 20, 74-83.	11.9	94
25	Design of Strainâ€Limiting Substrate Materials for Stretchable and Flexible Electronics. Advanced Functional Materials, 2016, 26, 5345-5351.	14.9	92
26	Cobaltâ€“Nickel Catalysts for Selective Hydrogenation of Carbon Dioxide into Ethanol. ACS Catalysis, 2019, 9, 11335-11340.	11.2	85
27	Soft Elastomers with Ionic Liquidâ€Filled Cavities as Strain Isolating Substrates for Wearable Electronics. Small, 2017, 13, 1602954.	10.0	82
28	A Pd@Zeolite Catalyst for Nitroarene Hydrogenation with High Product Selectivity by Sterically Controlled Adsorption in the Zeolite Micropores. Angewandte Chemie, 2017, 129, 9879-9883.	2.0	81
29	Activity and Selectivity in Nitroarene Hydrogenation over Au Nanoparticles on the Edge/Corner of Anatase. ACS Catalysis, 2016, 6, 4110-4116.	11.2	79
30	Novel shielding and synergy effects of Mn-Ce oxides confined in mesoporous zeolite for low temperature selective catalytic reduction of NOx with enhanced SO2/H2O tolerance. Journal of Hazardous Materials, 2020, 396, 122592.	12.4	79
31	Supported Au nanoparticles as efficient catalysts for aerobic homocoupling of phenylboronic acid. Chemical Communications, 2012, 48, 5476.	4.1	66
32	A significant enhancement of catalytic activities in oxidation with H2O2 over the TS-1 zeolite by adjusting the catalyst wettability. Chemical Communications, 2014, 50, 2012.	4.1	66
33	Efficient biomass transformations catalyzed by graphene-like nanoporous carbons functionalized with strong acid ionic liquids and sulfonic groups. Green Chemistry, 2015, 17, 480-489.	9.0	64
34	Chemical Sensing Systems that Utilize Soft Electronics on Thin Elastomeric Substrates with Open Cellular Designs. Advanced Functional Materials, 2017, 27, 1605476.	14.9	64
35	Hierarchical zeolite enveloping Pd-CeO2 nanowires: An efficient adsorption/catalysis bifunctional catalyst for low temperature propane total degradation. Chemical Engineering Journal, 2020, 393, 124717.	12.7	62
36	Pyrrolidone-modified SBA-15 supported Au nanoparticles with superior catalytic properties in aerobic oxidation of alcohols. Chemical Communications, 2010, 46, 5003.	4.1	57

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37	Controllable cyanation of carbon-hydrogen bonds by zeolite crystals over manganese oxide catalyst. Nature Communications, 2017, 8, 15240.	12.8	57
38	Interlayerâ€Expanded Microporous Titanosilicate Catalysts with Functionalized Hydroxyl Groups. ChemCatChem, 2011, 3, 1442-1446.	3.7	56
39	Solventâ€Free Synthesis of Zeolite Crystals Encapsulating Goldâ€“Palladium Nanoparticles for the Selective Oxidation of Bioethanol. ChemSusChem, 2015, 8, 2867-2871.	6.8	56
40	Dispersed Nickel Boosts Catalysis by Copper in CO₂ Hydrogenation. ACS Catalysis, 2020, 10, 9261-9270.	11.2	52
41	Atomically Dispersed Ru on Manganese Oxide Catalyst Boosts Oxidative Cyanation. ACS Catalysis, 2020, 10, 6299-6308.	11.2	51
42	Fischerâ€“Tropsch synthesis to olefins boosted by MFI zeolite nanosheets. Nature Nanotechnology, 2022, 17, 714-720.	31.5	51
43	Hydrophobic Zeolite Containing Titania Particles as Wettability-Selective Catalyst for Formaldehyde Removal. ACS Catalysis, 2018, 8, 5250-5254.	11.2	50
44	Superior Performance in Catalytic Combustion of Toluene over KZSM-5 Zeolite Supported Platinum Catalyst. Catalysis Letters, 2014, 144, 1851-1859.	2.6	49
45	Solvent-free and Mesoporogen-free Synthesis of Mesoporous Aluminosilicate ZSM-5 Zeolites with Superior Catalytic Properties in the Methanol-to-Olefins Reaction. Industrial & Engineering Chemistry Research, 2017, 56, 1450-1460.	3.7	49
46	Stable Bulky Particles Formed by TSâ€1 Zeolite Nanocrystals in the Presence of H₂O₂. ChemCatChem, 2010, 2, 407-412.	3.7	47
47	Temperature-Driven Switching of the Catalytic Activity of Artificial Glutathione Peroxidase by the Shape Transition between the Nanotubes and Vesicle-like Structures. Langmuir, 2014, 30, 4013-4018.	3.5	41
48	Dual stimuli-responsive supramolecular pseudo-polyrotaxane hydrogels. Soft Matter, 2013, 9, 4635.	2.7	40
49	High-temperature synthesis of ordered mesoporous silicas from solo hydrocarbonsurfactants and understanding of their synthetic mechanisms. Journal of Materials Chemistry, 2009, 19, 661-665.	6.7	39
50	â€œSolvent-freeâ€•synthesis of thermally stable and hierarchically porous aluminophosphates (SF-APOs) and heteroatom-substituted aluminophosphates (SF-MAPOs). Journal of Materials Chemistry, 2011, 21, 12026.	6.7	39
51	Organotemplate-free and seed-directed synthesis of ZSM-34 zeolite with good performance in methanol-to-olefins. Journal of Materials Chemistry, 2012, 22, 12238.	6.7	39
52	Tuning product selectivity in CO₂hydrogenation over metal-based catalysts. Chemical Science, 2021, 12, 14660-14673.	7.4	38
53	Boron Nanosheet-Supported Rh Catalysts for Hydrogen Evolution: A New Territory for the Strong Metal-Support Interaction Effect. Nano-Micro Letters, 2021, 13, 138.	27.0	37
54	Solvent-Free Synthesis of Coreâ€“Shell Zn/ZSM-5@Silicalite-1 Catalyst for Selective Conversion of Methanol to BTX Aromatics. Industrial & Engineering Chemistry Research, 2019, 58, 15453-15458.	3.7	36

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55	Strong Oxideâ€“Support Interactions Accelerate Selective Dehydrogenation of Propane by Modulating the Surface Oxygen. ACS Catalysis, 2020, 10, 10559-10569.	11.2	35
56	Selective Hydrogenation of CO₂ to Ethanol over Cobalt Catalysts. Angewandte Chemie, 2018, 130, 6212-6216.	2.0	34
57	Generalized and high temperature synthesis of a series of crystalline mesoporous metal oxides based nanocomposites with enhanced catalytic activities for benzene combustion. Journal of Materials Chemistry A, 2013, 1, 4089.	10.3	30
58	Eco-friendly photocatalysts achieved by zeolite fixing. Applied Catalysis B: Environmental, 2017, 212, 193-200.	20.2	30
59	Fischer-Tropsch reaction within zeolite crystals for selective formation of gasoline-ranged hydrocarbons. Journal of Energy Chemistry, 2021, 54, 429-433.	12.9	30
60	Design of Cyclodextrin-Based Functional Systems for Biomedical Applications. Frontiers in Chemistry, 2021, 9, 635507.	3.6	30
61	Copperâ€Incorporated Porous Polydivinylbenzene as Efficient and Recyclable Heterogeneous Catalyst in Ullmann Biaryl Ether Coupling. ChemCatChem, 2013, 5, 1606-1613.	3.7	29
62	Organotemplate-free and one-pot fabrication of nano-rod assembled plate-like micro-sized mordenite crystals. Journal of Materials Chemistry, 2012, 22, 6564.	6.7	28
63	Direct Synthesis of Pure Aqueous H₂O₂ Solution within Aluminosilicate Zeolite Crystals. ACS Catalysis, 2021, 11, 1946-1951.	11.2	28
64	Construction of a smart temperature-responsive GPx mimic based on the self-assembly of supra-amphiphiles. Soft Matter, 2016, 12, 1192-1199.	2.7	24
65	Construction of a smart glutathione peroxidase mimic with temperature responsive activity based on block copolymer. Soft Matter, 2011, 7, 2521.	2.7	23
66	â€œOn/Offâ€•Switchable Sequential Light-Harvesting Systems Based on Controllable Protein Nanosheets for Regulation of Photocatalysis. ACS Nano, 2022, 16, 8012-8021.	14.6	23
67	Positively charged bulk Au particles as an efficient catalyst for oxidation of styrene with molecular oxygen. Chemical Communications, 2013, 49, 3449.	4.1	22
68	Light-powered and transient peptide two-dimensional assembly driven by trans-to-cis isomerization of azobenzene side chains. Chemical Communications, 2020, 56, 1867-1870.	4.1	21
69	NbOPO₄Supported Rh Nanoparticles with Strong Metalâ€“Support Interactions for Selective CO₂Hydrogenation. ChemSusChem, 2020, 13, 6300-6306.	6.8	19
70	Ascorbic acid assisted green route for synthesis of water dispersible carbon dots. Chemical Research in Chinese Universities, 2013, 29, 401-403.	2.6	18
71	Bioinspired artificial nanochannels: construction and application. Materials Chemistry Frontiers, 2021, 5, 1610-1631.	5.9	18
72	Mgâ€Al Mixed Oxides Supported Bimetallic Auâ€Pd Nanoparticles with Superior Catalytic Properties in Aerobic Oxidation of Benzyl Alcohol and Glycerol. Chinese Journal of Chemistry, 2012, 30, 2189-2197.	4.9	17

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73	Enhanced catalytic performance of methane combustion over zeolite-supported Pd catalysts with the lanthanum. Catalysis Today, 2021, 364, 16-20.	4.4	16
74	Cu/ZnO/Al₂O₃ Catalyst Modulated by Zirconia with Enhanced Performance in CO₂ Hydrogenation to Methanol. Industrial & Engineering Chemistry Research, 2022, 61, 10446-10454.	3.7	16
75	Subnanometric Gold Clusters on CeO₂ with Maximized Strong Metalâ€“Support Interactions for Aerobic Oxidation of Carbonâ€“Hydrogen Bonds. ACS Sustainable Chemistry and Engineering, 2018, 6, 6418-6424.	6.7	15
76	Biomimetic Pulsating Vesicles with Both pH-Tunable Membrane Permeability and Light-Triggered Disassemblyâ€“Re-assembly Behaviors Prepared by Supra-Amphiphilic Helices. ACS Applied Materials & Interfaces, 2019, 11, 30566-30574.	8.0	15
77	N-Oxyl Radicals Trapped on Zeolite Surface Accelerate Photocatalysis. ACS Catalysis, 2019, 9, 10448-10453.	11.2	15
78	Titanosilicate zeolite supported Pt nanoparticles with electronic metal-support interactions for efficient methanol steam reforming. Catalysis Today, 2021, 382, 42-47.	4.4	15
79	Aerobic Activation of Câ€H Bond in Amines Over a Nanorod Manganese Oxide Catalyst. ChemCatChem, 2019, 11, 401-406.	3.7	14
80	Co-salen functionalized on graphene as an efficient heterogeneous catalyst for cyclohexene oxidation. Journal of Energy Chemistry, 2013, 22, 48-51.	12.9	13
81	Interfacial CoO_x Layers on TiO₂ as an Efficient Catalyst for Solventâ€Free Aerobic Oxidation of Hydrocarbons. ChemSusChem, 2018, 11, 3965-3974.	6.8	12
82	Solvent-free crystallization of ZSM-5 zeolite on SiC foam as a monolith catalyst for biofuel upgrading. Chinese Journal of Catalysis, 2020, 41, 1118-1124.	14.0	12
83	Product selectivity controlled by manganese oxide crystals in catalytic ammoxidation. Chinese Journal of Catalysis, 2021, 42, 2164-2172.	14.0	11
84	Selective Oxidation of Methane into Methanol Under Mild Conditions. Chemical Research in Chinese Universities, 2022, 38, 671-676.	2.6	11
85	Supramolecularly regulated artificial transmembrane signal transduction for 'ON/OFF'-switchable enzyme catalysis. Chemical Communications, 2022, 58, 5725-5728.	4.1	11
86	Side-Chain Length Dependence of Youngâ€™s Modulus and Strength in Crystalline Poly(3-alkylthiophene) Nanofibers. Macromolecules, 2020, 53, 10061-10068.	4.8	10
87	Zeolite Catalysts for Green Production of Caprolactam. Industrial & Engineering Chemistry Research, 2023, 62, 2217-2224.	3.7	10
88	Mesoporous Coâ€Al oxide nanosheets as highly efficient catalysts for CO oxidation. AICHE Journal, 2020, 66, e16923.	3.6	8
89	Self-assembled nanostructures from C60-containing supramolecular complex: its stimuli-responsive reversible transition and biological antioxidative capacity. New Journal of Chemistry, 2011, 35, 2632.	2.8	6
90	Synthesis of Aluminophosphate Molecular Sieves in Alkaline Media. Chemistry - A European Journal, 2020, 26, 11408-11411.	3.3	5

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91	Alloyed PdCu Nanoparticles within Siliceous Zeolite Crystals for Catalytic Semihydrogenation. ACS Materials Au, 2022, 2, 313-320.	6.0	5
92	Efficient adjustment of product selectivity using controllable Pd nanoparticles in nitroarene hydrogenation. Particuology, 2020, 48, 13-18.	3.6	4
93	Dynamically Tunable Ultrathin Protein Membranes for Controlled Molecular Separation. ACS Applied Materials & Interfaces, 2021, 13, 12359-12365.	8.0	4
94	Structure-performance interplay of rhodium-based catalysts for syngas conversion to ethanol. Materials Chemistry Frontiers, 2022, 6, 663-679.	5.9	4
95	Biocompatible Chemically Fueled Transient Polymer Nanoparticles for Temporally Programmable in Vivo Imaging. CCS Chemistry, 2023, 5, 669-681.	7.8	4
96	Innentitelbild: A Pd@Zeolite Catalyst for Nitroarene Hydrogenation with High Product Selectivity by Sterically Controlled Adsorption in the Zeolite Micropores (Angew. Chem. 33/2017). Angewandte Chemie, 2017, 129, 9756-9756.	2.0	3
97	17â€...Delivery of betulinic acid lipid nanoparticles assembled by a microfluidic device. , 2016, , .		0