Liang Chen

List of Publications by Year
in descending order

79	1,191	448610 19	511568 30
papers	citations	h-index	g-index

79	79	79	1461
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Numerical and experimental studies on the thermal and static characteristics of multi-leaf foil thrust bearing. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2022, 236, 405-420.	1.0	4
2	Experimental Study on Frost Crystal Morphologies and Frosting Characteristics under Different Working Pressures. Applied Sciences (Switzerland), 2022, 12, 4025.	1.3	1
3	Thermodynamic Analysis of Air-Cycle Refrigeration Systems with Expansion Work Recovery for Compartment Air Conditioning. Applied Sciences (Switzerland), 2022, 12, 5287.	1.3	2
4	Influence of Internal Flow on the Performance of High-Speed Centrifugal Pumps with a Fully Sealed Structure. Applied Sciences (Switzerland), 2022, 12, 5263.	1.3	2
5	Heat transfer of insulation structure for large cryogenic wind tunnel. Thermal Science, 2021, 25, 921-932.	0.5	1
6	Internal and external flow characteristics of multi-nozzle spray with liquid nitrogen. Cryogenics, 2021, 114, 103255.	0.9	12
7	Research subjects and hot topics of foil bearings performance in recent twenty years: analysis and prediction. Forschung Im Ingenieurwesen/Engineering Research, 2021, 85, 1029-1042.	1.0	1
8	Improving the stiffness of the aerostatic thrust bearing by using a restrictor with multi-orifice series. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1881-1891.	1.0	8
9	Pneumatic stability analysis of single-pad aerostatic thrust bearing with pocketed orifice. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 1857-1866.	1.0	9
10	Role of surfactant in controlling the deposition pattern of a particle-laden droplet: Fundamentals and strategies. Advances in Colloid and Interface Science, 2020, 275, 102049.	7.0	38
11	Thermodynamic analysis of the para-to-ortho hydrogen conversion in cryo-compressed hydrogen vessels for automotive applications. International Journal of Hydrogen Energy, 2020, 45, 24928-24937.	3.8	20
12	Study on a high-speed oil-free pump with fluid hydrodynamic lubrication. Advances in Mechanical Engineering, 2020, 12, 168781402094546.	0.8	6
13	Effects of surface subcooling on the spreading dynamics of an impact water droplet. Physics of Fluids, 2020, 32, .	1.6	33
14	Effects of cooling-recovery venting on the performance of cryo-compressed hydrogen storage for automotive applications. Applied Energy, 2020, 269, 115143.	5.1	8
15	Flow Boiling of Low-Pressure Water in Microchannels of Large Aspect Ratio. Energies, 2020, 13, 2689.	1.6	3
16	The Influence of Internal Heat Exchanger on the Performance of Transcritical CO2 Water Source Heat Pump Water Heater. Energies, 2020, 13, 1787.	1.6	9
17	Optimization Study on a Novel High-Speed Oil-Free Centrifugal Water Pump with Hydrodynamic Bearings. Applied Sciences (Switzerland), 2019, 9, 3050.	1.3	8
18	Numerical Study of the Effects of Injection Fluctuations on Liquid Nitrogen Spray Cooling. Processes, 2019, 7, 564.	1.3	10

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19	Understanding the thermal conductivity of Diamond/Copper composites by first-principles calculations. Carbon, 2019, 148, 249-257.	5.4	51
20	Experimental study on the heat transfer characteristics of saturated liquid nitrogen flow boiling in small-diameter horizontal tubes. Experimental Thermal and Fluid Science, 2019, 101, 27-36.	1.5	13
21	Unsteady cavitation of liquid nitrogen flow in spray nozzles under fluctuating conditions. Cryogenics, 2019, 97, 144-148.	0.9	12
22	Effects of operational parameters on liquid nitrogen spray cooling. Applied Thermal Engineering, 2019, 146, 85-91.	3.0	21
23	Roles of Point Defects in Thermal Transport in Perovskite Barium Stannate. Journal of Physical Chemistry C, 2018, 122, 11482-11490.	1.5	15
24	Numerical study on the heat transfer characteristics of oscillating flow in cryogenic regenerators. Cryogenics, 2018, 96, 99-107.	0.9	8
25	Flow boiling instability of liquid nitrogen in horizontal mini channels. Applied Thermal Engineering, 2018, 144, 812-824.	3.0	20
26	Numerical study of liquid nitrogen cavitating flow through nozzles of various shapes. Cryogenics, 2018, 94, 62-78.	0.9	9
27	Energetic and Exergetic Analysis of a Transcritical N2O Refrigeration Cycle with an Expander. Entropy, 2018, 20, 31.	1.1	5
28	Experimental study of liquid nitrogen spray characteristics in atmospheric environment. Applied Thermal Engineering, 2018, 142, 717-722.	3.0	24
29	Transient modeling and influence of operating parameters on thermodynamic performance of miniature Jouleâ€“Thomson cryocooler. Applied Thermal Engineering, 2018, 143, 1093-1100.	3.0	10
30	Static characteristics of six pads multilayer protuberant foil thrust bearings. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2017, 231, 158-164.	1.0	16
31	Effects of injection pressure difference on droplet size distribution and spray cone angle in spray cooling of liquid nitrogen. Cryogenics, 2017, 83, 57-63.	0.9	36
32	Experimental study on saturated flow boiling heat transfer of nitrogen in a small-diameter horizontal heated tube. Experimental Thermal and Fluid Science, 2017, 86, 257-271.	1.5	13
33	Solving Nongray Boltzmann Transport Equation in Gallium Nitride. Journal of Heat Transfer, 2017, 139, .	1.2	12
34	Two-phase flow boiling frictional pressure drop of liquid nitrogen in horizontal circular mini-tubes: Experimental investigation and comparison with correlations. Cryogenics, 2017, 83, 85-94.	0.9	13
35	Coupled electron-phonon transport and heat transfer pathways in graphene nanostructures. Carbon, 2017, 123, 525-535.	5.4	3
36	Heat confinement of phase-change memory using graphene. , 2017, , .		2

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37	Thermal conductivity of multilayer dielectric films from molecular dynamics simulations. RSC Advances, 2017, 7, 26194-26201.	1.7	6
38	Elastro-hydrodynamic lubrication model of multi-decked foil thrust bearing with copper wire support. Journal of Mechanical Science and Technology, 2017, 31, 4371-4379.	0.7	8
39	Investigation on CHF of saturated liquid nitrogen flow boiling in a horizontal small channel. Applied Thermal Engineering, 2017, 125, 1025-1036.	3.0	28
40	Experimental study on heat transfer characteristics of LN2 saturated flow boiling in a horizontal corrugated tube. Experimental Thermal and Fluid Science, 2017, 80, 259-269.	1.5	2
41	Flow characteristics of liquid nitrogen through solid-cone pressure swirl nozzles. Applied Thermal Engineering, 2017, 110, 290-297.	3.0	24
42	Thermal resistances of crystalline and amorphous few-layer oxide thin films. AIP Advances, 2017, 7, .	0.6	8
43	Modeling of Heat Transfer and Oscillating Flow in the Regenerator of a Pulse Tube Cryocooler Operating at 50 Hz. Applied Sciences (Switzerland), 2017, 7, 553.	1.3	7
44	Influence of Refrigerant Charge Amount and EEV Opening on the Performance of a Transcritical CO2 Heat Pump Water Heater. Energies, 2017, 10, 1521.	1.6	13
45	Experimental Study on the Performance of Water Source Trans-Critical CO2 Heat Pump Water Heater. Energies, 2017, 10, 810.	1.6	14
46	Preliminary experimental study on static loading characteristics of multi-decked protuberant foil thrust bearing. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2016, 10, JAMDSM0008-JAMDSM0008.	0.3	4
47	Investigation of phonon transport and thermal boundary conductance at the interface of functionalized SWCNT and poly (ether-ketone). Journal of Applied Physics, 2016, 120, .	1.1	11
48	Numerical modeling of recuperative cryogenic matrix heat exchangers and the experimental validation. International Journal of Thermal Sciences, 2016, 104, 330-341.	2.6	5
49	The Role of Interfacial Electronic Properties on Phonon Transport in Two-Dimensional MoS₂ on Metal Substrates. ACS Applied Materials & Interfaces, 2016, 8, 33299-33306.	4.0	21
50	Experimental study on multi-decked protuberant foil thrust bearing with different number of thrust pads. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2016, 10, JAMDSM0106-JAMDSM0106.	0.3	2
51	Study on the coupling performance of a turboexpander compressor applied in cryogenic reverse Brayton air refrigerator. Energy Conversion and Management, 2016, 122, 386-399.	4.4	27
52	Experimental study on the CO2 flow characteristics through electronic expansion valves in heat pump. International Journal of Refrigeration, 2016, 69, 106-113.	1.8	10
53	Comparative studies on double-layered protuberant foil bearing and Hydresil foil bearing. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2016, 230, 212-221.	1.0	2
54	Phonon transport at the interfaces of vertically stacked graphene and hexagonal boron nitride heterostructures. Nanoscale, 2016, 8, 4037-4046.	2.8	38

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55	Influence of chamber pressure on heat transfer characteristics of a closed loop R134-a spray cooling. Experimental Thermal and Fluid Science, 2016, 75, 89-95.	1.5	20
56	Numerical study on the spontaneous condensation flow in an air cryogenic turbo-expander using equilibrium and non-equilibrium models. Cryogenics, 2016, 73, 42-52.	0.9	18
57	Thermal Transport in Fullerene Derivatives Using Molecular Dynamics Simulations. Scientific Reports, 2015, 5, 12763.	1.6	40
58	Study on double-layer protuberant gas foil journal bearings with different foil layers arrangement. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2015, 9, JAMDSM0014-JAMDSM0014.	0.3	3
59	Experimental study on bump-foil gas bearing with different diametric clearance configurations. Journal of Mechanical Science and Technology, 2015, 29, 2089-2095.	0.7	15
60	Numerical study on tilting pad journal gas bearing with variable stiffness springs. Journal of Mechanical Science and Technology, 2015, 29, 3059-3067.	0.7	8
61	Study on the matching performance of a low temperature reverse Brayton air refrigerator. Energy Conversion and Management, 2015, 89, 339-348.	4.4	24
62	Effects of bearing clearance and supporting stiffness on performances of rotor-bearing system with multi-decked protuberant gas foil journal bearing. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2014, 228, 780-788.	1.0	21
63	Heat Dissipation Mechanism at Carbon Nanotube Junctions on Silicon Oxide Substrate. Journal of Heat Transfer, 2014, 136, .	1.2	6
64	Impact of bonding at multi-layer graphene/metal Interfaces on thermal boundary conductance. RSC Advances, 2014, 4, 35852-35861.	1.7	47
65	Numerical study on the load direction effect on the performance of tilting pad-journal gas bearing. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2014, 8, JAMDSM0025-JAMDSM0025.	0.3	2
66	THE ATOMISTIC GREEN'S FUNCTION METHOD FOR INTERFACIAL PHONON TRANSPORT. Annual Review of Heat Transfer, 2014, 17, 89-145.	0.3	61
67	Experimental investigation on phase change spray cooling with R22. , 2013, , .		0
68	Phonon transmission and thermal conductance across graphene/Cu interface. Applied Physics Letters, 2013, 103, .	1.5	47
69	Experimental Investigation on the Multi-Decked Protuberant Gas Foil Journal Bearing. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2013, 7, 791-799.	0.3	6
70	Impact of thermal boundary conductances on power dissipation and electrical breakdown of carbon nanotube network transistors. Journal of Applied Physics, 2012, 112, 124506.	1.1	13
71	Thermal transport in graphene supported on copper. Journal of Applied Physics, 2012, 112, .	1.1	84
72	Heat Dissipation Mechanism at Supported CNT-CNT Junctions. , 2012, , .		0

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73	Thermal transport in double-wall carbon nanotubes using heat pulse. Journal of Applied Physics, 2011, 110, .	1.1	17
74	Experimental Study of Thermo-siphon Generator for Solar Energy LiBr Absorption Refrigerator. Journal of Environment and Engineering, 2010, 5, 330-338.	0.2	0
75	Heat Pulse Analysis in Single-Wall and Double-Wall Carbon Nanotubes. , 2010, , .		0
76	Static Analysis of Viscoelastic Supported Gas Foil Thrust Bearing with Journal Inclination. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2010, 4, 1210-1220.	0.3	2
77	Experimental study on a small Brayton air refrigerator under â^'120Â°C. Applied Thermal Engineering, 2009, 29, 1702-1706.	3.0	18
78	Experimental study on the performance of an aircraft environmental control system. Applied Thermal Engineering, 2009, 29, 3284-3288.	3.0	49
79	Analytical Study of Aerodynamic Foil Journal Bearing with Elastic Support. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2008, 2, 303-312.	0.3	2