



Amirkabir University of Technology
(Tehran Polytechnic)



Hossein Khaleghi

Associate Professor
Department of Aerospace Engineering
Aerodynamics & Propulsion

Email:

khaleghi@aut.ac.ir

Phone:

h-index (Scopus):

8

Citations (Scopus):

252

Supervised MSc Theses

#	Thesis title	By	Date
1	Design of microturbine combustion chamber based on biofuels	Yassin Azadi & Hossein Khaleghi	October 2021
2	Construction and performance test of a contra rotating fan	Mohamad Hosein Raoufi & Hossein Khaleghi	October 2021
3	Design and investigation of performance of the last stages of steam turbines	Mohammad Abdi Sayaar & Hossein Khaleghi	October 2021
4	Developing a Model for Surge and Stall in Contra-Rotating Compressors	Mohammad Javad Shahriari & Hossein Khaleghi	September 2020
5	experiment study of instabilities in an industrial fan	Hamed Asadpour & Hossein Khaleghi	February 2020
6	Design and construction an injection system for enhancing the operability of axial fan	Hamid Reza Bolandi Arani & Hossein Khaleghi	February 2019
7	Numerical analysis performance of axial fan	Mahmood Tamiji & Hossein Khaleghi	February 2019
8	numerical study of the contouring effect on the axial turbine performance	Khosro Azizzadeh & Hossein Khaleghi	January 2019
9	Numerical Study Of The Effect Of Tip Clearance On The Performance Of An Axial	Amir Akbari & Hossein Khaleghi	January 2018
10	Design and construction of a fan test cell	Mohammad Karimi & Hossein Khaleghi	October 2017

11	Numerical study of circumferential grooves on the performance of a high-speed compressor	Amir Kheirhababadi & Hossein Khaleghi	June 2017
12	Numerical study of blade solidity on the performance of a high-speed compressor	Saeed Habibi & Hossein Khaleghi	June 2017
13	Numerical study of endwall recirculation on the performance of a high speed compressor	Mohammad Talebnezhad & Hossein Khaleghi	February 2017
14	Study of Inlet Distortion Effects on Performance of a Transonic Compressor	Reza Jalaly & Hossein Khaleghi	February 2016
15	Numerical study of the effect of tip clearance size on the performance of a transonic compressor	Mohammad Amin Sheikh Shahrokh Dehkordi & Hossein Khaleghi	February 2016

Journal Papers

Portal Records








- Hossein Khaleghi, Martin Heinrich, Mohammad Javad Shahriari, "Circumferential Casing Treatment in a Transonic Fan", , January 2021 Vol. -, Num. 0, Page 0-0, January 2021,
- Mohammad Javad Shahriari, Hossein Khaleghi, Martin Heinrich, "A Model for Predicting Post-Stall Behavior of Axial Compressors", Journal of Applied Fluid Mechanics JAFM, October 2020 Vol. 14, Num. 3, Page 897-908, October 2020,
- Hossein Khaleghi, Mohammad Javad Shahriari, Martin Heinrich, "A theory for rotating stall in contra-rotating fans", PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, August 2020 Vol. 0, Num. 0, Page 1-10, August 2020,
- Martin Heinrich, Hossein Khaleghi, Christian Friebe, "Effect of Circumferential Casing Treatment on Low-Speed Contra-Rotating Fans", Journal of Applied Fluid Mechanics JAFM, July 2020 Vol. 13, Num. 6, Page 1719-1726, July 2020,
- Hossein Khaleghi, "A new approach of endwall recirculation in axial compressors", AEROSPACE SCIENCE AND TECHNOLOGY, March 2020 Vol. 98, Num. 0, Page 1-9, March 2020,
- Mohammad Javad Shahriari, Hossein Khaleghi, Martin Heinrich, "A Model for Stall and Surge in Low-Speed Contra-Rotating Fans", JOURNAL OF ENGINEERING FOR GAS TURBINES AND POWER-TRANSACTIONS OF THE ASME, August 2019 Vol. 141, Num. 8, Page 1-11, August 2019,
- Hossein Khaleghi, "Parametric study of injector radial penetration on stalling characteristics of a transonic fan", AEROSPACE SCIENCE AND TECHNOLOGY, March 2017 Vol. 66, Num. 0, Page 112-118, March 2017,
- Hossein Khaleghi, "Effect of axial skewed slot casing treatment in a transonic fan", PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING, October 2016 Vol. 0, Num. 0, Page 0-0, October 2016,
- Hossein Khaleghi, Mohammad Amin Sheikh Shahrokh Dehkordi, Abolghasem Mesgarpour Tousi, "Role of tip injection in desensitizing the compressor to the tip clearance size", AEROSPACE SCIENCE AND TECHNOLOGY, February 2016 Vol. 0, Num. 0, Page 0-0, February 2016,
- Hossein Khaleghi, "Stall inception and control in a transonic fan, part B: Stall control by discrete endwall injection", AEROSPACE SCIENCE AND TECHNOLOGY, February 2015 Vol. 41, Num. 0, Page 151-157, February 2015,
- Hossein Khaleghi, "Stall inception and control in a transonic fan, part A: Rotating stall inception", AEROSPACE SCIENCE AND TECHNOLOGY, February 2015 Vol. 41, Num. 0, Page 250-258, February 2015,
- Hossein Khaleghi, "Effect of discrete endwall recirculation on the stability of a high-speed compressor rotor", AEROSPACE SCIENCE AND TECHNOLOGY, August 2014 Vol. 37, Num. 0, Page 130-137, August 2014,

Conference Papers

Portal Records

- 1 Martin Heinrich, Hossein Khaleghi, Christian Friebe, "NUMERICAL INVESTIGATION OF CIRCUMFERENTIAL GROOVE CASING TREATMENT ON A LOW SPEED CONTRA-ROTATING FAN ", Proceedings of the ASME Turbo Expo 2019, June 2019
- 2 Hossein Khaleghi, Reza Jalaly, "EFFECTS OF CIRCUMFERENTIAL INLET DISTORTION ON THE PERFORMANCE OF A TRANSONIC FAN TOGETHER WITH THE IMPACT OF TIP INJECTION ", ASME Turbo Expo 2016, June 2016

Taught Courses

#	Course title	Description	Headlines	Date
1	Engineering Mathematics	Learning Fourier Series, Integrals and Transform- Laplace Transform- PDE equations and solutions - Complex variables : complex differentiation, Integral, Residue integral, Conformal Mapping		Fall 2021
2	Advanced Mathematics (I)	PDEs, Calculus of Variations, Linear Algebra		Fall 2021
3	Thermodynamic (II)	Learning principals of Thermodynamics including Power systems and Refrigeration systems, Gas mixtures, Thermodynamic relations, Chemical reactions		Spring 2021
4	(Special Topics (Compressor Instability	Learning compressor instabilities, surge and rotating stall, and their control methods		Spring 2021
5	Fluid Mechanics	Learning principals of fluid mechanics		Spring 2021
6	Thermodynamic (II)	Learning principals of Thermodynamics including Power systems and Refrigeration systems, Gas mixtures, Thermodynamic relations, Chemical reactions		Fall 2020
7	Advanced Mathematics (I)	PDEs, Calculus of Variations, Linear Algebra		Fall 2020