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h-index (Scopus):

9

Citations (Scopus):

317



Supervised MSc Theses

#	Thesis title	By	Date
1	Study of arrangement of vortex generators on heat transfer enhancement in a two dimensional channel using lattice Boltzmann method	Saba Mirahsani & Ali Ahmadpour	September 2021
2	Numerical study of blood flow in an asymmetric bifurcation under the effect of an external magnetic field	Seyed Reza Nodeh Farahani & Ali Ahmadpour	June 2021
3	Three-dimensional optimum design of highly thermal conductive pathways embedded in a heat generating medium	Romina Kabiri Khalajzadeh & Ali Ahmadpour	April 2021
4	Numerical investigation of magnetic drug targeting in lymphatic vessels considering lymph-leaflet interaction	Amir Poorghani & Ali Ahmadpour	March 2021
5	Heat transfer enhancement in curved tube under magnetic field using ferrofluid	Hadi Zeinalzadeh & Ali Ahmadpour	January 2021
6	optimal design of wavy microchannel heatsinks cooled with a fluid containing encapsulated phase-change materials	Hadi Nemati Moghaddam & Ali Ahmadpour	January 2021
7	The effect of cross-section geometry on thermal performance of microchannel heat sinks	Sayed Moein Ayatollahi & Ali Ahmadpour	July 2020
8	Numerical Simulation of Non-Newtonian Turbulent Flows Using LES method	Mohammadjavad Aghajari & Ali Ahmadpour	July 2020
9	Evolution of a vortex in a stratified- rotating shear flow	Iman Toghraei & Ali Ahmadpour	September 2019

10	Numerical investigation of pressure drop and heat Transfer for laminar force convection of a non-Newtonian nanofluids in microchannel with different cross sections	Aminreza Ramezan & Ali Ahmadpour	September 2019
11	Numerical Simulation of Two Phase Viscoplastic Fluids and Water in Different Flow Regimes	Mohammad Reza Daneshvar Garmroodi & Ali Ahmadpour	July 2019
12	Numerical simulation of waxy crude oil pipe flows using thixoelectric constitutive equations	Alireza Allahyarikarnagh & Ali Ahmadpour	February 2019
13	A numerical simulation of turbulent two-phase slug flow of a gas and non-newtonian liquid	Fateme Darlik & Ali Ahmadpour	February 2019
14	Design and manufacturing of a solar-dryer for dry climate zones	Pouria Moghimighadikolaei & Ali Ahmadpour	February 2019
15	Cooling performance enhancement of microchannel heat sinks using a nanofluid with non-Newtonian viscosity	Ali Sarlak & Ali Ahmadpour	October 2018
16	Study of Forced convective heat transfer of non-newtonian nanofluid in bend tube with variable angles	Seyyede Hanieh Mousavi & Ali Ahmadpour	September 2018
17	Numerical Simulation of Magneto-hydrodynamic Flow of Blood in Arteries	Nazar Oudah Mosa Al-Yaseen & Ali Ahmadpour	December 2017

Journal Papers

Portal Records

- 1 Ali Ahmadpour, Ehsan Amani, Alireza Mashayekhi, Mehran Soleimani, "Newtonian and Shear-thinning Taylor flow heat transfer in wavy micro-tubes: a numerical study", *MECCANICA*, July 2021 Vol. 0, Num. 0, Page 1-22, July 2021,
- 2 Sayed Moein Ayatollahi, Ali Ahmadpour, Mohammadreza Hajmohammadi, "Performance evaluation and optimization of flattened microchannel heat sinks for the electronic cooling application", *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, April 2021 Vol. 0, Num. 0, Page 1-15, April 2021,
- 3 Pouria Moghimighadikolaei, Hassan Rahimzadeh, Ali Ahmadpour, "Experimental and numerical optimal design of a household solar fruit and vegetable dryer", *SOLAR ENERGY*, December 2020 Vol. 214, Num. 0, Page 575-587, December 2020,
- 4 Seyyede Hanieh Mousavi, Ali Ahmadpour, Majid Saffar-Avval, "Numerical simulation of convective heat transfer of non-Newtonian carbon-based nanofluids in U-bend tubes using Buongiorno's model", *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, October 2020 Vol. 0, Num. 0, Page 1-19, October 2020,
- 5 Mohammad Reza Daneshvar Garmroodi, Ali Ahmadpour, "Numerical simulation of stratified waxy crude oil and water flows across horizontal pipes in the presence of wall heating", *JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING*, October 2020 Vol. 193, Num. 107458, Page 0-0, October 2020,
- 6 Mohammadreza Hajmohammadi, Sepehr Gholamrezaie, Ali Ahmadpour, Zohreh Mansoori, "Effects of applying uniform and non-uniform external magnetic fields on the optimal design of microchannel heat sinks", *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES*, June 2020 Vol. 186, Num. 0, Page 105886-105897, June 2020,
- 7 Mohammad Reza Daneshvar Garmroodi, Ali Ahmadpour, "A numerical study on two-phase core-annular flows of waxy crude oil/water in inclined pipes", *CHEMICAL ENGINEERING RESEARCH & DESIGN*, May 2020 Vol. 159, Num. 0, Page 362-376, May 2020,
- 8 Ali Ahmadpour, Seyed Pedram Mousavi, "Forced convective heat transfer of Carreau fluids in crossflows over multiple cylinders in tandem and staggered arrangements", *JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING*, May 2020 Vol. 42, Num. 285, Page 0-0, May 2020,

- 9 Mohammad Reza Daneshvar Garmroodi, Ali Ahmadpour, Mohammadreza Hajmohammadi, Sepehr Gholamrezaie, "Natural convection of a non-Newtonian ferrofluid in a porous elliptical enclosure in the presence of a non-uniform magnetic field", *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY*, November 2019 Vol. 0, Num. 0, Page 1-17, November 2019,
- 10 Arman Torkfar, S.M.A. Noori Rahimabadi, Ali Ahmadpour, "Natural Convection Heat Transfer of Non-Newtonian Power-Law Fluids Within an Array of Elliptic Cylinders", *JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME*, October 2019 Vol. 142, Num. 0, Page 1-12, October 2019,
- 11 Ali Ahmadpour, "Displacement flow of thixoelectric fluids by a Newtonian liquid: A multiphase numerical study applicable to the start-up of gelled pipelines", *JOURNAL OF NON-NEWTONIAN FLUID MECHANICS*, August 2019 Vol. 271, Num. 0, Page 104-149, August 2019,
- 12 S.M.A. Noori Rahimabadi, Ali Ahmadpour, J. P. Meyer, "Effects of vibration on pool boiling heat transfer from a vertically aligned array of heated tubes", *INTERNATIONAL JOURNAL OF MULTIPHASE FLOW*, June 2019 Vol. 118, Num. 0, Page 97-112, June 2019,
- 13 Hamed Nasrfard Jahromi, Hassan Rahimzadeh, Ali Ahmadpour, Ehsan Amani, "Simulation of Intermittent Flow Development in a Horizontal Pipe", *JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME*, June 2019 Vol. 141, Num. 12, Page 1-33, June 2019,
- 14 Ali Ahmadpour, S.M.A. Noori Rahimabadi, "Thermal-hydraulic performance evaluation of gas-liquid multiphase flows in a vertical sinusoidal wavy channel in the presence/absence of phase change", *INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER*, April 2019 Vol. 138, Num. 0, Page 677-689, April 2019,
- 15 Kaveh Yazdani Motlagh, Mohammad Sahebamei, Ali Ahmadpour, "Natural Convection Heat Transfer and Entropy Generation in a Porous Trapezoidal Enclosure Saturated with Power-Law Non-Newtonian Fluids", *HEAT TRANSFER ENGINEERING*, April 2019 Vol. 41, Num. 11, Page 1-20, April 2019,
- 16 Hamed Nasrfard Jahromi, Hassan Rahimzadeh, Ali Ahmadpour, Hamid Naderan Tahan, "Experimental study of condensation heat transfer for R141b in intermittent flow regime within a smooth horizontal tube", *EXPERIMENTAL THERMAL AND FLUID SCIENCE*, March 2019 Vol. 105, Num. 0, Page 109-122, March 2019,
- 17 Ali Ahmadpour, Ehsan Amani, Mohammad Esmaili, "Numerical simulation of shear thinning slug flows: the effect of viscosity variation on the shape of Taylor bubbles and wall shear stress", *JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING*, January 2019 Vol. 41, Num. 48, Page 1-18, January 2019,
- 18 Ehsan Amani, Ali Ahmadpour, Mohammad Tohidi Moghaddam, "A numerical study of the rise of a Taylor bubble through a sudden/gradual expansion in Newtonian and shear-thinning liquids", *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES*, January 2019 Vol. 152, Num. 0, Page 236-246, January 2019,
- 19 Mohammad Reza Daneshvar Garmroodi, Ali Ahmadpour, F. Talati, "MHD mixed convection of nanofluids in the presence of multiple rotating cylinders in different configurations: A two-phase numerical study", *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES*, October 2018 Vol. 150, Num. 0, Page 247-264, October 2018,
- 20 Ali Sarlak, Ali Ahmadpour, Mohammadreza Hajmohammadi, "Thermal design improvement of a double-layered microchannel heat sink by using multi-walled carbon nanotube (MWCNT) nanofluids with non-Newtonian viscosity", *APPLIED THERMAL ENGINEERING*, October 2018 Vol. 147, Num. 0, Page 205-215, October 2018,
- 21 S.M.A. Noori Rahim Abadi, Ali Ahmadpour, J.P. Meyer, "Numerical simulation of pool boiling on smooth, vertically aligned tandem tubes", *INTERNATIONAL JOURNAL OF THERMAL SCIENCES*, July 2018 Vol. 132, Num. 0, Page 628-644, July 2018,
- 22 Ali Ahmadpour, S.M.A. Noori Rahim Abadi, J.P. Meyer, "Numerical investigation of pool boiling on a staggered tube bundle for different working fluids", *INTERNATIONAL JOURNAL OF MULTIPHASE FLOW*, April 2018 Vol. 104, Num. 0, Page 89-102, April 2018,
- 23 Ali Ahmadpour, Milad Nasiri, Mehdi Khazayinejad, Navid Asgharian, "Flow and convective heat transfer of Casson fluid between squeezing porous disks in the presence of thermal radiation, viscous dissipation, and variable heat source/sink", *JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING*, February 2018 Vol. 40, Num. 0, Page 1-13, February 2018,
- 24 Sahand Majidi, Ali Ahmadpour, "Thermally assisted restart of gelled pipelines: A weakly compressible numerical study", *INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER*, October 2017 Vol. 118, Num. 0, Page 27-39, October 2017,

- 25 Ali Ahmadpour, Alireza Allahyarikarnagh, "Poiseuille flow of a thixo-elastic fluid: analytical and semi-analytical solutions", JOURNAL OF NON-NEWTONIAN FLUID MECHANICS, August 2017 Vol. 247, Num. 0, Page 239-253, August 2017,
- 26 S.M.A Noori Rahim Abadi, Ali Ahmadpour, S.M.N.R. Abadi, J.P. Meyer, "CFD-based shape optimization of steam turbine blade cascade in transonic two phase flows", APPLIED THERMAL ENGINEERING, February 2017 Vol. 112, Num. 0, Page 1575-1589, February 2017,
- 27 Ali Ahmadpour, Sma Noori Rahimabadi, J.P. Meyer, "On the performance enhancement of thermo-compressor and steam turbine blade cascade in the presence of spontaneous nucleation", ENERGY, January 2017 Vol. 119, Num. 0, Page 675-693, January 2017,
- 28 A. Salehi-Shabestari, Ali Ahmadpour, M. Raisee, Kayvan Sadeghy, "Flow and Displacement of Waxy Crude Oils in a Homogenous Porous Medium: a Numerical Study", JOURNAL OF NON-NEWTONIAN FLUID MECHANICS, July 2016 Vol. 235, Num. 0, Page 47-63, July 2016,
- 29 Ali Ahmadpour, S.M.A Noori Rahimabadi, Ramin Kouhikamali, "Numerical simulation of two-phase gas-liquid flow through gradual expansions/contractions", INTERNATIONAL JOURNAL OF MULTIPHASE FLOW, April 2016 Vol. 79, Num. 0, Page 31-49, April 2016,

Conference Papers


Portal Records














- 1 Fateme Darlik, Ehsan Amani, Ali Ahmadpour, "Simulation of slug flow of liquid-gas two-phase flow in vertical tubes ", The 8th national conference on CFD applications in chemical & petroleum industries, May 2017

Journal Referee

# Magazine Title	Date of Cooperation & Explanations
1 Applied Thermal Engineering	
2 Journal of Non-Newtonian Fluid Mechanics	
3 International Communications On Heat & Mass Transfer	
4 International Journal of Heat and Mass Transfer	
5 Journal of the Brazilian Society of Mechanical Sciences and Engineering	
6 Special Topics & Reviews in Porous Media - An International Journal	
7 Journal of Power and Energy	
8 Computational Thermal Sciences	
9 AUT Journal of Mechanical Engineering	

Taught Courses

# Course title	Description	Headlines	Date
1 Advanced Fluid Mechanics	Theoretical Study of Fluid Flow Phenomenon		Fall 2021

2	Thermodynamics (I)	Energy and Exergy Analysis of industrial processes and equipments		Fall 2021
3	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Fall 2021
4	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Fall 2021
5	Two Phase Gas-Solid Flow	An introduction to Multiphase Flows an their numerical modeling		Spring 2021
6	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Spring 2021
7	Introduction to Computational Fluid Dynamics	An Introduction To Numerical Simulation of Fluid Flow and Heat transfer		Spring 2021
8	Fluid Mechanics Lab	Fluid Flow Experimentation		Spring 2021
9	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Spring 2021
10	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Spring 2021
11	Fluid Mechanics Lab	Fluid Flow Experimentation		Spring 2021
12	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Fall 2020
13	Thermodynamics (I)	Energy and Exergy Analysis of industrial processes and equipments		Fall 2020
14	Fluid Mechanics Lab.	Examination of Fluid Mechanics Basic Principals		Fall 2020