

# Muhammad Sohail

## List of Publications by Year in descending order

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79  
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257450

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Numerical Examination on Impact of Hall Current on Peristaltic Flow of Eyring-Powell Fluid under Ohmic-Thermal Effect with Slip Conditions. <i>Current Nanoscience</i> , 2023, 19, 49-62.	1.2	8
2	Utilization of modified fluxes on thermal and mass transportation in Williamson material. <i>Advances in Mechanical Engineering</i> , 2022, 14, 168781402210758.	1.6	6
3	Analytical Study on Sodium Alginate Based Hybrid Nanofluid Flow through a Shrinking/Stretching Sheet with Radiation, Heat Source and Inclined Lorentz Force Effects. <i>Fractal and Fractional</i> , 2022, 6, 68.	3.3	10
4	Dynamics of Tri-Hybrid Nanoparticles in the Rheology of Pseudo-Plastic Liquid with Dufour and Soret Effects. <i>Micromachines</i> , 2022, 13, 201.	2.9	42
5	A Galerkin strategy for tri-hybridized mixture in ethylene glycol comprising variable diffusion and thermal conductivity using non-Fourier's theory. <i>Nanotechnology Reviews</i> , 2022, 11, 834-845.	5.8	44
6	Investigation of thermal performance of Maxwell hybrid nanofluid boundary value problem in vertical porous surface via finite element approach. <i>Scientific Reports</i> , 2022, 12, 2335.	3.3	38
7	An Application of Homotopy Perturbation Method to Fractional-Order Thin Film Flow of the Johnson-Segalman Fluid Model. <i>Mathematical Problems in Engineering</i> , 2022, 2022, 1-17.	1.1	8
8	An implication of magnetic dipole in Carreau Yasuda liquid influenced by engine oil using ternary hybrid nanomaterial. <i>Nanotechnology Reviews</i> , 2022, 11, 1620-1632.	5.8	14
9	Peristaltic mechanism of Ellis fluid in curved configuration with homogeneous and heterogeneous effects. <i>AEJ - Alexandria Engineering Journal</i> , 2022, 61, 10677-10688.	6.4	7
10	Thermal analysis characterisation of solar-powered ship using Oldroyd hybrid nanofluids in parabolic trough solar collector: An optimal thermal application. <i>Nanotechnology Reviews</i> , 2022, 11, 2015-2037.	5.8	32
11	Finite element analysis for ternary hybrid nanoparticles on thermal enhancement in pseudo-plastic liquid through porous stretching sheet. <i>Scientific Reports</i> , 2022, 12, .	3.3	22
12	A dynamic assessment of various non-Newtonian models for ternary hybrid nanomaterial involving partially ionized mechanism. <i>Scientific Reports</i> , 2022, 12, .	3.3	17
13	A study of triple-mass diffusion species and energy transfer in Carreau-Yasuda material influenced by activation energy and heat source. <i>Scientific Reports</i> , 2022, 12, .	3.3	27
14	Impact of viscous dissipation and coriolis effects in heat and mass transfer analysis of the 3D non-Newtonian fluid flow. <i>Case Studies in Thermal Engineering</i> , 2022, 37, 102289.	5.7	14
15	Modeling of three dimensional Prandtl hybrid nano-material over a heated rotating cone involving hall and ion slip currents via finite element procedure. <i>Scientific Reports</i> , 2022, 12, .	3.3	3
16	Meta-analysis on homogeneous-heterogeneous reaction effects in a sinusoidal wavy curved channel. <i>Chemical Physics Letters</i> , 2021, 763, 138200.	2.6	19
17	Heat transfer analysis for particle-fluid suspension thermomagneto-hydrodynamic peristaltic flow with Darcy-Forchheimer medium. <i>Heat Transfer</i> , 2021, 50, 3547-3563.	3.0	2
18	Radiative flow of MHD non-Newtonian fluid by utilizing the updated version of heat flux model under Joule heating. <i>Heat Transfer</i> , 2021, 50, 3407-3425.	3.0	6

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19	Computation of traveling wave solution for nonlinear variable-order fractional model of modified equal width equation. <i>AIMS Mathematics</i> , 2021, 6, 10055-10069.	1.6	17
20	Utilization of updated version of heat flux model for the radiative flow of a non-Newtonian material under Joule heating: OHAM application. <i>Open Physics</i> , 2021, 19, 100-110.	1.7	22
21	Numerical Solutions for Heat Transfer of An Unsteady Cavity with Viscous Heating. <i>Computers, Materials and Continua</i> , 2021, 68, 319-336.	1.9	13
22	Exploration of Temperature-Dependent Thermal Conductivity and Diffusion Coefficient for Thermal and Mass Transportation in Sutterby Nanofluid Model over a Stretching Cylinder. <i>Complexity</i> , 2021, 2021, 1-14.	1.6	11
23	Vectorial reduced differential transform method for fractional Cauchy-Riemann system of equations. <i>Computational and Mathematical Methods</i> , 2021, 3, .	0.8	2
24	Effect of rotational slip on the physical parameter in a micropolar fluid flow past a stretching sheet. <i>International Journal of Modern Physics B</i> , 2021, 35, 2150169.	2.0	0
25	Contribution of joule heating and viscous dissipation on three dimensional flow of Casson model comprising temperature dependent conductance utilizing shooting method. <i>Physica Scripta</i> , 2021, 96, 085208.	2.5	41
26	Numerical Computation of Dufour and Soret Effects on Radiated Material on a Porous Stretching Surface with Temperature-Dependent Thermal Conductivity. <i>Fluids</i> , 2021, 6, 196.	1.7	11
27	Contribution of Dufour and Soret effects on hydromagnetized material comprising temperature-dependent thermal conductivity. <i>Heat Transfer</i> , 2021, 50, 7157-7175.	3.0	12
28	Inclusion of hybrid nanoparticles in hyperbolic tangent material to explore thermal transportation via finite element approach engaging Cattaneo-Christov heat flux. <i>PLoS ONE</i> , 2021, 16, e0256302.	2.5	21
29	Computational analysis of radiative Williamson hybrid nanofluid comprising variable thermal conductivity. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 087004.	1.5	15
30	Significant Involvement of Double Diffusion Theories on Viscoelastic Fluid Comprising Variable Thermophysical Properties. <i>Micromachines</i> , 2021, 12, 951.	2.9	25
31	Applications of Cattaneo-Christov fluxes on modelling the boundary value problem of Prandtl fluid comprising variable properties. <i>Scientific Reports</i> , 2021, 11, 17837.	3.3	17
32	Computational study for temperature distribution in ArF excimer laser corneal refractive surgeries using different beam delivery techniques. <i>Lasers in Medical Science</i> , 2021, , 1.	2.1	2
33	Enhancement in Thermal Energy and Solute Particles Using Hybrid Nanoparticles by Engaging Activation Energy and Chemical Reaction over a Parabolic Surface via Finite Element Approach. <i>Fractal and Fractional</i> , 2021, 5, 119.	3.3	437
34	Finite element simulations of hybrid nano-Carreau Yasuda fluid with hall and ion slip forces over rotating heated porous cone. <i>Scientific Reports</i> , 2021, 11, 19604.	3.3	44
35	Numerical exploration of thermal transport in water-based nanoparticles: A computational strategy. <i>Case Studies in Thermal Engineering</i> , 2021, 27, 101334.	5.7	23
36	Homotopic fractional analysis of thin film flow of Oldroyd 6-Constant fluid. <i>AEJ - Alexandria Engineering Journal</i> , 2021, 60, 5311-5322.	6.4	8

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37	Pharmacological and engineering biomedical applications of peristaltically induced flow in a curved channel. AEJ - Alexandria Engineering Journal, 2021, 60, 4995-5008.	6.4	9
38	Computational Assessment of Thermal and Solute Mechanisms in Carreauâ€“Yasuda Hybrid Nanoparticles Involving Soret and Dufour Effects over Porous Surface. Micromachines, 2021, 12, 1302.	2.9	8
39	Significant Production of Thermal Energy in Partially Ionized Hyperbolic Tangent Material Based on Ternary Hybrid Nanomaterials. Energies, 2021, 14, 6911.	3.1	55
40	Numerical Exploration via Least Squares Estimation on Three Dimensional MHD Yield Exhibiting Nanofluid Model with Porous Stretching Boundaries. Fractal and Fractional, 2021, 5, 167.	3.3	2
41	Fractional order stagnation point flow of the hybrid nanofluid towards a stretching sheet. Scientific Reports, 2021, 11, 20429.	3.3	40
42	Numerical exploration of thermal and mass transportation by utilising non-Fourier double diffusion theories for Casson model under Hall and ion slip effects. Pramana - Journal of Physics, 2021, 95, 1.	1.8	7
43	An inclination in Thermal Energy Using Nanoparticles with Casson Liquid Past an Expanding Porous Surface. Energies, 2021, 14, 7328.	3.1	16
44	Utilization of Chebyshev collocation approach for differential, differential-difference and integro-differential equations. Arab Journal of Basic and Applied Sciences, 2021, 28, 413-426.	2.1	2
45	Numerical exploration of thin film flow of MHD pseudo-plastic fluid in fractional space: Utilization of fractional calculus approach. Open Physics, 2021, 19, 710-721.	1.7	22
46	Thermal Improvement in Pseudo-Plastic Material Using Ternary Hybrid Nanoparticles via Non-Fourierâ€™s Law over Porous Heated Surface. Energies, 2021, 14, 8115.	3.1	28
47	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
48	Application of non-Fourier double diffusions theories to the boundary-layer flow of a yield stress exhibiting fluid model. Physica A: Statistical Mechanics and Its Applications, 2020, 537, 122753.	2.6	65
49	On the onset of entropy generation for a nanofluid with thermal radiation and gyrotactic microorganisms through 3D flows. Physica Scripta, 2020, 95, 045206.	2.5	108
50	Modified heat and mass transmission models in the magnetohydrodynamic flow of Sutterby nanofluid in stretching cylinder. Physica A: Statistical Mechanics and Its Applications, 2020, 549, 124088.	2.6	98
51	Theoretical and numerical investigation of entropy for the variable thermophysical characteristics of couple stress material: Applications to optimization. AEJ - Alexandria Engineering Journal, 2020, 59, 4365-4375.	6.4	36
52	An Efficient Numerical Scheme for Variable-Order Fractional Sub-Diffusion Equation. Symmetry, 2020, 12, 1437.	2.2	21
53	Outcome of slip features on the peristaltic flow of a Rabinowitsch nanofluid in an asymmetric flexible channel. Multidiscipline Modeling in Materials and Structures, 2020, 17, 181-197.	1.3	9
54	Numerical exploration of heat and mass transport for the flow of nanofluid subject to Hall and ion slip effects. Multidiscipline Modeling in Materials and Structures, 2020, 16, 951-965.	1.3	3

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55	On Behavioral Response of 3D Squeezing Flow of Nanofluids in a Rotating Channel. Complexity, 2020, 2020, 1-16.	1.6	9
56	On Behavioral Response of Microstructural Slip on the Development of Magnetohydrodynamic Micropolar Boundary Layer Flow. Complexity, 2020, 2020, 1-12.	1.6	6
57	Utilization of hall current and ions slip effects for the dynamic simulation of peristalsis in a compliant channel. AEJ - Alexandria Engineering Journal, 2020, 59, 3609-3622.	6.4	17
58	Analysis of radiative magneto nano pseudo-plastic material over three dimensional nonlinear stretched surface with passive control of mass flux and chemically responsive species. Multidiscipline Modeling in Materials and Structures, 2020, 16, 1061-1083.	1.3	13
59	Theoretical exploration of thermal transportation with chemical reactions for sutterby fluid model obeying peristaltic mechanism. Journal of Materials Research and Technology, 2020, 9, 7449-7459.	5.8	52
60	Entropy generation in MHD Casson fluid flow with variable heat conductance and thermal conductivity over non-linear bi-directional stretching surface. Scientific Reports, 2020, 10, 12530.	3.3	68
61	Thermal and species transportation of Eyring-Powell material over a rotating disk with swimming microorganisms: applications to metallurgy. Journal of Materials Research and Technology, 2020, 9, 5577-5590.	5.8	28
62	Exploration of thermal transport for Sisko fluid model under peristaltic phenomenon. Journal of Physics Communications, 2020, 4, 065003.	1.2	12
63	Fourth-Order Difference Approximation for Time-Fractional Modified Sub-Diffusion Equation. Symmetry, 2020, 12, 691.	2.2	24
64	Entropy generation optimization in MHD pseudoplastic fluid comprising motile microorganisms with stratification effect. AEJ - Alexandria Engineering Journal, 2020, 59, 485-496.	6.4	58
65	Influence of chemical reactions and mechanism of peristalsis for the thermal distribution obeying slip constraints: Applications to conductive transportation. Journal of Materials Research and Technology, 2020, 9, 6533-6543.	5.8	13
66	Utilization of modified Darcy's law in peristalsis with a compliant channel: applications to thermal science. Journal of Materials Research and Technology, 2020, 9, 5619-5629.	5.8	16
67	Simultaneous effects of heterogeneous-homogeneous reactions in peristaltic flow comprising thermal radiation: Rabinowitsch fluid model. Journal of Materials Research and Technology, 2020, 9, 3520-3529.	5.8	36
68	Numerical approach of variable thermophysical features of dissipated viscous nanofluid comprising gyrotactic micro-organisms. Pramana - Journal of Physics, 2020, 94, 1.	1.8	60
69	Investigation of entropy generation in stratified MHD Carreau nanofluid with gyrotactic microorganisms under Von Neumann similarity transformations. European Physical Journal Plus, 2020, 135, 1.	2.6	40
70	Computational exploration for radiative flow of Sutterby nanofluid with variable temperature-dependent thermal conductivity and diffusion coefficient. Open Physics, 2020, 18, 1073-1083.	1.7	54
71	Thermal performance of an MHD radiative Oldroyd-B nanofluid by utilizing generalized models for heat and mass fluxes in the presence of bioconvective gyrotactic microorganisms and variable thermal conductivity. Heat Transfer - Asian Research, 2019, 48, 2659-2675.	2.8	17
72	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

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73	Heat transport in the convective Casson fluid flow with homogeneous&#x2013;heterogeneous reactions in Darcy&#x2013;Forchheimer medium. <i>Multidiscipline Modeling in Materials and Structures</i> , 2019, 15, 1170-1189.	1.3	31
74	Dynamical and optimal procedure to analyze the attributes of yield exhibiting material with double diffusion theories. <i>Multidiscipline Modeling in Materials and Structures</i> , 2019, 16, 557-580.	1.3	8
75	Theoretical analysis of MHD Carreau liquid over a heated rotating disk under Von-Karman transformations. <i>Multidiscipline Modeling in Materials and Structures</i> , 2019, 16, 390-408.	1.3	7
76	Application of double diffusion theories to Maxwell nanofluid under the appliance of thermal radiation and gyrotactic microorganism. <i>Multidiscipline Modeling in Materials and Structures</i> , 2019, 16, 256-280.	1.3	15
77	Exploration of temperature dependent thermophysical characteristics of yield exhibiting non-Newtonian fluid flow under gyrotactic microorganisms. <i>AIP Advances</i> , 2019, 9, .	1.3	56
78	Novel Schemes for Cauchy-Riemann System of Equations with Cauchy Conditions. <i>Advances in the Theory of Nonlinear Analysis and Its Applications</i> , 0, , .	0.7	0
79	A Petrov&#x2013;Galerkin finite element approach for the unsteady boundary layer upper-convected rotating Maxwell fluid flow and heat transfer analysis. <i>Waves in Random and Complex Media</i> , 0, , 1-18.	2.7	7