Huamin Wang

List of Publications by Year in Descending Order

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	Quantification of biogenic carbon in fuel blends through LSC 14C direct measurement and assessment of uncertainty. *Fuel*, **2022**, 315, 122859	7.1	0
57	Kinetics of nitrogen-, oxygen- and sulfur-containing compounds hydrotreating during co-processing of bio-crude with petroleum stream. *Applied Catalysis B: Environmental*, **2022**, 307, 121197	21.8	0
56	Deactivation by Potassium Accumulation on a Pt/TiO2 Bifunctional Catalyst for Biomass Catalytic Fast Pyrolysis. *ACS Catalysis*, **2022**, 12, 465-480	13.1	1
55	Selective Butene Formation in Direct Ethanol-to-C3+-Olefin Valorization over Zn□/Beta and Single-Atom Alloy Composite Catalysts Using In Situ-Generated Hydrogen. *ACS Catalysis*, **2021**, 11, 7193-7209	13.1	5
54	Directing the Rate-Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. *Angewandte Chemie*, **2021**, 133, 2334-2341	3.6	0
53	Directing the Rate-Enhancement for Hydronium Ion Catalyzed Dehydration via Organization of Alkanols in Nanoscopic Confinements. *Angewandte Chemie - International Edition*, **2021**, 60, 2304-2311	16.4	7
52	Understanding the Deactivation of Ag□rO2/SiO2 Catalysts for the Single-step Conversion of Ethanol to Butenes. *ChemCatChem*, **2021**, 13, 999-1008	5.2	7
51	Hydrogenation and CS bond activation pathways in thiophene and tetrahydrothiophene reactions on sulfur-passivated surfaces of Ru, Pt, and Re nanoparticles. *Applied Catalysis B: Environmental*, **2021**, 291, 119797	21.8	5
50	Elucidation of Active Sites in Aldol Condensation of Acetone over Single-Facet Dominant Anatase TiO (101) and (001) Catalysts. *Jacs Au*, **2021**, 1, 41-52		13
49	Performance and techno-economic evaluations of co-processing residual heavy fraction in bio-oil hydrotreating. *Catalysis Today*, **2021**, 365, 357-364	5.3	8
48	Probing Acid□Base Properties of Anatase TiO2 Nanoparticles with Dominant {001} and {101} Facets Using Methanol Chemisorption and Surface Reactions. *Journal of Physical Chemistry C*, **2021**, 125, 3988-4000	3.8	7
47	Toward efficient single-atom catalysts for renewable fuels and chemicals production from biomass and CO2. *Applied Catalysis B: Environmental*, **2021**, 292, 120162	21.8	35
46	Operando S/TEM Reactions of Pt/TiO2 Catalysts for Catalytic Fast Pyrolysis. *Microscopy and Microanalysis*, **2020**, 26, 1696-1697	0.5	1
45	In Situ Catalytic Fast Pyrolysis Using Red Mud Catalyst: Impact of Catalytic Fast Pyrolysis Temperature and Biomass Feedstocks. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 5156-5164	8.3	10
44	Tracking renewable carbon in bio-oil/crude co-processing with VGO through 13C/12C ratio analysis. *Fuel*, **2020**, 275, 117770	7.1	10
43	Single-Facet Dominant Anatase TiO2 (101) and (001) Model Catalysts to Elucidate the Active Sites for Alkanol Dehydration. *ACS Catalysis*, **2020**, 10, 4268-4279	13.1	16
42	Pilot Plant Reliability Metrics for Grinding and Fast Pyrolysis of Woody Residues. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 2793-2805	8.3	4

41	Reformulated Red Mud: a Robust Catalyst for In Situ Catalytic Pyrolysis of Biomass. *Energy & Fuels*, **2020**, 34, 3272-3283	4.1	7
40	Transition-Metal Nitroprussides Examined for Water Harvesting and Sorption Cooling. *Inorganic Chemistry*, **2020**, 59, 15620-15625	5.1	3
39	Quantitative Determination of Biomass-Derived Renewable Carbon in Fuels from Coprocessing of Bio-Oils in Refinery Using a Stable Carbon Isotopic Approach. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 17565-17572	8.3	2
38	Nanoporous catalysts for biomass conversion **2020**, 387-440		1
37	Single-atom Automobile Exhaust Catalysts. *ChemNanoMat*, **2020**, 6, 1659-1682	3.5	12
36	Electrocatalytic Hydrogenation of Biomass-Derived Organics: A Review. *Chemical Reviews*, **2020**, 120, 11370-11419	68.1	62
35	Selective adsorption removal of carbonyl molecular foulants from real fast pyrolysis bio-oils. *Biomass and Bioenergy*, **2020**, 136, 105522	5.3	3
34	Technology advancements in hydroprocessing of bio-oils. *Biomass and Bioenergy*, **2019**, 125, 151-168	5.3	29
33	Upgrading Fast Pyrolysis Liquids **2019**, 207-255		4
32	WO supported on Al2O3 with different morphologies as model catalysts for alkanol dehydration. *Journal of Catalysis*, **2018**, 363, 1-8	7.3	15
31	Driving towards cost-competitive biofuels through catalytic fast pyrolysis by rethinking catalyst selection and reactor configuration. *Energy and Environmental Science*, **2018**, 11, 2904-2918	35.4	66
30	Stabilization of Bio-oil to Enable Its Hydrotreating to Produce Biofuels. *Catalytic Science Series*, **2018**, 57-76	0.4	0
29	Production of Jet Fuel-Range Hydrocarbons from Hydrodeoxygenation of Lignin over Super Lewis Acid Combined with Metal Catalysts. *ChemSusChem*, **2018**, 11, 285-291	8.3	64
28	Impact of structural defects and hydronium ion concentration on the stability of zeolite BEA in aqueous phase. *Applied Catalysis B: Environmental*, **2018**, 237, 996-1002	21.8	25
27	Sulfur-Tolerant Molybdenum Carbide Catalysts Enabling Low-Temperature Stabilization of Fast Pyrolysis Bio-oil. *Energy & Fuels*, **2017**, 31, 9585-9594	4.1	15
26	Bio-oil Stabilization by Hydrogenation over Reduced Metal Catalysts at Low Temperatures. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 5533-5545	8.3	74
25	Biomass Conversion to Produce Hydrocarbon Liquid Fuel Via Hot-vapor Filtered Fast Pyrolysis and Catalytic Hydrotreating. *Journal of Visualized Experiments*, **2016**,	1.6	5
24	Molybdenum Carbides, Active and In Situ Regenerable Catalysts in Hydroprocessing of Fast Pyrolysis Bio-Oil. *Energy & Fuels*, **2016**, 30, 5016-5026	4.1	21

23	Characterization of Deactivated Bio-oil Hydrotreating Catalysts. *Topics in Catalysis*, **2016**, 59, 65-72	2.3	24
22	Investigating the Surface Structure of Al2O3 Supported WOX Catalysts by High Field 27Al MAS NMR and Electronic Structure Calculations. *Journal of Physical Chemistry C*, **2016**, 120, 23093-23103	3.8	15
21	Hydrocarbon liquid production via the bioCRACK process and catalytic hydroprocessing of the product oil. *Green Chemistry*, **2015**, 17, 2487-2494	10	26
20	Hydrocarbon Liquid Production via Catalytic Hydroprocessing of Phenolic Oils Fractionated from Fast Pyrolysis of Red Oak and Corn Stover. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 892-902	8.3	66
19	Biomass-derived lignin to jet fuel range hydrocarbons via aqueous phase hydrodeoxygenation. *Green Chemistry*, **2015**, 17, 5131-5135	10	108
18	Modeling the Kinetics of Deactivation of Catalysts during the Upgrading of Bio-oil. *Energy & Fuels*, **2015**, 29, 273-277	4.1	26
17	Catalytic fast pyrolysis of lignocellulosic biomass. *Chemical Society Reviews*, **2014**, 43, 7594-623	58.5	696
16	Hydrocarbon Liquid Production from Biomass via Hot-Vapor-Filtered Fast Pyrolysis and Catalytic Hydroprocessing of the Bio-oil. *Energy & Fuels*, **2014**, 28, 5909-5917	4.1	62
15	Recent Advances in Hydrotreating of Pyrolysis Bio-Oil and Its Oxygen-Containing Model Compounds. *ACS Catalysis*, **2013**, 3, 1047-1070	13.1	508
14	Pathways for biomass-derived lignin to hydrocarbon fuels. *Biofuels, Bioproducts and Biorefining*, **2013**, 7, 602-626	5.3	144
13	Synthesis of transition metal nitride by nitridation of metastable oxide precursor. *Journal of Solid State Chemistry*, **2012**, 194, 238-244	3.3	10
12	Mechanism and Site Requirements of Thiophene Hydrodesulfurization Catalyzed by Supported Pt Clusters. *ChemCatChem*, **2011**, 3, 1166-1175	5.2	33
11	Thiophene hydrodesulfurization catalysis on supported Ru clusters: Mechanism and site requirements for hydrogenation and desulfurization pathways. *Journal of Catalysis*, **2010**, 273, 245-256	7.3	64
10	Hydrodesulfurization of dibenzothiophene, 4,6-dimethyldibenzothiophene, and their hydrogenated intermediates over NiMoS2/Al2O3. *Journal of Catalysis*, **2009**, 264, 31-43	7.3	76
9	Hydrodesulfurization of dibenzothiophene and its hydrogenated intermediates over sulfided Mo/Al2O3. *Journal of Catalysis*, **2008**, 258, 153-164	7.3	68
8	Low-temperature approach to synthesize iron nitride from amorphous iron. *Inorganic Chemistry*, **2008**, 47, 1261-3	5.1	16
7	Synthesis of 4,6-dimethyl-tetrahydro- and hexahydro-dibenzothiophene. *Tetrahedron Letters*, **2008**, 49, 2063-2065	2	8
6	On the Formation of Pentylpiperidine in the Hydrodenitrogenation of Pyridine. *Catalysis Letters*, **2008**, 126, 1-9	2.8	7

5	HDS of benzothiophene and dihydrobenzothiophene over sulfided Mo/Al2O3. *Applied Catalysis A: General*, **2008**, 350, 191-196	5.1	22
4	Hydrodenitrogenation of 2-methylpyridine and its intermediates 2-methylpiperidine and tetrahydro-methylpyridine over sulfided NiMo/Al2O3. *Journal of Catalysis*, **2007**, 251, 295-306	7.3	8
3	New Approach to the Synthesis of Bulk and Supported Bimetallic Molybdenum Nitrides. *Chemistry of Materials*, **2005**, 17, 3262-3267	9.6	39
2	A novel Ni2Mo3N/MCM41 catalyst for the hydrogenation of aromatics. *Catalysis Letters*, **2005**, 100, 73-77	2.8	11
1	Fast Pyrolysis and Hydrotreating: 2015 State of Technology R&D and Projections to 2017		4