

Moniba Shams

Associate Professor

NUST Business School

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About

Dr. Moniba Shams is working as Associate Professor in the NUST Business School. Dr. Moniba Shams has a PhD in Elasticity/Solid Mechanics. Dr. Moniba Shams has published 20 research articles & conference papers having a citation count of 425, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Elasticity/Solid Mechanics University of Glasgow , United Kingdom	2007 - 2011
MPhil in Elasticity/Solid Mechanics Quaid-i-Azam University , Pakistan	2000 - 2002
MSc in Mathematics Quaid-i-Azam University , Pakistan	1998 - 2000
BSc in MathematicsPhysics University of the Punjab , Pakistan	1995 - 1997

Experience

Associate Professor NUST Business School	2023- Present
Assistant Professor NUST Business School	2022 - 2023
Assistant Professor School of Natural Sciences	2021 - 2022
Assistant Professor School of Natural Sciences	2015 - 2021
Assistant Professor School of Natural Sciences	2012 - 2015
Assistant Professor School of Natural Sciences	2011 - 2012
Lecturer School of Electrical Engineering and Computer Science	2005 - 2011
Lecturer NIIT (Currently SEECS) NUST , H-12, Islamabad	2005 - 2007
Lecturer Int Islamic University , Islamabad	2003 - 2005

Awards

Best teacher, 2013-14	2015
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Research Articles

Nanofluid cooling in photovoltaic thermal systems: Influence of thermal radiation, MHD, Joule heating, and carbon nanotubes <i>Moniba Shams Asim Aziz H. M. S. Bahaidarah Taha Aziz</i> <i>Journal of Renewable and Sustainable Energy</i> , Volume:17, Issue:4, Article Number 043501	2025
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Impact Factor: 1.900 Quartile: 4 DOI: https://doi.org/10.1063/5.0268799	
Channelized water driven flow of MHD carbon-nanotube nanofluid influenced by rotation, heat source and thermal radiation <i>Moniba Shams Sofia Sarwar</i> <i>PLoS ONE</i> , Volume:18, Issue:12 Impact Factor: 3.7 Quartile: 2 Citations: 3 DOI: 10.1371/journal.pone.0295406	2023
The effect of radiation and porosity on MHD nanofluid flow and heat transfer across a stretching cylinder <i>Moniba Shams Saira Asghar Muhammad Asif Farooq</i> <i>Waves in Random and Complex Media</i> , Pages 1-19 Impact Factor: 4.051 Quartile: 2 Citations: 3 DOI: 10.1080/17455030.2022.2141913	2022
Propagation of interfacial (Stoneley-type) waves at the joint boundary of two initially-stressed incompressible half-spaces <i>Moniba Shams</i> <i>International Journal of Non-Linear Mechanics</i> , Volume:146, Impact Factor: 3.336 Quartile: 2 Citations: 1 DOI: 10.1016/j.ijnonlinmec.2022.104158	2022
Entropy analysis with the Cattaneo–Christov heat flux model for the Powell–Eyring nanofluid flow over a stretching surface <i>Taha Aziz Asim Aziz Moniba Shams Haitham M.S. Bahaidarah Hafiz Muhammad Ali</i> <i>Waves in Random and Complex Media</i> , Pages 1-26 Impact Factor: 4.853 Quartile: 1 Citations: 3 DOI: 10.1080/17455030.2022.2060534	2022
Interfacial wave propagation in initially stressed compressible hyperelastic materials <i>Moniba Shams Kanwal Ejaz</i> <i>Mathematics and Mechanics of Solids</i> , Pages 1-22 Impact Factor: 2.341 Quartile: 2 Citations: 2 DOI: https://doi.org/10.1177%2F10812865221074304	2022
Propagation of Rayleigh wave in initially-stressed compressible hyperelastic materials <i>Kanwal Ejaz Moniba Shams</i> <i>Wave Motion</i> , Volume 100, Article Number 102675 Impact Factor: 2.174 Quartile: 2 Citations: 6 DOI: https://doi.org/10.1016/j.wavemoti.2020.102675	2021
Wave-propagation in an incompressible hollow elastic cylinder with residual stress <i>Moniba Shams</i> <i>Discrete and Continuous Dynamical Systems Series S</i> , Volume 13, Issue 10, Pages 2877-2904 Impact Factor: 2.425 Quartile: 1 Citations: 1 DOI: 10.3934/dcdss.2020123	2020
On Caputo modification of Hadamard-type fractional derivative and fractional Taylor series <i>Rashida Zafar Moniba Shams Mujeeb-ur-Rehman</i> <i>Advances in Difference Equations</i> , Volume 2020, Article Number 219 Impact Factor: 2.803 Quartile: 1 Citations: 17 DOI: https://doi.org/10.1186/s13662-020-02658-1	2020
Entropy generation in MHD Maxwell nanofluid flow with variable thermal conductivity, thermal radiation, slip conditions, and heat source <i>Asim Aziz Moniba Shams</i> <i>AIP Advances</i> , Volume 10, Issue 1, Article Number 015038 Impact Factor: 1.548 Quartile: 4 Citations: 63 DOI: https://aip.scitation.org/doi/full/10.1063/1.5129569	2020
Heat transfer and entropy analysis of Maxwell hybrid nanofluid including effects of inclined magnetic field, Joule heating and thermal radiation <i>Wasim Jamshed Yasir Ali Moniba Shams Asim Aziz</i>	2019

Impact Factor: 1.233 | **Quartile:** 2 | **Citations:** 76

DOI: 10.3934/dcdss.2020142

Plane Wave Reflection in a Compressible Half Space with Initial Stress

2019

C. M. Khalique T. Aziz Moniba Shams

Open Physics, Volume 17, Issue 1, Pages 438-448

Impact Factor: 0.963 | **Quartile:** 4 | **Citations:** 1

DOI: 10.1515/phys-2019-0044

Love waves in compressible elastic materials with a homogeneous initial stress

2018

MONIBA SHAMS K. Ejaz

Mathematics and Mechanics of Solids, NULL

Impact Factor: 1.791 | **Quartile:** 2 | **Citations:** 6

DOI: <https://doi.org/10.1177/1081286518771726>

Reflection of plane waves from the boundary of an initially stressed incompressible half-space

2017

Moniba Shams

Mathematics and Mechanics of Solids, NULL

Impact Factor: 2.545 | **Quartile:** 1 | **Citations:** 6

DOI: <https://doi.org/10.1177/1081286517741524>

Effect of initial stress on Love wave propagation at the boundary between a layer and a half-space

2016

M Shams

Wave Motion, Volume 65, Pages 92–104

Impact Factor: 1.575 | **Quartile:** 2 | **Citations:** 35

DOI: 10.1016/j.wavemoti.2016.04.009

On Rayleigh-type surface waves in an initially stressed incompressible elastic solid

2014

Moniba Shams R. W. Ogden

IMA Journal of Applied Mathematics, Volume: 79 Issue: 2 Pages: 360-376

Impact Factor: 0.947 | **Quartile:** 2 | **Citations:** 35

DOI: 10.1093/imamat/hxs070

Lamb Modes for an Isotropic Incompressible Plate

2013

Moniba Shams Takasar Hussain M. Afzal awan Faiz Ahmad

Mathematical Problems in Engineering, Volume 2013, Article ID 152346, 4 pages

Impact Factor: 1.082 | **Quartile:** 2

DOI: 10.1155/2013/152346

Initial stresses in elastic solids: Constitutive laws and acoustoelasticity

2011

M. Shams M. Destrade R.W. Ogden

Wave Motion, Volume: 48 Issue: 7 Pages: 552-567

Impact Factor: 1.46 | **Quartile:** 2 | **Citations:** 152

DOI: 10.1016/j.wavemoti.2011.04.004

Guided waves in a fluid-loaded transversely isotropic plate

2002

Moniba Shams Faiz Ahmad Nagina Kayani Farkhanda Yousuf

Mathematical Problems in Engineering, Volume 8 Issue 2 Pages 151-159

Impact Factor: 0.238 | **Quartile:** 3 | **Citations:** 15

DOI: 10.1080/10241230212909

Conference Proceedings

Rayleigh surface waves in orthotropic materials with voids

2018

Moniba Shams Noureen Tayyab

The 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications 2018, res.country(227,)

Citations: N/A

DOI: <http://aims sciences.org/conferences/2018/abstracts-2018-06-17.pdf>

Editorial Activities

Academia Engineering

2025

Reviewed Papers for Journals

Impact Factor: N/A	
Malaysian Journal of Mathematical Sciences Reviewed Papers for Journals Impact Factor: 1.3	2025
Propulsion and Power Research Reviewed Papers for Journals Impact Factor: 6.3	2025
International Journal of Ambient Energy Reviewed Papers for Journals Impact Factor: 0.31	2025
Journal of Applied Mathematics and Mechanics Reviewed Papers for Journals Impact Factor: 3.2	2025
Partial Differential Equations in Applied Mathematics Reviewed Papers for Journals Impact Factor: N/A	2025
Journal of Radiation Research and Applied Sciences Reviewed Papers for Journals Impact Factor: 1.7	2025
International Journal of Non-Linear Mechanics Reviewed Papers for Journals Impact Factor: 2.8	2025
Journal of Vibration and Control Reviewed Papers for Journals Impact Factor: 2.3	2025
Journal of Vibration and Contro Reviewed Papers for Journals Impact Factor: 2.3	2024
Engineering Computations. Reviewed Papers for Journals Impact Factor: 1.5	2024
Case Studies in Thermal Engineering Reviewed Papers for Journals Impact Factor: 6.4	2024
International Journal of Ambient Energy Reviewed Papers for Journals Impact Factor: 0	2024
Mathematics and Mechanics of Solids Reviewed Papers for Journals Impact Factor: 1.7	2024
Journal of Elasticity Reviewed Papers for Journals Impact Factor: N/A	2024
Nanotechnology Reviews Reviewed Papers for Journals Impact Factor: 7.4	2024
Nanotechnology Reviews Reviewed Papers for Journals Impact Factor: 7.4	2024
Modern Physics Letters B Reviewed Papers for Journals Impact Factor: 1.948	2023
Mechanics of Solids	2023

Reviewed Papers for Journals Impact Factor: 0.7	
Nanotechnology Reviewed Papers for Journals Impact Factor: 6.739	2023
Nanotechnology Reviews Reviewed Papers for Journals Impact Factor: 7.4	2023
International Journal of Modern Physics B Reviewed Papers for Journals Impact Factor: 1.404	2023
Reviewed Papers for Journals Impact Factor: 4.853	2022
Reviewed Papers for Journals Impact Factor: 4.051	2022
Reviewed Papers for Journals Impact Factor: awaiting	2022
Reviewed Papers for Journals Impact Factor: awaiting	2022
Reviewed Papers for Journals Impact Factor: 3.095	2022
Reviewed Papers for Journals Impact Factor: 2.986	2022
Reviewed Papers for Journals Impact Factor: 4.853	2022
Reviewed Papers for Journals Impact Factor: 00	2021
Reviewed Papers for Journals Impact Factor: 1.009	2021
Reviewed Papers for Journals Impact Factor: 2.98	2020
Reviewed Papers for Journals Impact Factor: 2.98	2020
Reviewed Papers for Journals	2018
Reviewed Papers for Journals	2018