

Flemming Jappe Frandsen

List of Publications by Year in descending order

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70
papers

4,237
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109321

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70
all docs

70
docs citations

70
times ranked

2647
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of kaolin and coal fly ash addition on biomass ash deposition in an entrained flow reactor. <i>Fuel</i> , 2022, 313, 123041.	6.4	10
2	Modeling Potassium Capture by Aluminosilicate, Part 1: Kaolin. <i>Energy & Fuels</i> , 2021, 35, 13984-13998.	5.1	6
3	Modeling Potassium Capture by Aluminosilicate, Part 2: Coal Fly Ash. <i>Energy & Fuels</i> , 2021, 35, 19725-19736.	5.1	4
4	The fate of chlorine during MSW incineration: Vaporization, transformation, deposition, corrosion and remedies. <i>Progress in Energy and Combustion Science</i> , 2020, 76, 100789.	31.2	139
5	Biomass fly ash deposition in an entrained flow reactor. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2689-2696.	3.9	19
6	Potassium capture by coal fly ash: K_2CO_3 , KCl and K_2SO_4 . <i>Fuel Processing Technology</i> , 2019, 194, 106115.	7.2	31
7	KOH capture by coal fly ash. <i>Fuel</i> , 2019, 242, 828-836.	6.4	25
8	Potassium Capture by Kaolin, Part 2: K_2CO_3 , KCl, and K_2SO_4 . <i>Energy & Fuels</i> , 2018, 32, 3566-3578.	5.1	36
9	Potassium Capture by Kaolin, Part 1: KOH. <i>Energy & Fuels</i> , 2018, 32, 1851-1862.	5.1	34
10	Tensile Adhesion Strength of Biomass Ash Deposits: Effect of the Temperature Gradient and Ash Chemistry. <i>Energy & Fuels</i> , 2018, 32, 4432-4441.	5.1	19
11	Influence of Preoxidation on High-Temperature Corrosion of a FeCrAl Alloy Under Conditions Relevant to Biomass Firing. <i>Oxidation of Metals</i> , 2018, 89, 99-122.	2.1	6
12	Ash formation and deposition in coal and biomass fired combustion systems: Progress and challenges in the field of ash particle sticking and rebound behavior. <i>Progress in Energy and Combustion Science</i> , 2018, 68, 65-168.	31.2	322
13	Time and Temperature Effects on Alkali Chloride Induced High Temperature Corrosion of Superheaters during Biomass Firing. <i>Energy & Fuels</i> , 2018, 32, 7991-7999.	5.1	20
14	Low temperature circulating fluidized bed gasification and co-gasification of municipal sewage sludge. Part 1: Process performance and gas product characterization. <i>Waste Management</i> , 2017, 66, 123-133.	7.4	41
15	Changes imposed by pyrolysis, thermal gasification and incineration on composition and phosphorus fertilizer quality of municipal sewage sludge. <i>Journal of Environmental Management</i> , 2017, 198, 308-318.	7.8	84
16	Influence of preoxidation on high temperature corrosion of a Ni-based alloy under conditions relevant to biomass firing. <i>Surface and Coatings Technology</i> , 2017, 319, 76-87.	4.8	3
17	Mechanistic Model for Ash Deposit Formation in Biomass Suspension Firing. Part 1: Model Verification by Use of Entrained Flow Reactor Experiments. <i>Energy & Fuels</i> , 2017, 31, 2771-2789.	5.1	18
18	Mechanistic Model for Ash Deposit Formation in Biomass Suspension Firing. Part 2: Model Verification by Use of Full-Scale Tests. <i>Energy & Fuels</i> , 2017, 31, 2790-2802.	5.1	6

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19	Fly Ash Formation during Suspension Firing of Biomass: Effects of Residence Time and Fuel Type. Energy & Fuels, 2017, 31, 555-570.	5.1	25
20	Deposit Shedding in Biomass-Fired Boilers: Shear Adhesion Strength Measurements. Energy & Fuels, 2017, 31, 8733-8741.	5.1	17
21	Complementary Methods for the Characterization of Corrosion Products on a Plant-Exposed Superheater Tube. Metallography, Microstructure, and Analysis, 2017, 6, 22-35.	1.0	3
22	Review: Circulation of Inorganic Elements in Combustion of Alternative Fuels in Cement Plants. Energy & Fuels, 2015, 29, 4076-4099.	5.1	39
23	Effect of Water Vapor on High-Temperature Corrosion under Conditions Mimicking Biomass Firing. Energy & Fuels, 2015, 29, 5802-5815.	5.1	28
24	High Temperature Corrosion under Laboratory Conditions Simulating Biomass-Firing: A Comprehensive Characterization of Corrosion Products. Energy & Fuels, 2014, 28, 6447-6458.	5.1	39
25	Modeling the Use of Sulfate Additives for Potassium Chloride Destruction in Biomass Combustion. Energy & Fuels, 2014, 28, 199-207.	5.1	25
26	Impact of Coal Fly Ash Addition on Combustion Aerosols (PM _{2.5}) from Full-Scale Suspension-Firing of Pulverized Wood. Energy & Fuels, 2014, 28, 3217-3223.	5.1	25
27	Deposit Probe Measurements in Large Biomass-Fired Grate Boilers and Pulverized-Fuel Boilers. Energy & Fuels, 2014, 28, 3539-3555.	5.1	23
28	Partitioning of K, Cl, S and P during combustion of poplar and brassica energy crops. Fuel, 2014, 134, 209-219.	6.4	47
29	Modeling of ferric sulfate decomposition and sulfation of potassium chloride during grate-firing of biomass. AIChE Journal, 2013, 59, 4314-4324.	3.6	9
30	Pilot-scale investigation and CFD modeling of particle deposition in low-dust monolithic SCR DeNO _x catalysts. AIChE Journal, 2013, 59, 1919-1933.	3.6	14
31	Release of K, Cl, and S during combustion and co-combustion with wood of high-chlorine biomass in bench and pilot scale fuel beds. Proceedings of the Combustion Institute, 2013, 34, 2363-2372.	3.9	90
32	Sulfation of Condensed Potassium Chloride by SO ₂ . Energy & Fuels, 2013, 27, 3283-3289.	5.1	32
33	Trace elements in co-combustion of solid recovered fuel and coal. Fuel Processing Technology, 2013, 105, 212-221.	7.2	57
34	Impacts of Fuel Quality on Power Production and the Environment. Energy & Fuels, 2013, 27, 5593-5594.	5.1	1
35	Co-firing of Coal with Biomass and Waste in Full-Scale Suspension-Fired Boilers. , 2013, , 781-800.		4
36	Dust-Firing of Straw and Additives: Ash Chemistry and Deposition Behavior. Energy & Fuels, 2011, 25, 2862-2873.	5.1	59

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37	Release of K, Cl, and S during Pyrolysis and Combustion of High-Chlorine Biomass. Energy & Fuels, 2011, 25, 4961-4971.	5.1	312
38	Release and Transformation of Inorganic Elements in Combustion of a High-Phosphorus Fuel. Energy & Fuels, 2011, 25, 2874-2886.	5.1	70
39	Co-combustion of pulverized coal and solid recovered fuel in an entrained flow reactor – General combustion and ash behaviour. Fuel, 2011, 90, 1980-1991.	6.4	65
40	Release to the gas phase of metals, S and Cl during combustion of dedicated waste fractions. Fuel Processing Technology, 2010, 91, 1062-1072.	7.2	59
41	A Full-scale Study on the Partitioning of Trace Elements in Municipal Solid Waste Incineration – Effects of Firing Different Waste Types. Energy & Fuels, 2009, 23, 3475-3489.	5.1	60
42	Release of Potassium from the Systems $K-Ca-Si$ and $K-Ca-P$. Energy & Fuels, 2009, 23, 3423-3428.	5.1	93
43	Deposit Formation in the FASAN WtE Boiler as a Function of Feedstock Composition and Boiler Operation. Energy & Fuels, 2009, 23, 3490-3496.	5.1	11
44	Ash Research from Palm Coast, Florida to Banff, Canada: Entry of Biomass in Modern Power Boilers. Energy & Fuels, 2009, 23, 3347-3378.	5.1	29
45	Lab-scale Investigation of Deposit-induced Chlorine Corrosion of Superheater Materials under Simulated Biomass-firing Conditions. Part 1: Exposure at 560 °C. Energy & Fuels, 2009, 23, 3457-3468.	5.1	60
46	Release to the Gas Phase of Inorganic Elements during Wood Combustion. Part 2: Influence of Fuel Composition. Energy & Fuels, 2008, 22, 1598-1609.	5.1	252
47	COMBUSTION AEROSOLS FROM MUNICIPAL WASTE INCINERATION – EFFECT OF FUEL FEEDSTOCK AND PLANT OPERATION. Combustion Science and Technology, 2007, 179, 2171-2198.	2.3	36
48	Dynamic mechanistic model of superheater deposit growth and shedding in a biomass fired grate boiler. Fuel, 2007, 86, 1519-1533.	6.4	89
49	Quantification of the release of inorganic elements from biofuels. Fuel Processing Technology, 2007, 88, 1118-1128.	7.2	81
50	Experimental Investigation of Ash Deposit Shedding in a Straw-Fired Boiler. Energy & Fuels, 2006, 20, 512-519.	5.1	30
51	Release to the Gas Phase of Inorganic Elements during Wood Combustion. Part 1: Development and Evaluation of Quantification Methods. Energy & Fuels, 2006, 20, 964-978.	5.1	177
52	Heat transfer in ash deposits: A modelling tool-box. Progress in Energy and Combustion Science, 2005, 31, 371-421.	31.2	108
53	Utilizing biomass and waste for power production – a decade of contributing to the understanding, interpretation and analysis of deposits and corrosion products. Fuel, 2005, 84, 1277-1294.	6.4	194
54	On the fate of heavy metals in municipal solid waste combustion. Part II. From furnace to filter. Fuel, 2004, 83, 1703-1710.	6.4	42

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55	Sulfur Transformations during Thermal Conversion of Herbaceous Biomass. Energy & Fuels, 2004, 18, 810-819.	5.1	189
56	SEM Investigation of Superheater Deposits from Biomass-Fired Boilers. Energy & Fuels, 2004, 18, 378-384.	5.1	92
57	Agglomeration in bio-fuel fired fluidized bed combustors. Chemical Engineering Journal, 2003, 96, 171-185.	12.7	239
58	On the fate of heavy metals in municipal solid waste combustion Part I: devolatilisation of heavy metals on the grate. Fuel, 2003, 82, 2273-2283.	6.4	78
59	Classification System for Ash Deposits Based on Sem analyses. , 2002, , 205-216.		5
60	Ash Fusion Quantification by Means of Thermal Analysis. , 2002, , 181-193.		0
61	Ash Fusion and Deposit Formation at Straw Fired Boilers. , 2002, , 341-356.		0
62	Influence of Metal Surface Temperature and Coal Quality on Ash Deposition in PC-Fired Boilers. , 2002, , 357-366.		1
63	Influence of deposit formation on corrosion at a straw-fired boiler. Fuel Processing Technology, 2000, 64, 189-209.	7.2	169
64	Deposit Formation in a 150 MWe Utility PF-Boiler during Co-combustion of Coal and Straw. Energy & Fuels, 2000, 14, 765-780.	5.1	54
65	Quantification of fusion in ashes from solid fuel combustion. Thermochemica Acta, 1999, 326, 105-117.	2.7	68
66	Lab-Scale Investigations of High-Temperature Corrosion Phenomena in Straw-Fired Boilers. Energy & Fuels, 1999, 13, 1114-1121.	5.1	94
67	Characterization of Ashes and Deposits from High-Temperature Coal~Straw Co-Firing. Energy & Fuels, 1999, 13, 803-816.	5.1	44
68	Iron-sulfide crystals in probe deposits. Fuel Processing Technology, 1998, 58, 45-59.	7.2	6
69	Trace metal emissions from the Estonian oil shale fired power plant. Fuel Processing Technology, 1998, 57, 1-24.	7.2	40
70	Ash Deposition Trials at Three Power Stations in Denmark. Energy & Fuels, 1998, 12, 429-442.	5.1	30