

Teemu Turunen-Saaresti

List of Publications by Year in descending order

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74
papers

1,139
citations

471061

17
h-index

414034

32
g-index

75
all docs

75
docs citations

75
times ranked

1074
citing authors

#	ARTICLE	IF	CITATIONS
1	Organic Rankine Cycle Power Systems: From the Concept to Current Technology, Applications, and an Outlook to the Future. <i>Journal of Engineering for Gas Turbines and Power</i> , 2015, 137, .	0.5	272
2	Results of the International Wet Steam Modeling Project. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2018, 232, 550-570.	0.8	60
3	Thermodynamic and turbomachinery design analysis of supercritical Brayton cycles for exhaust gas heat recovery. <i>Energy</i> , 2019, 167, 60-79.	4.5	58
4	Thermodynamic evaluation on the effect of working fluid type and fluids critical properties on design and performance of Organic Rankine Cycles. <i>Journal of Cleaner Production</i> , 2018, 188, 253-263.	4.6	57
5	Computational Study of a High-Expansion Ratio Radial Organic Rankine Cycle Turbine Stator. <i>Journal of Engineering for Gas Turbines and Power</i> , 2010, 132, .	0.5	50
6	Evaluation of a small-scale waste heat recovery organic Rankine cycle. <i>Applied Energy</i> , 2017, 192, 146-158.	5.1	47
7	Influence of turbulence modelling on non-equilibrium condensing flows in nozzle and turbine cascade. <i>International Journal of Heat and Mass Transfer</i> , 2015, 88, 165-180.	2.5	46
8	A thermodynamic analysis of waste heat recovery from reciprocating engine power plants by means of Organic Rankine Cycles. <i>Applied Thermal Engineering</i> , 2014, 70, 33-41.	3.0	42
9	Siloxanes as Working Fluids for Mini-ORC Systems Based on High-Speed Turbogenerator Technology. <i>Journal of Engineering for Gas Turbines and Power</i> , 2013, 135, .	0.5	32
10	Numerical Investigation of the Flow Behavior Inside a Supercritical CO2 Centrifugal Compressor. <i>Journal of Engineering for Gas Turbines and Power</i> , 2018, 140, .	0.5	30
11	Experimental study of small scale and high expansion ratio ORC for recovering high temperature waste heat. <i>Energy</i> , 2020, 208, 118321.	4.5	28
12	Numerical analysis of working fluids for large scale centrifugal compressor driven cascade heat pumps upgrading waste heat. <i>Applied Energy</i> , 2020, 269, 115056.	5.1	24
13	Investigation of the Stage Performance and Flow Fields in a Centrifugal Compressor with a Vaneless Diffuser. <i>International Journal of Rotating Machinery</i> , 2014, 2014, 1-10.	0.8	21
14	Design and loss analysis of radial turbines for supercritical CO2 Brayton cycles. <i>Energy</i> , 2021, 230, 120878.	4.5	21
15	Centrifugal Compressor Design for Near-Critical Point Applications. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019, 141, .	0.5	20
16	Optimising the refrigeration cycle with a two-stage centrifugal compressor and a flash intercooler. <i>International Journal of Refrigeration</i> , 2009, 32, 1366-1375.	1.8	19
17	Influence of the Different Design Parameters to the Centrifugal Compressor Tip Clearance Loss. <i>Journal of Turbomachinery</i> , 2013, 135, .	0.9	19
18	Origin of droplet size underprediction in modeling of low pressure nucleating flows of steam. <i>International Journal of Multiphase Flow</i> , 2016, 86, 86-98.	1.6	17

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19	Predicting off-design range and performance of refrigeration cycle with two-stage centrifugal compressor and flash intercooler. International Journal of Refrigeration, 2010, 33, 1152-1160.	1.8	16
20	Effects of Real Gas Model Accuracy and Operating Conditions on Supercritical CO2 Compressor Performance and Flow Field. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	16
21	Effects of Different Blade Angle Distributions on Centrifugal Compressor Performance. International Journal of Rotating Machinery, 2009, 2009, 1-9.	0.8	14
22	Effect of vaneless diffuser width on the overall performance of a centrifugal compressor. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2011, 225, 665-673.	0.8	14
23	Experimental study of centrifugal compressor vaneless diffuser width. Journal of Mechanical Science and Technology, 2013, 27, 1011-1020.	0.7	13
24	Design and verification of a hermetic high-speed turbogenerator concept for biomass and waste heat recovery applications. Energy Conversion and Management, 2020, 225, 113427.	4.4	13
25	Design and off-design performance of a supersonic axial flow turbine with different stator-rotor axial gaps. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2011, 225, 497-503.	0.8	11
26	Numerical Sensitivity Analysis for Supercritical CO 2 Radial Turbine Performance and Flow Field. Energy Procedia, 2017, 129, 1117-1124.	1.8	11
27	Effects of Real Gas Model Accuracy and Operating Conditions on Supercritical CO2 Compressor Performance and Flow Field. , 2017, , .		11
28	Numerical Investigation of the Flow Behavior Inside a Supercritical CO2 Centrifugal Compressor. , 2016, , .		10
29	Centrifugal compressor tip clearance and impeller flow. Journal of Mechanical Science and Technology, 2016, 30, 5029-5040.	0.7	10
30	Computational and experimental study of pinch on the performance of a vaneless diffuser in a centrifugal compressor. Journal of Thermal Science, 2006, 15, 306-313.	0.9	9
31	Design and testing of high temperature micro-ORC test stand using Siloxane as working fluid. Journal of Physics: Conference Series, 2017, 821, 012024.	0.3	9
32	Experimental study of centrifugal compressor tip clearance and vaneless diffuser flow fields. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2013, 227, 885-895.	0.8	8
33	Study of the Intelligent Control and Modes of the Arctic-Adopted Wind-Diesel Hybrid System. Energies, 2021, 14, 4188.	1.6	8
34	Numerical modelling of a supersonic axial turbine stator. Journal of Thermal Science, 2010, 19, 211-217.	0.9	7
35	Design and Flow Analysis of a Supersonic Small Scale ORC Turbine Stator With High Molecular Complexity Working Fluid. , 2014, , .		7
36	Effect of FreeStream Velocity Definition on Boundary Layer Thickness and Losses in Centrifugal Compressors. Journal of Turbomachinery, 2018, 140, .	0.9	7

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37	Unsteady pressure field in a vaneless diffuser of a centrifugal compressor: An experimental and computational analysis. <i>Journal of Thermal Science</i> , 2004, 13, 302-309.	0.9	6
38	Performance and flow fields of a supersonic axial turbine at off-design conditions. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2013, 227, 285-294.	0.8	6
39	Influence of the axial turbine design parameters on the stator-rotor axial clearance losses. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2014, 228, 482-490.	0.8	6
40	Comparison of Moment-Based Methods for Representing Droplet Size Distributions in Supersonic Nucleating Flows of Steam. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, .	0.8	5
41	Use of partially shrouded impeller in a small centrifugal compressor. <i>Journal of Thermal Science</i> , 2008, 17, 21-27.	0.9	4
42	Experimental Study of Pinch in Vaneless Diffuser of Centrifugal Compressor. , 2009, , .		4
43	Effect of high negative incidence on the performance of a centrifugal compressor stage with conventional vaned diffusers. <i>Journal of Thermal Science</i> , 2011, 20, 97-105.	0.9	4
44	Experimental Study of the Effect of the Tip Clearance to the Diffuser Flow Field and Stage Performance of a Centrifugal Compressor. , 2012, , .		4
45	The Effect of Turbulence and Real Gas Models on the Two Phase Spontaneously Condensing Flows in Nozzle. , 2013, , .		4
46	Non-equilibrium condensation of supercritical carbon dioxide in a converging-diverging nozzle. <i>Journal of Physics: Conference Series</i> , 2017, 821, 012025.	0.3	4
47	Centrifugal Compressor Design for Near-Critical Point Applications. , 2018, , .		4
48	CFD-DEM simulations of hydrodynamics of combined ion exchange-membrane filtration. <i>Chemical Engineering Science</i> , 2019, 208, 115151.	1.9	4
49	Numerical Investigation of Centrifugal Compressor Tip Clearance. , 2015, , .		3
50	Numerical Investigation of the Effect of Tip Clearance to the Performance of a Small Centrifugal Compressor. , 2006, , 411.		2
51	Effects of Impeller Tip Clearance on Centrifugal Compressor Efficiency. , 2007, , 1141.		2
52	Prototype Design of a Two-Stage High-Speed Motor Driven Air Compressor. , 2008, , .		2
53	Numerical Investigation of Turbulence Modelling on Condensing Steam Flows in Turbine Cascade. , 2014, , .		2
54	Importance of the vane exit Mach number on the axial clearance-related losses. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2016, 230, 175-183.	0.8	2

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55	Nonrealizability Problem With Quadrature Method of Moments in Wet-Steam Flows and Solution Techniques. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	0.5	2
56	Effect of Free-Stream Velocity Definition on Boundary Layer Thickness and Losses in Centrifugal Compressors. , 2017, , .		2
57	Analysis on gas dynamic effects and design of supersonic ORC stator nozzles for transcritical expansions. Energy Conversion and Management, 2021, 247, 114703.	4.4	2
58	The Time-Accurate Numerical Simulation of a Centrifugal Compressor. , 2002, , 579.		1
59	Experimental and Numerical Study of Real-Gas Flow in a Supersonic ORC Turbine Nozzle. , 2006, , 1527.		1
60	Radial Forces in a Centrifugal Compressor Equipped With Vaned Diffusers. , 2009, , .		1
61	Experimental Study of Vaned Diffusers in Centrifugal Compressor. , 2010, , .		1
62	Optimization of the mean radius flow path of a multi-stage steam turbine with evolution algorithms. Journal of Thermal Science, 2011, 20, 318-323.	0.9	1
63	MEASURED AND CALCULATED UNSTEADY PRESSURE FIELD IN A VANELESS DIFFUSER OF A CENTRIFUGAL COMPRESSOR. , 2006, , 493-503.		1
64	Influence of the Different Design Parameters to the Centrifugal Compressor Tip Clearance Loss. , 2011, , .		1
65	Design and Implementation of Problem-Based Learning in a Graduate Engineering Course. , 2011, , .		0
66	Design and Performance Measurements of a 6 kW High-Speed Micro Gas Turbine Prototype. , 2015, , .		0
67	Influence of Trailing Edge Geometry on the Condensing Steam Flow in Low-Pressure Steam Turbine. , 2015, , .		0
68	Non-Realizability Problem With Quadrature Method of Moments in Wet-Steam Flows and Solution Techniques. , 2016, , .		0
69	Influence of Turbulence Modelling to Condensing Steam Flow in the 3D Low-Pressure Steam Turbine Stage. , 2016, , .		0
70	Quantification of Stator Blade Shape Influence on Non-Equilibrium Condensation in Low-Pressure Steam Turbine. , 2017, , .		0
71	Non-realizability problem with the conventional method of moments in wet-steam flows. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2018, 232, 473-489.	0.8	0
72	Centrifugal Compressor Working Fluids for Refrigeration Cycle. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
73	Blended Education in Turbomachinery and Fluid Dynamics. , 2009, , .		0
74	EXPLICIT DARCYâ€™S LAW BOUNDARY CONDITION WITH COMBINED CONTINUUM AND DISCRETE MODEL FOR PRESSURE DRIVEN MEMBRANE APPLICATIONS. , 2016, , .		0