

Syed Tayyab Hussain Shah


Associate Professor

College of Electrical & Mechanical Engineering

Email: sthqau@ceme.nust.edu.pk

Contact: 5154444514

LinkedIn: <https://www.linkedin.com/in/syed-tayyab-hussain-ba0253101/>



About

Dr. Syed Tayyab Hussain Shah is working as Associate Professor in the College of Electrical & Mechanical Engineering. Dr. Syed Tayyab Hussain Shah has a PhD in Fluid Mechanics. Dr. Syed Tayyab Hussain Shah has published 25 research articles & conference papers having a citation count of 1181, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Fluid Mechanics	2012 - 2015
Quaid-i-Azam University , Pakistan	
MPhil in Fluid Mechanics Applied Mathematics	2009 - 2011
Quaid-i-Azam University , Pakistan	
MSc in Applied Mathematics	2007 - 2009
Quaid-i-Azam University , Pakistan	
BSc in Math, Physics	2005 - 2007
University of the Punjab , Pakistan	

Experience

Associate Professor	2022- Present
College of Electrical & Mechanical Engineering	
Assistant Professor	2020 - 2022
College of Electrical & Mechanical Engineering	
Assistant Professor	2017 - 2020
College of Electrical & Mechanical Engineering	
Assistant Professor	2017 - 2017
College of Electrical & Mechanical Engineering	
Assistant Professor	2016 - 2017
College of Electrical & Mechanical Engineering	

Research Projects

National Projects	
Analyzing the effects of Nanoparticles Thermal Conductivity on the flow and heat transfer characteristics of fluid	2017
Funding Agency: HEC	
Amount: PKR 506,000.00	
Status: Completed	

International Projects

Research Articles

An optimized Impulse Factor-based VMD-EMD approach to improve SSVEP accuracy for BCI Systems	2025
Umar Shahbaz Khan Tahir Habib Nawaz Ayesha Zeb Adeel Wahab Syed Tayyab Hussain Shah U. Izhar	
Results in Engineering , Volume:25, Article Number:104203, Pages:14	
Impact Factor: 6 Quartile: 1 Citations: 4	
DOI: https://doi.org/10.1016/j.rineng.2025.104203	

Improved Accuracy for Subject-Dependent and Subject-Independent Deep Learning-based SSVEP BCI Classification: A User-Friendly Approach <i>Adeel Wahab Umar Shahbaz Khan Tahir Habib Nawaz Hassan Akbar Syed Tayyab Hussain Shah Azfar Khalid Ali. R. Ansari Raheel Nawaz</i> <i>IEEE Access</i> , Volume 12, Pages 115935-115950 Impact Factor: 3.400 Quartile: 2 Citations: 3 DOI: 10.1109/ACCESS.2024.3442235	2024
Heat transfer enhancement in a trapezoidal cavity due to the cavity orientation and marangoni convection <i>Syed Tayyab Hussain Z. K. Ghoben Rizwan Ul Haq</i> <i>Case Studies in Thermal Engineering</i> , Volume 59, Article Number 104547 Impact Factor: 6.400 Quartile: 1 Citations: 7 DOI: https://doi.org/10.1016/j.csite.2024.104547	2024
Mathematical model for a thermal cooling system with variable viscosity and thermal conductivity over a rotating disk <i>Asim Aziz Syed Tayyab Hussain Shah Amna Sadiq</i> <i>Case Studies in Thermal Engineering</i> , Volume 52, Article Number 103664 Impact Factor: 6.8 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1016/j.csite.2023.103664	2023
Image denoising using difference classifier and trimmed global mean filter adaptive approach <i>Syeda Hira Fatima Asim Munir Syed Tayyab Hussain</i> <i>Visual Computer</i> , Pages 1-23 Impact Factor: 3.5 Quartile: 2 Citations: 8 DOI: https://doi.org/10.1007/s00371-023-03106-3	2023
Constructional design and mixed convection heat transfer inside lid-driven semicircular cavity <i>Feroz Ahmed Soomro Muhammad Hamid Syed Tayyab Hussain Shah Rizwan Ul Haq</i> <i>European Physical Journal Plus</i> , Volume 137, Issue 7, Article Number 781 Impact Factor: 3.4 Quartile: 2 Citations: 15 DOI: https://doi.org/10.1140/epjp/s13360-022-03009-7	2022
Thermal strategy due to flame shape source in a carbon nanotubes-water enclosed by trapezoidal cavity <i>M. Zakaullah Rizwan Ul Haq Syed Tayyab Hussain Shah A. Khamis Alzahrani Fouad Mallawi</i> <i>International Communications in Heat and Mass Transfer</i> , Volume 135, Article Number 106068 Impact Factor: 7.0 Quartile: 1 Citations: 4 DOI: 10.1016/j.icheatmasstransfer.2022.106068	2022
Thermal energy performance due to convection process of nanofluid in a porous medium due to split lid motion in a right triangular enclosure <i>M. Zaka Ullah Syed Tayyab Hussain Shah Rizwan Ul Haq A. Khamis Alzahrani Fouad Mallawi</i> <i>Journal of Computational Design and Engineering</i> , Volume 9, Issue 3, Pages 890-906 Impact Factor: 4.9 Quartile: 1 Citations: 14 DOI: 10.1093/jcde/qwac033	2022
Pulsatile Darcy flow of water-based thermally radiative carbon nanotubes between two concentric cylinders <i>Naeem Ur Rehman Syed Tayyab Hussain Shah Asim Aziz</i> <i>Numerical Methods for Partial Differential Equations</i> , Pages 1-18 Impact Factor: 3.009 Quartile: 1 Citations: 8 DOI: 10.1002/num.22870	2022
Analysis of water driven CNTs along an axisymmetric surface with viscous dissipation effect <i>Rizwan Ul Haq Syed Tayyab Hussain Shah A. S. Alshomrani Malik Zaka Ullah Iskander Tilili</i> <i>Case Studies in Thermal Engineering</i> , Volume 22, Article Number 100779 Impact Factor: 4.724 Quartile: 1 DOI: j.csite.2020.100779	2020
Existence and stability of heat and fluid flow in the presence of nanoparticles along a curved surface by mean of dual nature solution <i>Arif Ullah Khan Sohail Nadeem Syed Tayyab Hussain Shah</i> <i>Applied Mathematics and Computation</i> , Volume 353, 15 July 2019, Pages 66-81 Impact Factor: 3.472 Quartile: 1 Citations: 38	2019

DOI: 10.1016/j.amc.2019.01.044

Model based study of SWCNT and MWCNT thermal conductivities effect on the heat transfer due to the oscillating wall conditions

2017

Syed Tayyab Hussain Sohail Nadeem Arif Ullah Khan
International Journal of Hydrogen Energy, NULL

Impact Factor: 4.229 | **Quartile:** 1 | **Citations:** 46

DOI: <https://doi.org/10.1016/j.ijhydene.2017.09.114>

Non-linear Radiation Effects in Mixed Convection Stagnation Point Flow along a Vertically Stretching Surface

2017

Rizwan Ul Haq Sohail Nadeem Noor Fadiya Mohd Syed Tayyab Hussain
International Journal of Chemical Reactor Engineering, Volume: 15, Issue: 1, Pages: 11-20, Published: Jan 2017

Impact Factor: 0.881 | **Quartile:** 4 | **Citations:** 26

DOI: 10.1515/ijcre-2015-0177

Phase flow study of MHD nanofluid with slip effects on oscillatory oblique stagnation point flow in view of inclined magnetic field

2016

Syed Tayyab Hussain Sohail Nadeem Arif Ullah Khan
Journal of Molecular Liquids, JOURNAL OF MOLECULAR LIQUIDS Volume: 224 Pages: 1210-1219 Part: B

Impact Factor: 3.648 | **Quartile:** 1 | **Citations:** 40

DOI: 10.1016/j.molliq.2016.10.102

Flow and heat transfer analysis of water and ethylene glycol based Cu nanoparticles between two parallel disks with suction/injection effects

2016

Syed Tayyab Hussain Rizwan Ul Haq Zafar Hayat Khan Zakia Hammouch
Journal of Molecular Liquids, Volume: 221 Pages: 298-304

Impact Factor: 3.648 | **Quartile:** 1 | **Citations:** 99

DOI: 10.1016/j.molliq.2016.05.089

Impact of Linear Operator on the Convergence of HAM Solution: a Modified Operator Approach

2016

Syed Tayyab Hussain Shah Muhammad Qasim Sohail Nadeem
Advances in applied mathematics and Mechanics, Volume: 8, Issue: 3, Pages: 499-516

Impact Factor: 0.763 | **Quartile:** 3 | **Citations:** 2

DOI: 10.4208/aamm.2014.m809

Water driven flow of carbon nanotubes in a rotating channel

2016

Syed Tayyab Hussain Zafar Hayat Khan Sohail Nadeem Rizwan Ul Haq
Journal of Molecular Liquids 214 (2016) 136–144, Volume: 214 Pages: 136-144

Impact Factor: 3.648 | **Quartile:** 1 | **Citations:** 76

DOI: 10.1016/j.molliq.2015.11.042

Analysis of MHD Williamson nano fluid flow over a heated surface

2016

Sohail Nadeem Syed Tayyab Hussain
Journal of Applied Fluid Mechanics, Volume: 9 Issue: 2 Pages: 729-739 Part: 1

Impact Factor: N/A | **Citations:** 44

DOI: 10.18869/acadpub.jafm.68.225.21487

Model-based analysis of micropolar nanofluid flow over a stretching surface

2014

Sohail Nadeem Rizwan Ul Haq Syed Tayyab Hussain
European Physical Journal Plus, Volume: 129 Issue: 8 Article Number: 161

Impact Factor: 1.377 | **Quartile:** 2 | **Citations:** 84

DOI: 10.1140/epjp/i2014-14161-8

Heat transfer analysis of Williamson fluid over exponentially stretching surface

2014

Sohail Nadeem Syed Tayyab Hussain
Applied Mathematics and Mechanics-English Edition, Volume 35, Issue 4, Pages 489-502

Impact Factor: 1.128 | **Quartile:** 2 | **Citations:** 102

DOI: 10.1007/s10483-014-1807-6

Flow and heat transfer analysis of Williamson nanofluid

2014

Sohail Nadeem Syed Tayyab Hussain
Applied Nanoscience, Volume: 4 Issue: 8 Pages: 1005-1012

Impact Factor: 0 | **Citations:** 204

DOI: 10.1007/s13204-013-0282-1

Flow of a Williamson fluid over a stretching sheet <i>Sohail Nadeem Syed Tayyab Hussain</i> <i>Brazilian Journal of Chemical Engineering</i> , Volume 30, No. 03, Pages 619-625 Impact Factor: 0.912 Quartile: 3 Citations: 317 DOI: 10.1590/S0104-66322013000300019	2013
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Conference Proceedings

An Improved Method for Identifying SSVEP Single-Channel Target Frequency for BCI Systems <i>Umar Shahbaz Khan Tahir Habib Nawaz Syed Tayyab Hussain Shah Adeel Wahab Hassan Akbar Zulfiqar Hasan Khan</i> <i>2024 3rd International Conference on Emerging Trends in Electrical, Control, and Telecommunication Engineering, ETECTE 2024 - Proceedings</i> <i>res.country(177,)</i> Citations: N/A DOI: 10.1109/ETECTE63967.2024.10823885	2024
Enhancing the Accuracy of SSVEP Target Frequency Detection: A User- Friendly Approach <i>Adeel Wahab Umar Shahbaz Khan Tahir Habib Nawaz Syed Tayyab Hussain Shah Naveed Anjum</i> <i>First International Conference on Advances in Mechanical, Materials, Mechatronics, and Energy Engineering (ICAME-24), res.country(177,)</i> Citations: N/A DOI: 638817996017460160	2024

Editorial Activities

Nanotechnology Reviews Reviewed Papers for Journals Impact Factor: 4	2024
Numerical Heat Transfer, Part A: Applications Reviewed Papers for Journals Impact Factor: 2	2024
Journal of Computational Design and Engineering Reviewed Papers for Journals Impact Factor: 3	2024
Journal of Nanofluids Reviewed Papers for Journals Impact Factor: 3.5	2024
International Journal of Hydrogen Energy Reviewed Papers for Journals Impact Factor: 6	2023
International Communications in Heat and Mass Transfer Reviewed Papers for Journals Impact Factor: 6.8	2021
Reviewed Papers for Journals Impact Factor: 4.379	2021
Reviewed Papers for Journals Impact Factor: 3.971	2021
Reviewed Papers for Journals Impact Factor: 4.724	2021
Reviewed Papers for Journals Impact Factor: 4.379	2021
Reviewed Papers for Journals Impact Factor: 4.724	2021

Reviewed Papers for Journals Impact Factor: 1.49	2021
Reviewed Papers for Journals Impact Factor: 3	2021
Reviewed Papers for Journals Impact Factor: 3	2020
Reviewed Papers for Journals Impact Factor: 3	2020
Reviewed Papers for Journals Impact Factor: 3	2020
Reviewed Papers for Journals Impact Factor: 3	2020
Reviewed Papers for Journals Impact Factor: 3	2020
Reviewed Papers for Journals Impact Factor: 2.236	2020
Reviewed Papers for Journals Impact Factor: 3.971	2020
Reviewed Papers for Journals Impact Factor: 2.236	2019
Reviewed Papers for Journals Impact Factor: 1.867	2019
Reviewed Papers for Journals Impact Factor: 2.638	2019
Reviewed Papers for Journals Impact Factor: 2.924	2019
Reviewed Papers for Journals Impact Factor: 2.924	2019
Reviewed Papers for Journals Impact Factor: 2.88	2019
Reviewed Papers for Journals Impact Factor: 2.5	2019
Reviewed Papers for Journals Impact Factor: 2.5	2019
Reviewed Papers for Journals Impact Factor: 2.5	2019
Reviewed Papers for Journals Impact Factor: 2.544	2019

Reviewed Papers for Journals
Impact Factor: 2.5

Reviewed Papers for Journals
Impact Factor: 1.62