Heat recirculating reactors: Fundamental research and

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Citation Report

#	Article	IF	Citations
1	Analysis of an idealized counter-current microchannel-based reactor to produce hydrogen-rich syngas from methanol. International Journal of Hydrogen Energy, 2019, 44, 23807-23820.	3.8	6
2	Three-dimensional pore-scale numerical simulation of methane-air combustion in inert porous media under the conditions of upstream and downstream combustion wave propagation through the media. Combustion and Flame, 2019, 209, 74-98.	2.8	50
3	Thermal management in catalytic heat-recirculating micro-combustors: A computational fluid dynamics study. Applied Thermal Engineering, 2019, 160, 114073.	3.0	16
4	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.	4.4	52
5	Flame stability analysis of premixed hydrogen/air mixtures in a swirl micro-combustor. Energy, 2020, 209, 118495.	4.5	54
6	Processes defining smouldering combustion: Integrated review and synthesis. Progress in Energy and Combustion Science, 2020, 81, 100869.	15.8	86
7	Combustion of Lean Methaneâ€“air Flames in Mesoscale Reactor with Opposite Gas Flows. Combustion Science and Technology, 2022, 194, 1872-1894.	1.2	2
8	Pore-scale study of thermal nonequilibrium in a two-layer burner formed by staggered arrangement of particles. Applied Thermal Engineering, 2020, 176, 115376.	3.0	7
9	Development of a new infrared heater based on an annular cylindrical radiant burner for direct heating applications. Energy, 2020, 204, 117965.	4.5	29
10	Thermodynamic cycle analysis of superadiabatic matrix-stabilized combustion for gas turbine engines. Energy, 2020, 207, 118171.	4.5	5
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12	A pore-scale assessment of the dynamic response of forced convection in porous media to inlet flow modulations. International Journal of Heat and Mass Transfer, 2020, 153, 119657.	2.5	100
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14	Effects of ozone on n-heptane low temperature chemistry and premixed cool flames. Combustion and Flame, 2021, 225, 20-30.	2.8	9
15	Fuel interchangeability for lean premixed combustion in cylindrical radiant burner operated in the internal combustion mode. Applied Thermal Engineering, 2021, 186, 115997.	3.0	18
16	Integration of heat recirculating microreactors with thermoelectric modules for power generation: a comparative study using CFD. Reaction Chemistry and Engineering, 2021, 6, 2327-2341.	1.9	1
17	Understanding pressure changes in smouldering thermal porous media reactors. Chemical Engineering Journal, 2021, 412, 128642.	6.6	23
18	Combustion of Low-Concentration Gas in a Porous Media Burner: Reactor Design and Optimization. Shock and Vibration, 2021, 2021, 1-12.	0.3	2

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19	Fully explicit formulae for flame speed in infinite and finite porous media. Combustion Theory and Modelling, 2021, 25, 785-812.	1.0	7
20	Experimental and Analytical Investigation of a Counter-flow Reactor at Lean Conditions. Combustion Science and Technology, 2023, 195, 107-132.	1.2	1
21	Combustion Characteristics of Coal Mine Methane in a Preheated-Burner Packed with Raschig Rings. Journal of Thermal Science, 2021, 30, 1741-1750.	0.9	3
22	A CFD study of ignition of lean propane-air mixtures in a heat recirculating U-bend catalytic microreactor. Chemical Engineering Research and Design, 2021, 173, 15-26.	2.7	4
23	Pore-scale study of complex flame stabilization phenomena in thin-layered radial porous burner. Combustion and Flame, 2021, 231, 111468.	2.8	19
24	Analytical study of superadiabatic small-scale combustors with a two-step chain-branching chemistry model: Lean burning below the flammability limit. Combustion and Flame, 2022, 235, 111731.	2.8	4
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29	Experimental investigation of reverse flow porous medium reactor with premixed and non-premixed flames. Chemical Engineering Journal, 2021, 425, 130178.	6.6	17
30	Catalytically stabilized combustion characteristics of methane-air mixtures in micro-scale heat-recirculating systems. Fuel, 2021, 306, 121693.	3.4	19
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32	The application of an innovative integrated Swiss-roll-combustor/Stirling-hot-end component on an unpressurized Stirling engine. Energy Conversion and Management, 2021, 249, 114831.	4.4	10
33	Ceramic sintering furnace based on combustion of premixed natural gas in porous inert media. Fuel, 2022, 309, 122098.	3.4	4
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37	Effects of Key Influencing Factors on the Flame Inclination of Low Concentration Methane (LCM) Combustion in Porous Burner. Combustion Science and Technology, 0, , 1-21.	1.2	1
38	Effect of heat loss on the syngas production by fuel-rich combustion in a divergent two-layer burner. International Journal of Hydrogen Energy, 2022, , .	3.8	4
39	Combustion regimes in inert porous media: From decoupled to hyperdiffusive flames. Combustion and Flame, 2022, 241, 112052.	2.8	5
40	Asymptotic study of premixed flames in inert porous media layers of finite width: Parametric analysis of heat recirculation phenomena. Combustion and Flame, 2022, 241, 112109.	2.8	2
41	The Effect of Catalyst Placement on the Stability of a U-Bend Catalytic Heat-Recirculating Micro-Combustor: A Numerical Investigation. Catalysts, 2021, 11, 1560.	1.6	2
42	Experimental Study on the Influence of Gas-Solid Heat Transfer in a Mesoscale Counterflow Combustor. Combustion Science and Technology, 0, , 1-22.	1.2	0
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52	Superadiabatic small-scale combustors: Asymptotic analysis of a two-step chain-branching combustion model. Proceedings of the Combustion Institute, 2023, 39, 1927-1935.	2.4	1
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54	Numerical study of flame stability within inert porous media with variable void area. Combustion and Flame, 2022, 246, 112475.	2.8	4

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56	A comprehensive review on combustion stabilization technologies of micro/meso-scale combustors for micro thermophotovoltaic systems: Thermal, emission, and energy conversion. Fuel, 2023, 335, 126660.	3.4	29
57	Oxidation-Affected Erosion of Porous Ni-Al Intermetallic Alloy in Combustion Applications: Pore-Scale Simulation. Metals, 2023, 13, 277.	1.0	1
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