Mohammad Azadi, C.V.

Scientific and Business Curriculum Vitae (CV)

Ph.D. in Mechanical Engineering
(Graduated from Sharif University of Technology, Tehran, Iran, 2013)

CURRENT AFFILIATION

Associate Professor, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran
Vice Chancellor for Research and Technology, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran

CONTACT INFORMATION

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m_azadi@ip-co.com
Website Addresses:
http://m-azadi.profile.semnan.ac.ir (main page)

PERSONAL INFORMATION

Date of Birth: July 4, 1983
Place of Birth: Shiraz, Iran
Citizenship: Iranian

Last update:
7/1/2021

EDUCATIONS

2019-Now Associate Professor, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran

2019 Visiting Researcher, Mechanical Engineering, University of Leoben (Montanuinversitaet), Leoben, Austria
Project: Thermo-mechanical fatigue and low cycle fatigue tests on nano-composites
Supervisors: Dr. Gerhard Winter and Prof. Florian Gruen

2015-2018 Assistant Professor, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran

2008-2013 PhD., Mechanical Engineering (Engine, Solid Mechanics), Sharif University of Technology, Tehran, Iran
Thesis: Thermo-mechanical fatigue lifetime prediction model for Al-alloy (A356.0) with thermal barrier coating - *Grade: Very Good*
Supervisor: Prof. Gholam Hossein Farrahi
Averaged Grade: 17.34

2011 Visiting Researcher, Mechanical Engineering, University of Leoben (Montanuinversitaet), Leoben, Austria
Project: Thermo-mechanical fatigue and low cycle fatigue tests on aluminum and magnesium alloys
Supervisors: Dr. Gerhard Winter and Prof. Wilfried Eichlseder

2006-2008 MSc., Mechanical Engineering (Vehicle Structure and Body, Solid Mechanics), K.N. Toosi University of Technology, Tehran, Iran
Thesis: Analysis and improvement of NVH behavior of a passenger car by using the design of experiment method - *Grade: 20*
Supervisors: Dr. Shahram Azadi and Dr. Mohammad Shariyat
Averaged Grade: 19.16

2002-2006 BSc., Mechanical Engineering (Solid Mechanics), Shiraz University, Shiraz, Iran
Thesis: Optimization of structures using in warning and advertise alarms - *Grade: 20*
Supervisor: Dr. Farhang Daneshmand
Averaged Grade: 15.20

2000-2001 Pre-University Degree, Mathematics and Physics, Bagher-o-Olum School, Marvdasht, Iran
Averaged Grade: 18.54

1998-2001 Diploma, Mathematics and Physics, Nemoneh Mardomi School, Marvdasht, Iran
Averaged Grade: 18.79

HONORS

2002	1115th placed in BSc. Entrance Exam Ranking, between about 1,000,000 Participants, Iran
2006	541th placed in MSc. Mechanical Engineering Iterance Exam Ranking, between about 15,000 Participants, Iran
2008	First placed in MSc. Ranking with Averaged Grade of 19.16, between 5 Graduated Students, K.N. Toosi University of Technology, Iran
2009	Introduced as Scientific Elite, Iranian National Elite Institute, Iran
2014	Best MSc. Thesis (Student: Mr. M. Mokhtari Shirazabad, Supervisor: Dr. S.M.A. Boutorabi, Advisor: Dr. M. Azadi) in the Scientific and Technical Festival, 8th International Conference on Internal Combustion Engines and Oil (ICICE&O-8), Iran
2018	Introduced as one of 17 Selected Scientific Projects in the Iran-Austria Impulse Program (between 78 projects), Iran
2018	Best BSc. Thesis (Student: Mr. M. Jamalkhani Khameneh, Supervisor: Dr. M. Azadi) in the Scientific and Technical Festival, 10th International Conference on Internal Combustion Engines and Oil (ICICE&O-10), Iran
2018	Best MSc. Thesis (Student: Mr. H. Sayar, Supervisor: Dr. A. Ghasemi-Ghalehbahman and Dr. M. Azadi) in 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Iran
2019	Best BSc. Thesis (Student: Mr. H. Bahmanabadi, Supervisor: Dr. M. Azadi) in 2nd National Conference on Internal Combustion Engines, Iran Society of Engine and Babol Noshirvani University of Technology, Iran
2019	Best MSc. Thesis (Student: Mr. S. Rezanezhad, Supervisor: Dr. M. Azadi) in 2nd National Conference on Internal Combustion Engines, Iran Society of Engine and Babol Noshirvani University of Technology, Iran
2019	Best Researcher in Faculty of Mechanical Engineering, Semnan University, Iran
2020	Best BSc. Thesis (Student: Mr. A. Basiri, Supervisor: Dr. M. Azadi) in Research Week, Irankhodro Powertrain Company (IPCO), Iran
2020	Best MSc. Thesis (Student: Mrs. F. Ahadi, Supervisor: Dr. M. Biglari and Dr. M. Azadi) in Research Week, Irankhodro Powertrain Company (IPCO), Iran
2020	Best Article (Student: Mr. H. Sayar, Supervisor: Dr. A. Ghasemi Ghale-bahman and Dr. M. Azadi) in Research Week, Irankhodro Powertrain Company (IPCO), Iran
2020	Best Research Project and Patent (Title: Nano-piston, cooperation between Semnan University and Motorsazi Pooya Neyestanak (MPN) Company) in Research Week, Irankhodro Powertrain Company (IPCO), Iran
2020	Best Patent in Engine Industry, (Improvement of high-cycle fatigue lifetime in aluminum alloy by nano SiO_2 reinforcement in order to use in engine piston, Semnan University, Motorsazi Pooya Neyestanak (MPN) Company, Mohammad Azadi, Mahboobeh Azadi, Mehrdad Zolfaghari, Saeid Rezanezhad and Roham Rasouli, Patent Number: 98652, International Category: C01B21/072, F01C1/100, C01B32/97, 2019), 11th International Conference on Internal Combustion Engines and Oil (ICICE&O-11), Iran
2020	Best BSc. Thesis as the first rank (Student: Mrs. H. Aroo, Supervisor: Dr. M. Azadi) in the Scientific and Technical Festival, 11th International Conference on Internal Combustion Engines and Oil (ICICE&O-11), Iran
2020	Best BSc. Thesis as the third rank (Student: Mr. K. Rashnoo, Supervisor: Dr. M. Azadi) in the Scientific and Technical Festival, 11th International Conference on Internal Combustion Engines and Oil (ICICE&O-11), Iran
2020	Best MSc. Thesis as the second rank (Student: Mrs. F. Ahadi, Supervisors: Dr. M. Biglari and Dr. M. Azadi) in the Scientific and Technical Festival, 11th International Conference on Internal Combustion Engines and Oil (ICICE&O-11), Iran
2020	Best MSc. Thesis as the second rank (Student: Mr. S.M.R. Hosseini Moghaddam, Supervisors: Dr. A.M. Jadidi, Advisor: Dr. M. Azadi) in the Scientific and Technical Festival, 11th International Conference on Internal Combustion Engines and Oil (ICICE&O-11), Iran
2020	Best MSc. Thesis (Student: Mr. M.J. Sharifi, Advisor: Dr. M. Azadi) in the Research and Technology Week, Faculty of Mechanical Engineering, Semnan University, Iran
2021	Best BSc. Thesis as the second rank (Student: Mrs. S. Dezianian) in engineering faculties, Haji-Ghorbani Award, Semnan University, Iran
2021	Best MSc. (Student: Mr. M.J. Sharifi), 3rd National Conference on Internal Combustion Engines, Shahid Rajaee Teacher Training University, Iran
2021	Best Professor in Education in Faculty of Mechanical Engineering, Semnan University, Iran

PROFESSIONAL QUALIFICATIONS

Computer Skills:

Coding and Analysis: Microsoft Office, HTML, ORIGIN, MATLAB, MINITAB
Finite Element Method: HYPERMESH, ABAQUS, FEMFAT

INTERESTS

Main Field: Fatigue in Materials

Biomechanics

Tissue Engineering

Aerospace Engineering

Automotive Engineering:

1) Engine Components
2) Vehicle Body and Structure

Mechanical Engineering (Solid Mechanics):

1) Composites and Nano-composites
2) Functionally Graded Materials (FGMs)
3) Elasticity, Plasticity, Visco-plasticity and Hyper-elasticity
4) Fatigue Testing and Modeling (HCF, LCF and TMF)
5) Fracture Mechanics, Creep and Reliability
6) Finite Element Methods (FEMs) and Structural Simulations
7) Noise, Vibration and Harshness (NVH)
8) Theories of Disks, Beams, Shells and Plates
9) Design of Experiment (DOE)

Additive Manufacturing

1) 3D-, 4D-, 5D- and 6D-printing
2) Fused Deposition Modeling (FDM)
3) Metamaterials and Topology Optimization

Surface Engineering:

4) Thermal Barrier Coatings (TBCs)
5) Wear Resistant Coatings

Materials Engineering:

1) Failure Analysis and Materials Investigation
2) Modeling of Materials Behaviors
3) Analysis of Fractured Components
4) Material Characterizations
5) Mechanical Properties

Industrial Engineering:

1) Project Management
2) Systems and Procedures

TEACHING EXPERIENCES

BSc.:

Shiraz University (2006-2007): Teaching Assistant (TA) for Laboratory of Strength of Materials, Strength of Materials I, Mechanical Engineering Design II
K.N. Toosi University of Technology (2007-2008): Teaching Assistant (TA) for Vibration, Strength of Materials I, Mechanical Engineering Design II
Sharif University of Technology (2008-2009): Teaching Assistant (TA) for Laboratory of Strength of Materials, Strength of Materials I
Islamic Azad University, Gharb Branch (2008-2010): Industrial Drawing, Hydraulics and Pneumatics, Professional Foreign Language, Computer Basics and Programing
Semnan University (2014-Now): Composite Materials, Design of Engines, Engineering Mathematics, Fracture/Fatigue/Creep, Industrial Drawing, Laboratory of Strength of Materials, Strength of Materials I/II, Mechanical Engineering Design I/II, Vehicle Chassis and Structure

MSc.:

Semnan University (2015-Now): Advanced Finite Element Methods, Researching Methods, Theories of Shells and Plates

PhD.:

Semnan University (2017-Now): Vehicle Chassis and Structure, Advanced Finite Element Methods, Theories of Shells and Plates

RESEARCH GRANTS

Grant Type	Institute or Company	Year	Budget
Research Project	K.N. Toosi University of Technology	2008	**15,000,000** Rials
Exchange Program	Iran Ministry of Science, Research and Technology	2011	**3,150.00** Euros
Exchange Program	Irankhodro Powertrain Company (IPCo)	2011	**50,000,000** Rials
PhD Thesis Grant	Sharif University of Technology	2013	**50,000,000** Rials
Research Grant	Semnan University	2015	**77,000,000** Rials
Welcome Grant	Semnan University	2016	**10,000,000** Rials
Research Grant	Semnan University	2016	**85,000,000** Rials
Research Project	Irankhodro Powertrain Company (IPCo)	2017	**20,000,000** Rials
MSc Thesis of Students	Iran Nanotechnology Innovation Council (INIC)	2017	**5,000,000** Rials
Research Grant	Semnan University	2017	**65,000,000** Rials
MSc Thesis of Students	Iran Nanotechnology Innovation Council (INIC)	2018	**5,000,000** Rials
Research Project	Motorsazi Pooya Neyestanak (MPN) Company	2018	**50,000,000** Rials
Research Project	Iran Tire Company	2018	**50,000,000** Rials
Research Grant	Semnan University	2018	**200,000,000** Rials
Research Project	Motorsazi Pooya Neyestanak (MPN) Company	2019	**30,000,000** Rials
Research Project	Motorsazi Pooya Neyestanak (MPN) Company	2019	**100,000,000** Rials
Best Researcher Grant	Semnan University	2019	**10,000,000** Rials
Research Grant	Semnan University	2019	**250,000,000** Rials
International Research Project	Iran-Austria Impulse Program	2020	**520,000,000** Rials (equal to **14,900.00** Euros)
Research Grant	Semnan University	2020	**248,000,000** Rials
Research Project	Motorsazi Pooya Neyestanak (MPN) Company	2021	**100,000,000** Rials
Article Publishing Grant	Iran Nanotechnology Innovation Council (INIC)	2021	**15,000,000** Rials
Research Project	Asia Ghata'at Daghigh Company	in progress	**300,000,000** Rials
International Research Project	Center for International Scientific Studies and Collaboration (CISSC)	in progress	**500,000,000** Rials
Research Project	Parmida Rubber Industry Company	in progress	**100,000,000** Rials
Research Grant	Semnan University	TBD	**?** Rials

My Research Assistant

2018-2021 Mr. Hamed Bahmanabdi
2021-Now Mr. Mohammad Sadegh Aghareb Parast

ADVISOR

Thesis	Student Name	Topic	Institute	Supervisor	Year
BSc	Amir Bagheri	Investigating engine emission under real driving cycle using ADVISOR software	Semnan University	Dr. M. Biglari	2017
BSc	Mohammad Hassan Rizi	Study of manufacturing method effect on creep behavior and lifetime in Inconel-713C nickel-based supper-alloy	Semnan University	Dr. A. Hajiali Mohammadi	2017
BSc	Armin Marbout	Study of heat treatment effect on creep behavior and lifetime in Inconel-713C nickel-based supper-alloy	Semnan University	Dr. A. Hajiali Mohammadi	2017
BSc	Seyed Mehdi Hosseini	Manufacturing of high-temperature pin-on-disk wear test with lubricant environment	Semnan University	Dr. V. Abedini	2018
BSc	Mehrdad Pourjam	Manufacturing of high-temperature reciprocating wear test with lubricant environment	Semnan University	Dr. V. Abedini	2018
BSc	Sama Safarloo	Study of microstructure and hardness of nickel-based superalloy 713C under age-hardening	Semnan University	Dr. M. Azadi	2018
BSc	Omid Nabiei	Study of nano-particles effect on thermo-physical properties and rheological behavior of cooling fluid in combustion engines	Semnan University	Dr. M. Biglari	2018
BSc	Mostafa Mirzakhani	Study on vibration of rotary bending fatigue testing device by digital image correlation technique	Semnan University	Dr. M.M. Khatibi	in progress
BSc	Mohammad Javad Barjan	Study on vibration of fretting fatigue testing device by digital image correlation technique	Semnan University	Dr. M.M. Khatibi	in progress
BSc	Ali Fattahi	Integrated fluid and solid analysis for heat transfer, strength and lifetime of compressor impeller in turbo-charger part	Semnan University	Dr. M. Biglari	in progress
BSc	Shaghayegh Torkaman	Identification of different geometries in acoustic metamaterial structures and the feasibility of 3D-printing	Semnan University	Dr. M.M. Khatibi	in progress
BSc	Morteza Talati Ahmad	Topology optimization of bone from substituted metamaterial with the objective of weight reduction and the constraint of strength	Semnan University	Dr. A. Ghodosian	in progress
BSc	Mohammad Reza Masoumi Ravandi	Investigation of compressive strength of bone by additive manufacturing of substituted metamaterial with 3D-printer	Semnan University	Dr. A. Ghodosian	in progress
MSc	Mehdi Mokhtari Shirazabad	The effect of rare earth elements on high cycle fatigue behavior of magnesium alloy AZ91	Iran University of Science and Technology	Dr. M.A. Boutorabi	2013
MSc	Ebrahim Alvandi	Multi-axial stress and fatigue analysis of aluminum cylinder heads	Shahid Rajaee Teacher Training University	Dr. A. Pourkamali Anaraki	2013
MSc	Mohammad Ghodrati	Numerical simulation of Al-Si alloy fatigue behavior under thermo-mechanical and isothermal loadings	Sharif University of Technology	Dr. G.H. Farrahi	2013
MSc	Mehran Felfeli	Modeling stress-strain behavior of aluminum alloy (A356.0) under thermo-mechanical loading	Sharif University of Technology	Dr. G.H. Farrahi	2013
MSc	Ali Shamloo	Cyclic behavior modeling of magnesium alloy (AZ91) under thermo-mechanical and low cycle fatigue loadings	Sharif University of Technology	Dr. G.H. Farrahi	2013

Thesis	Student Name	Topic	Institute	Supervisor	Year
MSc	Milad Rezvani Rad	Simulation of thermal barrier coating under thermo-mechanical and low cycle fatigue loadings	Sharif University of Technology	Dr. G.H. Farrahi	2014
MSc	Tohid Jadidi	Experimental investigation of ultrasonic assisted drilling for reinforced plastics	Semnan University	Dr. A. Hajiali Mohammadi	2018
MSc	Mohammad Zomorrodipour	Study of loading rate effect on mechanical properties of piston aluminum alloy, with and without nano-particles	Semnan University	Dr. A. Freidoon	2019
MSc	Arash Naderi	Study of nano-particles addition effect on high-temperature mechanical properties of piston aluminum alloy	Semnan University	Dr. A. Freidoon	2019
MSc	Seyed Mohammad Reza Hosseini Moghaddam	Analytical and experimental study of heat resources to improve heat transfer of working gases in Gamma-type Stirling engine	Semnan University	Dr. A.M. Jadidi	2019
MSc	Ferdos Hazbavi	Conceptual design of a rehabilitation robot with aim of retraining knee and ankle movements with simultaneous diagnosis and treatment capability	Semnan University	Dr. M.R. Dostmohammadi	2020
MSc	Mohsen Khorasani	An Investigation of performance of a fuel cell hybrid vehicle in an urban driving	Semnan University	Dr. F. Talebi	Not done!
MSc	Taban Mehr Gharaati	Investigating emission and fuel consumption of vehicle during a real driving cycle in Iran, comparing to standard cycles	Imam Khomeini International University	Dr. M. Momeni Movahed	in progress
MSc	Nima Sahragard	Topology optimization of engine connecting rod with objective of weight reduction and high-cycle fatigue lifetime enhancement by method of solid isotropic material with penalization	Semnan University	Dr. A. Ghodosian	in progress
PhD	Mana Motamedi	Fatigue analysis of bitumen, mastic and asphalt concrete mixtures using continuum damage mechanics	Semnan University	Dr. G.H. Shafabakhsh	2020
PhD	Hamed Jafari	Experimental analysis of friction between piston ring and cylinder in internal combustion engine by changing oil conditions and cylinder coating	Semnan University	Dr. M. Biglari and MSc. S.M. Mirsalim	in progress

SUPERVISOR

Thesis	Student Name	Topic	Institute	Other Supervisor	Year
BSc	Amir Hossein Rasouli	Fatigue damage calculation in A356.0 aluminum alloy during low-cycle fatigue loading by continuum damage mechanic method	Semnan University	-	2016
BSc	Hadi Abedi Koshki	Fatigue damage calculation in AZ91 magnesium alloy during low-cycle fatigue loading by continuum damage mechanic method	Semnan University	-	2016
BSc	Saeid Rezanezhad	Creep behavior prediction model of nickel-based Inconel 713C superalloy	Semnan University	-	2016
BSc	Mehdi Posht Mashhadi	Reliability calculation for light alloys with application of engine components under fatigue loadings	Semnan University	-	2016
BSc	Mahshad Farzannasab	Study of mechanical properties and fatigue behavior in bones	Semnan University	-	2017
BSc	Hamed Bahmanabadi	Evaluation of continuum damage mechanic in Inconel 713C nickel-based super-alloy under force-controlled creep loading	Semnan University	-	2017
BSc	Ali Akbar Emadoddin	Finite element simulation of turbine blades in turbo-charger component under creep loadings	Semnan University	-	2017
BSc	Mohammad Jamalkhani Khameneh	Investigation of high-cycle fatigue behavior for GJS700 cast iron with application of engine crank shaft	Semnan University	-	2017
BSc	Mohammad Hadi Mehdipanah	Evaluation of stress-lifetime in GJS700 cast iron under high-cycle rotary bending fatigue loading	Semnan University	-	2017
BSc	Farzaneh Khezri	Study of high-cycle fatigue behavior in AZ91 magnesium alloy using continuum damage mechanics method	Semnan University	-	2018
BSc	Keyvan Keypour	Evaluation of continuum damage in composite under creep loading at different temperatures	Semnan University	-	2018
BSc	Adel Basiri	Numerical simulation of low-cycle fatigue behavior in engine exhaust manifold under cyclic thermo-mechanical loadings	Semnan University	-	2018
BSc	Mehdi Samiei	Estimation of fatigue properties in aluminum alloy during low-cycle fatigue loading based on striation marks	Semnan University	-	2018
BSc	Hanieh Aroo	Investigation of high-temperature creep behavior in piston aluminum alloy, with and without nano-particles	Semnan University	-	2018
BSc	Mohammad Sadegh Aghareb Parast	Investigation of nitriding process on high-cycle fatigue behavior of GJS700 cast iron under rotary bending loading	Semnan University	-	2018
BSc	Mohammad Mahdi Aliakbari	Experimental study on thermal expansion coefficient of aluminum and magnesium light alloys	Semnan University	-	2019
BSc	Ali Dadashi	Isothermal and un-isothermal low-cycle fatigue lifetime prediction of aluminum-silicon alloy in engine piston based on modified plastic strain energy	Semnan University	-	2019
BSc	Ghazaleh Nosrat	Isothermal and un-isothermal low-cycle fatigue lifetime prediction of aluminum-silicon alloy in engine piston based on continuum damage mechanics	Semnan University	-	2019

Thesis	Student Name	Topic	Institute	Other Supervisor	Year
BSc	Amir Masoud Afsari Golshan	Study of heat treatment effect on high-temperature creep behavior in aluminum-silicon alloy	Semnan University	-	2019
BSc	Mohammad Hossein Hajiesmaeili	Experimental study on fretting fatigue behavior in aluminum-silicon alloy of engine piston	Semnan University	-	2019
BSc	Kianosh Rashno	Investigation of nano-clay particles addition effect on mechanical properties of cylinder-head aluminum-silicon-copper alloy, under different loading rates	Semnan University	-	2019
BSc	Shokouh Dezianian	Study of fatigue behavior in materials made from additive manufacturing	Semnan University	-	2020
BSc	Ashkan Behmanesh	Study of stress level effect on creep behavior of aluminum matrix composite, reinforced by SiO_2 nano-particles	Semnan University	-	2020
BSc	Sajad Golzari	Continuum damage prediction in AZ61A magnesium alloy under torsional low-cycle fatigue loading	Semnan University	-	2021
BSc	Ali Shahsavand	Study of wear behavior in vehicle engine piston aluminum alloy, with and without nano-particles	Semnan University	-	in progress
BSc	Farhad Mohammadi	Experimental and numerical investigations on the geometry effect of the test sample on bending fatigue behavior of metal-based nano-composite	Semnan University	-	in progress
BSc	Shaghayegh Takrousta	Continuum damage prediction in AZ61A magnesium alloy under tensile-compressive low-cycle fatigue loading	Semnan University	-	in progress
BSc	Roozbeh Ghanadi-Azar	Study of fretting fatigue behavior in cylinder head aluminum alloy, with and without nano-clay particles	Semnan University	-	in progress
MSc	Hasan Sayar	Failure mechanisms investigation in composite under different tensile loading rate using acoustic emission method	Semnan University	First supervisor: Dr. A. Ghasemi Ghale-bahman	2017
MSc	Mohsen Alizadeh	Crack behavior prediction in composite under cyclic loadings using acoustic emission	Semnan University	Second supervisor: Dr. A. Farakhabadi	2017
MSc	Amir Shirzadi	Effects of parameters in plasma thermal spray process on fatigue lifetime of thermal barrier coating using design of experiments	Iran University of Industries and Mines	Second supervisor: M. Ostad Shabani	2018
MSc	Nezamodin Raeisi	Crack detection in composites under tensile loading based on vibration analysis	Semnan University	Second supervisor: Dr. M. Shakouri	2018
MSc	Mohammad Dorfaki	Investigation of loading rate effect on low-cycle fatigue behavior in composite	Semnan University	-	2018
MSc	Saied Rezanezhad	Investigation of heat treatment effect on bending high-cycle fatigue properties in aluminum-silicon alloy, with and without nano-particles	Semnan University	-	2018
MSc	Mehrdad Zolfaghari	Investigation of nano-particles addition effect on bending high-cycle fatigue lifetime in engine piston aluminum alloy	Semnan University	-	2018
MSc	Mostafa Saeidi	Investigation of loading frequency effect on crack growth behavior in polymer-based	Semnan University	-	2018

Thesis	Student Name	Topic	Institute	Other Supervisor	Year
		laminated composite by digital image correlation			
MSc	Fatemeh Farhadian Langroodi	Study loading rate of adhesive bonding of composite and metal structures	Semnan University	First supervisor: Dr. M. Shakouri	2019
MSc	Fatemeh Ahadi	Optimization of thermal barrier coating type and thickness in order to improve power and efficiency of Gamma Stirling Engine	Semnan University	First supervisor: Dr. M. Biglari	2019
MSc	Mohammad Jafar Sharifi	Study of high-cycle fatigue properties in cylinder head aluminum-silicon-copper alloy, reinforced by nano-clay particles	Semnan University	-	2020
MSc	Bahram Vaziri	Optimization of working fluid type and combination percent in order to improve power and efficiency of Gamma Stirling Engine	Semnan University	First supervisor: Dr. M. Biglari	2020
MSc	Hamed Bahmanabadi	Experimental and numerical study on low-cycle fatigue behavior of aluminum metal matrix nano-composite at different temperatures	Semnan University	-	2020
MSc	Majid Salehi	Numerical simulation of polymer-based composite behavior under monotonic and cyclic loading by finite element method	Semnan University	-	Not done!
MSc	Hanieh Aroo	Investigation of corrosion effect on high-cycle bending fatigue lifetime for heat treated aluminum-matrix nano-composite comparing to base-material aluminum-silicon alloy	Semnan University	-	2021
MSc	Mohammad Sadegh Aghareb Parast	Study of strengthening effect of nano-particles and heat treatment on fatigue and fretting-fatigue properties in aluminum-silicon alloy	Semnan University	-	2021
MSc	Adel Basiri	Numerical simulation of ratcheting behavior in aluminum and magnesium cast light alloys by multi-scale microstructure models	Semnan University	Second supervisor: Dr. A. Ghasemi Ghale-bahman	2021
MSc	Ahmad Yousefi Parchin Oliya	Investigation of heat treatment effect on high-cycle fatigue properties of AZ91 magnesium-aluminum-zinc alloy under cyclic bending loading conditions	Semnan University	-	in progress
MSc	Ali Dadashi	Investigating the effect of 3D printing parameters in additive manufacturing process on bending fatigue properties of PLA biomaterial	Semnan University	-	in progress
MSc	Mohammad Hasan Rahaei	Study of 3D printing parameters on creep behavior of PLA polymer fabricated by additive manufactured fused diffusion modeling technique	Semnan University	-	in progress
MSc	Amin Asghaei	Evaluation of high-cycle bending fatigue properties and the fracture behavior in AM60 magnesium alloy by friction welding	Semnan University	Second supervisor: Dr. M. Mahmoodi	in progress
MSc	Elaheh Ejlalipour	Numerical simulation of acoustic emission in 2000-series aluminum alloy under monotonic and cyclic loadings	Semnan University	-	in progress
MSc	Seyed Hamid Hashemi	Investigation of the high-pressure casting mold design in cylinder-head cap of combustion engine using finite element simulation method	Semnan University	First supervisor: Dr. M. Mahmoodi	in progress
MSc	Ehsan Rameni	Study of high-cycle bending fatigue behavior in AA7022 aluminum alloy fabricated by friction stir extrusion process	Semnan University	First supervisor: Dr. M. Mahmoodi	in progress

Thesis	Student Name	Topic	Institute	Other Supervisor	Year
MSc	Nasim Momeni Shorkachali	Numerical simulation of heat transfer in cooling system of internal combustion engine with hybrid-nano-fluid and temperature-dependent thermo-physical properties	Semnan University	First supervisor: Dr. A.M. Jadidi	in progress
MSc	Shokouh Dezianian	Topology optimization of the vehicle non-pneumatic tire from multi-material metamaterial with the objective of compressive strength and bending fatigue lifetime	Semnan University	-	in progress
MSc	Mohammad Hossein Tavasoli	Study of the effect of driving behavior and type on characteristics of statistical data and final driving cycle	Semnan University	-	in progress
MSc	Alireza Asadi	Study of effects of geographical climate and climatic conditions on characteristics of statistical data and driving cycle	Semnan University	-	in progress
PhD	Sajad Khisheh	Effect of ageing heat treatment on high-cycle fatigue properties of A380 aluminum-silicon-copper alloy in engine cylinder head	University of Birjand	First supervisor: Dr. K. Khalili	2021
PhD	Seyed Morteza Hosseini	Analysis of vibration and acoustic emission data in GJS700 cast iron under cyclic bending loading to predict fatigue lifetime related to crack initiation and propagation	Semnan University	First supervisor: Dr. A. Ghasemi Ghale-bahman	in progress
PhD	Mohammad Javad Izadi	Investigation of effects of thermal barrier coating parameters on heat transfer in aluminum piston by finite element method	Semnan University	First supervisor: Dr. F. Talebi	Not done!
PhD	Saeid Rezanezhad	Experimental study of wear and wear-fatigue behavior in AM60 magnesium alloy with and without surface modification by pulsed electron beam irradiation (PEBI) method and presenting a damage model	Semnan University	-	in progress
PhD	Ali Ashraf Talesh	Effects investigation of corroded and modified surfaces by pulsed electron beam irradiation technique on high-cycle bending fatigue properties of AM60 magnesium alloy	Semnan University	-	in progress
PhD	Mohammad Mokhtari	Experimental and numerical modeling and optimization of the effective parameters on the generated heat and cutting force in bone drilling process	Semnan University	First supervisor: Dr. V. Abedini	in progress
PhD	Fatemeh Ahadi	Stent topology optimization based on hemodynamics parameters and structural characteristics	Semnan University	First supervisor: Dr. M. Biglari	in progress
PhD	Morteza Kianifar	Fatigue properties of additive-manufactured composites and nano-composites	Semnan University	-	in progress for proposal
PhD	Bahram Vaziri	Towards design optimization of a novel spiral insert/stent for coronary artery bypass grafts by fluid-solid interactions framework	Semnan University	First supervisor: Dr. S. Zirak	in progress for proposal
PhD	Sattar Mohammadi Esfarjani	Multi- and bi-material meta-materials with negative Poisson ratio and negative thermal expansion	Semnan University	-	in progress for proposal

PUBLICATIONS

Score in ORCID:	-	*Author ID: 0000-0001-8686-8705
H-Index in Google Scholar:	**19**	*Citations NO: 1020, i_{10}-index: 37
H-Index in SCOPUS:	**16**	*Author ID: 35077100300, Documents NO: 65, Citations NO: 653
H-Index in Publons:	**15**	*Citations NO: 669, Reviewing: 561, Editoring: 11
H-Index in Research Gate:	**16/13**	*RG Score: 29.73, Citation No: 674
Highest Impact Factor:	**7.635**	*2 articles in Composites Part B

Articles/Books:

Conference Proceeding	**2** proceedings
Chapter Books	**2** chapters
Articles	**165** articles
ISI/ISC Journal Articles	**73** articles
Conference Articles	**94** articles
English Articles	**77** articles
Persian Articles	**68** articles
Patents	**13** patents
Research Projects	**10** projects

Patents, Chapter Books, Proceedings and Special Issues:

2011

1) Heat Transfer: Mathematical Modeling, Numerical Methods and Information Technology, Chapter 11, Thermo-elastic Stresses in FG-cylinders, **Mohammad Azadi** and Mahboobeh Azadi, Editor: Aziz Belmiloudi, ISBN: 978-953-307-550-1, InTech Publication, February 2011

2014

2) Proceedings of 8th International Conference on Internal Combustion Engines and Oil (ICICE&O-8), Proceeding Editor: **Mohammad Azadi**, Dina Motors Publication, February 2014
3) Acceptance of Suggesting a New Journal, Advances in Powertrains and Automotives, Science and Education Publishing, USA, 2014
4) Acceptance of Suggesting a New Journal, International Journal of Materials Lifetime, Science and Education Publishing, USA, 2014

2016

5) Handbook of Materials Failure Analysis: with Case Studies from The Aerospace, Chemical, and Oil and Gas Industries, Chapter 21, Failure Analysis and Prevention in Powertrain Systems, **Mohammad Azadi**, ISBN: 978-0-12-800950-5, Elsevier Publication, 2016
6) Proceedings of 9th International Conference on Internal Combustion Engines and Oil (ICICE&O-9), Proceeding Editor: **Mohammad Azadi**, Dina Motors Publication, February 2016

2017

7) High-temperature four-point rotary-bending high-cycle fatigue testing machine, Irankhodro Powertrain Company, **Mohammad Azadi**, Hojat Noori Benvarnazer, Mohammad Jamalkhani Khameneh, Mehdi Mokhtari Shirazabad and Peyman Tahi, Patent Number: 91821, International Category: G01N 32/3; G01M 00/5, 2017
8) Etchant for metallography of Inconel-713C nickel-based superalloy, Semnan University Science and Technology Park, **Mohammad Azadi**, Mahboobeh Azadi and Sama Safarloo, Patent Number: 93819, International Category: G23F1/16, 2017
9) Heat treatment procedure for Inconel 713C superalloy by hardness improvement target, Semnan University Science and Technology Park, **Mohammad Azadi**, Mahboobeh Azadi, Sama Safarloo, Fatemeh Loghman and Armin Marbout, Patent Number: 93435, International Category: G22F1/00, 2017

2019

10) Scientific Confirmation on Patent, Etchant for metallography of Inconel-713C nickel-based superalloy, Semnan University Science and Technology Park, **Mohammad Azadi**, Mahboobeh Azadi and Sama Safarloo, Patent Number: 93819, Iranian Research Organization for Science and Technology (IROST), Score: 6 (out of 10), 2019
11) Scientific Confirmation on Patent, Heat treatment procedure for Inconel 713C superalloy by hardness improvement target, Semnan University Science and Technology Park, **Mohammad Azadi**, Mahboobeh Azadi, Sama Safarloo, Fatemeh Loghman and Armin Marbout, Patent Number: 93435, Semnan University Science and Technology Park, Score: 2.2 (out of 10), 2019
12) Production and improvement of wear properties in aluminum matrix nano-composite with silica reinforcement for applying in engine piston, Semnan University Science and Technology Park, **Mohammad Azadi**, Mahboobeh Azadi, Mehrdad Zolfaghari and Saeid Rezanezhad, Patent Number: 97932, International Category: C01B32/00, C01F7/00, 2019
13) Fretting fatigue test machine with functionality in lubricant and high temperature, Semnan University, **Mohammad Azadi**, Mehrdad Zolfaghari, Mohammad Hossein Hajiesmaeili and Saeid Rezanezhad, Patent Number: 98399, International Category: G01N/34, 2019
14) Improvement of high-cycle fatigue lifetime in aluminum alloy by nano SiO_2 reinforcement in order to use in engine piston, Semnan University, Motorsazi Pooya Neyestanak (MPN) Company, **Mohammad Azadi**, Mahboobeh Azadi, Mehrdad Zolfaghari, Saeid Rezanezhad and Roham Rasouli, Patent Number: 98652, International Category: C01B21/072, F01C1/100, C01B32/97, 2019
15) High-temperature (300°C) pin-on-disc wear test machine in lubricated environment, Semnan University, **Mohammad Azadi**, Vahid Abedini, Seyed Mehdi Hossieni and Mehrdad Pourjam, Patent Number: 98830, International Category: G01N3/00, 2019
16) Increasing process of creep lifetime and properties in AlSiCuNiMg alloy by nano-SiO_2-particles and heat treatment (to complete Patent No. 98652), Semnan University, **Mohammad Azadi** and Hanieh Aroo, Patent Number: 99359, International Category: C30B29/26, C01B32/97, 2019
17) Improvement of mechanical and bending fatigue properties in cylinder-head aluminum alloy by clay nano-particles and heat treatment, Semnan University, **Mohammad Azadi**, Mahboobeh Azadi, Kianoosh Rashnoo, Mohammad Jafar Sharifi, Patent Number: 99513, International Category: F01C1/00, C01B21/00, 2019

18) Scientific Confirmation on Patent, Production and improvement of wear properties in aluminum matrix nano-composite with silica reinforcement for applying in engine piston, Semnan University Science and Technology Park, **Mohammad Azadi**, Mahboobeh Azadi, Mehrdad Zolfaghari and Saeid Rezanezhad, Patent Number: 97932, Iranian Research Organization for Science and Technology (IROST), Score: 4 (out of 10), 2019
19) Nano-piston technology, TRL 2, Irantechhub, Iran Ministry of Science, Research and Technology
20) Fretting fatigue test device, TRL 2, Irantechhub, Iran Ministry of Science, Research and Technology
21) Reciprocating wear test device, TRL 5, Irantechhub, Iran Ministry of Science, Research and Technology

2020

22) Reciprocating wear test machine of engine piston at high-temperature (300°C) and in lubricated environment, Motorsazi Pooya Neyestanak (MPN) Company, **Mohammad Azadi**, Seyed Mehdi Hosseini, Roham Rasouli, Zeynab Naji Totonchi Azar, Sedaghat Fazeli, Zeynab Pourbaferani, and Mohsen Alizadeh, Patent Number: 100252, International Category: F02F3/00, G01N19/00, G01N3/00, 2020
23) Reciprocating wear tester with variable force at high-temperature and non-acidic lubricated environment, Semnan University, **Mohammad Azadi**, Vahid Abedini, Seyed Mehdi Hossieni and Mehrdad Pourjam, Patent Number: 100688, International Category: G01N3/56, 2020

2021

24) Thermal shock fatigue tester at different temperatures, variable heat rate and measurement of strain and crack length by image processing technique, Semnan University, **Mohammad Azadi**, Roozbeh Ghanadi-Azar, Patent Number: 103086, International Category: G01K7/00, G01B7/00, G01K5/00, F02F1/00, 2021
25) Scientific Confirmation on Patent, Reciprocating wear test machine of engine piston at high-temperature (300°C) and in lubricated environment, Motorsazi Pooya Neyestanak (MPN) Company, **Mohammad Azadi**, Seyed Mehdi Hosseini, Roham Rasouli, Zeynab Naji Totonchi Azar, Sedaghat Fazeli, Zeynab Pourbaferani, and Mohsen Alizadeh, Patent Number: 100252, Semnan University Science and Technology Park, Score: 6.25 (out of 10), 2021
26) **Mohammad Azadi**, Hamed Bahmanabadi and Mahshad Farzannasab, Translation on Vehicular Engine Design, Semnan University Publication, 2021
27) Acceptance of Suggesting a New Journal, International Journal of Additive Manufacturing, Faculty of Mechanical Engineering, Semnan University, 2021

Workshops and Keynotes:

2015

1) Workshop on Articles Writing, Faculty of Mechanical Engineering, Semnan, Iran
2) Workshop on Simulation in Engine (Solid Mechanics Part), Faculty of Mechanical Engineering, Semnan University, Semnan, Iran

2016

1) Workshop on Strategy and Road-Map of Powertrains in The World, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran

2018

2) Workshop on Articles Writing, Irankhodro Powertrain Company (IPCO), Tehran, Iran

2019

3) Workshop on Articles Writing, Irankhodro Powertrain Company (IPCO), Tehran, Iran
4) Workshop on Articles Writing, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran
5) Workshop on Engine Tests and Validation, Motorsazi Pooya Neyestanak (MPN) Company, Tehran, Iran
6) Workshop on Nano-Technology in Mechanical Engineering based on Engine Applications, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran

2020

7) Keynote on A Model for Science and Industry Cooperation based on Full-Service Supplier, 11th International Conference on Internal Combustion Engines and Oil, Sapco Company, Tehran, Iran
8) Workshop on Engine Tests and Validation, Motorsazi Pooya Neyestanak (MPN) Company, Naeen, Iran
9) Workshop on Design of Experiments (DOE), Irankhodro Powertrain Company (IPCO), Tehran, Iran
10) Workshop on Social Networks for Researchers, Semnan University, Semnan, Iran
11) Workshop on Proposal for International Grants, Semnan University, Semnan, Iran
12) Workshop on Patent Reviewing, Irankhodro Powertrain Company (IPCO), Tehran, Iran
13) Workshop on Design of Experiments (DOE), Semnan University, Semnan, Iran

2021

14) Keynote Speaker, Topic: A review on recent advances in additive manufacturing: 4D-printing against 3D-printing in addition to nanotechnology, The 10th Spring World Congress on Engineering and Technology, Xi'an, China, April 20-22
15) Tech-Day, Topic: Iran driving cycle, Irankhodro Powertrain Company (IPCo.), Tehran, Iran

Research Projects:

2008

1) Shahram Azadi, **Mohammad Azadi** and Farshad Zahedi, Analysis and improvement of NVH and fatigue behavior of a body car, Research Project for K.N. Toosi University of Technology, Tehran, Iran, 2008

2016

2) **Mohammad Azadi** and Mahboobeh Azadi, Study of high-temperature creep behavior of IN713C nickel-based super-alloy by presenting lifetime prediction model, Research Project for Semnan University, Semnan, Iran, 2016

2017

3) Mahboobeh Azadi, **Mohammad Azadi** and Alireza Hajiali Mohammadi, Effect of manufacturing method and heat treatment on creep behavior of a nickel-based super-alloy, Research Project for Semnan University, Semnan, Iran, 2017
4) **Mohammad Azadi**, Market study for development of failure analysis business focused on materials behavior laboratory, Research Project for Irankhodro Powertrain Company (IPCo), Tehran, Iran, 2017

2018

5) **Mohammad Azadi**, Obtaining ability in designing vehicle engine piston, Research Project for Motorsazi Pooya Neyestanak (MPN) Company, Naein, Iran, 2018
6) **Mohammad Azadi**, Simulation and numerical analysis of tire behavior, Research Project for Iran Tire Company, Tehran, Iran, 2018

2019

7) **Mohammad Azadi**, Improvement in mechanical and fatigue properties for pistons by nano-particles, Research Project for Motorsazi Pooya Neyestanak (MPN) Company, Naein, Iran, 2019
8) **Mohammad Azadi**, Design knowledge of vehicle engine components, Research Project for Motorsazi Pooya Neyestanak (MPN) Company, Naein, Iran, 2019

2020

9) **Mohammad Azadi** and Florian Gruen, Evaluation of low-cycle fatigue properties in piston aluminum alloys, reinforced by nano-particles, A Research Project for the Iran-Austria Impulse Program (Semnan University and University of Leoben), Semnan and Leoben, Iran and Austria, 2020

2021

10) **Mohammad Azadi**, Scientific documents for knowledge-based Motorsazi Pooya Neyestanak (MPN) Company, Research Project for Motorsazi Pooya Neyestanak (MPN) Company, Naein, Iran, 2021

Journal Articles:

2008

1) Mehrnoosh Damircheli and **Mohammad Azadi**, Non-linear thermo-elastic stresses analysis of a rotating FG-disk by considering temperature dependency of material properties, Journal of Solid Mechanics in Engineering, Year 1, Number 2, pp. 53-61, Summer 2008 (in Persian)

2009

2) **Mohammad Azadi** and Mehrnoosh Damircheli, Solid-fluid interaction and its effects on piping systems, Journal of Sharif Mechanics, Tehran, Iran, Year 13, Number 36, pp. 60-63, Summer 2009 (in Persian)
3) **Mohammad Azadi** and Mahboobeh Azadi, Nonlinear transient heat transfer and thermo-elastic analysis of thick-walled FGM cylinder with temperature-dependent material properties using Hermitian transfinite element, Journal of Mechanical Science and Technology, Volume 23, Number 10, pp. 2635-2644, 2009
4) Shahram Azadi, **Mohammad Azadi** and Farshad Zahedi, NVH Analysis and Improvement of a Vehicle Body Structure Using DOE Method, Journal of Mechanical Science and Technology, Volume 23, Number 11, pp. 2980-2989, 2009
5) **Mohammad Azadi**, Shahram Azadi, Mahmood Moradi and Farshad Zahedi, Multidisciplinary optimization of a car component under NVH and weight constraints using RSM, International Journal of Vehicle Noise and Vibration, Volume 5, Number 3, pp. 261-270, 2009

2010

6) Mohammad Shariyat, Davood Asgari and **Mohammad Azadi**, Analysis of transient thermo-elastic behavior of thick-walled FG-cylinder having temperature dependent material properties by using finite element method, Amirkabir Journal of Science and Technology, Mechanical and Aerospace Engineering Transaction, Year 42, Number 3, 2010 (in Persian)
7) **Mohammad Azadi** and Mohammad Shariyat, Nonlinear transient transfinite element thermal analysis of thick-walled FGM cylinders with temperature-dependent material properties, Meccanica, Volume 45, Number 3, pp. 305-318, 2010

2011

8) **Mohammad Azadi**, Free and forced vibration analysis of FG-beam considering temperature dependency of material properties, Journal of Mechanical Science and Technology, Volume 25, Number 1, pp. 69-80, 2011
9) Mehrnoosh Damircheli and **Mohammad Azadi**, Temperature and thickness effects on thermal and mechanical stresses of rotating FG disk, Journal of Mechanical Science and Technology, Volume 25, Number 3, pp. 827-836, 2011
10) Atieh Moridi, **Mohammad Azadi** and Gholam Hossein Farrahi, Coating thickness and roughness effect on stress distribution of A356.0 under thermo-mechanical loadings, Procedia Engineering, Volume 10, pp.1373-1378, 2011
11) Mehdi Mokhtari Shirazabad, Seyed Mohammad Ali Boutorabi, **Mohammad Azadi** and Mehdi Nikravan, An investigation of high cycle fatigue behavior of magnesium alloy for cylinder head application, The Journal of Engine Research, Volume 24, pp. 29-35, 2011 (in Persian)
12) Atieh Moridi, **Mohammad Azadi** and Gholam Hossein Farrahi, Numerical simulation of thermal barrier coating system under thermo-mechanical loadings, Lecture Notes in Engineering and Computer Science, Volume 2192, Number 1, pp. 1959-1964, 2011

2012

13) Mahdi Maghsoudi Mehrabani, Ali Asghar Jafari and **Mohammad Azadi**, Multidiciplinary optimization of a stiffened shell by genetic algorithm, Journal of Mechanical Scienece and Technology, Volume 26, Number 2, pp. 517-530, 2012
14) **Mohammad Azadi**, Atieh Moridi and Gholam Hossein Farrahi, Optimal design experiment of plasma thermal spray parameters at bending loads, International Journal of Surface Science and Engineering, Volume 6, Number 1/2, pp. 3-14, 2012
15) **Mohammad Azadi**, Amir Mafi, Mehdi Roozban and Farshid Moghaddam, Failure analysis of a crack gasoline engine cylinder head, Journal of Failure Analysis and Prevention, Volume 12, Number 3, pp. 286-294, 2012
16) **Mohammad Azadi**, Mehdi Roozban and Amir Mafi, Failure analysis of an intake valve in a gasoline engine, The Journal of Engine Research, Volume 26, pp. 3-9, 2012

17) Gholam Hossein Farrahi, Milad Rezvani Rad and **Mohammad Azadi**, Coating thickness effect on stress distribution of coated cylinder head considering residual stress, The Journal of Engine Research, Volume 26, pp. 49-57, 2012
18) **Mohammad Azadi**, Gholam Hossein Farrahi and Farshad Zahedi, Low cycle fatigue analysis of magnesium alloy cylinder head based on plastic strain energy approach, The Journal of Engine Research, Volume 27, pp. 3-10, 2012 (in Persian)
19) Gholam Hossein Farrahi, Mohammad Ghodrati and **Mohammad Azadi**, Finite element analysis of thermal and mechanical stresses in diesel engine cylinder head using two-layer elastic-viscoplastic model, The Journal of Engine Research, Vol. 28, pp. 51-60, 2012 (in Persian)

2013

20) **Mohammad Azadi** and Mehdi Mokhtari Shirazabad, Heat treatment effect on thermo-mechanical fatigue and low cycle fatigue behaviors of A356.0 aluminum alloy, Materials and Design, Volume 45, pp. 279-285, 2013
21) **Mohammad Azadi**, Effects of strain rate and mean strain on cyclic behavior of aluminum alloys under isothermal and thermo-mechanical fatigue loadings, International Journal of Fatigue, Volume 47, pp. 148-153, 2013
22) **Mohammad Azadi**, Mahdi Baloo, Gholam Hossein Farrahi and Seyed Mostafa Mirsalim, A review of thermal barrier coating effects on diesel engine performance and components lifetime, International Journal of Automotive Engineering, Volume 3, Number 1, pp. 305-317, 2013
23) **Mohammad Azadi**, Gholam Hossein Farrahi, Gerhard Winter and Wilfred Eichlseder, The effect of various parameters on out-of-phase thermo-mechanical fatigue lifetime of A356.0 cast aluminum alloy, International Journal of Engineering Transactions C: Aspects, Volume 26, Number 12, pp. 1459-1468, 2013
24) **Mohammad Azadi**, Gholam Hossein Farrahi, Gerhard Winter and Wilfred Eichlseder, Experimental fatigue lifetime of un-coated and coated aluminum alloy under isothermal and thermo-mechanical loadings, Ceramics International, Volume 39, pp. 9099-9107, 2013
25) Mehdi Mokhtari Shirazabad, Seyed Mohammad Ali Boutorabi, **Mohammad Azadi** and Mehdi Nikravan, Effect of rare earth elements on high cycle fatigue behavior of AZ91 alloy, Materials Science and Engineering A, Volume 587, pp. 179-184, 2013
26) Mehdi Mokhtari Shirazabad, **Mohammad Azadi**, Gholam Hossein Farrahi, Gerhard Winter and Wilfred Eichlseder, Improvement of high temperature fatigue lifetime in AZ91 magnesium alloy by heat treatment, Materials Science and Engineering A, Volume 588, pp. 357-365, 2013
27) **Mohammad Azadi**, Gholam Hossein Farrahi and Atieh Moridi, Optimization of air plasma sprayed thermal barrier coating parameters in diesel engine applications, Journal of Materials Engineering and Performance, Volume 22, Number 11, pp. 3530-3538, 2013
28) Gholam Hossein Farrahi, **Mohammad Azadi**, Gerhard Winter and Wilfred Eichlseder, A new energy-based isothermal and thermo-mechanical fatigue lifetime prediction model for aluminum-silicon-magnesium alloy, Fatigue and Fracture of Engineering Materials and Structures, Volume 36, Number 12, pp. 1323-1335, 2013
29) **Mohammad Azadi**, Rezvan Roohani, Mehdi Roozban and Amir Mafi, Failure analysis of a dynamometer drive shaft coupled to an engine, The Journal of Engine Research, Volume 30, pp. 37-46, 2013

2014

30) **Mohammad Azadi**, Gholam Hossein Farrahi, Gerhard Winter and Wilfred Eichlseder, Fatigue lifetime of AZ91 magnesium alloy subjected to cyclic thermal and mechanical loadings, Materials and Design, Volume 53, pp. 639-644, 2014
31) Gholam Hossein Farrahi, Ali Shamloo, Mehran Felfeli and **Mohammad Azadi**, Numerical simulations of cyclic behaviors in light alloys under isothermal and thermo-mechanical fatigue loadings, Materials and Design, Volume 56, pp. 245-253, 2014
32) **Mohammad Azadi**, Gholam Hossein Farrahi, Gerhard Winter and Wilfred Eichlseder, Thermo-mechanical behaviors of light alloys in comparison to high temperature isothermal behaviors, Materials at High Temperatures, Volume 31, Number 1, pp. 12-17, 2014
33) Atieh Moridi, **Mohammad Azadi** and Gholam Hossein Farrahi, Thermo-mechanical stress analysis of thermal barrier coating system considering thickness and roughness effects, Surface and Coatings Technology, Volume 243, pp. 91-99, 2014
34) **Mohammad Azadi**, Mohammad Ghodrati and Gholam Hossein Farrahi, Experimental and numerical evaluations of stress relaxation in A356 aluminum alloy subjected to out-of-phase thermo-mechanical cyclic loadings, Materials at High Temperatures, Volume 31, Number 3, pp. 204-210, 2014

35) **Mohammad Azadi**, Akbar Naderpour, Mehdi Roozban, Amir Mafi, Farshid Moghaddam, Hamed Navabi, Mohammad Kazemi and Mehdi Rezaei, Complete analysis for material, mechanism, vibration, stress and fatigue in valve spring, The Journal of Engine Research, Volume 33, pp. 3-12, 2014
36) Gholam Hossein Farrahi, Mohammad Ghodrati, **Mohammad Azadi** and Milad Rezvani Rad, Stress-strain time-dependent behavior of A356.0 aluminum alloy subjected to cyclic thermal and mechanical loadings, Mechanics of Time-Dependent Materials, Volume 18, Number 3, pp. 475-491, 2014
37) Milad Rezvani Rad, Gholam Hossein Farrahi, **Mohammad Azadi** and Mohammad Ghodrati, Effects of preheating temperature and cooling rate on two-step residual stress in thermal barrier coatings considering real roughness and porosity effect, Ceramics International, Volume 40, Number 10, Part A, pp. 15925-15940, 2014
38) **Mohammad Azadi** and Gholam Hossein Farrahi, A new low cycle fatigue lifetime prediction model for magnesium alloy based on modified plastic strain energy approach, Journal of Solid Mechanics in Engineering, Year 6, Number 1, pp. 63-75, Summer 2014 (in Persian)

2015

39) **Mohammad Azadi**, Gholam Hossein Farrahi, Gerhard Winter, Patrik Huter and Wilfred Eichlseder, Damage prediction for uncoated and coated aluminum alloy under thermal and mechanical fatigue loadings based on a modified plastic strain energy approach, Materials and Design, Volume 66, Part B, pp. 587-595, 2015
40) Milad Rezvani Rad, Gholam Hossein Farrahi, **Mohammad Azadi** and Mohammad Ghodrati, Stress analysis of thermal barrier coating system subjected to out-of-phase thermo-mechanical loadings considering roughness and porosity effect, Surface and Coating Technology, Volume 262, pp. 77-86, 2015
41) Mehran Felfeli, **Mohammad Azadi** and Gholam Hossein Farrahi, Constitutive modeling of elastic-viscoplastic behaviors in aluminum alloys subjected to cyclic loadings at various strain rates, The Journal of Strain Analysis in Engineering Design, Volume 50, Number 2, pp. 103-124, 2015
42) Rohollah Hossieni, **Mohammad Azadi**, Mehdi Sadeghi Hegar, Yaser Pournaghi, Mohammad Shariyat, Free and forced vibration analysis on finite element model of an off-road vehicle, International Journal of Automotive Engineering, Volume 5, Number 4, pp. 2028-2033
43) **Mohammad Azadi**, Gerhard Winter, Gholam Hossein Farrahi and Wilfred Eichlseder, Comparison between isothermal and non-isothermal fatigue behaviors in cast aluminum-silicon-magnesium alloy, Strength of Materials, Volume 47, Number 6, pp. 840-848, 2015

2016

44) Mahboobeh Azadi and **Mohammad Azadi**, Corrosion failure study in an oil cooler heat exchanger in marine diesel engine, International Journal of Engineering, Transaction B: Applications, Volume 29, Number 11, pp. 1531-1538, 2016
45) **Mohammad Azadi**, Mostafa Iziy, Armin Marbout, Mahboobeh Azadi, Alireza Hajiali Mohammadi, Optimization of solution temperature and time in nickel-based super-alloy of engine turbo-charger based on hardness by design of experiments, The Journal of Engine Research, Volume 43, pp. 63-70, 2016 (in Persian)
46) **Mohammad Azadi** and Gholam Hossein Farrahi, Failure mechanisms investigation in thermal barrier coatings under isothermal and non-isothermal fatigue loadings using design of experiments, Journal of Solid Mechanics in Engineering, Volume 9, Number 3, pp. 517-530, 2016 (in Persian)
47) Mostafa Iziy, Mahboobeh Azadi, Armin Marbout, Mohammad Hassan Rizi and **Mohammad Azadi**, Macrostructures, microstructures and the phase evaluation of Inconel 713C super-alloy under using different etchants and the heat treatment, Metallurgical Engineering, Volume 19, Number 2, pp. 124-134, 2016 (in Persian)

2017

48) **Mohammad Azadi** and Mahboobeh Azadi, Evaluation of high-temperature creep behavior in Inconel-713C nickel-based superalloy considering effects of stress levels, Materials Science and Engineering A, Volume 689, pp. 298-305, 2017
49) **Mohammad Azadi**, Cyclic thermo-mechanical stress, strain and continuum damage behaviors in light alloys during fatigue lifetime considering heat treatment effect, International Journal of Fatigue, Volume 99, Part 2, pp. 303-314, 2017
50) **Mohammad Azadi** and Gholam Hossein Farrahi, Evaluation of fatigue, oxidation and creep damages in A356.0 aluminum alloy under cyclic isothermal and un-isothermal loadings, Journal of Mechanical Engineering of Tabriz University, Volume 47, Number 1, pp. 1-7, 2017 (in Persian)
51) Mahboobeh Azadi, Mostafa Iziy, Armin Marbout, **Mohammad Azadi** and Mohammad Hasan Rizi, Investigation of the heat treatment effect on microstructures and phases of Inconel 713C super-alloy, International Journal of Engineering, A: Basics, Volume 30, Number 10, pp. 1538-1544, 2017

2018

52) Mahboobeh Azadi, Armin Marbout, Sama Safarloo, **Mohammad Azadi**, Mehdi Shariat and Mohammad Hassan Rizi, Effects of solutioning and ageing treatments on properties of Inconel-713C nickel-based superalloy under creep loading, Materials Science and Engineering A, Volume 711, pp. 195-204, 2018
53) Mohsen Alizadeh, **Mohammad Azadi**, Amin Farrokhabadi and Seyed Mohammad Jafari, Investigation of displacement amplitude effect on failure mechanisms in open-hole laminated composites under low-cycle fatigue loading using acoustic emission, Modares Mechanical Engineering, Volume 17, Number 12, pp. 435-445, 2018 (in Persian)
54) Mohammad Jamalkhani Khameneh and **Mohammad Azadi**, Evaluation of high-cycle bending fatigue and fracture behaviors in EN-GJS700-2 ductile cast iron of crankshafts, Engineering Failure Analysis, Volume 85, pp. 189-200, 2018
55) Hamed Bahmanabadi, Saied Rezanezhad, **Mohammad Azadi** and Mahboobeh Azadi, Characterization of creep damage and lifetime in Inconel-713C nickel-based superalloy by stress-based, strain/strain rate-based and continuum damage mechanics models, Materials Research Express, Volume 5, Number 2, pp. 026509, 2018
56) Ahmad Ghasemi-Ghalebahman, Hassan Sayyar, **Mohammad Azadi** and Seyed Mohammad Jafari, Failure mechanisms in open-hole laminated composites under tensile loading using acoustic emission, Journal of Science and Technology of Composites, Volume 5, Number 1, pp. 143-152, 2018 (in Persian)
57) Sama Safarloo, Fatemeh Loghman, Mahboobeh Azadi and **Mohammad Azadi**, Optimal design experiment of ageing time and temperature in Inconel-713C superalloy based on hardness objective, Transactions of the Indian Institute of Metals, Volume 71, Issue 7, pp. 1563-1572, 2018
58) Hassan Sayar, Mohsen Alizadeh, **Mohammad Azadi**, Ahmad Ghasemi-Ghalebahman, Seyed Mohammad Jafari and Amir Mafi, Investigation of crack growth behavior in aluminum alloy used in engine components, by acoustic emission method, The Journal of Engine Research, Volume 48, pp. 3-12, 2018 (in Persian)
59) Mahboobeh Azadi, Mehrdad Zolfaghari, Saeid Rezanezhad and **Mohammad Azadi**, Effects of SiO_2 nano-particles on tribological and mechanical properties of aluminum matrix composites by different dispersion methods, Applied Physics A, Volume 124, Number 5, Article 377, 2018
60) Hassan Sayar, **Mohammad Azadi**, Ahmad Ghasemi-Ghalebahman and Seyed Mohammad Jafari, Clustering effect on damage mechanisms in open-hole laminated carbon/epoxy composite under constant tensile loading rate, using acoustic emission, Composite Structures, Volume 204, pp. 1-11, 2018
61) **Mohammad Azadi** and Mahshad Farzannasab, Evaluation of high-cycle fatigue behavior in compact bones at different loading frequencies, Meccanica, Volume 53, Issue 14, pp. 3517-3526, 2018
62) Sajjad Khisheh, Khalil Khalili, **Mohammad Azadi** and Vahid Zaker Hendoabadi, Heat treatment effect on microstructure, mechanical properties and fracture behavior of cylinder head aluminum-silicon-copper alloy, The Journal of Engine Research, Volume 50, pp. 55-65, 2018 (in Persian)
63) Mana Motamedi, Gholamali Shafabakhsh and **Mohammad Azadi**, Evaluation of chemical, physical and fatigue properties of modified asphalt binder with nano silica and synthesized polyurethane, Journal of Transportation Infrastructure Engineering, Volume 4, Number 3, pp. 33-44, 2018 (in Persian)
64) Adel Basiri, **Mohammad Azadi** and Farshid Moghaddam, Finite element analysis of fatigue damage in passenger-car diesel engine cylinder head under cyclic thermo-mechanical loadings, The Journal of Engine Research, Volume 51, pp. 3-19, 2018 (in Persian)
65) Ghazaleh Nosrat and **Mohammad Azadi**, Evaluation of continuum damage at different temperatures for aluminum-silicon alloy of engine piston within low-cycle fatigue regime, The Journal of Engine Research, Volume 52, pp. 43-53, 2018 (in Persian)

2019

66) Mohsen Alizadeh, Hassan Sayar, **Mohammad Azadi** and Seyed Mohammad Jafari, Health monitoring for composite under low-cycle cyclic loading, considering effects of acoustic emission sensor type, Mechanics of Advanced Composite Structures, Volume 6, Issue 1, pp. 19-26, 2019
67) **Mohammad Azadi**, Hassan Sayar, Ahmad Ghasemi-Ghalebahman and Seyed Mohammad Jafari, Tensile loading rate effect on mechanical properties and failure mechanisms in open-hole carbon fiber reinforced polymer composites by acoustic emission approach, Composites Part B, Volume 158, pp. 448-458, 2019
68) Mahboobeh Azadi, Saeid Rezanezhad, Mehrdad Zolfaghari and **Mohammad Azadi**, Effects of various ageing heat treatments on microstructural features and hardness of piston aluminum alloy, International Journal of Engineering, Transactions A: Basics, Volume 32, Number 1, pp. 92-98, 2019
69) **Mohammad Azadi**, Mostafa Saeedi, Mehdi Mokhtarishirazabad and Pablo Lopez-Crespo, Effects of loading rate on crack growth behavior in carbon fiber reinforced polymer composites using digital image correlation technique, Composites Part B, Volume 175, Article 107161, 2019

70) **Mohammad Azadi**, Nezamoddin Raeisi, Seyed Ashkan Moosavian and Meysam Shakouri, Detection of different defects in carbon fiber reinforced polymer matrix laminated composite under tension by vibration analysis, Journal of Science and Technology of Composites, Volume 6, Number 3, pp. 373-384, 2019 (in Persian)
71) Hanieh Aroo and **Mohammad Azadi**, Modeling of creep behavior in AlSiCuNiMg alloy at different temperatures and stress levels, Journal of Solid and Fluid Mechanics, Volume 9, Issue 2, pp. 61-76, 2019 (in Persian)
72) **Mohammad Azadi** and Hanieh Aroo, Creep properties and failure mechanisms of aluminum alloy and aluminum matrix silicon oxide nano-composite under working conditions in engine pistons, Materials Research Express, Volume 6, Number 11, Article 115020, 2019
73) Hassan Sayar, **Mohammad Azadi** and Mohsen Alizadeh, Detection of crack initiation and propagation in aluminum alloy under tensile loading, comparing signals acquired by acoustic emission and vibration sensors, Journal of Nondestructive Evaluation, Volume 38, Issue 4, Article 100, 2019
74) Bahram Vaziri, **Mohammad Azadi**, Mojtaba Biglari and Seyed Navid Madani, Sensitivity analysis of dependency of working fluid thermo-dynamics properties to temperature on performance of Gama-type Stirling engine, The Journal of Engine Research, Volume 54, pp. 3-12, 2019 (in Persian)

2020

75) Mahboobeh Azadi, Saeid Rezanezhad, Mehrdad Zolfaghari and **Mohammad Azadi**, Investigation of tribological and compressive behaviors of Al/SiO_2 nanocomposites after T6 heat treatment, Sadhana, Volume 45, Issue 1, Article No. 28, 2020
76) Mahboobeh Azadi, **Mohammad Azadi** and Alireza Hajiali Mohammadi, Effects of Ageing and Forging on Short-term Creep Behaviors of Inconel-713C Superalloy at 850 °C, International Journal of Engineering, Transaction A: Basics, Volume 33, Number 4, pp. 639-646, 2020
77) Hamed Bahmanabadi, **Mohammad Azadi** and Keyvan Keypour, Continuum damage mechanics for creep lifetime estimation in polymer matrix composites at various temperatures, Journal of Stress Analysis, Volume 4, Number 2, pp. 29-44, 2020
78) **Mohammad Azadi**, Saeid Rezanezhad, Mehrdad Zolfaghari and Mahboobeh Azadi, Study of effect of simultaneous use from Silica nano-particles and heat treatment on high-cycle bending fatigue lifetime in piston aluminum alloy, Modares Mechanical Engineering, Volume 20, Number 6, pp. 1463-1473, 2020 (in Persian)
79) **Mohammad Azadi**, Hamed Bahmanabadi, Florian Gruen and Gerhard Winter, Evaluation of tensile and low-cycle fatigue properties at elevated temperatures in piston aluminum-silicon alloys with and without nano-clay-particles and heat treatment, Materials Science and Engineering A, Volume 788, Article No. 139497, 2020
80) Mana Motamedi, Gholamali Shafabakhsh and **Mohammad Azadi**, Evaluating fatigue-damage of asphalt binder and mastic modified with nano-silica and synthesized polyurethane using VECD method, Journal of Materials in Civil Engineering, Volume 32, Issue 8, Article No. 04020218, 2020
81) **Mohammad Azadi** and Hanieh Aroo, Temperature effect on creep and fracture behaviors of nano-SiO_2-composite and AlSi12Cu3Ni2MgFe aluminum alloy, International Journal of Engineering, Transaction B: Application, Volume 33, Number 8, pp. 1579-1589, 2020
82) Kianoosh Rashnoo, Mohammad Jafar Sharifi, **Mohammad Azadi** and Mahboobeh Azadi, Influences of reinforcement and displacement rate on microstructure, mechanical properties and fracture behaviors of cylinder-head aluminum alloy, Materials Chemistry and Physics, Volume 255, Article No. 123441, 2020
83) Mahshad Farzannasab, **Mohammad Azadi** and Hamed Bahmanabadi, Study of high-cycle fatigue properties in tibia bovine bones based on reliability and scatter-band predictions, Mechanics of Advanced Composite Structures, Volume 7, Number 2, pp. 255-261, 2020
84) **Mohammad Azadi**, Hamed Bahmanabadi, Jahangir Torkian and Ghazaleh Nosrat, Investigation of nano-clay particles addition on microstructure, fracture surface and mechanical properties of piston aluminum alloy in automotive engine, Sharif Mechanical Engineering Journal, Volume 36, Number 2, pp. 41-49, 2020

2021

85) **Mohammad Azadi**, Mohammad Zomorodipour and Abdoulhossein Fereidoon, Study of effect of loading rate on tensile properties of aluminum alloy and aluminum matrix nano-composite, Journal of Mechanical Engineering of Tabriz University, Volume 51, Number 1, pp. 9-18, 2021 (in Persian)
86) Amir Masoud Afsari Golshan, Hanieh Aroo and **Mohammad Azadi**, Sensitivity analysis for effects of heat treatment, stress and temperature on AlSi12CuNiMg aluminum alloy behavior under force-controlled creep loading, Applied Physics A, Volume 127, Article No. 48, 2021
87) Mana Motamedi, Gholamali Shafabakhsh and **Mohammad Azadi**, Linking fatigue response of asphalt binders, mastics, and asphalt concrete mixture modified by nano-silica and synthesized polyurethane, International Journal of Damage Mechanics, Volume 30, Number 1, pp.103-122, 2021

88) Mehrdad Zolfaghari, **Mohammad Azadi**, Mahboobeh Azadi, Characterization of high-cycle bending fatigue behaviors for piston aluminum matrix SiO2 nano-composites in comparison to aluminum-silicon alloys, International Journal of Metalcasting, Volume 15, Number 1, pp. 152-168, 2021
89) Mana Motamedi, Gholamali Shafabakhsh and **Mohammad Azadi**, Rehabilitation of asphalt binder to improve rutting, fatigue and thermal cracking behavior using nano-silica and synthesized polyurethane, Journal of Rehabilitation in Civil Engineering, Volume 9, Number 1, pp. 19-28, 2021
90) Sajjad Khisheh, Khalil Khalili, **Mohammad Azadi** and Vahid Zaker Hendouabadi, Influences of roughness and heat treatment on high-cycle bending fatigue properties of A380 aluminum alloy under stress-controlled cyclic loading, Materials Chemistry and Physics, Volume 264, Article No. 124475, 2021
91) **Mohammad Azadi**, Ali Dadashi, Shokouh Dezianian, Morteza Kianifar, Shaghayegh Torkaman and Maryam Chiyani, High-cycle bending fatigue properties of additive-manufactured ABS and PLA polymers fabricated by fused deposition modeling 3D-printing, Forces in Mechanics, Volume 3, Article No. 100016, 2021
92) **Mohammad Azadi**, Hanieh Aroo, Mahboobeh Azadi and Mohammad Sadegh Aghareb Parast, Comparing of high-cycle fatigue lifetimes in un-corroded and corroded piston aluminum alloys in diesel engine applications, Archives of Foundry Engineering, Volume 21, Number 1, pp. 89-94, 2021
93) Mohammad Jafar Sharifi, **Mohammad Azadi** and Mahboobeh Azadi, Sensitivity analysis of heat treatment parameters on cylinder-head aluminum alloy properties by regression method, Journal of Metallurgical and Materials Engineering, Volume 32, Number 1, pp.57-74, 2020 (in Persian)
94) Saeid Rezanezhad, **Mohammad Azadi** and Mahboobeh Azadi, Influence of heat treatment on high-cycle fatigue and fracture behaviors of piston aluminum alloy under fully-reversed cyclic bending, Metals and Materials International, Volume 27, Number 5, pp. 860-870, 2021
95) **Mohammad Azadi**, Mohammad Zomorodipour and Abdoulhossein Fereidoon, Sensitivity analysis of mechanical properties and ductile/brittle behaviors in aluminum-silicon alloy to loading rate and nano-particles, considering interaction effects, Engineering Reports, Volume 3, Number 6, Article No. e12341, 2021
96) Seyed Morteza Hosseini, Ahmad Ghasemi-Ghalebahman, **Mohammad Azadi** and Seyed Mohammad Jafari, Crack initiation detection in crankshaft ductile cast iron based on information entropy of acoustic emission signals under tensile loading, Engineering Failure Analysis, Volume 127, Article No. 105547, 2021
97) Fatemeh Ahadi, **Mohammad Azadi**, Mojtaba Biglari and Seyed Navid Madani, Study of coating effects on the performance of Stirling engine by non-ideal adiabatic thermodynamics modeling, Energy Reports, Volume 7, pp. 3688-3702, 2021
98) Shokouh Dezianian, **Mohammad Azadi** and Sattar Mohammadi Esfarjani, A review on additive manufacturing process by 5D-printers and their application, Iran Polymer Technology: Research and Development, Volume 6, Number 1, pp. 51-60, 2021 (in Persian)
99) Adel Basiri, Ali Dadashi, **Mohammad Azadi**, Gerhard Winter, Benjamin Seisenbacher and Florian Gruen, Effect of nano-clay addition and heat treatment on tensile and stress-controlled low-cycle fatigue behaviors of aluminum-silicon alloy, Fracture and Structural Integrity, Volume 15, Number 57, pp. 373-397, 2021
100) Mohammad Sadegh Aghareb Parast, Mohammad Jamalkhani Khameneh, **Mohammad Azadi**, Mahboobeh Azadi, Mohammad Hadi Mahdipanah and Saied Roostaie, Effect of plasma nitriding on high-cycle fatigue properties and fracture behaviors of GJS700 nodular cast iron under cyclic bending loading, Fatigue and Fracture of Engineering Materials and Structures, Volume 44, Number 8, pp. 2070-2086, 2021
101) **Mohammad Azadi**, Arash Naderi and Abdolhossein Freidoon, Investigation of effects of the temperature and adding nano-SiO_2-particles on high-temperature mechanical properties for the piston aluminum-silicon alloy, Iranian Journal of Manufacturing Engineering, Volume 8, Number 3, pp. 47-58, 2021 (in Persian)
102) Mohammad Sadegh Aghareb Parast, Hanieh Aroo, **Mohammad Azadi** and Mahboobeh Azadi, Investigation on effects of lubrication and heat treatment on fretting fatigue behavior of aluminum-matrix nano-composite, Modares Mechanical Engineering, Volume 21, Number 8, pp. 527-540, 2021 (in Persian)
103) Sattar Mohammadi Esfarjani, **Mohammad Azadi**, Mohsen Alizadeh and Hassan Sayar, Prediction of fiber breakage and matrix cracking in polymeric composites under low-cycle fatigue regimes by fuzzy and wavelet clustering of acoustic emission signals, Composites: Mechanics, Computations, Applications: An International Journal, Volume 12, Number 3, pp. 17-51, 2021

Accepted

104) Mostafa Saeedi, **Mohammad Azadi**, Mehdi Mokhtarishirazabad and Pablo Lopez-Crespo, Numerical simulations of carbon/epoxy laminated composites under various loading rates, comparing extended finite element method and cohesive zone modeling, accepted in Material Design and Processing Communication, 2020
105) Mohammad Jafar Sharifi, **Mohammad Azadi** and Mahboobeh Azadi, Fabrication of heat-treated nano-clay-composite for improving high-cycle fatigue properties of AlSiCu aluminum alloy under stress-controlled fully-reversed bending loads, accepted in Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020

106) **Mohammad Azadi**, Mostafa Saeedi, Mehdi Mokhtari Shirazabad and Pablo Lopez-Crespo, Sensitivity analysis of fracture behavior in carbon-epoxy composite at different displacement rates under mode I tensile loading by regression analysis, accepted in Amirkabir Journal of Mechanical Engineering, 2020 (in Persian)
107) **Mohammad Azadi**, Mohsen Alizadeh, Seyed Mohammad Jafari, Amin Farrokhabadi, Cumulative acoustic emission energy for damage detection in composites reinforced by carbon fibers within low-cycle fatigue regime at various displacement amplitudes and rates, accepted in Polymers and Polymer Composites, 2020
108) **Mohammad Azadi** and Mohammad Dorfaki, Study of cyclic behavior, displacement-controlled low-cycle fatigue lifetime and failure in open-hole polymer-matrix composite reinforced by carbon fibers under various loading rates and amplitudes, accepted in Journal of Science and Technology of Composites, 2021
109) Hanieh Aroo, **Mohammad Azadi** and Mahboobeh Azadi, Corrosion effects on high-cycle fatigue lifetime and fracture behavior for heat-treated aluminum-matrix nano-clay-composite compared to piston aluminum alloy, accepted in Silicon, 2021
110) Mana Motamedi, Gholamali Shafabakhsh and **Mohammad Azadi**, Evaluation of fatigue and rutting properties of asphalt binder and mastic modified by synthesized polyurethane, accepted in Journal of Traffic and Transportation Engineering (English Edition), 2021
111) Mahdi Samiee, **Mohammad Azadi** and Sattar Mohammadi Esfarjani, Estimation of low-cycle fatigue lifetime in Aluminum-Silicon-Magnesium alloy of cylinder heads based on striation marks on fracture surfaces and Paris crack growth law, accepted in Journal of Failure Analysis and Prevention, 2021

Conference Articles:

2008

1) Mohammad Shariyat, **Mohammad Azadi** and Davood Asgari, Finite element analysis of non-linear transient thermo-elastic stresses of hollow FG-cylinder for different heat transfer states by considering temperature dependency of material properties, 16th Annual (International) Conference on Mechanical Engineering, Volume 2, page 1401-1402, Shahid Bahonar University of Kerman, Kerman, Iran, May 2008 (in Persian)
2) **Mohammad Azadi**, Dynamic response of FGM beam using modal analysis and FEM considering temperature dependency of properties, 2nd International Joint Conference on Composite Engineering & Design, the Acknowledge Management for Composite Materials, Vancouver BC, Canada, July 2008
3) Shahram Azadi, Mohammad Shariyat, **Mohammad Azadi** and Farshad Zahedi, Making of frequency map of a vehicle in order to vibrational optimization, National Conference of Mechanical Engineering, page 41, Islamic Azad University of Khomeinishahr Branch, Khomeinishahr, Iran, November 2008 (in Persian)
4) Mehrnoosh Damircheli and **Mohammad Azadi**, Non-linear stresses analysis of a rotating disk made of FG-material by using finite element method, National Conference of Mechanical Engineering, page 3, Islamic Azad University of Khomeinishahr Branch, Khomeinishahr, Iran, November 2008 (in Persian)
5) Mohammad Shariyat, Ali Asghar Jafari, Yaser Pornaghi and **Mohammad Azadi**, Free and forced vibration analysis of a complete finite element model of a heavy vehicle and optimization of vibrational behavior, National Conference of Mechanical Engineering, page 43, Islamic Azad University of Khomeinishahr Branch, Khomeinishahr, Iran, November 2008 (in Persian)
6) Mohammad Shariyat, Shahram Azadi, Farshad Zahedi and **Mohammad Azadi**, Damage analysis of antiroll bar comparing experimental and theoretical results, National Conference of Mechanical Engineering, page 168, Islamic Azad University of Khomeinishahr Branch, Khomeinishahr, Iran, November 2008

2009

7) **Mohammad Azadi** and Mehrnoosh Damircheli, Dynamic response of FGM Beam using modal analysis and FEM considering temperature dependency of properties, 7th International Conference on Composite Science and Technology, American University of Sharjah, Sharjah, UAE, January 2009
8) **Mohammad Azadi** and Mehrnoosh Damircheli, Nonlinear transient heat transfer and thermoelastic analysis of thick-walled FGM cylinder with temperature-dependent material properties using Hermitian transfinite element, 7th International Conference on Composite Science and Technology, American University of Sharjah, Sharjah, UAE, January 2009
9) **Mohammad Azadi**, Shahram Azadi, Farshad Zahedi and Mahmood Moradi, Multidisciplinary optimization of a back-bonnet of a vehicle under noise, vibration, harshness and weight by using response surface method, 6th Annual Student Conference on Mechanical Engineering, page 173, Amirkabir University of Technology, Tehran, Iran, March 2009 (in Persian)
10) Mehrnoosh Damircheli and **Mohammad Azadi**, Stresses analysis of a rotating FG-disk by using finite element method and considering temperature dependency of material properties, 6th Annual Student Conference on Mechanical Engineering, page 80, Amirkabir University of Technology, Tehran, Iran, March 2009 (in Persian)
11) **Mohammad Azadi**, Farshad Zahedi and Mehrnoosh Damircheli, Free vibration analysis of FG-beam by using finite element and considering temperature dependency of material properties, 6th Annual Student Conference on Mechanical Engineering, page 79, Amirkabir University of Technology, Tehran, Iran, March 2009 (in Persian)
12) **Mohammad Azadi**, Shahram Azadi and Farshad Zahedi, Structural optimization of an off-road vehicle based on NVH analysis using DOE method, 17th Annual (International) Conference on Mechanical Engineering, Volume 3, page 207-208, Tehran University, Tehran, Iran, May 2009
13) Gholam Hossein Farrahi, Jalal Fathi Sola and **Mohammad Azadi**, Fatigue life analysis of finite element model of national engine piston pin and comparing different theories, 6th International Conference on Internal Combustion Engines, page 121-122, Irankhodro Powertrain Company (IPCO), Tehran, Iran, November 2009 (in Persian)
14) Farshad Zahedi, **Mohammad Azadi** and Jalal Fathi Sola, Thermo-mechanical stresses analysis of the exhaust manifold to evaluate the fatigue life for different used materials, 6th international conference on internal combustion engines, page 251-252, Irankhodro Powertrain Company (IPCO), Olympic Hotel, Tehran, Iran, November 2009
15) **Mohammad Azadi** and Mehrnoosh Damircheli, Nonlinear thermoelastic stress analysis of the rotating FGM disk with variable thickness and temperature-dependent material properties using finite element method, International Mechanical Engineering Congress & Exposition (ASME), Lake Buena Vista, Florida, USA, November 2009
16) **Mohammad Azadi** and Farshad Zahedi, Fatigue analysis of antiroll bar for periodic and random inputs using various theories and introducing a new method, International Mechanical Engineering Congress & Exposition (ASME), Lake Buena Vista, Florida, USA, November 2009
17) **Mohammad Azadi**, Shahram Azadi, Farshad Zahedi and Mahmood Moradi, Multidisciplinary optimization of a car component under NVH and weight constraints using RSM, International Mechanical Engineering Congress & Exposition (ASME), Lake Buena Vista, Florida, USA, November 2009

2010

No Paper

2011

18) Atieh Moridi, **Mohammad Azadi** and Gholam Hossein Farrahi, Optimizing constitutive cyclic plasticity model by genetic algorithm, 19th Annual Conference on Mechanical Engineering, Birjand University, Birjand, Iran, May 2011
19) Atieh Moridi, **Mohammad Azadi** and Gholam Hossein Farrahi, Coating thickness and roughness effect on stress distribution of A356.0 under thermo-mechanical loadings, 11th International Conference on the Mechanical Behavior of Materials, Lake Como, Italy, June 2011
20) Atieh Moridi, **Mohammad Azadi** and Gholam Hossein Farrahi, Numerical simulation of thermal barrier coating system under thermo-mechanical loadings, World Congress on Engineering, The International Conference of Mechanical Engineering, London, U.K., July 2011
21) **Mohammad Azadi**, Atieh Moridi and Gholam Hossein Farrahi, Optimization of plasma thermal spray parameters under bending loads by using design of experiment method, 14th International Conference on Advances in Materials and Processing Technologies, Istanbul, Turkey, July 2011
22) Amir Mafi and **Mohammad Azadi**, Failure analysis of an oil cooler in marine diesel engine, 7th international conference on internal combustion engines, page 108, Irankhodro Powertrain Company (IPCO), Tehran, Iran, November 2011 (in Persian)
23) **Mohammad Azadi**, Atieh Moridi and Gholam Hossein Farrahi, Optimization of thermal barrier coating parameters under fatigue and bending loadings in diesel engine application, 7th international conference on internal combustion engines, page 100, Irankhodro Powertrain Company (IPCO), Tehran, Iran, November 2011, (in Persian)
24) **Mohammad Azadi**, Amir Mafi, Seyed Vahid Hosseini and Peyman Sharghi, Dimensional contrary and material investigation in a cracked cylinder head, 7th international conference on internal combustion engines, page 106, Irankhodro Powertrain Company (IPCO), Tehran, Iran, November 2011 (in Persian)
25) **Mohammad Azadi**, Amir Mafi, Yaghoub Abbadzadeh and Farshid Moghaddam Jahangiri, Investigation of damage causes in a cracked cylinder head and finite element simulation, 7th international conference on internal combustion engines, page 57, Irankhodro Powertrain Company (IPCO), Tehran, Iran, November 2011 (in Persian)

2012

26) Gholam Hossein Farrahi, **Mohammad Azadi**, Gerhard Winter and Wilfried Eichlseder, Thermo-mechanical and low cycle fatigue behavior of aluminum alloy cylinder head, The International Conference on Experimental Solid Mechanics and Dynamics, page 1, Iran University of Science and Technology, Tehran, Iran, March 2012
27) **Mohammad Azadi**, Gerhard Winter, Gholam Hossein Farrahi and Wilfried Eichlseder, Cyclic behavior of a cast magnesium alloy under low cycle and thermo-mechanical fatigue, 3rd Fatigue Symposium Leoben, Lightweight Design, page 248-254, University of Leoben, Leoben, Austria, April 2012
28) Atieh Moridi, **Mohammad Azadi**, Gerhard Winter, Gholam Hossein Farrahi and Wilfried Eichlseder, Modeling of high temperature cyclic behavior in aluminum alloy under thermo-mechanical and isothermal fatigue conditions, 3rd Fatigue Symposium Leoben, Lightweight Design, page 227-235, University of Leoben, Leoben, Austria, April 2012
29) Farshad Zahedi and **Mohammad Azadi**, Low cycle fatigue life analysis of magnesium alloy diesel engine cylinder head, 20th Annual International Iranian Mechanical Engineering Conference, page 11, Shiraz University, Shiraz, Iran, May 2012
30) **Mohammad Azadi**, Gholam Hossein Farrahi, Partik Huter and Gerhard Winter, Thermo-mechanical and high temperature low cycle fatigue analysis of aluminum alloy based on Sehitoglu's model, 20th Annual International Iranian Mechanical Engineering Conference, page 79, Shiraz University, Shiraz, Iran, May 2012 (in Persian)
31) Mehdi Mokhtari Shirazabad, Seyed Mohammad Ali Boutorabi, **Mohammad Azadi**, Mehdi Roozban, Amir Mafi, Mehdi Nikravan, Effect of rare earth elements on microtructure and high temperature mechanical properties of magnesium alloy with engine components application, 1st National Conference on Internal , Combustion Engine, page 70, Semnan University, Semnan, Iran, November 2012 (in Persian)

2013

32) Mehdi Mokhtari Shirazabad, Seyed Mohammad Ali Boutorabi, **Mohammad Azadi** and Mehdi Nikravan, Effect of casting parameters on microstructure and mechanical properties of AZ91 magnesium alloy, 7th Student Conference on Mechanical Engineering, page 185, Tehran University, Tehran, Iran, February 2013 (in Persian)
33) **Mohammad Azadi** and Gholam Hossein Farrahi, Sesitivity analysis of various parameters on lifetime of aluminum alloy with and without thermal barrier coating under isothermal and thermo-mechanical fatigue loadings, 7th Student Conference on Mechanical Engineering, Page 261, Tehran University, Tehran, Iran, February 2013 (in Persian)

34) Ali Shamloo, **Mohammad Azadi**, Gholam Hossein Farrahi and Mehran Felfeli, Parameters calibration of nonlinear isotropic/kinematic hardening model for magnesium alloy under cyclic loadings, 7th Student Conference on Mechanical Engineering, Page 286, Tehran University, Tehran, Iran, February 2013
35) Mehran Felfeli, **Mohammad Azadi**, Gholam Hossein Farrahi and Ali Shamloo, Application of nonlinear hardening model for aluminum alloy under low cycle and thermo-mechanical fatigue loadings, 7th Student Conference on Mechanical Engineering, Page 287, Tehran University, Tehran, Iran, February 2013 (in Persian)
36) Milad Rezvani Rad, **Mohammad Azadi** and Gholam Hossein Farrahi, Thermal barrier coating effect on stress distribution of a diesel engine cylinder head, 7th Student Conference on Mechanical Engineering, Page 260, Tehran University, Tehran, Iran, February 2013
37) **Mohammad Azadi** and Gholam Hossein Farrahi, Study of failure mechanism in coated aluminum alloy under isothermal and thermo-mechanical fatigue loadings, 21th Annual International Conference on Mechanical Engineering, Page 26, K.N. Toosi University of Technology, Tehran, Iran, May 2013

2014

38) **Mohammad Azadi**, Mojtaba Mehrabi and Peyman Sharghi, Determination of engine fast running-in procedure based on wear and using oil analysis results, 8th Conference on Internal Combustion Engines and Oil, Page 1, Research Institute of Petroleum Industry, Tehran, Iran, February 2014 (in Persian)
39) Mehdi Mokhtari Shirazabad, **Mohammad Azadi**, Seyed Mohammad Ali Boutorabi and Mehdi Nikravan, Effect of pouring system on casting defects and tensile properties of AZ91+1%RE magnesium alloy, 8th Conference on Internal Combustion Engines and Oil, Page 2, Research Institute of Petroleum Industry, Tehran, Iran, February 2014 (in Persian)
40) **Mohammad Azadi**, Akbar Naderpour, Mehdi Roozban, Amir Mafi, Farshid Moghaddam, Hamed Navabi, Mohammad Kazemi and Mehdi Rezaei, Presenting a completed analysis for material, mechanism, vibration, stress and fatigue in valve spring, 8th Conference on Internal Combustion Engines and Oil, Page 3, Research Institute of Petroleum Industry, Tehran, Iran, February 2014 (in Persian)
41) **Mohammad Azadi**, Farshid Moghaddam, Pedram Abedini and Reza Soltani, Investigation of effects of material and geometry changes on stress and fatigue in main bearing cap of engine, 8th Conference on Internal Combustion Engines and Oil, Page 36, Research Institute of Petroleum Industry, Tehran, Iran, February 2014 (in Persian)
42) **Mohammad Azadi**, Gerhard Winter, Gholam Hossein Farrahi and Wilfried Eichlseder, Design of cylinder head and block in internal combustion engines based on fatigue strength of materials, 8th Conference on Internal Combustion Engines and Oil, Page 37, Research Institute of Petroleum Industry, Tehran, Iran, February 2014 (in Persian)
43) **Mohammad Azadi** and Mehrnoosh Damircheli, Improvement of stress behavior in flywheel by using functionally graded materials based on finite element method, 8th Conference on Internal Combustion Engines and Oil, Page 64, Research Institute of Petroleum Industry, Tehran, Iran, February 2014 (in Persian)

2015

No Paper

2016

44) **Mohammad Azadi** and Mahboobeh Azadi, Coatings applications in engine components: study of thermal barrier coatings, 9th Conference on Internal Combustion Engines and Oil, Page 41, Research Institute of Petroleum Industry, Tehran, Iran, February 2016 (in Persian)
45) Mahboobeh Azadi and **Mohammad Azadi**, Coatings applications in engine components: study of wear resistant coatings, 9th Conference on Internal Combustion Engines and Oil, Page 42, Research Institute of Petroleum Industry, Tehran, Iran, February 2016 (in Persian)
46) **Mohammad Azadi** and Saeid Rezanezhad, Presenting of creep lifetime prediction model for super-alloy used in turbine blade of turbo-charger, Page 20, 9th Conference on Internal Combustion Engines and Oil, Page 20, Research Institute of Petroleum Industry, Tehran, Iran, February 2016 (in Persian)
47) Farhad Talebi, Javad Zarei Nezhad and **Mohammad Azadi**, Fuel effect on performance parameters of single-cylinder spark ignition engine, Page 88, 9th Conference on Internal Combustion Engines and Oil, Page 88, Research Institute of Petroleum Industry, Tehran, Iran, February 2016 (in Persian)
48) **Mohammad Azadi** and Mahboobeh Azadi, Study of thermo-mechanical fatigue behaviors in light alloys with and without heat treatments, 3rd International Workshop on Thermo-mechanical Fatigue, Page 12, Federal Institute for Materials Research and Testing, Berlin, Germany, April 2016
49) **Mohammad Azadi** and Mahdi Posht Mashhadi, Computing reliability for light aluminum and magnesium alloys under low-cycle fatigue loading, 2nd Conference on Modern Achievements on Aerospace, Mechanic and Related Sciences, Page 90, University of Tehran, Tehran, Iran, September 2016 (in Persian)

50) Majid Nikmehr and **Mohammad Azadi**, Estimation of fatigue crack growth rate by Striation spacing in 2024 aluminum alloy fracture surface, 2nd Conference on Modern Achievements on Aerospace, Mechanic and Related Sciences, Page 91, University of Tehran, Tehran, Iran, September 2016 (in Persian)
51) Hamed Bahmanabadi and **Mohammad Azadi**, Optimization of materials creep properties by using Levenberg-Marquardt method based on continuum damage mechanics, 2nd Conference on Modern Achievements on Aerospace, Mechanic and Related Sciences, Page 101, University of Tehran, Tehran, Iran, September 2016 (in Persian)
52) **Mohammad Azadi**, Hadi Abedi Koshki and Amir Hossein Rasouli, Calculation of fatigue damage in light alloys under low-cycle cyclic loading, 2nd Conference on New Research Achievement in Mechanics, Industrial and Aerospace, Amirkabir University of Technology, Tehran, Iran, September 2016 (in Persian)
53) Hamed Bahmanabadi and **Mohammad Azadi**, Optimization of materials creep properties in minimum strain rate power relation, 2nd Conference on New Research Achievement in Mechanics, Industrial and Aerospace, Amirkabir University of Technology, Tehran, Iran, September 2016 (in Persian)
54) **Mohammad Azadi** and Mahdi Roshani, Investigation of emission share from production of greenhouse gases in transportation part for each country province, The 8th National Conference and Exhibition on Environmental Engineering, Iran Society of Environmental Engineering, Tehran University, Tehran, Iran, 2016 (in Persian)
55) Mostafa Iziy, Mahboobeh Azadi, **Mohammad Azadi**, Armin Marbout, Mohammad Hasan Rizi, Study of the effect of heat treatment temperature and time on superalloy Inconel 713 microstructure, phase and hardness, 5th International Conference on Materials Engineering and Metallurgy, Shiraz University, Shiraz, Iran, November 2016 (in Persian)

2017

56) Hamed Bahmanabadi, **Mohammad Azadi** and Mohammad Jamalkhani, Scatter-band analysis for high-cycle and low-cycle fatigue tests on materials, 25th International Annual Conference of Mechanical Engineering, Page 397, Tarbiat Modares University, Tehran, Iran, May 2017 (in Persian)
57) **Mohammad Azadi**, Mahshad Farzannasab and Hamed Bahmanabadi, Comparison of stress-controlled fatigue lifetime of femur and tibia bone under low loading frequency, 25th International Annual Conference of Mechanical Engineering, Page 545, Tarbiat Modares University, Tehran, Iran, May 2017 (in Persian)
58) Alireza Hajiali Mohammadi, Mohammad Hassan Rizi, Armin Marboot, **Mohammad Azadi** and Mahboobeh Azadi, Experimental method development of simulation results in hot forging process in a closed die of Inconel-713 superalloy, 4th National Conference on Application of Novel Technologies in Engineering Science, University of Torbat Heydarieh University, Torbat Heydarieh, Iran, March 2017 (in Persian)
59) **Mohammad Azadi**, Sama Safarloo, Fatemeh Loghman and Roham Rasouli, Microstructural and thermal properties of piston aluminum alloy reinforced by nano-particles, 6th International Biennial Conference on Ultrafine Grained and Nano-structured Materials, Kish International Convention Center, Kish, Iran, November 2017 (AIP Conference Proceedings, Volume 1920, Article Number 020027, 2018)
60) Vahid Abedini, Seyed Mehdi Hossieni, Mehrdad Pourjam, **Mohammad Azadi**, Vibration and stress analysis in order to design of pin-on-disk wear machine with capability of working at high temperature and fluid environment, 14th Iranian Conference on the Manufacturing Engineering, Arak University of Technology, Arak, Iran, October 2017 (in Persian)

2018

61) **Mohammad Azadi**, Hamed Bahmanabadi, Saeid Rezanezhad and Mahboobeh Azadi, Determination of creep lifetime in nickel-based superalloy by continuum damage mechanics and Larson-Miller model, 6th National Conference on Gas Turbine, Iran University of Science and Technology, Tehran, Iran, February 2018 (in Persian)
62) Mahboobeh Azadi, Sama Safarloo, **Mohammad Azadi**, Mostafa Iziy and Mehdi Shariat, Study of creep mechanism of 713C nickel-based superalloy and presenting size-change model for Gama-prime precipitates, 6th National Conference on Gas Turbine, Iran University of Science and Technology, Tehran, Iran, February 2018 (in Persian)
63) Saeid Rezanezhad, Mahboobeh Azadi, Armin Marbout, **Mohammad Azadi** and Alireza Hajiali Mohammadi, Investigation of manufacturing method and heat treatment type on creep behavior and micro-structural changes in 713 Inconel superalloy, 6th National Conference on Gas Turbine, Iran University of Science and Technology, Tehran, Iran, February 2018 (in Persian)
64) **Mohammad Azadi** and Sama Safarloo, Failure analysis caused by cyclic thermo-mechanical loading for an exhaust valve in high-duty diesel engine, 10th International Conference on Internal Combustion Engines and Oil, Research Institute of Petroleum Industry, Tehran, Iran, February 2018 (in Persian)
65) Mojtaba Biglari, Bahram Vaziri and **Mohammad Azadi**, Physical properties comparison between hybrid-nano-oil and vehicle engine base-oil, 10th International Conference on Internal Combustion Engines and Oil, Research Institute of Petroleum Industry, Tehran, Iran, February 2018 (in Persian)
66) Farzaneh Khezri, **Mohammad Azadi** and Hamed Bahmanabadi, Continuum damage prediction during high-cycle fatigue loading on magnesium alloy with application of engine components manufacturing, 10th International Conference on Internal Combustion Engines and Oil, Research Institute of Petroleum Industry, Tehran, Iran, February 2018 (in Persian)

67) Azad Akbarian, Arash Mohammadi, **Mohammad Azadi**, Mostafa Varmazyar, Investigation of cylinder head material on boiling flow heat transfer coefficient, 10th International Conference on Internal Combustion Engines and Oil, Research Institute of Petroleum Industry, Tehran, Iran, February 2018 (in Persian)
68) **Mohammad Azadi**, Mahshad Farzannasab and Hamed Bahmanabadi, Scatter-band and reliability analysis on high-cycle fatigue behavior of bovine compact bones, The Biennial International Conference on Experimental Solid Mechanics, Iran University of Science and Technology, Tehran, Iran, February 2018
69) Adel Basiri, **Mohammad Azadi** and Hamed Bahmanabadi, Energy-based low-cycle fatigue lifetime prediction models of gray and nodular cast irons for engine exhaust manifold applications, The Biennial International Conference on Experimental Solid Mechanics, Iran University of Science and Technology, Tehran, Iran, February 2018
70) **Mohammad Azadi**, Hassan Sayar, Mohsen Alizadeh, Nezamodin Raeisi, Ashkan Moosavian, Ahmad Ghasemi-Ghalebahman, Seyed Mohammad Jafari and Meysam Shakouri, A comparison between acoustic emission approach and vibration analysis in detection of failure mechanisms in carbon/epoxy composites, The Biennial International Conference on Experimental Solid Mechanics, Iran University of Science and Technology, Tehran, Iran, February 2018
71) Mahboobeh Azadi, Mehrdad Zolfaghari, Saeid Rezanezhad and **Mohammad Azadi**, Preparation of various aluminium matrix composites reinforcing by nano-particles with different dispersion methods, Iran International Aluminium Conference, Tehran, Iran, April 2018
72) Mohsen Alizadeh, Hassan Sayar, **Mohammad Azadi** and Seyed Mohammad Jafari, Investigation on effect of acoustic emission sensor type on condition monitoring of polymer matrix laminated composite under low-cycle fatiue loading, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
73) Hassan Sayar, Mohsen Alizadeh, **Mohammad Azadi**, Ahmad Ghasemi-Ghalebahman and Seyed Mohammad Jafari, Analysis of acoustic emission data to study crack propagation behavior in aluminum alloy under low-cycle fatigue loading, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
74) Mahdi Samiei and **Mohammad Azadi**, Low-cycle fatigue lifetime prediction for aluminum-silicon-magnesium alloy of engine cylinder head based on striations in fracture surface and Paris crack propagation relation, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
75) Seyed Mehdi Hosseini, **Mohammad Azadi**, Zinat Pourbaferani, Roham Rasouli, Mohsen Alizadeh, Zeynab Naji and Seyed Behzad Mousavi, Vibration and stress analysis on structure of engine piston scuff test-rig device at high temperature and fluid environment, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
76) Mohammad Amir Shirzadi, **Mohammad Azadi**, Mohsen Ostad Shabani and Fatemeh Heydari, Sensitivity analysis on parameters of plasma spray method on thermal shock fatigue lifetime of aluminum alloy with thermal barrier coating, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
77) Mostafa Saeidi, **Mohammad Azadi**, Mehdi Mokhtari Shirazabad and Pablo Lopez-Crespo, Determination of mode-I stress intensity factor in aluminum alloy by finite element method and digital image correlation, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
78) Mehrdad Pourjam, Seyed Mehdi Hosseini, Vahid Abedini and **Mohammad Azadi**, Vibration and stress analysis for design of reciprocating wear device at high temperature and fluid environment, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
79) Tohid Jadidi, Alireza Hajiali Mohammadi, Amir Abdollah, **Mohammad Azadi** and Mousa Nikmanesh, Experimental study on drilling of carbon fiber reinforced polymer matrix composites using altrasonic vibration, 26th International Annual Conference of the Iranian Society of Mechanical Engineers, Semnan University, Semnan, Iran, April 2018 (in Persian)
80) Ali Dadashi, **Mohammad Azadi** and Hamed Bahmanabadi, Low-cycle fatigue lifetime prediction of aluminum-silicon alloy in engine piston at different temperatures using modified plastic strain energy, 3rd International Conference on Mechanical and Aerospace Engineering, K.N. Toosi University of Technology, Tehran, Iran, May 2018 (in Persian)
81) **Mohammad Azadi**, Mohsen Alizadeh and Hassan Sayar, Sensitivity analysis for effects of displacement amplitude and loading frequency on low-cycle fatigue lifetime in carbon/epoxy laminated composites, 12th International Fatigue Congress, Poitiers, France, May 2018 (MATEC Web of Conferences, Volume 165, Article Number 22021, 2018)
82) Mohammad Jamalkhani Khameneh and **Mohammad Azadi**, Reliability prediction, scatter-band analysis and fatigue limit assessment of high-cycle fatigue properties in EN-GJS700-2 ductile cast iron, 12th International Fatigue Congress, Poitiers, France, May 2018 (MATEC Web of Conferences, Volume 165, Article Number 10012, 2018)

83) Tohid Jadidi, Alireza Hajiali Mohammadi, Amir Abdollah and **Mohammad Azadi**, Experimental study on effect of using ultrasonic waves on the surface roughness and defects during drilling of carbon fiber reinforced polymer matrix composite components, 15th annual and 4th International Conference on Manufacturing Engineering, Tarbiyat Modares University, Tehran, Iran, October 2018 (in Persian)

2019

84) Ali Dadashi and **Mohammad Azadi**, Presenting fatigue lifetime prediction model based on modified plastic strain energy in piston aluminum alloy under cyclic in-phase thermo-mechanical loadings, 2nd National Conference on Internal Combustion Engines, Iran Society of Engine, Babol Noshirvani University of Technology, Babol, Iran, February 2019 (in Persian)
85) Sajad Khisheh, Khalil Khalili, **Mohammad Azadi** and Vahid Zaker Hendoabadi, Hardness estimation in different processes of heat treatment for aluminum alloy using artificial neural network and regression analysis, 2nd National Conference on Internal Combustion Engines, Iran Society of Engine, Babol Noshirvani University of Technology, Babol, Iran, February 2019 (in Persian)
86) Ghazaleh Nosrat and **Mohammad Azadi**, Continuum damage prediction in aluminum-silicon alloy of engine piston under isothermal low-cycle fatigue loading, 2nd National Conference on Internal Combustion Engines, Iran Society of Engine, Babol Noshirvani University of Technology, Babol, Iran, February 2019 (in Persian)
87) Fatemeh Ahadi, Mojtaba Biglari and **Mohammad Azadi**, A literature review on Stirling engines: New achievements in order to improve power and efficiency, 2nd National Conference on Internal Combustion Engines, Iran Society of Engine, Babol Noshirvani University of Technology, Babol, Iran, February 2019 (in Persian)
88) Seyed Mohammad Reza Hosseini Moghadam, Amir Mohammad Jadidi, **Mohammad Azadi** and Siamak Alizadeh Nia, The effect of regenerator material and working temperature on brake power of Gamma-type Stirling engine, 2nd National Conference on Internal Combustion Engines, Iran Society of Engine, Babol Noshirvani University of Technology, Babol, Iran, February 2019 (in Persian)
89) Zeinab Naji, **Mohammad Azadi** and Zinat Poorbafrani, Creating the ability of stress/fatigue finite element simulations through the piston development process for improving a combustion engine, 2nd National Conference on Internal Combustion Engines, Iran Society of Engine, Babol Noshirvani University of Technology, Babol, Iran, February 2019 (in Persian)
90) Mojtaba Biglari, Bahram Vaziri and **Mohammad Azadi**, Investigation of effect of combination percent air/helium working fluid on performance of beta-type Stirling engine by finite speed thermo-dynamics model, 5th International Conference on Applied Research in Electrical, Mechanical and Mechatronics Engineering, K.N. Toosi University of Technology, Tehran, Iran, January 2019 (in Persian)
91) **Mohammad Azadi**, Hamed Bahmanabadi, Jahangir Torkian and Roham Rasouli, Investigation of nano-clay addition effect on microstructure, hardness and machining process in vehicle engine piston aluminum-silicon alloy, 4th National Congress on Mechanical Engineering and Chemical Engineering, Kharazmi University, Karaj, Iran, February 2019 (in Persian)
92) Hassan Sayar, **Mohammad Azadi** and Mohsen Alizadeh, Sensitivity analysis for effects of tensile loading rate on mechanical properties in carbon fibers, epoxy resin and laminated composites, 27th Annual International Conference of Iranian Society of Mechanical Engineering and 7th Conference on Thermal Power Plants, Tarbiat Modares University and University of Tehran, Tehran, Iran, April-May, Page 81, 2019
93) Hanieh Aroo and **Mohammad Azadi**, Sensitivity analysis of creep properties to temperature and reinforcement parameters in aluminum alloy and aluminum matrix nano-composite, 27th Annual International Conference of Iranian Society of Mechanical Engineering and 7th Conference on Thermal Power Plants, Tarbiat Modares University and University of Tehran, Tehran, Iran, April-May, Page 145, 2019 (in Persian)
94) Ali Dadashi, Ghazaleh Nosrat and **Mohammad Azadi**, Lifetime calculation by plastic strain energy and continuum damage mechanics in low-cycle fatigue of aluminum alloy, 27th Annual International Conference of Iranian Society of Mechanical Engineering and 7th Conference on Thermal Power Plants, Tarbiat Modares University and University of Tehran, Tehran, Iran, April-May, Page 151, 2019 (in Persian)
95) Shokouh Dezianian and **Mohammad Azadi**, Investigation of build orientation effect on bending fatigue lifetime and fracture surfaces in Polylactic acid (PLA) made from additive manufacturing by 3D printing device, 4th National Conference on Mechanical and Aerospace Engineering, K.N. Toosi University of Technology, Tehran, Iran, May 2019 (in Persian)
96) Kianoosh Rashnoo, Mohammad Jafar Sharifi, **Mohammad Azadi** and Mahboobeh Azadi, Sensitivity analysis of displacement rate and strengthening process on tensile mechanical properties in aluminum alloy of engine cylinder-head, 4th National Conference on Mechanical and Aerospace Engineering, K.N. Toosi University of Technology, Tehran, Iran, May 2019 (in Persian)
97) Sahar Safarloo, Sama Safarloo and **Mohammad Azadi**, Effect of SiO_2 nano-particles reinforcement on reciprocating wear properties of piston aluminumsilicon alloys, 7th International Biennial Conference on Ultrafine Grained and Nanostructured Materials, University of Trento and University of Tehran, Trento, Italy, September, 2019

98) **Mohammad Azadi** and Hanieh Aroo, Effect of adding 2 wt.% SiO_2 nano-particles on creep behavior at 250°C and 100 MPa in AlSi12CuNiMg piston aluminum alloy, 7th International Biennial Conference on Ultrafine Grained and Nanostructured Materials, University of Trento and University of Tehran, Trento, Italy, September, 2019

2020

99) Sajad Golzari, Shaghayegh Takrousta, Hamed Bahmanabadi and **Mohammad Azadi**, Sensitivity analysis of continuum damage parameters on error and scatter-band for predicted low-cycle fatigue lifetime of AZ61A magnesium alloy, The 5th Biennial International Conference on Experimental Solid Mechanics, Iran University of Science and Technology, Tehran, Iran, February 2020
100) Hanieh Aroo, Mohammad Sadegh Aghareb Parast, Mahboobeh Azadi and **Mohammad Azadi**, Investigation of effects of nano-particles, heat treatment process and acid amount on corrosion rate in piston aluminum alloy using regression analysis, 11th International Conference on Internal Combustion Engines and Oil, Sapco Company, Tehran, Iran, February 2020 (in Persian)
101) Fatemeh Ahadi, Mojtaba Biglari, **Mohammad Azadi** and Seyed Navid Madani, The effect of porosity, type and thickness of thermal barrier coating on performance of Gamma-type Stirling engine by regression analysis, 11th International Conference on Internal Combustion Engines and Oil, Sapco Company, Tehran, Iran, February 2020 (in Persian)
102) Bahram Vaziri, **Mohammad Azadi**, Mojtaba Biglari and Seyed Navid Madani, Investigation of dependency of working fluid thermo-dynamics properties to temperature on performance of Gama-type Stirling engine by sensitivity analysis, 11th International Conference on Internal Combustion Engines and Oil, Sapco Company, Tehran, Iran, February 2020 (in Persian)
103) Shokouh Dezianian and **Mohammad Azadi**, Application of additive manufacturing techniques in fabricating optimized engine components: Case study of piston and valve, 11th International Conference on Internal Combustion Engines and Oil, Sapco Company, Tehran, Iran, February 2020 (in Persian)
104) Tabanmehr Qaraati, Ali Momeni Movahed, **Mohammad Azadi**, Seyed Ashkan Moosavian and Mehdi Nikkhah, Comparing characteristic parameters of driving cycle using real data collected in Iran and global standard cycles, 11th International Conference on Internal Combustion Engines and Oil, Sapco Company, Tehran, Iran, February 2020 (in Persian)
105) Shaghayegh Takrousta, Sajad Golzari and **Mohammad Azadi**, Continuum damage in AZ61A magnesium alloy under torsion and tensile-compressive low-cycle fatigue loading, The 28th Annual International Conference of Iranian Society of Mechanical Engineering, Amirkabir University, Tehran, Iran, May 2020 (in Persian)
106) **Mohammad Azadi**, Morteza Kianifar, Shokouh Dezianian, Ali Dadashi, Shaghayegh Torkaman and Maryam Chiani, Investigation of build orientation in fused deposition modeling on high-cycle bending fatigue properties in PLA polymer, The 28th Annual International Conference of Iranian Society of Mechanical Engineering, Amirkabir University, Tehran, Iran, May 2020 (in Persian)
107) Seyed Mohammad Reza Hosseini Moghadam, Amir Mohammad Jadidi, **Mohammad Azadi** and Siamak Alizadeh, Experimental study of dissipated heat, friction and production power in Gama Stirling engine with different heat sources, The 28th Annual International Conference of Iranian Society of Mechanical Engineering, Amirkabir University, Tehran, Iran, May 2020 (in Persian)
108) Hanieh Aroo, **Mohammad Azadi**, Mahboobeh Azadi and Mohammad Sadegh Aghareb Parast, Pure fatigue and corrosion-fatigue behaviors of piston aluminum alloys after various immersion times, 60th International Scientific Conference on Solidification and Crystallization of Metals, Silesian University of Technology, Poland, September 2020
109) Ashkan Behmanesh, **Mohammad Azadi** and Hanieh Aroo, Study of stress effects on creep behaviors of aluminum matrix composite, reinforced by SiO_2 nano-particles, 60th International Scientific Conference on Solidification and Crystallization of Metals, Silesian University of Technology, Poland, September 2020
110) Seyed Mohammad Ahmadi, Shokouh Dezianian, **Mohammad Azadi**, Azadeh Shokri, Hossein Mehrabian Mohammadi, Sensitivity analysis of casting parameters on manufacturing process quality in vehicle engine piston, 9th International Conference and Exhibition on Materials Science and Metallurgical Engineering (iMat2020), Tehran, Iran, November 2020 (in Persian)

2021

111) Tabanmehr Gharaati, Ali Momeni Movahed, **Mohammad Azadi** and Seyed Ashkan Mousavian, Performance evaluation of speed-acceleration probability matrix, K-means, support vector machine and artificial neural network for extracting driving cycles, The First Conference on Automotive Industries Recent Advances and Future Trends, Iran University of Science and Technology, Tehran, Iran, January 2021 (in Persian)
112) Mina Hesami Zokaei, Azadeh Shokri, **Mohammad Azadi**, Davoud Afshari, Roham Rasouli, Zinat Pourbaferani, Seyed Behzad Mousavi, Masoud Alizadeh, Ali Moshiri, Siamak Alizadeh, Peyman Sharghi, Saber Ahmadabadi, Characterization of the route and the proper model of science and industry cooperation based on full-service supplier, The First Conference on Automotive Industries Recent Advances and Future Trends, Iran University of Science and Technology, Tehran, Iran, January 2021 (in Persian)

113) Mohammad Sadegh Aghareb Parast, Sajad Khisheh and **Mohammad Azadi**, Effect study of the surface roughness on high-cycle fatigue lifetime of engine piston aluminum-silicon alloy, 3rd National Conference on Internal Combustion Engines, Shahid Rajaee Teacher Training University, Tehran, Iran, February 2021 (in Persian)
114) Ali Dadashi, **Mohammad Azadi**, Nima Sahragard and Ali Ghoddosian, Minimizing the weight and the strain energy in XU+ engine connecting rod by shape and topology optimization, 3rd National Conference on Internal Combustion Engines, Shahid Rajaee Teacher Training University, Tehran, Iran, February 2021 (in Persian)
115) Ali Dadashi, **Mohammad Azadi** and Azade Shokri, Topology and shape optimization of XU7 engine piston using weight and strain energy objective functions, 3rd National Conference on Internal Combustion Engines, Shahid Rajaee Teacher Training University, Tehran, Iran, February 2021 (in Persian)
116) Mohammad Karimi and **Mohammad Azadi**, Multi-objective optimization of engine piston by coupling finite element method and genetic algorithm, 3rd National Conference on Internal Combustion Engines, Shahid Rajaee Teacher Training University, Tehran, Iran, February 2021 (in Persian)
117) **Mohammad Azadi** and Mehrnaz Farrokhpour, A review on recent advances in additive manufacturing: 4Dprinting against 3D-printing in addition to nanotechnology (as a keynote speech), 10th Spring World Congress on Engineering and Technology, Spring International Conference on Material Sciences and Technology, Xi'an, China, April 2021
118) **Mohammad Azadi** and Hanieh Aroo, Sensitivity analysis of stress, pre-corrosion, nano-particles and heat treatment on fatigue lifetime of aluminum alloy, 26th International Conference on Fracture and Structural Integrity, Turin, Italy, May 2021

EMPLOYMENT HISTORY

Industrial Carriers:

2021-Now	Project Manager, Iran Driving Cycle (IDC) Project, Irankhodro Powetrain Company (IPCO), Tehran, Iran
2020-Now	Research and Technology Expert, Irankhodro Powetrain Company (IPCO), Tehran, Iran
2016-2019	Advisor of Vice President, Irankhodro Powetrain Company (IPCO), Tehran, Iran
2015	Head of Executers Board, Iran Mechanic and Powetrain Consortium, Tehran, Iran
2015	Executive Project Manager, Turbo-charged Engine Family Project (EF4-TC Engine), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2014-2015	Executive Project Manager, Turbo-charged Engine Family Project (EF7-TC Engine), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2014	President of Mechanics and Powertrains Association, Tehran, Iran
2014	Assistant Project Manager, EU4 Project (EF7 engine family with EURO-4 pollution level), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2014	Assistant Project Manager, PSC Project (EF7 engine family with partial stratified combustion), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2014	Assistant Project Manager, TC7 Project (EF7 engine family with turbo-charger), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2014-2015	Expert (Senior Engineer), Projects Management Organization (PMO), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2014-2015	Head, Publication Committee, Iranian Society of Engine (ISE), Tehran, Iran
2013-2015	Head, Fatigue and Wear in Materials (FWM) Workgroup, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2013-2016	Inspector, Iranian Society of Engine (ISE), Tehran, Iran (elected for the second time)
2013-2014	Dean, Education, Research and Technology (ERT) Department, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2013	Assistant Project Manager, Fatigue Lifetime of Vehicle Axle Research Project, Imam Hossein University, Tehran, Iran
2012-2013	Dean, Research and Technology Department, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2012-2013	Head, Fatigue and Wear Workgroup, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2011	Head, Validation Team of AZ91 Project (Using magnesium alloys in engine components), Irankhodro Powertrain Company (IPCO), Tehran, Iran
2010-2012	Head, Fatigue Workgroup, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2009-2012	Inspector, Iranian Society of Engine (ISE), Tehran, Iran
2008-2012	Expert (Senior Engineer), Engine/Vehicle Laboratory and Validation Department, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2008	Expert (Senior Engineer), CAE Department, Irankhodro Powertrain Company (IPCO), Tehran, Iran
2008	Assistant Executer, Fatigue and NVH Improvement of Vehicle Body and Structure Research Project, K.N. Toosi University of Technology, Tehran, Iran

Educational Carriers:

2021-Now	A Board Member of Directors of Iran Society of Automotive Engineering, Tehran, Iran
2021-Now	Head of Speech Committee, Sharif Alumni Association, Tehran, Iran
2021-Now	A Member of Tourism Committee, Sharif Alumni Association, Tehran, Iran
2021-Now	A Board Member of Directors of Faculties Guild Council, Semnan University, Semnan, Iran
2020-2021	Advisor, MSc. Thesis (1 title), Imam Khomeini International University, Qazvin, Iran
2019-Now	Associate Professor, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran
2020-Now	Vice-Chancellor for Research and Technology, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran
2016-2018	Head of Entrepreneurship and Relations with Industry Group, Semnan University, Semnan, Iran
2015-2018	Advisor, Society of Scientific Student Faculty of Mechanical Engineering, Semnan University, Semnan, Iran
2015-2018	Assistant Professor, Faculty of Mechanical Engineering, Semnan University, Semnan, Iran
2015	Vice-President, Pishro Powertrain Technology Institute, Tehran, Iran

2015	Member of Directors Board, Pishro Powertrain Technology Institute, Tehran, Iran
2015	Chairman of Executive Board of Faculty Recruitment, Pishgam Powertrain Research Institute, Tehran, Iran
2015	Member of Directors Board, Pishgam Powertrain Research Institute, Tehran, Iran
2014-2015	Lecturer (Powertrain Validation Tests), University of Applied Science and Technology, Irankhodro Branch, Tehran, Iran
2014-2015	Lecturer (Mechanical Engineering Design I, Composite Materials), Semnan University, Semnan, Iran
2012-2014	Advisor, MSc. Thesis (4 titles), Sharif University of Technology, Tehran, Iran
2012-2013	Advisor, MSc. Thesis (1 title), Iran University of Science and Technology, Tehran, Iran
2008-2010	Lecturer (Industrial Drawing, Hydraulics and Pneumatics, Computer Basics and Programing and Professional Foreign Language), Islamic Azad University, Tehran West Branch, Tehran, Iran
2008-2009	Teaching Assistant (Strength of Materials I), Sharif University of Technology, Tehran, Iran
2008-2009	Laboratory Assistant (Laboratory of Strength of Materials), Sharif University of Technology, Tehran, Iran
2008	Project Researcher, Improvement of Vehicle Body and Structure based on Fatigue and Vibration Behaviors, K.N. Toosi University of Technology, Tehran, Iran
2007-2008	Teaching Assistant (Mechanical Engineering Design II, Vibration and Strength of Materials I), K.N. Toosi University of Technology, Tehran, Iran
2006-2007	Teaching Assistant (Mechanical Engineering Design II and Strength of Materials I), Shiraz University, Shiraz, Iran
2006-2007	Laboratory Assistant (Laboratory of Mechanics of Materials), Shiraz University, Shiraz, Iran

Researching Carriers:

2021-Now	Paper Reviewer, Journal of Rehabilitation in Civil Engineering, Iran
2021-2022	Scientific Chairman of 12th International Conference on Internal Combustion Engines and Oil, Iran
2021-Now	Paper Reviewer, Academia Letters, USA
2021-Now	Paper Reviewer, Journal of Transportation Infrastructure Engineering, Iran
2021-Now	Paper Reviewer, Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, England
2021-Now	Paper Reviewer, AUT Journal of Mechanical Engineering, Iran
2021-Now	Paper Reviewer, Iranian Journal of Manufacturing Engineering, Iran
2021-Now	Paper Reviewer, Iranian (Iranica) Journal of Energy & Environment, Iran
2021-Now	Paper Reviewer, Advances in Mechanical Engineering, Sage
2021-Now	Paper Reviewer, Materials Research Express, IOP
2021-Now	Paper Reviewer, Journal of Solid Mechanics, Iran
2021	Paper Reviewer, Applied Composite Materials, Springer
2021-Now	Paper Reviewer, Heliyon, Elsevier
2021-Now	Editorial Board Member, The Journal of Engine Research, Iran
2020-Now	Editorial Board Member, Frattura ed Integrita Strutturale (Fracture and Structural Integrity), Italy
2021	Organizing Committee Member, International Conference and Exhibition on Nanotechnology, South Korea
2020-Now	Paper Reviewer, International Journal of Metalcasting, Springer
2020-Now	Paper Reviewer, PLOS ONE, Springer
2020-Now	Paper Reviewer, Fatigue and Fracture of Engineering Materials and Structures, Wiley
2020-Now	Paper Reviewer, Journal of the Brazilian Society of Mechanical Sciences and Engineering, Springer
2020-Now	Paper Reviewer, Journal of Applied Polymer Science, Wiley
2020-Now	Paper Reviewer, Composite Science and Technology, Elsevier

2019-Now	Paper Reviewer, Fuel, Elsevier
2019-Now	Paper Reviewer, Composite Structures, Elsevier
2019-Now	Paper Reviewer, Archives of Civil and Mechanical Engineering, Poland
2019-Now	Paper Reviewer, Advances in Manufacturing, Springer
2019-Now	Paper Reviewer, Amirkabir Journal of Mechanical Engineering, Iran
2019-Now	Paper Reviewer, International Journal of Ambient Energy, England
2019-Now	Paper Reviewer, Journal of Stress Analysis, Iran
2018-Now	Head, Research Laboratory of Advanced Materials Behavior, Semnan University, Iran
2018-Now	Paper Reviewer, Journal of Aerospace Technology and Management, Brazil
2018-Now	Paper Reviewer, Engineering Failure Analysis, Elsevier
2018-Now	Paper Reviewer, Materials Chemistry and Physics, Elsevier
2018-Now	Editorial Advisory Board Member, International Journal of Engineering, Iran
2017-Now	Paper Reviewer, Materials and Design, Elsevier
2016-Now	Paper Reviewer, Surface and Coatings Technology, Elsevier
2016-Now	Paper Reviewer, Iranian Journal of Science and Technology, Iran
2015-Now	Paper Reviewer, Modares Mechanical Engineering, Iran
2015-Now	Paper Reviewer, Applied Surface Science, Elsevier
2015-2020	Paper Reviewer, Mechanics of Advanced Composite Structures, Iran
2015-2018	Executive Director, Mechanics of Advanced Composite Structures, Iran
2015-2018	Associate Editor, Mechanics of Advanced Composite Structures, Iran
2015-2016	Project Manager of Scientific Part, 9th International Conference on Internal Combustion Engines and Oil (ICICE&O-9), Iran
2016	Proceeding Editor, 9th International Conference on Internal Combustion Engines and Oil (ICICE&O-9), Iran
2015-2016	Scientific Board Member, 9th International Conference on Internal Combustion Engines and Oil (ICICE&O-9), Iran
2015-2016	Articles and Keynote Speakers Responsible, 9th International Conference on Internal Combustion Engines and Oil (ICICE&O-9), Iran
2015	Paper Reviewer, Steel and Composite Structures, Korea
2015-Now	Paper Reviewer, Applied Mathematical Modeling, Elsevier
2015-Now	Paper Reviewer, International Journal of Thermal Sciences, Elsevier
2015	Paper Reviewer, Advances in Powertrains and Automotives, USA
2015	Paper Reviewer, Nuclear Science and Techniques, China
2015	Member of Technical Program Committee, 4th International Conference on Materials Science and Engineering, China
2015	Paper Reviewer, Archives of Foundry Engineering, Poland
2015	Foreign Associate Editors Board Member, Archives of Foundry Engineering, Poland
2015	Paper Reviewer, Advanced Ceramics Progress, Iran
2014	Paper Reviewer, Journal of Solid Mechanics, Iran
2014	Paper Reviewer, Metallurgical and Materials Transactions A, Springer
2014-2015	Editorial Board Member, Advances in Powertrains and Automotives, USA
2014-2017	Editorial Board Member, International Journal of Materials Lifetime, USA
2014-Now	Editorial Board Member, American Journal of Materials Engineering and Technology, USA

2014	Paper Reviewer, International Journal of Materials Science and Applications, USA
2014	Paper Reviewer, Experimental Mechanics, Springer
2014-2016	Editorial Board Member, International Journal of Materials Science and Applications, USA
2014-2016	Editorial Board Member, Advances in Materials, USA
2014-2016	Editorial Board Member, International Journal of Mechanical Engineering and Applications, USA
2014	Paper Reviewer, Journal of The Energy Institute, USA
2014	Paper Reviewer, International Journal of Mechanical Engineering and Applications, USA
2014	Paper Reviewer, Science Journal of Applied Mathematics and Statistics, USA
2014	Paper Reviewer, 3rd Global Conference on Materials Science and Engineering (CMSE2014), China
2014	Member of Technical Program Committee, 3rd Global Conference on Materials Science and Engineering (CMSE2014), China
2014	Paper Reviewer, Scientia Iranica, Iran
2014-2016	Editorial Board Member, American Journal of Science and Technology, USA
2014-2016	Editorial Board Member, American Journal of Materials Research, USA
2014-2016	Editorial Board Member, American Journal of Energy and Power Engineering, USA
2014	Paper Reviewer, American Journal of Materials Research, USA
2014	Proceeding Editor, 8th International Conference on Internal Combustion Engines and Oil (ICICE&O-8), Iran
2013-2014	Scientific Board Member, 8th International Conference on Internal Combustion Engines and Oil (ICICE&O-8), Iran
2013-2014	Website Responsible, 8th International Conference on Internal Combustion Engines and Oil (ICICE&O-8), Iran
2014	Paper Reviewer, International Conference on Internal Combustion Engines and Oil, Iran
2013	Paper Reviewer, 2nd Global Conference on Materials Science and Engineering (CMSE2013), China
2013	Paper Reviewer, Composite B: Engineering, Europe
2013	Paper Reviewer, Engineering Fracture Mechanics, Elsevier
2013-2015	Editorial Board Member, The Journal of Engine Research, Iran
2013-Now	Paper Reviewer, International Journal of Fatigue, Elsevier
2013-Now	Paper Reviewer, Materials Science and Engineering A, Elsevier
2013	Paper Reviewer, Global Conference on Materials Science and Engineering, China
2013	Paper Reviewer, Advancement in Scientific and Engineering Research, Turkey
2012-2015	Associate Editor, The Journal of Engine Research, Iran
2012-2015	Executive Director, The Journal of Engine Research, Iran
2012-2013	Paper Reviewer, Advances in Ceramic Science and Engineering, Hong Kong
2012	Paper Reviewer, Sky Journal of Mechanical and Electrical Electronics Engineering, African countries
2011-2016	Paper Reviewer, The Journal of Engine Research, Iran
2011-2013	Paper Reviewer, International Conference on Internal Combustion Engines, Iran
2011-Now	Paper Reviewer, Meccanica, Springer
2010-2015	Paper Reviewer, Journal of Mechanical Science and Technology, Springer
2009-Now	Paper Reviewer, International Journal of Engineering, Iran
2009	Paper Reviewer, International Mechanical Engineering Congress & Exposition (ASME), USA

REVIEWING & EDITORING

***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in Material Science and Engineering A, 2015**
***Introduced as Excellence in Reviewing (Top 10 Reviewers) in International Journal of Fatigue, 2016**
***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in International Journal of Fatigue, 2016**
***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in Surface and Coating Technology, 2016**
***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in Materials Characterization, 2017**
***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in Material Science and Engineering A, 2017**
***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in Surface and Coating Technology, 2017**
***Introduced as Outstanding Contribution in Reviewing (Top 10 Reviewers) in Materials Characterization, 2018**
***Introduced as Selective Reviewer in Amirkabir Journal of Mechanical Engineering, 2020**

Articles Editoring:

Editorial Board Member, The Journal of Engine Research, Iran	since 2021
ISE Advisor and Scientific Board Member, 3nd National Conference on Internal Combustion Engines, Tehran	2021
Editorial Board Member, Frattura ed Integrita Strutturale (Fracture and Structural Integrity), Italy	since 2020
Scientific Board Member, 11th International Conference on Internal Combustion Engines and Oil, Iran	2019-2020
Editorial Advisory Board Member, International Journal of Engineering, Iran	since 2018
Scientific Board Member, 2nd National Conference on Internal Combustion Engines, Babol	2018
Scientific Board Member, 10th International Conference on Internal Combustion Engines and Oil, Iran	2017-2018
Associate Editor, Mechanics of Advanced Composite Structures, Iran	2015-2016
Executive Director, Mechanics of Advanced Composite Structures, Iran	2015-2016
Project Manager of Scientific Part, 9th International Conference on Internal Combustion Engines and Oil, Iran	2015-2016
Proceeding Editor, 9th International Conference on Internal Combustion Engines and Oil, Iran	2016
Scientific Board Member, 9th International Conference on Internal Combustion Engines and Oil, Iran	2015-2016
Articles and Keynote Speakers Responsible, 9th International Conference on Internal Combustion Engines and Oil, Iran	2015-2016
Foreign Associate Editors Board Member, Archives of Foundry Engineering, Poland	2015
Editorial Board Member, Advances in Powertrains and Automotives, USA	2014-2015
Editorial Board Member, International Journal of Materials Lifetime, USA	2014-2017
Editorial Board Member, American Journal of Materials Engineering and Technology, USA	since 2014
Technical Program Committee Member, 4th International Conference on Materials Science and Engineering, China	2015
Technical Program Committee Member, 3rd Global Conference on Materials Science and Engineering, China	2014
Editorial Board Member, International Journal of Materials Science and Applications, USA	2014-2016
Editorial Board Member, Advances in Materials, USA	2014-2016
Editorial Board Member, International Journal of Mechanical Engineering and Applications, USA	2014-2016
Editorial Board Member, American Journal of Science and Technology, USA	2014-2016
Editorial Board Member, American Journal of Materials Research, USA	2014-2016
Editorial Board Member, American Journal of Energy and Power Engineering, USA	2014-2016
Proceeding Editor, 8th International Conference on Internal Combustion Engines and Oil, Iran	2014

Website Responsible, 8th International Conference on Internal Combustion Engines and Oil, Iran	2013-2014
Scientific Board Member, 8th International Conference on Internal Combustion Engines and Oil, Iran	2013-2014
Editorial Board Member, The Journal of Engine Research, Iran	2013-2015
Associate Editor, The Journal of Engine Research, Iran	2012-2015
Executive Director, The Journal of Engine Research, Iran	2012-2015

Articles Reviewing:

Journals

Journal of Rehabilitation in Civil Engineering	**1** articles (since 2021)
Academia Letters	**1** articles (since 2021)
Journal of Transportation Infrastructure Engineering	**1** articles (since 2021)
Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture	**1** articles (since 2021)
AUT Journal of Mechanical Engineering	**1** articles (since 2021)
Iranian Journal of Manufacturing Engineering	**1** articles (since 2021)
Iranian (Iranica) Journal of Energy & Environment	**1** articles (since 2021)
Advances in Mechanical Engineering	**2** articles (since 2021)
Materials Research Express	**1** articles (since 2021)
Journal of Solid Mechanics	**1** articles (since 2021)
Applied Composite Materials	**8** articles (2021)
Heliyon	**1** articles (since 2021)
International Journal of Metalcasting	**3** articles (since 2020)
PLOS ONE	**1** articles (since 2020)
Fatigue and Fracture of Engineering Materials and Structures	**3** articles (since 2020)
Journal of the Brazilian Society of Mechanical Sciences and Engineering	**1** articles (since 2020)
Journal of Applied Polymer Science	**1** articles (since 2020)
Composite Science and Technology	**1** articles (since 2020)
Fuel	**1** articles (since 2019)
Composite Structures	**3** articles (since 2019)
Archives of Civil and Mechanical Engineering	**1** articles (since 2019)
Advances in Manufacturing	**1** articles (since 2019)
Amirkabir Journal of Mechanical Engineering	**27** articles (since 2019)
International Journal of Ambient Energy	**1** articles (since 2019)
Journal of Stress Analysis	**1** articles (since 2019)
Journal of Aerospace Technology and Management	**1** articles (since 2018)
Engineering Failure Analysis	**1** articles (since 2018)
Materials Chemistry and Physics	**6** articles (since 2018)
Materials and Design	**21** articles (since 2017)
Surface Coatings and Technology	**11** articles (since 2016)

Iranian Journal of Science and Technology	**1** articles (since 2016)
Modares Mechanical Engineering	**7** articles (since 2015)
Applied Surface Science	**1** articles (since 2015)
Mechanics of Advanced Composite Structures	**74** articles (2015-2020)
Steel and Composite Structures	**1** article (since 2015)
Applied Mathematical Modeling	**1** article (since 2015)
International Journal of Thermal Sciences	**1** article (since 2015)
Advances in Powetrains and Automotives	**3** article (2015)
Nuclear Science and Techniques	**1** article (2015)
Archives of Foundry Engineering	**9** article (since 2015)
Advanced Ceramics Progress	**1** article (2015)
Journal of Solid Mechanics	**2** article (2015)
Metallurgical and Materials Transactions A	**8** article (2014)
Experimental Mechanics	**1** article (2014)
Journal of The Energy Institute	**1** article (2014)
International Journal of Mechanical Engineering and Applications	**1** article (2014)
International Journal of Materials Science and Applications	**1** article (2014)
International Journal of Microstructure and Materials Properties	**1** article (2014)
Science Journal of Applied Mathematics and Statistics	**1** article (2014-2015)
Scientia Iranica	**5** article (2014)
American Journal of Materials Research	**1** article (2014)
Composite B: Engineering	**1** article (2013)
Journal of Applied Mechanical Engineering	**1** article (2013)
Engineering Fracture Mechanics	**3** article (2013)
International Journal of Fatigue	**64** articles (since 2013)
Materials Science and Engineering A	**87** articles (since 2013)
Advancement in Scientific and Engineering Research	**1** article (2013)
Advances in Ceramic Science and Engineering	**3** articles (2012-2013)
Sky Journal of Mechanical and Electrical Electronics Engineering	**1** article (2012)
The Journal of Engine Research	about **125** articles (since 2011)
Meccanica	**13** articles (since 2011)
Journal of Mechanical Science and Technology	**45** articles (2010-2015)
International Journal of Engineering	about **114** articles (since 2009)

Conferences

Materials Engineering and Modern Manufacturing	**1** articles (2020)
National Conference on Internal Combustion Engines (NCICE)	**4** articles (since 2019)
Global Conference on Materials Science and Engineering (CMSE)	**22** articles (2013-2014)
International Conference on Internal Combustion Engines and Oil (ICICE&O)	**72** articles (since 2011)

International Mechanical Engineering Congress & Exposition (ASME)	**2** articles (2009)

References

My Own-pages and IDs

Telegram ID: @mhmmd_zd
Twitter ID: @Mohamma43534696
Instagram: https://www.instagram.com/mhmmd_zd2

My Iranian Pages

Civilica: https://www.civilica.com/p/107233
Mag-Iran: https://www.magiran.com/author/profile/445818
SCI-Explore: https://sciexplore.ir/profiles/author/330-786-940
Elm-Net: https://elmnet.ir/eid/H-0019-8136
Iranian Researchers Network: http://www.irangn.ir/profile.php?mid=10709
Iran Researchers Virtual Society: http://irresearchers.ir/mohammadazadi
Sharif Alumni Association: https://grads.alumsharif.org/user-menu/resume-detail/resume-Mohammad-Azadi-26/nav-1
Kalej: https://kalej.ir/teachers/57248/%D9%85%D8%AD%D9%85%D8%AF-%D8%A2%D8%B2%D8%A7%D8%AF%DB%8C

My International Pages

Publons: https://publons.com/researcher/2619720/mohammad-azadi
Scopus: https://www.scopus.com/authid/detail.uri?authorId=35077100300
Mendeley: https://www.mendeley.com/profiles/mohammad-azadi2
ORCiD: https://orcid.org/0000-0001-8686-8705
Google Scholar: https://scholar.google.com/citations?user=77RoC_sAAAAJ&hl=en&oi=ao
Research Gate: https://www.researchgate.net/profile/Mohammad_Azadi
Microsoft Academic:
https://academic.microsoft.com/profile/39j568ii-ig68-491g-f0e9-2j86h61f449j/MohammadAzadi/publication/search?q=Mohammad%20Azadi&qe=%2540%2540%2540USER.PUBLICATIONS%253D39f568ee-ec68-491c-b0a9-2f86d61b449f&f=&orderBy=0
Linked-in: https://www.linkedin.com/in/mohammad-azadi-2a956738
Academia: https://semnanu.academia.edu/MohammadAzadi
My Science Work: https://www.mysciencework.com/profile/mohammad.azadi
Live DNA: https://livedna.org/98.33363
KUDOS: https://www.growkudos.com/profile/mohammad_azadi
Impact Story: https://profiles.impactstory.org/u/0000-0001-8686-8705
Reddit: https://www.reddit.com/user/Mohammad-Azadi