

# Mirco Magnini

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Numerical investigation of hydrodynamics and heat transfer of elongated bubbles during flow boiling in a microchannel. <i>International Journal of Heat and Mass Transfer</i> , 2013, 59, 451-471.	2.5	168
2	Proposed models, ongoing experiments, and latest numerical simulations of microchannel two-phase flow boiling. <i>International Journal of Multiphase Flow</i> , 2014, 59, 84-101.	1.6	117
3	Numerical analysis of slug flow boiling in square microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2018, 123, 928-944.	2.5	67
4	Numerical investigation of the influence of leading and sequential bubbles on slug flow boiling within a microchannel. <i>International Journal of Thermal Sciences</i> , 2013, 71, 36-52.	2.6	65
5	A CFD study of the parameters influencing heat transfer in microchannel slug flow boiling. <i>International Journal of Thermal Sciences</i> , 2016, 110, 119-136.	2.6	58
6	A Flexible Coupled Level Set and Volume of Fluid (flexCLV) method to simulate microscale two-phase flow in non-uniform and unstructured meshes. <i>International Journal of Multiphase Flow</i> , 2017, 91, 276-295.	1.6	50
7	An updated three-zone heat transfer model for slug flow boiling in microchannels. <i>International Journal of Multiphase Flow</i> , 2017, 91, 296-314.	1.6	43
8	Dynamics of isolated confined air bubbles in liquid flows through circular microchannels: an experimental and numerical study. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 209-234.	1.0	38
9	Two-phase operational maps, pressure drop, and heat transfer for flow boiling of R236fa in a micro-pin fin evaporator. <i>International Journal of Heat and Mass Transfer</i> , 2017, 107, 805-819.	2.5	37
10	Computational Study of Saturated Flow Boiling Within a Microchannel in the Slug Flow Regime. <i>Journal of Heat Transfer</i> , 2016, 138, .	1.2	36
11	Hydrodynamic and thermal analysis of a micro-pin fin evaporator for on-chip two-phase cooling of high density power micro-electronics. <i>Applied Thermal Engineering</i> , 2018, 130, 1425-1439.	3.0	34
12	Undulations on the surface of elongated bubbles in confined gas-liquid flows. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	33
13	Numerical study of the impact of the channel shape on microchannel boiling heat transfer. <i>International Journal of Heat and Mass Transfer</i> , 2020, 150, 119322.	2.5	30
14	Characterization of the velocity fields generated by flow initialization in the CFD simulation of multiphase flows. <i>Applied Mathematical Modelling</i> , 2016, 40, 6811-6830.	2.2	21
15	Numerical study of water displacement from the elbow of an inclined oil pipeline. <i>Journal of Petroleum Science and Engineering</i> , 2018, 166, 1000-1017.	2.1	20
16	Surface Topography Effects on Pool Boiling via Non-equilibrium Molecular Dynamics Simulations. <i>Langmuir</i> , 2021, 37, 5731-5744.	1.6	19
17	Dynamics of long gas bubbles rising in a vertical tube in a cocurrent liquid flow. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	18
18	Effect of surfactant on elongated bubbles in capillary tubes at high Reynolds number. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	18

#	ARTICLE	IF	CITATIONS
19	Pore-scale analysis of the minimum liquid film thickness around elongated bubbles in confined gas-liquid flows. <i>Advances in Water Resources</i> , 2017, 109, 84-93.	1.7	15
20	Fundamental Study of Wax Deposition in Crude Oil Flows in a Pipeline via Interface-Resolved Numerical Simulations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 21797-21816.	1.8	14
21	A new flow pattern-based boiling heat transfer model for micro-pin fin evaporators. <i>International Journal of Heat and Mass Transfer</i> , 2018, 122, 967-982.	2.5	13
22	Morphology of long gas bubbles propagating in square capillaries. <i>International Journal of Multiphase Flow</i> , 2020, 129, 103353.	1.6	12
23	Liquid film distribution around long gas bubbles propagating in rectangular capillaries. <i>International Journal of Multiphase Flow</i> , 2022, 148, 103939.	1.6	12
24	Flow Boiling Heat Transfer and Pressure Drops of R1234ze(E) in a Silicon Micro-pin Fin Evaporator. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2017, 139, .	1.2	9
25	Inertial and buoyancy effects on the flow of elongated bubbles in horizontal channels. <i>International Journal of Multiphase Flow</i> , 2021, 135, 103468.	1.6	9
26	Single-bubble dynamics in nanopores: Transition between homogeneous and heterogeneous nucleation. <i>Physical Review Research</i> , 2020, 2, .	1.3	9
27	A study of gravitational effects on single elongated vapor bubbles. <i>International Journal of Heat and Mass Transfer</i> , 2016, 99, 904-917.	2.5	8
28	Numerical optimization of evaporative cooling in artificial gas diffusion layers. <i>Applied Thermal Engineering</i> , 2021, 186, 116460.	3.0	8
29	Conjugate heat transfer effects on flow boiling in microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2022, 195, 123166.	2.5	7
30	Five simple tools for stochastic lattice creation. <i>Additive Manufacturing</i> , 2022, 49, 102488.	1.7	6
31	Non-unique bubble dynamics in a vertical capillary with an external flow. <i>Journal of Fluid Mechanics</i> , 2021, 911, .	1.4	5
32	Numerical investigation of gas-liquid hydrodynamics during trapped-liquid displacement from low sections of high-pressure gas pipelines. <i>Journal of Natural Gas Science and Engineering</i> , 2021, 95, 104185.	2.1	5
33	Analysis and control of vapor bubble growth inside solid-state nanopores. <i>Journal of Thermal Science and Technology</i> , 2021, 16, JTST0007-JTST0007.	0.6	4
34	Use of Two-Phase CFD Simulations to Develop a Boiling Heat Transfer Prediction Method for Slug Flow Within Microchannels. , 2015, , .		3
35	Height function interface reconstruction algorithm for the simulation of boiling flows. , 2011, , .		3
36	Flow boiling heat transfer and pressure drops of R1234ze(E) in a silicon micro-pin fin evaporator. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
37	Optimizing the Design of Micro-evaporators via Numerical Simulations. , 2021, , 163-168.		1
38	Shapes and Rise Velocities of Single Bubbles in a Confined Annular Channel: Experiments and Numerical Simulations. Fluids, 2021, 6, 437.	0.8	1
39	Stochastic design for additive manufacture of true biomimetic populations. Additive Manufacturing, 2022, 55, 102739.	1.7	1
40	Conductive Heat Transfer in Partially Saturated Gas Diffusion Layers with Evaporative Cooling. Journal of the Electrochemical Society, 0, , .	1.3	0
41	Bubbles in capillaries: Relaxing traditional assumptions. , 2022, 2, 100020.		0