## Yinhai Zhu

## List of Publications by Year in descending order

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172386 182361 2,794 71 29 51 citations h-index g-index papers 71 71 71 997 citing authors docs citations times ranked all docs

#	Article	IF	Citations
1	Numerical investigation of geometry parameters for design of high performance ejectors. Applied Thermal Engineering, 2009, 29, 898-905.	3.0	264
2	Review on active thermal protection and its heat transfer for airbreathing hypersonic vehicles. Chinese Journal of Aeronautics, 2018, 31, 1929-1953.	2.8	189
3	Shock circle model for ejector performance evaluation. Energy Conversion and Management, 2007, 48, 2533-2541.	4.4	179
4	Experimental and Numerical Investigations on <i>n</i> -Decane Thermal Cracking at Supercritical Pressures in a Vertical Tube. Energy & Samp; Fuels, 2014, 28, 466-474.	2.5	157
5	Experimental and numerical investigation of the effect of shock wave characteristics on the ejector performance. International Journal of Refrigeration, 2014, 40, 31-42.	1.8	121
6	Experimental investigation of convection heat transfer of n-decane at supercritical pressures in small vertical tubes. International Journal of Heat and Mass Transfer, 2015, 91, 734-746.	2.5	119
7	New theoretical model for convergent nozzle ejector in the proton exchange membrane fuel cell system. Journal of Power Sources, 2009, 191, 510-519.	4.0	99
8	Comprehensive experimental study on a transcritical CO 2 ejector-expansion refrigeration system. Energy Conversion and Management, 2017, 151, 98-106.	4.4	94
9	Experimental investigation on the performance of transcritical CO2 ejector–expansion heat pump water heater system. Energy Conversion and Management, 2018, 167, 147-155.	4.4	93
10	Fuel ejector design and simulation model for anodic recirculation SOFC system. Journal of Power Sources, 2007, 173, 437-449.	4.0	83
11	Experimental investigation of combined transpiration and film cooling for sintered metal porous struts. International Journal of Heat and Mass Transfer, 2017, 108, 232-243.	2.5	67
12	Flow visualization of supersonic two-phase transcritical flow of CO2 in an ejector of a refrigeration system. International Journal of Refrigeration, 2017, 74, 354-361.	1.8	63
13	Experimental and analytical studies on the shock wave length in convergent and convergent–divergent nozzle ejectors. Energy Conversion and Management, 2014, 88, 907-914.	4.4	61
14	Experimental investigation of transpiration cooling with phase change for sintered porous plates. International Journal of Heat and Mass Transfer, 2017, 114, 1201-1213.	2.5	57
15	Anode gas recirculation behavior of a fuel ejector in hybrid solid oxide fuel cell systems: Performance evaluation in three operational modes. Journal of Power Sources, 2008, 185, 1122-1130.	4.0	53
16	Hybrid vapor compression refrigeration system with an integrated ejector cooling cycle. International Journal of Refrigeration, 2012, 35, 68-78.	1.8	48
17	Investigation of transpiration cooling for sintered metal porous struts in supersonic flow. Applied Thermal Engineering, 2014, 70, 240-249.	3.0	48
18	Experimental investigation of the flow and heat transfer instabilities in n-decane at supercritical pressures in a vertical tube. International Journal of Heat and Mass Transfer, 2018, 120, 987-996.	2.5	47

#	Article	IF	CITATIONS
19	Multi-objective optimization of combined cooling, heating, and power systems with supercritical CO2 recompression Brayton cycle. Applied Energy, 2020, 271, 115189.	5.1	47
20	Biomimetic self-pumping transpiration cooling for additive manufactured porous module with tree-like micro-channel. International Journal of Heat and Mass Transfer, 2019, 131, 403-410.	2.5	46
21	Novel ejector model for performance evaluation on both dry and wet vapors ejectors. International Journal of Refrigeration, 2009, 32, 21-31.	1.8	44
22	Three-Dimensional Numerical Simulation on the Laminar Flow and Heat Transfer in Four Basic Fins of Plate-Fin Heat Exchangers. Journal of Heat Transfer, 2008, 130, .	1.2	43
23	Experimental investigation of full-coverage effusion cooling through perforated flat plates. Applied Thermal Engineering, 2015, 76, 76-85.	3.0	39
24	Bypass ejector with an annular cavity in the nozzle wall to increase the entrainment: Experimental and numerical validation. Energy, 2014, 68, 174-181.	4.5	37
25	Numerical Simulation of Transpiration Cooling for Sintered Metal Porous Strut of the Scramjet Combustion Chamber. Heat Transfer Engineering, 2014, 35, 721-729.	1.2	35
26	Simplified ejector model for control and optimization. Energy Conversion and Management, 2008, 49, 1424-1432.	4.4	33
27	Investigation of a Porous Transpiration-Cooled Strut Injector. Journal of Propulsion and Power, 2015, 31, 278-285.	1.3	32
28	Thermal Cracking and Heat Transfer of Hydrocarbon Fuels at Supercritical Pressures in Vertical Tubes. Heat Transfer Engineering, 2019, 40, 437-449.	1.2	32
29	Injector Head Transpiration Cooling Coupled with Combustion in H2/O2 Subscale Thrust Chamber. Journal of Thermophysics and Heat Transfer, 2013, 27, 42-51.	0.9	30
30	Experimental investigation of convective heat transfer of hydrocarbon fuels at supercritical pressures within rotating centrifugal channel. Applied Thermal Engineering, 2019, 147, 101-112.	3.0	30
31	A two-dimensional inverse heat conduction problem for simultaneous estimation of heat convection coefficient, fluid temperature and wall temperature on the inner wall of a pipeline. Progress in Nuclear Energy, 2015, 81, 161-168.	1.3	29
32	Control oriented modeling of ejector in anode gas recirculation solid oxygen fuel cell systems. Energy Conversion and Management, 2011, 52, 1881-1889.	4.4	27
33	A novel global reaction modeling approach considering the effects of pressure on pyrolysis of n-decane at supercritical pressures. Fuel, 2021, 287, 119416.	3.4	27
34	Experimental investigation of biomimetic self-pumping and self-adaptive transpiration cooling. Bioinspiration and Biomimetics, 2017, 12, 056002.	1.5	24
35	Experimental investigation of self-pumping internal transpiration cooling. International Journal of Heat and Mass Transfer, 2018, 123, 514-522.	2.5	24
36	Self-pumping transpiration cooling with a protective porous armor. Applied Thermal Engineering, 2020, 164, 114485.	3.0	24

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37	Influence of shock waves on supersonic transpiration cooling. International Journal of Heat and Mass Transfer, 2019, 129, 965-974.	2.5	23
38	Experimental and modeling studies of thermally-driven subcritical and transcritical ejector refrigeration systems. Energy Conversion and Management, 2020, 224, 113361.	4.4	23
39	Thermodynamic optimization of heat transfer process in thermal systems using CO2 as the working fluid based on temperature glide matching. Energy, 2018, 151, 376-386.	4.5	21
40	Theoretical model of transcritical CO2 ejector with non-equilibrium phase change correlation. International Journal of Refrigeration, 2018, 86, 218-227.	1.8	19
41	Differential Global Reaction Model with Variable Stoichiometric Coefficients for Thermal Cracking of <i>n</i> -Decane at Supercritical Pressures. Energy & Samp; Fuels, 2019, 33, 7244-7256.	2.5	19
42	Experimental and theoretical modeling of the effects of pressure and secondary reactions on pyrolysis of JP-10 at supercritical pressures. Fuel, 2021, 306, 121737.	3.4	18
43	Experimental Study on Combined Cooling Method for Porous Struts in Supersonic Flow. Journal of Heat Transfer, 2018, 140, .	1.2	17
44	Study of convection heat transfer of CO2 at supercritical pressures during cooling in fluted tube-in-tube heat exchangers. International Journal of Refrigeration, 2019, 104, 161-170.	1.8	17
45	Transpiration cooling with bio-inspired structured surfaces. Bioinspiration and Biomimetics, 2020, 15, 036016.	1.5	17
46	Investigation of Combined Transpiration and Opposing Jet Cooling of Sintered Metal Porous Struts. Heat Transfer Engineering, 2018, 39, 711-723.	1.2	16
47	Investigation on thermal stratification and turbulent penetration in a pressurizer surge line with an overall out-surge flow. Annals of Nuclear Energy, 2016, 90, 212-233.	0.9	15
48	Investigation of flow and heat transfer instabilities and oscillation inhibition of n-decane at supercritical pressure in vertical pipe. Applied Thermal Engineering, 2019, 161, 114143.	3.0	15
49	Quasi-two-dimensional ejector model for anode gas recirculation fuel cell systems. Energy Conversion and Management, 2022, 262, 115674.	4.4	15
50	Experimental Investigation of Flow Coking and Coke Deposition of Supercritical Hydrocarbon Fuels in Porous Media. Energy & Samp; Fuels, 2018, 32, 2941-2948.	2.5	14
51	Performance analysis and dynamic optimization of integrated cooling and power generation system based on supercritical CO2 cycle for turbine-based combined cycle engine. Applied Thermal Engineering, 2022, 215, 118867.	3.0	14
52	Self-pumping transpiration cooling with phase change for sintered porous plates. Applied Thermal Engineering, 2019, 159, 113870.	3.0	12
53	Geometry optimization study of ejector in anode recirculation solid oxygen fuel cell system. , 2011, , .		10
54	Influence of shock wave impinging region on supersonic film cooling. Chinese Journal of Aeronautics, 2021, 34, 452-465.	2.8	10

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55	INVESTIGATION OF SUPERSONIC TRANSPIRATION COOLING THROUGH SINTERED METAL POROUS FLAT PLATES. Journal of Porous Media, 2015, 18, 1047-1057.	1.0	9
56	Numerical and experimental investigation on the thermal insulation performance of low temperature cold box. International Communications in Heat and Mass Transfer, 2009, 36, 908-911.	2.9	8
57	Inverse Heat Conduction Problem for Estimating Heat Flux on a Triangular Wall. Journal of Thermophysics and Heat Transfer, 2017, 31, 205-210.	0.9	7
58	Experimental Investigation of Convective Heat Transfer of Supercritical Pressure Hydrocarbon Fuel in a Horizontal Section of a Rotating U-Duct. Journal of Heat Transfer, 2019, 141, .	1.2	7
59	Investigation of Inclined Porous Transpiration-Cooled Struts. Journal of Spacecraft and Rockets, 2018, 55, 660-668.	1.3	5
60	An innovative design for measuring the enhanced mixing effect of a shock wave on supersonic film cooling. International Communications in Heat and Mass Transfer, 2021, 122, 105132.	2.9	4
61	Experimental and Numerical Investigation on Humidity Distribution in an Environmental Chamber. Journal of Environment and Engineering, 2009, 4, 326-337.	0.2	3
62	Dynamic simulation model with virtual interfaces of supercritical working fluid heat exchanger based on moving boundary method. Energy, 2022, 254, 124334.	<b>4.</b> 5	3
63	Online measurement of mean residence time of supercritical-pressure fluid with/without chemical reaction in pipe flow: A particle image statistics method considering optical distortion and radial uneven distribution of tracer particles. Chemical Engineering Science, 2022, 258, 117772.	1.9	3
64	Inversion of the Third Boundary Condition on the Inner Wall of a Two-dimensional Pipe Based on Inverse Heat Conduction Problems. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2015, 51, 171.	0.7	2
65	Study on thermal stratification in rocket liquid oxygen tank with natural circulation precooling loop. , 2009, , .		1
66	A numerical study of segmented cooling-stream injection in supersonic film cooling. Chinese Journal of Aeronautics, 2022, 35, 156-171.	2.8	1
67	INFLUENCE OF COOLANT PRESSURE RATIO AND SHOCK WAVE ON SUPERSONIC FILM COOLING WITH TWO ROWS OF DISCRETE HOLES. The Proceedings of the International Conference on Nuclear Engineering (ICONE), 2019, 2019.27, 1596.	0.0	1
68	Development of Control Model for Critical Operation Ejector. , 2007, , .		0
69	Numerical modeling and analysis of ejector in the proton exchange membrane fuel cell system. , 2009, , .		O
70	Numerical and experimental investigation of the coupled heat transfer in cold box. , 2009, , .		0
71	Numerical analysis of thermal insulation in a cold box of cold neutron source system. , 2010, , .		0