

Ibraheem Haneef

Professor

School of Mechanical & Manufacturing Engineering

Email: ibraheem.haneef@smme.nust.edu.pk

Contact: 0518770334

LinkedIn: <https://www.linkedin.com/in/ibraheem-haneef-3411b4a/?originalSubdomain=pk>



About

Dr. Ibraheem Haneef is working as Professor in the School of Mechanical & Manufacturing Engineering. Dr. Ibraheem Haneef has a PhD in Engineering. Dr. Ibraheem Haneef has published 25 research articles & conference papers having a citation count of 547, carried out 2 projects and filed 0 intellectual property.

Qualifications

PhD in Engineering University of Cambridge , United Kingdom	2004 - 2009
MS in Aerospace Engineering NUST, Islamabad , Pakistan	2002 - 2004
BE in Aerospace Engineering NED UET Karachi , Pakistan	1987 - 1991

Experience

Professor School of Mechanical & Manufacturing Engineering	2023- Present
Professor, Dean/ Director General Institute of Avionics & Aeronautics (DG IAA) & HoD Mechanical & Aerospace Engineering Department Air University , E-9, Islamabad	2020 - 2023
Professor, Director International Cooperation Office, HoD Mechanical & Aerospace Engineering Department & Actg Dean /Director General Institute of AVionics & Aronautics Air University , E-9, Islamabad	2019 - 2020
Professor & Director International Cooperation Air University , E-9, Islamabad	2019 - 2019
Associate Professor & Director International Cooperation Air University , E-9, Islamabad	2017 - 2019
Associate Professor & Dean College of Aeronautical Engineering (CAE), NUST , CAE-NUST, PAF Academy, Risalpur	2016 - 2017
Associate Professor & HoD Aerospace Engineering Department College of Aeronautical Engineering (CAE), NUST , CAE-NUST, PAF Academy, Risalpur	2015 - 2016
Associate Professor & HoD Research, CAE College of Aeronautical Engineering (CAE), NUST , CAE-NUST, PAF Academy, Risalpur	2014 - 2015
Assistant Professor, PI-MEMS Lab & Deputy Director International Cooperation Office Air University , E-9, Islamabad	2009 - 2014
Graduate Research Assitant (PhD Student) University of Cambridge, Cambridge , HVMS Lab, Centre for Advanced Photonics & Electronics (CAPE), University of Cambnridge, 9-JJ Thomson Avenue, Cambridge CB3 0FA, United Kingdom (UK)	2004 - 2009
Graduate Research Assistant (MS Student) College of Aeronautical Engineering (CAE) , CAE, PAF Academy, Risalpur, Distt Nowshehra, KPK	2002 - 2004
Officer In-Charge Aircraft Engineering Squadron Engineering Wing , PAF Base Minhas, Kamra, Attock	2001 - 2002
Production Control Officer, F-100 Engine (F-16 Aircraft) F-100 Engine Project, Engine Overhaul Group, Mirage Rebuild Factory , Mirage Rebuild Factory, Pakistan Aeronautical Complex, Kamra, Attock	1995 - 2001
Engineering Officer No 9 Multi Role Squadron, , No 38 Wing, PAF Base, Mushaf, Sargodha	1993 - 1995
Officer In-Charge, F-16 Aircraft Phase Inspection Flight Aircraft Engineering Squadron, , Engineering Wing, PAF Base Mushaf, Sargodha	1991 - 1993
Trainee Engineering Officer Professional Continuing Education (PCE) Department , College of Aeronautical Engineering (CAE), PAF Academy, Risalpur	1991 - 1991

Research Projects

National Projects	
Going Global PAK-UK Education Gateway Students' Research Partnership Grant Funding Agency: British Council Amount: PKR 7,053,750.00 Status: Completed	2023
Going Global PAK-UK EducationGateway Faculty Research Partnership Grant Funding Agency: British Council Amount: PKR 11,400,000.00 Status: Approved_inprocess	2023

International Projects

Research Articles

A Map-Based Recommendation System and House Price Prediction Model for Real Estate Maryam Mubarak Ali Tahir Fizza Waqar Ibraheem Haneef Gavin McArdle Michel Bertolotto Muhammad Tariq Saeed <i>ISPRS International Journal of Geo-Information</i> , Volume 11, Issue 3, Article Number 178 Impact Factor: 2.899 Quartile: 2 Citations: 8 DOI: https://doi.org/10.3390/ijgi11030178	2022
Material selection for optimum design of MEMS pressure sensors Zahid Mehmood Ibraheem Haneef Florin Udrea <i>Microsystem Technologies</i> , Volume 26, Pages 2751–2766 Impact Factor: 2.276 Quartile: 3 Citations: 37 DOI: https://doi.org/10.1007/s00542-019-04601-1	2020
Sensitivity enhancement of silicon-on-insulator CMOS MEMS thermal hot-film flow sensors by minimizing membrane conductive heat losses Zahid Mehmood Ibraheem Haneef Syed Zeeshan Ali Florin Udrea <i>Sensors</i> , Volume 19(8), Article Number 1860 Impact Factor: 3.275 Quartile: 1 Citations: 13 DOI: https://doi.org/10.3390/s19081860	2019
Material selection for Micro-Electro-Mechanical-Systems (MEMS) using Ashby's approach Zahid Mehmood Florin Udrea Ibraheem Haneef <i>Materials & Design</i> , Volume 157, Pages 412-430 Impact Factor: 5.770 Quartile: 1 Citations: 42 DOI: 10.1016/j.matdes.2018.07.058	2018
Evaluation of thin film p-type single crystal silicon for use as a CMOS Resistance Temperature Detector (RTD) Zahid Mehmood Mohtashim Mansoor S. Zeeshan Ali Florin Udrea Ibraheem Haneef <i>Sensors and Actuators A: Physical</i> , Volume 283, Pages 159-168 Impact Factor: 2.739 Quartile: 2 Citations: 17 DOI: doi.org/10.1016/j.sna.2018.09.062	2018
A maskless etching technique for fabrication of 3D MEMS structures in SOI CMOS devices Mohtashim Mansoor Ibraheem Haneef Andrea DeLuca John Coull Florin Udrea <i>Journal of Micromechanics and Microengineering</i> , Volume 28, Number 8, Article Number 085013 Impact Factor: 2.141 Quartile: 2 Citations: 7 DOI: 10.1088/1361-6439/aabe0d	2018
An SOI CMOS-based multi-sensor MEMS chip for fluidic applications Mohtashim Mansoor Ibraheem Haneef Suhail Akhtar Muhammad Aftab Rafiq Andrea De Luca Syed Zeeshan Ali Florin Udrea <i>Sensors</i> , Volume 16, Issue 11, Article Number 1608 Impact Factor: 2.677 Quartile: 1 Citations: 26 DOI: doi:10.3390/s16111608	2016
High-Sensitivity Single Thermopile SOI CMOS MEMS Thermal Wall Shear Stress Sensor Andrea De Luca John Coull Syed Zeeshan Ali Claudio Falco Florin Udrea Ibraheem Haneef <i>IEEE Sensors Journal</i> , Volume 15, Issue 10, Pages 5561-5568 Impact Factor: 1.889 Quartile: 2 Citations: 19 DOI: 10.1109/JSEN.2015.2444798	2015
Minimizing the loss produced by a turbulent separation using vortex generator jets Simon Evans John Coull Howard Hodson Ibraheem Haneef <i>AIAA Journal</i> , Volume 50, Issue 4, Pages 778-787 Impact Factor: 1.080 Quartile: 1 Citations: 30 DOI: https://doi.org/10.2514/1.J050790	2012
Ultra-high temperature (>300 °c) suspended thermodiode in SOI CMOS technology S. Santra Florian Udrea P.K. Guha S.Z. Ali Ibraheem Haneef <i>Micromachines</i> , Volume 41, Issue 9, Pages 540-546 Impact Factor: 0.789 Quartile: 3 Citations: 23 DOI: 10.1016/j.mejo.2009.12.005	2010
Silicon on insulator diode temperature Sensor - A detailed analysis for ultra-high temperature operation Sumita Santra Prasanta Kumar Guha Syed Zeeshan Ali Florin Udrea Ibraheem Haneef <i>IEEE Sensors Journal</i> , Volume 10, Issue 5, Pages 997-1003	2010

Impact Factor: 1.473 | **Quartile:** 2 | **Citations:** 45
DOI: 10.1109/JSEN.2009.2037822

Use of carbon micro-particles for improved infrared temperature measurement of CMOS MEMS devices

2010

Richard H Hopper Syed Zeeshan Ali Florin Udrea Christopher H Oxley Ibraheem Haneef
Measurement Science and Technology, Volume 21, Issue 4, Article Number 045107

Impact Factor: 1.353 | **Quartile:** 1 | **Citations:** 12
DOI: 10.1088/0957-0233/21/4/045107

Arrays of parallel connected coaxial multiwall-carbonnanotube-amorphous- silicon solar cells

2009

Hang Zhou Alan Colli Arman Ahnood Yang Yang Nalin Rupesinghe Tim Butler Pritesh Hiralal Arokia Nathan Gehan A. J. Amaratunga Ibraheem Haneef
Advanced Materials, Volume 21, Issue 38-39, Pages 3919-3923

Impact Factor: 8.379 | **Quartile:** 1 | **Citations:** 45
DOI: <https://doi.org/10.1002/adma.200901094>

Force measurements on U-shaped electrothermal microactuators: Applications to packaging

2008

M Boutchich T J Mamtara G J McShane D F Moore J A Williams Ibraheem Haneef
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, Volume 222, Issue 1, Pages 87-96

Impact Factor: 0.317 | **Quartile:** 4 | **Citations:** 5
DOI: <https://doi.org/10.1243/09544062JMES664>

On-chip deposition of carbon nanotubes using CMOS microhotplates

2007

MS Haque KBK Teo NL Rupensinghe SZ Ali Sunglyul Maeng J Park F Udrea W I Milne Ibraheem Haneef
Nanotechnology, Volume 19, Issue 2, Article Number 025607

Impact Factor: 3.310 | **Quartile:** 1 | **Citations:** 55
DOI: 10.1088/0957-4484/19/02/025607

Use of nanocomposites to increase electrical "gain" in chemical sensors

2007

Sara M. C. Vieira Paul Beecher Florin Udrea William I. Milne Manoj A. G. Namboothiry David L. Carroll Jonghyurk Park Sunglyul Maeng Ibraheem Haneef
Applied Physics Letters, Volume 91, Issue 20, Article Number 203111

Impact Factor: 3.596 | **Quartile:** 1 | **Citations:** 23
DOI: <https://doi.org/10.1063/1.2811716>

- Towards Real Estate Analytics using Map Personalisation** 2020
Mariam Mubarak Kamran Khalid Fizza Waqar Muhammad Ali Tahir Gavin McArdle Ibraheem Haneef Michela Bertolotto
6th International Conference on Geographical Information Systems Theory, Applications and Management, res.country(183,)
Citations: N/A
DOI: 10.5220/0009368301840190
- Heritage preservation using aerial imagery from light weight low cost Unmanned Aerial Vehicle (UAV)** 2017
Muhammad Abdullah Tariq Butt S. M. Osama A. Gillani Hassaan Khaliq Qureshi Ibraheem Haneef
2017 International Conference on Communication Technologies (ComTech), res.country(177,)
Citations: N/A
DOI: 10.1109/COMTECH.2017.8065774
- A tungsten based SOI CMOS MEMS wall shear stress sensor** 2014
Ibraheem Haneef Muhammad Umer Mohtashim Mansoor Suhail Akhtar Muhammad Rafiq Syed Zeeshan Ali Florin Udrea
Proceedings of IEEE Sensors, res.country(68,)
Citations: N/A
DOI: 10.1109/ICSENS.2014.6985293
- SOI CMOS multi-sensors MEMS chip for aerospace applications** 2014
M. Mansoor Ibraheem Haneef Suhail Akhtar Muhammad Rafiq M. A. Rafiq Florin Udrea S. Z. Ali
Proceedings of IEEE Sensors, res.country(68,)
Citations: N/A
DOI: 10.1109/ICSENS.2014.6985225
- 3D modelling of a thermopile-based SOI CMOS thermal wall shear stress sensor** 2014
Claudio Falco Andrea De Luca Sohab Sarfraz Ibraheem Haneef John Coull Syed Zeeshan Ali Florin Udrea
Proceedings of the International Semiconductor Conference, CAS, res.country(188,)
Citations: N/A
DOI: 10.1109/SMICND.2014.6966459
- 3D multiphysics modelling of an SOI CMOS MEMS thermal wall shear stress sensor** 2014
C. Falco A. De Luca S. Sarfraz I. Haneef John Coull S.Z. Ali Udrea, Florian
Procedia Engineering, res.country(109,)
Citations: N/A
DOI: doi.org/10.1016/j.proeng.2014.11.567
- A thermopile based SOI CMOS MEMS wall shear stress sensor** 2013
Andrea De Luca Ibraheem Haneef John Coull Syed Zeeshan Ali Claudio Falco Florin Udrea
Proceedings of the International Semiconductor Conference, CAS, res.country(188,)
Citations: 8
DOI: 10.1109/SMICND.2013.6688088
- Improved infrared thermal imaging of a CMOS MEMS device** 2010
Richard Hopper Ibraheem Haneef Syed Zeeshan Ali Florin Udrea Chris Oxley
2010 16th International Workshop on Thermal Investigations of ICs and Systems (THERMINIC), res.country(68,)
Citations: N/A
DOI: https://ieeexplore.ieee.org/abstract/document/5636311