Kristiina Iisa

List of Publications by Citations

53 papers	1,870 citations	27 h-index	42 g-index
58 ext. papers	2,139 ext. citations	6.4 avg, IF	4.63 L-index

#	Paper	IF	Citations
53	Sulfation of Potassium Chloride at Combustion Conditions. *Energy & Fuels*, **1999**, 13, 1184-1190	4.1	131
52	A kinetic study of gaseous alkali capture by kaolin in the fixed bed reactor equipped with an alkali detector. *Fuel*, **2005**, 84, 169-175	7.1	108
51	Analysis of Oxygenated Compounds in Hydrotreated Biomass Fast Pyrolysis Oil Distillate Fractions. *Energy & Fuels*, **2011**, 25, 5462-5471	4.1	101
50	Real-time monitoring of the deactivation of HZSM-5 during upgrading of pine pyrolysis vapors. *Green Chemistry*, **2014**, 16, 1444-1461	10	93
49	In Situ and ex Situ Catalytic Pyrolysis of Pine in a Bench-Scale Fluidized Bed Reactor System. *Energy & Fuels*, **2016**, 30, 2144-2157	4.1	78
48	Upgrading biomass pyrolysis vapors over Ɛeolites: role of silica-to-alumina ratio. *Green Chemistry*, **2014**, 16, 4891-4905	10	76
47	Production of ethanol from carbohydrates from loblolly pine: a technical and economic assessment. *Bioresource Technology*, **2008**, 99, 5051-7	11	73
46	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
45	Co-production of ethanol and cellulose fiber from Southern Pine: A technical and economic assessment. *Biomass and Bioenergy*, **2008**, 32, 1293-1302	5.3	64
44	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
43	Production of low-oxygen bio-oil via ex situ catalytic fast pyrolysis and hydrotreating. *Fuel*, **2017**, 207, 413-422	7.1	61
42	Limestone and dolomite as sulfur absorbents under pressurized gasification conditions. *Fuel*, **1996**, 75, 89-95	7.1	58
41	Effect of Temperature, Pressure, and Residence Time on Pyrolysis of Pine in an Entrained Flow Reactor. *Energy & Fuels*, **2014**, 28, 5144-5157	4.1	57
40	Catalytic fast pyrolysis of biomass: the reactions of water and aromatic intermediates produces phenols. *Green Chemistry*, **2015**, 17, 4217-4227	10	57
39	Kinetics of the Sulfation of NaCl at Combustion Conditions. *Industrial & Engineering Chemistry Research*, **1997**, 36, 4212-4216	3.9	54
38	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	8.3	49
37	Multiscale Evaluation of Catalytic Upgrading of Biomass Pyrolysis Vapors on Ni- and Ga-Modified ZSM-5. *Energy & Fuels*, **2016**, 30, 9471-9479	4.1	43

36	Capture of Potassium and Cadmium by Kaolin in Oxidizing and Reducing Atmospheres. *Energy & Fuels*, **2004**, 18, 1870-1876	4.1	42
35	Improving biomass pyrolysis economics by integrating vapor and liquid phase upgrading. *Green Chemistry*, **2018**, 20, 567-582	10	42
34	Molybdenum incorporated mesoporous silica catalyst for production of biofuels and value-added chemicals via catalytic fast pyrolysis. *Green Chemistry*, **2015**, 17, 3035-3046	10	41
33	Fractional condensation of pyrolysis vapors produced from Nordic feedstocks in cyclone pyrolysis. *Journal of Analytical and Applied Pyrolysis*, **2017**, 123, 244-254	6	37
32	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	7.1	37
31	Role of Biopolymers in the Deactivation of ZSM-5 during Catalytic Fast Pyrolysis of Biomass. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 10030-10038	8.3	36
30	Deactivation of Multilayered MFI Nanosheet Zeolite during Upgrading of Biomass Pyrolysis Vapors. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 5477-5484	8.3	35
29	Comparison of SO2 capture capacities of limestones and dolomites under pressure. *Fuel*, **1995**, 74, 395-400	7.1	34
28	Pyrolysis of Woody Residue Feedstocks: Upgrading of Bio-oils from Mountain-Pine-Beetle-Killed Trees and Hog Fuel. *Energy & Fuels*, **2014**, 28, 7510-7516	4.1	31
27	Evaluate Impact of Catalyst Type on Oil Yield and Hydrogen Consumption from Mild Hydrotreating. *Energy & Fuels*, **2014**, 28, 3086-3095	4.1	28
26	Catalytic Pyrolysis of Pine Over HZSM-5 with Different Binders. *Topics in Catalysis*, **2016**, 59, 94-108	2.3	25
25	Chemical characterization and water content determination of bio-oils obtained from various biomass species using 31P NMR spectroscopy. *Biofuels*, **2012**, 3, 123-128	2	21
24	Catalytic fast pyrolysis with metal-modified ZSM-5 catalysts in inert and hydrogen atmospheres. *Journal of Analytical and Applied Pyrolysis*, **2018**, 135, 199-208	6	20
23	Quantitative 13C NMR characterization of fast pyrolysis oils. *RSC Advances*, **2016**, 6, 102665-102670	3.7	17
22	Hydrotreating the Organic Fraction of Biomass Pyrolysis Oil to a Refinery Intermediate. *Energy & Fuels*, **2015**, 29, 7985-7992	4.1	17
21	Pressurized Stabilization of Desulfurization Residues from Gasification Processes. *Energy & Fuels*, **1996**, 10, 1189-1195	4.1	17
20	Sulphur absorption by limestone at pressurized fluidized bed conditions. *Proceedings of the Combustion Institute*, **1991**, 23, 943-948		17
19	A perspective on biomass-derived biofuels: From catalyst design principles to fuel properties. *Journal of Hazardous Materials*, **2020**, 400, 123198	12.8	14

18	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	10	13
17	Catalytic Upgrading of Biomass Pyrolysis Oxygenates with Vacuum Gas Oil Using a Davison Circulating Riser Reactor. *Energy & Fuels*, **2018**, 32, 1733-1743	4.1	13
16	Chemical and physical characterization of aerosols from fast pyrolysis of biomass. *Journal of Analytical and Applied Pyrolysis*, **2019**, 142, 104606	6	12
15	Kinetics of NO Reduction by Black Liquor Char. *Energy & Fuels*, **1998**, 12, 457-463	4.1	12
14	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	0.5	11
13	Product layer diffusion in the sulphation of calcium carbonate. *Proceedings of the Combustion Institute*, **1992**, 24, 1349-1356		8
12	Ex situ upgrading of pyrolysis vapors over PtTiO2: extraction of apparent kinetics via hierarchical transport modeling. *Reaction Chemistry and Engineering*, **2021**, 6, 125-137	4.9	8
11	Liquid□liquid Equilibrium Measurements for Model Systems Related to Catalytic Fast Pyrolysis of Biomass. *Journal of Chemical & Engineering Data*, **2017**, 62, 243-252	2.8	7
10	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	8.3	7
9	High-speed imaging of biomass particles heated with a laser. *Journal of Analytical and Applied Pyrolysis*, **2013**, 103, 278-286	6	6
8	Biomass Conversion to Produce Hydrocarbon Liquid Fuel Via Hot-vapor Filtered Fast Pyrolysis and Catalytic Hydrotreating. *Journal of Visualized Experiments*, **2016**,	1.6	5
7	Hydrotreating of Model Mixtures and Catalytic Fast Pyrolysis Oils over Pd/C. *Energy & Fuels*, **2018**, 32, 12577-12586	4.1	5
6	Optimization of Biomass Pyrolysis Vapor Upgrading Using a Laminar Entrained-Flow Reactor System. *Energy & Fuels*, **2020**, 34, 6030-6040	4.1	4
5	Computational Fluid Dynamics Simulations of Raw Gas Composition from a Black Liquor Gasifier□Comparison with Experiments. *Energy & Fuels*, **2011**, 25, 4122-4128	4.1	4
4	A Cost-Benefit Assessment of Gasification-Based Biorefining in the Kraft Pulp and Paper Industry		4
3	Online Biogenic Carbon Analysis Enables Refineries to Reduce Carbon Footprint during Coprocessing Biomass- and Petroleum-Derived Liquids. *Analytical Chemistry*, **2021**, 93, 4351-4360	7.8	3
2	Optimizing Process Conditions during Catalytic Fast Pyrolysis of Pine with Pt/TiO2□Improving the Viability of a Multiple-Fixed-Bed Configuration. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 1235-1245	8.3	3
1	Predicting thermal excursions during in situ oxidative regeneration of packed bed catalytic fast pyrolysis catalyst. *Reaction Chemistry and Engineering*, **2021**, 6, 888-904	4.9	2