

Muhammad Nawaz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9055262/publications.pdf>

Version: 2024-02-01

88
papers

1,805
citations

257450

24
h-index

377865

34
g-index

90
all docs

90
docs citations

90
times ranked

685
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Shape effect of nanosize particles in unsteady mixed convection flow of nanofluid over disk with entropy generation. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2017, 231, 871-879. | 2.5 | 71 |
| 2 | Three-dimensional heat transfer in the mixture of nanoparticles and micropolar MHD plasma with Hall and ion slip effects. AIP Advances, 2018, 8, . | 1.3 | 60 |
| 3 | Study of transport phenomenon in Carreau fluid using Cattaneo-Christov heat flux model with temperature dependent diffusion coefficients. Physica A: Statistical Mechanics and Its Applications, 2020, 554, 123921. | 2.6 | 60 |
| 4 | Galerkin Finite Element Study on the Effects of Variable Thermal Conductivity and Variable Mass Diffusion Conductance on Heat and Mass Transfer. Communications in Theoretical Physics, 2018, 70, 049. | 2.5 | 58 |
| 5 | Role of hybrid nanoparticles in thermal performance of Sutterby fluid, the ethylene glycol. Physica A: Statistical Mechanics and Its Applications, 2020, 537, 122447. | 2.6 | 57 |
| 6 | MHD axisymmetric flow of third grade fluid between porous disks with heat transfer. Applied Mathematics and Mechanics (English Edition), 2012, 33, 749-764. | 3.6 | 49 |
| 7 | Finite element study of three dimensional radiative nano-plasma flow subject to Hall and ion slip currents. Results in Physics, 2017, 7, 4111-4122. | 4.1 | 49 |
| 8 | An enhancement of thermal performance of ethylene glycol by nano and hybrid nanoparticles. Physica A: Statistical Mechanics and Its Applications, 2020, 551, 124527. | 2.6 | 47 |
| 9 | Unsteady stagnation point flow of viscous fluid caused by an impulsively rotating disk. Journal of the Taiwan Institute of Chemical Engineers, 2011, 42, 41-49. | 5.3 | 46 |
| 10 | The effect of thermal radiation on the flow of a second grade fluid. Computers and Mathematics With Applications, 2009, 58, 369-379. | 2.7 | 45 |
| 11 | Numerical study of dispersion of nanoparticles in magnetohydrodynamic liquid with Hall and ion slip currents. AIP Advances, 2019, 9, . | 1.3 | 43 |
| 12 | Thermal-diffusion and diffusion-thermo effects on axisymmetric flow of a second grade fluid. International Journal of Heat and Mass Transfer, 2011, 54, 3031-3041. | 4.8 | 38 |
| 13 | Numerical study of heat and mass transfer enhancement in Prandtl fluid MHD flow using Cattaneo-Christov heat flux theory. Case Studies in Thermal Engineering, 2022, 33, 101949. | 5.7 | 37 |
| 14 | Magnetohydrodynamic axisymmetric flow of a third-grade fluid between two porous disks. Brazilian Journal of Chemical Engineering, 2013, 30, 599-609. | 1.3 | 36 |
| 15 | Computational fluid dynamic simulations for dispersion of nanoparticles in a magnetohydrodynamic liquid: a Galerkin finite element method. RSC Advances, 2018, 8, 38324-38335. | 3.6 | 35 |
| 16 | Numerical study on enhancement of heat transfer in hybrid nano-micropolar fluid. Physica Scripta, 2020, 95, 045201. | 2.5 | 35 |
| 17 | Thermophysical properties of chemotactic microorganisms in bio-convective peristaltic rheology of nano-liquid with slippage, Joule heating and viscous dissipation. Case Studies in Thermal Engineering, 2021, 27, 101285. | 5.7 | 35 |
| 18 | Thermal performance of magnetohydrodynamic complex fluid using nano and hybrid nanoparticles. Physica A: Statistical Mechanics and Its Applications, 2020, 553, 124345. | 2.6 | 34 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Soret and Dufour effects on the mixed convection flow of a second grade fluid subject to Hall and ionâ€slip currents. <i>International Journal for Numerical Methods in Fluids</i> , 2011, 67, 1073-1099. | 1.6 | 32 |
| 20 | Investigation of variable thermo-physical properties of viscoelastic rheology: A Galerkin finite element approach. <i>AIP Advances</i> , 2018, 8, . | 1.3 | 30 |
| 21 | Thermal analysis for hybrid nanofluid past a cylinder exposed to magnetic field. <i>AIP Advances</i> , 2019, 9, . | 1.3 | 30 |
| 22 | Computational study of chemical reactions during heat and mass transfer in magnetized partially ionized nanofluid. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2019, 41, 1. | 1.6 | 29 |
| 23 | Investigation of enhancement of heat transfer in Sutterby nanofluid using Kooâ€Kleinstreuer and Li (KKL) correlations and Cattaneoâ€Christov heat flux model. <i>Physica Scripta</i> , 2019, 94, 115213. | 2.5 | 28 |
| 24 | Numerical investigation on transport of momenta and energy in micropolar fluid suspended with dusty, mono and hybrid nano-structures. <i>AIP Advances</i> , 2020, 10, . | 1.3 | 28 |
| 25 | Axisymmetric magnetohydrodynamic flow of micropolar fluid between unsteady stretching surfaces. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2011, 32, 361-374. | 3.6 | 26 |
| 26 | Cattaneo-Christov heat flux theory and thermal enhancement in hybrid nano Oldroyd-B rheological fluid in the presence of mass transfer. <i>International Communications in Heat and Mass Transfer</i> , 2021, 126, 105344. | 5.6 | 26 |
| 27 | MHD Squeezing Flow of a Micropolar Fluid Between Parallel Disks. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2011, 133, . | 1.5 | 25 |
| 28 | NEWTONIAN HEATING, THERMAL-DIFFUSION AND DIFFUSION-THERMO EFFECTS IN AN AXISYMMETRIC FLOW OF A JEFFERY FLUID OVER A STRETCHING SURFACE. <i>Brazilian Journal of Chemical Engineering</i> , 2015, 32, 555-561. | 1.3 | 25 |
| 29 | Numerical study of simultaneous transport of heat and mass transfer in Maxwell hybrid nanofluid in the presence of Soret and Dufour effects. <i>Physica Scripta</i> , 2022, 97, 025207. | 2.5 | 25 |
| 30 | Hall and ionâ€slip effects on threeâ€dimensional flow of a second grade fluid. <i>International Journal for Numerical Methods in Fluids</i> , 2011, 66, 183-193. | 1.6 | 24 |
| 31 | Impact of temperature dependent diffusion coefficients on heat and mass transport in viscoelastic liquid using generalized Fourier theory. <i>Physica Scripta</i> , 2019, 94, 115206. | 2.5 | 24 |
| 32 | Unsteady heat transfer enhancement in Williamson fluid in Darcy-Forchheimer porous medium under non-Fourier condition of heat flux. <i>Case Studies in Thermal Engineering</i> , 2021, 28, 101647. | 5.7 | 24 |
| 33 | Combined effects of partial slip and variable diffusion coefficient on mass and heat transfer subjected to chemical reaction. <i>Physica Scripta</i> , 2020, 95, 035222. | 2.5 | 23 |
| 34 | Impact of monocity and hybridity of nano-structures on thermal performance of micropolar fluid with novel heat flux theory: the Cattaneoâ€Christov heat flux theory. <i>Journal of Materials Research and Technology</i> , 2020, 9, 8618-8626. | 5.8 | 22 |
| 35 | Heat Transfer in Nanomaterial Suspension (CuO and Al2O3) Using KKL Model. <i>Coatings</i> , 2021, 11, 417. | 2.6 | 21 |
| 36 | Dufour and Soret effects on MHD flow of viscous fluid between radially stretching sheets in porous medium. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2012, 33, 1403-1418. | 3.6 | 20 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Mixed Convection Three-dimensional Flow with Hall and Ion-slip Effects. International Journal of Nonlinear Sciences and Numerical Simulation, 2013, 14, 167-177. | 1.0 | 20 |
| 38 | Numerical study of heat and mass transfer in MHD flow of nanofluid in a porous medium with Soret and Dufour effects. Heat Transfer, 2021, 50, 4501-4515. | 3.0 | 20 |
| 39 | Numerical study of thermal and mass enhancement in the flow of Carreau-Yasuda fluid with hybrid nanoparticles. Case Studies in Thermal Engineering, 2021, 27, 101256. | 5.7 | 20 |
| 40 | Double diffusion in Carreau liquid suspended with hybrid nanoparticles in the presence of heat generation and chemical reaction. International Communications in Heat and Mass Transfer, 2020, 119, 104932. | 5.6 | 19 |
| 41 | Investigation on the impact of thermal performance of fluid due to hybrid nano-structures. Journal of Thermal Analysis and Calorimetry, 2021, 144, 729-737. | 3.6 | 19 |
| 42 | Numerical study on thermal enhancement in hyperbolic tangent fluid with dust and hybrid nanoparticles. International Communications in Heat and Mass Transfer, 2021, 127, 105535. | 5.6 | 19 |
| 43 | An enhancement in thermal performance of partially ionized fluid due to hybrid nano-structures exposed to magnetic field. AIP Advances, 2019, 9, . | 1.3 | 18 |
| 44 | Numerical study on non-Fourier heat and mass transfer in partially ionized MHD Williamson hybrid nanofluid. International Communications in Heat and Mass Transfer, 2022, 133, 105967. | 5.6 | 18 |
| 45 | Temperature and concentration gradient effects on heat and mass transfer in micropolar fluid. Pramana - Journal of Physics, 2018, 91, 1. | 1.8 | 17 |
| 46 | Finite Element Study of Flow of Partially Ionized Fluid Containing Nanoparticles. Arabian Journal for Science and Engineering, 2019, 44, 10257-10268. | 3.0 | 17 |
| 47 | Non-Fourier thermal and mass transport in hybrid nano-Williamson fluid under chemical reaction in Forchheimer porous medium. International Communications in Heat and Mass Transfer, 2021, 127, 105536. | 5.6 | 17 |
| 48 | Non-Fourier modeling and numerical simulations on heat and transfer in tangent hyperbolic nanofluid subjected to chemical reactions. International Communications in Heat and Mass Transfer, 2022, 134, 105996. | 5.6 | 17 |
| 49 | Axisymmetric magnetohydrodynamic flow of Jeffrey fluid over a rotating disk. International Journal for Numerical Methods in Fluids, 2012, 70, 764-774. | 1.6 | 15 |
| 50 | Heat transfer in a permeable cavity filled with a ferrofluid under electric force and radiation effects. AIP Advances, 2019, 9, . | 1.3 | 15 |
| 51 | Three-dimensional heat transfer in nonlinear flow: a FEM computational approach. Journal of Thermal Analysis and Calorimetry, 2020, 140, 2519-2528. | 3.6 | 15 |
| 52 | Dufour and Soret Effects in an Axisymmetric Stagnation Point Flow of Second Grade Fluid with Newtonian Heating. Journal of Mechanics, 2013, 29, 27-34. | 1.4 | 14 |
| 53 | Axisymmetric Stagnation-Point Flow of Nanofluid Over a Stretching Surface. Advances in Applied Mathematics and Mechanics, 2014, 6, 220-232. | 1.2 | 14 |
| 54 | Three dimensional heat transfer in the Carreau-Yasuda hybrid nanofluid with Hall and ion slip effects. Physica Scripta, 2021, 96, 125215. | 2.5 | 13 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | 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. International Communications in Heat and Mass Transfer, 2021, 128, 105580. | 5.6 | 13 |
| 56 | Thermal enhancement in coolant using novel hybrid nanoparticles with mass transport. Case Studies in Thermal Engineering, 2021, 28, 101467. | 5.7 | 13 |
| 57 | Thermal and solutal analysis in power law fluid under non-Fourier's diffusion conditions. International Communications in Heat and Mass Transfer, 2021, 126, 105331. | 5.6 | 12 |
| 58 | Mixed convective transport in Maxwell hybrid nano-fluid under generalized Fourier and Fick laws. International Communications in Heat and Mass Transfer, 2022, 130, 105714. | 5.6 | 11 |
| 59 | Magnetohydrodynamic Three-Dimensional Flow of a Second-Grade Fluid with Heat Transfer. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2010, 65, 683-691. | 1.5 | 9 |
| 60 | Mixed Convection Three-Dimensional Flow in the Presence of Hall and Ion-Slip Effects. Journal of Heat Transfer, 2013, 135, . | 2.1 | 9 |
| 61 | Numerical thermal study on performance of hybrid nano-Williamson fluid with memory effects using novel heat flux model. Case Studies in Thermal Engineering, 2021, 26, 101070. | 5.7 | 9 |
| 62 | Effect of heat transfer on the flow of a second-grade fluid in divergent/convergent channel. International Journal for Numerical Methods in Fluids, 2010, 64, 761-776. | 1.6 | 8 |
| 63 | Melting heat transfer in an axisymmetric stagnation-point flow of the Jeffrey fluid. Journal of Applied Mechanics and Technical Physics, 2016, 57, 308-316. | 0.5 | 8 |
| 64 | Influence of thermal properties on temperature of fluid with micro-structures. Physica A: Statistical Mechanics and Its Applications, 2019, 531, 121494. | 2.6 | 8 |
| 65 | Triple diffusion of species in fluid regime using tangent hyperbolic rheology. Journal of Thermal Analysis and Calorimetry, 2021, 146, 775-785. | 3.6 | 8 |
| 66 | Simultaneous impact of hybrid nano and dust particles on enhancement of heat transfer in fluid with micro-rotation and thermal memory effects. International Communications in Heat and Mass Transfer, 2020, 118, 104871. | 5.6 | 8 |
| 67 | Computational analysis for enhancement of heat and mass transfer in MHD-polymer with hybrid nano-particles using generalized laws. Case Studies in Thermal Engineering, 2022, 31, 101851. | 5.7 | 8 |
| 68 | Triple diffusion with heat transfer under different effects on magnetized hyperbolic tangent nanofluid flow. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 0, , 095440892210791. | 2.5 | 7 |
| 69 | Effect of Heat Transfer on Magnetohydrodynamic Axisymmetric Flow Between Two Stretching Sheets. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2010, 65, 961-968. | 1.5 | 6 |
| 70 | Casson Fluid Flow Due to Non-Coaxial Rotation of a Porous Disk and the Fluid at Infinity Through a Porous Medium. Journal of Applied Mechanics and Technical Physics, 2018, 59, 601-607. | 0.5 | 6 |
| 71 | Thermal performance of partially ionized Eyring-Powell liquid: a theoretical approach. Physica Scripta, 2019, 94, 125209. | 2.5 | 6 |
| 72 | Unsteady heat transfer in colloidal suspension containing hybrid nanostructures. Journal of Thermal Analysis and Calorimetry, 2021, 143, 421-429. | 3.6 | 6 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | An enhancement of energy transport and mass in hybrid nanofluid under magnetic field and temperature and mass concentration gradients. <i>Case Studies in Thermal Engineering</i> , 2021, 27, 101182. | 5.7 | 6 |
| 74 | Effects of Generative/Destructive Chemical Reaction on Mass Transport in Williamson Liquid with Variable Thermophysical Properties. <i>Journal of Engineering Thermophysics</i> , 2019, 28, 591-602. | 1.4 | 5 |
| 75 | Thermal performance of micro-polymers containing nano-solid structures during transport phenomenon. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 146, 1323-1333. | 3.6 | 5 |
| 76 | Heat Transfer Analysis on Axisymmetric Mhd Flow of a Micropolar Fluid Between the Radially Stretching Sheets. <i>Journal of Mechanics</i> , 2011, 27, 607-617. | 1.4 | 4 |
| 77 | Numerical investigation on optimization of thermal analysis due to immersion of hybrid nanostructures in a fluid of shear dependent viscosity using the finite element method. <i>Heat Transfer</i> , 2021, 50, 5588-5606. | 3.0 | 4 |
| 78 | Computational study on the effects of variable viscosity of micropolar liquids on heat transfer in a channel. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 3269-3279. | 3.6 | 3 |
| 79 | Computational study on transport of thermal energy and mass species in power law rheological fluid with hybrid nanostructures in the presence of chemical reaction. <i>International Communications in Heat and Mass Transfer</i> , 2021, 120, 105022. | 5.6 | 3 |
| 80 | Influence of Chemical Reaction on Mass Transport in Yield Stress Exhibiting Flow Regime. <i>Theoretical Foundations of Chemical Engineering</i> , 2020, 54, 1327-1339. | 0.7 | 3 |
| 81 | Flow of Magnetohydrodynamic Micropolar Fluid Induced by Radially Stretching Sheets. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2011, 66, 53-60. | 1.5 | 2 |
| 82 | Nonlinear Flow of Third-Grade Fluid between Stretching-Shrinking Sheets. <i>Journal of Aerospace Engineering</i> , 2016, 29, 04015062. | 1.4 | 2 |
| 83 | Influence of Chemical Reaction on Heat and Mass Transfer in MHD Radiative Flow due to Non-Coaxial Rotations of Disk and Fluid at Infinity. <i>Theoretical Foundations of Chemical Engineering</i> , 2020, 54, 664-674. | 0.7 | 2 |
| 84 | Role of hybrid nanostructures and dust particles on transport of heat energy in micropolar fluid with memory effects. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, , 1. | 3.6 | 2 |
| 85 | Unsteady axisymmetric flow of a micropolar fluid between the stretching surfaces. <i>Quaestiones Mathematicae</i> , 2013, 36, 463-476. | 0.6 | 1 |
| 86 | Numerical study on the impact of variable diffusion co-efficients and chemical reaction on transport phenomenon in nonlinear axisymmetric flow. <i>Physica Scripta</i> , 2020, 95, 015203. | 2.5 | 1 |
| 87 | Influence of hybrid nano-structures on thermal performance of shear rate dependent viscosity fluid over a heated rotating cone with Hall and ion slip currents. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, , 1. | 3.6 | 1 |
| 88 | Role of Variable Conductance on Heat and Mass Transport Mechanism Using Generalized Theory. <i>Journal of Thermal Science and Engineering Applications</i> , 2021, 13, . | 1.5 | 1 |