

Gherhardt Ribatski

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

99
papers

2,875
citations

29
h-index

51
g-index

113
ext. papers

3,287
ext. citations

3.4
avg, IF

5.76
L-index

#	Paper	IF	Citations
99	Detailed transient assessment of a small-scale concentrated solar power plant based on the organic Rankine cycle. <i>Applied Thermal Engineering</i> , 2022 , 204, 117959	5.8	2
98	An overview on the role of wettability and wickability as a tool for enhancing pool boiling heat transfer. <i>Advances in Heat Transfer</i> , 2021 , 53, 187-248	1.9	1
97	Flow boiling heat transfer coefficient of DI water and nanofluids inside microscale channels under conditions near the critical heat flux (CHF). <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2021 , 43, 1	2	
96	Experimental study of ammonia flow boiling in a vertical tube bundle: Part 2 [Enhanced dimple tube with full length solid round PVC nonconductive rod. <i>International Journal of Refrigeration</i> , 2021 , 131, 368-368	3.8	0
95	Flow boiling and convective condensation of hydrocarbons: A state-of-the-art literature review. <i>Applied Thermal Engineering</i> , 2021 , 182, 116129	5.8	12
94	Flow Boiling. <i>Mechanical Engineering Series</i> , 2021 , 161-216	0.3	
93	Flow Patterns. <i>Mechanical Engineering Series</i> , 2021 , 65-123	0.3	
92	Critical Heat Flux and Dryout. <i>Mechanical Engineering Series</i> , 2021 , 217-240	0.3	
91	Convective condensation of R600a, R290, R1270 and their zeotropic binary mixtures in horizontal tubes. <i>International Journal of Refrigeration</i> , 2021 , 130, 27-43	3.8	5
90	Flow boiling of hydrocarbons and their zeotropic binary mixtures under pre- and post-dryout conditions. <i>Applied Thermal Engineering</i> , 2021 , 198, 117483	5.8	1
89	Flow boiling of R134a and HFE-7000 in a single silicon microchannel with microstructured sidewalls. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 179, 121653	4.9	2
88	Pressure Drop. <i>Mechanical Engineering Series</i> , 2021 , 125-160	0.3	
87	Convective boiling heat transfer under microgravity and hypergravity conditions. <i>International Journal of Heat and Mass Transfer</i> , 2020 , 153, 119614	4.9	6
86	Pressure and shear stress analysis in a normal triangular tube bundle based on experimental flow velocity field. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2020 , 42, 1	2	2
85	Characterization of the Velocity Field External to a Tube Bundle Using Spatial Filter Velocimetry Based on Variable Meshing Scheme. <i>Flow, Turbulence and Combustion</i> , 2020 , 105, 1277-1301	2.5	
84	Flow boiling heat transfer of R134a in a 500 μm ID tube. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2020 , 42, 1	2	3
83	New Approach of Triumphant Temperature Nonuniformity and Heat Transfer Performance Augmentation in Micro Pin Fin Heat Sinks. <i>Journal of Heat Transfer</i> , 2020 , 142,	1.8	5

82	Pool boiling heat transfer of HFE-7100 on metal foams. <i>Experimental Thermal and Fluid Science</i> , 2020 , 113, 110025	3	24
81	Liquid-film thickness and disturbance-wave characterization in a vertical, upward, two-phase annular flow of saturated R245fa inside a rectangular channel. <i>International Journal of Multiphase Flow</i> , 2020 , 132, 103412	3.6	17
80	An experimental study on flow boiling heat transfer of HFO1336mzz(Z) in microchannels-based polymeric heat sinks. <i>Applied Thermal Engineering</i> , 2020 , 180, 115815	5.8	1
79	Simulation of Boiling Heat Transfer at Different Reduced Temperatures with an Improved Pseudopotential Lattice Boltzmann Method. <i>Symmetry</i> , 2020 , 12, 1358	2.7	3
78	An experimental study on flow boiling in microchannels under heating pulses and a methodology for predicting the wall temperature fluctuations. <i>Applied Thermal Engineering</i> , 2019 , 159, 113851	5.8	3
77	Thermal oscillations during flow boiling of hydrocarbon refrigerants in a microchannels array heat sink. <i>Applied Thermal Engineering</i> , 2019 , 157, 113725	5.8	8
76	Flow boiling critical heat flux of DI-water and nanofluids inside smooth and nanoporous round microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2019 , 139, 240-253	4.9	13
75	Analyses of the effects of channel inclination and rotation on two-phase flow characteristics and pressure drop in a rectangular channel. <i>Experimental Thermal and Fluid Science</i> , 2019 , 109, 109850	3	5
74	The Effect of Transient Power Hotspots on the Heat Transfer Coefficient during Flow Boiling Inside Single Microscale Channels. <i>Heat Transfer Engineering</i> , 2019 , 40, 1337-1348	1.7	4
73	Experimental investigation of the heat transfer coefficient during convective boiling of R134a in tubes with twisted tape insert. <i>International Journal of Refrigeration</i> , 2018 , 92, 196-207	3.8	6
72	EXPERIMENTAL EVALUATION OF THE FLOW BOILING HEAT TRANSFER COEFFICIENT OF DI-WATER INSIDE MINICHANNELS UNDER CONDITIONS CLOSE TO THE CRITICAL HEAT FLUX 2018 ,		2
71	Flow Boiling and Two-Phase Flows in Single Microchannels and Microchannel Heat Sinks: Fundamentals, Differences, and New Areas for Research 2018 , 185-231		
70	Dynamic wettability evaluation of nanoparticles-coated surfaces. <i>Experimental Thermal and Fluid Science</i> , 2018 , 92, 231-242	3	8
69	Validation of turbulence induced vibration design guidelines in a normal triangular tube bundle during two-phase crossflow. <i>Journal of Fluids and Structures</i> , 2018 , 76, 301-318	3.1	8
68	Nanofluids for heat transfer applications: a review. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2018 , 40, 1	2	24
67	Two-Phase Flow-Induced Vibrations in Tube Bundles Under Crossflow 2018 , 251-334		
66	Two-phase pressure drop and flow boiling heat transfer in an enhanced dimpled tube with a solid round rod insert. <i>International Journal of Refrigeration</i> , 2017 , 75, 1-13	3.8	16
65	Flow boiling heat transfer of R134a and low GWP refrigerants in a horizontal micro-scale channel. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 108, 2417-2432	4.9	46

64	Two-phase frictional pressure drop in horizontal micro-scale channels: Experimental data analysis and prediction method development. <i>International Journal of Refrigeration</i> , 2017 , 79, 143-163	3.8	36
63	Experimental and numerical study of slightly loaded water alumina nanofluids in the developing region of a 1.1 mm in diameter pipe and convective enhancement evaluation. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 115, 317-335	4.9	4
62	An investigation of the effect of nanoparticle composition and dimension on the heat transfer coefficient during flow boiling of aqueous nanofluids in small diameter channels (1.1 mm). <i>Experimental Thermal and Fluid Science</i> , 2017 , 89, 72-89	3	18
61	The effect of the cross-sectional geometry on saturated flow boiling heat transfer in horizontal micro-scale channels. <i>Experimental Thermal and Fluid Science</i> , 2017 , 89, 98-109	3	15
60	Heat transfer and pressure drop during condensation of low-GWP refrigerants inside bar-and-plate heat exchangers. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 114, 363-379	4.9	7
59	Updated results on hydrodynamic mass and damping estimations in tube bundles under two-phase crossflow. <i>International Journal of Multiphase Flow</i> , 2017 , 89, 150-162	3.6	4
58	Void fraction and pressure drop during external upward two-phase crossflow in tube bundles □ part I: Experimental investigation. <i>International Journal of Heat and Fluid Flow</i> , 2017 , 65, 200-209	2.4	10
57	Void fraction and pressure drop during external upward two-phase cross flow in tube bundles □ part II: Predictive methods. <i>International Journal of Heat and Fluid Flow</i> , 2017 , 65, 210-219	2.4	6
56	An analysis of the effects of nanoparticles deposition on characteristics of the heating surface and ON pool boiling of water. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 106, 666-674	4.9	42
55	Evaluation of thermal-hydraulic performance of hydrocarbon refrigerants during flow boiling in a microchannels array heat sink. <i>Applied Thermal Engineering</i> , 2017 , 111, 703-717	5.8	18
54	Void fraction predictive method based on the minimum kinetic energy. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2016 , 38, 209-225	2	26
53	Two-phase flow patterns across triangular tube bundles for air/water upward flow. <i>International Journal of Multiphase Flow</i> , 2016 , 80, 43-56	3.6	23
52	Heat transfer during convective boiling inside microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 93, 566-583	4.9	52
51	A new model for flow boiling heat transfer coefficient inside horizontal tubes with twisted-tape inserts. <i>International Journal of Refrigeration</i> , 2016 , 61, 55-68	3.8	7
50	Condensation in Microchannels 2016 , 287-324		2
49	Experimental flow boiling heat transfer in a small polyimide channel. <i>Applied Thermal Engineering</i> , 2016 , 103, 1324-1338	5.8	5
48	Critical heat flux in a 0.38 mm microchannel and actions for suppression of flow boiling instabilities. <i>Experimental Thermal and Fluid Science</i> , 2015 , 67, 48-56	3	31
47	Experimental evaluation of thermal conductivity, viscosity and breakdown voltage AC of nanofluids of carbon nanotubes and diamond in transformer oil. <i>Diamond and Related Materials</i> , 2015 , 58, 115-121	3.5	94

46	An analysis of the effect of the footprint orientation on the thermal-hydraulic performance of a microchannels heat sink during flow boiling of R245fa. <i>Applied Thermal Engineering</i> , 2015 , 90, 907-926	5.8	18
45	Heat Transfer Enhancement Techniques Applied to Evaporation Processes 2015 , 1-51		1
44	Flow Boiling Phenomenological Differences Between Micro- and Macroscale Channels. <i>Heat Transfer Engineering</i> , 2015 , 36, 937-942	1.7	15
43	A State-of-the-Art Review on Pool Boiling on Nanostructure Surfaces 2015 ,		5
42	Flow patterns and bubble departure fundamental characteristics during flow boiling in microscale channels. <i>Experimental Thermal and Fluid Science</i> , 2014 , 59, 152-165	3	58
41	Flow boiling heat transfer of R407C in a microchannels based heat spreader. <i>Experimental Thermal and Fluid Science</i> , 2014 , 59, 140-151	3	15
40	Evaluation of the heat transfer enhancement and pressure drop penalty during flow boiling inside tubes containing twisted tape insert. <i>Applied Thermal Engineering</i> , 2014 , 70, 328-340	5.8	23
39	Two-phase pressure drop during upward cross flow in triangular tube bundle. <i>MATEC Web of Conferences</i> , 2014 , 18, 01006	0.3	
38	Extrapolation of Al ₂ O ₃ water nanofluid viscosity for temperatures and volume concentrations beyond the range of validity of existing correlations. <i>Applied Thermal Engineering</i> , 2013 , 51, 1092-1097	5.8	28
37	Two-Phase Flow Characteristics During Convective Boiling of Halocarbon Refrigerants Inside Horizontal Small-Diameter Tubes. <i>Heat Transfer Engineering</i> , 2013 , 34, 1073-1087	1.7	9
36	Critical Heat Flux of R134a and R245fa Inside Small-Diameter Tubes. <i>Heat Transfer Engineering</i> , 2013 , 34, 492-499	1.7	10
35	An experimental study on flow boiling heat transfer of R134a in a microchannel-based heat sink. <i>Experimental Thermal and Fluid Science</i> , 2013 , 45, 117-127	3	41
34	Flow boiling in micro-scale channels [Synthesized literature review. <i>International Journal of Refrigeration</i> , 2013 , 36, 301-324	3.8	95
33	Experimental study of the effect of twisted-tape inserts on flow boiling heat transfer enhancement and pressure drop penalty. <i>International Journal of Refrigeration</i> , 2013 , 36, 504-515	3.8	21
32	A Critical Overview on the Recent Literature Concerning Flow Boiling and Two-Phase Flows Inside Micro-Scale Channels. <i>Experimental Heat Transfer</i> , 2013 , 26, 198-246	2.4	40
31	Boiling and Two-Phase Flow in Microchannels 2013 , 61-91		
30	Saturated flow boiling heat transfer and critical heat flux in small horizontal flattened tubes. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 7873-7883	4.9	40
29	Two-phase flow patterns and pressure drop inside horizontal tubes containing twisted-tape inserts. <i>International Journal of Multiphase Flow</i> , 2012 , 47, 50-65	3.6	37

28	Flow Boiling Characteristics for R1234ze(E) in 1.0 and 2.2 mm Circular Channels. <i>Journal of Heat Transfer</i> , 2012 , 134,	1.8	20
27	Flow Boiling Heat Transfer of R134a in a Microchannel Heat Sink 2012 ,		3
26	State-of-the-Art Review on Flow Patterns, Superficial Void Fraction and Flow-Induced Vibration During Two-Phase Flows Across Tube Bundles 2012 ,		3
25	Experimental Investigation of Flow Boiling Pressure Drop of R134A in a Microscale Horizontal Smooth Tube. <i>Journal of Thermal Science and Engineering Applications</i> , 2011 , 3,	1.9	12
24	Two-Phase Frictional Pressure Drop and Flow Boiling Heat Transfer for R245fa in a 2.32-mm Tube. <i>Heat Transfer Engineering</i> , 2011 , 32, 1139-1149	1.7	25
23	Effectiveness - NTU data and analysis for air conditioning and refrigeration air coils. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2010 , 32, 218-226	2	7
22	Flow boiling heat transfer of R134a and R245fa in a 2.3mm tube. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 2459-2468	4.9	91
21	Film thickness measurement techniques applied to micro-scale two-phase flow systems. <i>Experimental Thermal and Fluid Science</i> , 2010 , 34, 463-473	3	67
20	Evaluation of flow patterns and elongated bubble characteristics during the flow boiling of halocarbon refrigerants in a micro-scale channel. <i>Experimental Thermal and Fluid Science</i> , 2010 , 34, 766-775		29
19	Roughness and surface material effects on nucleate boiling heat transfer from cylindrical surfaces to refrigerants R-134a and R-123. <i>Experimental Thermal and Fluid Science</i> , 2009 , 33, 579-590	3	56
18	Two-Phase Flow Patterns and Flow-Pattern Maps: Fundamentals and Applications. <i>Applied Mechanics Reviews</i> , 2008 , 61,	8.6	176
17	Modeling and experimental study of nucleate boiling on a vertical array of horizontal plain tubes. <i>Experimental Thermal and Fluid Science</i> , 2008 , 32, 1530-1537	3	33
16	New prediction methods for CO ₂ evaporation inside tubes: Part II An updated general flow boiling heat transfer model based on flow patterns. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 125-135	4.9	115
15	New prediction methods for CO ₂ evaporation inside tubes: Part I A two-phase flow pattern map and a flow pattern based phenomenological model for two-phase flow frictional pressure drops. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 111-124	4.9	143
14	Flow boiling of ammonia and hydrocarbons: A state-of-the-art review. <i>International Journal of Refrigeration</i> , 2008 , 31, 603-620	3.8	54
13	Analysis of supercritical CO ₂ cooling in macro- and micro-channels. <i>International Journal of Refrigeration</i> , 2008 , 31, 1301-1316	3.8	92
12	Experimental study on the onset of local dryout in an evaporating falling film on horizontal plain tubes. <i>Experimental Thermal and Fluid Science</i> , 2007 , 31, 483-493	3	56
11	Heat Transfer in Confined Forced-Flow Boiling. <i>Heat Transfer Engineering</i> , 2007 , 28, 826-833	1.7	15

10	On the Prediction of Heat Transfer in Micro-Scale Flow Boiling. <i>Heat Transfer Engineering</i> , 2007 , 28, 842-851	1.7	19
9	Two-Phase Flow and Heat Transfer across Horizontal Tube Bundles-A Review. <i>Heat Transfer Engineering</i> , 2007 , 28, 508-524	1.7	64
8	Nucleate boiling heat transfer of R134a on enhanced tubes. <i>Applied Thermal Engineering</i> , 2006 , 26, 1018-1031	1.7	48
7	New flow boiling heat transfer model and flow pattern map for carbon dioxide evaporating inside horizontal tubes. <i>International Journal of Heat and Mass Transfer</i> , 2006 , 49, 4082-4094	4.9	104
6	An analysis of experimental data and prediction methods for two-phase frictional pressure drop and flow boiling heat transfer in micro-scale channels. <i>Experimental Thermal and Fluid Science</i> , 2006 , 31, 1-19	3	138
5	Falling-film evaporation on horizontal tubes—critical review. <i>International Journal of Refrigeration</i> , 2005 , 28, 635-653	3.8	224
4	State-of-the-art of two-phase flow and flow boiling heat transfer and pressure drop of CO ₂ in macro- and micro-channels. <i>International Journal of Refrigeration</i> , 2005 , 28, 1149-1168	3.8	80
3	Experimental study of nucleate boiling of halocarbon refrigerants on cylindrical surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2003 , 46, 4439-4451	4.9	91
2	Nucleate Boiling of Halocarbon Refrigerants: Heat Transfer Correlations. <i>HVAC and R Research</i> , 2000 , 6, 349-367		5
1	A State-of-the-Art Review on Two-Phase Flow-Induced Noise in Expansion Devices. <i>Heat Transfer Engineering</i> , 1-23	1.7	