Mohammad Faghri

List of Publications by Year
in descending order

47 papers	1,082 citations	471509 17 h-index	395702 33 g-index
47 all docs	47 docs citations	47 times ranked	973 citing authors

#	Article	IF	Citations
1	Heat Transfer of Turbulent Gaseous Flow in Microtubes With Constant Wall Temperature. Journal of Heat Transfer, 2022, 144, .	2.1	2
2	A Colorimetric Dip Strip Assay for Detection of Low Concentrations of Phosphate in Seawater. Sensors, 2021, 21, 3125.	3.8	9
3	A New Paper-Based Microfluidic Device for Improved Detection of Nitrate in Water. Sensors, 2021, 21, 102.	3.8	27
4	Numerical and Experimental Modeling of Paper-Based Actuators. , 2021, 5, .		6
5	Energy equation of swirling flow in a cylindrical container. International Communications in Heat and Mass Transfer, 2019, 108, 104288.	5.6	0
6	Numerical analysis of irreversible processes in a piston-cylinder system using LB1S turbulence model. International Journal of Heat and Mass Transfer, 2019, 136, 730-739.	4.8	3
7	Numerical analysis for irreversible processes in a piston-cylinder system. International Journal of Heat and Mass Transfer, 2018, 124, 1097-1106.	4.8	4
8	Outflow velocity for SIMPLE algorithm for unsteady forced convection flows with variable density. International Communications in Heat and Mass Transfer, 2018, 92, 73-77.	5.6	2
9	Modification of SIMPLE algorithm to handle natural convection flows with zero-isothermal compressibility. International Journal of Heat and Mass Transfer, 2017, 106, 177-182.	4.8	7
10	Finite element analysis of transient ballisticâ€"diffusive phonon heat transport in two-dimensional domains. International Journal of Heat and Mass Transfer, 2015, 80, 781-788.	4.8	39
11	Liquid Characteristics Under Melting/Solidification Conditions Using Energy Conserving Dissipative Particle Dynamics. , 2014, , .		0
12	Paper-based non-mechanical valves for autonomous multi-reagent lateral flow microfluidic devices. , 2014, , .		4
13	A new paper-based platform technology for point-of-care diagnostics. Lab on A Chip, 2014, 14, 4042-4049.	6.0	67
14	Diffusive-ballistic heat transport in thin films using energy conserving dissipative particle dynamics. International Journal of Heat and Mass Transfer, 2013, 61, 287-292.	4.8	21
15	Simulation of Thermal Conductivity of Nanofluids Using Dissipative Particle Dynamics. , 2012, , .		0
16	Friction Factor Correlations for Compressible Gaseous Flow in a Concentric Micro Annular Tube. Numerical Heat Transfer; Part A: Applications, 2012, 61, 163-179.	2.1	3
17	A fluidic diode, valves, and a sequential-loading circuit fabricated on layered paper. Lab on A Chip, 2012, 12, 2909.	6.0	125
18	Simulation of Thermal Conductivity of Nanofluids Using Dissipative Particle Dynamics. Numerical Heat Transfer; Part A: Applications, 2012, 61, 323-337.	2.1	20

#	Article	IF	Citations
19	Experimental investigations of laminar, transitional and turbulent Gas flow in microchannels. International Journal of Heat and Mass Transfer, 2012, 55, 4397-4403.	4.8	17
20	Dissipative particle dynamics for complex geometries using nonâ€orthogonal transformation. International Journal for Numerical Methods in Fluids, 2012, 68, 324-340.	1.6	5
21	Forced Convection Heat Transfer Simulation Using Dissipative Particle Dynamics. Numerical Heat Transfer; Part A: Applications, 2011, 60, 651-665.	2.1	29
22	Experimental Investigations of Laminar, Transitional to Turbulent Gas Flow in Rib-Patterned Micro-Channels. , 2011, , .		0
23	A blocking-free microfluidic fluorescence heterogeneous immunoassay for point-of-care diagnostics. Biomedical Microdevices, 2011, 13, 475-483.	2.8	9
24	Microfluidic inverse phase ELISA via manipulation of magnetic beads. Microfluidics and Nanofluidics, 2011, 10, 593-605.	2.2	27
25	Experimental investigations of liquid flow in rib-patterned microchannels with different surface wettability. Microfluidics and Nanofluidics, 2011, 11, 45-55.	2.2	30
26	Modeling of micro/nano particle separation in microchannels with field-flow fractionation. Microsystem Technologies, 2010, 16, 947-954.	2.0	8
27	From dissipative particle dynamics scales to physical scales: a coarse-graining study for water flow in microchannel. Microfluidics and Nanofluidics, 2009, 7, 467-477.	2.2	56
28	Development of an ultrafast quantitative heterogeneous immunoassay on pre-functionalized poly(dimethylsiloxane) microfluidic chips for the next-generation immunosensors. Microfluidics and Nanofluidics, 2009, 7, 593-598.	2.2	11
29	Poiseuille Number Correlations for Gas Slip Flow in Micro-Tubes. Numerical Heat Transfer; Part A: Applications, 2009, 56, 785-806.	2.1	10
30	Friction Factor Correlations for Gas Flow in Slip Flow Regime. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 1268-1276.	1.5	25
31	Convection Heat Transfer in Microchannels With High Speed Gas Flow. Journal of Heat Transfer, 2007, 129, 319-328.	2.1	10
32	Convection Enhancement in Melting by Electromagnetic Fields in a Low-Gravity Environment: Side Wall Heating. Numerical Heat Transfer; Part A: Applications, 2007, 51, 129-158.	2.1	4
33	Friction Factor Correlations of Slip Flow in Micro-Tubes. , 2007, , .		2
34	NUMERICAL SOLUTION OF MELTING IN SIDE-HEATED RECTANGULAR ENCLOSURE UNDER ELECTROMAGNETICALLY SIMULATED LOW GRAVITY. Numerical Heat Transfer; Part A: Applications, 2005, 47, 315-332.	2.1	10
35	Phase Change in a Three-Dimensional Rectangular Cavity Under Electromagnetically Simulated Low Gravity: Top Wall Heating With an Unfixed Material. Numerical Heat Transfer; Part A: Applications, 2005, 48, 849-878.	2.1	6
36	Experimental Investigation of Gas Flow in Microchannels. Journal of Heat Transfer, 2004, 126, 753-763.	2.1	115

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37	Effect of Compressibility on Heat Transfer in Microchannels. , 2004, , 341.		1
38	Effect of compressibility on gaseous flows in micro-channels. International Journal of Heat and Mass Transfer, 2003, 46, 3041-3050.	4.8	89
39	Effect of Surface Roughness on Nitrogen Flow in a Microchannel Using the Direct Simulation Monte Carlo method. Numerical Heat Transfer; Part A: Applications, 2003, 43, 1-8.	2.1	74
40	Natural convection and radiation heat transfer in a vertical porous layer with a hexagonal honeycomb core (Part 1: numerical analysis). Heat Transfer - Asian Research, 1999, 28, 278-294.	2.8	0
41	EFFECTS OF COMPRESSIBILITY AND RAREFACTION ON GASEOUS FLOWS IN MICROCHANNELS. Numerical Heat Transfer; Part A: Applications, 1997, 32, 677-696.	2.1	120
42	A New Low-Reynolds-Number k-Îµ Model for Turbulent Flow Over Smooth and Rough Surfaces. Journal of Fluids Engineering, Transactions of the ASME, 1996, 118, 255-259.	1.5	33
43	PREDICTION OF TURBULENT HEAT TRANSFER IN THE ENTRANCE OF AN ARRAY OF HEATED BLOCKS USING LOW-REYNOLDS-NUMBER Îº-Îµ MODEL. Numerical Heat Transfer; Part A: Applications, 1995, 28, 263-277.	2.1	6
44	PREDICTION OF TURBULENT THREE-DIMENSIONAL HEAT TRANSFER OF HEATED BLOCKS USING LOW-REYNOLDS NUMBER TWO-EQUATION MODEL. Numerical Heat Transfer; Part A: Applications, 1994, 26, 87-101.	2.1	9
45	Parametric study of turbulent three-dimensional heat transfer of arrays of heated blocks encountered in electronic equipment. International Journal of Heat and Mass Transfer, 1994, 37, 469-478.	4.8	23
46	Three-dimensional natural convection in a vertical porous layer with hexagonal honeycomb core of negligible thickness. International Journal of Heat and Mass Transfer, 1993, 36, 3403-3406.	4.8	9
47	THREE-DIMENSIONAL LAMINAR NATURAL CONVECTION IN A HONEYCOMB ENCLOSURE WITH HEXAGONAL END WALLS. Numerical Heat Transfer; Part A: Applications, 1989, 15, 67-86.	2.1	5