

# Huamin Wang

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58 papers	2,578 citations	22 h-index	50 g-index
64 ext. papers	3,053 ext. citations	9.9 avg, IF	5.52 L-index

#	Paper	IF	Citations
58	Catalytic fast pyrolysis of lignocellulosic biomass. <i>Chemical Society Reviews</i> , <b>2014</b> , 43, 7594-623	58.5	696
57	Recent Advances in Hydrotreating of Pyrolysis Bio-Oil and Its Oxygen-Containing Model Compounds. <i>ACS Catalysis</i> , <b>2013</b> , 3, 1047-1070	13.1	508
56	Pathways for biomass-derived lignin to hydrocarbon fuels. <i>Biofuels, Bioproducts and Biorefining</i> , <b>2013</b> , 7, 602-626	5.3	144
55	Biomass-derived lignin to jet fuel range hydrocarbons via aqueous phase hydrodeoxygenation. <i>Green Chemistry</i> , <b>2015</b> , 17, 5131-5135	10	108
54	Hydrodesulfurization of dibenzothiophene, 4,6-dimethyldibenzothiophene, and their hydrogenated intermediates over NiMoS <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Catalysis</i> , <b>2009</b> , 264, 31-43	7.3	76
53	Bio-oil Stabilization by Hydrogenation over Reduced Metal Catalysts at Low Temperatures. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 5533-5545	8.3	74
52	Hydrodesulfurization of dibenzothiophene and its hydrogenated intermediates over sulfided Mo/Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Catalysis</i> , <b>2008</b> , 258, 153-164	7.3	68
51	Hydrocarbon Liquid Production via Catalytic Hydroprocessing of Phenolic Oils Fractionated from Fast Pyrolysis of Red Oak and Corn Stover. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 892-902	8.3	66
50	Driving towards cost-competitive biofuels through catalytic fast pyrolysis by rethinking catalyst selection and reactor configuration. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2904-2918	35.4	66
49	Thiophene hydrodesulfurization catalysis on supported Ru clusters: Mechanism and site requirements for hydrogenation and desulfurization pathways. <i>Journal of Catalysis</i> , <b>2010</b> , 273, 245-256	7.3	64
48	Production of Jet Fuel-Range Hydrocarbons from Hydrodeoxygenation of Lignin over Super Lewis Acid Combined with Metal Catalysts. <i>ChemSusChem</i> , <b>2018</b> , 11, 285-291	8.3	64
47	Hydrocarbon Liquid Production from Biomass via Hot-Vapor-Filtered Fast Pyrolysis and Catalytic Hydroprocessing of the Bio-oil. <i>Energy &amp; Fuels</i> , <b>2014</b> , 28, 5909-5917	4.1	62
46	Electrocatalytic Hydrogenation of Biomass-Derived Organics: A Review. <i>Chemical Reviews</i> , <b>2020</b> , 120, 11370-11419	68.1	62
45	New Approach to the Synthesis of Bulk and Supported Bimetallic Molybdenum Nitrides. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 3262-3267	9.6	39
44	Toward efficient single-atom catalysts for renewable fuels and chemicals production from biomass and CO <sub>2</sub> . <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 292, 120162	21.8	35
43	Mechanism and Site Requirements of Thiophene Hydrodesulfurization Catalyzed by Supported Pt Clusters. <i>ChemCatChem</i> , <b>2011</b> , 3, 1166-1175	5.2	33
42	Technology advancements in hydroprocessing of bio-oils. <i>Biomass and Bioenergy</i> , <b>2019</b> , 125, 151-168	5.3	29

4 <sup>1</sup>	Hydrocarbon liquid production via the bioCRACK process and catalytic hydroprocessing of the product oil. <i>Green Chemistry</i> , <b>2015</b> , 17, 2487-2494	10	26
4 <sup>0</sup>	Modeling the Kinetics of Deactivation of Catalysts during the Upgrading of Bio-oil. <i>Energy &amp; Fuels</i> , <b>2015</b> , 29, 273-277	4.1	26
39	Impact of structural defects and hydronium ion concentration on the stability of zeolite BEA in aqueous phase. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 237, 996-1002	21.8	25
38	Characterization of Deactivated Bio-oil Hydrotreating Catalysts. <i>Topics in Catalysis</i> , <b>2016</b> , 59, 65-72	2.3	24
37	HDS of benzothiophene and dihydrobenzothiophene over sulfided Mo/ $\gamma$ -Al <sub>2</sub> O <sub>3</sub> . <i>Applied Catalysis A: General</i> , <b>2008</b> , 350, 191-196	5.1	22
36	Molybdenum Carbides, Active and In Situ Regenerable Catalysts in Hydroprocessing of Fast Pyrolysis Bio-Oil. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 5016-5026	4.1	21
35	Single-Facet Dominant Anatase TiO <sub>2</sub> (101) and (001) Model Catalysts to Elucidate the Active Sites for Alkanol Dehydration. <i>ACS Catalysis</i> , <b>2020</b> , 10, 4268-4279	13.1	16
34	Low-temperature approach to synthesize iron nitride from amorphous iron. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 1261-3	5.1	16
33	WO supported on $\gamma$ -Al <sub>2</sub> O <sub>3</sub> with different morphologies as model catalysts for alkanol dehydration. <i>Journal of Catalysis</i> , <b>2018</b> , 363, 1-8	7.3	15
32	Sulfur-Tolerant Molybdenum Carbide Catalysts Enabling Low-Temperature Stabilization of Fast Pyrolysis Bio-oil. <i>Energy &amp; Fuels</i> , <b>2017</b> , 31, 9585-9594	4.1	15
3 <sup>1</sup>	Investigating the Surface Structure of $\gamma$ -Al <sub>2</sub> O <sub>3</sub> Supported WOX Catalysts by High Field 27Al MAS NMR and Electronic Structure Calculations. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 23093-23103	3.8	15
3 <sup>0</sup>	Elucidation of Active Sites in Aldol Condensation of Acetone over Single-Facet Dominant Anatase TiO <sub>2</sub> (101) and (001) Catalysts. <i>JACS Au</i> , <b>2021</b> , 1, 41-52		13
29	Single-atom Automobile Exhaust Catalysts. <i>ChemNanoMat</i> , <b>2020</b> , 6, 1659-1682	3.5	12
28	A novel Ni <sub>2</sub> Mo <sub>3</sub> N/MCM41 catalyst for the hydrogenation of aromatics. <i>Catalysis Letters</i> , <b>2005</b> , 100, 73-77	2.8	11
27	In Situ Catalytic Fast Pyrolysis Using Red Mud Catalyst: Impact of Catalytic Fast Pyrolysis Temperature and Biomass Feedstocks. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 5156-5164	8.3	10
26	Tracking renewable carbon in bio-oil/crude co-processing with VGO through <sup>13</sup> C/ <sup>12</sup> C ratio analysis. <i>Fuel</i> , <b>2020</b> , 275, 117770	7.1	10
25	Synthesis of transition metal nitride by nitridation of metastable oxide precursor. <i>Journal of Solid State Chemistry</i> , <b>2012</b> , 194, 238-244	3.3	10
24	Hydrodenitrogenation of 2-methylpyridine and its intermediates 2-methylpiperidine and tetrahydro-methylpyridine over sulfided NiMo/ $\gamma$ -Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Catalysis</i> , <b>2007</b> , 251, 295-306	7.3	8

23	Synthesis of 4,6-dimethyl-tetrahydro- and hexahydro-dibenzothiophene. <i>Tetrahedron Letters</i> , <b>2008</b> , 49, 2063-2065	2	8
22	Performance and techno-economic evaluations of co-processing residual heavy fraction in bio-oil hydrotreating. <i>Catalysis Today</i> , <b>2021</b> , 365, 357-364	5.3	8
21	Reformulated Red Mud: a Robust Catalyst for In Situ Catalytic Pyrolysis of Biomass. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 3272-3283	4.1	7
20	On the Formation of Pentylpiperidine in the Hydrodenitrogenation of Pyridine. <i>Catalysis Letters</i> , <b>2008</b> , 126, 1-9	2.8	7
19	Directing the Rate-Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 2304-2311	16.4	7
18	Understanding the Deactivation of Ag $\gamma$ -Al <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> Catalysts for the Single-step Conversion of Ethanol to Butenes. <i>ChemCatChem</i> , <b>2021</b> , 13, 999-1008	5.2	7
17	Probing Acid-Base Properties of Anatase TiO <sub>2</sub> Nanoparticles with Dominant {001} and {101} Facets Using Methanol Chemisorption and Surface Reactions. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 3988-4000	3.8	7
16	Biomass Conversion to Produce Hydrocarbon Liquid Fuel Via Hot-vapor Filtered Fast Pyrolysis and Catalytic Hydrotreating. <i>Journal of Visualized Experiments</i> , <b>2016</b> ,	1.6	5
15	Selective Butene Formation in Direct Ethanol-to-C <sub>3</sub> +Olefin Valorization over Zn $\gamma$ -Al <sub>2</sub> O <sub>3</sub> /Beta and Single-Atom Alloy Composite Catalysts Using In Situ-Generated Hydrogen. <i>ACS Catalysis</i> , <b>2021</b> , 11, 7193-7209	12.1	5
14	Hydrogenation and CS bond activation pathways in thiophene and tetrahydrothiophene reactions on sulfur-passivated surfaces of Ru, Pt, and Re nanoparticles. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 291, 119797	21.8	5
13	Upgrading Fast Pyrolysis Liquids <b>2019</b> , 207-255		4
12	Pilot Plant Reliability Metrics for Grinding and Fast Pyrolysis of Woody Residues. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 2793-2805	8.3	4
11	Fast Pyrolysis and Hydrotreating: 2015 State of Technology R&D and Projections to 2017		4
10	Transition-Metal Nitroprussides Examined for Water Harvesting and Sorption Cooling. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 15620-15625	5.1	3
9	Selective adsorption removal of carbonyl molecular foulants from real fast pyrolysis bio-oils. <i>Biomass and Bioenergy</i> , <b>2020</b> , 136, 105522	5.3	3
8	Quantitative Determination of Biomass-Derived Renewable Carbon in Fuels from Coprocessing of Bio-Oils in Refinery Using a Stable Carbon Isotopic Approach. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 17565-17572	8.3	2
7	Operando S/TEM Reactions of Pt/TiO <sub>2</sub> Catalysts for Catalytic Fast Pyrolysis. <i>Microscopy and Microanalysis</i> , <b>2020</b> , 26, 1696-1697	0.5	1
6	Nanoporous catalysts for biomass conversion <b>2020</b> , 387-440		1

5	Deactivation by Potassium Accumulation on a Pt/TiO <sub>2</sub> Bifunctional Catalyst for Biomass Catalytic Fast Pyrolysis. <i>ACS Catalysis</i> , <b>2022</b> , 12, 465-480	13.1	1
4	Quantification of biogenic carbon in fuel blends through LSC 14C direct measurement and assessment of uncertainty. <i>Fuel</i> , <b>2022</b> , 315, 122859	7.1	0
3	Kinetics of nitrogen-, oxygen- and sulfur-containing compounds hydrotreating during co-processing of bio-crude with petroleum stream. <i>Applied Catalysis B: Environmental</i> , <b>2022</b> , 307, 121197	21.8	0
2	Stabilization of Bio-oil to Enable Its Hydrotreating to Produce Biofuels. <i>Catalytic Science Series</i> , <b>2018</b> , 57-76	0.4	0
1	Directing the Rate-Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 2334-2341	3.6	0