

Yunfei Yan

List of Publications by Year in descending order

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1647
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancement of combustion and radiation performances in a counterflow double-channel combustor with pin fins for micro-thermophotovoltaic system. <i>International Journal of Energy Research</i> , 2022, 46, 1575-1592.	4.5	3
2	Combustion characteristic of premixed H ₂ /air in the micro cavity combustor with guide vanes. <i>Energy</i> , 2022, 239, 121975.	8.8	26
3	Numerical study on hotspots adaptive cooling and thermal-hydraulic performance enhancement of fractal microchannel heat sink embedded with hydrogels. <i>International Journal of Thermal Sciences</i> , 2022, 172, 107272.	4.9	8
4	Automatically adaptive cooling of hotspots by a fractal microchannel heat sink embedded with thermo-responsive hydrogels. <i>International Journal of Energy Research</i> , 2022, 46, 3132-3144.	4.5	4
5	Numerical investigation on thermal-hydraulic characteristics of the micro heat sink with gradient distribution pin fin arrays and narrow slots. <i>Applied Thermal Engineering</i> , 2022, 202, 117836.	6.0	20
6	Experimental study on flow boiling characteristics of hybrid micro-channels with gradient distribution pillars and bypass. <i>International Journal of Heat and Mass Transfer</i> , 2022, 186, 122468.	4.8	11
7	Numerical study on hot spots thermal management in low pressure gradient distribution narrow microchannel embedded with pin fins. <i>International Journal of Heat and Mass Transfer</i> , 2022, 186, 122518.	4.8	10
8	Novel non-noble metal catalyst with high efficiency and synergetic photocatalytic hydrolysis of ammonia borane and mechanism investigation. <i>Energy</i> , 2022, 244, 123187.	8.8	21
9	Comprehensive numerical insight the thermal performance improvement of the micro combustors with internal bionic Y-shaped fins for micro-thermal voltaic system applications. <i>Fuel</i> , 2022, 318, 123610.	6.4	29
10	Numerical study on combustion characteristics and heat transfer enhancement of the micro combustor embedded with Y-shaped fin for micro thermo-photovoltaic system. <i>Applied Thermal Engineering</i> , 2022, 211, 118427.	6.0	21
11	Influence of ZrO ₂ crystal structure on the catalytic performance of Fe-Ni catalysts for CO ₂ -assisted ethane dehydrogenation reaction. <i>Fuel</i> , 2022, 322, 124122.	6.4	8
12	Numerical study on methane/air combustion characteristics in a heat-recirculating micro combustor embedded with porous media. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 20999-21012.	7.1	18
13	Parametric study of inserting internal spiral fins on the micro combustor performance for thermophotovoltaic systems. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 165, 112595.	16.4	23
14	Combustion Performance of Methane/Air in a Micro Combustor Embedded Hollow Hemispherical Slotted Bluff Body. <i>Energies</i> , 2022, 15, 4033.	3.1	2
15	Numerical study of thermal enhancement in a micro-heat sink with ribbed pin-fin arrays. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 143, 2163-2177.	3.6	13
16	Thermal management of 3D chip with non-uniform hotspots by integrated gradient distribution annular-cavity micro-pin fins. <i>Applied Thermal Engineering</i> , 2021, 182, 116132.	6.0	38
17	Thermal management and temperature uniformity enhancement of electronic devices by micro heat sinks: A review. <i>Energy</i> , 2021, 216, 119223.	8.8	278
18	Numerical study on the influence of controllable flow ratio on combustion characteristics of a controllable central slotted bluff body and cavity combined micro combustor. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 6901-6914.	7.1	38

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19	Numerical investigation on a multi-channel micro combustor fueled with hydrogen for a micro-thermophotovoltaic system. International Journal of Hydrogen Energy, 2021, 46, 4460-4471.	7.1	37
20	Catalytic combustion characteristics of CH ₄ in the micro cavity combustor under different types of air inlet distribution. International Journal of Energy Research, 2021, 45, 3870-3882.	4.5	6
21	Ammonia Borane and Its Applications in the Advanced Energy Technology. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	6
22	Numerical investigation on the characteristics of flow and heat transfer enhancement by micro pin-fin array heat sink with fin-shaped strips. Chemical Engineering and Processing: Process Intensification, 2021, 160, 108273.	3.6	27
23	Multi-objective optimizations on thermal and hydraulic performance of symmetric and asymmetric bionic Y-shaped fractal networks by genetic algorithm coupled with CFD simulation. International Communications in Heat and Mass Transfer, 2021, 124, 105261.	5.6	14
24	Heat transfer enhancement and exergy efficiency improvement of a micro combustor with internal spiral fins for thermophotovoltaic systems. Applied Thermal Engineering, 2021, 189, 116723.	6.0	42
25	Comparative investigation of combustion and thermal characteristics of a conventional micro combustor and micro combustor with internal straight/spiral fins for thermophotovoltaic system. International Journal of Hydrogen Energy, 2021, 46, 22165-22179.	7.1	22
26	Influence of hole size and number on pressure drop and energy output of the micro-cylindrical combustor inserting with an internal spiral fin with holes. International Journal of Hydrogen Energy, 2021, 46, 26594-26606.	7.1	14
27	Numerical comparison of premixed H ₂ /air combustion characteristic of three types of micro cavity-combustors with guide vanes, bluff body, guide vanes and bluff body respectively. International Journal of Hydrogen Energy, 2021, 46, 24382-24394.	7.1	29
28	Multi-objective optimization and multi-factors analysis of the thermal/hydraulic performance of the bionic Y-shaped fractal heat sink. Applied Thermal Engineering, 2021, 195, 117157.	6.0	20
29	Influence of multi-structure optimization on the comprehensive performance of micro-cylindrical combustor inserting with spiral fin by using grey relational analysis and analysis of variance. International Journal of Hydrogen Energy, 2021, 46, 28327-28337.	7.1	12
30	Numerical Study on the Characteristics of Methane Hedging Combustion in a Heat Cycle Porous Media Burner. Processes, 2021, 9, 1733.	2.8	1
31	Influence of Porous Media Aperture Arrangement on CH ₄ /Air Combustion Characteristics in Micro Combustor. Processes, 2021, 9, 1747.	2.8	3
32	Preparation of TiO ₂ -Based Photocatalysts Synergistically Modified with Fe ³⁺ -Graphene and Their Visible-Light-Catalyzed Hydrogen Production from Ammonia Borane. Energy & Fuels, 2021, 35, 16035-16045.	5.1	8
33	Efficient Hydrogen Production by an rGO/TiO ₂ Composite Material from Ammonia Borane Hydrolysis in a Photocatalytic Reactor. Energy & Fuels, 2021, 35, 16065-16074.	5.1	15
34	Thermal-hydraulic performance enhancement of miniature heat sinks using connected Y-shaped fractal micro-channels. Chemical Engineering and Processing: Process Intensification, 2021, 166, 108487.	3.6	15
35	Numerical study on premixed hydrogen/air combustion characteristics and heat transfer enhancement of micro-combustor embedded with pin fins. International Journal of Hydrogen Energy, 2021, 46, 38519-38534.	7.1	15
36	Numerical investigations on the emitter power and energy conversion efficiency improvement of micro-cylindrical combustor by an internal spiral fin for micro-thermophotovoltaic systems. International Journal of Energy Research, 2021, 45, 8684-8698.	4.5	5

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37	Numerical investigation of a novel micro combustor with a central and bilateral slotted blunt body. International Journal of Hydrogen Energy, 2021, 46, 23564-23579.	7.1	25
38	Numerical investigation on combustion characteristics of premixed hydrogen/air in a swirl micro combustor with twisted vanes. International Journal of Hydrogen Energy, 2021, 46, 40105-40119.	7.1	18
39	Experimental Investigation on Mixed Combustion Characteristics of Coal, Tobacco Straw, and Cinder in an Energy-Saving Bake Process. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	1
40	Adsorption materials for volatile organic compounds (VOCs) and the key factors for VOCs adsorption process: A review. Separation and Purification Technology, 2020, 235, 116213.	7.9	489
41	Reprint of: Temperature Uniformity Enhancement and Flow Characteristics of Embedded Gradient Distribution Micro Pin Fin Arrays Using Dielectric Coolant for Direct Intra-Chip Cooling. International Journal of Heat and Mass Transfer, 2020, 161, 120235.	4.8	8
42	Highly Efficient Photothermal Difunctional Catalysts To Enhance Ammonia Borane Hydrolysis for Hydrogen Evolution. Energy & Fuels, 2020, 34, 16948-16955.	5.1	10
43	Influence of hydrogels embedding positions on automatic adaptive cooling of hot spot in fractal microchannel heat sink. International Journal of Thermal Sciences, 2020, 155, 106428.	4.9	33
44	Temperature Uniformity Enhancement and Flow Characteristics of Embedded Gradient Distribution Micro Pin Fin Arrays Using Dielectric Coolant for Direct Intra-Chip Cooling. International Journal of Heat and Mass Transfer, 2020, 156, 119675.	4.8	30
45	Investigation on premixed methane/air combustion characteristics in heat recirculation micro combustor with separating cylinder. Chemical Engineering and Processing: Process Intensification, 2020, 153, 107987.	3.6	20
46	Heat transfer characteristics investigations on liquid-cooled integrated micro pin-fin chip with gradient distribution arrays and double heating input for intra-chip micro-fluidic cooling. International Journal of Heat and Mass Transfer, 2020, 159, 120118.	4.8	28
47	Thermodynamic analysis of CaO enhanced steam gasification process of food waste with high moisture and low moisture. Energy, 2020, 194, 116831.	8.8	29
48	Gas Capture Processes. Processes, 2020, 8, 70.	2.8	2
49	Catalytic Combustion of Low-Concentration Methane over $M_{x/3}-Al_2O_3$ ($M = Mn/Ce$) Catalysts. Industrial & Engineering Chemistry Research, 2020, 59, 4291-4301.	3.7	7
50	Combustion characteristics and thermal enhancement of premixed hydrogen/air in micro combustor with pin fin arrays. International Journal of Hydrogen Energy, 2020, 45, 5014-5027.	7.1	48
51	Effects of Slitting Size and Inlet Operating Conditions on Hydrogen Combustion Characteristics in a Micro-Combustor With a Controllable Vortex Slotted Bluff Body. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	2.3	7
52	Thermal-hydraulic performances and synergy effect between heat and flow distribution in a truncated doubled-layered heat sink with Y-shaped fractal network. International Journal of Heat and Mass Transfer, 2019, 142, 118337.	4.8	30
53	Novel method of high-efficient synergistic catalyze ammonia borane hydrolysis to hydrogen evolution and catalytic mechanism investigation. Fuel, 2019, 255, 115771.	6.4	26
54	Influence of controllable slit width and angle of controllable flow on hydrogen/air premixed combustion characteristics in micro combustor with both sides slitted bluff body. International Journal of Hydrogen Energy, 2019, 44, 20482-20492.	7.1	36

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55	Activation Pathway of C-H and C-C Bonds of Ethane by Pd Atom with CO ₂ as a Soft Oxidant. <i>ChemistrySelect</i> , 2019, 4, 9608-9617.	1.5	13
56	Numerical comparison of H ₂ /air catalytic combustion characteristic of micro-combustors with a conventional, slotted or controllable slotted bluff body. <i>Energy</i> , 2019, 189, 116242.	8.8	48
57	Theoretical and numerical investigation of embedded microfluidic thermal management using gradient distribution micro pin fin arrays. <i>Applied Thermal Engineering</i> , 2019, 153, 748-760.	6.0	34
58	Transition metal tuned semiconductor photocatalyst CuCo ₂ -SiC catalyze hydrolysis of ammonia borane to hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 8307-8314.	7.1	18
59	Numerical comparison study of methane catalytic combustion characteristic between newly proposed opposed counter-flow micro-combustor and the conventional ones. <i>Energy</i> , 2019, 170, 403-410.	8.8	60
60	Numerical study on premixed hydrogen/air combustion characteristics in micro-combustor with slits on both sides of the bluff body. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 1998-2012.	7.1	58
61	Hydrogen release mechanism and performance of ammonia borane catalyzed by transition metal catalysts Cu-Co/MgO(100). <i>International Journal of Energy Research</i> , 2019, 43, 921-930.	4.5	26
62	A review of microscopic seepage mechanism for shale gas extracted by supercritical CO ₂ flooding. <i>Fuel</i> , 2019, 238, 412-424.	6.4	98
63	Single/multi-objective optimizations on hydraulic and thermal management in micro-channel heat sink with bionic Y-shaped fractal network by genetic algorithm coupled with numerical simulation. <i>International Journal of Heat and Mass Transfer</i> , 2019, 129, 468-479.	4.8	60
64	Numerical investigation on combustion characteristics of methane/air in a micro-combustor with a regular triangular pyramid-bluff body. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 7581-7590.	7.1	56
65	Thermal management and catalytic combustion stability characteristics of premixed methane/air in heat recirculation meso-combustors. <i>International Journal of Energy Research</i> , 2018, 42, 999-1012.	4.5	50
66	Thermodynamic Analysis on Reaction Characteristics of the Coupling Steam, CO ₂ and O ₂ Reforming of Methane. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2018, 140, .	2.3	7
67	Characteristics of combined carbon dioxide reforming with partial oxidation of methane to produce hydrogen in the membrane reactor. <i>International Journal of Energy Research</i> , 2017, 41, 689-698.	4.5	3
68	The Effect of Inlet Velocity on CH ₄ Catalytic Combustion Behavior with H ₂ Addition in a Microchannel Combustor. <i>Energy Technology</i> , 2017, 5, 1495-1506.	3.8	2
69	Planar Laser-Induced Fluorescence Research on Flame Quenching and OH Radical Behavior Near the Walls. <i>Journal of Energy Engineering - ASCE</i> , 2017, 143, 04017027.	1.9	2
70	Methane oxidation with low O ₂ /CH ₄ ratios in the present of water: Combustion or reforming. <i>Energy Conversion and Management</i> , 2017, 132, 339-346.	9.2	15
71	Numerical study of effect of wall parameters on catalytic combustion characteristics of CH ₄ /air in a heat recirculation micro-combustor. <i>Energy Conversion and Management</i> , 2016, 118, 474-484.	9.2	46
72	Experimental investigation of methane auto-thermal reforming in hydrogen-permeable membrane reactor for pure hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 13069-13076.	7.1	17

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73	Effects of O ₂ /CH ₄ ratio on methane catalytic combustion over Cu/Al ₂ O ₃ particles. International Journal of Hydrogen Energy, 2016, 41, 18282-18290.	7.1	18
74	Numerical study on catalytic combustion and extinction characteristics of pre-mixed methane-air in micro flatbed channel under different parameters of operation and wall. Fuel, 2016, 180, 659-667.	6.4	40
75	Numerical investigation on the combustion characteristics of methane/air in a micro-combustor with a hollow hemispherical bluff body. Energy Conversion and Management, 2015, 94, 293-299.	9.2	46
76	Investigation of autothermal reforming of methane for hydrogen production in a spiral multi-cylinder micro-reactor used for mobile fuel cell. International Journal of Hydrogen Energy, 2015, 40, 1886-1893.	7.1	46
77	Hydrogen-rich gas production from wet biomass steam gasification with CaO/MgO. International Journal of Hydrogen Energy, 2015, 40, 8816-8823.	7.1	61
78	Influence of the Membrane Module Geometry on SO ₂ Removal: A Numerical Study. Industrial & Engineering Chemistry Research, 2015, 54, 11619-11627.	3.7	21
79	Numerical study of the geometrical parameters on CH ₄ /air premixed combustion in heat recirculation micro-combustor. Fuel, 2015, 159, 45-51.	6.4	40
80	Effect of Catalytic Cylinders on Autothermal Reforming of Methane for Hydrogen Production in a Microchamber Reactor. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	1
81	Numerical Simulation and Analysis of CO ₂ Removal in a Polypropylene Hollow Fiber Membrane Contactor. International Journal of Chemical Engineering, 2014, 2014, 1-7.	2.4	10
82	Numerical simulation of the effect of hydrogen addition fraction on catalytic micro-combustion characteristics of methane-air. International Journal of Hydrogen Energy, 2014, 39, 1864-1873.	7.1	69
83	Thermal and chemical effects of hydrogen addition on catalytic micro-combustion of methane-air. International Journal of Hydrogen Energy, 2014, 39, 19204-19211.	7.1	46
84	Theoretical Study on CO ₂ Absorption from Biogas by Membrane Contactors: Effect of Operating Parameters. Industrial & Engineering Chemistry Research, 2014, 53, 14075-14083.	3.7	63
85	Dynamic Modeling of Biogas Upgrading in Hollow Fiber Membrane Contactors. Energy & Fuels, 2014, 28, 5745-5755.	5.1	47
86	Numerical investigation of components influence on characteristics of autothermal reforming of methane in micro pre-mix chamber. International Journal of Hydrogen Energy, 2014, 39, 11583-11591.	7.1	6
87	Investigation of CO ₂ absorption in methyldiethanolamine and 2-(1-piperazinyl)-ethylamine using hollow fiber membrane contactors: Part C. Effect of operating variables. Journal of Natural Gas Science and Engineering, 2014, 20, 58-66.	4.4	29
88	CFD investigation of CO ₂ capture by methyldiethanolamine and 2-(1-piperazinyl)-ethylamine in membranes: Part B. Effect of membrane properties. Journal of Natural Gas Science and Engineering, 2014, 19, 311-316.	4.4	65
89	Numerical investigation on the transient characteristics of hydrogen production from catalytic autothermal reforming of methane in a micro combustor with multiple cylinders. Journal of Natural Gas Science and Engineering, 2014, 19, 251-257.	4.4	11
90	Properties of thermodynamic equilibrium-based methane autothermal reforming to generate hydrogen. International Journal of Hydrogen Energy, 2013, 38, 15744-15750.	7.1	30

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91	Numerical study on combustion characteristics of hydrogen addition into methane-air mixture. International Journal of Hydrogen Energy, 2013, 38, 13463-13470.	7.1	39
92	Effects of the geometrical parameters of a rough structure on the wall of a micro-channel on the catalytic combustion of methane and the extinction limit: a numerical study. Sustainable Energy and Fuels, 0, , .	4.9	1
93	Thermal-hydraulic investigation on micro heat sinks with ribbed pin-fin arrays and single heating input: parametrical study. Journal of Thermal Analysis and Calorimetry, 0, , 1.	3.6	2