Hongyang Liu

List of Publications by Year
in descending order

80 papers	4,613 citations	117571 34 h-index	102432 66 g-index
83 all docs	83 docs citations	83 times ranked	5468 citing authors

#	Article	IF	Citations
1	Facile fabrication of graphene encapsulating 3d transition metal nanoparticles as highly active and anti-poisoning catalysts for selective hydrogenation of nitroaromatics. Journal of Colloid and Interface Science, 2022, 608, 1278-1285.	5.0	7
2	Defect-rich graphene stabilized atomically dispersed Cu3 clusters with enhanced oxidase-like activity for antibacterial applications. Applied Catalysis B: Environmental, 2022, 301, 120826.	10.8	51
3	Antisintering Pd₁ Catalyst for Propane Direct Dehydrogenation with In Situ Active Sites Regeneration Ability. ACS Catalysis, 2022, 12, 2244-2252.	5.5	23
4	Few-Atom Pt Ensembles Enable Efficient Catalytic Cyclohexane Dehydrogenation for Hydrogen Production. Journal of the American Chemical Society, 2022, 144, 3535-3542.	6.6	72
5	A Magnetically Separable Pd Singleâ€Atom Catalyst for Efficient Selective Hydrogenation of Phenylacetylene. Advanced Materials, 2022, 34, e2110455.	11.1	44
6	Insight into the Activity of Atomically Dispersed Cu Catalysts for Semihydrogenation of Acetylene: Impact of Coordination Environments. ACS Catalysis, 2022, 12, 48-57.	5.5	23
7	Fully exposed palladium cluster catalysts enable hydrogen production from nitrogen heterocycles. Nature Catalysis, 2022, 5, 485-493.	16.1	118
8	Kinetic Evidence of Most Abundant Surface Intermediates Variation over Pt_n and Pt_p: Few-Atom Pt Ensembles Enable Efficient Catalytic Cyclohexane Dehydrogenation for Hydrogen Production-II. ACS Catalysis, 2022, 12, 7248-7261.	5.5	3
9	Fully-exposed Pt clusters stabilized on Sn-decorated nanodiamond/graphene hybrid support for efficient ethylbenzene direct dehydrogenation. Nano Research, 2022, 15, 10029-10036.	5.8	7
10	Boron nitride for enhanced oxidative dehydrogenation of ethylbenzene. Journal of Energy Chemistry, 2021, 57, 477-484.	7.1	23
11	Fully Exposed Cluster Catalyst (FECC): Toward Rich Surface Sites and Full Atom Utilization Efficiency. ACS Central Science, 2021, 7, 262-273.	5.3	163
12	Bottom-Up Approach Derived Iron and Nitrogen Cofunctionalized Carbon as Efficient Renewable Catalyst for Selective Reduction of Nitroarenes. Journal of Physical Chemistry C, 2021, 125, 5127-5135.	1.5	7
13	Regulating coordination number in atomically dispersed Pt species on defect-rich graphene for n-butane dehydrogenation reaction. Nature Communications, 2021, 12, 2664.	5.8	111
14	Cooperative Sites in Fully Exposed Pd Clusters for Low-Temperature Direct Dehydrogenation Reaction. ACS Catalysis, 2021, 11, 11469-11477.	5.5	51
15	Towards a library of atomically dispersed catalysts. Materials and Design, 2021, 210, 110080.	3.3	6
16	Phosphorus-doped h-boron nitride as an efficient metal-free catalyst for direct dehydrogenation of ethylbenzene. Catalysis Science and Technology, 2021, 11, 5590-5597.	2.1	7
17	Atomically dispersed metal catalysts on nanodiamond and its derivatives: synthesis and catalytic application. Chemical Communications, 2021, 57, 11591-11603.	2.2	8
18	3D atomic imaging of low-coordinated active sites in solid-state dealloyed hierarchical nanoporous gold. Journal of Materials Chemistry A, 2021, 9, 25513-25521.	5.2	3

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19	Tuning the selectivity of catalytic nitriles hydrogenation by structure regulation in atomically dispersed Pd catalysts. Nature Communications, 2021, 12, 6194.	5.8	51
20	Pd on Nanodiamond/Graphene in Hydrogenation of Propyne with Parahydrogen. Journal of Physical Chemistry C, 2021, 125, 27221-27229.	1.5	5
21	Electrophilic oxygen on defect-rich carbon nanotubes for selective oxidation of cyclohexane. Catalysis Science and Technology, 2020, 10, 332-336.	2.1	30
22	Resolving Nanostructured Materials Down to the Single-atom Limit. Microscopy and Microanalysis, 2020, 26, 1756-1758.	0.2	0
23	A facile strategy based on the metal-free design of carbon to deliver an insight into the active sites for liquid phase carbocatalysis. Chemical Communications, 2020, 56, 3789-3792.	2.2	5
24	The durability of carbon nanotubes in the selective reduction of nitrobenzene. Physical Chemistry Chemical Physics, 2020, 22, 6524-6527.	1.3	5
25	Threeâ€Dimensional Interconnected Porous Nitrogenâ€Doped Carbon Hybrid Foam for Notably Promoted Direct Dehydrogenation of Ethylbenzene to Styrene. ChemCatChem, 2019, 11, 4830-4840.	1.8	6
26	Low Temperature Oxidation of Ethane to Oxygenates by Oxygen over Iridium-Cluster Catalysts. Journal of the American Chemical Society, 2019, 141, 18921-18925.	6.6	72
27	Multiple-twinned silver nanoparticles supported on mesoporous graphene with enhanced antibacterial activity. Carbon, 2019, 155, 397-402.	5.4	30
28	Anchoring Cu1 species over nanodiamond-graphene for semi-hydrogenation of acetylene. Nature Communications, 2019, 10, 4431.	5.8	224
29	Defect-rich activated carbons as active and stable metal-free catalyst for acetylene hydrochlorination. Carbon, 2019, 146, 406-412.	5.4	78
30	Defective graphene@diamond hybrid nanocarbon material as an effective and stable metal-free catalyst for acetylene hydrochlorination. Chemical Communications, 2019, 55, 1430-1433.	2.2	41
31	Tin-Assisted Fully Exposed Platinum Clusters Stabilized on Defect-Rich Graphene for Dehydrogenation Reaction. ACS Catalysis, 2019, 9, 5998-6005.	5.5	150
32	PdZn alloy nanoparticles encapsulated within a few layers of graphene for efficient semi-hydrogenation of acetylene. Chemical Communications, 2019, 55, 14693-14696.	2.2	27
33	Palladium nanoclusters immobilized on defective nanodiamond-graphene core-shell supports for semihydrogenation of phenylacetylene. Journal of Energy Chemistry, 2019, 33, 31-36.	7.1	20
34	N-doped graphene confined Pt nanoparticles for efficient semi-hydrogenation of phenylacetylene. Carbon, 2019, 145, 47-52.	5.4	44
35	A comparative study of nitrobenzene reduction using model catalysts. Physical Chemistry Chemical Physics, 2019, 21, 1019-1022.	1.3	3
36	Construction of Pd-M (M = Ni, Ag, Cu) alloy surfaces for catalytic applications. Nano Research, 2018, 11, 780-790.	5.8	61

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37	Boron doped g-C3N4 as an effective metal-free solid base catalyst in Knoevenagel condensation. Catalysis Today, 2018, 316, 199-205.	2.2	68
38	Facile construction of Ag nanoparticles encapsulated into carbon nanotubes with robust antibacterial activity. Carbon, 2018, 130, 775-781.	5.4	50
39	An Efficient Metalâ€Free Catalyst for Oxidative Dehydrogenation Reaction: Activated Carbon Decorated with Fewâ€Layer Graphene. ChemSusChem, 2018, 11, 536-541.	3.6	14
40	Few-layer sp2 carbon supported on Al2O3 as hybrid structure for ethylbenzene oxidative dehydrogenation. Catalysis Today, 2018, 301, 32-37.	2.2	9
41	Nanodiamondâ€Coreâ€Reinforced, Grapheneâ€Shellâ€Immobilized Platinum Nanoparticles as a Highly Active Catalyst for the Lowâ€Temperature Dehydrogenation of <i>n</i>â€Butane. ChemCatChem, 2018, 10, 520-524.	1.8	15
42	Submicroreactors: The Development of Yolk-Shell-Structured Pd&ZnO@Carbon Submicroreactors with High Selectivity and Stability (Adv. Funct. Mater. 32/2018). Advanced Functional Materials, 2018, 28, 1870227.	7.8	1
43	Phosphor-doped hexagonal boron nitride nanosheets as effective acidâ€“base bifunctional catalysts for one-pot deacetalizationâ€“Knoevenagel cascade reactions. Catalysis Science and Technology, 2018, 8, 5900-5905.	2.1	24
44	Synergetic Effect of B and O Dopants for Aerobic Oxidative Coupling of Amines to Imines. ACS Sustainable Chemistry and Engineering, 2018, 6, 17410-17418.	3.2	25
45	Ultra-Small Platinum Nanoparticles Encapsulated in Sub-50 nm Hollow Titania Nanospheres for Low-Temperature Waterâ€“Gas Shift Reaction. ACS Applied Materials & Interfaces, 2018, 10, 36954-36960.	4.0	31
46	Ti₃C₂T_{<i>x</i>} MXene Catalyzed Ethylbenzene Dehydrogenation: Active Sites and Mechanism Exploration from both Experimental and Theoretical Aspects. ACS Catalysis, 2018, 8, 10051-10057.	5.5	79
47	Atomically Dispersed Pd on Nanodiamond/Graphene Hybrid for Selective Hydrogenation of Acetylene. Journal of the American Chemical Society, 2018, 140, 13142-13146.	6.6	342
48	Facet Sensitivity of Capping Ligandâ€Free Ag Crystals in CO₂ Electrochemical Reduction to CO. ChemCatChem, 2018, 10, 5128-5134.	1.8	29
49	Pt NPs immobilized on a N-doped graphene@Al₂O₃ hybrid support as robust catalysts for low temperature CO oxidation. Chemical Communications, 2018, 54, 11168-11171.	2.2	21
50	Steam treatment: a facile and effective process for the removal of PVP from shape-controlled palladium nanoparticles. Nanoscale, 2018, 10, 11992-11996.	2.8	9
51	The Development of Yolkâ€“Shellâ€Structured Pd&ZnO@Carbon Submicroreactors with High Selectivity and Stability. Advanced Functional Materials, 2018, 28, 1801737.	7.8	78
52	High performance of nitrogen-modified carbon nanotubes for selective oxidation of allyl alcohol. Catalysis Science and Technology, 2017, 7, 1279-1283.	2.1	9
53	Origin of the Robust Catalytic Performance of Nanodiamondâ€“Graphene-Supported Pt Nanoparticles Used in the Propane Dehydrogenation Reaction. ACS Catalysis, 2017, 7, 3349-3355.	5.5	85
54	A Facile and Efficient Method to Fabricate Highly Selective Nanocarbon Catalysts for Oxidative Dehydrogenation. ChemSusChem, 2017, 10, 353-358.	3.6	19

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55	Improving the Alkene Selectivity of Nanocarbon-Catalyzed Oxidative Dehydrogenation of <i>n</i>-Butane by Refinement of Oxygen Species. ACS Catalysis, 2017, 7, 7305-7311.	5.5	28
56	Fabrication of MgOâ€“rGO hybrid catalysts with a sandwich structure for enhanced ethylbenzene dehydrogenation performance. Chemical Communications, 2017, 53, 11322-11325.	2.2	21
57	Graphitized nanocarbon-supported metal catalysts: synthesis, properties, and applications in heterogeneous catalysis. Science China Materials, 2017, 60, 1149-1167.	3.5	13
58	Wide-band microwave absorption by <i>in situ</i> tailoring morphology and optimized N-doping in nano-SiC. Applied Physics Letters, 2017, 111, .	1.5	35
59	Selective and Stable Ethylbenzene Dehydrogenation to Styrene over Nanodiamonds under Oxygenâ€Lean Conditions. ChemSusChem, 2016, 9, 662-666.	3.6	43
60	Multiâ€Walled Carbon Nanotubes as a Catalyst for Gasâ€Phase Oxidation of Ethanol to Acetaldehyde. ChemSusChem, 2016, 9, 1820-1826.	3.6	24
61	Phosphate modified carbon nanotubes for oxidative dehydrogenation of n-butane. Journal of Energy Chemistry, 2016, 25, 349-353.	7.1	19
62	Vaporâ€“Dissociationâ€“Solid Growth of Three-Dimensional Graphite-like Capsules with Delicate Morphology and Atomic-level Thickness Control. Crystal Growth and Design, 2016, 16, 5040-5048.	1.4	27
63	Efficient band structure tuning, charge separation, and visible-light response in ZrS₂-based van der Waals heterostructures. Energy and Environmental Science, 2016, 9, 841-849.	15.6	161
64	Highly efficient and selective hydrogenation of chloronitrobenzenes to chloroanilines by H₂ over confined silver nanoparticles. RSC Advances, 2016, 6, 31871-31875.	1.7	8
65	Ultrafine platinum/iron oxide nanoconjugates confined in silica nanoshells for highly durable catalytic oxidation. Journal of Materials Chemistry A, 2016, 4, 1366-1372.	5.2	51
66	Facile Synthesis of Au Nanoparticles Embedded in an Ultrathin Hollow Graphene Nanoshell with Robust Catalytic Performance. Small, 2015, 11, 5059-5064.	5.2	69
67	Stabilization of Palladium Nanoparticles on Nanodiamondâ€“Graphene Coreâ€“Shell Supports for CO Oxidation. Angewandte Chemie - International Edition, 2015, 54, 15823-15826.	7.2	74
68	Porous graphene-based material as an efficient metal free catalyst for the oxidative dehydrogenation of ethylbenzene to styrene. Chemical Communications, 2015, 51, 3423-3425.	2.2	51
69	Reconstruction of Rh nanoparticles in methanol oxidation reaction. Catalysis Science and Technology, 2015, 5, 4116-4122.	2.1	9
70	Highly dispersed nanodiamonds supported on few-layer graphene as robust metal-free catalysts for ethylbenzene dehydrogenation reaction. Catalysis Science and Technology, 2015, 5, 4950-4953.	2.1	31
71	Size-controlled nitrogen-containing mesoporous carbon nanospheres by one-step aqueous self-assembly strategy. Journal of Materials Chemistry A, 2015, 3, 2305-2313.	5.2	149
72	Study of the Role of Surface Oxygen Functional Groups on Carbon Nanotubes in the Selective Oxidation of Acrolein. ChemCatChem, 2014, 6, 1553-1557.	1.8	24

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73	Synthesis of nitrogen-containing ordered mesoporous carbon as a metal-free catalyst for selective oxidation of ethylbenzene. Chemical Communications, 2014, 50, 9182-9184.	2.2	70
74	Unconventional Route to Encapsulated Ultrasmall Gold Nanoparticles for High-Temperature Catalysis. ACS Nano, 2014, 8, 7297-7304.	7.3	113
75	Preparation of Palladium Catalysts Supported on Carbon Nanotubes by an Electrostatic Adsorption Method. ChemCatChem, 2014, 6, 2600-2606.	1.8	33
76	Palladium Nanoparticles Embedded in the Inner Surfaces of Carbon Nanotubes: Synthesis, Catalytic Activity, and Sinter Resistance. Angewandte Chemie - International Edition, 2014, 53, 12634-12638.	7.2	76
77	A nanodiamond/CNTâ€“SiC monolith as a novel metal free catalyst for ethylbenzene direct dehydrogenation to styrene. Chemical Communications, 2014, 50, 7810-7812.	2.2	82
78	Immobilizing Carbon Nanotubes on SiC Foam as a Monolith Catalyst for Oxidative Dehydrogenation Reactions. ChemCatChem, 2013, 5, 1713-1717.	1.8	25
79	Interface-Confined Ferrous Centers for Catalytic Oxidation. Science, 2010, 328, 1141-1144.	6.0	866
80	Crystal phase-selective synthesis of intermetallic palladium borides and phase-regulated (electro)catalytic properties. Catalysis Science and Technology, 0, , .	2.1	6