

Steven J Eckels

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

681
citations

623734

14
h-index

580821

25
g-index

60
all docs

60
docs citations

60
times ranked

602
citing authors

#	ARTICLE	IF	CITATIONS
1	Parametric study and application of a data-mining model in 2D and 3D micro-fin tubes. Applied Thermal Engineering, 2022, 207, 118165.	6.0	4
2	Investigation of Relationship Between Flow Structures and Drag Forces on Microfin Enhanced Surfaces Using Large Eddy Simulations. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	1.5	2
3	A review of drag reduction and heat transfer enhancement by riblet surfaces in closed and open channel flow. International Journal of Thermofluids, 2021, 9, 100053.	7.8	35
4	Forced Convective Boiling in a Vertical Annular Test Section With Seawater Coolant. Journal of Nuclear Engineering and Radiation Science, 2021, 7, .	0.4	2
5	X-ray Imaging-Based Void Fraction Measurement in Saturated Flow Boiling Experiments with Seawater Coolant. Quantum Beam Science, 2021, 5, 31.	1.2	0
6	Performance analysis of different transverse and axial micro-fins in a turbulent-flow channel. International Journal of Thermal Sciences, 2020, 149, 106185.	4.9	8
7	A Structured Cleaving Mesh for Bioheat Transfer Application. IEEE Open Journal of Engineering in Medicine and Biology, 2020, 1, 174-186.	2.3	2
8	Characterization and numerical simulation of liquid refrigerant R-134a flow emerging from a flooded evaporator tube bundle. International Journal of Refrigeration, 2019, 107, 275-287.	3.4	1
9	Multi-objective heat transfer optimization of 2D helical micro-fins using NSGA-II. International Journal of Heat and Mass Transfer, 2019, 132, 1250-1261.	4.8	34
10	Relationship between turbulent structures and heat transfer in microfin enhanced surfaces using large eddy simulations and particle image velocimetry. International Journal of Heat and Mass Transfer, 2019, 136, 1282-1298.	4.8	12
11	Convective boiling of R-123 on enhanced-tube bundles. International Journal of Heat and Mass Transfer, 2019, 134, 752-767.	4.8	9
12	A Method of Measuring Turbulent Flow Structures With Particle Image Velocimetry and Incorporating Into Boundary Conditions of Large Eddy Simulations. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	1.5	7
13	Characterization of liquid refrigerant R-123 flow emerging from a flooded evaporator tube bundle. Science and Technology for the Built Environment, 2018, 24, 1026-1038.	1.7	2
14	Determining temperature ratings for children's sleeping bags. International Journal of Industrial Ergonomics, 2018, 65, 153-160.	2.6	3
15	A refractive-index and position-independent single-particle detector for large, nonabsorbing, spherical particles. Aerosol Science and Technology, 2018, 52, 1429-1436.	3.1	1
16	Contribution of wetted clothing to body energy exchange and heat stress. Journal of Thermal Biology, 2018, 78, 343-351.	2.5	7
17	Update of the scientific evidence for specifying lower limit relative humidity levels for comfort, health, and indoor environmental quality in occupied spaces (RP-1630). Science and Technology for the Built Environment, 2017, 23, 30-45.	1.7	49
18	Hot under the collar: The impact of heat on game play. Applied Ergonomics, 2017, 59, 209-214.	3.1	0

#	ARTICLE	IF	CITATIONS
19	Measurements and Numerical Simulations of Heat Transfer and Pressure Drop in a Duct With Smooth Walls. , 2017, , .		1
20	Focal plane model for flat refractive geometry. Journal of the European Optical Society-Rapid Publications, 2017, 13, .	1.9	2
21	Effects of Parallel Processing on Large Eddy Simulations in ANSYS Fluent. , 2016, , .		2
22	Heat transfer characteristics of R-134a in a converging-Diverging nozzle. International Journal of Heat and Fluid Flow, 2016, 62, 464-473.	2.4	7
23	Persistence of Bleed-Air Contaminants on High-Efficiency Particulate Arrestance Filters. Journal of Aircraft, 2016, 53, 1574-1577.	2.4	1
24	Convective boiling of R-134a on enhanced-tube bundles. International Journal of Refrigeration, 2016, 68, 145-160.	3.4	19
25	A Thermodynamic Analysis of the Temperature Drop and Potential Cooling Effect of Cavitation. , 2015, , .		0
26	An objective method for screening and selecting personal cooling systems based on cooling properties. Applied Ergonomics, 2015, 48, 33-41.	3.1	16
27	Aircraft Recirculation Filter for Air-Quality and Incident Assessment. Journal of Aircraft, 2014, 51, 320-326.	2.4	8
28	Analysis of particulate size distribution and concentrations from simulated jet engine bleed air incidents. HVAC and R Research, 2014, 20, 780-789.	0.6	5
29	Experimental Measurements and Flow Visualization of Water Cavitation Through a Nozzle. , 2014, , .		3
30	Experimental Measurements in Near-Wall Regions by Particle Image Velocimetry (PIV). , 2014, , .		2
31	Model simulation and experiments of flow and mass transport through a nano-material gas filter. Applied Mathematical Modelling, 2013, 37, 9052-9062.	4.2	13
32	Local heat transfer coefficient for pool boiling of R-134a and R-123 on smooth and enhanced tubes. International Journal of Heat and Mass Transfer, 2012, 55, 3021-3028.	4.8	31
33	Average Heat Transfer Coefficient for Pool Boiling of R-134a and R-123 on Smooth and Enhanced Tubes (RP-1316). HVAC and R Research, 2010, 16, 657-676.	0.6	16
34	Nanoscale Catalysts and In Room Devices To Improve Indoor Air Quality and Sustainability. ACS Symposium Series, 2010, , 249-263.	0.5	0
35	Single-Phase Flow in Meso-Channel Compact Heat Exchangers for Air Conditioning Applications. Heat Transfer Engineering, 2010, 31, 3-16.	1.9	11
36	Determining temperature ratings for children's cold weather clothing. Applied Ergonomics, 2009, 40, 870-877.	3.1	30

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37	Transient Response of Particle Distribution in a Chamber to Transient Particle Injection. Particle and Particle Systems Characterization, 2009, 26, 199-209.	2.3	14
38	Condensing dryers with enhanced dehumidification using surface tension elements. Applied Thermal Engineering, 2009, 29, 723-731.	6.0	16
39	Qâ€Space Analysis Applied to Polydisperse, Dense Random Aggregates. Particle and Particle Systems Characterization, 2008, 25, 68-73.	2.3	7
40	Study of heat-transfer on the surface of a circular cylinder in flow using an immersed-boundary method. International Journal of Heat and Fluid Flow, 2008, 29, 1558-1566.	2.4	98
41	Mesochannel Compact Heat Exchangers for Automotive Air Conditioning Applications. , 2008, , .		0
42	Fluorescent Particle Injection Technique for Two-Phase Flow Measurement Using Particle Image Velocimetry. , 2006, , 1139.		1
43	Dimensional analysis on the evaporation and condensation of refrigerant R-134a in minichannel plate heat exchangers. Applied Thermal Engineering, 2006, 26, 2287-2300.	6.0	70
44	Effect of Inundation Upon the Condensation Heat Transfer Performance of R-134a: Part Iâ€™Facility Overview and Data Analysis (RP-984). HVAC and R Research, 2005, 11, 527-542.	0.6	4
45	Effect of Inundation Upon the Condensation Heat Transfer Performance of R-134a: Part IIâ€™Results (RP-984). HVAC and R Research, 2005, 11, 543-562.	0.6	6
46	Experimental Measurements and Numerical Simulations of Two-Phase Stratified, Wavy and Slug Flow in a Narrow Rectangular Channel. , 2005, , 767.		0
47	Thermal-Fluid Characteristics of an Automotive Radiator Used as the External Heat Exchanger in an Auto Air Conditioning System. , 2005, , 315.		1
48	Evaluation of Heat Transfer and Pressure Drop for the Heater-Core in an Automotive Heat Pump System. , 2004, , 57.		3
49	Thermo-Hydrodynamic of the Evaporation of Refrigerant R134A in Brazed Plate Heat Exchangers. , 2004, , 211.		3
50	Single-Phase Heat Transfer and Pressure Drop Performance in Smooth Tubes with R-22, R-134a, R-407C, and R-410A at Superheated Conditions with Lubricant Mixtures (RP-1067). HVAC and R Research, 2004, 10, 421-440.	0.6	2
51	Three Dimensional Velocity Measurements in an Automotive-Size Evaporator Using Particle Image Velocimetry. , 2004, , 723.		0
52	Condensation Heat Transfer and Pressure Drop of Brazed Plate Heat Exchangers Using Refrigerant R-134a. Journal of Enhanced Heat Transfer, 2004, 11, 161-182.	1.1	24
53	Validations of Particle/Fluid Interaction Models. , 2004, , .		1
54	The Effects of Oil in Circulation on the Performance of an Automotive Air Conditioning System. , 2004, , .		0

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55	An Investigation of Condensation Heat Transfer Performance of HFC-134a on Single Enhanced Tubes (RP-984). HVAC and R Research, 2003, 9, 3-18.	0.6	5
56	An Experimental Investigation of In-Tube Evaporation of Pure Ammonia in a Smooth and a Microfin Tube, Part II—Pressure Drop (RP-866). HVAC and R Research, 2002, 8, 257-275.	0.6	2
57	An Experimental Investigation of In-Tube Evaporation of Pure Ammonia in a Smooth and a Microfin Tube, Part I—Heat Transfer (RP-866). HVAC and R Research, 2002, 8, 239-256.	0.6	9
58	Local Heat Transfer Coefficients during Condensation of R-22 and R-32/R-125 Mixtures. HVAC and R Research, 1999, 5, 59-76.	0.6	8
59	An experimental comparison of evaporation and condensation heat transfer coefficients for HFC-134a and CFC-12. International Journal of Refrigeration, 1991, 14, 70-77.	3.4	58
60	New Generation Integrated Automotive Thermal System. , 0, , .		4