Luigi Colombo

List of Publications by Year
in descending order

59	722	586496 16	685536 24
papers	citations	h-index	g-index

60	60	60	742
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Drop-in analysis of R450A and R513A as low-GWP alternatives to R134a in a water-to-water heat pump. International Journal of Refrigeration, 2022, 135, 139-147.	1.8	17
2	Implementation of a multi-setpoint strategy for fire-tube boilers utilized in food and beverage industry: Estimating the fuel saving potential. Sustainable Energy Technologies and Assessments, 2022, 53, 102481.	1.7	1
3	Feasibility study of a desiccant packed bed system for air humidification. Energy, 2021, 214, 119002.	4.5	11
4	Machine learning based models for pressure drop estimation of two-phase adiabatic air-water flow in micro-finned tubes: Determination of the most promising dimensionless feature set. Chemical Engineering Research and Design, 2021, 167, 252-267.	2.7	17
5	Numerical analysis of different designs of roll-bond absorber on PV/T module and performance assessment. Applied Thermal Engineering, 2021, 192, 116873.	3.0	8
6	Machine learning based pressure drop estimation of evaporating R134a flow in micro-fin tubes: Investigation of the optimal dimensionless feature set. International Journal of Refrigeration, 2021, 131, 20-32.	1.8	11
7	Comparison between R134a and R1234ze(E) during Flow Boiling in Microfin Tubes. Fluids, 2021, 6, 417.	0.8	4
8	Pressure Drop and Void Fraction in Horizontal Airâ€“Water Stratified Flows with Smooth Interface at Atmospheric Pressure. Fluids, 2020, 5, 101.	0.8	12
9	First experimental results of the use of R1234yf and R1234ze(E) as drop-in substitutes for R134a in a water-to-water heat pump. Journal of Physics: Conference Series, 2020, 1599, 012057.	0.3	1
10	Experimental analysis of the use of R1234yf and R1234ze(E) as drop-in alternatives of R134a in a water-to-water heat pump. International Journal of Refrigeration, 2020, 115, 18-27.	1.8	35
11	Methods to Characterize Effective Thermal Conductivity, Diffusivity and Thermal Response in Different Classes of Composite Phase Change Materials. Materials, 2019, 12, 2552.	1.3	16
12	A mechanistic model to predict pressure drop and holdup pertinent to horizontal gas-liquid-liquid intermittent flow. Chemical Engineering Research and Design, 2019, 149, 182-194.	2.7	4
13	Preliminary experimental and numerical analysis of a silica gel packed bed humidification system. E3S Web of Conferences, 2019, 111, 06044.	0.2	2
14	Design and commissioning of an experimental facility for performance evaluation of pure and mixed refrigerants. Journal of Physics: Conference Series, 2019, 1224, 012021.	0.3	0
15	Design and assessment of an experimental facility for the characterization of flow boiling of azeotropic refrigerants in horizontal tubes. Journal of Physics: Conference Series, 2019, 1224, 012037.	0.3	2
16	Characterization of plug and slug multiphase flows by means of image analysis. Journal of Physics: Conference Series, 2019, 1249, 012002.	0.3	1
17	Numerical simulation of oil-water two-phase flow in a horizontal duct with a Venturi flow meter. Journal of Physics: Conference Series, 2019, 1224, 012008.	0.3	3
18	Study of viscous oil-water-gas slug flow in a horizontal pipe. Journal of Petroleum Science and Engineering, 2019, 178, 1-13.	2.1	9

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19	The influence of abruptly variable cross-section on oil core eccentricity and flow characteristics during viscous oil-water horizontal flow. Experimental Thermal and Fluid Science, 2019, 105, 261-277.	1.5	5
20	Effect of evaporation cooling on drying capillary active building materials. Energy and Buildings, 2018, 166, 550-560.	3.1	18
21	A non-equilibrium control oriented model for the pressurizer dynamics. Progress in Nuclear Energy, 2018, 106, 102-119.	1.3	12
22	Experimental study of aqueous foam generation and transport in a horizontal pipe for deliquification purposes. Experimental Thermal and Fluid Science, 2018, 98, 369-380.	1.5	16
23	Image-based analysis of intermittent three-phase flow. International Journal of Multiphase Flow, 2018, 107, 256-262.	1.6	7
24	Determination of the water retention curve from drying experiments using infrared thermography: A preliminary study. International Journal of Thermal Sciences, 2017, 114, 271-280.	2.6	15
25	The effect of aspect ratio in counter-current gas-liquid bubble columns: Experimental results and gas holdup correlations. International Journal of Multiphase Flow, 2017, 94, 53-78.	1.6	60
26	Design and validation of a Cooking Stoves Thermal Performance Simulator (Cook-STePS) to simulate water heating procedures in selected conditions. Energy, 2017, 141, 1384-1392.	4.5	6
27	Pulse thermography identification of service insignia in Second World War camouflage German helmets. Journal of Cultural Heritage, 2017, 28, 177-182.	1.5	0
28	CFD simulation with experimental validation of oil-water core-annular flows through Venturi and Nozzle flow meters. Journal of Petroleum Science and Engineering, 2017, 149, 540-552.	2.1	34
29	Water holdup estimation from pressure drop measurements in oil-water two-phase flows by means of the two-fluid model. Journal of Physics: Conference Series, 2017, 923, 012012.	0.3	2
30	Quantitative visualization of oil-water mixture behind sudden expansion by high speed camera. Journal of Physics: Conference Series, 2017, 882, 012009.	0.3	5
31	Tiles as solar air heater to support a heat pump for residential air conditioning. Applied Thermal Engineering, 2016, 102, 1412-1421.	3.0	15
32	Heat transfer characteristics in forced convection through a rectangular channel with broken V-shaped rib roughened surface. Journal of Physics: Conference Series, 2015, 655, 012060.	0.3	0
33	Performance analysis of a solar cooling plant based on a liquid desiccant evaporative cooler. International Journal of Refrigeration, 2015, 53, 163-176.	1.8	15
34	Fully developed laminar mixed convection in uniformly heated horizontal annular ducts. International Journal of Thermal Sciences, 2015, 94, 204-220.	2.6	5
35	Influence of sudden contractions on in situ volume fractions for oilâ€“water flows in horizontal pipes. International Journal of Heat and Fluid Flow, 2015, 53, 91-97.	1.1	18
36	A scheme of correlation for frictional pressure drop in steamâ€“water two-phase flow in helicoidal tubes. Chemical Engineering Science, 2015, 123, 460-473.	1.9	30

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37	Passive control of microclimate in museum display cases: A lumped parameter model and experimental tests. Journal of Cultural Heritage, 2015, 16, 413-418.	1.5	16
38	A detailed characterization of viscous oil-water flows downward sudden contractions in horizontal pipes. Journal of Physics: Conference Series, 2014, 547, 012025.	0.3	1
39	Application of the Dynamics of Variable Mass Systems to the Pelton Turbine. International Journal of Mechanical Engineering Education, 2014, 42, 36-47.	0.6	0
40	Heat transfer characteristics in forced convection through a rectangular channel with 60Â° tilted staggered ribs. Journal of Physics: Conference Series, 2014, 501, 012007.	0.3	0
41	Measurement of the oil holdup for a two-phase oil-water flow through a sudden contraction in a horizontal pipe. Journal of Physics: Conference Series, 2014, 501, 012015.	0.3	8
42	Experimental and numerical study of the laminar flow in helically coiled pipes. Progress in Nuclear Energy, 2014, 76, 206-215.	1.3	29
43	An Approximate Analytical Approach to Steady State Simulation of Unglazed Solar Collectors. Energy Procedia, 2014, 48, 28-36.	1.8	4
44	Thermal and luminous investigations of a pcLED based refrigerating liquid prototype. Applied Thermal Engineering, 2014, 70, 884-891.	3.0	7
45	Heat Transfer Characteristics in Forced Convection Through a Rectangular Channel with V-Shaped Rib Roughened Surfaces. , 2014, , .		0
46	A non-iterative method for Testing, Adjusting and Balancing (TAB) air ducts systems: Theory, practical procedure and validation. Energy and Buildings, 2013, 65, 322-330.	3.1	26
47	Thermal effect of lubricating oil in positive-displacement air compressors. Applied Thermal Engineering, 2013, 51, 1055-1066.	3.0	25
48	Flow patterns, heat transfer and pressure drop for evaporation and condensation of R134A in microfin tubes. International Journal of Refrigeration, 2012, 35, 2150-2165.	1.8	54
49	Techno-economic evaluation of commercial cogeneration plants for small and medium size companies in the Italian industrial and service sector. Applied Thermal Engineering, 2012, 48, 402-413.	3.0	16
50	Characterization of the critical transition from annular to wavy-stratified flow for oilâ€“water mixtures in horizontal pipes. Experiments in Fluids, 2012, 53, 1617-1625.	1.1	20
51	First average and local heat transfer measurements on a forced air-flow at low Re-numbers through a rectangular channel with ribbed surfaces. Journal of Physics: Conference Series, 2012, 395, 012042.	0.3	3
52	Experimental Characterization of a Small Cogeneration Plant at Full and Partial Loads. Distributed Generation and Alternative Energy Journal, 2011, 26, 36-52.	1.1	0
53	Simplified Thermal Model of a Stacked Ball Grid Array Package. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, .	1.2	3
54	Design of an innovative enthalpy wheel based humidification system for polymer electrolyte fuel cell. International Journal of Hydrogen Energy, 2011, 36, 5000-5009.	3.8	29

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55	Quantitative characterization of water transport and flooding in the diffusion layers of polymer electrolyte fuel cells. Journal of Power Sources, 2010, 195, 4143-4148.	4.0	16
56	A Model of BGA Thermal Vias as an Example of Lumped Parameter Analysis in Thermal Modeling of SiPs and Stacked Die Packages. Proceedings of the IEEE, 2009, 97, 70-77.	16.4	3
57	Experimentation on a cogenerative system based on a microturbine. Applied Thermal Engineering, 2007, 27, 705-711.	3.0	35
58	Noninvasive quantification of respiratory modulation on left ventricular size and stroke volume. Physiological Measurement, 2002, 23, 567-580.	1.2	10
59	Diffusion through a half space: equivalence between different formulations of the unique solution. Applied Mathematical Sciences, 0, 8, 7727-7748.	0.0	0