Mian Ashfaq Ali

Associate Professor

School of Mechanical & Manufacturing Engineering

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LinkedIn:

About

Dr. Mian Ashfaq Ali is working as Associate Professor in the School of Mechanical & Manufacturing Engineering. Dr. Mian Ashfaq Ali has a PhD in Automotive Engineering. Dr. Mian Ashfaq Ali has published 23 research articles & conference papers having a citation count of 229, carried out 4 projects and filed 1 intellectual property.

Qualifications

PhD in Automotive Engineering 2012 - 2015
Hanyang University , Korea

MS in Automotive Engineering 2008 - 2009
Hanyang University , Korea

BE in Mechanical Engineering 2002 - 2006
UET Peshawar , Pakistan

Experience

Associate Professor 2022- Present
School of Mechanical & Manufacturing Engineering

Assistant Professor 2021 - 2022
School of Mechanical & Manufacturing Engineering

Assistant Professor 2019 - 2021
School of Mechanical & Manufacturing Engineering

Assistant Professor 2016 - 2019
School of Mechanical & Manufacturing Engineering

Assistant Professor 2016 - 2016
School of Mechanical & Manufacturing Engineering

Lecturer 2010 - 2016
School of Mechanical & Manufacturing Engineering

Engineer 2006 - 2008
KTC , KTC Mardan

Awards

Professional Memberships

PEC

Research Projects

National Projects

Development of Electric Vehicle for Short Daily Commute by Conversion 2024

Funding Agency: NUST
Amount: PKR 10,000,000.00
Status: Approved_inprocess

Design & Development of a Prototype Linear Motor Drive 2022

Funding Agency: Defence R&D Dte
Amount: PKR 4,700,000.00
Status: Approved_inprocess

Development of Smart Metrology Machine 2022

Funding Agency: HEC
Amount: PKR 19,310,000.00
Status: Approved_inprocess

Design and Development of Vacuum forming Machine 2019

Funding Agency: HEC
Amount: PKR 12,800,000.00
Status: Completed

International Projects

Research Articles

A novel approach to measure rotational dynamics of valvetrain components in production engines using miniature GMR chip 2025

Sehrish Shahnawaz Riaz Ahmed Mufti Mian Ashfaq Ali Rehan Zahid Jawad Aslam Muhammad Rizwan Siddiqui Muhammad Usman Bhutta
Measurement , Volume 256, Part D, Article Number 118455
Impact Factor: 5.600 | **Quartile:** 1
DOI: https://doi.org/10.1016/j.measurement.2025.118455

Friction and Wear Properties of Phosphonium Based Ionic Liquid Used as Additive in Synthetic and Bio Based Lubricants 2024

Nouman Haider Muhammad moneeb Butt Rehan Zahid Mian Ashfaq Ali Jawad Aslam Riaz Ahmed Mufti Muhammad Usman Bhutta
Tribology in Industry , Volume 46, No. 4, Pages 611-623
Impact Factor: N/A | **Citations:** 1
DOI: 10.24874/ti.1648.03.24.08

Effect of micro-surface-texturing on the friction between cam/tappet interface of a commercial vehicle engine 2024

Muhammad Rizwan Siddiqui Mian Ashfaq Ali Riaz Ahmed Mufti Jawad Aslam Muhammad Usman Bhutta Rehan Zahid Muhammad Khuram
Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, Pages 1-19
Impact Factor: 1.600 | **Quartile:** 3 | **Citations:** 2
DOI: https://doi.org/10.1177/13506501241266116

Numerical investigation of vortex-induced vibrations (VIV) of a rotating cylinder in in-line and cross-flow directions subjected to oscillatory flow 2024

Ubaid Ur Rehman Adnan Munir Niaz Bahadur Khan Ming Zhao Mian Ashfaq Ali Muhammad Kashif Mohammad S. Islam Zeeshan Saeed
Ocean Engineering , Volume 304 , Article Number 117917
Impact Factor: 4.600 | **Quartile:** 1 | **Citations:** 9
DOI: https://doi.org/10.1016/j.oceaneng.2024.117917

Tribological Testing and Analysis of Surface-Textured Metal Surfaces 2023

Rizwan Siddiqui Mian Ashfaq Ali Waqar Arshad Muhammad Shaban Muhammad Usman Muhammad Zulfiqar
Engineering Proceedings , Volume 45(1), Article Number 4
Impact Factor: N/A
DOI: https://doi.org/10.3390/engproc2023045004

Experimental Investigation of Engine Valve Train Friction Considering Effects of Operating Conditions and WPC Surface Treatment 2023

Muhammad Usman Bhutta Muhammad Huzaifa Najeeb Muhammad Usman Abdullah Sami Ur Rahman Shah Muhammad Khurram Riaz Ahmed Mufti Kiyotaka Ogawa Jawad Aslam Rehan Zahid Mian Ashfaq Ali Muazzam Arshad
Materials , Volume 16(9), Article Number 3431

Impact Factor: 3.748 | **Quartile:** 1 | **Citations:** 4
DOI: https://doi.org/10.3390/ma16093431

Friction and Wear Performance Evaluation of Bio-Lubricants and DLC Coatings on Cam/Tappet Interface of Internal Combustion Engines 2021

Rehan Zahid Muhammad Usman Bhutta Riaz Ahmad Mufti Muhammad Usman Abdullah Haji Hassan Masjuki Mahendra Varman Muhammad Abul Kalam Mian Ashfaq Ali Jawad Aslam Khalid Akhtar
Materials , Volume 14(23), Article Number 7206
Impact Factor: 3.623 | **Quartile:** 1 | **Citations:** 7
DOI: https://doi.org/10.3390/ ma14237206

Roller sliding in engine valve train: Effect of oil film thickness considering lubricant composition 2020

Muhammad Khurram Riaz Ahmad Mufti Muhammad Usman Bhutta Hafiz Malik Naqash Afzal Muhammad Usman Abdullah Sami Ur Rahman Shah Saif ur Rehman Rehan Zahid Khalid Mahmood Mian Ashfaq Muhammad Umar
Tribology International , Volume 149, Article Number 105829
Impact Factor: 4.872 | **Quartile:** 1 | **Citations:** 11
DOI: 10.1016/j.triboint.2019.06.022

Fuzzy Logic-Based Direct Load Control Scheme for Air Conditioning Load to Reduce Energy Consumption 2020

Zeeshan Ali Shah Hatem F. Sindi Mian Ashfaq Ali Azhar Ul Haq
IEEE Access , Volume 8, Pages 117413-117427
Impact Factor: 3.367 | **Quartile:** 2 | **Citations:** 37
DOI: 10.1109/ACCESS.2020.3005054

Numerical simulation of flow with large eddy simulation at Re = 3900 A study on the accuracy of statistical quantities 2019

Niaz B. Khan Zainah B. Ibrahim Mian Ashfaq Ali Mohammed Jameel Muhammad Ijaz Khan Ahad Javanmardi D.O. Oyejobi
International Journal of Numerical Methods for Heat & Fluid Flow, -
Impact Factor: 2.871 | **Quartile:** 1 | **Citations:** 12
DOI: 10.1108/HFF-11-2018-0619

Tribological characteristics comparison of formulated palm trimethylolpropane ester and polyalphaolefin for cam/tappet interface of direct acting valve train system 2018

Rehan Zahid Masjuki Hj. Hassan Abdullah Alabdulkarem Mahendra Varman Md. Abul Kalam Riaz Ahmad Mufti Nurin Wahidah Mohd Zulkifli Mubashir Gulzar Muhammad Usman Bhutta Mian Ashfaq Ali Usman Abdullah Robiah H. Yunus
Industrial Lubrication and Tribology , Volume 70 Issue 5
Impact Factor: 1.037 | **Quartile:** 4 | **Citations:** 13
DOI: https://doi.org/10.1108/ILT-06-2017-0156

Collision Avoidance from Multiple Passive Agents with Partially Predictable Behavior 2017

Khalil Muhammad Zuhaib Abdul Manan Khan Junaid Iqbal Dr. Mian Ashfaq Ali Muhammad Usman Ahmad Ali Sheraz Yaqub Ji Yeong Lee Changsoo Han
Applied Sciences , NULL
Impact Factor: 1.689 | **Quartile:** 3 | **Citations:** 7
DOI: 10.3390/app7090903

Adaptive Global Fast Sliding Mode Control for Steer-by-Wire System Road Vehicles 2017

Junaid Iqbal Khalil Muhammad Zuhaib Changsoo Han Abdul Manan Khan Mian Ashfaq Ali
Applied Sciences-Basel , NULL
Impact Factor: 1.689 | **Quartile:** 3 | **Citations:** 27
DOI: 10.3390/app7070738

Lateral acceleration potential field function control for rollover safety of multi-wheel military vehicle with in-wheel-motors 2017

Mian Ashfaq Ali Changjun Kim Sangho Kim Abdul Manan Khan Junaid Iqbal Mohammad Zuhaib Khalil Donghwan Lim Changsoo Han
International Journal of Control Automation and Systems, NULL
Impact Factor: 2.173 | **Quartile:** 2 | **Citations:** 14
DOI: 10.1007/s12555-014-0573-7

Passivity based adaptive control for upper extremity assist exoskeleton 2016

Mian Ashfaq Ali Abdul Manan Khan Deok Won Yun Khalil Muhammad Zuhaib Chao Yuan Junaid Iqbal Jungsoo Han Kyoosik Shin Chang Soo Han
International Journal of Control Automation and Systems, Volume 14(1), Pages 291-300
Impact Factor: 1.687 | **Quartile:** 3 | **Citations:** 46
DOI: http://dx.doi.org/10.1007/s12555-014-0250-x

Performance evaluation of integrated control of direct yaw moment and slip ratio control for electric vehicle with rear in-wheel motors on split-mu road 2015

Mian Ashfaq Ali ChangJun Kiim S H Kim S H Back S H Jang J H Jang Chang Soo Han

International Journal of Automotive Technology, Volume 16(6), Pages 939-946

Impact Factor: 0.876 | **Quartile:** 3 | **Citations:** 19

DOI: DOI 10.1007/s12239?015?0096?0

Development of Insole Sensor System and Gait Phase Detection Algorithm for Lower Extremity Exoskeleton 2015

Mian Ashfaq Ali Dong Hwan Lim Wan Soo Kim Chang Soo Han

Journal of the Korean Society for Precision Engineering, Volume 32, No.12, Pages 1065-1072

Impact Factor: 0

DOI: https://doi.org/10.7736/KSPE.2015.32.12.1065

Passivity Based Adaptive Control and Its Optimization for Upper Limb Assist Exoskeleton Robot 2015

Mian Ashfaq Ali Abdul Manan Khan Young Hoon Ji Chang Soo Han Jung Soo Han

Journal of the Korean Society for Precision Engineering, Volume 32(10), Pages 857-863

Impact Factor: 0

DOI: https://doi.org/10.7736/KSPE.2015.32.10.857

Motion Control of a 6WD/6WS wheeled platform with in-wheel motors to improve its maneuverability 2015

Mian Ashfaq Ali ChangJun Kim Sangho Kim Sunghoon Back Youngsoo Kim Soonwoong Hwang Changsoo Han Jaeho Jang

International Journal of Control Automation and Systems, Volume 13(2), Pages 434-442

Impact Factor: 1.219 | **Quartile:** 3 | **Citations:** 20

DOI: DOI 10.1007/s12555-014-0039-y

Conference Proceedings

An Advanced Method for Measuring Shim and Tappet Dynamics and Analysing the Effects of Friction Modifiers in Engine Valvetrains 2025

Sehrish Shahnawaz Riaz Ahmed Mufti Waleed Al-Sallami Mian Ashfaq Ali Rehan Zahid Jawad Aslam

50th Leeds Lyon Symposium on Tribology, res.country(231,)

Citations: N/A

DOI: Nil

Measurement of frictional torque of a directacting valvetrain using a shaft-to-shaft torque transducer to study the effect of Laser Surface Texturing on friction reductionMeasurement of frictional torque of a directacting valvetrain using a shaft-to-shaft torque transducer to study the effect of Laser Surface Texturing on friction reductionMeasurement of frictional torque of a directacting valvetrain using a shaft-to-shaft torque transducer to study the effect of Laser Surface Texturing on friction reductionMeasurement of frictional torque of a directacting valvetrain using a shaft-to-shaft torque transducer to study the effect of Laser Surface Texturing on friction reduction 2024

Muhammad Rizwan Siddiqui Mian Ashfaq Ali Riaz Ahmed Mufti Jawad Aslam Muhammad Usman Bhutta Rehan Zahid Muhammad Khurram

2nd International Conference on Modern Technologies in Mechanical & Material Engineering, MTME 2024, GIKI, Pakistan (Best paper award) res.country(177,)

Citations: N/A

DOI: https://doi.org/10.1051/matecconf/202439801002

Effect of WPC Surface Treatment on the Performance of an Engine Valve Train 2023

Dr Muhammad Usman Bhutta Shahbaz Ahmad Samiur Rahman Shah Muhammad Khurram Riaz Ahmad Mufti Dr Muhammad Usman Abdullah Kiyo Ogawa Rehan Zahid Dr Jawad Aslam Mian Ashfaq Ali Tayyab Ul Islam

Leeds-Lyon Symposium on Tribology, res.country(231,)

Citations: N/A

DOI: Available after Publishing of Article

Intellectual Property

Copyrights

Patents

Development of engine blow-by meter based on microcontroller and axel flow meter 2013

Status: Filed

Industrial Designs

Trademarks