Mirco Magnini

List of Publications by Year
in descending order

41 papers	**1,018** citations	471061 **17** h-index	433756 **31** g-index
41 all docs	**41** docs citations	**41** times ranked	**624** citing authors

#	Article	IF	Citations
1	Five simple tools for stochastic lattice creation. Additive Manufacturing, 2022, 49, 102488.	1.7	6
2	Liquid film distribution around long gas bubbles propagating in rectangular capillaries. International Journal of Multiphase Flow, 2022, 148, 103939.	1.6	12
3	Bubbles in capillaries: Relaxing traditional assumptions. , 2022, 2, 100020.		0
4	Stochastic design for additive manufacture of true biomimetic populations. Additive Manufacturing, 2022, 55, 102739.	1.7	1
5	Conjugate heat transfer effects on flow boiling in microchannels. International Journal of Heat and Mass Transfer, 2022, 195, 123166.	2.5	7
6	Inertial and buoyancy effects on the flow of elongated bubbles in horizontal channels. International Journal of Multiphase Flow, 2021, 135, 103468.	1.6	9
7	Analysis and control of vapor bubble growth inside solid-state nanopores. Journal of Thermal Science and Technology, 2021, 16, JTST0007-JTST0007.	0.6	4
8	Non-unique bubble dynamics in a vertical capillary with an external flow. Journal of Fluid Mechanics, 2021, 911, .	1.4	5
9	Numerical optimization of evaporative cooling in artificial gas diffusion layers. Applied Thermal Engineering, 2021, 186, 116460.	3.0	8
10	Surface Topography Effects on Pool Boiling via Non-equilibrium Molecular Dynamics Simulations. Langmuir, 2021, 37, 5731-5744.	1.6	19
11	Numerical investigation of gas-liquid hydrodynamics during trapped-liquid displacement from low sections of high-pressure gas pipelines. Journal of Natural Gas Science and Engineering, 2021, 95, 104185.	2.1	5
12	Optimizing the Design of Micro-evaporators via Numerical Simulations. , 2021, , 163-168.		1
13	Shapes and Rise Velocities of Single Bubbles in a Confined Annular Channel: Experiments and Numerical Simulations. Fluids, 2021, 6, 437.	0.8	1
14	Numerical study of the impact of the channel shape on microchannel boiling heat transfer. International Journal of Heat and Mass Transfer, 2020, 150, 119322.	2.5	30
15	Morphology of long gas bubbles propagating in square capillaries. International Journal of Multiphase Flow, 2020, 129, 103353.	1.6	12
16	Effect of surfactant on elongated bubbles in capillary tubes at high Reynolds number. Physical Review Fluids, 2020, 5, .	1.0	18
17	Single-bubble dynamics in nanopores: Transition between homogeneous and heterogeneous nucleation. Physical Review Research, 2020, 2, .	1.3	9
18	Fundamental Study of Wax Deposition in Crude Oil Flows in a Pipeline via Interface-Resolved Numerical Simulations. Industrial & Engineering Chemistry Research, 2019, 58, 21797-21816.	1.8	14

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19	Dynamics of long gas bubbles rising in a vertical tube in a cocurrent liquid flow. Physical Review Fluids, 2019, 4, .	1.0	18
20	A new flow pattern-based boiling heat transfer model for micro-pin fin evaporators. International Journal of Heat and Mass Transfer, 2018, 122, 967-982.	2.5	13
21	Numerical study of water displacement from the elbow of an inclined oil pipeline. Journal of Petroleum Science and Engineering, 2018, 166, 1000-1017.	2.1	20
22	Numerical analysis of slug flow boiling in square microchannels. International Journal of Heat and Mass Transfer, 2018, 123, 928-944.	2.5	67
23	Hydrodynamic and thermal analysis of a micro-pin fin evaporator for on-chip two-phase cooling of high density power micro-electronics. Applied Thermal Engineering, 2018, 130, 1425-1439.	3.0	34
24	An updated three-zone heat transfer model for slug flow boiling in microchannels. International Journal of Multiphase Flow, 2017, 91, 296-314.	1.6	43
25	A Flexible Coupled Level Set and Volume of Fluid (flexCLV) method to simulate microscale two-phase flow in non-uniform and unstructured meshes. International Journal of Multiphase Flow, 2017, 91, 276-295.	1.6	50
26	Two-phase operational maps, pressure drop, and heat transfer for flow boiling of R236fa in a micro-pin fin evaporator. International Journal of Heat and Mass Transfer, 2017, 107, 805-819.	2.5	37
27	Pore-scale analysis of the minimum liquid film thickness around elongated bubbles in confined gas-liquid flows. Advances in Water Resources, 2017, 109, 84-93.	1.7	15
28	Flow boiling heat transfer and pressure drops of R1234ze(E) in a silicon micro-pin fin evaporator. , 2017, , .		1
29	Flow Boiling Heat Transfer and Pressure Drops of R1234ze(E) in a Silicon Micro-pin Fin Evaporator. Journal of Electronic Packaging, Transactions of the ASME, 2017, 139, .	1.2	9
30	Undulations on the surface of elongated bubbles in confined gas-liquid flows. Physical Review Fluids, 2017, 2, .	1.0	33
31	A CFD study of the parameters influencing heat transfer in microchannel slug flow boiling. International Journal of Thermal Sciences, 2016, 110, 119-136.	2.6	58
32	A study of gravitational effects on single elongated vapor bubbles. International Journal of Heat and Mass Transfer, 2016, 99, 904-917.	2.5	8
33	Computational Study of Saturated Flow Boiling Within a Microchannel in the Slug Flow Regime. Journal of Heat Transfer, 2016, 138, .	1.2	36
34	Characterization of the velocity fields generated by flow initialization in the CFD simulation of multiphase flows. Applied Mathematical Modelling, 2016, 40, 6811-6830.	2.2	21
35	Use of Two-Phase CFD Simulations to Develop a Boiling Heat Transfer Prediction Method for Slug Flow Within Microchannels. , 2015, , .		3
36	Dynamics of isolated confined air bubbles in liquid flows through circular microchannels: an experimental and numerical study. Microfluidics and Nanofluidics, 2015, 19, 209-234.	1.0	38

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37	Proposed models, ongoing experiments, and latest numerical simulations of microchannel two-phase flow boiling. International Journal of Multiphase Flow, 2014, 59, 84-101.	1.6	117
38	Numerical investigation of hydrodynamics and heat transfer of elongated bubbles during flow boiling in a microchannel. International Journal of Heat and Mass Transfer, 2013, 59, 451-471.	2.5	168
39	Numerical investigation of the influence of leading and sequential bubbles on slug flow boiling within a microchannel. International Journal of Thermal Sciences, 2013, 71, 36-52.	2.6	65
40	Height function interface reconstruction algorithm for the simulation of boiling flows. , 2011, , .		3
41	Conductive Heat Transfer in Partially Saturated Gas Diffusion Layers with Evaporative Cooling. Journal of the Electrochemical Society, 0, , .	1.3	0