Mousa Mohammadpourfard

List of Publications by Year
in descending order

87	1,668	331259	344852
papers	citations	21	36
		h-index	g-index

88	88	88	1206
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionic liquids: Promising compounds for sustainable chemical processes and applications. Chemical Engineering Research and Design, 2020, 160, 264-300.	2.7	123
2	Numerical study of the ferrofluid flow and heat transfer through a rectangular duct in the presence of a non-uniform transverse magnetic field. Journal of Magnetism and Magnetic Materials, 2013, 327, 31-42.	1.0	117
3	A 3D numerical simulation of mixed convection of a magnetic nanofluid in the presence of non-uniform magnetic field in a vertical tube using two phase mixture model. Journal of Magnetism and Magnetic Materials, 2011, 323, 1963-1972.	1.0	104
4	Two-phase mixture model simulation of the hydro-thermal behavior of an electrical conductive ferrofluid in the presence of magnetic fields. Journal of Magnetism and Magnetic Materials, 2012, 324, 830-842.	1.0	104
5	A review on effects of magnetic fields and electric fields on boiling heat transfer and CHF. Applied Thermal Engineering, 2019, 151, 11-25.	3.0	61
6	Experimental investigation of the flow and heat transfer of magnetic nanofluid in a vertical tube in the presence of magnetic quadrupole field. Experimental Thermal and Fluid Science, 2018, 91, 155-165.	1.5	50
7	Development of human respiratory airway models: A review. European Journal of Pharmaceutical Sciences, 2020, 145, 105233.	1.9	50
8	Numerical study of magnetic field effects on the mixed convection of a magnetic nanofluid in a curved tube. International Journal of Mechanical Sciences, 2014, 78, 81-90.	3.6	43
9	Experimental study on the effect of magnetic field on critical heat flux of ferrofluid flow boiling in a vertical annulus. Experimental Thermal and Fluid Science, 2014, 58, 156-169.	1.5	39
10	Experimental investigation into lubrication properties and mechanism of vegetable-based CuO nanofluid in MQL grinding. International Journal of Advanced Manufacturing Technology, 2017, 92, 3807-3823.	1.5	39
11	Design and thermodynamic analysis of a novel methanol, hydrogen, and power trigeneration system based on renewable energy and flue gas carbon dioxide. Energy Conversion and Management, 2021, 233, 113922.	4.4	33
12	Numerical investigation of thermocapillary and buoyancy driven convection of nanofluids in a floating zone. International Journal of Mechanical Sciences, 2012, 65, 147-156.	3.6	32
13	Wettability alterations and magnetic field effects on the nucleation of magnetic nanofluids: A molecular dynamics simulation. Journal of Molecular Liquids, 2018, 260, 209-220.	2.3	32
14	Flow Structure and Particle Deposition Analyses for Optimization of a Pressurized Metered Dose Inhaler (pMDI) in a Model of Tracheobronchial Airway. European Journal of Pharmaceutical Sciences, 2021, 164, 105911.	1.9	32
15	Numerical investigation of TiO2 and MWCNTs turbine meter oil nanofluids: Flow and hydrodynamic properties. Fuel, 2022, 320, 123943.	3.4	32
16	Experimental investigation of aerosol deposition through a realistic respiratory airway replica: An evaluation for MDI and DPI performance. International Journal of Pharmaceutics, 2019, 566, 157-172.	2.6	31
17	Lattice Boltzmann method for electrowetting modeling and simulation. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 3852-3868.	3.4	28
18	Numerical and experimental study of the effects of ultrasonic vibrations of tool on machining characteristics of EDM process. International Journal of Advanced Manufacturing Technology, 2018, 96, 2657-2669.	1.5	26

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19	Dry powder inhaler aerosol deposition in a model of tracheobronchial airways: Validating CFD predictions with in vitro data. International Journal of Pharmaceutics, 2020, 587, 119599.	2.6	26
20	Investigation into the performance of eco-friendly graphite nanofluid as lubricant in MQL grinding. Machining Science and Technology, 2019, 23, 569-594.	1.4	24
21	Enhancement of the performance of a NEPCM filled shell-and-multi tube thermal energy storage system using magnetic field: A numerical study. Applied Thermal Engineering, 2020, 178, 115604.	3.0	24
22	Numerical study of non-uniform magnetic fields effects on subcooled nanofluid flow boiling. Progress in Nuclear Energy, 2014, 74, 232-241.	1.3	23
23	Numerical investigation of non-uniform transverse magnetic field effects on the swirling flow boiling of magnetic nanofluid in annuli. International Communications in Heat and Mass Transfer, 2016, 75, 240-252.	2.9	23
24	Numerical simulation of nucleate pool boiling on the horizontal surface for nano-fluid using wall heat flux partitioning method. Computers and Fluids, 2012, 66, 29-38.	1.3	22
25	A numerical simulation of the water vapor bubble rising in ferrofluid by volume of fluid model in the presence of a magnetic field. Journal of Magnetism and Magnetic Materials, 2018, 449, 185-196.	1.0	22
26	Numerical study on the effect of non-uniform magnetic fields on melting and solidification characteristics of NEPCMs in an annulus enclosure. Energy Conversion and Management, 2018, 171, 879-889.	4.4	21
27	Investigating the effects of external magnetic field on machining characteristics of electrical discharge machining process, numerically and experimentally. International Journal of Advanced Manufacturing Technology, 2019, 102, 55-65.	1.5	21
28	Dynamic analysis of a laminated cylindrical shell with piezoelectric layers under dynamic loads. Finite Elements in Analysis and Design, 2010, 46, 770-781.	1.7	20
29	Energy efficient hourly scheduling of multi-chiller systems using imperialistic competitive algorithm. Computers and Electrical Engineering, 2020, 82, 106550.	3.0	20
30	Exergoeconomic analysis and optimization of a high-efficient multi-generation system powered by Sabalan (Savalan) geothermal power plant including branched GAX cycle and electrolyzer unit. Energy Conversion and Management, 2022, 268, 115996.	4.4	20
31	Numerical simulation of nucleate pool boiling on the horizontal surface for ferrofluid under the effect of non-uniform magnetic field. Heat and Mass Transfer, 2014, 50, 1167-1176.	1.2	19
32	Experimental study of magnetic field effect on bubble lift-off diameter in sub-cooled flow boiling. Experimental Thermal and Fluid Science, 2017, 89, 62-71.	1.5	18
33	Two-phase simulation of non-uniform magnetic field effects on biofluid (blood) with magnetic nanoparticles through a collapsible tube. Journal of Magnetism and Magnetic Materials, 2013, 332, 172-179.	1.0	16
34	Risk-Constrained Optimal Chiller Loading Strategy Using Information Gap Decision Theory. Applied Sciences (Switzerland), 2019, 9, 1925.	1.3	16
35	Entropy generation analysis for thermomagnetic convection of paramagnetic fluid inside a porous enclosure in the presence of magnetic quadrupole field. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2005-2022.	2.0	16
36	Thermodynamic and thermoeconomic analyses of a new dual-loop organic Rankine â€" Generator absorber heat exchanger power and cooling cogeneration system. Energy Conversion and Management, 2020, 224, 113356.	4.4	16

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37	Modelling of a fluidized bed carbonator reactor for post-combustion CO_2 capture considering bed hydrodynamics and sorbent characteristics. Chemical Engineering Journal, 2021, 406, 126762.	6.6	16
38	Multi-objective optimization of a novel biomass-based multigeneration system consisting of liquid natural gas open cycle and proton exchange membrane electrolyzer. International Journal of Energy Research, 2021, 45, 16806-16823.	2.2	15
39	Numerical study of ferrofluid flow and heat transfer in the presence of a non-uniform magnetic field in rectangular microchannels. Heat Transfer - Asian Research, 2012, 41, 302-317.	2.8	14
40	Hydrothermal Behavior of a Ferrofluid in a Corrugated Channel in the Presence of a Magnetic Field. Heat Transfer - Asian Research, 2014, 43, 80-92.	2.8	14
41	Design, evaluation, and optimization of an efficient solar-based multi-generation system with an energy storage option for Iran's summer peak demand. Energy Conversion and Management, 2021, 242, 114324.	4.4	14
42	Multi-objective configuration of an intelligent parking lot and combined hydrogen, heat and power (IPL-CHHP) based microgrid. Sustainable Cities and Society, 2022, 76, 103433.	5.1	14
43	Multi-objective optimization of a novel supercritical CO_2 cycle-based combined cycle for solar power tower plants integrated with SOFC and LNG cold energy and regasification. International Journal of Energy Research, 2022, 46, 12082-12107.	2.2	13
44	Numerical Investigation of the Transient Hydrothermal Behavior of a Ferrofluid Flowing Through a Helical Duct in the Presence of Nonuniform Magnetic Field. Journal of Heat Transfer, 2014, 136, .	1.2	12
45	3D Numerical Investigation of Thermal Characteristics of Nanofluid Flow through Helical Tubes Using Two-Phase Mixture Model. International Journal for Computational Methods in Engineering Science and Mechanics, 2014, 15, 512-521.	1.4	12
46	A biogas-steam combined cycle for sustainable development of industrial-scale water-power hybrid microgrids: design and optimal scheduling. Biofuels, Bioproducts and Biorefining, 2022, 16, 172-192.	1.9	12
47	On flow characteristics of liquid-solid mixed-phase nanofluid inside nanochannels. Applied Mathematics and Mechanics (English Edition), 2014, 35, 1541-1554.	1.9	11
48	Molecular Dynamics Study of Aggregation in Nanofluid Flow: Effects of Liquid–Nanoparticle Interaction Strength and Particles Volume Fraction. International Journal of Applied Mechanics, 2015, 07, 1550010.	1.3	11
49	Robust optimal self-scheduling of potable water and power producers under uncertain electricity prices. Applied Thermal Engineering, 2019, 162, 114258.	3.0	11
50	Numerical investigation of the condensation of a rising bubble inside a subcooled liquid under magnetic field. International Journal of Thermal Sciences, 2021, 160, 106674.	2.6	11
51	A novel approach to plasma channel radius determination and numerical modeling of electrical discharge machining process. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	10
52	Lattice Boltzmann BGK model for gas flow in a microchannel. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 1855-1860.	1.1	9
53	Numerical Investigation of the Magnetic Field Effects on the Entropy Generation and Heat Transfer in a Nanofluid Filled Cavity with Natural Convection. Heat Transfer - Asian Research, 2017, 46, 409-433.	2.8	9
54	Experimental and numerical study of swirling subcooled flow boiling of water in a vertical annulus. Experimental Heat Transfer, 2018, 31, 513-530.	2.3	9

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55	Design, worst case study, and sensitivity analysis of a net-zero energy building for sustainable urban development. Sustainable Cities and Society, 2020, 54, 101991.	5.1	9
56	Experimental study of the subcooled flow boiling heat transfer of magnetic nanofluid in a vertical tube under magnetic field. Journal of Thermal Analysis and Calorimetry, 2020, 140, 2805-2816.	2.0	9
57	Implementation of magnetic field force in molecular dynamics algorithm: NAMD source code version 2.12. Journal of Molecular Modeling, 2020, 26, 106.	0.8	8
58	Droplets Merging and Stabilization by Electrowetting: Lattice Boltzmann Study. Journal of Adhesion Science and Technology, 2012, 26, 1853-1871.	1.4	7
59	Finite difference simulation and experimental investigation: effects of physical synergetic properties of nanoparticles on temperature distribution and surface integrity of workpiece in nanofluid MQL grinding process. International Journal of Advanced Manufacturing Technology, 2018, 95, 2661-2679.	1.5	7
60	Lattice Boltzmann simulation of droplet base electrowetting. International Journal of Computational Fluid Dynamics, 2010, 24, 143-156.	0.5	6
61	Numerical investigation of subcooled boiling characteristics of magnetic nanofluid under the effect of quadrupole magnetic field. Journal of Engineering Thermophysics, 2017, 26, 427-446.	0.6	6
62	Eulerian–Eulerian simulation of non-uniform magnetic field effects on the ferrofluid nucleate pool boiling. Journal of Engineering Thermophysics, 2017, 26, 580-597.	0.6	6
63	Numerical simulations of the influence of Brownian and gravitational forces on the stability of CuO nanoparticles by the Eulerian–Lagrangian approach. Heat Transfer - Asian Research, 2018, 47, 72-87.	2.8	6
64	Simulation of ferrofluid flow boiling in helical tubes using two-fluid model. Heat and Mass Transfer, 2019, 55, 133-148.	1.2	6
65	Optimal Techno-Economic Planning of a Smart Parking Lot–Combined Heat, Hydrogen, and Power (SPL-CHHP)-Based Microgrid in the Active Distribution Network. Applied Sciences (Switzerland), 2021, 11, 8043.	1.3	6
66	Thermodynamic design, evaluation, and optimization of a novel quadruple generation system combined of a fuel cell, an absorption refrigeration cycle, and an electrolyzer. International Journal of Energy Research, 2022, 46, 7261-7276.	2.2	6
67	NUMERICAL STUDY OF THE HYDROTHERMAL BEHAVIOR AND EXERGY DESTRUCTION OF MAGNETIC NANOFLUID IN CURVED RECTANGULAR MICROCHANNELS. Heat Transfer Research, 2015, 46, 795-818.	0.9	5
68	Electrowetting on dielectric and superhydrophobic surface: lattice Boltzmann study. Indian Journal of Physics, 2012, 86, 889-899.	0.9	3
69	Concentration polarization effects on the macromolecular transport in the presence of non-uniform magnetic field: A numerical study using a lumen-wall model. Journal of Magnetism and Magnetic Materials, 2014, 356, 111-119.	1.0	3
70	Molecular Dynamics Study of Ferrofluid Flow Inside Nanochannels Under Magnetic Fields. Journal of Computational and Theoretical Nanoscience, 2015, 12, 2339-2347.	0.4	3
71	Computational modeling of geometry effects on the IDL surface concentration in the presence of non-uniform magnetic field – links to atherosclerosis. Journal of Magnetism and Magnetic Materials, 2016, 398, 38-48.	1.0	2
72	Experimental study of the effects of quadrupole magnetic field and hydro-thermal parameters on bubble departure diameter and frequency in a vertical annulus. Experimental Heat Transfer, 2022, 35, 341-368.	2.3	2

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73	Non-uniform magnetic field impact on thermomagnetic convection of paramagnetic air in a permanent magnet-inserted horizontal annulus. European Physical Journal Plus, 2021, 136, 1.	1.2	2
74	OPTIMIZED FREE ENERGY-BASED LATTICE BOLTZMANN METHOD FOR MODELING MICRO DROP DYNAMICS. International Journal of Computational Methods, 2013, 10, 1350006.	0.8	1
75	Euler–Lagrangian Simulation of Magnetic Field Effects on the Mixed Convection of Ferrofluid. Heat Transfer - Asian Research, 2014, 43, 148-166.	2.8	1
76	Mechanobiology of LDL mass transport in the arterial wall under the effect of magnetic field, part I: Diffusion rate. Journal of Magnetism and Magnetic Materials, 2017, 426, 569-574.	1.0	1
77	Numerical investigation of nonuniform transverse magnetic field effects on the flow and heat transfer of magnetic nanofluid in a sintered porous channel. Heat Transfer - Asian Research, 2019, 48, 3790-3811.	2.8	1
78	Molecular dynamics simulation of the magnetic field influence on the oil-water interface. Fluid Phase Equilibria, 2020, 522, 112761.	1.4	1
79	Bubble Lift-Off Diameter and Frequency in Ferrofluid Subcooled Flow Boiling. Heat Transfer Engineering, 2023, 44, 512-529.	1.2	1
80	Numerical study of biofluid flow over a backward-facing step: The hydro-thermal behavior in the presence of magnetic field effects. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2017, 231, 800-812.	1.4	0
81	Reduction of cavitation in refrigerant fluid flow through micro passages in the presence of external transverse magnetic fields. Heat Transfer - Asian Research, 2017, 46, 1130-1147.	2.8	0
82	Numerical study of the effects of internal and external forces on the nanoparticle mixing in a ferrofluid flow. Heat Transfer - Asian Research, 2019, 48, 2007-2028.	2.8	0
83	Vortex Suppression behind a Heated Circular Cylinder Placed between Parallel Walls by Applying Magnetic Field on a Magnetic Nanofluid Flow. International Journal of Fluid Mechanics Research, 2015, 42, 214-226.	0.4	0
84	AC Optimal Power Flow Incorporating Demand-Side Management Strategy. , 2020, , 147-165.		0
85	Implementation of Demand Response Programs on Unit Commitment Problem. , 2020, , 37-54.		0
86	Numerical investigation of blood flow and red blood cell rheology: the magnetic field effect. Electromagnetic Biology and Medicine, 2022, , 1-13.	0.7	0
87	Numerical Investigation of Tio2 and Mwcnt Turbine Meter Oil Nanofluids: Flow and Hydrodynamic Properties. SSRN Electronic Journal, 0, , .	0.4	0