Qiang Lu

List of Publications by Year
in descending order

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211 papers	7,633 citations	61984 43 h-index	69250 77 g-index
215 all docs	215 docs citations	215 times ranked	5106 citing authors

#	Article	IF	Citations
1	Overview of fuel properties of biomass fast pyrolysis oils. Energy Conversion and Management, 2009, 50, 1376-1383.	9.2	683
2	Influence of pyrolysis temperature and time on the cellulose fast pyrolysis products: Analytical Py-GC/MS study. Journal of Analytical and Applied Pyrolysis, 2011, 92, 430-438.	5.5	332
3	Catalytic Upgrading of Biomass Fast Pyrolysis Vapors with Nano Metal Oxides: An Analytical Py-GC/MS Study. Energies, 2010, 3, 1805-1820.	3.1	253
4	Analysis on chemical and physical properties of bio-oil pyrolyzed from rice husk. Journal of Analytical and Applied Pyrolysis, 2008, 82, 191-198.	5.5	244
5	Study on pyrolysis behaviors of non-woody lignins with TG-FTIR and Py-GC/MS. Journal of Analytical and Applied Pyrolysis, 2015, 113, 499-507.	5.5	193
6	Characteristics and mechanism study of analytical fast pyrolysis of poplar wood. Energy Conversion and Management, 2012, 57, 49-59.	9.2	180
7	Catalytic upgrading of biomass fast pyrolysis vapors with titania and zirconia/titania based catalysts. Fuel, 2010, 89, 2096-2103.	6.4	175
8	Catalytic pyrolysis of cellulose with sulfated metal oxides: A promising method for obtaining high yield of light furan compounds. Bioresource Technology, 2009, 100, 4871-4876.	9.6	174
9	One Step Bio-Oil Upgrading through Hydrotreatment, Esterification, and Cracking. Industrial & Engineering Chemistry Research, 2009, 48, 6923-6929.	3.7	166
10	Selective fast pyrolysis of biomass impregnated with ZnCl2 to produce furfural: Analytical Py-GC/MS study. Journal of Analytical and Applied Pyrolysis, 2011, 90, 204-212.	5.5	160
11	Catalytic pyrolysis of lignocellulosic biomass: A review of variations in process factors and system structure. Renewable and Sustainable Energy Reviews, 2020, 134, 110305.	16.4	126
12	Catalytic Pyrolysis of Biomass and Polymer Wastes. Catalysts, 2018, 8, 659.	3.5	113
13	Catalytic fast pyrolysis of cellulose and biomass to produce levoglucosenone using magnetic SO42â˜/TiO2â€“Fe3O4. Bioresource Technology, 2014, 171, 10-15.	9.6	111
14	Catalytic fast pyrolysis of biomass impregnated with K3PO4 to produce phenolic compounds: Analytical Py-GC/MS study. Journal of Analytical and Applied Pyrolysis, 2013, 104, 139-145.	5.5	107
15	Catalytic Fast Pyrolysis of Cellulose and Biomass to Selectively Produce Levoglucosenone Using Activated Carbon Catalyst. ACS Sustainable Chemistry and Engineering, 2017, 5, 10815-10825.	6.7	105
16	Catalytic fast pyrolysis of biomass with noble metal-like catalysts to produce high-grade bio-oil: Analytical Py-GC/MS study. Catalysis Today, 2018, 302, 169-179.	4.4	100
17	Catalytic Fast Pyrolysis of Cellulose to Prepare Levoglucosenone Using Sulfated Zirconia. ChemSusChem, 2011, 4, 79-84.	6.8	95
18	Selective fast pyrolysis of biomass impregnated with ZnCl2: Furfural production together with acetic acid and activated carbon as by-products. Journal of Analytical and Applied Pyrolysis, 2011, 91, 273-279.	5.5	92

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19	Catalytic Upgrading of Biomass Fast Pyrolysis Vapors with Pd/SBA-15 Catalysts. Industrial & Engineering Chemistry Research, 2010, 49, 2573-2580.	3.7	91
20	Recent Progress in Quantum Chemistry Modeling on the Pyrolysis Mechanisms of Lignocellulosic Biomass. Energy & Fuels, 2020, 34, 10384-10440.	5.1	91
21	Highly efficient conversion of Kraft lignin into liquid fuels with a Co-Zn-beta zeolite catalyst. Applied Catalysis B: Environmental, 2020, 268, 118429.	20.2	85
22	Selective Production of Levoglucosenone from Catalytic Fast Pyrolysis of Biomass Mechanically Mixed with Solid Phosphoric Acid Catalysts. Bioenergy Research, 2015, 8, 1263-1274.	3.9	75
23	Catalytic Steam Reforming of Toluene as a Model Compound of Biomass Gasification Tar Using Ni-CeO2/SBA-15 Catalysts. Energies, 2013, 6, 3284-3296.	3.1	72
24	Mechanism of cellulose fast pyrolysis: The role of characteristic chain ends and dehydrated units. Combustion and Flame, 2018, 198, 267-277.	5.2	72
25	Production of phenolic-rich bio-oil from catalytic fast pyrolysis of biomass using magnetic solid base catalyst. Energy Conversion and Management, 2015, 106, 1309-1317.	9.2	70
26	The mechanism for the formation of levoglucosenone during pyrolysis of Î²-d-glucopyranose and cellobiose: A density functional theory study. Journal of Analytical and Applied Pyrolysis, 2014, 110, 34-43.	5.5	68
27	Selective preparation of monocyclic aromatic hydrocarbons from catalytic cracking of biomass fast pyrolysis vapors over Mo 2 N/HZSM-5 catalyst. Fuel Processing Technology, 2018, 173, 134-142.	7.2	65
28	Pyrolysis mechanism of glucose and mannose: The formation of 5-hydroxymethyl furfural and furfural. Journal of Energy Chemistry, 2018, 27, 486-501.	12.9	65
29	Pyrolysis mechanism of holocellulose-based monosaccharides: The formation of hydroxyacetaldehyde. Journal of Analytical and Applied Pyrolysis, 2016, 120, 15-26.	5.5	63
30	Improved production and quality of biocrude oil from low-lipid high-ash macroalgae Enteromorpha prolifera via addition of crude glycerol. Journal of Cleaner Production, 2017, 142, 749-757.	9.3	61
31	Formation mechanism of HCN and NH3 during indole pyrolysis: A theoretical DFT study. Journal of the Energy Institute, 2020, 93, 649-657.	5.3	60
32	Pyrolysis mechanism of Î² O 4 type lignin model dimer. Journal of Analytical and Applied Pyrolysis, 2015, 115, 103-111.	5.5	59
33	Upgrading of Rice Husk by Torrefaction and its Influence on the Fuel Properties. BioResources, 2014, 9, .	1.0	57
34	Insight into the formation mechanism of levoglucosenone in phosphoric acid-catalyzed fast pyrolysis of cellulose. Journal of Energy Chemistry, 2020, 43, 78-89.	12.9	54
35	Density functional theory study on activity of Î±-Fe2O3 in chemical-looping combustion system. Applied Surface Science, 2011, 257, 8647-8652.	6.1	53
36	Selective production of monocyclic aromatic hydrocarbons from ex situ catalytic fast pyrolysis of pine over the HZSM-5 catalyst with calcium formate as a hydrogen source. Sustainable Energy and Fuels, 2020, 4, 538-548.	4.9	51

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37	Corrosion properties of bio-oil and its emulsions with diesel. Science Bulletin, 2008, 53, 3726-3734.	1.7	50
38	Catalytic Fast Pyrolysis of Bagasse Using Activated Carbon Catalyst to Selectively Produce 4-Ethyl Phenol. Energy & Fuels, 2016, 30, 10618-10626.	5.1	50
39	Intermolecular interaction mechanism of lignin pyrolysis: A joint theoretical and experimental study. Fuel, 2018, 215, 386-394.	6.4	49
40	Deactivation Mechanism of the Commercial V₂O₅â€“MoO₃/TiO₂ Selective Catalytic Reduction Catalyst by Arsenic Poisoning in Coal-Fired Power Plants. Energy & Fuels, 2020, 34, 4865-4873.	5.1	48
41	Selective Production of 4-Vinylphenol by Fast Pyrolysis of Herbaceous Biomass. Industrial & Engineering Chemistry Research, 2013, 52, 12771-12776.	3.7	47
42	On-line catalytic upgrading of biomass fast pyrolysis products. Science Bulletin, 2009, 54, 1941-1948.	9.0	46
43	Direct conversion of cellulose and raw biomass to acetonitrile by catalytic fast pyrolysis in ammonia. Green Chemistry, 2019, 21, 812-820.	9.0	46
44	Selective preparation of monocyclic aromatic hydrocarbons from ex-situ catalytic fast pyrolysis of pine over Ti(SO4)2-Mo2N/HZSM-5 catalyst. Fuel, 2019, 243, 88-96.	6.4	45
45	Catalytic mechanism of sulfuric acid in cellulose pyrolysis: A combined experimental and computational investigation. Journal of Analytical and Applied Pyrolysis, 2018, 134, 183-194.	5.5	44
46	Thermal behaviour, kinetics and fast pyrolysis of Cynodon dactylon grass using Py-GC/MS and Py-FTIR analyser. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104887.	5.5	44
47	A novel interaction mechanism in lignin pyrolysis: Phenolics-assisted hydrogen transfer for the decomposition of the Î²-O-4 linkage. Combustion and Flame, 2021, 225, 395-405.	5.2	44
48	Mechanism insight into the fast pyrolysis of xylose, xylobiose and xylan by combined theoretical and experimental approaches. Combustion and Flame, 2019, 206, 177-188.	5.2	42
49	Valorization of lignin into phenolic compounds via fast pyrolysis: Impact of lignin structure. Fuel, 2022, 319, 123758.	6.4	42
50	Effects of electric current upon catalytic steam reforming of biomass gasification tar model compounds to syngas. Energy Conversion and Management, 2015, 100, 56-63.	9.2	41
51	Highly efficient catalytic conversion of cellulose into acetol over Niâ€“Sn supported on nanosilica and the mechanism study. Green Chemistry, 2019, 21, 5647-5656.	9.0	41
52	Sketching Pakistan's energy dynamics: Prospects of biomass energy. Journal of Renewable and Sustainable Energy, 2018, 10, .	2.0	40
53	Catalytic fast pyrolysis of biomass with Ni-P-MCM-41 to selectively produce levoglucosenone. Journal of Analytical and Applied Pyrolysis, 2020, 148, 104824.	5.5	38
54	Direct catalytic decomposition of N2O over bismuth modified NiO catalysts. Journal of Hazardous Materials, 2021, 401, 123334.	12.4	38

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55	Effects of gaseous agents on the evolution of char physical and chemical structures during biomass gasification. Bioresource Technology, 2019, 292, 121994.	9.6	37
56	Effects of Se and SeO2 on the denitrification performance of V2O5-WO3/TiO2 SCR catalyst. Applied Catalysis A: General, 2019, 587, 117263.	4.3	37
57	Mechanism study on the effect of alkali metal ions on the formation of HCN as NOx precursor during coal pyrolysis. Journal of the Energy Institute, 2019, 92, 604-612.	5.3	37
58	Monocyclic aromatic hydrocarbons production from catalytic cracking of pine wood-derived pyrolytic vapors over Ce-Mo2N/HZSM-5 catalyst. Science of the Total Environment, 2018, 634, 141-149.	8.0	36
59	Fast pyrolysis of biomass catalyzed by magnetic solid base catalyst in a hydrogen atmosphere for selective production of phenol. Industrial Crops and Products, 2019, 137, 495-500.	5.2	36
60	Structures and pyrolytic characteristics of organosolv lignins from typical softwood, hardwood and herbaceous biomass. Industrial Crops and Products, 2021, 171, 113912.	5.2	35
61	Deep reduction behavior of iron oxide and its effect on direct CO oxidation. Applied Surface Science, 2012, 258, 2562-2569.	6.1	34
62	Pyrolysis mechanism of a Î²-O-4 type lignin dimer model compound. Journal of Thermal Analysis and Calorimetry, 2016, 123, 501-510.	3.6	34
63	Temperature and emissivity measurements from combustion of pine wood, rice husk and fir wood using flame emission spectrum. Fuel Processing Technology, 2020, 204, 106423.	7.2	34
64	Migration and transformation of lead species over CaO surface in municipal solid waste incineration fly Ash: A DFT study. Waste Management, 2021, 120, 59-67.	7.4	34
65	Formation mechanism of hydroxyacetone in glucose pyrolysis: A combined experimental and theoreticalÂstudy. Proceedings of the Combustion Institute, 2019, 37, 2741-2748.	3.9	32
66	Inhibition effects of Pb species on the V2O5-MoO3/TiO2 catalyst for selective catalytic reduction of NO with NH3: A DFT supported experimental study. Applied Surface Science, 2020, 525, 146582.	6.1	32
67	Gas-phase total oxidation of nitric oxide using hydrogen peroxide vapor over Pt/TiO2. Applied Surface Science, 2018, 457, 821-830.	6.1	31
68	Selective production of 4-ethyl phenol from low-temperature catalytic fast pyrolysis of herbaceous biomass. Journal of Analytical and Applied Pyrolysis, 2015, 115, 307-315.	5.5	30
69	A Comprehensive Study on Pyrolysis Mechanism of Substituted Î²-O-4 Type Lignin Dimers. International Journal of Molecular Sciences, 2017, 18, 2364.	4.1	30
70	Catalytic Upgrading of Biomass Fast Pyrolysis Vapors Using Ordered Mesoporous ZrO2, TiO2 and SiO2. Energy Procedia, 2014, 61, 1937-1941.	1.8	29
71	Pyrolysis characteristics of poplar sawdust by pretreatment of anaerobic fermentation. Industrial Crops and Products, 2018, 125, 596-601.	5.2	28
72	Formation mechanism of NO precursors during the pyrolysis of 2,5-diketopiperazine based on experimental and theoretical study. Science of the Total Environment, 2021, 801, 149663.	8.0	28

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73	Mechanism of Mercury Adsorption and Oxidation by Oxygen over the CeO2 (111) Surface: A DFT Study. Materials, 2018, 11, 485.	2.9	27
74	Effects of biopretreatment on pyrolysis behaviors of corn stalk by methanogen. Bioresource Technology, 2014, 164, 416-419.	9.6	26
75	Effect of WO3 doping on the mechanism of mercury oxidation by HCl over V2O5/TiO2 (001) surface: Periodic density functional theory study. Applied Surface Science, 2019, 487, 369-378.	6.1	26
76	Electro-catalytic steam reforming of methane over Ni-CeO2/Î³-Al2O3-MgO catalyst. Fuel Processing Technology, 2019, 192, 57-64.	7.2	26
77	Catalytic fast pyrolysis of sugarcane bagasse using activated carbon catalyst in a hydrogen atmosphere to selectively produce 4-ethyl phenol. Journal of Analytical and Applied Pyrolysis, 2018, 136, 125-131.	5.5	25
78	Insight into the mechanism of secondary reactions in cellulose pyrolysis: interactions between levoglucosan and acetic acid. Cellulose, 2019, 26, 8279-8290.	4.9	25
79	Calcium formate assisted catalytic pyrolysis of pine for enhanced production of monocyclic aromatic hydrocarbons over bimetal-modified HZSM-5. Bioresource Technology, 2020, 315, 123805.	9.6	25
80	Effects of Alkali and Alkaline Earth Metals on N-Containing Species Release during Rice Straw Pyrolysis. Energies, 2015, 8, 13021-13032.	3.1	24
81	The performance of nickel-loaded lignite residue for steam reforming of toluene as the model compound of biomass gasification tar. Journal of the Energy Institute, 2018, 91, 867-876.	5.3	24
82	On the mechanism of xylan pyrolysis by combined experimental and computational approaches. Proceedings of the Combustion Institute, 2021, 38, 4215-4223.	3.9	24
83	Lubrication Properties of Bio-Oil and Its Emulsions with Diesel Oil. Energies, 2012, 5, 741-751.	3.1	23
84	Influence of alkaline hydrothermal pretreatment on shrub wood Tamarix ramosissima : Characteristics of degraded lignin. Biomass and Bioenergy, 2014, 68, 82-94.	5.7	23
85	Catalytic Fast Pyrolysis of Biomass Impregnated with Potassium Phosphate in a Hydrogen Atmosphere for the Production of Phenol and Activated Carbon. Frontiers in Chemistry, 2018, 6, 32.	3.6	23
86	Influence of inherent alkali metal chlorides on pyrolysis mechanism of a lignin model dimer based on DFT study. Journal of Thermal Analysis and Calorimetry, 2019, 137, 151-160.	3.6	23
87	Effects of radiation reabsorption on laminar NH3/H2/air flames. Combustion and Flame, 2022, 235, 111699.	5.2	23
88	Insight into the Formation of Anhydrosugars in Glucose Pyrolysis: A Joint Computational and Experimental Investigation. Energy & Fuels, 2017, 31, 8291-8299.	5.1	22
89	Fast pyrolysis product distribution of biopretreated corn stalk by methanogen. Bioresource Technology, 2014, 169, 812-815.	9.6	21
90	Effects of chemical inhomogeneity on pyrolysis behaviors of corn stalk fractions. Fuel, 2014, 129, 111-115.	6.4	21

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91	Catalytic Cracking of Biomass High-Temperature Pyrolysis Tar Using NiO/AC Catalysts. International Journal of Green Energy, 2015, 12, 773-779.	3.8	21
92	Selective production of nicotyrine from catalytic fast pyrolysis of tobacco biomass with Pd/C catalyst. Journal of Analytical and Applied Pyrolysis, 2016, 117, 88-93.	5.5	21
93	Regeneration of commercial SCR catalyst deactivated by arsenic poisoning in coal-fired power plants. Korean Journal of Chemical Engineering, 2019, 36, 377-384.	2.7	21
94	Catalytic oxidation of CO over V2O5/TiO2 and V2O5-WO3/TiO2 catalysts: A DFT study. Fuel Processing Technology, 2021, 213, 106678.	7.2	21
95	Effects of C2H2 and C2H4 radiation on soot formation in ethylene/air diffusion flames. Applied Thermal Engineering, 2021, 183, 116194.	6.0	21
96	Green and Moderate Activation of Coal Fly Ash and Its Application in Selective Catalytic Reduction of NO with NH₃. Environmental Science & Technology, 2022, 56, 2582-2592.	10.0	21
97	Characterization of the water-insoluble pyrolytic cellulose from cellulose pyrolysis oil. Journal of Analytical and Applied Pyrolysis, 2012, 97, 49-54.	5.5	20
98	Torrefaction of Rice Husk using TG-FTIR and its Effect on the Fuel Characteristics, Carbon, and Energy Yields. BioResources, 2014, 9, .	1.0	20
99	Comprehensively utilization of spent bleaching clay for producing high quality bio-fuel via fast pyrolysis process. Energy, 2020, 190, 116371.	8.8	20
100	Reaction mechanism of low-temperature fast pyrolysis of fructose to produce 5-hydroxymethyl furfural. Journal of Fuel Chemistry and Technology, 2013, 41, 1070-1076.	2.0	19
101	Interaction characteristics and mechanism in the fast co-pyrolysis of cellulose and lignin model compounds. Journal of Thermal Analysis and Calorimetry, 2017, 130, 975-984.	3.6	19
102	Investigation on the NO Removal from Simulated Flue Gas by Using H₂O₂ Vapor over Fe₂(MoO₄)₃. Energy & Fuels, 2018, 32, 8605-8613.	5.1	19
103	Catalytic fast pyrolysis of alkali-pretreated bagasse for selective preparation of 4-vinylphenol. Journal of Analytical and Applied Pyrolysis, 2019, 143, 104669.	5.5	19
104	Theoretical study of the effect of hydrogen radicals on the formation of HCN from pyrrole pyrolysis. Journal of the Energy Institute, 2019, 92, 1468-1475.	5.3	19
105	Interaction mechanism between cadmium species and SiO2 of municipal solid waste incineration fly ash: Effect of HCl. Chemical Engineering Journal, 2021, 425, 130604.	12.7	19
106	Fast and catalytic pyrolysis of xylan: Effects of temperature and M/HZSM-5 (M = Fe, Zn) catalysts on pyrolytic products. Frontiers of Energy and Power Engineering in China, 2010, 4, 424-429.	0.4	18
107	Selective production of 4-ethyl guaiacol from catalytic fast pyrolysis of softwood biomass using Pd/SBA-15 catalyst. Journal of Analytical and Applied Pyrolysis, 2017, 123, 237-243.	5.5	18
108	Mechanism of heterogeneous mercury oxidation by HCl on V2O5(001) surface. Current Applied Physics, 2018, 18, 626-632.	2.4	18

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109	Experiment and Modeling Study of Glucose Pyrolysis: Formation of 3-Hydroxy-Î³-butyrolactone and 3-(2H)-Furanone. Energy & Fuels, 2018, 32, 9519-9529.	5.1	18
110	Pyrolysis of Biomass Impregnated With Ammonium Dihydrogen Phosphate for Polygeneration of Phenol and Supercapacitor Electrode Material. Frontiers in Chemistry, 2020, 8, 436.	3.6	18
111	Selective preparation of 5-hydroxymethylfurfural by catalytic fast pyrolysis of cellulose over zirconium-tin mixed metal oxides. Journal of Analytical and Applied Pyrolysis, 2021, 155, 105103.	5.5	18
112	Research on the catalytic oxidation of Hg0 by modified SCR catalysts. Journal of Fuel Chemistry and Technology, 2015, 43, 628-634.	2.0	17
113	Effect of Sodium Oxides in Ash Composition on Ash Fusibility. Energy & Fuels, 0, , .	5.1	17
114	In-depth experimental study of pyrolysis characteristics of raw and cooking treated shrimp shell samples. Renewable Energy, 2019, 139, 730-738.	8.9	17
115	Selective preparation of 1-hydroxy-3,6-dioxabicyclo[3.2.1]octan-2-one by fast pyrolysis of cellulose catalyzed with metal-loaded nitrided HZSM-5. Bioresource Technology, 2020, 309, 123370.	9.6	17
116	Mechanism study on the formation of furfural during zinc chloride-catalyzed pyrolysis of xylose. Fuel, 2021, 295, 120656.	6.4	17
117	Hydroxyl-Assisted Hydrogen Transfer Interaction in Lignin Pyrolysis: An Extended Concerted Interaction Mechanism. Energy & Fuels, 2021, 35, 13170-13180.	5.1	17
118	A sustainable strategy for the production of 1,4:3,6-dianhydro-Î±-d-glucopyranose through oxalic acid-assisted fast pyrolysis of cellulose. Chemical Engineering Journal, 2022, 436, 135200.	12.7	17
119	Removal of NOX Using Hydrogen Peroxide Vapor over Fe/TiO2 Catalysts and an Absorption Technique. Catalysts, 2017, 7, 386.	3.5	16
120	Theoretical Investigation of the Formation Mechanism of NH3 and HCN during Pyrrole Pyrolysis: The Effect of H2O. Molecules, 2018, 23, 711.	3.8	16
121	Taming NO oxidation efficiency by Î³-MnO2 morphology regulation. Catalysis Science and Technology, 2020, 10, 5996-6005.	4.1	16
122	Overview of Bio-Oil Upgrading via Catalytic Cracking. Advanced Materials Research, 0, 827, 25-29.	0.3	15
123	Effects of radiation reabsorption on the laminar burning velocity of methane/air and methane/hydrogen/air flames at elevated pressures. Fuel, 2022, 311, 122586.	6.4	15
124	Effects of radiation reabsorption on the flame speed and NO emission of NH3/H2/air flames at various hydrogen ratios. Fuel, 2022, 327, 125176.	6.4	15
125	Pyrolytic characteristics of sweet potato vine. Bioresource Technology, 2015, 192, 799-801.	9.6	14
126	Pyrolysis characteristic changes of poplar wood during natural decay. Journal of Analytical and Applied Pyrolysis, 2017, 128, 257-260.	5.5	14

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127	Fast Pyrolysis of Corn Stalks at Different Growth Stages to Selectively Produce 4-Vinyl Phenol and 5-Hydroxymethyl Furfural. Waste and Biomass Valorization, 2019, 10, 3867-3878.	3.4	14
128	An improved full-spectrum correlated-k-distribution model for non-gray radiative heat transfer in combustion gas mixtures. International Communications in Heat and Mass Transfer, 2020, 114, 104566.	5.6	14
129	Design and evaluation of a novel system for the flue gas compression and purification from the oxy-fuel combustion process. Applied Energy, 2021, 285, 116388.	10.1	14
130	Catalytic pyrolysis of biomass impregnated with elements from steelmaking slag leaching and simultaneous fabrication of phosphorus adsorbent. Journal of Cleaner Production, 2021, 328, 129490.	9.3	14
131	Study on pyrolysis characteristics of red pepper stalks to analyze the changes of pyrolytic behaviors from xylophyta to herbage. Journal of Analytical and Applied Pyrolysis, 2016, 120, 330-333.	5.5	13
132	Density Functional Theory Study on Mechanism of Mercury Removal by CeO2 Modified Activated Carbon. Energies, 2018, 11, 2872.	3.1	13
133	Catalytic Mechanism of Calcium on the Formation of HCN during Pyrolysis of Pyrrole and Indole: A Theoretical Study. Energy & Fuels, 2019, 33, 11516-11523.	5.1	12
134	Comparative study of pyrolysis characteristics of bamboo powder and grape vine by anaerobic fermentation pretreatment. Journal of Analytical and Applied Pyrolysis, 2019, 140, 93-101.	5.5	12
135	Interaction between Acetic Acid and Glycerol: A Model for Secondary Reactions during Holocellulose Pyrolysis. Journal of Physical Chemistry A, 2019, 123, 674-681.	2.5	12
136	Interaction mechanism between Se species in flue gas and V2O5-MoO3/TiO2 catalyst: An in-depth experimental and theoretical study. Chemical Engineering Journal, 2020, 398, 125615.	12.7	12
137	Catalytic oxidation of NH3 over circulating ash in the selective non-catalytic reduction process during circulating fluidized bed combustion. Fuel, 2020, 271, 117546.	6.4	12
138	Theoretical insight into the interaction mechanism between V2O5/TiO2 (0 0 1) surface and arsenic oxides in flue gas. Applied Surface Science, 2021, 535, 147752.	6.1	12
139	Catalytic fast pyrolysis of walnut shell for alkylphenols production with nitrogen-doped activated carbon catalyst. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	6.0	12
140	Mechanism insight into the formation of H2S from thiophene pyrolysis: A theoretical study. Frontiers of Environmental Science and Engineering, 2021, 15, 1.	6.0	12
141	A theoretical investigation on the thermal decomposition of pyridine and the effect of H2O on the formation of NOx precursors. Frontiers of Chemical Science and Engineering, 2021, 15, 1217-1228.	4.4	12
142	Catalytic fast pyrolysis of cellulose for selective production of 1-hydroxy-3,6-dioxabicyclo[3.2.1]octan-2-one using nickel-tin layered double oxides. Industrial Crops and Products, 2021, 162, 113269.	5.2	12
143	Theoretical insights into the roles of active oxygen species in heterogeneous oxidation of CO over Mn/TiO2 catalyst. Applied Catalysis A: General, 2021, 616, 118104.	4.3	12
144	Selective Analytical Production of 1-Hydroxy-3,6-dioxabicyclo[3.2.1]octan-2-one from Catalytic Fast Pyrolysis of Cellulose with Zinc-Aluminium Layered Double Oxide Catalyst. BioResources, 2015, 10, .	1.0	12

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145	Production of Chemicals from Selective Fast Pyrolysis of Biomass. , 0, , .		11
146	Enhanced production of 4-ethyl phenol from activated carbon catalyzed fast pyrolysis of bagasse with 9,10-dihydroanthracene as a hydrogen donor. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104880.	5.5	11
147	Effect of WO3 and MoO3 doping on the interaction mechanism between arsenic oxide and V2O5-based SCR catalyst: A theoretical account. Molecular Catalysis, 2021, 499, 111317.	2.0	11
148	The oxalic acid-assisted fast pyrolysis of biomass for the sustainable production of furfural. Fuel, 2022, 322, 124279.	6.4	11
149	Gold nanoparticles incorporated mesoporous silica thin films of varied gold contents and their well-tuned third-order optical nonlinearities. Optical Materials, 2011, 33, 1266-1271.	3.6	10
150	First-principles insights into the adsorption and interaction mechanism of selenium on selective catalytic reduction catalyst. Chemosphere, 2021, 275, 130057.	8.2	10
151	Fast pyrolysis of bagasse catalyzed by mixed alkaline-earth metal oxides for the selective production of 4-vinylphenol. Journal of Analytical and Applied Pyrolysis, 2022, 164, 105531.	5.5	10
152	On the measurement of flame temperature and emissivity based on multispectral imaging technique. Measurement: Journal of the International Measurement Confederation, 2022, 196, 111272.	5.0	10
153	Selective Production of Phenolic-rich Bio-oil from Catalytic Fast Pyrolysis of Biomass: Comparison of K3PO4, K2HPO4, and KH2PO4. BioResources, 2014, 9, .	1.0	9
154	Pyrolytic behaviors of decocting residues of Rhodiola rosea. Journal of Analytical and Applied Pyrolysis, 2018, 129, 61-65.	5.5	9
155	Ex situ catalytic fast pyrolysis of soy sauce residue with HZSM-5 for co-production of aromatic hydrocarbons and supercapacitor materials. RSC Advances, 2020, 10, 23331-23340.	3.6	9
156	Numerical solutions of non-gray gases and particles radiative transfer in three-dimensional combustion system using DRESOR and SNBCK. International Journal of Thermal Sciences, 2021, 161, 106783.	4.9	9
157	Experimental Study on Oxy-Fuel Combustion and NO Emission in a Spouted-Fluidized Bed with under Bed Feeding. Journal of Thermal Science, 2021, 30, 1132-1140.	1.9	9
158	Mechanical insight into the formation of H2S from thiophene pyrolysis: The influence of H2O. Chemosphere, 2021, 279, 130628.	8.2	9
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