Kristiina Iisa

List of Publications by Year
in descending order

56	2,348	185998 28	214527 47
papers	citations	h-index	g-index

58	58	58	2277
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sulfation of Potassium Chloride at Combustion Conditions. Energy & Fuels, 1999, 13, 1184-1190.	2.5	142
2	Analysis of Oxygenated Compounds in Hydrotreated Biomass Fast Pyrolysis Oil Distillate Fractions. Energy & Fuels, 2011, 25, 5462-5471.	2.5	120
3	A kinetic study of gaseous alkali capture by kaolin in the fixed bed reactor equipped with an alkali detector. Fuel, 2005, 84, 169-175.	3.4	115
4	Real-time monitoring of the deactivation of HZSM-5 during upgrading of pine pyrolysis vapors. Green Chemistry, 2014, 16, 1444-1461.	4.6	112
5	In Situ and ex Situ Catalytic Pyrolysis of Pine in a Bench-Scale Fluidized Bed Reactor System. Energy & Fuels, 2016, 30, 2144-2157.	2.5	100
6	Driving towards cost-competitive biofuels through catalytic fast pyrolysis by rethinking catalyst selection and reactor configuration. Energy and Environmental Science, 2018, 11, 2904-2918.	15.6	95
7	Upgrading biomass pyrolysis vapors over Î²-zeolites: role of silica-to-alumina ratio. Green Chemistry, 2014, 16, 4891-4905.	4.6	91
8	Production of low-oxygen bio-oil via ex situ catalytic fast pyrolysis and hydrotreating. Fuel, 2017, 207, 413-422.	3.4	83
9	Production of ethanol from carbohydrates from loblolly pine: A technical and economic assessment. Bioresource Technology, 2008, 99, 5051-5057.	4.8	78
10	Hydrocarbon Liquid Production from Biomass via Hot-Vapor-Filtered Fast Pyrolysis and Catalytic Hydroprocessing of the Bio-oil. Energy & Fuels, 2014, 28, 5909-5917.	2.5	73
11	Catalytic fast pyrolysis of biomass: the reactions of water and aromatic intermediates produces phenols. Green Chemistry, 2015, 17, 4217-4227.	4.6	71
12	Limestone and dolomite as sulfur absorbents under pressurized gasification conditions. Fuel, 1996, 75, 89-95.	3.4	69
13	Co-production of ethanol and cellulose fiber from Southern Pine: A technical and economic assessment. Biomass and Bioenergy, 2008, 32, 1293-1302.	2.9	69
14	Influence of Crystal Allomorph and Crystallinity on the Products and Behavior of Cellulose during Fast Pyrolysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 4662-4674.	3.2	69
15	Effect of Temperature, Pressure, and Residence Time on Pyrolysis of Pine in an Entrained Flow Reactor. Energy & Fuels, 2014, 28, 5144-5157.	2.5	68
16	Kinetics of the Sulfation of NaCl at Combustion Conditions. Industrial & Engineering Chemistry Research, 1997, 36, 4212-4216.	1.8	62
17	Role of Biopolymers in the Deactivation of ZSM-5 during Catalytic Fast Pyrolysis of Biomass. ACS Sustainable Chemistry and Engineering, 2018, 6, 10030-10038.	3.2	62
18	Multiscale Evaluation of Catalytic Upgrading of Biomass Pyrolysis Vapors on Ni- and Ga-Modified ZSM-5. Energy & Fuels, 2016, 30, 9471-9479.	2.5	57

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19	Improving biomass pyrolysis economics by integrating vapor and liquid phase upgrading. Green Chemistry, 2018, 20, 567-582.	4.6	55
20	Capture of Potassium and Cadmium by Kaolin in Oxidizing and Reducing Atmospheres. Energy & Fuels, 2004, 18, 1870-1876.	2.5	47
21	Fractional condensation of pyrolysis vapors produced from Nordic feedstocks in cyclone pyrolysis. Journal of Analytical and Applied Pyrolysis, 2017, 123, 244-254.	2.6	46
22	Molybdenum incorporated mesoporous silica catalyst for production of biofuels and value-added chemicals via catalytic fast pyrolysis. Green Chemistry, 2015, 17, 3035-3046.	4.6	45
23	Deactivation of Multilayered MFI Nanosheet Zeolite during Upgrading of Biomass Pyrolysis Vapors. ACS Sustainable Chemistry and Engineering, 2017, 5, 5477-5484.	3.2	44
24	On the application of surface ionization detector for the study of alkali capture by kaolin in a fixed bed reactor. Fuel, 2004, 83, 807-812.	3.4	40
25	Comparison of SO2 capture capacities of limestones and dolomites under pressure. Fuel, 1995, 74, 395-400.	3.4	39
26	Pyrolysis of Woody Residue Feedstocks: Upgrading of Bio-oils from Mountain-Pine-Beetle-Killed Trees and Hog Fuel. Energy & Fuels, 2014, 28, 7510-7516.	2.5	38
27	Catalytic Pyrolysis of Pine Over HZSM-5 with Different Binders. Topics in Catalysis, 2016, 59, 94-108.	1.3	32
28	Catalytic fast pyrolysis with metal-modified ZSM-5 catalysts in inert and hydrogen atmospheres. Journal of Analytical and Applied Pyrolysis, 2018, 135, 199-208.	2.6	31
29	Evaluate Impact of Catalyst Type on Oil Yield and Hydrogen Consumption from Mild Hydrotreating. Energy & Fuels, 2014, 28, 3086-3095.	2.5	30
30	Ga/ZSM-5 catalyst improves hydrocarbon yields and increases alkene selectivity during catalytic fast pyrolysis of biomass with co-fed hydrogen. Green Chemistry, 2020, 22, 2403-2418.	4.6	26
31	Chemical characterization and water content determination of bio-oils obtained from various biomass species using31P NMR spectroscopy. Biofuels, 2012, 3, 123-128.	1.4	23
32	A perspective on biomass-derived biofuels: From catalyst design principles to fuel properties. Journal of Hazardous Materials, 2020, 400, 123198.	6.5	23
33	Chemical and physical characterization of aerosols from fast pyrolysis of biomass. Journal of Analytical and Applied Pyrolysis, 2019, 142, 104606.	2.6	22
34	Pressurized Stabilization of Desulfurization Residues from Gasification Processes. Energy & Fuels, 1996, 10, 1189-1195.	2.5	20
35	Quantitative ¹³C NMR characterization of fast pyrolysis oils. RSC Advances, 2016, 6, 102665-102670.	1.7	20
36	Hydrotreating the Organic Fraction of Biomass Pyrolysis Oil to a Refinery Intermediate. Energy & Fuels, 2015, 29, 7985-7992.	2.5	18

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37	Sulphur absorption by limestone at pressurized fluidized bed conditions. Proceedings of the Combustion Institute, 1991, 23, 943-948.	0.3	17
38	Catalytic Upgrading of Biomass Pyrolysis Oxygenates with Vacuum Gas Oil Using a Davison Circulating Riser Reactor. Energy & Fuels, 2018, 32, 1733-1743.	2.5	17
39	Detailed Oil Compositional Analysis Enables Evaluation of Impact of Temperature and Biomass-to-Catalyst Ratio on ex Situ Catalytic Fast Pyrolysis of Pine Vapors over ZSM-5. ACS Sustainable Chemistry and Engineering, 2020, 8, 1762-1773.	3.2	17
40	An Assessment of Gasification-Based Biorefining at Kraft Pulp and Paper Mills in the United States, Part B: Results. Tappi Journal, 2009, 8, 27-35.	0.2	17
41	Kinetics of NO Reduction by Black Liquor Char. Energy & Fuels, 1998, 12, 457-463.	2.5	14
42	Online Biogenic Carbon Analysis Enables Refineries to Reduce Carbon Footprint during Coprocessing Biomass- and Petroleum-Derived Liquids. Analytical Chemistry, 2021, 93, 4351-4360.	3.2	12
43	Ex situ upgrading of pyrolysis vapors over PtTiO₂: extraction of apparent kinetics via hierarchical transport modeling. Reaction Chemistry and Engineering, 2021, 6, 125-137.	1.9	11
44	Liquidâ€“Liquid Equilibrium Measurements for Model Systems Related to Catalytic Fast Pyrolysis of Biomass. Journal of Chemical & Engineering Data, 2017, 62, 243-252.	1.0	10
45	Optimizing Process Conditions during Catalytic Fast Pyrolysis of Pine with Pt/TiO₂â€”Improving the Viability of a Multiple-Fixed-Bed Configuration. ACS Sustainable Chemistry and Engineering, 2021, 9, 1235-1245.	3.2	10
46	Product layer diffusion in the sulphation of calcium carbonate. Proceedings of the Combustion Institute, 1992, 24, 1349-1356.	0.3	8
47	High-speed imaging of biomass particles heated with a laser. Journal of Analytical and Applied Pyrolysis, 2013, 103, 278-286.	2.6	8
48	Hydrotreating of Model Mixtures and Catalytic Fast Pyrolysis Oils over Pd/C. Energy & Fuels, 2018, 32, 12577-12586.	2.5	8
49	Feedstock and catalyst impact on bio-oil production and FCC Co-processing to fuels. Biomass and Bioenergy, 2022, 163, 106502.	2.9	7
50	Biomass Conversion to Produce Hydrocarbon Liquid Fuel Via Hot-vapor Filtered Fast Pyrolysis and Catalytic Hydrotreating. Journal of Visualized Experiments, 2016, , .	0.2	6
51	Optimization of Biomass Pyrolysis Vapor Upgrading Using a Laminar Entrained-Flow Reactor System. Energy & Fuels, 2020, 34, 6030-6040.	2.5	6
52	Efficacy, economics, and sustainability of bio-based insecticides from thermochemical biorefineries. Green Chemistry, 2021, 23, 10145-10156.	4.6	5
53	Accelerating catalyst development for biofuel production through multiscale catalytic fast pyrolysis of biomass over Mo2C. Chem Catalysis, 2022, 2, 1819-1831.	2.9	5
54	Computational Fluid Dynamics Simulations of Raw Gas Composition from a Black Liquor Gasifierâ€”Comparison with Experiments. Energy & Fuels, 2011, 25, 4122-4128.	2.5	4

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55	Predicting thermal excursions during in situ oxidative regeneration of packed bed catalytic fast pyrolysis catalyst. Reaction Chemistry and Engineering, 2021, 6, 888-904.	1.9	4
56	Multiscale Catalytic Fast Pyrolysis of Grindelia Reveals Opportunities for Generating Low Oxygen Content Bio-Oils from Drought Tolerant Biomass. Energy & Fuels, 0, , .	2.5	0