

Zhongliang Liu

List of Publications by Year in descending order

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71
papers

2,337
citations

201674

27
h-index

214800

47
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72
all docs

72
docs citations

72
times ranked

1858
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on evolution laws of two-phase choking flow and entrainment performance of steam ejector oriented towards MED-TVC desalination system. <i>Energy</i> , 2022, 242, 122967.	8.8	9
2	Experimental study of frost formation on straight cylindrical fins of cryogenic temperature under natural convection conditions. <i>International Journal of Refrigeration</i> , 2022, 135, 51-59.	3.4	5
3	Force and energy analysis of single-piston free-piston expander linear generator. <i>Energy</i> , 2022, 251, 123926.	8.8	4
4	Improved electricity generation, coulombic efficiency and microbial community structure of microbial fuel cells using sodium citrate as an effective additive. <i>Journal of Power Sources</i> , 2021, 482, 228947.	7.8	21
5	Study on fundamental link between mixing efficiency and entrainment performance of a steam ejector. <i>Energy</i> , 2021, 215, 119128.	8.8	22
6	Modification of the anodes using MoS ₂ nanoflowers for improving microbial fuel cells performance. <i>Catalysis Today</i> , 2021, 364, 111-117.	4.4	18
7	Mixing process of two streams within a steam ejector from the perspectives of mass, momentum and energy transfer. <i>Applied Thermal Engineering</i> , 2021, 185, 116358.	6.0	17
8	Experimental study on the performance of single-piston free-piston expander linear generator. <i>Energy</i> , 2021, 221, 119724.	8.8	4
9	High electricity generation achieved by depositing rGO@MnO ₂ composite catalysts on three-dimensional stainless steel fiber felt for preparing the energy-efficient air cathode in microbial fuel cells. <i>Energy</i> , 2021, 222, 119971.	8.8	12
10	Simulation of Denitrification of Vehicle Exhaust over Cu-CHA Bazite Catalyst for a Monolith Reactor. <i>Catalysts</i> , 2021, 11, 930.	3.5	1
11	A membraneless microfluidic fuel cell with continuous multistream flow through cotton threads. <i>International Journal of Energy Research</i> , 2020, 44, 2243-2251.	4.5	20
12	A double-choking theory as an explanation of the evolution laws of ejector performance with various operational and geometrical parameters. <i>Energy Conversion and Management</i> , 2020, 206, 112499.	9.2	28
13	Self-Nitrogen-Doped Carbon Nanosheets Modification of Anodes for Improving Microbial Fuel Cells Performance. <i>Catalysts</i> , 2020, 10, 381.	3.5	7
14	Visualization experimental study of the condensing flow regime in the transonic mixing process of desalination-oriented steam ejector. <i>Energy Conversion and Management</i> , 2019, 197, 111849.	9.2	41
15	Improved performance of microbial fuel cells using a gradient porous air cathode: An experiment and simulation study. <i>Bioelectrochemistry</i> , 2019, 130, 107335.	4.6	6
16	A novel stainless steel fiber felt/Pd nanocatalysts electrode for efficient ORR in air-cathode microbial fuel cells. <i>Electrochimica Acta</i> , 2019, 324, 134862.	5.2	17
17	An optimization study on the seal structure of fully-rotary valve energy recovery device by CFD. <i>Desalination</i> , 2019, 459, 46-58.	8.2	9
18	A combined pressure regulation technology with multi-optimization of the entrainment passage for performance improvement of the steam ejector in MED-TVC desalination system. <i>Energy</i> , 2019, 175, 46-57.	8.8	28

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19	The theoretical analysis and experimental study on anti-frosting performance of surface characteristics. <i>International Journal of Thermal Sciences</i> , 2019, 137, 343-351.	4.9	6
20	Numerical investigation and improvement strategy of flow characteristics inside supersonic separator. <i>Separation Science and Technology</i> , 2018, 53, 940-952.	2.5	25
21	Enhancing performance of microbial fuel cells by using novel double-layer-capacitor-materials modified anodes. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 1816-1823.	7.1	29
22	Experimental Study on Catalytic Combustion of Methane in a Microcombustor with Metal Foam Monolithic Catalyst. <i>Catalysts</i> , 2018, 8, 536.	3.5	6
23	A novel steam ejector with pressure regulation to dredge the blocked entrained flow for performance improvement in MED-TVC desalination system. <i>Energy Conversion and Management</i> , 2018, 172, 237-247.	9.2	29
24	Combined auxiliary entrainment and structure optimization for performance improvement of steam ejector with consideration of back pressure variation. <i>Energy Conversion and Management</i> , 2018, 166, 163-173.	9.2	28
25	Numerical study for the influences of primary steam nozzle distance and mixing chamber throat diameter on steam ejector performance. <i>International Journal of Thermal Sciences</i> , 2018, 132, 509-516.	4.9	51
26	A novel steam ejector with pressure regulation to optimize the entrained flow passage for performance improvement in MED-TVC desalination system. <i>Energy</i> , 2018, 158, 305-316.	8.8	51
27	Enhancing boiling and condensation co-existing heat transfer in a small and closed space by copper foam inserts. <i>International Journal of Heat and Mass Transfer</i> , 2017, 108, 961-971.	4.8	12
28	A novel anode fabricated by three-dimensional printing for use in urine-powered microbial fuel cell. <i>Biochemical Engineering Journal</i> , 2017, 124, 36-43.	3.6	29
29	Studies on leakage characteristics and efficiency of a fully-rotary valve energy recovery device by CFD simulation. <i>Desalination</i> , 2017, 415, 40-48.	8.2	11
30	Frost deposition on a horizontal cryogenic surface in free convection. <i>International Journal of Heat and Mass Transfer</i> , 2017, 113, 166-175.	4.8	37
31	A novel steam ejector with auxiliary entrainment for energy conservation and performance optimization. <i>Energy Conversion and Management</i> , 2017, 148, 210-221.	9.2	38
32	Performance improvement of steam ejectors under designed parameters with auxiliary entrainment and structure optimization for high energy efficiency. <i>Energy Conversion and Management</i> , 2017, 153, 12-21.	9.2	29
33	An experimental study of pH distributions within an electricity-producing biofilm by using pH microelectrode. <i>Electrochimica Acta</i> , 2017, 251, 187-194.	5.2	26
34	Carbon nanotube sponge 3D anodes for urine-powered microbial fuel cell. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2017, 39, 1543-1547.	2.3	3
35	Enhancing boiling and condensation co-existing heat transfer in a small and closed space by heat-conduction bridges. <i>International Journal of Heat and Mass Transfer</i> , 2017, 114, 891-902.	4.8	6
36	Development and experimental studies on a fully-rotary valve energy recovery device for SWRO desalination system. <i>Desalination</i> , 2016, 397, 67-74.	8.2	22

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37	Numerical study for the influences of primary nozzle on steam ejector performance. Applied Thermal Engineering, 2016, 106, 1148-1156.	6.0	68
38	An experimental study of frost formation on cryogenic surfaces under natural convection conditions. International Journal of Heat and Mass Transfer, 2016, 97, 569-577.	4.8	49
39	CHARACTERISTICS OF HYDROGEN-ASSISTED CATALYTIC OXIDATION OF CH ₄ /AIR MIXTURES OVER METAL FOAM-BASED MONOLITHIC CATALYST. International Journal of Energy for A Clean Environment, 2015, 16, 81-89.	1.1	1
40	Polyaniline Modified Stainless Steel Fiber Felt for High-Performance Microbial Fuel Cell Anodes. Journal of Clean Energy Technologies, 2015, 3, 165-169.	0.1	40
41	A comparative study of graphene-coated stainless steel fiber felt and carbon cloth as anodes in MFCs. Bioprocess and Biosystems Engineering, 2015, 38, 881-888.	3.4	42
42	Catalytic oxidation characteristics of CH ₄ –air mixtures over metal foam monoliths. Applied Energy, 2015, 156, 756-761.	10.1	18
43	Investigation on Separation Efficiency in Supersonic Separator with Gas-Droplet Flow Based on DPM Approach. Separation Science and Technology, 2014, 49, 2603-2612.	2.5	31
44	A visualization study of the influences of liquid levels on boiling and condensation co-existing phase change heat transfer phenomenon in small confined spaces. International Journal of Heat and Mass Transfer, 2014, 73, 415-423.	4.8	16
45	A One-Dimensional Heat Transfer Model Analysis of Heat Sinks. Heat Transfer Engineering, 2014, 35, 764-769.	1.9	1
46	Visualization study of boiling and condensation co-existing phase change heat transfer in a small and closed space with a boiling surface of enhanced structures. International Journal of Heat and Mass Transfer, 2014, 79, 916-924.	4.8	15
47	Numerical investigation of the influences of mixing chamber geometries on steam ejector performance. Desalination, 2014, 353, 15-20.	8.2	89
48	Three-dimensional macroporous anodes based on stainless steel fiber felt for high-performance microbial fuel cells. Journal of Power Sources, 2014, 258, 204-209.	7.8	169
49	Experimental study on a new method for improving the performance of thermal vapor compressors for multi-effect distillation desalination systems. Desalination, 2014, 344, 391-395.	8.2	24
50	A new method for fabrication of graphene/polyaniline nanocomplex modified microbial fuel cell anodes. Journal of Power Sources, 2013, 224, 139-144.	7.8	275
51	An experimental study of boiling and condensation co-existing phase change heat transfer in small confined space. International Journal of Heat and Mass Transfer, 2013, 64, 1082-1090.	4.8	24
52	Study on Optimal Operating Mode of a Thermosyphon Heat Exchanger Unit in a Shopping Center. Journal of Energy Engineering - ASCE, 2013, 139, 275-280.	1.9	1
53	Energy-saving evaluation of a thermosyphon heat recovery unit for an air-conditioning system. Heat Transfer - Asian Research, 2013, 42, 377-388.	2.8	9
54	Emissions and thermal efficiency investigation of a pressurized submerged combustion evaporator. International Journal of Low-Carbon Technologies, 2012, 7, 257-263.	2.6	4

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55	Effect of contact angle on water droplet freezing process on a cold flat surface. <i>Experimental Thermal and Fluid Science</i> , 2012, 40, 74-80.	2.7	122
56	Preparation and anti-frosting performance of super-hydrophobic surface based on copper foil. <i>International Journal of Thermal Sciences</i> , 2011, 50, 432-439.	4.9	47
57	Experimental investigations of frost release by hydrophilic surfaces. <i>Frontiers of Energy and Power Engineering in China</i> , 2010, 4, 475-487.	0.4	8
58	Experimental study of frost growth on a horizontal cold surface under forced convection. <i>Journal of Mechanical Science and Technology</i> , 2010, 24, 1523-1529.	1.5	18
59	Fractal model for simulation of frost formation and growth. <i>Science China Technological Sciences</i> , 2010, 53, 807-812.	4.0	6
60	Phase equilibrium calculation of multi-component gas separation of supersonic separator. <i>Science China Technological Sciences</i> , 2010, 53, 435-443.	4.0	14
61	Experimental study on frost release on fin-and-tube heat exchangers by use of a novel anti-frosting paint. <i>Experimental Thermal and Fluid Science</i> , 2009, 33, 1049-1054.	2.7	81
62	Influences of friction drag on spontaneous condensation in water vapor supersonic flows. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 2653-2659.	0.9	13
63	Frost formation on a bionic super-hydrophobic surface under natural convection conditions. <i>Heat Transfer - Asian Research</i> , 2008, 37, 412-420.	2.8	7
64	Frost formation on a super-hydrophobic surface under natural convection conditions. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 5975-5982.	4.8	164
65	Experimental investigation of the influence of electric field on frost layer growth under natural convection condition*. <i>Progress in Natural Science: Materials International</i> , 2006, 16, 410-415.	4.4	6
66	An experimental study on minimizing frost deposition on a cold surface under natural convection conditions by use of a novel anti-frosting paint. Part II. Long-term performance, frost layer observation and mechanism analysis. <i>International Journal of Refrigeration</i> , 2006, 29, 237-242.	3.4	16
67	An experimental study on minimizing frost deposition on a cold surface under natural convection conditions by use of a novel anti-frosting paint. Part I. Anti-frosting performance and comparison with the uncoated metallic surface. <i>International Journal of Refrigeration</i> , 2006, 29, 229-236.	3.4	64
68	Deformation of freezing water droplets on a cold copper surface. <i>Science in China Series D: Earth Sciences</i> , 2006, 49, 590-600.	0.9	40
69	An experimental study on the heat transfer characteristics of a heat pipe heat exchanger with latent heat storage. Part II: Simultaneous charging/discharging modes. <i>Energy Conversion and Management</i> , 2006, 47, 967-991.	9.2	72
70	Experimental study of the characteristics of solidification of stearic acid in an annulus and its thermal conductivity enhancement. <i>Energy Conversion and Management</i> , 2005, 46, 971-984.	9.2	70
71	A NEW METHOD FOR NUMERICAL TREATMENT OF DIFFUSION COEFFICIENTS AT CONTROL-VOLUME SURFACES. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2005, 47, 491-505.	0.9	5