Ahmad Ali Rabienataj Darzi

List of Publications by Year
in descending order

41 papers	2,511 citations	218381 26 h-index	288905 40 g-index
42 all docs	42 docs citations	42 times ranked	1597 citing authors

#	Article	IF	Citations
1	Melting and solidification of PCM enhanced by radial conductive fins and nanoparticles in cylindrical annulus. Energy Conversion and Management, 2016, 118, 253-263.	4.4	256
2	Melting and solidification of PCM embedded in porous metal foam in horizontal multi-tube heat storage system. Energy Conversion and Management, 2018, 171, 398-410.	4.4	248
3	Numerical study of melting inside concentric and eccentric horizontal annulus. Applied Mathematical Modelling, 2012, 36, 4080-4086.	2.2	203
4	Numerical investigations of unconstrained melting of nano-enhanced phase change material (NEPCM) inside a spherical container. International Journal of Thermal Sciences, 2012, 51, 77-83.	2.6	199
5	Lattice Boltzmann simulation of nanofluid in lid-driven cavity. International Communications in Heat and Mass Transfer, 2010, 37, 1528-1534.	2.9	132
6	Unconstrained melting inside a sphere. International Journal of Thermal Sciences, 2013, 63, 55-64.	2.6	114
7	Melting process in porous media around two hot cylinders: Numerical study using the lattice Boltzmann method. Physica A: Statistical Mechanics and Its Applications, 2018, 509, 316-335.	1.2	107
8	Heat transfer and flow characteristics of AL2O3â€“water nanofluid in a double tube heat exchanger. International Communications in Heat and Mass Transfer, 2013, 47, 105-112.	2.9	101
9	Enhancement of phase change rate of PCM in cylindrical thermal energy storage. Applied Thermal Engineering, 2019, 150, 132-142.	3.0	96
10	Turbulent heat transfer of Al2O3â€“water nanofluid inside helically corrugated tubes: Numerical study. International Communications in Heat and Mass Transfer, 2013, 41, 68-75.	2.9	86
11	Experimental investigation of convective heat transfer and friction factor of Al2o3/water nanofluid in helically corrugated tube. Experimental Thermal and Fluid Science, 2014, 57, 188-199.	1.5	84
12	Experimental investigation of turbulent heat transfer and flow characteristics of SiO2/water nanofluid within helically corrugated tubes. International Communications in Heat and Mass Transfer, 2012, 39, 1425-1434.	2.9	83
13	Absorption and desorption of hydrogen in long metal hydride tank equipped with phase change material jacket. International Journal of Hydrogen Energy, 2016, 41, 9595-9610.	3.8	81
14	Numerical investigation of free-cooling system using plate type PCM storage. International Communications in Heat and Mass Transfer, 2013, 48, 155-163.	2.9	71
15	Outward melting of ice enhanced by Cu nanoparticles inside cylindrical horizontal annulus: Lattice Boltzmann approach. Applied Mathematical Modelling, 2013, 37, 8813-8825.	2.2	63
16	Numerical study of heat transfer on using lobed cross sections in helical coil heat exchangers: Effect of physical and geometrical parameters. Energy Conversion and Management, 2018, 176, 236-245.	4.4	48
17	A novel heat sink design with interrupted, staggered and capped fins. International Journal of Thermal Sciences, 2018, 127, 312-320.	2.6	43
18	The enthalpy-based lattice Boltzmann method (LBM) for simulation of NePCM melting in inclined elliptical annulus. Physica A: Statistical Mechanics and Its Applications, 2020, 548, 123887.	1.2	41

#	Article	IF	Citations
19	Constrained ice melting around one cylinder in horizontal cavity accelerated using three heat transfer enhancement techniques. International Journal of Thermal Sciences, 2018, 125, 231-247.	2.6	39
20	Heat transfer enhancement of ferrofluid flow within a wavy channel by applying a non-uniform magnetic field. Journal of Thermal Analysis and Calorimetry, 2020, 139, 3331-3343.	2.0	39
21	Heat transfer enhancement of PCM melting in 2D horizontal elliptical tube using metallic porous matrix. Theoretical and Computational Fluid Dynamics, 2016, 30, 579-603.	0.9	37
22	Natural convection melting of NEPCM in a cavity with an obstacle using lattice Boltzmann method. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 24, 221-236.	1.6	36
23	Numerical study of biomagnetic fluid flow in a duct with a constriction affected by a magnetic field. Journal of Magnetism and Magnetic Materials, 2019, 473, 42-50.	1.0	36
24	Simulation of natural convection melting in an inclined cavity using lattice Boltzmann method. Scientia Iranica, 2012, 19, 1066-1073.	0.3	34
25	Simulation of natural convection melting in a cavity with fin using lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2012, 70, 313-325.	0.9	32
26	Convection-dominated melting of phase change material in partially heated cavity: lattice Boltzmann study. Heat and Mass Transfer, 2013, 49, 555-565.	1.2	29
27	Turbulent heat transfer and fluid flow of alumina nanofluid inside three-lobed twisted tube. Journal of Thermal Analysis and Calorimetry, 2019, 137, 1451-1462.	2.0	27
28	Two phase mixture model of nano-enhanced mixed convection heat transfer in finned enclosure. Chemical Engineering Research and Design, 2016, 111, 294-304.	2.7	20
29	Accelerated melting of PCM in a multitube annulusâ€type thermal storage unit using lattice Boltzmann simulation. Heat Transfer - Asian Research, 2017, 46, 1499-1525.	2.8	20
30	Numerical investigation on thermal performance of coiled tube with helical corrugated wall. International Journal of Thermal Sciences, 2021, 161, 106759.	2.6	20
31	Lattice Boltzmann investigation for enhancing the thermal conductivity of ice using Al₂O₃porous matrix. International Journal of Computational Fluid Dynamics, 2012, 26, 451-462.	0.5	17
32	Modelling and Simulation of Flow and Heat Transfer of Ferrofluid under Magnetic Field of Neodymium Block Magnet. Applied Mathematical Modelling, 2022, 103, 238-260.	2.2	10
33	Numerical study of the fin effect on mixed convection heat transfer in a lid-driven cavity. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 397-406.	1.1	9
34	Interactions between hybrid nanosized particles and convection melting inside an enclosure with partially active walls: 2D lattice Boltzmannâ€based numerical investigation. Heat Transfer, 2021, 50, 4908-4936.	1.7	9
35	Two-and-three-dimensional analysis of Joule and viscous heating effects on MHD nanofluid forced convection in microchannels. Thermal Science and Engineering Progress, 2021, 25, 100983.	1.3	8
36	Mixed Convection Heat Transfer Analysis in an Enclosure with Two Hot Cylinders: A Lattice Boltzmann Approach. Heat Transfer - Asian Research, 2017, 46, 218-236.	2.8	7

#	Article	IF	Citations
37	Numerical investigation of heat transfer and fluid flow characteristics inside tube with internally star fins. Heat and Mass Transfer, 2019, 55, 1901-1911.	1.2	7
38	Heat transfer and pressure drop of Al₂O₃/water nanofluid in a tube equipped with double twisted tape inserts with different pitch ratios. Heat Transfer - Asian Research, 2019, 48, 233-253.	2.8	6
39	MELTING WITHIN HORIZONTAL H-SHAPED ENCLOSURE WITH ADIABATIC CURVED BOUNDARY AFFECTED BY INCLINATION, MONO/HYBRID NANOFLUIDS AND FINS. Journal of Enhanced Heat Transfer, 2020, 27, 407-437.	0.5	5
40	INTEGRATED INFLUENCES OF INCLINATION, NANOFLUIDS, AND FINS ON MELTING INSIDE A HORIZONTAL ENCLOSURE WITH CROSS SECTION OF MAJOR CIRCLE SECTOR. Heat Transfer Research, 2020, 51, 641-688.	0.9	3
41	A numerical study of flow behavior in the shell and helicalÂfinnedâ€tube heat exchanger. Heat Transfer, 2021, 50, 4607-4621.	1.7	0