

# Yanqing Niu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1085385/publications.pdf>

Version: 2024-02-01

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	Investigation on the regulation mechanism of Fe <sub>2</sub> O <sub>3</sub> / SiO <sub>2</sub> on ash melting and flow behavior under gasification conditions. Combustion Science and Technology, 2024, 196, 664-684.	2.3	3
2	Investigation on Ash Fusion and Slagging Properties of Coal under Reducing Atmosphere. Combustion Science and Technology, 2023, 195, 64-84.	2.3	2
3	Characteristics of particulate emissions from coal char combustion: Char fragmentation and ash coalescence behaviors. Fuel, 2022, 310, 122283.	6.4	11
4	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
5	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
6	Co-disposal and reutilization of municipal solid waste and its hazardous incineration fly ash. Environment International, 2022, 166, 107346.	10.0	8
7	Assisting effect of Al <sub>2</sub> O <sub>3</sub> on MnO for NO catalytic oxidation. Green Energy and Environment, 2021, 6, 903-909.	8.7	6
8	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
9	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
10	The role of H <sub>2</sub> O(g) in the formation of ultrafine PMs under O <sub>2</sub> /N <sub>2</sub> /H <sub>2</sub> O atmosphere. Journal of the Energy Institute, 2021, 94, 139-145.	5.3	2
11	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
12	Experimental and kinetic studies on ash fusion behavior: a high-precision acquisition method for ash fusion temperatures. Asia-Pacific Journal of Chemical Engineering, 2021, 16, e2644.	1.5	2
13	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
14	Separate physicochemical effects of CO <sub>2</sub> on the coal char combustion: An experimental and kinetic study. Combustion and Flame, 2021, 235, 111717.	5.2	3
15	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
16	NO formation and destruction during combustion of high temperature preheated pulverized coal. Journal of the Energy Institute, 2021, 99, 82-87.	5.3	8
17	Experimental Studies on Thermal Effect of H <sub>2</sub> O on the Combustion of Pulverized Coal Char. Combustion Science and Technology, 2020, , 1-13.	2.3	1
18	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

#	ARTICLE	IF	CITATIONS
19	Pollutant Formation and Control during Fuel Thermochemical Conversion. Journal of Chemistry, 2020, 2020, 1-2.	1.9	0
20	Experimental study on the formation of ultrafine particulate matters (PMs) during pulverized coal (PC) char combustion in O <sub>2</sub> /N <sub>2</sub> and O <sub>2</sub> /CO <sub>2</sub> atmospheres. Journal of the Energy Institute, 2020, 93, 2197-2203.	5.3	7
21	Experimental and kinetics studies on separate physicochemical effects of steam on coal char combustion. Combustion and Flame, 2020, 220, 168-177.	5.2	7
22	Effects of physical structure of high heating-rate chars on combustion characteristics. Fuel, 2020, 266, 117059.	6.4	14
23	An intrinsic kinetics model to predict complex ash effects (ash film, dilution, and vaporization) on pulverized coal char burnout in air (O <sub>2</sub> /N <sub>2</sub> ) and oxy-fuel (O <sub>2</sub> /CO <sub>2</sub> ) atmospheres. Proceedings of the Combustion Institute, 2019, 37, 2781-2790.	3.9	22
24	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
25	Effect of support on simultaneous removal of NO and HgO over Cu and Fe catalysts. Journal of the Energy Institute, 2019, 92, 1852-1863.	5.3	7
26	New insight into N <sub>2</sub> O formation from NH <sub>3</sub> oxidation over MnO /TiO <sub>2</sub> catalyst. Fuel, 2019, 254, 115719.	6.4	28
27	Effect of oxygen on N <sub>2</sub> O and NO formation from NH <sub>3</sub> oxidation over MnO /TiO <sub>2</sub> catalysts. Energy Procedia, 2019, 158, 1497-1501.	1.8	9
28	Analysis of Urea Pyrolysis Products in 132.5-190 Â°C. Energy Procedia, 2019, 158, 2170-2175.	1.8	3
29	Experimental comparative study on ash fusion characteristics of Ningdong coal under oxidizing and reducing atmosphere by means of SiO <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> -(CaO+MgO+Na <sub>2</sub> O+K <sub>2</sub> O) pseudo-ternary diagrams. Fuel, 2019, 258, 116137.	5.4	7
30	Experiment and Kinetics Studies on Ash Fusion Characteristics of Biomass/Coal Mixtures during Combustion. Energy & Fuels, 2019, 33, 10317-10323.	5.1	5
31	Biomass torrefaction: properties, applications, challenges, and economy. Renewable and Sustainable Energy Reviews, 2019, 115, 109395.	16.4	217
32	Performance of Low-temperature SCR of NO with NH <sub>3</sub> over MnO x /TiO <sub>2</sub> -based catalysts. Canadian Journal of Chemical Engineering, 2019, 97, 1407-1417.	1.7	5
33	Source of N and O in N <sub>2</sub> O formation during selective catalytic reduction of NO with NH <sub>3</sub> over MnO /TiO <sub>2</sub> . Fuel, 2019, 251, 23-29.	6.4	30
34	Effects of water leaching (simulated rainfall) and additives (KOH, KCl, and SiO <sub>2</sub> ) on the ash fusion characteristics of corn straw. Applied Thermal Engineering, 2019, 154, 485-492.	6.0	28
35	A Review of Urea Pyrolysis to Produce NH <sub>3</sub> Used for NO <sub>x</sub> Removal. Journal of Chemistry, 2019, 2019, 1-11.	1.9	12
36	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 <sub>2</sub> /N <sub>2</sub> and O <sub>2</sub> /CO <sub>2</sub> Atmospheres. Combustion Science and Technology, 2019, 191, 1898-1915.	2.3	11

#	ARTICLE	IF	CITATIONS
37	Analysis of urea pyrolysis in 132.5–190 °C. <i>Fuel</i> , 2019, 242, 62-67.	6.4	29
38	Experimental study on ash fusion characteristics and slagging potential using simulated biomass ashes. <i>Journal of the Energy Institute</i> , 2019, 92, 1889-1896.	5.3	38
39	Experiment Study on Ash Fusion Characteristics of Cofiring Straw and Sawdust. <i>Energy &amp; Fuels</i> , 2018, 32, 525-531.	5.1	18
40	Ultra-fine particulate matters (PMs) formation during air and oxy-coal combustion: Kinetics study. <i>Applied Energy</i> , 2018, 218, 46-53.	10.1	27
41	Investigation on ash deposition characteristics during Zhundong coal combustion. <i>Journal of the Energy Institute</i> , 2018, 91, 33-42.	5.3	56
42	High temperature gasification of high heating-rate chars using a flat-flame reactor. <i>Applied Energy</i> , 2018, 227, 100-107.	10.1	28
43	N <sub>2</sub> O and NO formation from NH <sub>3</sub> oxidation over MnO /TiO <sub>2</sub> catalysts. <i>Fuel</i> , 2018, 234, 650-655.	6.4	19
44	Effects of CO <sub>2</sub> gasification reaction on the combustion of pulverized coal char. <i>Fuel</i> , 2018, 233, 77-83.	6.4	15
45	Modelling study on the effect of ash fusion characteristics on the biomass slagging behavior. <i>Thermal Science</i> , 2018, 22, 2113-2121.	1.1	4
46	Effect of Pulverized Coal Preheating on NO <sub>x</sub> Reduction during Combustion. <i>Energy &amp; Fuels</i> , 2017, 31, 4436-4444.	5.1	19
47	Influence of Biomass Reburning on NO <sub>x</sub> Reductions during Pulverized Coal Combustion. <i>Energy &amp; Fuels</i> , 2017, 31, 5597-5602.	5.1	13
48	Gasification of High Heating-rate Biomass-derived Chars at Elevated Temperatures. <i>Energy Procedia</i> , 2017, 105, 642-647.	1.8	0
49	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.	5.2	28
50	Characteristics of biomass fast pyrolysis in a wire-mesh reactor. <i>Fuel</i> , 2017, 200, 225-235.	6.4	34
51	Study on CO <sub>2</sub> Gasification Reaction during the Combustion of Pulverized Coal Char Particle. <i>Energy Procedia</i> , 2017, 142, 1635-1639.	1.8	1
52	Effects of air distribution on furnace temperature and CO/NO/N <sub>2</sub> O/SO <sub>2</sub> 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.	1.5	4
53	Experimental evaluation of additives and K <sub>2</sub> O–SiO <sub>2</sub> –Al <sub>2</sub> O <sub>3</sub> diagrams on high-temperature silicate melt-induced slagging during biomass combustion. <i>Fuel</i> , 2016, 179, 52-59.	6.4	48
54	Kinetic modeling of the formation and growth of inorganic nano-particles during pulverized coal char combustion in O <sub>2</sub> /N <sub>2</sub> and O <sub>2</sub> /CO <sub>2</sub> atmospheres. <i>Combustion and Flame</i> , 2016, 173, 195-207.	5.2	29

#	ARTICLE	IF	CITATIONS
55	Synergistic removal of NO and N <sub>2</sub> O in low-temperature SCR process with MnO <sub>x</sub> /Ti based catalyst doped with Ce and V. <i>Fuel</i> , 2016, 185, 316-322.	6.4	68
56	Optimization and energy integration of heat recovery and power generation system. <i>Applied Thermal Engineering</i> , 2016, 107, 294-300.	6.0	8
57	Ash-related issues during biomass combustion: Alkali-induced slagging, silicate melt-induced slagging (ash fusion), agglomeration, corrosion, ash utilization, and related countermeasures. <i>Progress in Energy and Combustion Science</i> , 2016, 52, 1-61.	31.2	750
58	Combustion characteristics of a four-wall tangential firing pulverized coal furnace. <i>Applied Thermal Engineering</i> , 2015, 90, 471-477.	6.0	16
59	A sophisticated model to predict ash inhibition during combustion of pulverized char particles. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 561-569.	3.9	39
60	Experimental study on the coexistent dual slagging in biomass-fired furnaces: Alkali- and silicate melt-induced slagging. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 2405-2413.	3.9	44
61	Conversion Mechanism of Toxic Hydrogen Cyanide by Magnesium Oxide at High Temperatures. <i>Asian Journal of Chemistry</i> , 2014, 26, 495-498.	0.3	0
62	Short Review on the Origin and Countermeasure of Biomass Slagging in Grate Furnace. <i>Frontiers in Energy Research</i> , 2014, 2, .	2.3	29
63	Pilot Study on In-depth Water Saving and Heat Recovery from Tail Flue Gas in Lignite-fired Power Plant. <i>Energy Procedia</i> , 2014, 61, 2558-2561.	1.8	16
64	Economic Feasibility Study of Different Biomass Firing Models in China. <i>Energy Procedia</i> , 2014, 61, 767-771.	1.8	3
65	An Experimental Study on the Measurement of Moisture Content in Coal with Microwaves. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2014, 36, 2707-2714.	2.3	3
66	A calculation method of biomass slagging rate based on crystallization theory. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014, 9, 456-463.	1.5	7
67	Investigations on biomass slagging in utility boiler: Criterion numbers and slagging growth mechanisms. <i>Fuel Processing Technology</i> , 2014, 128, 499-508.	7.2	94
68	Study of briquetted biomass co-firing mode in power plants. <i>Applied Thermal Engineering</i> , 2014, 63, 266-271.	6.0	23
69	Determining the optimum coal concentration in a general tangential-fired furnace with rich-lean burners: From a bench-scale to a pilot-scale study. <i>Applied Thermal Engineering</i> , 2014, 73, 371-379.	6.0	19
70	Experimental study of a zero water consumption wet FGD system. <i>Applied Thermal Engineering</i> , 2014, 63, 272-277.	6.0	20
71	Experimental Study on The Synthetic Effects of Kaolin and Soil on Alkali-induced Slagging and Molten Slagging. <i>Energy Procedia</i> , 2014, 61, 756-759.	1.8	5
72	Effect of the addition of Ce to MnO <sub>x</sub> /Ti catalyst on reduction of N <sub>2</sub> O in low-temperature SCR. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014, 9, 810-817.	1.5	17

#	ARTICLE	IF	CITATIONS
73	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
74	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
75	Origination and formation of NH <sub>4</sub> Cl in biomass-fired furnace. Fuel Processing Technology, 2013, 106, 262-266.	7.2	20
76	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
77	Influences of CO and O <sub>2</sub> on the Reduction of N <sub>2</sub> O by Biomass Char. Energy & Fuels, 2012, 26, 3125-3131.	5.1	18
78	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
79	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
80	Fusion characteristics of capsicum stalk ash. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 679-684.	1.5	12
81	Study of optimal pulverized coal concentration in a four-wall tangentially fired furnace. Applied Energy, 2011, 88, 1164-1168.	10.1	30
82	Kinetic investigation of the SO <sub>2</sub> influence on NO reduction processes during methane reburning. Asia-Pacific Journal of Chemical Engineering, 2010, 5, 902-908.	1.5	2
83	Study on fusion characteristics of biomass ash. Bioresource Technology, 2010, 101, 9373-9381.	9.6	166
84	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
85	Slagging Characteristics on the Superheaters of a 12 MW Biomass-Fired Boiler. Energy & Fuels, 2010, 24, 5222-5227.	5.1	73