

Jurg Schiffmann

List of Publications by Year in descending order

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47
papers

1,031
citations

430874

18
h-index

434195

31
g-index

47
all docs

47
docs citations

47
times ranked

648
citing authors

#	ARTICLE	IF	CITATIONS
1	High temperature heat pumps: Market overview, state of the art, research status, refrigerants, and application potentials. <i>Energy</i> , 2018, 152, 985-1010.	8.8	345
2	Multi-temperature heat pumps: A literature review. <i>International Journal of Refrigeration</i> , 2016, 69, 437-465.	3.4	82
3	A Review of Grooved Dynamic Gas Bearings. <i>Applied Mechanics Reviews</i> , 2020, 72, .	10.1	37
4	Experimental investigation of a Thermally Driven Heat Pump based on a double Organic Rankine Cycle and an oil-free Compressor-Turbine Unit. <i>International Journal of Refrigeration</i> , 2014, 44, 91-100.	3.4	36
5	Multi-objective optimization of turbo-ORC systems for waste heat recovery on passenger car engines. <i>Energy</i> , 2018, 159, 751-765.	8.8	36
6	Modeling and Experimental Investigation of an Oil-Free Microcompressor-Turbine Unit for an Organic Rankine Cycle Driven Heat Pump. <i>Journal of Engineering for Gas Turbines and Power</i> , 2015, 137, .	1.1	33
7	Nonlinear study on a rigid rotor supported by herringbone grooved gas bearings: Theory and validation. <i>Mechanical Systems and Signal Processing</i> , 2021, 146, 106983.	8.0	31
8	On the manufacturing of compliant foil bearings. <i>Journal of Manufacturing Processes</i> , 2017, 25, 357-368.	5.9	29
9	Theoretical analysis of steam generation methods - Energy, CO 2 emission, and cost analysis. <i>Energy</i> , 2017, 129, 114-121.	8.8	28
10	Real-gas effects on aerodynamic bearings. <i>Tribology International</i> , 2018, 120, 358-368.	5.9	26
11	Thermo-economic optimization of an ORC driven heat pump based on small scale turbomachinery and comparison with absorption heat pumps. <i>International Journal of Refrigeration</i> , 2017, 81, 96-110.	3.4	24
12	Small-scale turbocompressors for wide-range operation with large tip-clearances for a two-stage heat pump concept. <i>International Journal of Refrigeration</i> , 2016, 69, 285-302.	3.4	23
13	Experimental characterization of a solid oxide fuel cell coupled to a steam-driven micro anode off-gas recirculation fan. <i>Applied Energy</i> , 2020, 262, 114219.	10.1	23
14	Multi-Objective Optimization of Grooved Gas Journal Bearings for Robustness in Manufacturing Tolerances. <i>Tribology Transactions</i> , 2019, 62, 1041-1050.	2.0	22
15	Performance potential of gas foil thrust bearings enhanced with spiral grooves. <i>Tribology International</i> , 2019, 131, 438-445.	5.9	21
16	Realistic Constrained Multiobjective Optimization Benchmark Problems From Design. <i>IEEE Transactions on Evolutionary Computation</i> , 2021, 25, 234-246.	10.0	21
17	Dimensionless correlations and performance maps of scroll expanders for micro-scale Organic Rankine Cycles. <i>Energy</i> , 2018, 156, 520-533.	8.8	20
18	Dynamic force coefficients identification on air-lubricated herringbone grooved journal bearing. <i>Mechanical Systems and Signal Processing</i> , 2020, 136, 106498.	8.0	20

#	ARTICLE	IF	CITATIONS
19	Modeling and Designing of a Radial Anode Off-Gas Recirculation Fan for Solid Oxide Fuel Cell Systems. Journal of Electrochemical Energy Conversion and Storage, 2017, 14, .	2.1	15
20	Which professional skills do students learn in engineering team-based projects?. European Journal of Engineering Education, 2022, 47, 314-332.	2.3	13
21	Flow pattern observations and flow pattern map for adiabatic two-phase flow of carbon dioxide in vertical upward and downward direction. Experimental Thermal and Fluid Science, 2022, 131, 110526.	2.7	12
22	The Role of Reynolds Number Effect and Tip Leakage in Compressor Geometry Scaling at Low Turbulent Reynolds Numbers. Journal of Turbomachinery, 2020, 142, .	1.7	11
23	Effects of humid air on aerodynamic journal bearings. Tribology International, 2018, 127, 333-340.	5.9	10
24	Experimental Investigation of a Small-Scale Organic Rankine Cycle Turbo-Generator Supported on Gas-Lubricated Bearings. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	1.1	10
25	Analysis of Spiral-Grooved Gas Journal Bearings by the Narrow-Groove Theory and the Finite Element Method At Large Eccentricities. Journal of Tribology, 2020, 142, .	1.9	10
26	Data-Driven Model for the Dynamic Characteristics of O-Rings for Gas Bearing Supported Rotors. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	2.2	9
27	Two-phase and oil-free co-rotating scroll compressor/expander. Applied Thermal Engineering, 2019, 148, 173-187.	6.0	7
28	Dynamic pressure probe response tests for robust measurements in periodic flows close to probe resonating frequency. Measurement Science and Technology, 2018, 29, 025301.	2.6	6
29	Design and Experimental Realization of a Steam-Driven Micro Recirculation Fan for Solid Oxide Fuel Cell Systems. ECS Transactions, 2019, 91, 187-193.	0.5	6
30	Prediction of the reaction forces of spiral-groove gas journal bearings by artificial neural network regression models. Journal of Computational Science, 2021, 48, 101256.	2.9	6
31	Flexible Support for Gas-Lubricated Bearing Bushings. Tribology Transactions, 2020, 63, 494-508.	2.0	6
32	Theoretical and Experimental Investigation of a Small-Scale, High-Speed, and Oil-Free Radial Anode Off-Gas Recirculation Fan for Solid Oxide Fuel Cell Systems. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	6
33	Extended Windage Loss Models for Gas Bearing Supported Spindles Operated in Dense Gases. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	6
34	Robust design using multiobjective optimisation and artificial neural networks with application to a heat pump radial compressor. Design Science, 2022, 8, .	2.1	6
35	On the Application of Small-Scale Turbines in Industrial Steam Networks. Energies, 2021, 14, 3149.	3.1	4
36	Experimental Assessment of a 3D-Printed Stainless Steel Gas Foil Bearing. Journal of Tribology, 2020, 142, .	1.9	4

#	ARTICLE	IF	CITATIONS
37	Adiabatic two-phase pressure drop of carbon dioxide in different channel orientations. International Journal of Heat and Fluid Flow, 2022, 95, 108966.	2.4	4
38	Experimental and numerical investigation of the unbalance behavior of rigid rotors supported by spiral-grooved gas journal bearings. Mechanical Systems and Signal Processing, 2022, 174, 109080.	8.0	4
39	Thin Gas Film Isothermal Condensation in Aerodynamic Bearings. Journal of Tribology, 2019, 141, .	1.9	3
40	Techno-Economic Optimization of an Integrated Biomass Waste Gasifier“Solid Oxide Fuel Cell Plant. Frontiers in Energy Research, 2021, 9, .	2.3	3
41	Stability and Unbalance Analysis of Rigid Rotors Supported by Spiral Groove Bearings: Comparison of Different Approaches. Journal of Engineering for Gas Turbines and Power, 2021, , .	1.1	3
42	Spatially Sampled Pressure Profile Measurements in Externally Pressurized Gas Journal Bearings. Tribology Transactions, 2018, 61, 1094-1106.	2.0	2
43	Unstable tilting motion of flexibly supported gas bearing bushings. Mechanical Systems and Signal Processing, 2022, 162, 107981.	8.0	2
44	An Instrumented High-Speed Rotor With Embedded Telemetry for the Continuous Spatial Pressure Profile Measurement in Gas Lubricated Bearings: A Proof of Concept. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	2
45	Pressure Profile Measurements Within the Gas Film of Journal Foil Bearings Using an Instrumented Rotor With Telemetry. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	2
46	Impacts of constraints and constraint handling strategies for multi-objective mechanical design problems. , 2018, , .		1
47	Theoretical and Experimental Investigation of a 34 Watt Radial-Inflow Steam Turbine With Partial Admission. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	1.1	1