Muhammad Nawaz

List of Publications by Year
in descending order

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	Numerical study of simultaneous transport of heat and mass transfer in Maxwell hybrid nanofluid in the presence of Soret and Dufour effects. Physica Scripta, 2022, 97, 025207.	2.5	25
2	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
3	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
4	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
5	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
6	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
7	Triple diffusion of species in fluid regime using tangent hyperbolic rheology. Journal of Thermal Analysis and Calorimetry, 2021, 146, 775-785.	3.6	8
8	Thermal performance of micro-polymers containing nano-solid structures during transport phenomenon. Journal of Thermal Analysis and Calorimetry, 2021, 146, 1323-1333.	3.6	5
9	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
10	Computational study on the effects of variable viscosity of micropolar liquids on heat transfer in a channel. Journal of Thermal Analysis and Calorimetry, 2021, 145, 3269-3279.	3.6	3
11	Compuational study on transport of thermal energy and mass species in power law rheological fluid with hybrid nanostructures in the presence of chemical reaction. International Communications in Heat and Mass Transfer, 2021, 120, 105022.	5.6	3
12	Unsteady heat transfer in colloidal suspension containing hybrid nanostructures. Journal of Thermal Analysis and Calorimetry, 2021, 143, 421-429.	3.6	6
13	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
14	Heat Transfer in Nanomaterial Suspension (CuO and Al2O3) Using KKL Model. Coatings, 2021, 11, 417.	2.6	21
15	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. Heat Transfer, 2021, 50, 5588-5606.	3.0	4
16	Cattaneo-Christov heat flux theory and thermal enhancement in hybrid nano Oldroyd-B rheological fluid in the presence of mass transfer. International Communications in Heat and Mass Transfer, 2021, 126, 105344.	5.6	26
17	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
18	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

#	Article	IF	Citations
19	Three dimensional heat transfer in the Carreau-Yasuda hybrid nanofluid with Hall and ion slip effects. Physica Scripta, 2021, 96, 125215.	2.5	13
20	Non-Fourier thermal and mass transport in hybridnano-Williamson fluid under chemical reaction in Forchheimer porous medium. International Communications in Heat and Mass Transfer, 2021, 127, 105536.	5.6	17
21	An enhancement of energy transport and mass in hybrid nanofluid under magnetic field and temperature and mass concentration gradients. Case Studies in Thermal Engineering, 2021, 27, 101182.	5.7	6
22	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
23	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
24	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
25	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
26	Thermal enhancement in coolant using novel hybrid nanoparticles with mass transport. Case Studies in Thermal Engineering, 2021, 28, 101467.	5.7	13
27	Role of Variable Conductance on Heat and Mass Transport Mechanism Using Generalized Theory. Journal of Thermal Science and Engineering Applications, 2021, 13, .	1.5	1
28	Unsteady heat transfer enhancement in Williamson fluid in Darcy-Forchheimer porous medium under non-Fourier condition of heat flux. Case Studies in Thermal Engineering, 2021, 28, 101647.	5.7	24
29	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
30	Numerical study on the impact of variable diffusion co-efficients and chemical reaction on transport phenomenon in nonlinear axisymmetric flow. Physica Scripta, 2020, 95, 015203.	2.5	1
31	Combined effects of partial slip and variable diffusion coefficient on mass and heat transfer subjected to chemical reaction. Physica Scripta, 2020, 95, 035222.	2.5	23
32	Three-dimensional heat transfer in nonlinear flow: a FEM computational approach. Journal of Thermal Analysis and Calorimetry, 2020, 140, 2519-2528.	3.6	15
33	Study of transport phenomenon in Carreau fluid using Cattaneoâ€"Christov heat flux model with temperature dependent diffusion coefficients. Physica A: Statistical Mechanics and Its Applications, 2020, 554, 123921.	2.6	60
34	Numerical study on enhancement of heat transfer in hybrid nano-micropolar fluid. Physica Scripta, 2020, 95, 045201.	2.5	35
35	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
36	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. Journal of Thermal Analysis and Calorimetry, 2020, , 1.	3.6	1

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37	Influence of Chemical Reaction on Heat and Mass Transfer in MHD Radiative Flow due to Non-Coaxial Rotations of Disk and Fluid at Infinity. Theoretical Foundations of Chemical Engineering, 2020, 54, 664-674.	0.7	2
38	Role of hybrid nanostructures and dust particles on transport of heat energy in micropolar fluid with memory effects. Journal of Thermal Analysis and Calorimetry, 2020, , 1.	3.6	2
39	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
40	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. Journal of Materials Research and Technology, 2020, 9, 8618-8626.	5.8	22
41	Thermal performance of magnetohydrodynamic complex fluid using nano and hybrid nanoparticles. Physica A: Statistical Mechanics and Its Applications, 2020, 553, 124345.	2.6	34
42	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
43	Numerical investigation on transport of momenta and energy in micropolar fluid suspended with dusty, mono and hybrid nano-structures. AIP Advances, 2020, 10, .	1.3	28
44	Influence of Chemical Reaction on Mass Transport in Yield Stress Exhibiting Flow Regime. Theoretical Foundations of Chemical Engineering, 2020, 54, 1327-1339.	0.7	3
45	Computational study of chemical reactions during heat and mass transfer in magnetized partially ionized nanofluid. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	29
46	Thermal performance of partially ionized Eyringâ€"Powell liquid: a theoretical approach. Physica Scripta, 2019, 94, 125209.	2.5	6
47	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
48	Heat transfer in a permeable cavity filled with a ferrofluid under electric force and radiation effects. AIP Advances, 2019, 9, .	1.3	15
49	Finite Element Study of Flow of Partially Ionized Fluid Containing Nanoparticles. Arabian Journal for Science and Engineering, 2019, 44, 10257-10268.	3.0	17
50	Influence of thermal properties on temperature of fluid with micro-structures. Physica A: Statistical Mechanics and Its Applications, 2019, 531, 121494.	2.6	8
51	Investigation of enhancement of heat transfer in Sutterby nanofluid using Kooâ€"Kleinstreuer and Li (KKL) correlations and Cattaneoâ€"Christov heat flux model. Physica Scripta, 2019, 94, 115213.	2.5	28
52	Impact of temperature dependent diffusion coefficients on heat and mass transport in viscoelastic liquid using generalized Fourier theory. Physica Scripta, 2019, 94, 115206.	2.5	24
53	Numerical study of dispersion of nanoparticles in magnetohydrodynamic liquid with Hall and ion slip currents. AIP Advances, 2019, 9, .	1.3	43
54	Thermal analysis for hybrid nanofluid past a cylinder exposed to magnetic field. AIP Advances, 2019, 9, .	1.3	30

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55	Effects of Generative/Destructive Chemical Reaction on Mass Transport in Williamson Liquid with Variable Thermophysical Properties. Journal of Engineering Thermophysics, 2019, 28, 591-602.	1.4	5
56	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
57	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
58	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
59	Investigation of variable thermo-physical properties of viscoelastic rheology: A Galerkin finite element approach. AIP Advances, 2018, 8, .	1.3	30
60	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
61	Temperature and concentration gradient effects on heat and mass transfer in micropolar fluid. Pramana - Journal of Physics, 2018, 91, 1.	1.8	17
62	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
63	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
64	Nonlinear Flow of Third-Grade Fluid between Stretching-Shrinking Sheets. Journal of Aerospace Engineering, 2016, 29, 04015062.	1.4	2
65	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
66	NEWTONIAN HEATING, THERMAL-DIFFUSION AND DIFFUSION-THERMO EFFECTS IN AN AXISYMMETRIC FLOW OF A JEFFERY FLUID OVER A STRETCHING SURFACE. Brazilian Journal of Chemical Engineering, 2015, 32, 555-561.	1.3	25
67	Axisymmetric Stagnation-Point Flow of Nanofluid Over a Stretching Surface. Advances in Applied Mathematics and Mechanics, 2014, 6, 220-232.	1.2	14
68	Mixed Convection Three-Dimensional Flow in the Presence of Hall and Ion-Slip Effects. Journal of Heat Transfer, 2013, 135, .	2.1	9
69	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
70	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
71	Unsteady axisymmetric flow of a micropolar fluid between the stretching surfaces. Quaestiones Mathematicae, 2013, 36, 463-476.	0.6	1
72	Magnetohydrodynamic axisymmetric flow of a third-grade fluid between two porous disks. Brazilian Journal of Chemical Engineering, 2013, 30, 599-609.	1.3	36

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73	Dufour and Soret effects on MHD flow of viscous fluid between radially stretching sheets in porous medium. Applied Mathematics and Mechanics (English Edition), 2012, 33, 1403-1418.	3.6	20
74	Axisymmetric magnetohydrodynamic flow of Jeffrey fluid over a rotating disk. International Journal for Numerical Methods in Fluids, 2012, 70, 764-774.	1.6	15
75	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
76	Heat Transfer Analysis on Axisymmetric Mhd Flow of a Micropolar Fluid Between the Radially Stretching Sheets. Journal of Mechanics, 2011, 27, 607-617.	1.4	4
77	Axisymmetric magnetohydrodynamic flow of micropolar fluid between unsteady stretching surfaces. Applied Mathematics and Mechanics (English Edition), 2011, 32, 361-374.	3.6	26
78	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
79	Hall and ion‐slip effects on three‐dimensional flow of a second grade fluid. International Journal for Numerical Methods in Fluids, 2011, 66, 183-193.	1.6	24
80	Soret and Dufour effects on the mixed convection flow of a second grade fluid subject to Hall and ion‐slip currents. International Journal for Numerical Methods in Fluids, 2011, 67, 1073-1099.	1.6	32
81	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
82	MHD Squeezing Flow of a Micropolar Fluid Between Parallel Disks. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	25
83	Flow of Magnetohydrodynamic Micropolar Fluid Induced by Radially Stretching Sheets. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2011, 66, 53-60.	1.5	2
84	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
85	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
86	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
87	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
88	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