



Amirkabir University of Technology
(Tehran Polytechnic)



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h-index (Scopus):

5

Citations (Scopus):

109

Educational Records

#	Degree/Major	University	City	Country	Graduation Date
1	BSc in Mechanical Engineering	Sharif University of Technology	Tehran	Iran	
2	MSc in Mechanical Engineering	Sharif University of Technology	Tehran	Iran	
3	PhD in Mechanical Engineering	Sharif University of Technology	Tehran	Iran	
4	PostDoc in Mechanical Engineering	Sharif University of Technology	Tehran	Iran	

Research Interests

#	Title	Start date
1	Optical Measurements	
2	Combustion	
3	Soft Robotics	
4	Energy	
5	Heat Transfer	
6	Micro/Nano-Fluidics	

Supervised MSc Theses

#	Thesis title	By	Date
1	Experimental Study of Combustion Characteristics of Hydrocarbon Fuels Using Meso-Scale Reactors	Soroush Sheykhbaglou & Amirreza Ghahremani	February 2020

Journal Papers

Portal Records

- 1 Amirreza Ghahremani, Mohammad Aramfard, Mohammad Hassan Saidi, "An analytical investigation of transient imperfectly- expanded turbulent jet", PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G- JOURNAL OF AEROSPACE ENGINEERING, February 2022 Vol. 1, Num. 1, Page 1-8, February 2022,

Other Records

- 1 A.R. Ghahremani--- M. Jafari--- M. Ahari--- M.H. Saidi--- A. Hajinezhad--- A.A. Mozafari, "Spray Characteristics and Atomization Behavior of Bio-diesel (Norouzak) and Diesel Fuel Blends", Journal of Particulate Science and Technology, 2018 Vol. 36, Num. , Page 270-281, 2018,
- 2 A.R. Ghahremani--- M.H. Saidi--- A. Hajinezhad--- A.A. Mozafari, "Experimental investigation of spray characteristics of a modified bio-diesel in a direct injection combustion chamber", Journal of Experimental Thermal and Fluid Science, 2017 Vol. 81, Num. , Page 445-453, 2017,
- 3 A.R. Ghahremani--- M. Ahari--- M. Jafari--- M.H. Saidi--- A. Hajinezhad---A.A. Mozafari, "Experimental and theoretical study on spray behaviors of Modified Bio-Ethanol fuel employing direct injection system", Journal Thermal Science, 2017 Vol. 21, Num. , Page 475-488, 2017,
- 4 A.R. Ghahremani--- M. Jafari--- M. Ahari--- M.H. Saidi--- A. Hajinezhad--- A. A. Mozafari, "Experimental and theoretical investigation on spray characteristics of bio-ethanol blends using a direct injection system", Journal of Scientia Iranica, 2017 Vol. 24, Num. , Page 237-248, 2017,
- 5 A.R. Ghahremani--- H. Karimi--- M.H. Saidi--- A.A. Mozafari, "A contribution to the understanding of isothermal diesel spray dynamics", Fuel, 2017 Vol. 187, Num. , Page 468-469, 2017,
- 6 M.M. Naghizadeh--- A.R. Ghahremani--- M.H. Saidi, "Numerical simulation of spray characteristics of bio-ethanol and its blend with gasoline in a direct injection combustion chamber", Modares Mechanical Engineering Journal, 2015 Vol. 15, Num. , Page 112-122, 2015,
- 7 M. Mohammadi--- M. Mohammadi--- A.R. Ghahremani--- M.B. Shafii--- N. Mohammadi, "Experimental Investigation of Thermal Resistance of a Ferrofluidic Closed Loop Pulsating Heat Pipe", Journal of Heat Transfer Engineering, 2014 Vol. 35, Num. , Page 25-33, 2014,
- 8 R. Jahanbakhshi--- M.H. Saidi--- A.R. Ghahremani, "Numerical modelling of pulse tube refrigerator and sensitivity analysis of simulation", HVAC&R Research Journal, 2013 Vol. 19, Num. , Page 242-256, 2013,
- 9 A.R. Ghahremani--- M.H. Saidi--- M. Ebrahimian, "Simultaneous Analytical Solution of Complete System of Double Inlet Pulse Tube Refrigerator", Journal of Thermophysics and Heat Transfer (AIAA), 2012 Vol. 26, Num. , Page 337-344, 2012,
- 10 A.R. Ghahremani--- M.H. Saidi--- R. Jahanbakhshi, "Performance Analysis and Optimization of High Capacity Pulse Tube Refrigerator", Journal of Cryogenics, 2011 Vol. 51, Num. , Page 173-179, 2011,
- 11 E. Ghafoori--- M.H. Kargarnovin--- A.R. Ghahremani, "Dynamic responses of a plate due to a moving oscillator using a semi-analytical method", Journal of Vibration and Control, 2010 Vol. 17, Num. , Page 1310-1324, 2010,

Conference Papers

Portal Records

- 1 Sina Narimani Asl, Soroush Sarrafan Sadeghi, Amirreza Ghahremani, Sadegh Tabejamaat, "Experimental study of methane-oxygen flat flame of micro-combustion characteristics by spectroscopy method in the canal of the heat recovery chamber ", Ninth Fuel and Combustion Conference of Iran, February 2022
- 2 Soroush Sarrafan Sadeghi, Sadegh Tabejamaat, Amirreza Ghahremani, Sina Narimani Asl, "Experimental study of the effects of nitrogen dilutions on the methane-oxygen micro combustion by the spectroscopy method in the canal with heat recovery chamber ", Ninth Fuel and Combustion Conference of Iran, February 2022

Other Records

- 1 A.R. Ghahremani--- M. Saeedan--- M.H. Saidi, "Experimental and numerical study of spray characteristics of modified bio-diesel in various fuel and ambient conditions", 7th FCCI-Iran, 2018
- 2 A.R. Ghahremani, H. Karimi--- A. Afshar--- M.H. Saidi, "Semi-analytical solution of transient imperfectly expanded turbulent supersonic jet", 7th FCCI-Iran, 2018
- 3 F. Farajimoghaddam--- M.H. Saidi--- A.R. Ghahremani, "An analytical investigation of under-expanded turbulent supersonic jet", International Conference on Energy Systems Istanbul ICES'15-Turkey, 2015
- 4 M. Mohammadi--- M. Mohammadi--- A.R. Ghahremani--- M.B. Shafii, "Experimental Study of the Effects of Ferrofluid on Thermal Performance of a Pulsating Heat Pipe", ASME ICNMM-Canada, 2011
- 5 F. Roshanghalb--- R. Jahanbakhshi--- A.R. Ghahremani--- P. Ahmadi--- M.H. Saidi, "Optimization of Pulse Tube Refrigerators Considering Prominent Operating Parameters Using Evolutionary Algorithms", 11th Cryogenics Conference-Slovak Republic, 2010
- 6 F. Roshanghalb--- A.R. Ghahremani--- R. Jahanbakhshi--- M.H. Saidi, "Investigation on Operating Parameters of a Pulse Tube Using Real Gas Equation of State for Temperatures below 20 K", ICEC 23 - ICMC-Poland, 2010
- 7 E. Haghghi--- B. Borzou--- A.R. Ghahremani--- M.B. Shafii, "Optimization of a Regenerative Gas Turbine Engine With Isothermal Heat Addition With the Genetic Algorithm", ASME Turbo Expo-USA, 2009
- 8 M. Asghari--- A.R. Ghahremani--- E. Ghafoori, "Semi-Analytical Analysis of the Dynamic Response of Rectangular Plates under Traversing Moving Oscillator", ESMC-Portugal, 2009
- 9 M. Asghari--- A.R. Ghahremani--- E. Ghafoori, "Investigating of the Dynamic Response in the Problem of Moving Oscillators on the Rectangular Plates", ICoVP-India, 2009
- 10 A.R. Ghahremani--- S. SafariMohsenabad--- M.B. Shafii, "Analytical Solution for Compressible Gas Flow Inside a Two-Dimensional Poiseuille Flow in Microchannels with Constant Heat Flux Including the Creeping Effect", ICFM-Germany, 2008
- 11 E. Ghafoori--- A.R. Ghahremani--- M.T. Ahmadian, "Calculating the Dynamic Response of a Multi-spans Bridge Subjected to a Moving Vehicle Considering Acceleration and Deceleration", CSME-Canada, 2008

Awards & Honors

#	title	Date
1	Won the "Dr. Kazemi Ashtiani" award	
2	Won the "Dr. Chamran" award	
3	Ranked 1st in PhD program of Mechanical Engineering of Sharif University of Technology	
4	The best PhD thesis of Iran award, Iranian Society of Mechanical Engineering	
5	Dean's List of the best students at Sharif University of Technology	
6	The best mechanical PhD thesis of university, Sharif University of Technology	

Taught Courses

#	Course title	Description	Headlines	Date
1	Special Topics)Optical Measurement Techniques(Introduction to Optical Measurement Techniques		Spring 2022
2	Thermodynamic (II)	Introduction to power cycles, refrigeration cycles, thermodynamic relations, gas mixtures, air-conditioning, and chemical reactions		Spring 2022
3	Research Method & Report Writings	Introduction to research, preparing report and paper, and oral presentations		Spring 2022
4	Thermodynamic (II)	Introduction to power cycles, refrigeration cycles, thermodynamic relations, gas mixtures, air-conditioning, and chemical reactions		Fall 2021
5	Special Topics (Space Propulsion)	Introduction to Space Propulsion, Concepts and Applications		Spring 2021
6	Research Method & Report Writings	Introduction to research and preparing reports, papers, and oral presentations		Spring 2021