Muhammad Malik

List of Publications by Year
in descending order

120 papers	3,319 citations	136950 32 h-index	243625 44 g-index
120 all docs	120 docs citations	120 times ranked	1099 citing authors

#	Article	IF	Citations
1	Inspection of hybrid based nanofluid flow over a curved surface. Computer Methods and Programs in Biomedicine, 2020, 189, 105193.	4.7	148
2	The boundary layer flow of hyperbolic tangent fluid over a vertical exponentially stretching cylinder. AEJ - Alexandria Engineering Journal, 2014, 53, 747-750.	6.4	84
3	Change in viscosity of Williamson nanofluid flow due to thermal and solutal stratification. International Journal of Heat and Mass Transfer, 2018, 126, 941-948.	4.8	81
4	Theoretical study of micropolar hybrid nanofluid over Riga channel with slip conditions. Physica A: Statistical Mechanics and Its Applications, 2020, 551, 124083.	2.6	68
5	Numerical analysis of Carreau fluid flow for generalized Fourier's and Fick's laws. Applied Numerical Mathematics, 2019, 144, 100-117.	2.1	64
6	Numerical modeling and analysis of bioconvection on MHD flow due to an upper paraboloid surface of revolution. Physica A: Statistical Mechanics and Its Applications, 2020, 553, 124231.	2.6	64
7	Transportation of magnetized micropolar hybrid nanomaterial fluid flow over a Riga curface surface. Computer Methods and Programs in Biomedicine, 2020, 185, 105136.	4.7	63
8	Change in internal energy of thermal diffusion stagnation point Maxwell nanofluid flow along with solar radiation and thermal conductivity. Chinese Journal of Chemical Engineering, 2019, 27, 2352-2358.	3.5	62
9	On extended version of Yamadaâ€“Ota and Xue models of hybrid nanofluid on moving needle. European Physical Journal Plus, 2020, 135, 1.	2.6	59
10	Generalized diffusion effects on Maxwell nanofluid stagnation point flow over a stretchable sheet with slip conditions and chemical reaction. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	58
11	Study of three dimensional stagnation point flow of hybrid nanofluid over an isotropic slip surface. Physica A: Statistical Mechanics and Its Applications, 2020, 554, 124020.	2.6	55
12	Heat transfer of three-dimensional micropolar fluid on a Riga plate. Canadian Journal of Physics, 2020, 98, 32-38.	1.1	53
13	A generalized findings on thermal radiation and heat generation/absorption in nanofluid flow regime. Physica A: Statistical Mechanics and Its Applications, 2020, 553, 124026.	2.6	53
14	Numerical analysis of water based CNTs flow of micropolar fluid through rotating frame. Computer Methods and Programs in Biomedicine, 2020, 186, 105194.	4.7	52
15	Numerical simulation of electroosmosis regulated peristaltic transport of Bingham nanofluid. Computer Methods and Programs in Biomedicine, 2019, 180, 105005.	4.7	51
16	Computational and physical aspects of MHD Prandtl-Eyring fluid flow analysis over a stretching sheet. Neural Computing and Applications, 2019, 31, 425-433.	5.6	51
17	Magneto Jeffrey Nanofluid Bioconvection over a Rotating Vertical Cone due to Gyrotactic Microorganism. Mathematical Problems in Engineering, 2019, 2019, 1-11.	1.1	50
18	Change in viscosity of Maxwell fluid flow due to thermal and solutal stratifications. Journal of Molecular Liquids, 2019, 288, 110970.	4.9	49

#	Article	IF	Citations
19	Physical aspects of heat generation/absorption in the second grade fluid flow due to Riga plate: Application of Cattaneo-Christov approach. Results in Physics, 2018, 9, 955-960.	4.1	47
20	On extended version of Yamadaâ€“Ota and Xue models in micropolar fluid flow under the region of stagnation point. Physica A: Statistical Mechanics and Its Applications, 2020, 542, 123512.	2.6	47
21	Heat transfer analysis on buoyantly convective non-Newtonian stream in a hexagonal enclosure rooted with T-Shaped flipper: Hybrid meshed analysis. Case Studies in Thermal Engineering, 2020, 21, 100725.	5.7	46
22	Finite element technique for the analysis of buoyantly convective multiply connected domain as a trapezium enclosure with heated circular obstacle. Journal of Molecular Liquids, 2019, 286, 110892.	4.9	45
23	Heat transport in CNTs based nanomaterial flow of non-Newtonian fluid having electro magnetize plate. AEJ - Alexandria Engineering Journal, 2020, 59, 3431-3442.	6.4	42
24	Thermo-physical aspects in tangent hyperbolic fluid flow regime: A short communication. Case Studies in Thermal Engineering, 2018, 12, 203-212.	5.7	40
25	Numerical Solution of Non-Newtonian Fluid Flow Due to Rotatory Rigid Disk. Symmetry, 2019, 11, 699.	2.2	40
26	Mathematical analysis on <scp>MHD</scp> Prandtlâ€Eyring nanofluid new mass flux conditions. Mathematical Methods in the Applied Sciences, 2019, 42, 24-38.	2.3	40
27	Parabolic curve fitting study subject to Joule heating in MHD thermally stratified mixed convection stagnation point flow of Eyring-Powell fluid induced by an inclined cylindrical surface. Journal of King Saud University - Science, 2018, 30, 440-449.	3.5	39
28	Upshot of ohmically dissipated Darcy-Forchheimer slip flow of magnetohydrodynamic Sutterby fluid over radiating linearly stretched surface in view of Cash and Carp method. Applied Mathematics and Mechanics (English Edition), 2019, 40, 861-876.	3.6	38
29	Theoretical analysis of non-Newtonian blood flow in a microchannel. Computer Methods and Programs in Biomedicine, 2020, 191, 105280.	4.7	38
30	Homogenousâ€“heterogeneous reactions in MHD flow of Powellâ€“Eyring fluid over a stretching sheet with Newtonian heating. Neural Computing and Applications, 2018, 30, 3581-3588.	5.6	36
31	Group theoretical analysis for MHD flow fields: a numerical result. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	36
32	Numerical analysis of MHD Carreau fluid flow over a stretching cylinder with homogenous-heterogeneous reactions. Results in Physics, 2018, 9, 1141-1147.	4.1	35
33	Numerical investigation of the unsteady solid-particle flow of a tangent hyperbolic fluid with variable thermal conductivity and convective boundary. European Physical Journal Plus, 2019, 134, 1.	2.6	35
34	The influence of MHD and heat generation/absorption in a Newtonian flow field manifested with a Cattaneoâ€“Christov heat flux model. Physica Scripta, 2019, 94, 085217.	2.5	35
35	Entropy analysis in nonlinearly convective flow of the Sisko model in the presence of Joule heating and activation energy: the Buongiorno model. Physica Scripta, 2020, 95, 025402.	2.5	35
36	Heat and mass diffusions for Casson nanofluid flow over a stretching surface with variable viscosity and convective boundary conditions. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	34

#	Article	IF	Citations
37	Buongiornoâ€™s Nanofluid Model over a Curved Exponentially Stretching Surface. Processes, 2019, 7, 665.	2.8	34
38	Thermal aspects of Carreau fluid around a wedge. Case Studies in Thermal Engineering, 2018, 12, 462-469.	5.7	33
39	On heat transfer in the presence of nano-sized particles suspended in a magnetized rotatory flow field. Case Studies in Thermal Engineering, 2019, 14, 100457.	5.7	33
40	On magnetohydrodynamics Prandtl fluid flow in the presence of stratification and heat generation. Physica A: Statistical Mechanics and Its Applications, 2020, 540, 123008.	2.6	33
41	Impact of heated triangular ribs on hydrodynamic forces in a rectangular domain with heated elliptic cylinder: Finite element analysis. International Communications in Heat and Mass Transfer, 2020, 112, 104501.	5.6	33
42	Numerical investigation on 2D viscoelastic fluid due to exponentially stretching surface with magnetic effects: an application of non-Fourier flux theory. Neural Computing and Applications, 2018, 30, 2749-2758.	5.6	32
43	On cattaneo-christov heat flux analysis with magneto-hydrodynamic and heat generation effects in a Carreau nano-fluid over a stretching sheet. Revista Mexicana De FÃsica, 2019, 65, 479-488.	0.4	32
44	Thermal and concentration aspects in Carreau viscosity model via wedge. Case Studies in Thermal Engineering, 2018, 12, 126-133.	5.7	30
45	Carreau fluid flow in a thermally stratified medium with heat generation/absorption effects. Case Studies in Thermal Engineering, 2018, 12, 16-25.	5.7	30
46	Application of generalized Fourier heat conduction law on MHD viscoinelastic fluid flow over stretching surface. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 3481-3496.	2.8	30
47	3-D axisymmetric Carreau nanofluid flow near the Homann stagnation region along with chemical reaction: Application Fourierâ€™s and Fickâ€™s laws. Mathematics and Computers in Simulation, 2020, 170, 221-235.	4.4	30
48	Numerical analysis of unsteady flow of three-dimensional Williamson fluid-particle suspension with MHD and nonlinear thermal radiations. European Physical Journal Plus, 2020, 135, 1.	2.6	30
49	Thermal distribution through a moving longitudinal trapezoidal fin with variable temperature-dependent thermal properties using DTM-Pade approximant. Case Studies in Thermal Engineering, 2021, 28, 101697.	5.7	30
50	Symmetry analysis on thermally magnetized fluid flow regime with heat source/sink. Case Studies in Thermal Engineering, 2019, 14, 100452.	5.7	29
51	An immediate change in viscosity of Carreau nanofluid due to double stratified medium: application of Fourierâ€™s and Fickâ€™s laws. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	28
52	Analysis of two dimensional Carreau fluid flow due to normal surface condition: A generalizedâ€‹ Fourierâ€™s and Fickâ€™s laws. Physica A: Statistical Mechanics and Its Applications, 2020, 540, 123024.	2.6	27
53	Stagnation flow of hybrid nanoparticles with MHD and slip effects. Heat Transfer - Asian Research, 2020, 49, 180-196.	2.8	27
54	Theoretical investigation of peristaltic activity in MHD based blood flow of non-Newtonian material. Computer Methods and Programs in Biomedicine, 2020, 187, 105225.	4.7	27

#	Article	IF	Citations
55	Change in internal energy of Carreau fluid flow along with Ohmic heating: A Von Karman application. Physica A: Statistical Mechanics and Its Applications, 2020, 547, 123440.	2.6	27
56	A Combined Convection Carreauâ€“Yasuda Nanofluid Model over a Convective Heated Surface near a Stagnation Point: A Numerical Study. Mathematical Problems in Engineering, 2021, 2021, 1-14.	1.1	27
57	Heat transfer analysis of viscous fluid flow between two coaxially rotated disks embedded in permeable media by capitalizing non-Fourier heat flux model. Physica A: Statistical Mechanics and Its Applications, 2020, 540, 123182.	2.6	26
58	Analysis of heat generation/absorption in thermally stratified Sutterby fluid flow with Cattaneoâ€“Christov theory. Microsystem Technologies, 2019, 25, 3365-3373.	2.0	25
59	Analysis of activation energy and melting heat transfer in MHD flow with chemical reaction. European Physical Journal Plus, 2019, 134, 1.	2.6	25
60	An estimation of pressure rise and heat transfer rate for hybrid nanofluid with endoscopic effects and induced magnetic field: computational intelligence application. European Physical Journal Plus, 2020, 135, 1.	2.6	25
61	Flow of a Jeffery-Six Constant Fluid Between Coaxial Cylinders with Heat Transfer Analysis. Communications in Theoretical Physics, 2011, 56, 345-351.	2.5	24
62	Arrhenius activation in MHD radiative Maxwell nanoliquid flow along with transformed internal energy. European Physical Journal Plus, 2019, 134, 1.	2.6	24
63	Dynamical and optimal procedure to analyze the exhibition of physical attributes imparted by Sutterby magneto-nanofluid in Darcy medium yielded by axially stretched cylinder. Canadian Journal of Physics, 2020, 98, 1-10.	1.1	24
64	Study of engine-oil based CNT nanofluid flow on a rotating cylinder with viscous dissipation. Physica Scripta, 2021, 96, 075005.	2.5	24
65	Darcy Forchheimer bioconvection flow of Casson nanofluid due to a rotating and stretching disk together with thermal radiation and entropy generation. Case Studies in Thermal Engineering, 2021, 27, 101201.	5.7	23
66	Finite element examination of hydrodynamic forces in grooved channel having two partially heated circular cylinders. Case Studies in Thermal Engineering, 2020, 18, 100600.	5.7	22
67	Exploration of cubic autocatalysis and thermal relaxation in a non-Newtonian flow field with MHD effects. Physica A: Statistical Mechanics and Its Applications, 2020, 549, 124349.	2.6	22
68	Thermal energy statistics for Jeffery fluid flow regime: A generalized Fourierâ€™s law outcomes. Physica A: Statistical Mechanics and Its Applications, 2020, 542, 123428.	2.6	21
69	Analysis of Carreau fluid in the presence of thermal stratification and magnetic field effect. Results in Physics, 2018, 10, 118-125.	4.1	20
70	Stratification phenomenon in an inclined rheology of UCM nanomaterial. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2201-2206.	2.1	20
71	Numerical Analysis of Unsteady Magneto-Biphase Williamson Fluid Flow with Time Dependent Magnetic Field. Communications in Theoretical Physics, 2019, 71, 143.	2.5	20
72	Impact of enhancing diffusion on Carreauâ€“Yasuda fluid flow over a rotating disk with slip conditions. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	19

#	Article	IF	Citations
73	Implementation of Darcyâ€“Forchheimer effect on magnetohydrodynamic Carreauâ€“Yasuda nanofluid flow: Application of Von KÃ¡rmÃ¡n. Canadian Journal of Physics, 2019, 97, 670-677.	1.1	18
74	MHD stagnation point flow of a Casson fluid with variable viscosity flowing past an extending/shrinking sheet with slip effects. Physica A: Statistical Mechanics and Its Applications, 2020, 553, 124080.	2.6	18
75	The exclusive impact of Hall current over a variably thicked sheet in magnetized viscous fluid by the implementation of non-Fourier flux theory. Physica A: Statistical Mechanics and Its Applications, 2020, 542, 123181.	2.6	18
76	A potential alternative CFD simulation for steady Carreauâ€“Bird law-based shear thickening model: Part-I. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	17
77	Dynamics of thermally magnetized grooved flow field having uniformly heated circular cylinder: Finite element analysis. Case Studies in Thermal Engineering, 2020, 21, 100718.	5.7	17
78	Computational and Physical Examination About the Aspects of Fluid Flow Between Two Coaxially Rotated Disks by Capitalizing Non-fourier Heat Flux Theory: Finite Difference Approach. Frontiers in Physics, 2020, 7, .	2.1	17
79	MHD Second Grade NanoFluid Flow Induced by a Rotatory Cone. Journal of Nanofluids, 2019, 8, 876-884.	2.7	17
80	A classical remark on the compatibility of inlet velocity and pressure singularities: Finite-element visualization. European Physical Journal Plus, 2019, 134, 1.	2.6	16
81	Physical aspects of magnetized suspended nanoparticles in a rotatory frame: Numerical simulation. Ain Shams Engineering Journal, 2020, 11, 479-487.	6.1	16
82	Numerical investigation of MHD Prandtl melted fluid flow towards a cylindrical surface: comprehensive outcomes. Canadian Journal of Physics, 2020, 98, 223-232.	1.1	16
83	Maxwell Nanofluid Flow Individualities by Way of Rotating Cone. Journal of Nanofluids, 2019, 8, 596-603.	2.7	16
84	Model for MHD viscoelastic nanofluid flow with prominence effects of radiation. Heat Transfer - Asian Research, 2019, 48, 463-482.	2.8	15
85	On Lie symmetry mechanics for Navierâ€“Stokes equations unified with non-Newtonian fluid model: A classical directory. Physica A: Statistical Mechanics and Its Applications, 2019, 535, 122469.	2.6	15
86	On both magnetized and non-magnetized dual stratified medium via stream lines topologies: A generalized formulation. Scientific Reports, 2019, 9, 6306.	3.3	14
87	Hybrid mesh finite element analysis (HMFEA) of uniformly heated cylinder in a partially heated moon shaped enclosure. Case Studies in Thermal Engineering, 2020, 21, 100713.	5.7	14
88	Numerical Analysis of Magnetohydrodynamic Navierâ€™s Slip Visco Nanofluid Flow Induced by Rotating Disk with Heat Source/Sink. Communications in Theoretical Physics, 2019, 71, 1075.	2.5	13
89	Cattaneoâ€“Christov double-diffusion model for viscoelastic nanofluid with activation energy and nonlinear thermal radiation. Multidiscipline Modeling in Materials and Structures, 2019, 16, 93-120.	1.3	13
90	Numerical Solutions of Peristaltic Flow of a Newtonian Fluid under the Effects of Magnetic Field and Heat Transfer in a Porous Concentric Tubes. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2010, 65, 369-380.	1.5	12

#	Article	IF	Citations
91	Homogeneousâ€“heterogeneous reaction effects in flow of tangent hyperbolic fluid on a stretching cylinder. Canadian Journal of Physics, 2020, 98, 125-129.	1.1	12
92	Numerical simulation of Joule heating and Arrhenius activation energy for nonlinear radiative flow of Casson nanofluid with Cattaneoâ€“Christov heat flux model. Physica Scripta, 2020, 95, 025401.	2.5	12
93	Comparative analysis of Maxwell and Xue models for a hybrid nanofluid film flow on an inclined moving substrate. Case Studies in Thermal Engineering, 2021, 28, 101598.	5.7	12
94	Similarity solution of second grade fluid flow over a moving cylinder. International Journal of Modern Physics B, 2021, 35, .	2.0	12
95	Solution of nonlinear pull-in behavior in electrostatic micro-actuators by using Heâ€™s homotopy perturbation method. Computers and Mathematics With Applications, 2010, 59, 2723-2733.	2.7	10
96	Flow of a Non-Newtonian Nanofluid Between Coaxial Cylinders with Variable Viscosity. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2012, 67, 255-261.	1.5	10
97	On inclined heated square obstacle in a liquid stream carried by partially heated channel: Finite element analysis. Case Studies in Thermal Engineering, 2019, 15, 100532.	5.7	10
98	Shape effects of molybdenum disulfide (nm) micro-rotating particles in crosswise transport of hydrogen oxide: (MoS₂â€“H₂O) nano polymer gel. Physica Scripta, 2020, 95, 035002.	2.5	10
99	On Both Magnetohydrodynamics Thermal Stratified and Dual Convection Flow Field Features: A Computational Study. Journal of Nanofluids, 2019, 8, 460-465.	2.7	10
100	Heat Transport Improvement and Three-Dimensional Rotating Cone Flow of Hybrid-Based Nanofluid. Mathematical Problems in Engineering, 2021, 2021, 1-11.	1.1	10
101	Analytical Treatment of an Oldroyd 8-constant Fluid Between Coaxial Cylinders with Variable Viscosity. Communications in Theoretical Physics, 2011, 56, 933-938.	2.5	9
102	Rheological analysis on non-Newtonian wire coating. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	9
103	A New Heat Dissipation Model and Convective Two-Phase Nanofluid in Brittle Medium Flow over a Cone. Mathematical Problems in Engineering, 2021, 2021, 1-11.	1.1	8
104	Variable fluid properties of a second-grade fluid using two different temperature-dependent viscosity models. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	7
105	On magnetized non-Newtonian rotatory fluid flow field. Advances in Mechanical Engineering, 2019, 11, 168781401987891.	1.6	7
106	Physical aspects of the Jeffery fluid inducing homogeneousâ€“heterogeneous reactions in MHD flow: a Cattaneoâ€“Christov approach. Canadian Journal of Physics, 2019, 97, 735-741.	1.1	7
107	Two-dimensional fin with convective base condition. Nonlinear Analysis: Real World Applications, 2010, 11, 147-154.	1.7	6
108	Thermal influence of homogeneously heated Y- shaped flipper on flowing stream in an unwavering rectangular domain. Case Studies in Thermal Engineering, 2020, 21, 100715.	5.7	6

#	Article	IF	Citations
109	Numerical investigation of squeezing flow of Waltersâ€™ B fluid through parallel plates. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	5
110	Change in conductivity of magnetohydrodynamic Darcyâ€“Forchheimer second-grade fluid flow due to variable thickness surface. Canadian Journal of Physics, 2019, 97, 809-815.	1.1	4
111	3D Bio-convective nanofluid BÃ¶dewadt slip flow comprising gyrotactic microorganisms over a stretched stationary disk with modified Fourier law. Physica Scripta, 2021, 96, 075702.	2.5	4
112	Analysis on flow features of unsteady Williamson fluid inaugurated by melted wedge in the presence of heat generationâ€“absorption: an extensive computational study. Canadian Journal of Physics, 2019, 97, 1277-1287.	1.1	3
113	Nonâ€Newtonian squashed flow simulation across Darcyâ€Forchheimer sensor. Heat Transfer - Asian Research, 2019, 48, 398-413.	2.8	3
114	MHD flow, under the kinetic postulate, of fluids that are initially liquid under thermal radiation effects. Canadian Journal of Physics, 2019, 97, 579-587.	1.1	2
115	Influence of heat generation on magnetohydrodynamic (MHD) flow using a theory of kinetics for liquids. Canadian Journal of Physics, 2019, 97, 1262-1269.	1.1	2
116	Formulating the behavior of thermal radiation and magnetic dipole effects on Darcyâ€“Forchheimer grasped ferrofluid flow. Canadian Journal of Physics, 2019, 97, 938-949.	1.1	2
117	Corrigendum to â€œTransportation of magnetized micropolar hybrid nanomaterial fluid flow over a Riga curface surfaceâ€•[Comput Meth Prog Bio 185 (2020) 105,136]. Computer Methods and Programs in Biomedicine, 2020, 187, 105251.	4.7	2
118	Rheology of Burgersâ€™ model with Cattaneo-Christov heat flux in the presence of heat source/sink and magnetic field. Scientia Iranica, 2018, .	0.4	2
119	Magnetic dipole ramifications on squashed flow characterization of a ferrofluid roaming a Darcyâ€“Forchheimer sensor surface. European Physical Journal Plus, 2020, 135, 1.	2.6	1
120	Numerical study of thermal radiations and thermal stratification mechanisms in magnetohydrodynamic casson fluid-flow. Thermal Science, 2020, 24, 1093-1104.	1.1	1