Ã˜yvind Skreiberg

List of Publications by Year
in descending order

123	4,477	101535	118840
papers	citations	36 h-index	62 g-index

124	124	124	3936
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Upgrading biomass fuels via wet torrefaction: A review and comparison with dry torrefaction. Renewable and Sustainable Energy Reviews, 2016, 54, 665-677.	16.4	311
2	A Critical Review on Additives to Reduce Ash Related Operation Problems in Biomass Combustion Applications. Energy Procedia, 2012, 20, 20-29.	1.8	253
3	Ammonia chemistry below 1400ÂK under fuel-rich conditions in a flow reactor. Combustion and Flame, 2004, 136, 501-518.	5.2	228
4	TGA and macro-TGA characterisation of biomass fuels and fuel mixtures. Fuel, 2011, 90, 2182-2197.	6.4	176
5	NOxand N2O Precursors (NH3and HCN) in Pyrolysis of Biomass Residues. Energy & Fuels, 2007, 21, 1173-1180.	5.1	143
6	Comparative Assessment of Wet Torrefaction. Energy & Fuels, 2013, 27, 6743-6753.	5.1	136
7	Effect of torrefaction on physiochemical characteristics and grindability of stem wood, stump and bark. Applied Energy, 2018, 227, 137-148.	10.1	114
8	Products distribution and gas release in pyrolysis of thermally thick biomass residues samples. Journal of Analytical and Applied Pyrolysis, 2007, 78, 207-213.	5.5	112
9	Predictions of biochar yield and elemental composition during torrefaction of forest residues. Bioresource Technology, 2016, 215, 239-246.	9.6	98
10	Effects of wet torrefaction on pyrolysis of woody biomass fuels. Energy, 2015, 88, 443-456.	8.8	93
11	Numerical models for thermochemical degradation of thermally thick woody biomass, and their application in domestic wood heating appliances and grate furnaces. Progress in Energy and Combustion Science, 2017, 63, 204-252.	31.2	85
12	Torrefaction of Norwegian Birch and Spruce: An Experimental Study Using Macro-TGA. Energy & Fuels, 2012, 26, 5232-5240.	5.1	84
13	Thermal Decomposition of Biomass Wastes. A Kinetic Study. Industrial & Engineering Chemistry Research, 2007, 46, 2428-2437.	3.7	82
14	Effects of wet torrefaction on reactivity and kinetics of wood under air combustion conditions. Fuel, 2014, 137, 375-383.	6.4	77
15	A comparison of low-NOx burners for combustion of methane and hydrogen mixtures. Proceedings of the Combustion Institute, 2002, 29, 1123-1129.	3.9	75
16	Experimental Investigation on NOx Reduction by Primary Measures in Biomass Combustion: Straw, Peat, Sewage Sludge, Forest Residues and Wood Pellets. Energies, 2012, 5, 270-290.	3.1	73
17	Investigation of rye straw ash sintering characteristics and the effect of additives. Applied Energy, 2016, 162, 1195-1204.	10.1	70
18	Effect of Excess Air Ratio and Temperature on NOx Emission from Grate Combustion of Biomass in the Staged Air Combustion Scenario. Energy & Fuels, 2011, 25, 4643-4654.	5.1	68

#	ARTICLE	IF	CITATIONS
19	NOx emission reduction by staged combustion in grate combustion of biomass fuels and fuel mixtures. Fuel, 2012, 98, 29-40.	6.4	68
20	Investigation of Biomass Ash Sintering Characteristics and the Effect of Additives. Energy & Fuels, 2014, 28, 208-218.	5.1	68
21	A critical review on production, modification and utilization of biochar. Journal of Analytical and Applied Pyrolysis, 2022, 161, 105405.	5.5	68
22	Is Elevated Pressure Required To Achieve a High Fixed-Carbon Yield of Charcoal from Biomass? Part 1: Round-Robin Results for Three Different Corncob Materials. Energy & Fuels, 2011, 25, 3251-3265.	5.1	66
23	Is Elevated Pressure Required to Achieve a High Fixed-Carbon Yield of Charcoal from Biomass? Part 2: The Importance of Particle Size. Energy & Fuels, 2013, 27, 2146-2156.	5.1	64
24	Analysis of optimal temperature, pressure and binder quantity for the production of biocarbon pellet to be used as a substitute for coke. Applied Energy, 2019, 256, 113933.	10.1	64
25	A simulation study on the torrefied biomass gasification. Energy Conversion and Management, 2015, 90, 446-457.	9.2	62
26	Combustion kinetics of wet-torrefied forest residues using the distributed activation energy model (DAEM). Applied Energy, 2017, 185, 1059-1066.	10.1	54
27	Investigation of additives for preventing ash fouling and sintering during barley straw combustion. Applied Thermal Engineering, 2014, 70, 1262-1269.	6.0	51
28	Comparative study on the thermal degradation of dry- and wet-torrefied woods. Applied Energy, 2017, 185, 1051-1058.	10.1	50
29	Sintering Behavior of Agricultural Residues Ashes and Effects of Additives. Energy & Fuels, 2012, 26, 5917-5929.	5.1	48
30	Enhanced NO_x Reduction by Combined Staged Air and Flue Gas Recirculation in Biomass Grate Combustion. Energy & Fuels, 2012, 26, 3003-3011.	5.1	47
31	Effects of Additives on Barley Straw and Husk Ashes Sintering Characteristics. Energy Procedia, 2012, 20, 30-39.	1.8	47
32	Torrefaction Influence on Pelletability and Pellet Quality of Norwegian Forest Residues. Energy & Fuels, 2014, 28, 2554-2561.	5.1	44
33	Kinetic Behavior of Torrefied Biomass in an Oxidative Environment. Energy & Fuels, 2013, 27, 1050-1060.	5.1	43
34	Effect of Torrefaction on Properties of Pellets Produced from Woody Biomass. Energy & Fuels, 2020, 34, 15343-15354.	5.1	40
35	Kinetics of Corncob Pyrolysis. Energy & Fuels, 2012, 26, 2005-2013.	5.1	39
36	Impact of Torrefaction on Woody Biomass Properties. Energy Procedia, 2017, 105, 1149-1154.	1.8	37

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37	Accelerating wet torrefaction rate and ash removal by carbon dioxide addition. Fuel Processing Technology, 2015, 140, 297-303.	7.2	36
38	Effects of Pyrolysis Conditions and Feedstocks on the Properties and Gasification Reactivity of Charcoal from Woodchips. Energy & Fuels, 2020, 34, 8353-8365.	5.1	36
39	Investigation on Ash Slagging Characteristics During Combustion of Biomass Pellets and Effect of Additives. Energy & Fuels, 2018, 32, 4442-4452.	5.1	35
40	Isothermal and non-isothermal kinetic study on CO2 gasification of torrefied forest residues. Biomass and Bioenergy, 2016, 91, 175-185.	5.7	34
41	Thermal Decomposition Kinetics of Woods with an Emphasis on Torrefaction. Energy & Fuels, 2013, 27, 6134-6145.	5.1	33
42	Experimental study on pyrolysis of thermally thick biomass residues samples: Intra-sample temperature distribution and effect of sample weight (â€œscaling effectâ€). Fuel, 2007, 86, 2754-2760.	6.4	32
43	Process modeling and optimization for torrefaction of forest residues. Energy, 2017, 138, 348-354.	8.8	32
44	Machine learning based modelling for lower heating value prediction of municipal solid waste. Fuel, 2021, 283, 118906.	6.4	32
45	A mathematical model of biomass downdraft gasification with an integrated pyrolysis model. Fuel, 2020, 265, 116867.	6.4	31
46	Experimental Study on Charcoal Production from Woody Biomass. Energy & Fuels, 2016, 30, 7994-8008.	5.1	29
47	Biomass combustion research and utilisation in IEA countries. Biomass and Bioenergy, 1995, 9, 235-255.	5.7	28
48	Hydrothermal pretreatment of fresh forest residues: Effects of feedstock pre-drying. Biomass and Bioenergy, 2016, 85, 76-83.	5.7	28
49	CO₂ Gasification of Torrefied Wood: A Kinetic Study. Energy & Fuels, 2014, 28, 7582-7590.	5.1	27
50	Numerical Simulations of Staged Biomass Grate Fired Combustion with an Emphasis on NOx Emissions. Energy Procedia, 2015, 75, 156-161.	1.8	27
51	Process synthesis and economics of combined biomethanol and CHP energy production derived from biomass wastes. Journal of Chemical Technology and Biotechnology, 2012, 87, 897-902.	3.2	26
52	On the proper integration of wood stoves in passive houses under cold climates. Energy and Buildings, 2014, 72, 87-95.	6.7	25
53	CO 2 gasification of charcoals produced at various pressures. Fuel Processing Technology, 2016, 152, 207-214.	7.2	25
54	Skeletal mechanisms for prediction of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:msub><mml:mrow><mml:mtext>NO</mml:mtext></mml:mrow><mml:mrow><mml:mi mathvariant="normal">x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math> emission in solid fuel combustion. Fuel, 2019, 254, 115569.	6.4	25

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55	Kinetic NO modelling and experimental results from single wood particle combustion. Fuel, 1997, 76, 671-682.	6.4	24
56	Comprehensive Compositional Study of Torrefied Wood and Herbaceous Materials by Chemical Analysis and Thermoanalytical Methods. Energy & Fuels, 2016, 30, 8019-8030.	5.1	24
57	Effect of Temperature and Duration of Torrefaction on the Thermal Behavior of Stem Wood, Bark, and Stump of Spruce. Energy Procedia, 2017, 105, 551-556.	1.8	24
58	Experimental Investigation on Corrosion Abatement in Straw Combustion by Fuel Mixing. Energy & Fuels, 2011, 25, 2687-2695.	5.1	23
59	Formation of NO from combustion of volatiles from municipal solid wastes. Combustion and Flame, 2001, 124, 195-212.	5.2	22
60	Automatic Generation of Kinetic Skeletal Mechanisms for Biomass Combustion. Energy & Fuels, 2013, 27, 6979-6991.	5.1	22
61	Fast Hydrothermal Liquefaction of Native and Torrefied Wood. Energy Procedia, 2017, 105, 218-223.	1.8	22
62	Substitution of coke with pelletized biocarbon in the European and Chinese steel industries: An LCA analysis. Applied Energy, 2021, 304, 117644.	10.1	21
63	The effect of peat ash addition to demolition wood on the formation of alkali, lead and zinc compounds at staged combustion conditions. Fuel Processing Technology, 2013, 105, 20-27.	7.2	19
64	On the proper integration of wood stoves in passive houses: Investigation using detailed dynamic simulations. Energy and Buildings, 2013, 59, 203-213.	6.7	19
65	Performance of a Residential Pellet Combustor Operating on Raw and Torrefied Spruce and Spruce-Derived Residues. Energy & Fuels, 2013, 27, 4760-4769.	5.1	19
66	Thermal Decomposition Kinetics of Wood and Bark and Their Torrefied Products. Energy & Fuels, 2017, 31, 4024-4034.	5.1	18
67	Cooling aerosols and changes in albedo counteract warming from CO2 and black carbon from forest bioenergy in Norway. Scientific Reports, 2018, 8, 3299.	3.3	18
68	Optimal Mixtures To Reduce the Formation of Corrosive Compounds during Straw Combustion: A Thermodynamic Analysis. Energy & Fuels, 2011, 25, 3223-3234.	5.1	17
69	Techno-economic Evaluations of Various Biomass CHP Technologies and Policy Measures Under Norwegian Conditions. Energy Procedia, 2012, 20, 1-10.	1.8	16
70	Ash related behaviour in staged and non-staged combustion of biomass fuels and fuel mixtures. Biomass and Bioenergy, 2012, 41, 86-93.	5.7	16
71	Combustion Characteristics of Biomass Charcoals Produced at Different Carbonization Conditions: A Kinetic Study. Energy & Fuels, 2016, 30, 3186-3197.	5.1	15
72	Comparative study on the thermal behavior of untreated and various torrefied bark, stem wood, and stump of Norway spruce. Applied Energy, 2017, 204, 1043-1054.	10.1	15

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73	Drying of Thermally Thick Wood Particles: A Study of the Numerical Efficiency, Accuracy, and Stability of Common Drying Models. Energy & Fuels, 2017, 31, 13743-13760.	5.1	15
74	Combustion of Thermally Thick Wood Particles: A Study on the Influence of Wood Particle Size on the Combustion Behavior. Energy & Fuels, 2018, 32, 6847-6862.	5.1	15
75	Effect of carbonization conditions on CO 2 gasification reactivity of biocarbon. Energy Procedia, 2017, 142, 932-937.	1.8	13
76	CO₂ Gasification of Chars Prepared by Fast and Slow Pyrolysis from Wood and Forest Residue: A Kinetic Study. Energy & Fuels, 2018, 32, 588-597.	5.1	13
77	Considerations on factors affecting biochar densification behavior based on a multiparameter model. Energy, 2021, 221, 119893.	8.8	13
78	The effect of kaolin on the combustion of demolition wood under well-controlled conditions. Waste Management and Research, 2012, 30, 672-680.	3.9	12
79	Towards a meaningful non-isothermal kinetics for biomass materials and other complex organic samples. Journal of Thermal Analysis and Calorimetry, 2018, 133, 703-712.	3.6	12
80	Effect of Processing Conditions on the Constant-Volume Carbonization of Biomass. Energy & Fuels, 2019, 33, 2219-2235.	5.1	12
81	Reduced chemical kinetic mechanisms for NO_x emission prediction in biomass combustion. International Journal of Chemical Kinetics, 2012, 44, 219-231.	1.6	11
82	Cost modeling approach and economic analysis of biomass gasification integrated solid oxide fuel cell systems. Journal of Renewable and Sustainable Energy, 2012, 4, .	2.0	10
83	Recommended Revisions of Norwegian Emission Factors for Wood Stoves. Energy Procedia, 2017, 105, 1022-1028.	1.8	10
84	Characterization of ash deposits from municipal solid waste (MSW) incineration plants. Energy Procedia, 2017, 142, 630-635.	1.8	10
85	Simple modelling procedure for the indoor thermal environment of highly insulated buildings heated by wood stoves. Journal of Building Performance Simulation, 2016, 9, 663-679.	2.0	9
86	Charcoal â€œMinesâ€•in the Norwegian Woods. Energy & Fuels, 2016, 30, 7959-7970.	5.1	9
87	A kinetic study on simultaneously boosting the mass and fixed-carbon yield of charcoal production via atmospheric carbonization. Energy Procedia, 2017, 120, 333-340.	1.8	9
88	Techno-economic Assessment of Thermal Co-pretreatment and Co-digestion of Food Wastes and Sewage Sludge for Heat, Power and Biochar Production. Energy Procedia, 2017, 105, 1737-1742.	1.8	9
89	Performance Evaluation of a Modern Wood Stove Using Charcoal. Energy Procedia, 2017, 142, 192-197.	1.8	9
90	Carbonization of Biomass in Constant-Volume Reactors. Energy & Fuels, 2018, 32, 475-489.	5.1	9

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91	Sintering of Rye Straw Ash and Effect of Additives. Energy Procedia, 2014, 61, 2008-2011.	1.8	8
92	Predicting NOx Emissions from Wood Stoves using Detailed Chemistry and Computational Fluid Dynamics. Energy Procedia, 2015, 75, 1740-1745.	1.8	8
93	CO 2 Gasification of Charcoals in the Context of Metallurgical Application. Energy Procedia, 2017, 105, 316-321.	1.8	8
94	Study of CO 2 gasification reactivity of biocarbon produced at different conditions. Energy Procedia, 2017, 142, 991-996.	1.8	8
95	Non-isothermal kinetics: best-fitting empirical models instead of model-free methods. Journal of Thermal Analysis and Calorimetry, 2020, 142, 1043-1054.	3.6	8
96	CO₂ Gasification Reactivity of Char from High-Ash Biomass. ACS Omega, 2021, 6, 34115-34128.	3.5	8
97	Wet Torrefaction of Forest Residues. Energy Procedia, 2014, 61, 1196-1199.	1.8	7
98	Techno-economic assessment of integrated hydrochar and high-grade activated carbon production for electricity generation and storage. Energy Procedia, 2017, 120, 341-348.	1.8	7
99	Variables Affecting Emission Measurements from Domestic Wood Combustion. Energy Procedia, 2017, 105, 596-603.	1.8	7
100	Techno-Economics of Biocarbon Production Processes under Norwegian Conditions. Energy & Fuels, 2017, 31, 14338-14356.	5.1	6
101	Pyrolysis of Untreated and Various Torrefied Stem Wood, Stump, and Bark of Norway Spruce. Energy & Fuels, 2019, 33, 3210-3220.	5.1	6
102	Simultaneously Boosting the Mass and Fixed-carbon Yields of Charcoal from Forest Residue via Atmospheric Carbonization. Energy Procedia, 2017, 105, 787-792.	1.8	5
103	Effect of fuel mixing on melting behavior of spruce wood ash. Energy Procedia, 2019, 158, 1342-1347.	1.8	5
104	Empirical Kinetic Models for the Combustion of Charcoals and Biomasses in the Kinetic Regime. Energy & Fuels, 2020, 34, 16302-16309.	5.1	5
105	Round robin test of a wood stove: The influence of standards, test procedures and calculation procedures on the emission level. Biomass and Bioenergy, 1997, 12, 439-452.	5.7	4
106	Effects of CO2 on Wet Torrefaction of Biomass. Energy Procedia, 2014, 61, 1200-1203.	1.8	4
107	Decentralized Production of Fischerâ€“Tropsch Biocrude via Coprocessing of Woody Biomass and Wet Organic Waste in Entrained Flow Gasification: Techno-Economic Analysis. Energy & Fuels, 2017, 31, 6089-6108.	5.1	4
108	Simulating Thermal Wood Particle Conversion: Ash-Layer Modeling and Parametric Studies. Energy & Fuels, 2018, 32, 10668-10682.	5.1	4

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109	Biocarbon Production and Use as a Fuel. Biofuels and Biorefineries, 2019, , 295-324.	0.5	4
110	Empirical Kinetic Models for the CO₂ Gasification of Biomass Chars. Part 1. Gasification of Wood Chars and Forest Residue Chars. ACS Omega, 2021, 6, 27552-27560.	3.5	4
111	Dampening of wood batch combustion heat release using a phase change material heat storage: Material selection and heat storage property optimization. Energy, 2016, 115, 378-385.	8.8	3
112	Process modeling for torrefaction of birch branches. Energy Procedia, 2017, 142, 395-400.	1.8	3
113	Wood stove material configurations for increased thermal comfort. Energy Procedia, 2017, 142, 488-494.	1.8	3
114	An evaluation of effects of operational parameters on NOx emissions through detailed chemical kinetics simulations. Energy Procedia, 2019, 158, 103-110.	1.8	3
115	The smart biofuels of the future. Biofuels, 2013, 4, 159-161.	2.4	2
116	Biocarbonization Process for High Quality Energy Carriers: Techno-economics. Energy Procedia, 2017, 105, 628-635.	1.8	2
117	A Simplified Power Sizing Method for the Correct Building Integration of Wood Stoves. E3S Web of Conferences, 2019, 111, 02066.	0.5	2
118	Combustion Properties of Norwegian Biomass: Wood Chips and Forest Residues. Applied Mechanics and Materials, 0, 110-116, 4564-4568.	0.2	1
119	Hydrochar slurry fuels and high-grade activated carbon for electricity production and storage Conceptual process design and analysis. , 2016, , .		1
120	Parametric Energy Simulations of a Nordic Detached House Heated by a Wood Stove. E3S Web of Conferences, 2020, 172, 25007.	0.5	1
121	Bed Model for Grate-Fired Furnaces: Computational Fluid Dynamics Modeling and Comparison to Experiments. Energy & Fuels, 2022, 36, 5852-5867.	5.1	1
122	Comparison of numerical efficiency of the thermal and the kinetic rate drying model applied to a thermally thick wood particle. Energy Procedia, 2017, 142, 37-42.	1.8	0
123	Validation of a Zonal Model to Capture the Detailed Indoor Thermal Environment of a Room Heated by a Stove. Springer Proceedings in Energy, 2019, , 653-663.	0.3	0