# Shuangtao Chen

## List of Publications by Citations



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|---|---|---|---|
| 50 papers | 331 citations | 11 h-index | 14 g-index |
| 51 ext. papers | 466 ext. citations | 3.5 avg, IF | 3.46 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 50 | Experimental study on the performance of an aircraft environmental control system. *Applied Thermal Engineering*, **2009**, 29, 3284-3288 | 5.8 | 39 |
| 49 | The measurement of thermodynamic performance in cryogenic two-phase turbo-expander. *Cryogenics*, **2015**, 70, 76-84 | 1.8 | 22 |
| 48 | Study on the coupling performance of a turboexpander compressor applied in cryogenic reverse Brayton air refrigerator. *Energy Conversion and Management*, **2016**, 122, 386-399 | 10.6 | 17 |
| 47 | 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 | 1.4 | 17 |
| 46 | Experimental study of liquid nitrogen spray characteristics in atmospheric environment. *Applied Thermal Engineering*, **2018**, 142, 717-722 | 5.8 | 16 |
| 45 | Study on the matching performance of a low temperature reverse Brayton air refrigerator. *Energy Conversion and Management*, **2015**, 89, 339-348 | 10.6 | 15 |
| 44 | Transient cooling and operational performance of the cryogenic part in reverse Brayton air refrigerator. *Energy*, **2019**, 167, 921-938 | 7.9 | 13 |
| 43 | Wetness loss prediction for a wet-type cryogenic turbo-expander based on 3-D numerical simulation. *Applied Thermal Engineering*, **2015**, 91, 1032-1039 | 5.8 | 12 |
| 42 | Experimental study on bump-foil gas bearing with different diametric clearance configurations. *Journal of Mechanical Science and Technology*, **2015**, 29, 2089-2095 | 1.6 | 12 |
| 41 | Numerical study on the spontaneous condensation flow in an air cryogenic turbo-expander using equilibrium and non-equilibrium models. *Cryogenics*, **2016**, 73, 42-52 | 1.8 | 11 |
| 40 | Flow boiling instability of liquid nitrogen in horizontal mini channels. *Applied Thermal Engineering*, **2018**, 144, 812-824 | 5.8 | 11 |
| 39 | Numerical investigation of nitrogen spontaneous condensation flow in cryogenic nozzles using varying nucleation theories. *Cryogenics*, **2015**, 68, 19-29 | 1.8 | 10 |
| 38 | 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 | 1.8 | 9 |
| 37 | Effect of impeller blade profile on the cryogenic two-phase turbo-expander performance. *Applied Thermal Engineering*, **2017**, 126, 884-891 | 5.8 | 9 |
| 36 | Numerical studies on the off-design performance of a cryogenic two-phase turbo-expander. *Applied Thermal Engineering*, **2018**, 140, 34-42 | 5.8 | 9 |
| 35 | 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 | 1.4 | 8 |
| 34 | 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 | 3 | 7 |

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| 33 | Non-equilibrium spontaneous condensation flow in cryogenic turbo-expander based on mean streamline off-design method. *Cryogenics*, **2019**, 98, 18-28 | 1.8 | 6 |
| 32 | Transient modeling and influence of operating parameters on thermodynamic performance of miniature Joule□homson cryocooler. *Applied Thermal Engineering*, **2018**, 143, 1093-1100 | 5.8 | 6 |
| 31 | Experimental Investigation on the Multi-Decked Protuberant Gas Foil Journal Bearing. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2013**, 7, 791-799 | 0.6 | 6 |
| 30 | Off-design performance analysis of cryogenic turbo-expander based on mathematic prediction and experiment research. *Applied Thermal Engineering*, **2018**, 138, 873-887 | 5.8 | 5 |
| 29 | Roles of Point Defects in Thermal Transport in Perovskite Barium Stannate. *Journal of Physical Chemistry C*, **2018**, 122, 11482-11490 | 3.8 | 5 |
| 28 | Elastro-hydrodynamic lubrication model of multi-decked foil thrust bearing with copper wire support. *Journal of Mechanical Science and Technology*, **2017**, 31, 4371-4379 | 1.6 | 5 |
| 27 | Numerical modeling of recuperative cryogenic matrix heat exchangers and the experimental validation. *International Journal of Thermal Sciences*, **2016**, 104, 330-341 | 4.1 | 5 |
| 26 | Effects of cooling-recovery venting on the performance of cryo-compressed hydrogen storage for automotive applications. *Applied Energy*, **2020**, 269, 115143 | 10.7 | 4 |
| 25 | 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-JAMDSM000 | 0.6 | 4 |
| 24 | Evaluation and analysis on the coupling performance of a high-speed turboexpander compressor. *Cryogenics*, **2017**, 88, 81-90 | 1.8 | 3 |
| 23 | Numerical studies of nitrogen spontaneous condensation flow in laval nozzles using varying droplet growth models. *International Journal of Multiphase Flow*, **2019**, 121, 103118 | 3.6 | 3 |
| 22 | Numerical study on tilting pad journal gas bearing with variable stiffness springs. *Journal of Mechanical Science and Technology*, **2015**, 29, 3059-3067 | 1.6 | 3 |
| 21 | Thermal conductivity of multilayer dielectric films from molecular dynamics simulations. *RSC Advances*, **2017**, 7, 26194-26201 | 3.7 | 3 |
| 20 | 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 | 0.6 | 3 |
| 19 | Calculation of the Critical Speed and Stability Analysis of Cryogenic Turboexpanders with Different Structures. *Plasma Science and Technology*, **2012**, 14, 919-926 | 1.5 | 3 |
| 18 | Experimental Study on Cryogenic Counterflow Woven-Wire Screen Matrix Heat Exchanger. *Journal of Thermophysics and Heat Transfer*, **2012**, 26, 322-327 | 1.3 | 3 |
| 17 | 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 | 6.7 | 3 |
| 16 | Numerical study on two-phase expansion performance and quantitative analysis of wetness loss in cryogenic turbo-expander. *Cryogenics*, **2020**, 110, 103123 | 1.8 | 3 |

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| 15 | Study on coupling performance of turbo-cooler in aircraft environmental control system. *Energy*, **2021**, 224, 120029 | 7.9 | 3 |
| 14 | Characteristics of frictional pressure drop of two-phase nitrogen flow in horizontal smooth mini channels in diabatic/adiabatic conditions. *Applied Thermal Engineering*, **2019**, 162, 114312 | 5.8 | 2 |
| 13 | Study on the Dynamic Performance of the Helium Turboexpander for EAST Subsystems. *Plasma Science and Technology*, **2015**, 17, 517-523 | 1.5 | 2 |
| 12 | Numerical and experimental study on the dynamic characteristics of the foil journal bearing with double-layer protuberant support. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2016**, 10, JAMDSM0027-JAMDSM0027 | 0.6 | 2 |
| 11 | 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 | 1.4 | 2 |
| 10 | Application of Gas Foil Bearings in China. *Applied Sciences (Switzerland)*, **2021**, 11, 6210 | 2.6 | 2 |
| 9 | Numerical study on the heat transfer characteristics of oscillating flow in cryogenic regenerators. *Cryogenics*, **2018**, 96, 99-107 | 1.8 | 2 |
| 8 | Numerical studies on two-phase flow in cryogenic radial-inflow turbo-expander using varying condensation models. *Applied Thermal Engineering*, **2019**, 156, 168-177 | 5.8 | 1 |
| 7 | 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 | 0.6 | 1 |
| 6 | Static Analysis of Viscoelastic Supported Gas Foil Thrust Bearing with Journal Inclination. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2010**, 4, 1210-1220 | 0.6 | 1 |
| 5 | Distributed Joule-Thomson effects and convective heat transfer of high-pressure argon gas flow in helically coiled mini-tubes. *Applied Thermal Engineering*, **2020**, 181, 115955 | 5.8 | 1 |
| 4 | Study on a high-speed oil-free pump with fluid hydrodynamic lubrication. *Advances in Mechanical Engineering*, **2020**, 12, 168781402094546 | 1.2 | 1 |
| 3 | 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*,135065012110110 | 1.4 | 1 |
| 2 | 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 | 0.6 | 0 |
| 1 | Thermodynamic Analysis of Air-Cycle Refrigeration Systems with Expansion Work Recovery for Compartment Air Conditioning. *Applied Sciences (Switzerland)*, **2022**, 12, 5287 | 2.6 | 0 |