

Ash-related issues during biomass combustion: Alkali-ion melt-induced slagging (ash fusion), agglomeration, corrosion and countermeasures

Progress in Energy and Combustion Science

52, 1-61

DOI: [10.1016/j.pecs.2015.09.003](https://doi.org/10.1016/j.pecs.2015.09.003)

Citation Report

#	ARTICLE	IF	CITATIONS
1	The Influence of Ashing Temperature on Ash Fouling and Slagging Characteristics during Combustion of Biomass Fuels. <i>BioResources</i> , 2016, 12, .	0.5	29
2	Effects of air distribution on furnace temperature and CO/NO ₂ /SO ₂ emissions in a lab-scale CFB furnace cofiring both biomass/coal and petroleum coke/coal. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2016, 11, 492-499.	0.8	4
3	Corrosive components of nutshells and their chars. <i>E3S Web of Conferences</i> , 2016, 10, 00113.	0.2	2
4	The role of limestone during fluidized bed oxy-combustion of coal and biomass. <i>Applied Energy</i> , 2016, 184, 670-680.	5.1	29
5	Experimental evaluation of additives and K ₂ O-SiO ₂ -Al ₂ O ₃ diagrams on high-temperature silicate melt-induced slagging during biomass combustion. <i>Fuel</i> , 2016, 179, 52-59.	3.4	48
6	Review of Particle Physics and Chemistry in Fluidized Beds for Development of Comprehensive Ash Agglomeration Prediction Models. <i>Energy & Fuels</i> , 2016, 30, 3714-3734.	2.5	17
7	Transformation Characteristics of Sodium of Zhundong Coal Combustion/Gasification in Circulating Fluidized Bed. <i>Energy & Fuels</i> , 2016, 30, 3473-3478.	2.5	95
8	Kinetic modeling of the formation and growth of inorganic nano-particles during pulverized coal char combustion in O ₂ /N ₂ and O ₂ /CO ₂ atmospheres. <i>Combustion and Flame</i> , 2016, 173, 195-207.	2.8	29
9	Slagging behaviors of high alkali Zhundong coal during circulating fluidized bed gasification. <i>Fuel</i> , 2016, 186, 140-149.	3.4	60
10	Theoretical and experimental metals flow calculations during biomass combustion. <i>Fuel</i> , 2016, 185, 524-531.	3.4	27
11	Blended biomass pellets as fuel for small scale combustion appliances: Influence on gaseous and total particulate matter emissions and applicability of fuel indices. <i>Fuel</i> , 2016, 184, 689-700.	3.4	95
12	Mechanism of Layer Formation on Olivine Bed Particles in Industrial-Scale Dual Fluid Bed Gasification of Wood. <i>Energy & Fuels</i> , 2016, 30, 7410-7418.	2.5	59
13	Thermal Stability of Bed Particle Layers on Naturally Occurring Minerals from Dual Fluid Bed Gasification of Woody Biomass. <i>Energy & Fuels</i> , 2016, 30, 8277-8285.	2.5	28
14	Effects of wall temperature on slagging and ash deposition of Zhundong coal during circulating fluidized bed gasification. <i>Applied Thermal Engineering</i> , 2016, 106, 1127-1135.	3.0	83
15	Experimental and theoretical methods for evaluating ash properties of pine and El Cerrejon coal used in co-firing. <i>Fuel</i> , 2016, 183, 39-54.	3.4	32
16	Influence of ammonium dihydrogen phosphate on potassium retention and ash melting characteristics during combustion of biomass. <i>Energy</i> , 2016, 102, 244-251.	4.5	31
17	Comparing Active Bed Materials in a Dual Fluidized Bed Biomass Gasifier: Olivine, Bauxite, Quartz-Sand, and Ilmenite. <i>Energy & Fuels</i> , 2016, 30, 4848-4857.	2.5	76
18	Co-pelletization of sewage sludge and biomass: Thermogravimetric analysis and ash deposits. <i>Fuel Processing Technology</i> , 2016, 145, 109-115.	3.7	76

#	ARTICLE	IF	CITATIONS
19	Characterization and productivity of cassava waste and its use as an energy source. <i>Renewable Energy</i> , 2016, 93, 691-699.	4.3	53
20	Effects of potassium feldspar on slagging and fluxing in phosphorus produced via electric furnace. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2017, 192, 475-480.	0.8	15
21	Release of K and Cl and Emissions of NO _x and SO ₂ during Reed Black Liquor Combustion in a Fluidized Bed. <i>Energy & Fuels</i> , 2017, 31, 1631-1637.	2.5	5
22	Alkali-Feldspar as a Catalyst for Biomass Gasification in a 2-MW Indirect Gasifier. <i>Energy & Fuels</i> , 2017, 31, 1583-1592.	2.5	30
23	Speciation and Distribution of Sodium during Zhundong Coal Gasification in a Circulating Fluidized Bed. <i>Energy & Fuels</i> , 2017, 31, 1889-1895.	2.5	30
24	Properties of chars from the gasification and pyrolysis of rice waste streams towards their valorisation as adsorbent materials. <i>Waste Management</i> , 2017, 65, 186-194.	3.7	32
25	Effect of bed materials on slagging and fouling during Zhundong coal gasification. <i>Energy Exploration and Exploitation</i> , 2017, 35, 558-578.	1.1	24
26	Emissions and ash behavior in a 500 kW pellet boiler operated with various blends of woody biomass and peat. <i>Fuel</i> , 2017, 202, 144-153.	3.4	59
27	Influence of Biomass Reburning on NO _x Reductions during Pulverized Coal Combustion. <i>Energy & Fuels</i> , 2017, 31, 5597-5602.	2.5	13
28	The co-combustion of hard coal with raw and torrefied biomasses (willow (<i>Salix viminalis</i>), olive oil) Tj ETQq1 1 0.784314 rgBT /Overlock	4.5	60
29	On the oxy-combustion of lignite and corn stover in a lab-scale fluidized bed reactor. <i>Biomass and Bioenergy</i> , 2017, 96, 152-161.	2.9	23
30	Biomass-based chemical looping technologies: the good, the bad and the future. <i>Energy and Environmental Science</i> , 2017, 10, 1885-1910.	15.6	382
31	CO, NO _x , PCDD/F, and Total Particulate Matter Emissions from Two Small Scale Combustion Appliances Using Agricultural Biomass Type Test Fuels. <i>Energy & Fuels</i> , 2017, 31, 7540-7551.	2.5	6
32	Influence of phosphorous based additives on ash melting characteristics during combustion of biomass briquette fuel. <i>Renewable Energy</i> , 2017, 113, 428-437.	4.3	45
33	Effect of industrial and domestic ash from biomass combustion, and spent coffee grounds, on soil fertility and plant growth: experiments at field conditions. <i>Environmental Science and Pollution Research</i> , 2017, 24, 15270-15277.	2.7	38
34	A numerical investigation of the effect of flue gas recirculation on the evolution of ultra-fine ash particles during pulverized coal char combustion. <i>Combustion and Flame</i> , 2017, 184, 1-10.	2.8	28
35	Potential of water-washing of rape straw on thermal properties and interactions during co-combustion with bituminous coal. <i>Bioresource Technology</i> , 2017, 234, 53-60.	4.8	21
36	Mineral transformation and emission behaviors of Cd, Cr, Ni, Pb and Zn during the co-combustion of dried waste activated sludge and lignite. <i>Fuel</i> , 2017, 199, 578-586.	3.4	38

#	ARTICLE	IF	CITATIONS
37	Investigation of sewage sludge treatment using air plasma assisted gasification. <i>Waste Management</i> , 2017, 64, 149-160.	3.7	54
38	Biomass Treatment Strategies for Thermochemical Conversion. <i>Energy & Fuels</i> , 2017, 31, 3525-3536.	2.5	83
39	Combined bioheat and biopower: A technology review and an assessment for Turkey. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 73, 1313-1332.	8.2	19
40	Characteristics of ash and particle emissions during bubbling fluidised bed combustion of three types of residual forest biomass. <i>Environmental Science and Pollution Research</i> , 2017, 24, 10018-10029.	2.7	16
41	Development of 3D transient wall filming mechanism during combustion by coupling Eulerian-Lagrangian approach and particle-wall interaction model. <i>Applied Thermal Engineering</i> , 2017, 112, 911-923.	3.0	13
42	Role of Potassium and Calcium on the Combustion Characteristics of Biomass Obtained from Thermogravimetric Experiments. <i>Energy & Fuels</i> , 2017, 31, 12238-12246.	2.5	14
43	Oxy-co-Firing in Fluidized Beds: Control of Sulfur Emissions and Assessment of Corrosion Issues. <i>Energy Procedia</i> , 2017, 114, 6003-6009.	1.8	6
44	Alloy Selection for a Cofired Circulating Fluidized Bed Boiler Vortex Finder Application at 880 Å°C in a Complex Mixed Mode Corrosion Environment. <i>Energy & Fuels</i> , 2017, 31, 12857-12866.	2.5	2
45	Time-Dependent Layer Formation on K-Feldspar Bed Particles during Fluidized Bed Combustion of Woody Fuels. <i>Energy & Fuels</i> , 2017, 31, 12848-12856.	2.5	25
46	Evaluation of different water-washing treatments effects on wheat straw combustion properties. <i>Bioresource Technology</i> , 2017, 245, 1075-1083.	4.8	57
47	An investigation of co-combustion municipal sewage sludge with biomass in a 20 kW BFB combustor under air-fired and oxygen-enriched condition. <i>Waste Management</i> , 2017, 70, 114-126.	3.7	31
48	Kinetic analysis of the combustion process of <i>Nannochloropsis gaditana</i> microalgae based on thermogravimetric studies. <i>Journal of Analytical and Applied Pyrolysis</i> , 2017, 127, 109-119.	2.6	19
49	Investigation on Blended Ash Fusibility Characteristics of Biomass and Coal with High Silicaâ€“Alumina. <i>Energy & Fuels</i> , 2017, 31, 7941-7951.	2.5	50
50	CO ₂ -looping in biomass pyrolysis or gasification. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1700-1729.	2.5	98
51	Ash contents and ash-forming elements of biomass and their significance for solid biofuel combustion. <i>Fuel</i> , 2017, 208, 377-409.	3.4	233
52	Gas-side fouling, erosion and corrosion of heat exchangers for middle/low temperature waste heat utilization: A review on simulation and experiment. <i>Applied Thermal Engineering</i> , 2017, 126, 737-761.	3.0	95
53	Slagging and fouling of Zhundong coal at different air equivalence ratios in circulating fluidized bed. <i>Fuel</i> , 2017, 205, 46-59.	3.4	37
54	Parametric studies on corn combustion characteristics in a fixed bed: Primary air flow rate and different corn lengths. <i>Applied Thermal Engineering</i> , 2017, 126, 702-716.	3.0	17

#	ARTICLE	IF	CITATIONS
55	Effects of potassium and calcium on the early stages of combustion of single biomass particles. <i>Fuel</i> , 2017, 209, 787-794.	3.4	39
56	Investigation of Corrosion Characteristics of High-Sodium High-Chlorine Lignite during Circulating Fluidized Bed Combustion. <i>Energy & Fuels</i> , 2017, 31, 13627-13638.	2.5	8
57	Importance of volatile AAEM species to char reactivity during volatile-ash char interactions. <i>RSC Advances</i> , 2017, 7, 10397-10406.	1.7	24
58	Integrated management of ash from industrial and domestic combustion: a new sustainable approach for reducing greenhouse gas emissions from energy conversion. <i>Environmental Science and Pollution Research</i> , 2017, 24, 14834-14846.	2.7	23
59	Influence of BaCO ₃ on chlorine fixation, combustion characteristics and KCl conversion during biomass combustion. <i>Fuel</i> , 2017, 208, 82-90.	3.4	19
60	Experimental study of various fluxing agents in a phosphorus furnace. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2017, 192, 1048-1053.	0.8	3
61	The condensation and thermodynamic characteristics of alkali compound vapors on wall during wheat straw combustion. <i>Fuel</i> , 2017, 187, 33-42.	3.4	26
62	Co-firing of biomass and slagging in industrial furnace: A review on modelling approach. <i>Journal of the Energy Institute</i> , 2017, 90, 838-854.	2.7	28
63	Potassium recovery from the fly ash from a grate boiler firing agro-residues: effects of unburnt carbon and calcination pretreatment. <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 801-807.	1.6	6
64	Thermochemical processing of sewage sludge to energy and fuel: Fundamentals, challenges and considerations. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 80, 888-913.	8.2	428
65	Full-scale experimental investigation of deposition and corrosion of pre-protector and 3rd superheater in a waste incineration plant. <i>Scientific Reports</i> , 2017, 7, 17549.	1.6	14
66	Study on CO ₂ Gasification Reaction during the Combustion of Pulverized Coal Char Particle. <i>Energy Procedia</i> , 2017, 142, 1635-1639.	1.8	1
67	Biomass Combustion: Potassium and Sodium Flame Emission Spectra and Composition in Ash. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2017, 96, 367-371.	0.2	9
68	Effect of minerals and binders on particulate matter emission from biomass pellets combustion. <i>Applied Energy</i> , 2018, 215, 106-115.	5.1	52
69	Influencing Mechanism of Additives on Ash Fusion Behaviors of Straw. <i>Energy & Fuels</i> , 2018, 32, 3272-3280.	2.5	32
70	Potassium Capture by Kaolin, Part 2: K ₂ CO ₃ , KCl, and K ₂ SO ₄ . <i>Energy & Fuels</i> , 2018, 32, 3566-3578.	2.5	36
71	Preliminary understanding on the ash behavior of algae during co-gasification in an entrained flow reactor. <i>Fuel Processing Technology</i> , 2018, 175, 26-34.	3.7	12
72	Assessment of hydrothermal carbonization and coupling washing with torrefaction of bamboo sawdust for biofuels production. <i>Bioresource Technology</i> , 2018, 258, 111-118.	4.8	46

#	ARTICLE	IF	CITATIONS
73	Catalytic behaviors of alkali metal salt involved in homogeneous volatile and heterogeneous char reforming in steam gasification of cellulose. <i>Energy Conversion and Management</i> , 2018, 158, 147-155.	4.4	50
74	Investigation of potassium transformation characteristics and the influence of additives during biochar briquette combustion. <i>Fuel</i> , 2018, 222, 407-415.	3.4	20
75	Physical-energy characterization of microalgae <i>Scenedesmus</i> and experimental pellets. <i>Fuel</i> , 2018, 226, 121-126.	3.4	37
76	Characterization of ash melting behaviour at high temperatures under conditions simulating combustible solid waste gasification. <i>Waste Management and Research</i> , 2018, 36, 415-425.	2.2	7
77	The formation of deposits and their evolutionary characteristics during pressurized gasification of Zhundong coal char. <i>Fuel</i> , 2018, 224, 469-480.	3.4	20
78	Potassium Capture by Kaolin, Part 1: KOH. <i>Energy & Fuels</i> , 2018, 32, 1851-1862.	2.5	34
79	Oxy-fuel combustion study of biomass fuels in a 20â€kWth fluidized bed combustor. <i>Fuel</i> , 2018, 215, 778-786.	3.4	124
80	Existence Form of Potassium Components in Woody Biomass Combustion Ashes and Estimation Method of Its Enrichment Degree. <i>Energy & Fuels</i> , 2018, 32, 517-524.	2.5	10
81	Ash Formation and Fouling during Combustion of Rice Husk and Its Blends with a High Alkali Xinjiang Coal. <i>Energy & Fuels</i> , 2018, 32, 416-424.	2.5	24
82	Experiment Study on Ash Fusion Characteristics of Cofiring Straw and Sawdust. <i>Energy & Fuels</i> , 2018, 32, 525-531.	2.5	18
83	Chlorine-Induced High-Temperature Corrosion of Boiler Steels Combusting Sha Erhu Coal Compared to Biomass. <i>Energy & Fuels</i> , 2018, 32, 4237-4247.	2.5	26
84	Behavior of Slagging Deposits during Coal and Biomass Co-combustion in a 300 kW Down-Fired Furnace. <i>Energy & Fuels</i> , 2018, 32, 4399-4409.	2.5	24
85	Codensification of Agroforestry Residue with Bio-Oil for Improved Fuel Pellets. <i>Energy & Fuels</i> , 2018, 32, 598-606.	2.5	21
86	Effect of ash circulation on the performance of a dual fluidized bed gasification system. <i>Biomass and Bioenergy</i> , 2018, 115, 45-55.	2.9	19
87	Fate and distribution of heavy metals during thermal processing of sewage sludge. <i>Fuel</i> , 2018, 226, 721-744.	3.4	203
88	Ultra-fine particulate matters (PMs) formation during air and oxy-coal combustion: Kinetics study. <i>Applied Energy</i> , 2018, 218, 46-53.	5.1	27
89	Release and transformation of potassium during corn straw and coal co-combustion. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2018, 40, 327-334.	1.2	3
90	Combustion performance and slagging characteristics during co-combustion of Zhundong coal and sludge. <i>Journal of the Energy Institute</i> , 2018, 91, 397-410.	2.7	70

#	ARTICLE	IF	CITATIONS
91	Transformation and release of potassium during fixed-bed pyrolysis of biomass. Journal of the Energy Institute, 2018, 91, 630-637.	2.7	48
92	Mineral phase transformation of biomass ashes – Experimental and thermochemical calculations. Renewable Energy, 2018, 128, 446-459.	4.3	88
93	Correlations of chemical properties of high-alkali solid fuels: A comparative study between Zhundong coal and biomass. Fuel, 2018, 211, 629-637.	3.4	24
94	Thermomechanical Extended Layerwise Method for laminated composite plates with multiple delaminations and transverse cracks. Composite Structures, 2018, 185, 665-683.	3.1	17
95	Investigation of ash deposition and corrosion during circulating fluidized bed combustion of high-sodium, high-chlorine Xinjiang lignite. Fuel, 2018, 214, 207-214.	3.4	24
96	Review of Pulverized Combustion of Non-Woody Residues. Energy & Fuels, 2018, 32, 4069-4095.	2.5	22
97	Variation of Char Reactivity during Catalytic Gasification with Steam: Comparison among Catalytic Gasification by Ion-Exchangeable Na, Ca, and Na/Ca Mixture. Energy & Fuels, 2018, 32, 142-153.	2.5	18
98	Influence of controlled handling of solid inorganic materials and design changes on the product gas quality in dual fluid bed gasification of woody biomass. Applied Energy, 2018, 210, 230-240.	5.1	36
99	Aggravated fine particulate matter emissions from heating-upgraded biomass and biochar combustion: The effect of pretreatment temperature. Fuel Processing Technology, 2018, 171, 1-9.	3.7	42
100	Particle agglomeration during fluidized bed combustion: Mechanisms, early detection and possible countermeasures. Fuel Processing Technology, 2018, 171, 31-38.	3.7	72
101	State-of-the-art applications of fly ash from coal and biomass: A focus on zeolite synthesis processes and issues. Progress in Energy and Combustion Science, 2018, 65, 109-135.	15.8	258
102	Blend design tools for Medium Combustion Plants (MCP) firing biomass wastes. Waste Management, 2018, 71, 200-214.	3.7	3
103	The low-temperature corrosion characteristics of alcohol-based fuel combustion. RSC Advances, 2018, 8, 41237-41245.	1.7	1
105	Experimental Study on the Bubble Formation Mechanism during the Sintering of Coal and Biomass Ash Blends. Energy & Fuels, 2018, 32, 12919-12929.	2.5	5
106	Analysis and Prediction of Corrosion of Refractory Materials by Potassium during Biomass Combustion-Thermodynamic Study. Materials, 2018, 11, 2584.	1.3	7
107	Characterization of Hydrochar Pellets from Hydrothermal Carbonization of Agricultural Residues. Energy & Fuels, 2018, 32, 11538-11546.	2.5	26
108	Entrained Metal Aerosol Emissions from Air-Fired Biomass and Coal Combustion for Carbon Capture Applications. Materials, 2018, 11, 1819.	1.3	7
109	Biomass ash interactions with a manganese ore used as oxygen-carrying bed material in a 12 MWth CFB boiler. Biomass and Bioenergy, 2018, 119, 179-190.	2.9	32

#	ARTICLE	IF	CITATIONS
110	Valorization of Wheat Straw Using a Recyclable Hydrotrope at Low Temperatures (â‰‰90 Â°C). ACS Sustainable Chemistry and Engineering, 2018, 6, 14480-14489.	3.2	51
111	Industrial Waste as Part of Coalâ€™Water Slurry Fuels. Energy & Fuels, 2018, 32, 11398-11410.	2.5	27
112	Geotechnical properties of products of alternative fuel combustion and co-firing with hard coal in the context of their use as solidifying dense mixtures. Waste Management and Research, 2018, 36, 1127-1136.	2.2	1
113	Removal of Hg ⁰ from simulated flue gas over silver-loaded rice husk gasification char. Royal Society Open Science, 2018, 5, 180248.	1.1	12
114	Fertilizer properties of ash from corn-stover pellets using the sequential extraction and matrix expression. Waste Management, 2018, 82, 111-117.	3.7	7
115	Modeling of ash formation and deposition processes in coal and biomass fired boilers: A comprehensive review. Applied Energy, 2018, 230, 1447-1544.	5.1	138
116	Effect of biomass ash addition on coal ash fusion process under CO ₂ atmosphere. Fuel, 2018, 231, 417-426.	3.4	27
117	Ash formation and deposition in coal and biomass fired combustion systems: Progress and challenges in the field of ash particle sticking and rebound behavior. Progress in Energy and Combustion Science, 2018, 68, 65-168.	15.8	322
118	Spontaneous Emission Measurements of Selected Alkali Radicals during the Combustion of a Single Biomass Pellet. Energy & Fuels, 2018, 32, 10132-10143.	2.5	5
119	Investigating co-firing characteristics of coal and masson pine. Renewable Energy, 2018, 126, 563-572.	4.3	13
120	Investigation on the effects of different forms of sodium, chlorine and sulphur and various pretreatment methods on the deposition characteristics of Na species during pyrolysis of a Na-rich coal. Fuel, 2018, 234, 872-885.	3.4	24
121	Post-combustion and Oxy-combustion Technologies. , 0, , 47-66.		2
122	Release and Transformation Pathways of Various K Species during Thermal Conversion of Agricultural Straw. Part 1: Devolatilization Stage. Energy & Fuels, 2018, 32, 9605-9613.	2.5	27
123	Combustion behavior of coal pellets blended with Miscanthus biochar. Energy, 2018, 163, 180-190.	4.5	57
124	Design and validation of an advanced entrained flow reactor system for studies of rapid solid biomass fuel particle conversion and ash formation reactions. Review of Scientific Instruments, 2018, 89, 065101.	0.6	5
125	Ash deposit formation during the combustion of pulverized grape pomace in a drop tube furnace. Energy Conversion and Management, 2018, 169, 383-389.	4.4	17
126	Thermogravimetric analysis of (co-)combustion of oily sludge and litchi peels: combustion characterization, interactions and kinetics. Thermochimica Acta, 2018, 667, 207-218.	1.2	59
127	Influence of coal co-firing on the particulate matter formation during pulverized biomass combustion. Journal of the Energy Institute, 2019, 92, 450-458.	2.7	32

#	ARTICLE	IF	CITATIONS
128	Effect of kaolin addition on alkali capture capability during combustion of olive residue. <i>Combustion Science and Technology</i> , 2019, 191, 43-53.	1.2	9
129	Effect of the torrefaction on the emission of PM10 from combustion of rice husk and its blends with a lignite. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2733-2740.	2.4	34
130	Measurement and kinetics of elemental and atomic potassium release from a burning biomass pellet. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2681-2688.	2.4	42
131	Prediction of particle sticking efficiency for fly ash deposition at high temperatures. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2995-3003.	2.4	27
132	An intrinsic kinetics model to predict complex ash effects (ash film, dilution, and vaporization) on pulverized coal char burnout in air (O ₂ /N ₂) and oxy-fuel (O ₂ /CO ₂) atmospheres. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2781-2790.	2.4	22
133	Effects of leaching and additives on the ash fusion characteristics of high-Na/Ca Zhundong coal. <i>Journal of the Energy Institute</i> , 2019, 92, 1115-1122.	2.7	66
134	Concerning operational aspects in supercritical water gasification of kraft black liquor. <i>Renewable Energy</i> , 2019, 130, 891-901.	4.3	45
135	Alkali metal emissions in an early-stage pulverized-coal flame: DNS analysis of reacting layers and chemistry tabulation. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2791-2799.	2.4	36
136	Production and characterization of granules from agricultural wastes and comparison of combustion and emission results with wood based fuels. <i>Fuel</i> , 2019, 256, 115897.	3.4	16
137	Carbon capture technologies. , 2019, , 15-45.		11
138	Effects of sewage sludge organic and inorganic constituents on the properties of pyrolysis products. <i>Energy Conversion and Management</i> , 2019, 196, 1410-1419.	4.4	89
139	Investigation of additives in combustion of wheat straw pellets in a small scale boiler. <i>Journal of Renewable and Sustainable Energy</i> , 2019, 11, .	0.8	8
140	Characterisation of ashes from waste biomass power plants and phosphorus recovery. <i>Science of the Total Environment</i> , 2019, 690, 573-583.	3.9	37
141	The impact of aluminosilicate-based additives upon the sintering and melting behaviour of biomass ash. <i>Biomass and Bioenergy</i> , 2019, 127, 105284.	2.9	39
142	Microwave-assisted hydrothermal carbonization of corn stalk for solid biofuel production: Optimization of process parameters and characterization of hydrochar. <i>Energy</i> , 2019, 186, 115795.	4.5	99
143	Combined manganese oxides as oxygen carriers for biomass combustion – Ash interactions. <i>Chemical Engineering Research and Design</i> , 2019, 149, 104-120.	2.7	27
144	Rubber Tree (<i>Hevea brasiliensis</i>) Biomass, Nutrient Content, and Heating Values in Southern Thailand. <i>Forests</i> , 2019, 10, 638.	0.9	26
145	The influence of Na ₂ SO ₃ /NaHSO ₃ on the formation process of low-temperature ash deposition with an in situ measurement technique. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2019, 14, e2351.	0.8	5

#	ARTICLE	IF	CITATIONS
146	Low-temperature pre-treatment of municipal solid waste for efficient application in combustion systems. <i>Energy Conversion and Management</i> , 2019, 196, 525-535.	4.4	31
147	Influence of herbaceous biomass ash pre-treated by alkali metal leaching on the agglomeration/sintering and corrosion behaviors. <i>Energy</i> , 2019, 187, 115950.	4.5	34
148	Evaporation rate of potassium chloride in combustion of herbaceous biomass and its calculation. <i>Fuel</i> , 2019, 257, 116021.	3.4	18
149	Impacts and release characteristics of K and Mg contained in rice husk during torrefaction process. <i>Energy</i> , 2019, 186, 115888.	4.5	16
150	Investigation into scavenging of sodium and ash deposition characteristics during co-combustion of Zhundong lignite with an oil shale semi-coke of high aluminosilicate in a circulating fluidized bed. <i>Fuel</i> , 2019, 257, 116099.	3.4	23
151	Characterization and thermal decomposition of demineralized wastewater algae biomass. <i>Algal Research</i> , 2019, 38, 101399.	2.4	23
152	Influence of Sewage Sludge on Ash Fusion during Combustion of Maize Straw. <i>Energy & Fuels</i> , 2019, 33, 10237-10246.	2.5	12
153	Agglomeration during Fluidized Bed Combustion and Gasification of Fuels. <i>Thermal Engineering (English Translation of Teploenergetika)</i> , 2019, 66, 635-651.	0.4	11
154	Investigation of the slagging characteristics during co-combustion of Shenhua coal and corn stalk: Effect of deposition surface. <i>Fuel</i> , 2019, 256, 115939.	3.4	9
155	Experimental comparative study on ash fusion characteristics of Ningdong coal under oxidizing and reducing atmosphere by means of SiO ₂ -Al ₂ O ₃ -(CaO+MgO+Na ₂ O+K ₂ O) pseudo-ternary diagrams. <i>Fuel</i> , 2019, 258, 116137.	3.4	7
156	Experiment and Kinetics Studies on Ash Fusion Characteristics of Biomass/Coal Mixtures during Combustion. <i>Energy & Fuels</i> , 2019, 33, 10317-10323.	2.5	5
157	Fly Ash From Poultry Litter Gasification – Can it be Utilised in Agriculture Systems as a Fertiliser?. <i>Energy Procedia</i> , 2019, 161, 38-46.	1.8	9
158	Biomass torrefaction: properties, applications, challenges, and economy. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 115, 109395.	8.2	217
159	Aluminosilicate phosphate cements – a critical review. <i>Advances in Applied Ceramics</i> , 2019, 118, 274-286.	0.6	23
160	Combustion improvements of upgraded biomass by washing and torrefaction. <i>Fuel</i> , 2019, 253, 1018-1033.	3.4	44
161	Potassium capture by coal fly ash: K ₂ CO ₃ , KCl and K ₂ SO ₄ . <i>Fuel Processing Technology</i> , 2019, 194, 106115.	3.7	31
162	Formation factors and emission characteristics of ultrafine particulate matters during Na-rich char gasification. <i>Fuel</i> , 2019, 253, 781-791.	3.4	10
163	Experimental investigation on temporal release of potassium from biomass pellet combustion by flame emission spectroscopy. <i>Fuel</i> , 2019, 253, 1378-1384.	3.4	38

#	ARTICLE	IF	CITATIONS
164	A synergistic approach for the simultaneous decarbonisation of power and industry via bioenergy with carbon capture and storage (BECCS). <i>International Journal of Greenhouse Gas Control</i> , 2019, 87, 221-237.	2.3	22
165	Prediction of potassium compounds released from biomass during combustion. <i>Applied Energy</i> , 2019, 250, 1696-1705.	5.1	40
166	Experimental methods in chemical engineering: Reactorsâ€™ fluidized beds. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 2383-2394.	0.9	32
167	Comparisons of Acid and Water Solubilities of Rice Straw Ash Together with Its Major Ash-Forming Elements at Different Ashing Temperatures: An Experimental Study. <i>Sustainability</i> , 2019, 11, 1989.	1.6	3
168	Numerical study of HCl and SO ₂ impact on potassium emissions in pulverized-biomass combustion. <i>Fuel Processing Technology</i> , 2019, 193, 19-30.	3.7	19
169	Theoretical and experimental study of gas-phase corrosion attack of Fe under simulated municipal solid waste combustion: Influence of KCl, SO ₂ , HCl, and H ₂ O vapour. <i>Applied Energy</i> , 2019, 247, 630-642.	5.1	12
170	Numerical study of HCl and SO ₂ impact on sodium emissions in pulverized-coal flames. <i>Fuel</i> , 2019, 250, 315-326.	3.4	12
171	Biomass ash characterisation for reuse as additive in composting process. <i>Biomass and Bioenergy</i> , 2019, 123, 186-194.	2.9	20
172	Fine Ash Formation and Slagging Deposition during Combustion of Silicon-Rich Biomasses and Their Blends with a Low-Rank Coal. <i>Energy & Fuels</i> , 2019, 33, 5875-5882.	2.5	42
173	Investigation on fusion characteristics of deposition from biomass vibrating grate furnace combustion and its modification. <i>Energy</i> , 2019, 174, 724-734.	4.5	32
174	Combustion of Miscanthus: Composition of the Ash by Particle Size. <i>Energies</i> , 2019, 12, 178.	1.6	18
175	Effects of water leaching (simulated rainfall) and additives (KOH, KCl, and SiO ₂) on the ash fusion characteristics of corn straw. <i>Applied Thermal Engineering</i> , 2019, 154, 485-492.	3.0	28
176	New chemical mechanism explaining the breakdown of protective oxides on high temperature steels in biomass combustion and gasification plants. <i>RSC Advances</i> , 2019, 9, 10034-10048.	1.7	9
177	A novel two-stage enriched air biomass gasification for producing low-tar high heating value fuel gas: Pilot verification and performance analysis. <i>Energy</i> , 2019, 173, 511-522.	4.5	30
178	Influence of Fine Fuel Particles on Ash Deposition in Industrial-Scale Biomass Combustion: Experiments and Computational Fluid Dynamics Modeling. <i>Energy & Fuels</i> , 2019, 33, 5911-5917.	2.5	10
179	Review on modelling approaches based on computational fluid dynamics for biomass combustion systems. <i>Biomass Conversion and Biorefinery</i> , 2019, 9, 129-182.	2.9	37
180	A complete review based on various aspects of pulverized coal combustion. <i>International Journal of Energy Research</i> , 2019, 43, 3134-3165.	2.2	48
181	Energy and Emission Characteristics of Biowaste from the Corn Grain Drying Process. <i>Energies</i> , 2019, 12, 4383.	1.6	17

#	ARTICLE	IF	CITATIONS
182	Ash Deposition Characteristics of Industrial Biomass Waste and Agricultural Residues. Materials Today: Proceedings, 2019, 19, 1712-1721.	0.9	11
183	Experimental study of radiation characteristics and temperature distributions of gasoline and biomass flame. IET Renewable Power Generation, 2019, 13, 1833-1839.	1.7	8
184	Modeling post-flame sulfation of KCl and KOH in bio-dust combustion with full and simplified mechanisms. Fuel, 2019, 258, 116147.	3.4	18
185	Oxy-combustion of agro and wood biomass in a fluidized bed. E3S Web of Conferences, 2019, 137, 01032.	0.2	0
186	Environmental risk assessment in livestock manure derived biochars. RSC Advances, 2019, 9, 40536-40545.	1.7	15
187	Effects of FGR and Changeable Combustion Parameters and Coal/Char Properties on the Formation of Ultrafine PMs during Pulverized Coal Char Combustion under Various O_2/N_2 and O_2/CO_2 Atmospheres. Combustion Science and Technology, 2019, 191, 1898-1915.	1.2	11
188	Study connective capabilities of solid residues from the waste incineration. Journal of Environmental Management, 2019, 231, 1048-1055.	3.8	26
189	Additives as a fuel-oriented measure to mitigate inorganic particulate matter (PM) emissions during small-scale combustion of solid biofuels. Biomass Conversion and Biorefinery, 2019, 9, 3-20.	2.9	21
190	An investigation of lime addition to fuel as a countermeasure to bed agglomeration for the combustion of non-woody biomass fuels in a 20kWth bubbling fluidised bed combustor. Fuel, 2019, 240, 349-361.	3.4	25
191	Mass, energy and exergy analysis of a biomass boiler: A portuguese representative case of the pulp and paper industry. Applied Thermal Engineering, 2019, 152, 350-361.	3.0	26
192	Condensation of KCl(g) under varied temperature gradient. Fuel, 2019, 237, 1141-1150.	3.4	10
193	Experimental study on the ash behaviour in combustion of pelletized residual agricultural biomass. Fuel, 2019, 239, 991-1000.	3.4	25
194	Pyrolysis derived char from municipal and industrial sludge: Impact of organic decomposition and inorganic accumulation on the fuel characteristics of char. Waste Management, 2019, 83, 131-141.	3.7	59
195	Sintering reduction of herbaceous biomass when blended with woody biomass: predictive and combustion tests. Fuel, 2019, 239, 1115-1124.	3.4	21
196	Experimental study of the high-temperature slagging characteristics of coal ash-biomass ash blends under different atmospheres. Journal of the Energy Institute, 2019, 92, 1914-1925.	2.7	22
197	Experimental study on ash fusion characteristics and slagging potential using simulated biomass ashes. Journal of the Energy Institute, 2019, 92, 1889-1896.	2.7	38
198	Heat transfer and fouling performance of finned tube heat exchangers: Experimentation via on line monitoring. Fuel, 2019, 236, 949-959.	3.4	45
199	Characteristics of co-combustion of strongly caking and non-caking coals in a pilot circulating fluidized bed combustor (CFBC). Fuel, 2019, 236, 1110-1116.	3.4	5

#	ARTICLE	IF	CITATIONS
200	Effect of additives on thermochemical conversion of solid biofuel blends from wheat straw, corn stover, and corn cob. <i>Biomass Conversion and Biorefinery</i> , 2019, 9, 35-54.	2.9	18
201	Assessment of additives avoiding the release of problematic species into the gas phase during biomass combustion—development of a fast screening method based on TGA. <i>Biomass Conversion and Biorefinery</i> , 2019, 9, 21-33.	2.9	7
202	Migration and transformation of sodium and chlorine in high-sodium high-chlorine Xinjiang lignite during circulating fluidized bed combustion. <i>Journal of the Energy Institute</i> , 2019, 92, 673-681.	2.7	25
203	Investigation of K*, Na* and Ca* flame emission during single biomass particle combustion. <i>Combustion Science and Technology</i> , 2019, 191, 151-162.	1.2	11
204	The use of equilibrium thermodynamic models for the prediction of inorganic phase changes in the co-firing of wheat straw with El Cerrejon coal. <i>Journal of the Energy Institute</i> , 2019, 92, 813-823.	2.7	17
205	Strategy for the Design of Waste to Energy Processes Based on Physicochemical Characterisation. <i>Waste and Biomass Valorization</i> , 2020, 11, 2961-2971.	1.8	2
206	The addition of dolomite to the combustion of biomass fuel forms: the study of ashes agglomeration and fusibility. <i>Biomass Conversion and Biorefinery</i> , 2020, 10, 471-481.	2.9	8
207	The fate of chlorine during MSW incineration: Vaporization, transformation, deposition, corrosion and remedies. <i>Progress in Energy and Combustion Science</i> , 2020, 76, 100789.	15.8	139
208	Experimental study of potassium release during biomass-pellet combustion and its interaction with inhibitive additives. <i>Fuel</i> , 2020, 260, 116346.	3.4	27
209	Biochar from pyrolysis of biological sludge from wastewater treatment. <i>Energy Reports</i> , 2020, 6, 757-763.	2.5	19
210	Influence of coal ash on CO ₂ gasification reactivity of corn stalk char. <i>Renewable Energy</i> , 2020, 147, 2056-2063.	4.3	22
211	Exploration of potassium migration behavior in straw ashes under reducing atmosphere and its modification by additives. <i>Renewable Energy</i> , 2020, 145, 2286-2295.	4.3	28
212	Chemical Characteristics of Ash Formed from the Combustion of Shoe Manufacturing Waste in a 2.5 MWth Circulating Fluidized Bed Combustor. <i>Waste and Biomass Valorization</i> , 2020, 11, 4551-4560.	1.8	2
213	Influence of Ammonium Dihydrogen Phosphate Addition on the Behavior of Potassium During Biomass Combustion. <i>Waste and Biomass Valorization</i> , 2020, 11, 6359-6367.	1.8	3
214	Research on formation mechanism of typical low-temperature fouling layers in coal-fired boilers. <i>Fuel</i> , 2020, 261, 116215.	3.4	6
215	Simulation of char-pellet combustion and sodium release inside porous char using lattice Boltzmann method. <i>Combustion and Flame</i> , 2020, 211, 325-336.	2.8	11
216	Effect of Phosphorus Concentration on Alkali and Heavy Metals Transformation Under Agglomeration/Defluidization During Fluidized Bed Simulated Sludge Co-combustion. <i>Waste and Biomass Valorization</i> , 2020, 11, 6903-6916.	1.8	9
217	Interaction of oxygen carriers with common biomass ash components. <i>Fuel Processing Technology</i> , 2020, 200, 106313.	3.7	26

#	ARTICLE	IF	CITATIONS
218	Modeling K-Containing Vapors Transforming into Sub-micrometer Particles in Flue Gas of Pulverized Straw Combustion. <i>Energy & Fuels</i> , 2020, 34, 440-449.	2.5	6
219	Online Measurement of the Flame Temperature and Emissivity during Biomass Volatile Combustion Using Spectral Thermometry and Image Thermometry. <i>Energy & Fuels</i> , 2020, 34, 907-919.	2.5	17
220	Experimental Investigation into Ash Deposition and Na Migration Characteristics during Combustion of High Sodium Zhundong Lignite in a Circulating Fluidized Bed Operating at Low Temperatures. <i>Energy & Fuels</i> , 2020, 34, 188-198.	2.5	13
221	Critical changes of inorganics during combustion of herbaceous biomass displayed in its water soluble fractions. <i>Fuel Processing Technology</i> , 2020, 198, 106231.	3.7	9
222	Effects of various occurrence modes of inorganic components on the emissions of PM10 during torrefied biomass combustion under air and oxy-fuel conditions. <i>Applied Energy</i> , 2020, 259, 114153.	5.1	22
223	Influence of additives on potassium retention behaviors during straw combustion: A mechanism study. <i>Bioresource Technology</i> , 2020, 299, 122515.	4.8	19
224	Effect of combining water washing and carbonisation on the emissions of PM10 generated by the combustion of typical herbs. <i>Fuel Processing Technology</i> , 2020, 200, 106311.	3.7	14
225	Sequential extraction for heavy metal distribution of bottom ash from fluidized bed co-combusted phosphorus-rich sludge under the agglomeration/defluidization process. <i>Waste Management and Research</i> , 2020, 38, 122-133.	2.2	5
226	Surface morphology analysis of oxide layers formed on 10CrMo9-10 steel used in the power industry. <i>Materials Research Express</i> , 2020, 7, 026544.	0.8	3
227	The ash-quartz sand interaction behaviours during steam gasification or combustion of a freshwater and a marine species of macroalgae. <i>Fuel</i> , 2020, 263, 116621.	3.4	12
228	Ash Formation and Deposition in Oxy-fuel Combustion of Rice Husk, Coal, and Their Blend with 70% Inlet O ₂ . <i>Energy & Fuels</i> , 2020, 34, 890-899.	2.5	13
229	The alkali metal occurrence characteristics and its release and conversion during wheat straw pyrolysis. <i>Renewable Energy</i> , 2020, 151, 255-262.	4.3	17
230	An experimental investigation into the effect of flue gas recirculation on ash deposition and Na migration behaviour in circulating fluidized bed during combustion of high sodium Zhundong lignite. <i>Fuel Processing Technology</i> , 2020, 199, 106300.	3.7	14
231	Bioenergy and emission characterizations of catalytic combustion and pyrolysis of litchi peels via TG-FTIR-MS and Py-GC/MS. <i>Renewable Energy</i> , 2020, 148, 1074-1093.	4.3	50
232	Flexibility of CFB Combustion: An Investigation of Co-Combustion with Biomass and RDF at Part Load in Pilot Scale. <i>Energies</i> , 2020, 13, 4665.	1.6	10
233	Particulate Emission from Municipal Solid Waste Combustion: Effect of Si-Al-Based Additives for Its Mitigation. <i>Energy & Fuels</i> , 2020, 34, 15399-15410.	2.5	14
234	Sludge biochar as a green additive in cement-based composites: Mechanical properties and hydration kinetics. <i>Construction and Building Materials</i> , 2020, 262, 120723.	3.2	47
235	Comparative evaluation of aquatic biomass feedstocks for energy application and potential for extraction of plant nutrients from their ash. <i>Biomass and Bioenergy</i> , 2020, 142, 105783.	2.9	17

#	ARTICLE	IF	CITATIONS
236	Dynamic insights into combustion drivers and responses of water hyacinth: Evolved gas and ash analyses. <i>Journal of Cleaner Production</i> , 2020, 276, 124156.	4.6	16
237	The leaching mechanism of heavy metals (Ni, Cd, As) in a gasification slag during acidification. <i>Waste Management</i> , 2020, 114, 17-24.	3.7	35
238	Effect of element content fluctuation on partial melting behavior of coal ash particles. <i>Fuel</i> , 2020, 271, 117608.	3.4	7
239	The correlations of chemical property, alkali metal distribution, and fouling evaluation of Zhundong coal. <i>Journal of the Energy Institute</i> , 2020, 93, 2204-2214.	2.7	35
240	Assessment of biomass demineralization on gasification: From experimental investigation, mechanism to potential application. <i>Science of the Total Environment</i> , 2020, 726, 138634.	3.9	28
241	Multi-stage model for the release of potassium in single particle biomass combustion. <i>Fuel</i> , 2020, 280, 118569.	3.4	9
242	Exploration in ash-deposition (AD) behavior modification of low-rank coal by manure addition. <i>Energy</i> , 2020, 208, 118293.	4.5	11
243	Behavior of the Sewage Sludge Ash under the Conditions of High-Temperature Processing. <i>Russian Journal of Applied Chemistry</i> , 2020, 93, 881-887.	0.1	4
244	Study on the Effect of Si-Al Components in Pulverized Coal Ash on Corrosion in Heating Surface of Biomass Boiler. <i>Key Engineering Materials</i> , 2020, 837, 89-94.	0.4	1
245	Fuzzy optimization of carbon management networks based on direct and indirect biomass co-firing. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 132, 110035.	8.2	30
246	Physiochemical properties and pyrolysis behavior evaluations of hydrochar from co-hydrothermal treatment of rice straw and sewage sludge. <i>Biomass and Bioenergy</i> , 2020, 140, 105664.	2.9	57
247	Formulating a fully converged biorefining chain with zero wastewater generation by recycling stillage liquid to dry acid pretreatment operation. <i>Bioresource Technology</i> , 2020, 318, 124077.	4.8	9
248	Characterization of Sewage Sludge and Food Waste-Based Biochar for Co-Firing in a Coal-Fired Power Plant: A Case Study in Korea. <i>Sustainability</i> , 2020, 12, 9411.	1.6	9
249	Developing Oxygen Carriers for Chemical Looping Biomass Processing: Challenges and Opportunities. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000099.	2.7	26
250	Interaction of Iron Oxygen Carriers and Alkaline Salts Present in Biomass-Derived Ash. <i>Energy & Fuels</i> , 2020, 34, 11143-11153.	2.5	15
251	Quantitative analysis of mass and energy flow in rice straw gasification based on mass and carbon balance. <i>Renewable Energy</i> , 2020, 161, 846-857.	4.3	11
252	Online determination of potassium and sodium release behaviour during single particle biomass combustion by FES and ICP-MS. <i>Science of the Total Environment</i> , 2020, 746, 141162.	3.9	18
253	Microstructure and corrosion resistance of ERNiCrMo-13 and NiCrBSi coatings in simulated coal-fired boiler conditions: The effect of fly-ash composition. <i>Surface and Coatings Technology</i> , 2020, 399, 126134.	2.2	9

#	ARTICLE	IF	CITATIONS
254	In-situ quantification of alkali metals from biomass combustion by optical emission spectroscopy. IOP Conference Series: Materials Science and Engineering, 2020, 736, 022043.	0.3	2
255	Torrefied biomass fuels as a renewable alternative to coal in co-firing for power generation. Energy, 2020, 209, 118444.	4.5	86
256	Study on the Interaction of the Fe-Based Oxygen Carrier with Ashes. Energy & Fuels, 2020, 34, 9796-9809.	2.5	8
257	Image-Based Model for Assessment of Wood Chip Quality and Mixture Ratios. Processes, 2020, 8, 728.	1.3	10
258	Enrichment mechanism of arsenic in fine ash deposits during co-combustion of rice husk and coal. Fuel, 2020, 281, 118712.	3.4	17
259	Combustion behaviour of biochars thermally pretreated via torrefaction, slow pyrolysis, or hydrothermal carbonisation and co-fired with pulverised coal. Renewable Energy, 2020, 161, 867-877.	4.3	76
260	Effect of potassium-containing sulfates on high-temperature mineral transformation and coal ash fusibility. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-16.	1.2	2
261	Harnessing bioenergy and high value-added products from rice residues: a review. Biomass Conversion and Biorefinery, 2022, 12, 3547-3571.	2.9	13
262	Application of Coatings to Alleviate Fireside Corrosion on Heat Transfer Tubes during the Combustion of Low-Grade Solid Fuels: A Review. Energy & Fuels, 2020, 34, 11752-11770.	2.5	17
263	Review on the Current Status of the Co-combustion Technology of Organic Solid Waste (OSW) and Coal in China. Energy & Fuels, 2020, 34, 15448-15487.	2.5	45
264	Reduced chemical reaction mechanisms for simulating sodium emissions by solid-fuel combustion. Applications in Energy and Combustion Science, 2020, 1-4, 100009.	0.9	1
265	Thermal Characteristics, Kinetics, and Volatility of Co-Combustion of Sewage Sludge and Rice Husk. Bioenergy Research, 2020, 14, 1014.	2.2	3
266	Influence of Sodium Oxide on the Fusion of Solid Municipal Waste Ash. Russian Journal of Physical Chemistry B, 2020, 14, 647-653.	0.2	6
267	Migration and transformation law of potassium in the combustion of biomass blended coal. Journal of Fuel Chemistry and Technology, 2020, 48, 929-936.	0.9	10
268	Investigation of the Formation of Coherent Ash Residues during Fluidized Bed Gasification of Wheat Straw Lignin. Energies, 2020, 13, 3935.	1.6	5
269	Pollutant Formation and Control during Fuel Thermochemical Conversion. Journal of Chemistry, 2020, 2020, 1-2.	0.9	0
270	Investigation on the Corrosion of the Elbows in the Flue Gas Cooler of a 600 MW Coal-Fired Power Plant. ACS Omega, 2020, 5, 32551-32563.	1.6	5
271	Impact of blending ratio and injection position on slagging behavior in a 1000 MWe wall-fired furnace with a modified viscosity model. Journal of Mechanical Science and Technology, 2020, 34, 4841-4856.	0.7	0

#	ARTICLE	IF	CITATIONS
272	Using of wood ash as the alternative filler for preparation of rubber mixtures. IOP Conference Series: Materials Science and Engineering, 2020, 776, 012087.	0.3	3
273	Waste Recovery through Thermochemical Conversion Technologies: A Case Study with Several Portuguese Agroforestry By-Products. Clean Technologies, 2020, 2, 377-391.	1.9	8
274	Agglomeration and the effect of process conditions on fluidized bed combustion of biomasses with olivine and silica sand as bed materials: Pilot-scale investigation. Biomass and Bioenergy, 2020, 142, 105806.	2.9	15
275	Influence of biomass ash additive on fusion characteristics of high-silicon-aluminum coal ash. Fuel, 2020, 282, 118876.	3.4	34
276	Viability of Agricultural and Forestry Residues as Biomass Fuels in the Galicia-North Portugal Region: An Experimental Study. Sustainability, 2020, 12, 8206.	1.6	6
277	Emission characteristics of particulate matters from a 30MW biomass-fired power plant in China. Renewable Energy, 2020, 155, 225-236.	4.3	25
278	The impacts of different profiles of the grate inlet conditions on freeboard CFD in a waste wood-fired grate boiler. Applied Energy, 2020, 268, 115055.	5.1	16
279	Temperature and emissivity measurements from combustion of pine wood, rice husk and fir wood using flame emission spectrum. Fuel Processing Technology, 2020, 204, 106423.	3.7	34
280	Slag Formation during Entrained Flow Gasification: Calcium-Rich Bark Fuel with KHCO ₃ Additive. Energy & Fuels, 2020, 34, 7112-7120.	2.5	3
281	Autothermal CaO looping biomass gasification to increase process energy efficiency and reduce ash sintering. Fuel, 2020, 277, 118199.	3.4	26
282	Characteristics of ash and slag from four biomass-fired power plants: Ash/slag ratio, unburned carbon, leaching of major and trace elements. Energy Conversion and Management, 2020, 214, 112897.	4.4	35
283	CO ₂ -mediated sulfur evolution chemistry of pyrite oxidation during oxy-fuel combustion. Combustion and Flame, 2020, 218, 75-83.	2.8	8
284	Release characteristics of potassium and chlorine for torrefied wheat straw during a combined pyrolysis-combustion system. Bioresource Technology, 2020, 312, 123591.	4.8	13
285	Pretreatment of corn stover ash to improve its effectiveness as a supplementary cementitious material in concrete. Cement and Concrete Composites, 2020, 112, 103658.	4.6	31
286	Migration and speciation transformation of K and Cl caused by interaction of KCl with organics during devolatilization of KCl-loaded model biomass compounds. Fuel, 2020, 277, 118205.	3.4	16
287	Catalytic combustions of two bamboo residues with sludge ash, CaO, and Fe ₂ O ₃ : Bioenergy, emission and ash deposition improvements. Journal of Cleaner Production, 2020, 270, 122418.	4.6	25
288	Effects of kaolin-limestone blended additive on the formation and emission of particulate matter: Field study on a 1000MW coal-firing power station. Journal of Hazardous Materials, 2020, 399, 123091.	6.5	22
289	Effect of biomass leachates on structure evolution and reactivity characteristic of petroleum coke gasification. Renewable Energy, 2020, 155, 111-120.	4.3	34

#	ARTICLE	IF	CITATIONS
290	Study on reduction characteristics of Fe species in coal ash under SNCR condition. <i>Fuel</i> , 2020, 277, 118231.	3.4	18
291	Optimal strategy for clean and efficient biomass combustion based on ash deposition tendency and kinetic analysis. <i>Journal of Cleaner Production</i> , 2020, 271, 122529.	4.6	23
292	Chemical study of fly ash deposition in combustion of pelletized residual agricultural biomass. <i>Fuel</i> , 2020, 268, 117228.	3.4	20
293	Valorization of biomass ash in biogas technology: Opportunities and challenges. <i>Energy Reports</i> , 2020, 6, 472-476.	2.5	12
294	Effect of Calcium and Phosphorus on Interactions between Quartz Sand and K-Salt-Doped Wood under Both Steam Gasification and Combustion Atmospheres. <i>Energy & Fuels</i> , 2020, 34, 3210-3222.	2.5	9
295	Experimental study on the formation of ultrafine particulate matters (PMs) during pulverized coal (PC) char combustion in O ₂ /N ₂ and O ₂ /CO ₂ atmospheres. <i>Journal of the Energy Institute</i> , 2020, 93, 2197-2203.	2.7	7
296	Cost-effective flexibilisation of an 80 MW retrofitted biomass power plants: Improved combustion control dynamics using virtual air flow sensors. <i>Case Studies in Thermal Engineering</i> , 2020, 21, 100680.	2.8	6
297	Combustion parameters, evolved gases, reaction mechanisms, and ash mineral behaviors of durian shells: A comprehensive characterization and joint-optimization. <i>Bioresource Technology</i> , 2020, 314, 123689.	4.8	22
298	Influence of additive on ash and combustion characteristics during biomass combustion under O ₂ /CO ₂ atmosphere. <i>Energy</i> , 2020, 195, 116987.	4.5	28
299	Migration and transformation of sodium during staged coal combustion of Zhundong coal and influence of carbon coating. <i>Fuel Processing Technology</i> , 2020, 203, 106382.	3.7	18
300	Development in biomass preparation for suspension firing towards higher biomass shares and better boiler performance and fuel rangeability. <i>Energy</i> , 2020, 196, 117129.	4.5	20
301	Effect of Sludge-Based Additive on Ash Characteristic and Potassium Fixation during the Rice Straw Combustion Process. <i>Energy & Fuels</i> , 2020, 34, 3367-3375.	2.5	8
303	Evaluation of ash composition and deposition tendencies of biomasses and torrefied products from woody and shrubby feedstocks: SRC poplar clones and common broom. <i>Fuel</i> , 2020, 269, 117454.	3.4	11
304	Cation induced microstructure and viscosity variation of molten synthetic slag analyzed by solid-state NMR. <i>Fuel</i> , 2020, 267, 117310.	3.4	12
305	Application of biomass leachate in regulating the fusibility of coal ash. <i>Fuel</i> , 2020, 268, 117338.	3.4	25
306	Interactions between Quartz Sand and Wood Doped with either K or Na Salts under Steam Gasification and Combustion Atmospheres. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 1712-1722.	1.8	8
307	Hydration, strength, and durability of cementitious materials incorporating untreated corn cob ash. <i>Construction and Building Materials</i> , 2020, 243, 118171.	3.2	47
308	Production and composition of biomass from short rotation coppice in marginal land: A 9-year study. <i>Biomass and Bioenergy</i> , 2020, 134, 105478.	2.9	13

#	ARTICLE	IF	CITATIONS
309	Effects of clay and temperature on the slag formation of two biomass fuels: Wood from Acacia mangium and rhizome residual from Manihot esculenta. <i>Renewable Energy</i> , 2020, 156, 213-219.	4.3	2
310	Influence of Phosphorus-Based Additives on Potassium Transformation During Pyrolysis and Ash Characteristics of Biochar Briquettes. <i>Bioenergy Research</i> , 2020, 13, 907-917.	2.2	2
311	Emission reduction of PM10 via pretreatment combining water washing and carbonisation during rice straw combustion: Focus on the effects of pretreatment and combustion conditions. <i>Fuel Processing Technology</i> , 2020, 205, 106412.	3.7	18
312	The study of highly mineralized peat sedimentation products in terms of their use as an energy source. <i>Fuel</i> , 2020, 271, 117593.	3.4	8
313	Production of biofloculant using feather waste as nitrogen source and its use in recycling of straw ash-washing wastewater with low-density and high pH property. <i>Chemosphere</i> , 2020, 252, 126495.	4.2	15
314	A critical review of ash slagging mechanisms and viscosity measurement for low-rank coal and bio-slugs. <i>Frontiers in Energy</i> , 2021, 15, 46-67.	1.2	28
315	Quantitative analysis and speciation of alkali metal emissions from biomass combustion in a 150â€‰kW _{th} furnace by optical emission spectroscopy. <i>Chemical Engineering Communications</i> , 2021, 208, 453-462.	1.5	2
316	Hemp Waste Valorization as Biofuel and Cement Replacement in Cement and Concrete Production. <i>Waste and Biomass Valorization</i> , 2021, 12, 913-923.	1.8	4
317	Effect of oil shale semi-coke on deposit mineralogy and morphology in the flue path of a CFB burning Zhundong lignite. <i>Frontiers in Energy</i> , 2021, 15, 26-37.	1.2	5
318	Unraveled mechanisms in energy production from bioresources using steam gasification. <i>Fuel</i> , 2021, 287, 119527.	3.4	5
319	Influence of pressure and CO ₂ in fluidized bed gasification of waste biomasses. <i>Biomass Conversion and Biorefinery</i> , 2021, 11, 69-81.	2.9	10
320	The ash fusion characteristics of bamboo and coal co-firing process. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 146, 461-468.	2.0	4
321	Biomass ash characterization, fusion analysis and its application in catalytic decomposition of methane. <i>Fuel</i> , 2021, 285, 119107.	3.4	44
322	Bioenergy technologies, uses, market and future trends with Austria as a case study. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 135, 110237.	8.2	73
323	Effects of leaching and additives on the formation of deposits on the heating surface during high-Na/Ca Zhundong coal combustion. <i>Journal of the Energy Institute</i> , 2021, 94, 319-328.	2.7	17
324	Correlations between vapor-phase Na/K/As adsorption capacities of kaolinite and temperature-dependent derivation of its Al-containing groups. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 5237-5247.	2.4	5
325	Preparation and mechanism of hyperbranched heavy oil viscosity reducer. <i>Journal of Petroleum Science and Engineering</i> , 2021, 196, 107941.	2.1	14
326	Experimental tests on co-firing coal and biomass waste fuels in a fluidised bed under oxy-fuel combustion. <i>Fuel</i> , 2021, 286, 119312.	3.4	47

#	ARTICLE	IF	CITATIONS
327	Predicting particle collection performance of a wet electrostatic precipitator under varied conditions with artificial neural networks. <i>Powder Technology</i> , 2021, 377, 632-639.	2.1	27
328	An overview of inorganic particulate matter emission from coal/biomass/MSW combustion: Sampling and measurement, formation, distribution, inorganic composition and influencing factors. <i>Fuel Processing Technology</i> , 2021, 213, 106657.	3.7	113
329	Catalytic influence of mineral compounds on the reactivity of cellulose-derived char in O ₂ -, CO ₂ -, and H ₂ O-containing atmospheres. <i>Fuel</i> , 2021, 287, 119584.	3.4	7
330	New insights into biomass combustion ash categorisation: A phylogenetic analysis. <i>Fuel</i> , 2021, 287, 119469.	3.4	10
331	Inhibition of K ₂ SO ₄ on evaporation of KCl in combustion of herbaceous biomass. <i>Fuel</i> , 2021, 289, 119754.	3.4	15
332	Flue gas-to-ash desulfurization of combustion of textile dyeing sludge: Its dependency on temperature, lignocellulosic residue, and CaO. <i>Chemical Engineering Journal</i> , 2021, 417, 127906.	6.6	58
333	Combustion characteristics and typical pollutant emissions of corn stalk blending with municipal sewage sludge. <i>Environmental Science and Pollution Research</i> , 2021, 28, 9792-9805.	2.7	16
334	Laboratory-scale additive content assessment for aluminum-silicate-based wood chip additivation. <i>Renewable Energy</i> , 2021, 164, 1471-1484.	4.3	4
335	Synergistic effect of additives and blend on sulfur retention, NO release and ash fusibility during combustion of biomass briquettes. <i>International Journal of Green Energy</i> , 2021, 18, 187-202.	2.1	2
336	Emissions of PM ₁₀ from the co-combustion of high-Ca pyrolyzed biochar and high-Si coal under air and oxyfuel atmosphere. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4091-4099.	2.4	14
337	Cleaner process: Efficacy of chlorine in the recycling of gold from gold-containing tailings. <i>Journal of Cleaner Production</i> , 2021, 287, 125066.	4.6	16
338	Regulation of ash slagging behavior for sewage sludge by rice husk addition: Focusing on control mechanisms. <i>Journal of Cleaner Production</i> , 2021, 284, 124677.	4.6	12
339	Dynamic CFD modeling evaluation of ash deposition behavior and morphology evolution with different tube arrangements. <i>Powder Technology</i> , 2021, 379, 279-295.	2.1	16
340	The roles of added chlorine and sulfur on ash deposition mechanisms during solid fuel combustion. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4309-4316.	2.4	10
341	Low-cost additives to improve the fusion behaviour of hydrochar ash. <i>Fuel</i> , 2021, 285, 119009.	3.4	7
342	Progress in biomass torrefaction: Principles, applications and challenges. <i>Progress in Energy and Combustion Science</i> , 2021, 82, 100887.	15.8	429
343	Determination of Combustion Kinetic Data of Some Agricultural Wastes from the Galicia-Northern Portugal Euroregion. <i>Waste and Biomass Valorization</i> , 2021, 12, 3091-3107.	1.8	2
344	A Study into the Influence of Different Factors on the Behavior of Alkaline Element Concentrations that Cause Bed Agglomeration. <i>Thermal Engineering (English Translation of Teploenergetika)</i> , 2021, 68, 72-81.	0.4	2

#	ARTICLE	IF	CITATIONS
345	Emission Behaviors of Submicron Particles (PM1) Generated by the Combustion of Sesame Stalk after Combined Water Washing and Carbonization Pretreatment. <i>Energy Engineering: Journal of the Association of Energy Engineers</i> , 2021, 118, 473-485.	0.3	0
346	Wet torrefaction of empty fruit bunches (EFB) and oil palm trunks (OPT): Effects of process parameters on their physicochemical and structural properties. <i>South African Journal of Chemical Engineering</i> , 2021, 35, 126-136.	1.2	18
347	Thermochemical and biochemical treatment strategies for resource recovery from agri-food industry wastes. , 2021, , 787-807.		2
348	Fractionation Behaviors of Walnut Shell Bio-Oil Components Under Atmospheric Distillation. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
349	Experimental study on ash morphology, fusibility, and mineral transformation during co-combustion of antibiotic filter residue and biomass. <i>Energy</i> , 2021, 217, 119345.	4.5	10
350	Mechanistic Determination of the Role of Aluminum in Particle Adhesiveness at High Temperatures Induced by Sodium and Potassium Using a Synthetic Ash Strategy. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 3727-3734.	3.2	7
351	Slagging Characteristics and Optimization of Operating Temperature on High-Alkali Coal Gasification. <i>Journal of Thermal Science</i> , 2021, 30, 644-655.	0.9	3
352	Application of the Mechanical and Pressure Drop Tests to Determine the Sintering Temperature of Coal and Biomass Ash. <i>Energies</i> , 2021, 14, 1126.	1.6	7
353	Assessment of Cow Dung Pellets as a Renewable Solid Fuel in Direct Combustion Technologies. <i>Energies</i> , 2021, 14, 1192.	1.6	28
354	Fusibility of Agricultural Plant Waste Ash under the Conditions of High-Temperature Processing. <i>Russian Journal of Applied Chemistry</i> , 2021, 94, 354-361.	0.1	0
355	Thermal Characteristics of Ash from Bamboo and Masson Pine Blends: Influence of Mixing Ratio and Heating Rate. <i>ACS Omega</i> , 2021, 6, 7008-7014.	1.6	5
356	Influence of Ashing Temperature on Predicting Slagging Characteristics of Xinjiang High-Sodium Low-Rank Coal and Strategy of Using Mineral Additives as Potential Slagging Preventatives. <i>ACS Omega</i> , 2021, 6, 8850-8861.	1.6	7
357	Compositional and structural study of ash deposits spatially distributed in superheaters of a large biomass-fired CFB boiler. <i>Frontiers in Energy</i> , 2021, 15, 449-459.	1.2	1
358	Recent Development in Numerical Simulations and Experimental Studies of Biomass Thermochemical Conversion. <i>Energy & Fuels</i> , 2021, 35, 6940-6963.	2.5	45
359	Inherent Metal Elements in Biomass Pyrolysis: A Review. <i>Energy & Fuels</i> , 2021, 35, 5407-5478.	2.5	68
360	Utilization of Barley Straw as Feedstock for the Production of Different Energy Vectors. <i>Processes</i> , 2021, 9, 726.	1.3	7
361	A review of the effects of alkali and alkaline earth metal species on biomass gasification. <i>Fuel Processing Technology</i> , 2021, 214, 106723.	3.7	156
362	Recovery of silicon and potassium from rice straw through thermal conversion and residue leaching. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105057.	3.3	6

#	ARTICLE	IF	CITATIONS
363	Experimental and kinetic studies on ash fusion behavior: a high-precision acquisition method for ash fusion temperatures. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2021, 16, e2644.	0.8	2
364	Investigation on the Hygroscopicity of Deposits at the Cold-End of Biomass and Coal-Fired Plants. <i>Energy & Fuels</i> , 2021, 35, 8006-8022.	2.5	1
365	Investigation on the slagging characteristics of high-AAEM lignite under different atmospheres. <i>Journal of the Energy Institute</i> , 2021, 95, 154-165.	2.7	4
366	Biochar from slow pyrolysis of biological sludge from wastewater treatment: characteristics and effect as soil amendment. <i>Biofuels, Bioproducts and Biorefining</i> , 2021, 15, 1054-1072.	1.9	27
367	Bench-scale bubbling fluidized bed systems around the world - Bed agglomeration and collapse: A comprehensive review. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 18740-18766.	3.8	23
368	Dynamic Transformations of Metals in the Burning Solid Matter during Combustion of Heavy Metal-Contaminated Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 7063-7073.	3.2	12
369	A review on bed material particle layer formation and its positive influence on the performance of thermo-chemical biomass conversion in fluidized beds. <i>Fuel</i> , 2021, 291, 120214.	3.4	33
370	Pyrolysis technology for <i>Cortaderia selloana</i> invasive species. Prospects in the biomass energy sector. <i>Renewable Energy</i> , 2021, 169, 178-190.	4.3	7
371	Characteristics of Particulate Emissions from Co-Firing in An Industrial Boiler. <i>Ecolab</i> , 2021, 15, 23-29.	0.1	2
372	Review of the use of additives to mitigate operational problems associated with the combustion of biomass with high content in ash-forming species. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 141, 110502.	8.2	71
373	Effect of different washing parameters on the fuel properties and elemental composition of wheat straw in water-washing pre-treatment. Part 2: Effect of washing temperature and solid-to-liquid ratio. <i>Fuel</i> , 2021, 292, 120209.	3.4	16
374	Numerical Analysis on Reduction of Ultrafine Particulate Matter by a Kaolin Additive during Pulverized Coal Combustion. <i>Energy & Fuels</i> , 2021, 35, 9538-9549.	2.5	18
375	Development of Oxygen Transport Properties by Olivine and Feldspar in Industrial-Scale Dual Fluidized Bed Gasification of Woody Biomass. <i>Energy & Fuels</i> , 2021, 35, 9424-9436.	2.5	9
376	Aspects of chemical recycling of complex plastic waste via the gasification route. <i>Waste Management</i> , 2021, 126, 65-77.	3.7	37
377	Joint examination of fuel-related measures for the improvement of corn cob combustion properties. <i>Journal of Renewable and Sustainable Energy</i> , 2021, 13, 033101.	0.8	1
378	Review on slagging evaluation methods of biomass fuel combustion. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 155, 105082.	2.6	56
379	Bio-based organic-inorganic hybrid UV-curable hydrophobic coating prepared from epoxidized vegetable oils. <i>Industrial Crops and Products</i> , 2021, 163, 113331.	2.5	18
380	Co-firing raw and torrefied rice husk with a high-Na/Ca/Cl coal: Impacts on fine particulates emission and elemental partitioning. <i>Fuel</i> , 2021, 292, 120327.	3.4	9

#	ARTICLE	IF	CITATIONS
381	Ash characteristics of oxy-biomass combustion in a circulating fluidized bed with kaolin addition. <i>Energy</i> , 2021, 230, 120871.	4.5	15
382	Effect of different washing parameters on the fuel properties and elemental composition of wheat straw in water-washing pre-treatment. Part 1: Effect of washing duration and biomass size. <i>Fuel</i> , 2021, 292, 120206.	3.4	18
383	An experimental investigation into bed particle agglomeration and ash deposition during circulating fluidized bed gasification of Zhundong lignite. <i>Journal of the Energy Institute</i> , 2021, 96, 192-204.	2.7	2
384	The impact of the particle size of meat and bone meal (MBM) incineration ash on phosphate precipitation and phosphorus recovery. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105247.	3.3	9
385	Comparative Study: Impacts of Ca and Mg Salts on Iron Oxygen Carriers in Chemical Looping Combustion of Biomass. <i>ACS Omega</i> , 2021, 6, 16649-16660.	1.6	11
386	A distributed-molten model describing the evaporation of potassium chloride from biomass ash at ash-heating stage. <i>Journal of the Energy Institute</i> , 2021, 96, 19-24.	2.7	3
387	Characterization of fine particulate matter generated in a large woody biomass-firing circulating fluid bed boiler. <i>Journal of the Energy Institute</i> , 2021, 96, 11-18.	2.7	10
388	Torrefaction of fruit waste seed and shells for biofuel production with reduced CO ₂ emission. <i>Energy</i> , 2021, 225, 120226.	4.5	24
389	Biowaste-to-biochar through microwave-assisted wet co-torrefaction of blending mango seed and passion shell with optoelectronic sludge. <i>Energy</i> , 2021, 225, 120213.	4.5	17
390	Investigation on Ash Fusion and Slagging Properties of Coal under Reducing Atmosphere. <i>Combustion Science and Technology</i> , 2023, 195, 64-84.	1.2	2
391	Combustion behaviors of complex incense stick residues: Multivariate Gaussian process-based optimization of thermal, kinetic, thermodynamic, emission, and ash responses. <i>Fuel</i> , 2021, 293, 120439.	3.4	5
392	Migration and transformation of heavy metals in hyperaccumulators during the thermal treatment: a review. <i>Environmental Science and Pollution Research</i> , 2021, 28, 47838-47855.	2.7	11
393	Thermochemical evaluation of fique bagasse waste (FBW) resulting from industrial processes as an energy precursor through combustion and gasification. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 5501-5514.	2.9	1
394	Emission Assessment of Agro-Waste Combustion. <i>European Journal of Science and Technology</i> , 0, , .	0.5	1
395	Fuel Improvement Measures for Particulate Matter Emission Reduction during Corn Cob Combustion. <i>Energies</i> , 2021, 14, 4548.	1.6	6
396	Agglomeration and Defluidization of Silica Sand and Bentonite Particles during Empty Fruit Bunch (EFB) Ash Addition in Bubbling Fluidized Bed (BFB) Processes. <i>Journal of Chemical Engineering of Japan</i> , 2021, 54, 369-379.	0.3	1
397	Valorization of tree leaves waste using microwave-assisted hydrothermal carbonization process. <i>GCB Bioenergy</i> , 2021, 13, 1690-1703.	2.5	5
398	Effect of phosphorus-based additives on the sintering characteristics of cornstalk ash. <i>Journal of the Energy Institute</i> , 2021, 97, 37-47.	2.7	13

#	ARTICLE	IF	CITATIONS
399	Coal to Biomass Conversion as a Path to Sustainability: A Hypothetical Scenario at Pego Power Plant (Abrantes, Portugal). Resources, 2021, 10, 84.	1.6	8
400	Ash thermochemical behaviors of bamboo lignin from kraft pulping: Influence of washing process. Renewable Energy, 2021, 174, 178-187.	4.3	12
401	Experimental analysis of the effect of the physicochemical properties of paper industry wastes on the performance of thermo-conversion processes: combustion and gasification. Biomass Conversion and Biorefinery, 0, , 1.	2.9	0
402	Modeling Potassium Capture by Aluminosilicate, Part 1: Kaolin. Energy & Fuels, 2021, 35, 13984-13998.	2.5	6
403	Inorganics in sugarcane bagasse and straw and their impacts for bioenergy and biorefining: A review. Renewable and Sustainable Energy Reviews, 2021, 148, 111268.	8.2	37
404	Interactions of Olivine and Silica Sand with Potassium- or Silicon-Rich Agricultural Residues under Combustion, Steam Gasification, and CO ₂ Gasification. Industrial & Engineering Chemistry Research, 2021, 60, 14354-14369.	1.8	7
405	Advanced modeling approaches for CFD simulations of coal combustion and gasification. Progress in Energy and Combustion Science, 2021, 86, 100938.	15.8	45
406	Calcium looping post-combustion CO ₂ capture in sugarcane bagasse fuelled power plants. International Journal of Greenhouse Gas Control, 2021, 110, 103401.	2.3	8
407	Emission-to-ash detoxification mechanisms of co-combustion of spent pot lining and pulverized coal. Journal of Hazardous Materials, 2021, 418, 126380.	6.5	33
408	Application of poultry manure as an energy resource by its gasification in a prototype rotary counterflow gasifier. Renewable Energy, 2021, 175, 422-429.	4.3	7
409	Potassium demineralization of coconut fiber via combined hydrothermal treatment and washing: Effect on pyrolysis kinetics, mechanisms, and bio-oil composition. Biomass and Bioenergy, 2021, 152, 106194.	2.9	7
410	Comparative study on ash characteristics of various high-alkali fuels using different ashing methods and temperatures. Fuel, 2021, 299, 120912.	3.4	9
411	Investigation on ash fusion behavior modification of wheat straw by sludge addition. Journal of the Energy Institute, 2021, 98, 1-10.	2.7	16
412	Investigation of the thermal behaviour of different biomasses and properties of their low- and high-temperature ashes. Fuel, 2021, 301, 121026.	3.4	18
413	Coupling the biochemical and thermochemical biorefinery platforms to enhance energy and product recovery from Agave tequilana bagasse. Applied Energy, 2021, 299, 117293.	5.1	3
414	Ash deposition mechanism of shoe manufacturing waste combustion in a full-scale CFB boiler. Fuel Processing Technology, 2021, 221, 106948.	3.7	6
415	Influence of coal ash characteristics on the pretreatment process of fluidized bed cement calcination. Construction and Building Materials, 2021, 303, 124531.	3.2	0
416	Effect of walnut shell ash on pore structure characteristics during Zhundong coal sintering. Fuel Processing Technology, 2021, 221, 106923.	3.7	9

#	ARTICLE	IF	CITATIONS
417	Effect of pressure on the transformation characteristics of inorganic minerals Na/S in Zhundong coal ash. <i>Journal of the Energy Institute</i> , 2021, 98, 161-171.	2.7	5
418	Investigation of control methods for agglomeration and slagging during combustion of olive cake in a bubbling fluidized bed combustor. <i>Journal of Cleaner Production</i> , 2021, 320, 128841.	4.6	0
419	Effect of basic washing parameters on the chemical composition of empty fruit bunches during washing pretreatment: A detailed experimental, pilot, and kinetic study. <i>Bioresource Technology</i> , 2021, 340, 125734.	4.8	11
420	Modelling and optimisation of biomass injection in ironmaking blast furnaces. <i>Progress in Energy and Combustion Science</i> , 2021, 87, 100952.	15.8	43
421	Beneficial management of biomass combustion ashes. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 151, 111555.	8.2	46
422	Influence of water/acid washing pretreatment of aquatic biomass on ash transformation and slagging behavior during co-firing with bituminous coal. <i>Energy</i> , 2021, 234, 121286.	4.5	35
423	The co-combustion of torrefied municipal solid waste and coal in bubbling fluidised bed combustor under atmospheric and elevated pressure. <i>Renewable Energy</i> , 2021, 179, 828-841.	4.3	18
424	An experimental study on the feasibility of in-situ desulfurization performance in a CFB combustor co-burning red mud and coal. <i>Fuel Processing Technology</i> , 2021, 223, 106985.	3.7	9
425	Water leaching for improving fuel properties of pongamia Pod: Informing process design. <i>Fuel</i> , 2021, 305, 121480.	3.4	2
426	Step washing: A modified pretreatment approach for industrial applications to improve chemical composition of agricultural residues. <i>Bioresource Technology</i> , 2021, 341, 125753.	4.8	6
427	Microstructural development of product layer during limestone sulfation and its relationship to agglomeration in large-scale CFB boiler. <i>Energy</i> , 2022, 238, 121872.	4.5	5
428	Ilmenite as alternative bed material for the combustion of coal and biomass blends in a fluidised bed combustor to improve combustion performance and reduce agglomeration tendency. <i>Energy</i> , 2022, 239, 121913.	4.5	23
429	Ash transformation mechanism during combustion of rice husk and rice straw. <i>Fuel</i> , 2022, 307, 121768.	3.4	41
430	Repercussions of clinical waste co-incineration in municipal solid waste incinerator during COVID-19 pandemic. <i>Journal of Hazardous Materials</i> , 2022, 423, 127144.	6.5	16
431	A Study on Agglomeration Behaviour of Cotton Stalk Under Fluidized Bed Conditions. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 879-890.	0.3	0
432	Generation rates of bottom and fly ash from thermal generation facilities in industrial and export processing zones in Ho Chi Minh City, Vietnam. <i>AIP Conference Proceedings</i> , 2021, , .	0.3	0
433	A Review of Thermochemical and Biochemical Conversion of Miscanthus to Biofuels. , 2020, , 195-220.		14
434	Experimental investigation of physicochemical and slagging characteristics of inorganic constituents in ash residues from gasification of different herbaceous biomass. <i>Energy</i> , 2020, 198, 117367.	4.5	72

#	ARTICLE	IF	CITATIONS
435	Development of reduced and optimized reaction mechanism for potassium emissions during biomass combustion based on genetic algorithms. <i>Energy</i> , 2020, 211, 118565.	4.5	3
436	Unsteady CFD simulation on ash particle deposition and removal characteristics in tube banks: Focusing on particle diameter, flow velocity, and temperature. <i>Journal of the Energy Institute</i> , 2020, 93, 1481-1494.	2.7	21
437	Synergistic effects of co-combustion of sewage sludge and corn stalk and the resulting gas emission characteristics. <i>IET Renewable Power Generation</i> , 2020, 14, 1596-1605.	1.7	11
438	Investigation of Ash-Related Issues During Combustion of Maize Straw and Wood Biomass Blends in Lab-Scale Bubbling Fluidized Bed Reactor. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2020, 142, .	1.4	10
439	Systematic Approach to Identifying Economically Feasible and Environmentally Benign Methods of Recycling Ash on a Regional Scale. <i>Journal of Residuals Science and Technology</i> , 2016, 13, 185-196.	0.6	2
440	The Impact of Sulphate Corrosion Limitation in Power Boilers on the Properties of Ash from Biomass Combustion. <i>Polish Journal of Environmental Studies</i> , 2018, 28, 1001-1006.	0.6	4
441	Effects of the type of biomass and ashing temperature on the properties of solid fuel ashes. <i>Polish Journal of Chemical Technology</i> , 2019, 21, 43-51.	0.3	13
442	FEASIBILITY OF UTILIZATION OF CHARCOAL AND ASHES FROM BIOMASS-ENERGY PROCESSES IN CONSTRUCTION MATERIALS. , 2017, , .		2
443	Mitigation of Particulate Matter Emissions by Co-Combustion Rice Husk with Two Other Biomass. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
444	Corn cob ash boosts fermentative hydrogen production from waste activated sludge. <i>Science of the Total Environment</i> , 2022, 807, 151064.	3.9	12
445	Effect of Exhausted Olive Cake Contamination on Fly and Bottom Ash in Power Plants. <i>Waste and Biomass Valorization</i> , 2022, 13, 1759-1778.	1.8	0
446	Thermogravimetric analysis of co-combustion between municipal sewage sludge and coal slime: Combustion characteristics, interaction and kinetics. <i>Thermochimica Acta</i> , 2021, 706, 179056.	1.2	33
447	Próbna zastosowania w peletach z agrobiomasy dodatków podwyższających temperaturę topnienia popiołu w celu uniknięcia tworzenia sił w palenisku. <i>Ciepłownictwo Ogrzewnictwo Wentylacja</i> , 2017, 1, 14-20.	0.0	0
448	Modelling the Quench Tower in Flue Gas Cleaning of a Waste Fueled Power Plant. <i>DEStech Transactions on Environment Energy and Earth Science</i> , 2019, , .	0.0	0
449	Study on the Effect of Si-Al Additive on Corrosion Related to Ash Deposition to Heating Surface in Biomass-Fired Boiler. <i>Advances in Energy and Power Engineering</i> , 2020, 08, 48-55.	0.0	0
450	A logistical and economical approach to coordinating a biomass supply chain, including energy characteristics. <i>Research, Society and Development</i> , 2020, 9, .	0.0	3
451	Study on Mass Transfer of Ash during Bamboo Powder Combustion. <i>Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy</i> , 2020, 99, 108-116.	0.2	1
452	Role of Phosphorus and Iron in Particle Adhesiveness at High Temperatures Using Synthetic Ashes. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 15315-15321.	3.2	6

#	ARTICLE	IF	CITATIONS
453	Non-Destructive Diagnostic Methods for Fire-Side Corrosion Risk Assessment of Industrial Scale Boilers, Burning Low Quality Solid Biofuels – A Mini Review. <i>Energies</i> , 2021, 14, 7132.	1.6	8
454	Methane production from algae in anaerobic digestion: Role of corncob ash supplementation. <i>Journal of Cleaner Production</i> , 2021, 327, 129485.	4.6	16
455	Experimental study on ash deposition characteristics of dryer exhaust along horizontal tube bundles using digital imaging techniques. <i>Drying Technology</i> , 0, , 1-17.	1.7	0
456	The critical role of anions in the porous biochar structure and potassium release during the potassium-assisted pyrolysis process. <i>Green Chemistry</i> , 2021, 23, 9589-9599.	4.6	10
457	The promotion effect of pyrolysis conditions on alkali metal pretreatment during pyrolysis of sub-bituminous Zhundong coal: Carbon engulfment control and subsequent sodium transformation. <i>Fuel Processing Technology</i> , 2022, 226, 107067.	3.7	3
458	Review of agglomeration in biomass chemical looping technology. <i>Fuel</i> , 2022, 309, 122199.	3.4	42
459	Transformation of HCl during pyrolysis of biomass and its model compounds. <i>Fuel</i> , 2022, 309, 122139.	3.4	7
460	Oxidation Kinetics of Corn Stover Char at Low Temperature Based on Surface Area. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
461	Hydrothermal carbonization of rape straw: Effect of reaction parameters on hydrochar and migration of AAEMs. <i>Chemosphere</i> , 2022, 291, 132785.	4.2	26
462	Experimental Investigation of the Ash Deposition Characteristics of Biomass Pretreated by Ash Removal during Co-Combustion with Sub-Bituminous Coal. <i>Energies</i> , 2021, 14, 7391.	1.6	8
463	Methods for the determination of composition, mineral phases, and process-relevant behavior of ashes and its modeling: A case study for an alkali-rich ash. <i>Journal of the Energy Institute</i> , 2022, 100, 137-147.	2.7	7
464	Comparative study on fuel characteristics and pyrolysis kinetics of corn residue-based hydrochar produced via microwave hydrothermal carbonization. <i>Chemosphere</i> , 2022, 291, 132787.	4.2	19
465	Hot corrosion behavior of an arc sprayed Fe-based amorphous coating in a simulated biomass firing environment. <i>Corrosion Science</i> , 2022, 194, 109938.	3.0	16
466	Investigation on ash deposition formation during co-firing of coal with wheat straw. <i>Journal of the Energy Institute</i> , 2022, 100, 148-159.	2.7	15
467	Chemical study of bottom ash sintering in combustion of pelletized residual agricultural biomass. <i>Fuel</i> , 2022, 310, 122145.	3.4	13
468	The use of polymer compounds in the deposits from the combustion of briquettes in domestic heating as an identifier of fuel quality. <i>Environmental Science and Pollution Research</i> , 2023, 30, 8582-8600.	2.7	3
469	Fate of trace elements in Oxygen Carrier Aided Combustion (OCAC) of municipal solid waste. <i>Fuel</i> , 2022, 311, 122551.	3.4	8
470	Chemical Looping for Combustion of Solid Biomass: A Review. <i>Energy & Fuels</i> , 2021, 35, 19248-19265.	2.5	32

#	ARTICLE	IF	CITATIONS
471	Full-Scale Investigation of Dry Sorbent Injection for NO _x Emission Control and Mercury Retention. <i>Energies</i> , 2021, 14, 7787.	1.6	8
472	Study of the Properties and Particulate Matter Content of the Gas from the Innovative Pilot-Scale Gasification Installation with Integrated Ceramic Filter. <i>Energies</i> , 2021, 14, 7476.	1.6	5
473	Parametric and kinetic study of washing pretreatment for K and Cl removal from rice husk. <i>Heliyon</i> , 2021, 7, e08398.	1.4	1
474	New fuel indexes to predict ash behavior for biogenic silica production. <i>Fuel</i> , 2022, 310, 122345.	3.4	6
475	Assessment of the effect of alkali chemistry on post-flame aerosol formation during oxy-combustion of biomass. <i>Fuel</i> , 2022, 311, 122521.	3.4	7
476	Oxidation kinetics of maize stover char at low temperature based on surface area and temperature correction. <i>Energy</i> , 2022, 241, 122928.	4.5	1
477	Effect of pretreatment and biomass blending on bio-oil and biochar quality from two-step slow pyrolysis of rice straw. <i>Waste Management</i> , 2022, 138, 298-307.	3.7	26
478	Effectiveness of bed additives in abating agglomeration during biomass air/oxy combustion in a fluidised bed combustor. <i>Renewable Energy</i> , 2022, 185, 945-958.	4.3	3
479	Water leaching of herbaceous biomass bales to reduce sintering and corrosion. <i>Fuel</i> , 2022, 312, 122744.	3.4	2
480	Effect of auto thermal biomass gasification on the sintering of simulated ashes. <i>Applications in Energy and Combustion Science</i> , 2022, 9, 100054.	0.9	3
481	Mechanistic studies on the slagging propensity in low-rank coal combustion. <i>Combustion and Flame</i> , 2022, 238, 111956.	2.8	10
482	Particulate matter emission during MSW/RDF/WW combustion: Inorganic minerals distribution, transformation and agglomeration. <i>Fuel Processing Technology</i> , 2022, 228, 107166.	3.7	13
483	Strategic valorization of bio-oil distillation sludge via gasification: A comparative study for reactivities, kinetics, prediction and ash deposition. <i>Chemical Engineering Journal</i> , 2022, 433, 134334.	6.6	12
484	Influence of kaolin and coal fly ash addition on biomass ash deposition in an entrained flow reactor. <i>Fuel</i> , 2022, 313, 123041.	3.4	10
485	Ash melting behaviour of reed and woody fuels blends. <i>Fuel</i> , 2022, 314, 123051.	3.4	8
486	Role of alkali chloride on formation of ultrafine particulate matter during combustion of typical food waste. <i>Fuel</i> , 2022, 315, 123153.	3.4	5
487	Characteristics of Carbonized Biomass Produced in a Manufacturing Process of Wood Charcoal Briquettes Using an Open Hearth Kiln. <i>Journal of the Korean Wood Science and Technology</i> , 2020, 48, 181-195.	0.8	6
488	Does Mechanical Screening of Contaminated Forest Fuels Improve Ash Chemistry for Thermal Conversion?. <i>Energy & Fuels</i> , 2020, 34, 16294-16301.	2.5	2

#	ARTICLE	IF	CITATIONS
489	Effects of P-Based Additives on Agricultural Biomass Torrefaction and PM Emissions from Fuel Combustion. SSRN Electronic Journal, 0, , .	0.4	0
490	Experimental Study and SEM-EDS Analyses of Agglomerates from Gasification of Biomass in Fluidized Beds. SSRN Electronic Journal, 0, , .	0.4	0
491	Oxidation Characteristics of Water Soluble Fractions of Agro-Stalks with Focus on Function of Reactive Inorganics. Eurasian Chemico-Technological Journal, 2021, 23, 181.	0.3	0
492	Utilization of agricultural and industrial waste as replacement of cement in pavement quality concrete: a review. Environmental Science and Pollution Research, 2022, 29, 24504-24546.	2.7	23
493	Development of a total Ash Quality Index and an Ash Quality Label: Comparative analysis of slagging/fouling potential of solid biofuels. Environmental Science and Pollution Research, 2022, 29, 42647-42663.	2.7	5
494	Element partitioning, emissions, and relative risk during disposal processes of diverse litters, fruit tree branches, and crop straws: dry distillation, incomplete combustion, and sufficient combustion. Environmental Science and Pollution Research, 2022, , 1.	2.7	0
495	Ultrasound-guided Venous Catheterization Experiences in Pediatric Burn Cases in Our New Burn Center. Bezmi-Ålem Science, 2022, 10, 35-43.	0.1	0
496	Effect of the reactive blend conditions on the thermal properties of waste biomass and soft coal as a reducing agent for silicon production. Renewable Energy, 2022, 187, 302-319.	4.3	8
497	Machine learning prediction and analysis of commercial wood fuel blends used in a typical biomass power station. Fuel, 2022, 316, 123364.	3.4	9
498	Particulate Matter Emission During MSW/ RDF/ WW Combustion: Inorganic Minerals Distribution, Transformation and Agglomeration. SSRN Electronic Journal, 0, , .	0.4	0
499	Investigation of Biomass, Rdf and Coal Ash-Related Problems: Impact on Metallic Surfaces of Boiler. SSRN Electronic Journal, 0, , .	0.4	0
500	Shear Strength Testing of Synthetic Ash: The Role of Surface vs Interparticle Adhesions. Industrial & Engineering Chemistry Research, 2022, 61, 3358-3364.	1.8	3
501	Ash Behaviour during Combustion of Agropellets Produced by an Agro-Industryâ€™ Part 2: Chemical Characterization of Sintering and Deposition. Energies, 2022, 15, 1499.	1.6	7
502	The preparation of slow-release fertilizers with biomass ash and water/waste acid solutions from desulfurization and denitrification of flue gas. Environmental Science and Pollution Research, 2022, , 1.	2.7	2
503	Understanding Ash Sintering Variation Behaviors of Low-Rank Coals with Municipal Sludge Addition Based on Mineral Interactions. ACS Omega, 2022, 7, 10588-10598.	1.6	6
504	Experimental study on K migration, ash fouling/slagging behaviors and CO2 emission during co-combustion of rice straw and coal gangue. Energy, 2022, 251, 123950.	4.5	11
505	Effects of P-based additives on agricultural biomass torrefaction and particulate matter emissions from fuel combustion. Renewable Energy, 2022, 190, 66-77.	4.3	15
506	Thermochemical conversion processes of Dichrostachys cinerea as a biofuel: A review of the Cuban case. Renewable and Sustainable Energy Reviews, 2022, 160, 112322.	8.2	5

#	ARTICLE	IF	CITATIONS
507	Mitigation of particulate matter emissions from co-combustion of rice husk with cotton stalk or cornstalk. <i>Renewable Energy</i> , 2022, 190, 893-902.	4.3	4
508	Torrefaction-assisted oxy-fuel co-combustion of textile dyeing sludge and bamboo residues toward enhancing emission-to-ash desulfurization in full waste circularity. <i>Fuel</i> , 2022, 318, 123603.	3.4	30
509	Corrosion of heat exchanger materials in co-combustion thermal power plants. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 161, 112328.	8.2	9
510	Synergistic effects of process-generated organic acids during co-hydrothermal carbonization of watermelon peel and high-sulfur coal. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107519.	3.3	9
511	Advanced Ni tar reforming catalysts resistant to syngas impurities: Current knowledge, research gaps and future prospects. <i>Fuel</i> , 2022, 318, 123602.	3.4	15
512	Investigation of mitigation of nitric oxide emission characteristics and slagging properties from biomass combustion by the additive of coal gangue. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107573.	3.3	9
513	Catalytic conversion of d-glucose into lactic acid with Ba(OH) ₂ as a base catalyst: mechanistic insight by NMR techniques. <i>Journal of Molecular Liquids</i> , 2022, 357, 119074.	2.3	2
514	Controlling particle adhesion of synthetic and sewage sludge ashes in high temperature combustion using metal oxide nanoparticles. <i>Fuel</i> , 2022, 321, 124110.	3.4	4
515	Quality Improvement and Cost Evaluation of Pellet Fuel Produced from Pruned Fruit Tree Branches. <i>Energies</i> , 2022, 15, 113.	1.6	5
516	Combustion characteristics of black liquor and waste oil sludge. <i>International Journal of Energy Research</i> , 2022, 46, 6065-6080.	2.2	3
517	Effect of Co-combustion of Multiple Additives with Coal on NO Removal. <i>ACS Omega</i> , 2021, 6, 33676-33684.	1.6	0
518	Ash Melting Behavior of Rice Straw and Calcium Additives. <i>Agriculture (Switzerland)</i> , 2021, 11, 1282.	1.4	6
519	Influence of water leaching on alkali-induced slagging properties of biomass straw. <i>Journal of Fuel Chemistry and Technology</i> , 2021, 49, 1839-1849.	0.9	11
520	Experimental study and SEM-EDS analysis of agglomerates from gasification of biomass in fluidized beds. <i>Energy</i> , 2022, 252, 124034.	4.5	6
521	Discrimination Method of Biomass Slagging Tendency Based on Particle Swarm Optimization Deep Neural Network (Dnn). <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
522	The Methodological Foundations of Building an Energy Efficient Community. , 2022, , .		1
523	Analisis Pemanfaatan Limbah Tandan Kosong Kelapa Sawit Sebagai Cofiring pada PLTU Batubara. <i>Jurnal Energi Baru Dan Terbarukan</i> , 2022, 3, 28-37.	0.1	2
524	Effects of S and Al on K Migration and Transformation during Coal and Biomass Co-combustion. <i>ACS Omega</i> , 2022, 7, 15880-15891.	1.6	5

#	ARTICLE	IF	CITATIONS
525	The effect of increasing MgO content in dendromass on ash fusibility and corrosion of corundum refractory castable. <i>Ceramics International</i> , 2022, 48, 21739-21747.	2.3	4
526	Pyrolysis kinetics of new bioenergy feedstock from anaerobic digestate of agro-waste by thermogravimetric analysis. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107850.	3.3	15
527	In-situ measurements of temperature and emissivity during MSW combustion using spectral analysis and multispectral imaging processing. <i>Fuel</i> , 2022, 323, 124328.	3.4	8
528	Investigation on formation mechanisms of ash and deposit from cotton stalk vibrating grate boiler combustion based on their characteristics. <i>Fuel</i> , 2022, 323, 124446.	3.4	9
529	Catalytic effects for cellulose-based model fuels under low and high heating rate in air and oxy-fuel atmosphere. <i>Fuel</i> , 2022, 324, 124437.	3.4	6
530	Effects of alkali and alkaline earth metal species on the combustion characteristics and synergistic effects: Sewage sludge and its blend with coal. <i>Waste Management</i> , 2022, 146, 119-129.	3.7	20
531	Influence Paths and Spillover Effects of Agricultural Agglomeration on Agricultural Green Development. <i>Sustainability</i> , 2022, 14, 6185.	1.6	10
532	Production of high-quality biogenic fuels by co-pelletization of sugarcane bagasse with pinewood sawdust and peanut shell. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 6797-6820.	2.9	1
533	Particle adhesion induced by calcium carbonate nanoparticles at 900 Å°C. <i>Powder Technology</i> , 2022, 405, 117514.	2.1	4
534	Turning the co-combustion synergy of textile dyeing sludge and waste biochar into emission-to-bottom slag pollution controls toward a circular economy. <i>Renewable Energy</i> , 2022, 194, 760-777.	4.3	19
535	Oxygen Carrier and Alkali Interaction in Chemical Looping Combustion: Case Study Using a Braunitite Mn Ore and Charcoal Impregnated with K_2CO_3 or Na_2CO_3 . <i>Energy & Fuels</i> , 2022, 36, 9470-9484.	2.5	10
536	Comparison of PM10 emission from co-combustion of <i>Platanus orientalis</i> leaf and wood in different seasons with coal. <i>Fuel Processing Technology</i> , 2022, 234, 107334.	3.7	3
537	Cofiring of Coal and Fossil Fuels is a Way to Decarbonization of Heat and Electricity Generation (Review). <i>Thermal Engineering (English Translation of Teploenergetika)</i> , 2022, 69, 405-417.	0.4	7
538	Recovery of phosphorus from sewage sludge ash: Influence of chemical addition prior to incineration on ash mineralogy and related phosphorus and heavy metal extraction. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108117.	3.3	10
539	Experimental Investigation of Gaseous Sodium Release in Slag-Tapping Coal-Fired Furnaces by Spontaneous Emission Spectroscopy. <i>Energies</i> , 2022, 15, 4165.	1.6	4
540	Experimental research on fully burning high-alkali coal in a 300-MW boiler with slag-tap furnace. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2022, 17, .	0.8	3
541	Agglomeration in fluidized bed: Bibliometric analysis, a review, and future perspectives. <i>Powder Technology</i> , 2022, 406, 117597.	2.1	10
542	Experimental study on transformation of alkali and alkaline earth metals during biomass gasification. <i>Journal of the Energy Institute</i> , 2022, 103, 117-127.	2.7	12

#	ARTICLE	IF	CITATIONS
543	High-temperature corrosion in a multifuel circulating fluidized bed (CFB) boiler co-firing refuse derived fuel (RDF) and hard coal. <i>Fuel</i> , 2022, 324, 124749.	3.4	16
544	Bioenergy and biofuel production from biomass using thermochemical conversions technologies—a review. <i>AIMS Energy</i> , 2022, 10, 585-647.	1.1	12
545	Potassium precipitation and transformation during the combustion of torrefied wheat straw—effect of additives. <i>Biomass Conversion and Biorefinery</i> , 0, , .	2.9	1
546	High-temperature corrosion investigations of deposit containing eutectic KCl-K ₂ SO ₄ mixture on AISI 1015 and SS304 steels. <i>Corrosion Science</i> , 2022, 205, 110470.	3.0	1
547	Enhancing cleaner biomass-coal co-combustion by pretreatment of wheat straw via washing versus hydrothermal carbonization. <i>Journal of Cleaner Production</i> , 2022, 366, 132991.	4.6	20
548	The sintering behavior of Fe-based oxygen carrier with straw ash and sawdust ash by thermodynamic and thermomechanical analysis. <i>Fuel Processing Technology</i> , 2022, 235, 107346.	3.7	7
549	Fluidised bed combustion and ash fusibility behaviour of coal and spent coffee grounds blends: CO and NO _x emissions, combustion performance and agglomeration tendency. <i>Fuel</i> , 2022, 326, 125008.	3.4	7
550	Investigation of biomass, RDF and coal ash-related problems: Impact on metallic heat exchanger surfaces of boilers. <i>Fuel</i> , 2022, 326, 125122.	3.4	10
551	Screening of Potential Additives for Alleviating Slagging and Fouling during MSW Incineration: Thermodynamic Analysis and Experimental Evaluation. <i>Atmosphere</i> , 2022, 13, 1163.	1.0	2
552	Effects of Torrefaction on Ash-Related Issues During Biomass Combustion and Co-Combustion with Coal. Part 1: Elemental Partitioning and Particulate Matter Emission. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
553	Spatially and temporally resolved laser/optical diagnostics of combustion processes: From fundamentals to practical applications. <i>Proceedings of the Combustion Institute</i> , 2023, 39, 1185-1228.	2.4	12
554	Thermodynamic Analysis on the Fate of Ash Elements in Chemical Looping Combustion of Solid Fuels—Iron-Based Oxygen Carriers. <i>Energy & Fuels</i> , 2022, 36, 9648-9659.	2.5	20
555	Switchgrass and Giant Reed Energy Potential when Cultivated in Heavy Metals Contaminated Soils. <i>Energies</i> , 2022, 15, 5538.	1.6	5
556	An investigation of pine needles fluidization, combustion performance, and fly ash behavior in fluidized bed combustor. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , .	2.0	0
557	Review of Biomass Agglomeration for Fluidized-Bed Gasification or Combustion Processes with a Focus on the Effect of Alkali Salts. <i>Energy & Fuels</i> , 2022, 36, 8925-8947.	2.5	13
558	Torrefaction of Pulp Industry Sludge to Enhance Its Fuel Characteristics. <i>Energies</i> , 2022, 15, 6175.	1.6	9
559	Co-firing of coal and biomass under pressurized oxy-fuel combustion mode in a 10 kWth fluidized bed: Nitrogen and sulfur pollutants. <i>Chemical Engineering Journal</i> , 2022, 450, 138401.	6.6	15
560	Investigation of ash formation and deposit characteristics in CFB co-combustion of coal with various biomass fuels. <i>Journal of the Energy Institute</i> , 2022, 105, 42-52.	2.7	11

#	ARTICLE	IF	CITATIONS
561	Innovative Technological Approach for the Cyclic Nutrients Adsorption by Post-Digestion Sewage Sludge-Based Ash Co-Formed with Some Nanostructural Additives under a Circular Economy Framework. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 11119.	1.2	7
562	Discrimination method of biomass slagging tendency based on particle swarm optimization deep neural network (DNN). <i>Energy</i> , 2023, 262, 125368.	4.5	6
563	Improving inorganic composition and ash fusion behavior of spruce bark by leaching with water, acetic acid, and steam pre-treatment condensate. <i>Chemical Engineering Journal</i> , 2023, 452, 139351.	6.6	6
564	Effects of Torrefaction on Ash-Related Issues During Biomass Combustion and Co-Combustion with Coal. Part 2: Ash Fouling Behavior. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
565	Effects of Torrefaction on Ash-Related Issues During Biomass Combustion and Co-Combustion with Coal. Part 3: Ash Slagging Behavior. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
566	Impact of Potassium on Bio-Ash Slagging and Resultant Slag Flowing Characteristics Under Mild Reducing Environment. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
567	Evolution of the conceptualization of hydrogen through knowledge maps, energy return on investment (EROI) and national policy strategies. <i>Clean Technologies and Environmental Policy</i> , 2023, 25, 69-91.	2.1	2
568	Reuse of wood ash from biomass combustion in non-structural concrete: mechanical properties, durability, and eco-efficiency. <i>Journal of Material Cycles and Waste Management</i> , 2022, 24, 2439-2454.	1.6	8
569	Plasma-electrified up-carbonization for low-carbon clean energy. , 2023, 5, .		10
570	Effect of Densification on Biomass Combustion and Particulate Matter Emission Characteristics. <i>Atmosphere</i> , 2022, 13, 1582.	1.0	6
571	Primary release and transformation of inorganic and organic sodium during fast pyrolysis of sodium-loaded lignin. <i>Proceedings of the Combustion Institute</i> , 2023, 39, 3439-3446.	2.4	1
572	Integrated water washing and carbonization pretreatment of typical herbaceous and woody biomass: Fuel properties, combustion behaviors, and techno-economic assessments. <i>Renewable Energy</i> , 2022, 200, 218-233.	4.3	11
573	Application of silica-rich biomass ash solid waste in geopolymer preparation: A review. <i>Construction and Building Materials</i> , 2022, 356, 129142.	3.2	16
574	Comparative insights into flue gas-to-ash characteristics on co-combustion of walnut shell and bio-oil distillation sludge under atmospheric and oxy-fuel condition. <i>Combustion and Flame</i> , 2022, 246, 112383.	2.8	2
575	Biomass gasification ash reutilization: Recirculation reusability and mechanism analysis. <i>Waste Management</i> , 2022, 154, 64-73.	3.7	1
576	Prediction of biomass corrosiveness over different coatings in fluidized bed combustion. <i>International Journal of Energy and Environmental Engineering</i> , 0, , .	1.3	0
577	Interactions of potassium vapor with reactor tubes made of different materials and their impacts on particulate matter emission during pulverized biomass combustion. <i>Proceedings of the Combustion Institute</i> , 2023, 39, 3401-3408.	2.4	1
578	Comparison between pilot and lab scale testing of aluminide coated and uncoated ferritic steels under oxy-fuel and coal/thistle co-firing conditions. <i>Surface and Coatings Technology</i> , 2022, 450, 128982.	2.2	0

#	ARTICLE	IF	CITATIONS
579	Syngas composition and ash characteristics of corn straw under a CO ₂ atmosphere. <i>Biomass and Bioenergy</i> , 2022, 166, 106630.	2.9	5
580	Development of biomass-fired circulating fluidized bed boiler with high steam parameters based on theoretical analysis and industrial practices. <i>Journal of the Energy Institute</i> , 2022, 105, 415-423.	2.7	6
581	The morphological and mineralogical characteristics and thermal conductivity of ash deposits in a 220MW CFBB firing Zhundong lignite. <i>Energy</i> , 2023, 263, 125842.	4.5	5
582	Optical in-situ measurements and modeling of post-flame sulfation of NaOH(g) and NaCl(g). <i>Fuel</i> , 2023, 332, 126337.	3.4	4
583	Effect of kaolinite additive on water-soluble sodium release and particle matter formation during Zhundong coal combustion. <i>Fuel</i> , 2023, 333, 126422.	3.4	9
584	A numerical simulation study of ash deposition in a circulating fluidized bed during Zhundong lignite combustion. <i>Fuel</i> , 2023, 333, 126501.	3.4	9
585	Agglomeration-influenced transformation of heavy metals in gas-solid phases during simulated sewage sludge co-incineration: Effects of phosphorus and operating temperature. <i>Science of the Total Environment</i> , 2023, 858, 159759.	3.9	4
586	Influence of deposit formation on corrosion at the high-temperature superheater of eucalyptus-fired boiler. <i>Materials at High Temperatures</i> , 2023, 40, 77-87.	0.5	1
587	Effects of torrefaction on ash-related issues during biomass combustion and co-combustion with coal. Part 2: Ash fouling behavior. <i>Fuel</i> , 2023, 334, 126777.	3.4	4
588	Fates of heavy metals, S, and P during co-combustion of textile dyeing sludge and cattle manure. <i>Journal of Cleaner Production</i> , 2023, 383, 135316.	4.6	16
589	Effects of torrefaction on ash-related issues during biomass combustion and co-combustion with coal. Part 1: Elemental partitioning and particulate matter emission. <i>Fuel</i> , 2023, 334, 126776.	3.4	2
590	Effect of semi-continuous water washing on the combustion behaviors of agricultural organic solid waste. <i>Carbon Resources Conversion</i> , 2023, 6, 58-64.	3.2	3
591	The chemical coupling between moist CO oxidation and gas-phase potassium sulfation. <i>Fuel</i> , 2023, 336, 127127.	3.4	2
592	An experimental and chemical kinetic modeling study of the role of potassium in the moist oxidation of CO. <i>Fuel</i> , 2023, 335, 127075.	3.4	3
593	Investigation on the influence of inherent AAEMs on gasification reactivity of solid digestate char. <i>Fuel</i> , 2023, 335, 127015.	3.4	5
594	Comparison of the influence of additives on the melting behaviour of wheat straw and fibre hemp ash. <i>Biomass Conversion and Biorefinery</i> , 0, , .	2.9	2
595	Evaluation of Particulate Matter (PM) Emissions from Combustion of Selected Types of Rapeseed Biofuels. <i>Energies</i> , 2023, 16, 239.	1.6	3
596	Effects of torrefaction on ash-related issues during biomass combustion and co-combustion with coal. Part 3: Ash slagging behavior. <i>Fuel</i> , 2023, 339, 126925.	3.4	8

#	ARTICLE	IF	CITATIONS
597	A critical review on co-hydrothermal carbonization of biomass and fossil-based feedstocks for cleaner solid fuel production: Synergistic effects and environmental benefits. <i>Chemical Engineering Journal</i> , 2023, 457, 141004.	6.6	27
598	A Review of On-Line Measurement Methods of Alkali Metal Emissions from Combustion by Passive Spontaneous Emission Spectroscopy. <i>Energies</i> , 2022, 15, 9392.	1.6	2
599	Effects of Different Coals for Co-Combustion with Palm Oil Waste on Slagging and Fouling Aspects. <i>Combustion Science and Technology</i> , 0, , 1-23.	1.2	12
600	A Promising Ash Supplementation Strategy in the Cultivation of <i>Spirodela polyrrhiza</i> Plants. <i>Cells</i> , 2023, 12, 289.	1.8	1
601	The Effects of Demineralization on Reducing Ash Content in Corn and Soy Biomass with the Goal of Increasing Biofuel Quality. <i>Energies</i> , 2023, 16, 967.	1.6	0
602	Effect of phosphorus-based additives on sodium release during Zhundong coal gasification in flat flame-assisted entrained flow reactor. <i>Combustion and Flame</i> , 2023, 249, 112608.	2.8	1
603	Co-hydrothermal carbonization of polyvinyl chloride and lignocellulose biomasses: Influence of biomass feedstock on fuel properties and combustion behaviors. <i>Science of the Total Environment</i> , 2023, 868, 161532.	3.9	3
604	Thermochemical conversion of multiple alkali metals in food waste pellet with a core-shell structure. <i>Energy</i> , 2023, 268, 126662.	4.5	3
605	Interaction behavior of sand-diluted and mixed Fe-based oxygen carriers with potassium salts. <i>Fuel</i> , 2023, 339, 127372.	3.4	5
606	A novel reutilization of ash from biomass gasification process: Feasibility and products improvement analysis. <i>Fuel</i> , 2023, 339, 127386.	3.4	3
607	Biomass and Coal Ash Sintering—Thermodynamic Equilibrium Modeling versus Pressure Drop Test and Mechanical Test. <i>Energies</i> , 2023, 16, 362.	1.6	2
608	Research and application of online monitoring of coal and biomass co-combustion and biomass combustion characteristics based on combustion flame. <i>Journal of the Energy Institute</i> , 2023, 108, 101191.	2.7	7
609	Ash aerosol particle size distribution, composition, and deposition behavior while co-firing coal and steam-exploded biomass in a 1.5 MWth combustor. <i>Fuel Processing Technology</i> , 2023, 243, 107674.	3.7	2
610	Effect of temperature and pressure on the transformation characteristics of inorganic elements in cotton straw ash. <i>Fuel</i> , 2023, 340, 127443.	3.4	3
611	Potential utilization of regional cashew nutshell ash wastes as a cementitious replacement on the performance and environmental impact of eco-friendly mortar. <i>Journal of Building Engineering</i> , 2023, 66, 105941.	1.6	0
612	Impact of potassium on bio-ash slagging and resultant slag flowing characteristics under mild reducing environment. <i>Fuel Processing Technology</i> , 2023, 243, 107672.	3.7	4
613	Characterisation of ash particles from co-combustion of bark and sludges from pulp and paper industry. <i>Fuel</i> , 2023, 340, 127597.	3.4	3
614	Theoretical and experimental investigation of ash-related problems during coal co-firing with different types of biomass in a pulverized coal-fired boiler. <i>Energy</i> , 2023, 269, 126784.	4.5	23

#	ARTICLE	IF	CITATIONS
615	Utilising Thermodynamic Equilibrium Calculations to Model Potassium Capture by Aluminosilicate Additives in Biomass Combustion Plants. <i>Fuel</i> , 2023, 340, 127591.	3.4	0
616	A percolation model of fly ash formation during the combustion of non-uniform porous char. <i>Combustion and Flame</i> , 2023, 251, 112720.	2.8	4
617	Correlations of chemical properties of sludge: A comparison study between municipal sludge and industrial sludge. <i>Journal of the Energy Institute</i> , 2023, 108, 101202.	2.7	4
618	Study of the interaction between a Mn ore and alkali chlorides in chemical looping combustion. <i>Fuel</i> , 2023, 344, 128090.	3.4	4
619	Influence of phosphorus based additives on nitrogen and sulfur pollutants emissions during densified biochar combustion. <i>Energy</i> , 2023, 275, 127442.	4.5	0
620	Effectiveness of different additives on slagging and fouling tendencies of blended coal. <i>Journal of the Energy Institute</i> , 2023, 107, 101192.	2.7	16
621	INFLUENCE OF ALUMOSILICATE CONCENTRATE ON THE CHARACTERISTICS OF BUILDING MATERIALS. , 2022, , .		0
622	Carbon neutrality: a comprehensive bibliometric analysis. <i>Environmental Science and Pollution Research</i> , 2023, 30, 45498-45514.	2.7	28
623	Co-firing pellet of torrefied corncob and khat stem mixture with coal on combustion efficiency and parametric optimization. <i>Journal of Thermal Analysis and Calorimetry</i> , 2023, 148, 3861-3873.	2.0	1
624	Valorization of Jute sticks (<i>Corchorus olitorius</i>) by torrefaction process: optimization and characterization of torrefied biomass as upgraded fuel. <i>Biomass Conversion and Biorefinery</i> , 0, , .	2.9	1
625	Agglomeration behavior of lignocellulosic biomasses in fluidized bed gasification: a comprehensive review. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , .	2.0	1
626	Reuse of soil-like material solidified by a biomass fly ash-based binder as engineering backfill material and its performance evaluation. <i>Journal of Cleaner Production</i> , 2023, 402, 136824.	4.6	32
627	Migration behavior of chlorine during co-gasification of Shenmu coal and corn straw. <i>Journal of Thermal Analysis and Calorimetry</i> , 2023, 148, 5833-5845.	2.0	1
628	Removal of ash in biochar from carbonization by CO ₂ -enhanced water leaching and its mechanism. <i>Journal of Fuel Chemistry and Technology</i> , 2023, 51, 544-551.	0.9	2
629	Research on Model Predictive Control of a 130 t/h Biomass Circulating Fluidized Bed Boiler Combustion System Based on Subspace Identification. <i>Energies</i> , 2023, 16, 3421.	1.6	0
630	CO ₂ gasification behavior of chars from high-alkali fuels and effects of Na, K, Ca, and Fe species via synthetic coal char. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , .	2.0	0
631	Formation and transformation of mineral phases in biomass ashes and evaluation of the feedstocks for application in high-temperature processes. <i>Renewable Energy</i> , 2023, 210, 627-639.	4.3	4
632	Investigation into the fusibility of biomass ashes and their mineral phase transformations at elevated temperatures by using the HT-XRD technique. <i>Biomass and Bioenergy</i> , 2023, 173, 106812.	2.9	2

#	ARTICLE	IF	CITATIONS
633	Dioxins and furans in biochars, hydrochars and torreficates produced by thermochemical conversion of biomass: a review. Environmental Chemistry Letters, 2023, 21, 2225-2249.	8.3	3
637	Thermochemical conversion of biomass into valuable products and its modeling studies. , 2023, , 137-152.		0
662	Energy Valorization of Fruit Shells and Stones Deriving from the Food Industry. Lecture Notes in Civil Engineering, 2023, , 743-751.	0.3	0
678	Challenges and Opportunities of Agricultural Biomass as a Replacement for PCI Coal in the Ironmaking Blast Furnace: A Review. Journal of Sustainable Metallurgy, 2023, 9, 927-949.	1.1	0
689	Experimental and multiscale numerical study of air-flue gas heat exchanger in a biomass boiler. , 2023, , 801-821.		0
690	Operational experience of an oxidative pyrolysis process in a pilot scale fluidized bed with organic and plastic wastes. AIP Conference Proceedings, 2023, , .	0.3	0
728	Ash management, recycling, and sustainability. , 2024, , 47-68.		0