

Yunfei Yan

List of Publications by Year in descending order

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times ranked

1647
citing authors

#	ARTICLE	IF	CITATIONS
1	Adsorption materials for volatile organic compounds (VOCs) and the key factors for VOCs adsorption process: A review. <i>Separation and Purification Technology</i> , 2020, 235, 116213.	7.9	489
2	Thermal management and temperature uniformity enhancement of electronic devices by micro heat sinks: A review. <i>Energy</i> , 2021, 216, 119223.	8.8	278
3	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
4	Numerical simulation of the effect of hydrogen addition fraction on catalytic micro-combustion characteristics of methane-air. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 1864-1873.	7.1	69
5	CFD investigation of CO ₂ capture by methyldiethanolamine and 2-(1-piperazinyl)-ethylamine in membranes: Part B. Effect of membrane properties. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 19, 311-316.	4.4	65
6	Theoretical Study on CO ₂ Absorption from Biogas by Membrane Contactors: Effect of Operating Parameters. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 14075-14083.	3.7	63
7	Hydrogen-rich gas production from wet biomass steam gasification with CaO/MgO. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 8816-8823.	7.1	61
8	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
9	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
10	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
11	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
12	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
13	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
14	Combustion characteristics and thermal enhancement of premixed hydrogen/air in micro combustor with pin fin arrays. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 5014-5027.	7.1	48
15	Dynamic Modeling of Biogas Upgrading in Hollow Fiber Membrane Contactors. <i>Energy & Fuels</i> , 2014, 28, 5745-5755.	5.1	47
16	Thermal and chemical effects of hydrogen addition on catalytic micro-combustion of methane-air. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 19204-19211.	7.1	46
17	Numerical investigation on the combustion characteristics of methane/air in a micro-combustor with a hollow hemispherical bluff body. <i>Energy Conversion and Management</i> , 2015, 94, 293-299.	9.2	46
18	Investigation of autothermal reforming of methane for hydrogen production in a spiral multi-cylinder micro-reactor used for mobile fuel cell. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 1886-1893.	7.1	46

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19	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
20	Heat transfer enhancement and exergy efficiency improvement of a micro combustor with internal spiral fins for thermophotovoltaic systems. <i>Applied Thermal Engineering</i> , 2021, 189, 116723.	6.0	42
21	Numerical study of the geometrical parameters on CH ₄ /air premixed combustion in heat recirculation micro-combustor. <i>Fuel</i> , 2015, 159, 45-51.	6.4	40
22	Numerical study on catalytic combustion and extinction characteristics of pre-mixed methane-air in micro flatbed channel under different parameters of operation and wall. <i>Fuel</i> , 2016, 180, 659-667.	6.4	40
23	Numerical study on combustion characteristics of hydrogen addition into methane-air mixture. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 13463-13470.	7.1	39
24	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
25	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
26	Numerical investigation on a multi-channel micro combustor fueled with hydrogen for a micro-thermophotovoltaic system. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 4460-4471.	7.1	37
27	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. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 20482-20492.	7.1	36
28	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
29	Influence of hydrogels embedding positions on automatic adaptive cooling of hot spot in fractal microchannel heat sink. <i>International Journal of Thermal Sciences</i> , 2020, 155, 106428.	4.9	33
30	Properties of thermodynamic equilibrium-based methane autothermal reforming to generate hydrogen. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 15744-15750.	7.1	30
31	Thermal-hydraulic performances and synergy effect between heat and flow distribution in a truncated doubled-layered heat sink with Y-shaped fractal network. <i>International Journal of Heat and Mass Transfer</i> , 2019, 142, 118337.	4.8	30
32	Temperature Uniformity Enhancement and Flow Characteristics of Embedded Gradient Distribution Micro Pin Fin Arrays Using Dielectric Coolant for Direct Intra-Chip Cooling. <i>International Journal of Heat and Mass Transfer</i> , 2020, 156, 119675.	4.8	30
33	Investigation of CO ₂ absorption in methyldiethanolamine and 2-(1-piperazinyl)-ethylamine using hollow fiber membrane contactors: Part C. Effect of operating variables. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 20, 58-66.	4.4	29
34	Thermodynamic analysis of CaO enhanced steam gasification process of food waste with high moisture and low moisture. <i>Energy</i> , 2020, 194, 116831.	8.8	29
35	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. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 24382-24394.	7.1	29
36	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

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37	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. <i>International Journal of Heat and Mass Transfer</i> , 2020, 159, 120118.	4.8	28
38	Numerical investigation on the characteristics of flow and heat transfer enhancement by micro pin-fin array heat sink with fin-shaped strips. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 160, 108273.	3.6	27
39	Novel method of high-efficient synergistic catalyze ammonia borane hydrolysis to hydrogen evolution and catalytic mechanism investigation. <i>Fuel</i> , 2019, 255, 115771.	6.4	26
40	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
41	Combustion characteristic of premixed H ₂ /air in the micro cavity combustor with guide vanes. <i>Energy</i> , 2022, 239, 121975.	8.8	26
42	Numerical investigation of a novel micro combustor with a central and bilateral slotted blunt body. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 23564-23579.	7.1	25
43	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
44	Comparative investigation of combustion and thermal characteristics of a conventional micro combustor and micro combustor with internal straight/spiral fins for thermophotovoltaic system. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 22165-22179.	7.1	22
45	Influence of the Membrane Module Geometry on SO ₂ Removal: A Numerical Study. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 11619-11627.	3.7	21
46	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
47	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
48	Investigation on premixed methane/air combustion characteristics in heat recirculation micro combustor with separating cylinder. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 153, 107987.	3.6	20
49	Multi-objective optimization and multi-factors analysis of the thermal/hydraulic performance of the bionic Y-shaped fractal heat sink. <i>Applied Thermal Engineering</i> , 2021, 195, 117157.	6.0	20
50	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
51	Effects of O ₂ /CH ₄ ratio on methane catalytic combustion over Cu ³⁺ -Al ₂ O ₃ particles. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 18282-18290.	7.1	18
52	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
53	Numerical investigation on combustion characteristics of premixed hydrogen/air in a swirl micro combustor with twisted vanes. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 40105-40119.	7.1	18
54	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

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55	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
56	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
57	Efficient Hydrogen Production by an rGO/TiO ₂ Composite Material from Ammonia Borane Hydrolysis in a Photocatalytic Reactor. <i>Energy & Fuels</i> , 2021, 35, 16065-16074.	5.1	15
58	Thermal-hydraulic performance enhancement of miniature heat sinks using connected Y-shaped fractal micro-channels. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 166, 108487.	3.6	15
59	Numerical study on premixed hydrogen/air combustion characteristics and heat transfer enhancement of micro-combustor embedded with pin fins. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 38519-38534.	7.1	15
60	Multi-objective optimizations on thermal and hydraulic performance of symmetric and asymmetric bionic Y-shaped fractal networks by genetic algorithm coupled with CFD simulation. <i>International Communications in Heat and Mass Transfer</i> , 2021, 124, 105261.	5.6	14
61	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. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 26594-26606.	7.1	14
62	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
63	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
64	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. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 28327-28337.	7.1	12
65	Numerical investigation on the transient characteristics of hydrogen production from catalytic autothermal reforming of methane in a micro combustor with multiple cylinders. <i>Journal of Natural Gas Science and Engineering</i> , 2014, 19, 251-257.	4.4	11
66	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
67	Numerical Simulation and Analysis of CO ₂ Removal in a Polypropylene Hollow Fiber Membrane Contactor. <i>International Journal of Chemical Engineering</i> , 2014, 2014, 1-7.	2.4	10
68	Highly Efficient Photothermal Difunctional Catalysts To Enhance Ammonia Borane Hydrolysis for Hydrogen Evolution. <i>Energy & Fuels</i> , 2020, 34, 16948-16955.	5.1	10
69	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
70	Reprint of: Temperature Uniformity Enhancement and Flow Characteristics of Embedded Gradient Distribution Micro Pin Fin Arrays Using Dielectric Coolant for Direct Intra-Chip Cooling. <i>International Journal of Heat and Mass Transfer</i> , 2020, 161, 120235.	4.8	8
71	Preparation of TiO ₂ -Based Photocatalysts Synergistically Modified with Fe ³⁺ -Graphene and Their Visible-Light-Catalyzed Hydrogen Production from Ammonia Borane. <i>Energy & Fuels</i> , 2021, 35, 16035-16045.	5.1	8
72	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

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73	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
74	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
75	Catalytic Combustion of Low-Concentration Methane over M _x -Cu _y /Al ₂ O ₃ (M = Mn/Ce) Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 4291-4301.	3.7	7
76	Effects of Slitting Size and Inlet Operating Conditions on Hydrogen Combustion Characteristics in a Micro-Combustor With a Controllable Vortex Slotted Bluff Body. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2020, 142, .	2.3	7
77	Numerical investigation of components influence on characteristics of autothermal reforming of methane in micro premix chamber. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 11583-11591.	7.1	6
78	Catalytic combustion characteristics of CH ₄ in the micro cavity combustor under different types of air inlet distribution. <i>International Journal of Energy Research</i> , 2021, 45, 3870-3882.	4.5	6
79	Ammonia Borane and Its Applications in the Advanced Energy Technology. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2021, 143, .	2.3	6
80	Numerical investigations on the emitter power and energy conversion efficiency improvement of micro-cylindrical combustor by an internal spiral fin for micro-thermophotovoltaic systems. <i>International Journal of Energy Research</i> , 2021, 45, 8684-8698.	4.5	5
81	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
82	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
83	Influence of Porous Media Aperture Arrangement on CH ₄ /Air Combustion Characteristics in Micro Combustor. <i>Processes</i> , 2021, 9, 1747.	2.8	3
84	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
85	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
86	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
87	Gas Capture Processes. <i>Processes</i> , 2020, 8, 70.	2.8	2
88	Thermal-hydraulic investigation on micro heat sinks with ribbed pin-fin arrays and single heating input: parametrical study. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , 1.	3.6	2
89	Combustion Performance of Methane/Air in a Micro Combustor Embedded Hollow Hemispherical Slotted Bluff Body. <i>Energies</i> , 2022, 15, 4033.	3.1	2
90	Effect of Catalytic Cylinders on Autothermal Reforming of Methane for Hydrogen Production in a Microchamber Reactor. <i>Scientific World Journal, The</i> , 2014, 2014, 1-9.	2.1	1

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91	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
92	Numerical Study on the Characteristics of Methane Hedging Combustion in a Heat Cycle Porous Media Burner. Processes, 2021, 9, 1733.	2.8	1
93	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