Jungho Jae

List of Publications by Year
in descending order

96 papers	6,998 citations	57631 44 h-index	58464 82 g-index
97 all docs	97 docs citations	97 times ranked	5441 citing authors

#	Article	IF	Citations
1	Investigation into the shape selectivity of zeolite catalysts for biomass conversion. Journal of Catalysis, 2011, 279, 257-268.	3.1	963
2	Production of green aromatics and olefins by catalytic fast pyrolysis of wood sawdust. Energy and Environmental Science, 2011, 4, 145-161.	15.6	507
3	Optimizing the aromatic yield and distribution from catalytic fast pyrolysis of biomass over ZSM-5. Applied Catalysis A: General, 2012, 423-424, 154-161.	2.2	354
4	Production of Renewable Aromatic Compounds by Catalytic Fast Pyrolysis of Lignocellulosic Biomass with Bifunctional Ga/ZSMâ€5 Catalysts. Angewandte Chemie - International Edition, 2012, 51, 1387-1390.	7.2	338
5	Production of Dimethylfuran from Hydroxymethylfurfural through Catalytic Transfer Hydrogenation with Ruthenium Supported on Carbon. ChemSusChem, 2013, 6, 1158-1162.	3.6	247
6	Recent advances in catalytic co-pyrolysis of biomass and plastic waste for the production of petroleum-like hydrocarbons. Bioresource Technology, 2020, 310, 123473.	4.8	199
7	Overview of the recent advances in lignocellulose liquefaction for producing biofuels, bio-based materials and chemicals. Bioresource Technology, 2019, 279, 373-384.	4.8	175
8	Catalytic fast pyrolysis of lignocellulosic biomass in a process development unit with continual catalyst addition and removal. Chemical Engineering Science, 2014, 108, 33-46.	1.9	158
9	Depolymerization of lignocellulosic biomass to fuel precursors: maximizing carbon efficiency by combining hydrolysis with pyrolysis. Energy and Environmental Science, 2010, 3, 358.	15.6	157
10	Heteropolyacid supported on Zr-Beta zeolite as an active catalyst for one-pot transformation of furfural to Î³-valerolactone. Applied Catalysis B: Environmental, 2019, 241, 588-597.	10.8	153
11	Recent progress in the thermal and catalytic conversion of lignin. Renewable and Sustainable Energy Reviews, 2019, 111, 422-441.	8.2	141
12	The Role of Ru and RuO₂ in the Catalytic Transfer Hydrogenation of 5â€Hydroxymethylfurfural for the Production of 2,5â€Dimethylfuran. ChemCatChem, 2014, 6, 848-856.	1.8	136
13	Catalytic Hydrodeoxygenation of Bio-oil Model Compounds over Pt/HY Catalyst. Scientific Reports, 2016, 6, 28765.	1.6	133
14	Catalytic co-pyrolysis of torrefied yellow poplar and high-density polyethylene using microporous HZSM-5 and mesoporous Al-MCM-41 catalysts. Energy Conversion and Management, 2017, 149, 966-973.	4.4	119
15	Catalytic Copyrolysis of Cellulose and Thermoplastics over HZSM-5 and HY. ACS Sustainable Chemistry and Engineering, 2016, 4, 1354-1363.	3.2	113
16	Production of Î³-valerolactone from furfural by a single-step process using Sn-Al-Beta zeolites: Optimizing the catalyst acid properties and process conditions. Journal of Industrial and Engineering Chemistry, 2016, 40, 62-71.	2.9	110
17	Cascade of Liquidâ€Phase Catalytic Transfer Hydrogenation and Etherification of 5â€Hydroxymethylfurfural to Potential Biodiesel Components over Lewis Acid Zeolites. ChemCatChem, 2014, 6, 508-513.	1.8	104
18	In-situ and ex-situ catalytic pyrolysis/co-pyrolysis of empty fruit bunches using mesostructured aluminosilicate catalysts. Chemical Engineering Journal, 2019, 366, 330-338.	6.6	84

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19	In-situ catalytic pyrolysis of lignin in a bench-scale fixed bed pyrolyzer. Journal of Industrial and Engineering Chemistry, 2017, 54, 447-453.	2.9	83
20	Effective depolymerization of concentrated acid hydrolysis lignin using a carbon-supported ruthenium catalyst in ethanol/formic acid media. Bioresource Technology, 2017, 234, 424-431.	4.8	79
21	Efficient depolymerization of lignin in supercritical ethanol by a combination of metal and base catalysts. Journal of Industrial and Engineering Chemistry, 2018, 57, 45-54.	2.9	79
22	Catalytic transfer hydrogenation/hydrogenolysis of guaiacol to cyclohexane over bimetallic RuRe/C catalysts. Catalysis Communications, 2016, 86, 113-118.	1.6	78
23	Catalytic pyrolysis of lignin using a two-stage fixed bed reactor comprised of in-situ natural zeolite and ex-situ HZSM-5. Journal of Analytical and Applied Pyrolysis, 2016, 122, 282-288.	2.6	74
24	Effective hydrodeoxygenation of lignin-derived phenols using bimetallic RuRe catalysts: Effect of carbon supports. Catalysis Today, 2018, 303, 191-199.	2.2	71
25	Global bioenergy potential from high-lignin agricultural residue. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4014-4019.	3.3	66
26	Bench scale catalytic fast pyrolysis of empty fruit bunches over low cost catalysts and HZSM-5 using a fixed bed reactor. Journal of Cleaner Production, 2018, 176, 298-303.	4.6	66
27	Production of value-added aromatics from wasted COVID-19 mask via catalytic pyrolysis. Environmental Pollution, 2021, 283, 117060.	3.7	66
28	Production of aromatic hydrocarbons via catalytic co-pyrolysis of torrefied cellulose and polypropylene. Energy Conversion and Management, 2016, 129, 81-88.	4.4	63
29	Hydro- and solvothermolysis of kraft lignin for maximizing production of monomeric aromatic chemicals. Bioresource Technology, 2016, 203, 142-149.	4.8	63
30	Catalytic pyrolysis of lignin for the production of aromatic hydrocarbons: Effect of magnesium oxide catalyst. Energy, 2019, 179, 669-675.	4.5	63
31	Pyrolysis and catalytic upgrading of Citrus unshiu peel. Bioresource Technology, 2015, 194, 312-319.	4.8	60
32	Production of renewable p-xylene from 2,5-dimethylfuran via Dielsâ€“Alder cycloaddition and dehydrative aromatization reactions over silicaâˆ’alumina aerogel catalysts. Catalysis Communications, 2015, 70, 12-16.	1.6	60
33	Investigation into the lignin decomposition mechanism by analysis of the pyrolysis product of Pinus radiata. Bioresource Technology, 2016, 219, 371-377.	4.8	59
34	Mild hydrodeoxygenation of phenolic lignin model compounds over a FeReO_x/ZrO₂ catalyst: zirconia and rhenium oxide as efficient dehydration promoters. Green Chemistry, 2018, 20, 1472-1483.	4.6	59
35	Catalytic co-pyrolysis of yellow poplar wood and polyethylene terephthalate over two stage calcium oxide-ZSM-5. Applied Energy, 2019, 250, 1706-1718.	5.1	58
36	Ex-situ catalytic pyrolysis of citrus fruit peels over mesoporous MFI and Al-MCM-41. Energy Conversion and Management, 2016, 125, 277-289.	4.4	56

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37	Production of renewable toluene from biomass-derived furans via Diels-Alder and dehydration reactions: A comparative study of Lewis acid catalysts. Fuel, 2016, 182, 588-596.	3.4	55
38	In-situ catalytic copyrolysis of cellulose and polypropylene over desilicated ZSM-5. Catalysis Today, 2017, 293-294, 151-158.	2.2	53
39	Catalytic fast pyrolysis of wood plastic composite over microporous zeolites. Chemical Engineering Journal, 2019, 377, 119742.	6.6	53
40	Catalytic pyrolysis of wood polymer composites over hierarchical mesoporous zeolites. Energy Conversion and Management, 2019, 195, 727-737.	4.4	52
41	Enhanced stability of bio-oil and diesel fuel emulsion using Span 80 and Tween 60 emulsifiers. Journal of Environmental Management, 2019, 231, 694-700.	3.8	52
42	Insight into the effect of metal and support for mild hydrodeoxygenation of lignin-derived phenolics to BTX aromatics. Chemical Engineering Journal, 2019, 377, 120121.	6.6	51
43	Catalytic co-pyrolysis of cellulose and linear low-density polyethylene over MgO-impregnated catalysts with different acid-base properties. Chemical Engineering Journal, 2019, 373, 375-381.	6.6	50
44	Hydrodeoxygenation of guaiacol on tungstated zirconia supported Ru catalysts. Applied Catalysis A: General, 2017, 543, 10-16.	2.2	49
45	In-situ catalytic co-pyrolysis of yellow poplar and high-density polyethylene over mesoporous catalysts. Energy Conversion and Management, 2017, 151, 116-122.	4.4	46
46	Enhancement of aromatics from catalytic pyrolysis of yellow poplar: Role of hydrogen and methane decomposition. Bioresource Technology, 2020, 315, 123835.	4.8	46
47	Oxidative Coupling of Methane Using Mg/Ti-Doped SiO₂-Supported Na₂WO₄/Mn Catalysts. ACS Sustainable Chemistry and Engineering, 2017, 5, 3667-3674.	3.2	44
48	Heteropolyacid catalysts for Diels-Alder cycloaddition of 2,5-dimethylfuran and ethylene to renewable p -xylene. Catalysis Today, 2017, 293-294, 167-175.	2.2	44
49	Catalytic co-pyrolysis of biomass carbohydrates with LLDPE over Al-SBA-15 and mesoporous ZSM-5. Catalysis Today, 2017, 298, 46-52.	2.2	44
50	Catalytic co-pyrolysis of epoxy-printed circuit board and plastics over HZSM-5 and HY. Journal of Cleaner Production, 2017, 168, 366-374.	4.6	42
51	Production of phenolic hydrocarbons using catalytic depolymerization of empty fruit bunch (EFB)-derived organosolv lignin on HÎ^{2}-supported Ru. Chemical Engineering Journal, 2017, 309, 187-196.	6.6	42
52	Effects of metal or metal oxide additives on oxidative coupling of methane using Na2WO4/SiO2 catalysts: Reducibility of metal additives to manipulate the catalytic activity. Applied Catalysis A: General, 2018, 562, 114-119.	2.2	39
53	Co-feeding effect of waste plastic films on the catalytic pyrolysis of Quercus variabilis over microporous HZSM-5 and HY catalysts. Chemical Engineering Journal, 2019, 378, 122151.	6.6	38
54	Pd/C catalyzed transfer hydrogenation of pyrolysis oil using 2-propanol as hydrogen source. Chemical Engineering Journal, 2019, 377, 119986.	6.6	38

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55	Catalytic copyrolysis of torrefied cork oak and high density polyethylene over a mesoporous HY catalyst. Catalysis Today, 2018, 307, 301-307.	2.2	37
56	Suppressed char agglomeration by rotary kiln reactor with alumina ball during the pyrolysis of Kraft lignin. Journal of Industrial and Engineering Chemistry, 2018, 66, 72-77.	2.9	35
57	Two-step continuous upgrading of sawdust pyrolysis oil to deoxygenated hydrocarbons using hydrotreating and hydrodeoxygenating catalysts. Catalysis Today, 2018, 303, 130-135.	2.2	34
58	Continuous pyrolysis of organosolv lignin and application of biochar on gasification of high density polyethylene. Applied Energy, 2019, 255, 113801.	5.1	34
59	High-quality and phenolic monomer-rich bio-oil production from lignin in supercritical ethanol over synergistic Ru and Mg-Zr-oxide catalysts. Chemical Engineering Journal, 2020, 396, 125175.	6.6	34
60	Catalytic fast co-pyrolysis of organosolv lignin and polypropylene over in-situ red mud and ex-situ HZSM-5 in two-step catalytic micro reactor. Applied Surface Science, 2020, 511, 145521.	3.1	34
61	Upgrading of sawdust pyrolysis oil to hydrocarbon fuels using tungstate-zirconia-supported Ru catalysts with less formation of cokes. Journal of Industrial and Engineering Chemistry, 2017, 56, 74-81.	2.9	31
62	Catalytic hydrodeoxygenation of Geodae-Uksae pyrolysis oil over Ni/desilicated HZSM-5. Journal of Cleaner Production, 2018, 174, 763-770.	4.6	30
63	Production of phenolic hydrocarbons from organosolv lignin and lignocellulose feedstocks of hardwood, softwood, grass and agricultural waste. Journal of Industrial and Engineering Chemistry, 2019, 69, 304-314.	2.9	27
64	One-pot catalytic reaction to produce high-carbon-number dimeric deoxygenated hydrocarbons from lignin-derived monophenyl vanillin using Al 2 O 3 -cogelled Ru nanoparticles. Applied Catalysis A: General, 2016, 524, 243-250.	2.2	26
65	Production of bio-oil with reduced polycyclic aromatic hydrocarbons via continuous pyrolysis of biobutanol process derived waste lignin. Journal of Hazardous Materials, 2020, 384, 121231.	6.5	25
66	Effect of methane co-feeding on product selectivity of catalytic pyrolysis of biomass. Catalysis Today, 2018, 303, 200-206.	2.2	22
67	Production of deoxygenated high carbon number hydrocarbons from furan condensates: Hydrodeoxygenation of biomass-based oxygenates. Chemical Engineering Journal, 2019, 377, 119985.	6.6	21
68	Hydrothermal Liquefaction of Concentrated Acid Hydrolysis Lignin in a Bench-Scale Continuous Stirred Tank Reactor. Energy & Fuels, 2019, 33, 6421-6428.	2.5	20
69	Pd/C-CaO-catalyzed Î±-alkylation and hydrodeoxygenation of an acetone-butanol-ethanol mixture for biogasoline synthesis. Chemical Engineering Journal, 2017, 313, 1486-1493.	6.6	19
70	Production of an upgraded lignin-derived bio-oil using the clay catalysts of bentonite and olivine and the spent FCC in a bench-scale fixed bed pyrolyzer. Environmental Research, 2019, 172, 658-664.	3.7	19
71	Reversible absorption of SO2 with alkyl-anilines: The effects of alkyl group on aniline and water. Journal of Industrial and Engineering Chemistry, 2019, 69, 338-344.	2.9	18
72	Valorization of rice husk to aromatics via thermocatalytic conversion in the presence of decomposed methane. Chemical Engineering Journal, 2021, 417, 129264.	6.6	18

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73	The use of calcined seashell for the prevention of char foaming/agglomeration and the production of high-quality oil during the pyrolysis of lignin. Renewable Energy, 2019, 144, 147-152.	4.3	17
74	Condensation of pentose-derived furan compounds to C15 fuel precursors using supported phosphotungstic acid catalysts: Strategy for designing heterogeneous acid catalysts based on the acid strength and pore structures. Applied Catalysis A: General, 2019, 570, 238-244.	2.2	17
75	Increased aromatics production by co-feeding waste oil sludge to the catalytic pyrolysis of cellulose. Energy, 2022, 239, 122331.	4.5	17
76	Pt black catalyzed methane oxidation to methyl bisulfate in H2SO4-SO3. Journal of Catalysis, 2019, 374, 230-236.	3.1	16
77	Effect of surface properties of TiO₂ on the performance of Pt/TiO₂ catalysts for furfural hydrogenation. RSC Advances, 2021, 12, 860-868.	1.7	16
78	Improved activity of a CaCO3-supported Ru catalyst for the hydrodeoxygenation of eugenol as a model lignin-derived phenolic compound. Catalysis Communications, 2019, 127, 45-50.	1.6	15
79	Diels-Alder cycloaddition of oxidized furans and ethylene over supported heteropolyacid catalysts for renewable terephthalic acid. Catalysis Today, 2020, 351, 37-43.	2.2	14
80	Direct conversion of lignin to high-quality biofuels by carbon dioxide-assisted hydrolysis combined with transfer hydrogenolysis over supported ruthenium catalysts. Energy Conversion and Management, 2022, 261, 115607.	4.4	14
81	Bimetallic <scp>Niâ€Re</scp> catalysts for the efficient hydrodeoxygenation of biomassâ€derived phenols. International Journal of Energy Research, 2021, 45, 16349-16361.	2.2	13
82	Hydrolysis of ionic cellulose to glucose. Bioresource Technology, 2014, 167, 484-489.	4.8	12
83	Acetaldehyde removal and increased H2/CO gas yield from biomass gasification over metal-loaded Kraft lignin char catalyst. Journal of Environmental Management, 2019, 232, 330-335.	3.8	12
84	Effect of the two-stage process comprised of ether extraction and supercritical hydrodeoxygenation on pyrolysis oil upgrading. Chemical Engineering Journal, 2021, 404, 126531.	6.6	12
85	Valorization of furniture industry-processed residue via catalytic pyrolysis with methane. Energy Conversion and Management, 2022, 261, 115652.	4.4	12
86	Enhancement of bioaromatics production from food waste through catalytic pyrolysis over Zn and Mo-loaded HZSM-5 under an environment of decomposed methane. Chemical Engineering Journal, 2022, 446, 137215.	6.6	12
87	Catalytic copyrolysis of cork oak and bio-oil distillation residue. Applied Surface Science, 2018, 429, 95-101.	3.1	11
88	Investigation of the activity and selectivity of supported rhenium catalysts for the hydrodeoxygenation of 2-methoxyphenol. Catalysis Today, 2021, 375, 164-173.	2.2	11
89	Catalytic co-conversion of Kraft lignin and linear low-density polyethylene over mesoZSM-5 and Al-SBA-15 catalysts. Catalysis Today, 2020, 355, 246-251.	2.2	10
90	Catalytic upgrading of Quercus Mongolica under methane environment to obtain high yield of bioaromatics. Environmental Pollution, 2021, 272, 116016.	3.7	10

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91	Catalytic pyrolysis of chicken manure over various catalysts. Fuel, 2022, 322, 124241.	3.4	10
92	Emulsification characteristics of ether extracted pyrolysis-oil in diesel using various combinations of emulsifiers (Span 80, Atlox 4916 and Zephrym PD3315) in double reactor system. Environmental Research, 2020, 184, 109267.	3.7	9
93	Increased CODH activity in a bioelectrochemical system improves microbial electrosynthesis with CO. Sustainable Energy and Fuels, 2020, 4, 5952-5957.	2.5	8
94	Dielsâ€"Alder Cycloaddition of Biomass-Derived 2,5-Dimethylfuran and Ethylene over Sulfated and Phosphated Metal Oxides for Renewable p-Xylene. Catalysts, 2021, 11, 1074.	1.6	8
95	Enhanced bioaromatics synthesis via catalytic co-pyrolysis of cellulose and spent coffee ground over microporous HZSM-5 and HY. Environmental Research, 2020, 184, 109311.	3.7	6
96	The effect of NaOH treatment of rice husk on its catalytic fast pyrolysis under decomposed methane for the production of aromatics. Catalysis Today, 2021, , .	2.2	0