Hongpeng Xu

List of Publications by Year
in descending order

24 papers	703 citations	567281 15 h-index	610901 24 g-index
24 all docs	24 docs citations	24 times ranked	486 citing authors

#	Article	IF	Citations
1	Combustion characteristics and thermal performance of premixed hydrogen-air in a two-rearward-step micro tube. Applied Energy, 2019, 242, 424-438.	10.1	79
2	Experimental and numerical investigation of a micro-thermophotovoltaic system with different backward-facing steps and wall thicknesses. Energy, 2019, 173, 540-547.	8.8	69
3	Investigation on premixed H2/C3H8/air combustion in porous medium combustor for the micro thermophotovoltaic application. Applied Energy, 2020, 260, 114352.	10.1	69
4	Investigation on H2/air combustion with C3H8 addition in the combustor with part/full porous medium. Energy Conversion and Management, 2021, 228, 113652.	9.2	61
5	Experimental investigation on premixed hydrogen/air combustion in varied size combustors inserted with porous medium for thermophotovoltaic system applications. Energy Conversion and Management, 2019, 200, 112086.	9.2	52
6	Effects analysis on combustion and thermal performance enhancement of a nozzle-inlet micro tube fueled by the premixed hydrogen/air. Energy, 2018, 160, 349-360.	8.8	40
7	Numerical investigation and thermodynamic analysis of syngas production through chemical looping gasification using biomass as fuel. Fuel, 2019, 246, 466-475.	6.4	38
8	Effects of propane addition and burner scale on the combustion characteristics and working performance. Applied Energy, 2021, 285, 116484.	10.1	37
9	CFD simulation of a fluidized bed reactor for biomass chemical looping gasification with continuous feedstock. Energy Conversion and Management, 2019, 201, 112143.	9.2	34
10	Numerical investigation of the effect of air supply and oxygen enrichment on the biomass combustion in the grate boiler. Applied Thermal Engineering, 2019, 156, 550-561.	6.0	34
11	Development of an optimization methodology for formulating both jet fuel and diesel fuel surrogates and their associated skeletal oxidation mechanisms. Fuel, 2018, 231, 361-372.	6.4	29
12	Numerical investigation of biomass co-combustion with methane for NOx reduction. Energy, 2020, 194, 116868.	8.8	26
13	Numerical Study of Biomass Grate Boiler with Coupled Time-Dependent Fuel Bed Model and Computational Fluid Dynamics Based Freeboard Model. Energy & Fuels, 2018, 32, 9493-9505.	5.1	19
14	Integrated analysis of CFD simulation data with K-means clustering algorithm for soot formation under varied combustion conditions. Applied Thermal Engineering, 2019, 153, 299-305.	6.0	17
15	Macroscopic fuel reactor modelling of a 5â€¯kWth interconnected fluidized bed for in-situ gasification chemical looping combustion of coal. Chemical Engineering Journal, 2018, 348, 978-991.	12.7	15
16	Numerical study on the effective utilization of high sulfur petroleum coke for syngas production via chemical looping gasification. Energy, 2021, 235, 121395.	8.8	14
17	Development of a new jet fuel surrogate and its associated reaction mechanism coupled with a multistep soot model for diesel engine combustion. Applied Energy, 2018, 228, 42-56.	10.1	14
18	Numerical study of HCN and NH3 reduction in a two-stage entrained flow gasifier by implementing MILD combustion. Fuel, 2019, 251, 482-495.	6.4	12

#	Article	IF	Citations
19	Development of a numerical model for co-combustion of the blended solid waste fuel in the grate boiler. Chemical Engineering Journal, 2021, 405, 126604.	12.7	12
20	Development of a mechanistic fouling model for predicting deposit formation in a woodchip-fired grate boiler. Energy, 2021, 220, 119699.	8.8	11
21	Investigation of soot aggregate formation and oxidation in compression ignition engines with a pseudo bi-variate soot model. Applied Energy, 2019, 253, 113609.	10.1	10
22	Simulation and investigation of periodic deflecting oscillation of gasâ€“solid planar opposed jets. Chemical Engineering and Processing: Process Intensification, 2014, 76, 6-15.	3.6	6
23	Predictive control of CO2 emissions from a grate boiler based on fuel nature structures using intelligent neural network and Box-Behnken design. Energy Procedia, 2019, 158, 364-369.	1.8	3
24	Numerical investigation the effect of air supply on the biomass combustion in the grate boiler. Energy Procedia, 2019, 158, 272-277.	1.8	2