

Rai Sajjad Saif

Assistant Professor

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About

Dr. Rai Sajjad Saif is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Rai Sajjad Saif has a PhD in Mathematics. Dr. Rai Sajjad Saif has published 31 research articles & conference papers having a citation count of 1328, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Mathematics International Islamic University , Pakistan	2012 - 2018
MPhil in Applied Mathematics (Fluid Dynamics) Quaid-i-Azam University , Pakistan	2008 - 2010
MSc in Mathematics Quaid-i-Azam University , Pakistan	2006 - 2008
BS in Mathematics AB Physics University of the Punjab , Pakistan	2002 - 2004

Experience

Assistant Professor School of Electrical Engineering and Computer Science	2020- Present
Assistant Professor School of Electrical Engineering and Computer Science	2020 - 2020
Assistant Professor School of Electrical Engineering and Computer Science	2019 - 2020
Assistant Profession National University of Sciences and Technology (NUST) , SEECS NUST, H-12, Islamabad, Pakistan.	2019 - 2022
TVF National University of Sciences and Technology (NUST) , SEECS NUST, H-12, Islamabad, Pakistan.	2018 - 2019
Lecturer Al-Hussan International Education , Al-Hussan International Education, Dammam, Kingdom of Saudi Arabia.	2014 - 2018
Lecturer Mohi-ud-Din Islamic University , Mohi-ud-Din Islamic University, Islamabad, Pakistan.	2008 - 2011

Research Articles

Convective heat transfer for Maxwell hybrid (Cu-Al2O3,) nanofluid flow having Darcy-Forchheimer's porous medium over a stretchable cylindrical pipe <i>Rai Sajjad Saif Zain Ul Abideen Ebrahim A. Algehyne Abdullah Alhushaybari</i> <i>Modern Physics Letters B</i> , Volume 2025, Article Number 2550153 (19 pages) Impact Factor: 1.800 Quartile: 2 DOI: 10.1142/S0217984925501532	2025
Non-Fourier heat and mass transport enhancement by hybrid nanofluid-flow over a non-linearly stretchable surface having variable thickness <i>Sayer Obaid Alharbi Rai Sajjad Saif Maryam Haneef Muhammad Nawaz Taseer Muhammad</i> <i>Ain Shams Engineering Journal</i> , Volume 15, Issue 10, Article Number 102980 Impact Factor: 6.000 Quartile: 1 Citations: 7	2024

DOI: <https://doi.org/10.1016/j.asej.2024.102980>

Melting heat transmission of Maxwell nanofluid flow caused due to a stretchable cylindrical pipe through Finite Element Technique

2024

Rai Sajjad Saif Awatif Alhowaity Muhammad F. Afzaal Yussri Mohammad Mahrous Taseer Muhammad
ZAMM Zeitschrift fur Angewandte Mathematik und Mechanik, Pages 1-11

Impact Factor: 2.300 | Quartile: 1 | Citations: 8

DOI: 10.1002/zamm.202300220

Second-grade fluid with carbon nanotubes flowing over an elongated curve surface possessing thermal radiation and internal heat generation effects

2024

Zain Ul Abideen Rai Sajjad Saif Taseer Muhammad
Journal of Thermal Analysis and Calarometry, Volume: 149, Pages: 1239-1250

Impact Factor: 4.400 | Quartile: 1 | Citations: 10

DOI: 10.1007/s10973-023-12779-w

Impact of thermal radiation and internal heat generation on Casson nano-fluid flowing by a curved stretchable surface with suspension of carbon nanotubes (CNTs)

2023

Zain ul Abideen Rai Sajjad Saif
Heliyon , Volume 9, Issue 8, Article Number e18941

Impact Factor: 4.0 | Quartile: 2 | Citations: 22

DOI: 10.1016/j.heliyon.2023.e18941

Melting heat transmission for nanoliquid flow through a curved stretching sheet with Darcy–Forchheimer phenomenon

2023

Rai Sajjad Saif Taseer Muhammad
Waves in Random and Complex Media, Pages 1-22

Impact Factor: N/A

DOI: <https://doi.org/10.1080/17455030.2023.2193848>

Homogeneous–heterogeneous reactions for Maxwell nanofluid flow over an elongating cylindrical pipe via finite element method

2023

Mashael M. AlBaidani Maha M. A. Lashin Rai Sajjad Saif Abdul Hamid Ganie
ZAMM-Zeitschrift fur Angewandte Mathematik und Mechanik, Pages 1-15

Impact Factor: 1.759 | Quartile: 2 | Citations: 9

DOI: <https://doi.org/10.1002/zamm.202100386>

Transport mechanism under temperature and concentration gradient for nano-sized species in Maxwell viscoelastic fluid over cylindrical object moving with non-uniform velocity

2023

Rai Sajjad Saif Maryam Haneef Muhammad Nawaz Taseer Muhammad
Chemical Physics Letters , Volume 813, Article Number 140293

Impact Factor: 2.8 | Quartile: 2 | Citations: 13

DOI: <https://doi.org/10.1016/j.cplett.2022.140293>

Numerical study of boundary stresses on Jeffery-Hamel flow subject to Soret/ Dufour effects

2023

Zaheer Asghar Rai Sajjad Saif Abu Zar Ghaffari
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, Volume 237, Issue 5

Impact Factor: 1.758 | Quartile: 3 | Citations: 17

DOI: <https://doi.org/10.1177/09544062221126646>

Investigation of boundary stresses on MHD flow in a convergent/divergent channel: An analytical and numerical study

2022

Zaheer Asghar Rai Sajjad Saif Nasir Ali
Alexandria Engineering Journal , Volume 61, Issue 6, Pages 4479-4490

Impact Factor: 6.8 | Quartile: 1 | Citations: 24

DOI: <https://doi.org/10.1016/j.aej.2021.10.004>

Triple diffusion with heat transfer under different effects on magnetized hyperbolic tangent nanofluid flow

2022

Uzma Arif M. Asif Memon Rai Sajjad Saif A.S. El-Shafay Muhammad Nawaz Taseer Muhammad
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, Pages 1-11

Impact Factor: 1.620 | Quartile: 3 | Citations: 17

DOI: <https://doi.org/10.1177/09544089221079139>

Thermally stratified flow of hybrid nanofluids with radiative heat transport and slip mechanism: multiple solutions <i>Rai Sajjad Saif Hashim Maria Zaman Muhammad Ayaz</i> <i>Communications in Theoretical Physics</i> , Volume 74, Number 1, Article Number 015801 Impact Factor: 3.1 Quartile: 2 Citations: 18 DOI: https://doi.org/10.1088/1572-9494/ac3230	2022
Comparative analysis on the roles of different nanoparticles on mixed convection heat transfer in Newtonian fluid in Darcy-Forchheimer porous space subjected to convectively heated boundary <i>Hadi Ali Madkhali M. Nawaz Rai Sajjad Saif Muhammad F. Afzaal Sayer Obaid Alharbi M. Kbiri Alaoui</i> <i>International Communications in Heat and Mass Transfer</i> , 128 (2021) 105580 Impact Factor: 5.683 Quartile: 1 Citations: 18 DOI: 10.1016/j.icheatmasstransfer.2021.105580	2021
Heat transfer attributes of MoS₂/Al₂O₃ hybrid nanomaterial flow through converging/diverging channels with shape factor effect <i>Muhammad Hafeez Rai Sajjad Saif Hashim</i> <i>Advances in Mechanical Engineering</i> , Volume 13, issue 5, Pages 1-13 Impact Factor: 1.566 Quartile: 4 Citations: 20 DOI: https://doi.org/10.1177%2F16878140211021289	2021
Analytical solutions for fluid flow triggered by a melting cylindrical surface in upper-convected Maxwell (UCM) fluid <i>Rai Sajjad Saif Meraj Mustafa Muhammad F. Afzaal Hamid Assilzadeh</i> <i>International Communications in Heat and Mass Transfer</i> , Volume 121, Article Number 105059 Impact Factor: 6.782 Quartile: 1 Citations: 14 DOI: https://doi.org/10.1016/j.icheatmasstransfer.2020.105059	2021
Significance of inclined magnetic field in Darcy–Forchheimer flow with variable porosity and thermal conductivity <i>Rai Sajjad Saif Taseer Muhammad Haleema Sadia</i> <i>Physica A: Statistical Mechanics and its Applications</i> , Volume 551, Article Number 124067 Impact Factor: 3.263 Quartile: 2 Citations: 61 DOI: https://doi.org/10.1016/j.physa.2019.124067	2020
Boundary layer flow due to a nonlinear stretching curved surface with convective boundary condition and homogeneous-heterogeneous reactions <i>Rai Sajjad Saif Taseer Muhammad Haleema Sadia Rahmat Ellahi</i> <i>Physica A: Statistical Mechanics and its Applications</i> , Volume 551, Article Number 123996 Impact Factor: 3.263 Quartile: 2 Citations: 53 DOI: https://doi.org/10.1016/j.physa.2019.123996	2020
Hydromagnetic flow of Jeffrey nanofluid due to a curved stretching surface <i>Rai Sajjad Saif Taseer Muhammad Haleema Sadia Rahmat Ellahi</i> <i>Physica A: Statistical Mechanics and its Applications</i> , Volume 551, Article Number 124060 Impact Factor: 3.263 Quartile: 2 Citations: 80 DOI: https://doi.org/10.1016/j.physa.2019.124060	2020
Thermal performance of micro-polymers containing nano-solid structures during transport phenomenon <i>Saima Batool Muhammad Nawaz Rai Sajjad Saif Shafia Rana</i> <i>Journal of Thermal Analysis and Calorimetry</i> , Pages 1-11 Impact Factor: 4.626 Quartile: 1 Citations: 11 DOI: https://doi.org/10.1007/s10973-020-10017-1	2020
Impact of monocity and hybridity of nano-structures on thermal performance of micropolar fluid with novel heat flux theory: the Cattaneo–Christov heat flux theory <i>Muhammad Nawaz Ahmed Elmoasry Jawdat Alebraheem Rai Sajjad Saif</i> <i>Journal of Materials Research and Technology</i> , Volume 9, Issue 4, Pages 8618-8626 Impact Factor: 5.039 Quartile: 1 Citations: 26 DOI: https://doi.org/10.1016/j.jmrt.2020.05.063	2020
Numerical investigation on transport of momenta and energy in micropolar fluid suspended with dusty, mono and hybrid nano-structures <i>Hajra Kaneez Jawdat Alebraheem Ahmed Elmoasry Rai Sajjad Saif M. Nawaz</i>	2020

- Darcy-Forchheimer flow of nanofluid due to a curved stretching surface** 2019
Rai Sajjad Saif Tasawar Hayat Rahmat Ellahi Taseer Muhammad Ahmed Alsaedi
International Journal of Numerical Methods for Heat & Fluid Flow, Volume 29, Issue 1, Pages 2-20
Impact Factor: 2.871 | Quartile: 1 | Citations: 108
DOI: <https://www.emeraldinsight.com/doi/full/10.1108/HFF-08-2017-0301>
- Simultaneous effects of melting heat and internal heat generation in stagnation point flow of Jeffrey fluid towards a nonlinear stretching surface with variable thickness** 2018
Tasawar Hayat Rai Sajjad Saif Rahmat Ellahi Taseer Muhammad Ahmed Alsaedi
International Journal of Thermal Sciences, Volume 132, Pages 344-354
Impact Factor: 3.488 | Quartile: 1 | Citations: 58
DOI: 10.1016/j.ijthermalsci.2018.05.047
- Numerical study for Darcy-Forchheimer flow due to a curved stretching surface with Cattaneo-Christov heat flux and homogeneous heterogeneous reactions** 2017
Tasawar Hayat Rai Sajjad Saif Rahmat Ellahi Taseer Muhammad Bashir Ahmad
Results in Physics, Volume 7, Pages 2886-2892
Impact Factor: 2.147 | Quartile: 2 | Citations: 98
DOI: 10.1016/j.rinp.2017.07.068
- Stagnation-point flow of second grade nanofluid towards a nonlinear stretching surface with variable thickness.** 2017
Rai Sajjad Saif Tasawar Hayat Rahmat Ellahi Taseer Muhammad Ahmed Alsaedi
Results in Physics, Volume 7, Pages 2821-2830
Impact Factor: 2.147 | Quartile: 2 | Citations: 48
DOI: 10.1016/j.rinp.2017.07.062
- Homogeneous-heterogeneous reactions in MHD flow of micropolar fluid by a curved stretching surface** 2017
Tasawar Hayat Rai Sajjad Saif Rahmat Ellahi Ahmed Alsaedi Taseer Muhammad
Journal of Molecular Liquids, Volume 240, Pages 209-220
Impact Factor: 4.513 | Quartile: 1 | Citations: 101
DOI: 10.1016/j.molliq.2017.05.054
- Numerical study of boundary-layer flow due to a nonlinear curved stretching sheet with convective heat and mass conditions** 2017
Tasawar Hayat Rai Sajjad Saif Rahmat Ellahi Taseer Muhammad Bashir Ahmad
Results in Physics, Volume 7, Pages 2601-2606
Impact Factor: 2.147 | Quartile: 2 | Citations: 80
DOI: 10.1016/j.rinp.2017.07.023
- On MHD nonlinear stretching flow of Powell-Eyring nanomaterial** 2017
Tasawar Hayat Rai Sajjad Saif Taseer Muhammad Ahmed Alsaedi Rahmat Ellahi
Results in Physics, Volume 7, Pages 535-543
Impact Factor: 2.147 | Quartile: 2 | Citations: 88
DOI: 10.1016/j.rinp.2016.12.039
- On squeezed flow of couple stress nanofluid between two parallel plates.** 2017
Tasawar Hayat Rai Sajjad Saif Ahmed Alsaedi Taseer Muhammad Rahmat Ellahi
Results in Physics, Volume 7, Pages 553-561
Impact Factor: 2.147 | Quartile: 2 | Citations: 118
DOI: 10.1016/j.rinp.2016.12.038
- Radiation effects on MHD flow of Maxwell fluid in a channel with porous medium** 2011
Tasawar Hayat Rai Sajjad Saif Zaheer Abbas Muhammad Sajid Awatif A. Hendi
International Journal of Heat and Mass transfer, Volume 54, Issue 4, Pages 854-862
Impact Factor: 2.407 | Quartile: 1 | Citations: 111
DOI: 10.1016/j.ijheatmasstransfer.2010.09.069
- Series solution for MHD channel flow of a Jeffery fluid** 2010
Tasawar Hayat Rai Sajjad Saif Saleem Asghar
Communications in Nonlinear Science and Numerical Simulation, Volume 15, Issue 9, Pages 2400-2406

Editorial Activities

Results in Engineering	2024
Reviewed Papers for Journals	
Impact Factor: 6.0	
International Communications in Heat and Mass Transfer	2024
Reviewed Papers for Journals	
Impact Factor: 5.9	
International Journal of Modern Physics B	2023
Reviewed Papers for Journals	
Impact Factor: 1.404	
International Journal of Modern Physics B	2023
Reviewed Papers for Journals	
Impact Factor: 1.404	
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