Yanqing Niu

List of Publications by Year
in descending order

85 papers	2,766 citations	218677 26 h-index	189892 50 g-index
88 all docs	88 docs citations	88 times ranked	2025 citing authors

#	Article	IF	Citations
1	Ash-related issues during biomass combustion: Alkali-induced slagging, silicate melt-induced slagging (ash fusion), agglomeration, corrosion, ash utilization, and related countermeasures. Progress in Energy and Combustion Science, 2016, 52, 1-61.	31.2	750
2	Biomass torrefaction: properties, applications, challenges, and economy. Renewable and Sustainable Energy Reviews, 2019, 115, 109395.	16.4	217
3	Study on fusion characteristics of biomass ash. Bioresource Technology, 2010, 101, 9373-9381.	9.6	166
4	Investigations on biomass slagging in utility boiler: Criterion numbers and slagging growth mechanisms. Fuel Processing Technology, 2014, 128, 499-508.	7.2	94
5	Further study on biomass ash characteristics at elevated ashing temperatures: The evolution of K, Cl, S and the ash fusion characteristics. Bioresource Technology, 2013, 129, 642-645.	9.6	76
6	Slagging Characteristics on the Superheaters of a 12 MW Biomass-Fired Boiler. Energy & Fuels, 2010, 24, 5222-5227.	5.1	73
7	Experimental investigation on biomass co-firing in a 300 MW pulverized coal-fired utility furnace in China. Proceedings of the Combustion Institute, 2011, 33, 2725-2733.	3.9	71
8	Synergistic removal of NO and N 2 O in low-temperature SCR process with MnO x /Ti based catalyst doped with Ce and V. Fuel, 2016, 185, 316-322.	6.4	68
9	Effects of leaching and additives on the ash fusion characteristics of high-Na/Ca Zhundong coal. Journal of the Energy Institute, 2019, 92, 1115-1122.	5.3	66
10	Investigation on ash deposition characteristics during Zhundong coal combustion. Journal of the Energy Institute, 2018, 91, 33-42.	5.3	56
11	Experimental evaluation of additives and K2Oâ€"SiO2â€"Al2O3 diagrams on high-temperature silicate melt-induced slagging during biomass combustion. Fuel, 2016, 179, 52-59.	6.4	48
12	Experimental study on the coexistent dual slagging in biomass-fired furnaces: Alkali- and silicate melt-induced slagging. Proceedings of the Combustion Institute, 2015, 35, 2405-2413.	3.9	44
13	A sophisticated model to predict ash inhibition during combustion of pulverized char particles. Proceedings of the Combustion Institute, 2015, 35, 561-569.	3.9	39
14	Experimental study on ash fusion characteristics and slagging potential using simulated biomass ashes. Journal of the Energy Institute, 2019, 92, 1889-1896.	5.3	38
15	Study on Deposits on the Surface, Upstream, and Downstream of Bag Filters in a 12 MW Biomass-Fired Boiler. Energy & Fuels, 2010, 24, 2127-2132.	5.1	36
16	Characteristics of biomass fast pyrolysis in a wire-mesh reactor. Fuel, 2017, 200, 225-235.	6.4	34
17	Study of optimal pulverized coal concentration in a four-wall tangentially fired furnace. Applied Energy, 2011, 88, 1164-1168.	10.1	30
18	Kinetics investigation on the combustion of waste capsicum stalks in Western China using thermogravimetric analysis. Journal of Thermal Analysis and Calorimetry, 2012, 109, 403-412.	3.6	30

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19	Source of N and O in N2O formation during selective catalytic reduction of NO with NH3 over MnO /TiO2. Fuel, 2019, 251, 23-29.	6.4	30
20	The Effect of Particle Size and Heating Rate on Pyrolysis of Waste Capsicum Stalks Biomass. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2013, 35, 1663-1669.	2.3	29
21	Short Review on the Origin and Countermeasure of Biomass Slagging in Grate Furnace. Frontiers in Energy Research, 2014, 2, .	2.3	29
22	Kinetic modeling of the formation and growth of inorganic nano-particles during pulverized coal char combustion in O2/N2 and O2/CO2 atmospheres. Combustion and Flame, 2016, 173, 195-207.	5.2	29
23	Analysis of urea pyrolysis in 132.5â€"190â€¯Â°C. Fuel, 2019, 242, 62-67.	6.4	29
24	A numerical investigation of the effect of flue gas recirculation on the evolution of ultra-fine ash particles during pulverized coal char combustion. Combustion and Flame, 2017, 184, 1-10.	5.2	28
25	High temperature gasification of high heating-rate chars using a flat-flame reactor. Applied Energy, 2018, 227, 100-107.	10.1	28
26	New insight into N2O formation from NH3 oxidation over MnO /TiO2 catalyst. Fuel, 2019, 254, 115719.	6.4	28
27	Effects of water leaching (simulated rainfall) and additives (KOH, KCl, and SiO2) on the ash fusion characteristics of corn straw. Applied Thermal Engineering, 2019, 154, 485-492.	6.0	28
28	Ultra-fine particulate matters (PMs) formation during air and oxy-coal combustion: Kinetics study. Applied Energy, 2018, 218, 46-53.	10.1	27
29	Study of briquetted biomass co-firing mode in power plants. Applied Thermal Engineering, 2014, 63, 266-271.	6.0	23
30	An intrinsic kinetics model to predict complex ash effects (ash film, dilution, and vaporization) on pulverized coal char burnout in air (O2/N2) and oxy-fuel (O2/CO2) atmospheres. Proceedings of the Combustion Institute, 2019, 37, 2781-2790.	3.9	22
31	Origination and formation of NH4Cl in biomass-fired furnace. Fuel Processing Technology, 2013, 106, 262-266.	7.2	20
32	Experimental study of a zero water consumption wet FGD system. Applied Thermal Engineering, 2014, 63, 272-277.	6.0	20
33	Determining the optimum coal concentration in a general tangential-fired furnace with rich-lean burners: From a bench-scale to a pilot-scale study. Applied Thermal Engineering, 2014, 73, 371-379.	6.0	19
34	Effect of Pulverized Coal Preheating on NO_{<i>x</i>} Reduction during Combustion. Energy & Fuels, 2017, 31, 4436-4444.	5.1	19
35	N2O and NO formation from NH3 oxidation over MnO /TiO2 catalysts. Fuel, 2018, 234, 650-655.	6.4	19
36	Study on NO emissions during the coupling process of preheating-combustion of pulverized coal with multi-air staging. Journal of Cleaner Production, 2021, 292, 126012.	9.3	19

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37	Influences of CO and O₂ on the Reduction of N₂O by Biomass Char. Energy & Fuels, 2012, 26, 3125-3131.	5.1	18
38	Experiment Study on Ash Fusion Characteristics of Cofiring Straw and Sawdust. Energy & Fuels, 2018, 32, 525-531.	5.1	18
39	A New Agro/Forestry Residues Co-Firing Model in a Large Pulverized Coal Furnace: Technical and Economic Assessments. Energies, 2013, 6, 4377-4393.	3.1	17
40	Effect of the addition of Ce to MnO<i>_x</i>/Ti catalyst on reduction of N₂O in lowâ€temperature SCR. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 810-817.	1.5	17
41	Effects of leaching and additives on the formation of deposits on the heating surface during high-Na/Ca Zhundong coal combustion. Journal of the Energy Institute, 2021, 94, 319-328.	5.3	17
42	Pilot Study on In-depth Water Saving and Heat Recovery from Tail Flue Gas in Lignite-fired Power Plant. Energy Procedia, 2014, 61, 2558-2561.	1.8	16
43	Combustion characteristics of a four-wall tangential firing pulverized coal furnace. Applied Thermal Engineering, 2015, 90, 471-477.	6.0	16
44	Effects of CO2 gasification reaction on the combustion of pulverized coal char. Fuel, 2018, 233, 77-83.	6.4	15
45	Investigation on ash deposition formation during co-firing of coal with wheat straw. Journal of the Energy Institute, 2022, 100, 148-159.	5.3	15
46	Experimental and kinetic study on the transformation of coal nitrogen in the preheating stage of preheating-combustion coupling process. Fuel, 2020, 275, 117924.	6.4	14
47	Effects of physical structure of high heating-rate chars on combustion characteristics. Fuel, 2020, 266, 117059.	6.4	14
48	Influence of Biomass Reburning on NO_{<i>x</i>} Reductions during Pulverized Coal Combustion. Energy & Fuels, 2017, 31, 5597-5602.	5.1	13
49	Fusion characteristics of capsicum stalk ash. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 679-684.	1.5	12
50	A Review of Urea Pyrolysis to Produce NH₃ Used for NO_{<i>x</i>} Removal. Journal of Chemistry, 2019, 2019, 1-11.	1.9	12
51	Effects of FGR and Changeable Combustion Parameters and Coal/Char Properties on the Formation of Ultrafine PMs during Pulverized Coal Char Combustion under Various O₂/N₂ and O₂/CO₂ Atmospheres. Combustion Science and Technology, 2019, 191, 1898-1915.	2.3	11
52	Experimental and kinetic studies on NO emission during pulverized coal preheating-combustion process with high preheating temperature. Journal of the Energy Institute, 2021, 97, 180-186.	5.3	11
53	Characteristics of particulate emissions from coal char combustion: Char fragmentation and ash coalescence behaviors. Fuel, 2022, 310, 122283.	6.4	11
54	Experimental and kinetics studies on the evolution and effects of ash film during pulverized coal char combustion. Combustion and Flame, 2021, 233, 111623.	5.2	10

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55	Effect of oxygen on N2O and NO formation from NH3 oxidation over MnO /TiO2 catalysts. Energy Procedia, 2019, 158, 1497-1501.	1.8	9
56	Optimization and energy integration of heat recovery and power generation system. Applied Thermal Engineering, 2016, 107, 294-300.	6.0	8
57	NO formation and destruction during combustion of high temperature preheated pulverized coal. Journal of the Energy Institute, 2021, 99, 82-87.	5.3	8
58	Co-disposal and reutilization of municipal solid waste and its hazardous incineration fly ash. Environment International, 2022, 166, 107346.	10.0	8
59	A calculation method of biomass slagging rate based on crystallization theory. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 456-463.	1.5	7
60	Effect of support on simultaneous removal of NO and Hg0 over Cu and Fe catalysts. Journal of the Energy Institute, 2019, 92, 1852-1863.	5.3	7
61	Experimental comparative study on ash fusion characteristics of Ningdong coal under oxidizing and reducing atmosphere by means of SiO2-Al2O3-(CaOâ€¯+â€¯MgOâ€¯+â€¯Na2Oâ€¯+â€¯K2O) pseudo-ternary diagrams. Fuel, 2019, 258, 116137.	6.4	7
62	Experimental study on the formation of ultrafine particulate matters (PMs) during pulverized coal (PC) char combustion in O2/N2 and O2/CO2 atmospheres. Journal of the Energy Institute, 2020, 93, 2197-2203.	5.3	7
63	Experimental and kinetics studies on separate physicochemical effects of steam on coal char combustion. Combustion and Flame, 2020, 220, 168-177.	5.2	7
64	Assisting effect of Al2O3 on MnO for NO catalytic oxidation. Green Energy and Environment, 2021, 6, 903-909.	8.7	6
65	Experimental Study on The Synthetic Effects of Kaolin and Soil on Alkali-induced Slagging and Molten Slagging. Energy Procedia, 2014, 61, 756-759.	1.8	5
66	Experiment and Kinetics Studies on Ash Fusion Characteristics of Biomass/Coal Mixtures during Combustion. Energy & Fuels, 2019, 33, 10317-10323.	5.1	5
67	Performance of Lowâ€temperature SCR of NO with NH 3 over MnO x /Tiâ€based catalysts. Canadian Journal of Chemical Engineering, 2019, 97, 1407-1417.	1.7	5
68	Effects of air distribution on furnace temperature and CO/NO/N₂O/SO₂ emissions in a labâ€scale CFB furnace cofiring both biomass/coal and petroleum coke/coal. Asia-Pacific Journal of Chemical Engineering, 2016, 11, 492-499.	1.5	4
69	Modelling study on the effect of ash fusion characteristics on the biomass slagging behavior. Thermal Science, 2018, 22, 2113-2121.	1.1	4
70	Economic Feasibility Study of Different Biomass Firing Models in China. Energy Procedia, 2014, 61, 767-771.	1.8	3
71	An Experimental Study on the Measurement of Moisture Content in Coal with Microwaves. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2014, 36, 2707-2714.	2.3	3
72	Analysis of Urea Pyrolysis Products in 132.5-190 Â°C. Energy Procedia, 2019, 158, 2170-2175.	1.8	3

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73	Separate physicochemical effects of CO2 on the coal char combustion: An experimental and kinetic study. Combustion and Flame, 2021, 235, 111717.	5.2	3
74	Investigation on the regulation mechanism of Fe ₂ O ₃ / SiO ₂ on ash melting and flow behavior under gasification conditions. Combustion Science and Technology, 2024, 196, 664-684.	2.3	3
75	Kinetic investigation of the SO2 influence on NO reduction processes during methane reburning. Asia-Pacific Journal of Chemical Engineering, 2010, 5, 902-908.	1.5	2
76	The role of H2O(g) in the formation of ultrafine PMs under O2/N2/H2O atmosphere. Journal of the Energy Institute, 2021, 94, 139-145.	5.3	2
77	Experimental and kinetic studies on ash fusion behavior: a highâ€precision acquisition method for ash fusion temperatures. Asia-Pacific Journal of Chemical Engineering, 2021, 16, e2644.	1.5	2
78	Investigation on Ash Fusion and Slagging Properties of Coal under Reducing Atmosphere. Combustion Science and Technology, 2023, 195, 64-84.	2.3	2
79	Study on CO 2 Gasification Reaction during the Combustion of Pulverized Coal Char Particle. Energy Procedia, 2017, 142, 1635-1639.	1.8	1
80	Experimental Studies on Thermal Effect of H2O on the Combustion of Pulverized Coal Char. Combustion Science and Technology, 2020, , 1-13.	2.3	1
81	Experimental studies of ash film fractions based on measurement of cenospheres geometry in pulverized coal combustion. Frontiers in Energy, 2021, 15, 91-98.	2.3	1
82	Conversion Mechanism of Toxic Hydrogen Cyanide by Magnesium Oxide at High Temperatures. Asian Journal of Chemistry, 2014, 26, 495-498.	0.3	0
83	Gasification of High Heating-rate Biomass-derived Chars at Elevated Temperatures. Energy Procedia, 2017, 105, 642-647.	1.8	0
84	Pollutant Formation and Control during Fuel Thermochemical Conversion. Journal of Chemistry, 2020, 2020, 1-2.	1.9	0
85	Study on the formation of ultrafine particulate matter (PM) during char combustion in a wet oxy-combustion atmosphere. International Journal of Greenhouse Gas Control, 2022, 115, 103617.	4.6	0