Muhammad Irfan

List of Publications by Year
in descending order

79 papers	2,799 citations	147801 31 h-index	233421 45 g-index
79 all docs	79 docs citations	79 times ranked	764 citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of energy transport considering Arrhenius activation energy and chemical reaction in radiative Maxwell nanofluid flow. Chemical Physics Letters, 2022, 793, 139323.	2.6	15
2	Heat Transfer in a Fractional Nanofluid Flow through a Permeable Medium. Mathematical Problems in Engineering, 2022, 2022, 1-18.	1.1	14
3	Energy Transport and Effectiveness of Thermo-Sloutal Time's Relaxation Theory in Carreau Fluid with Variable Mass Diffusivity. Mathematical Problems in Engineering, 2022, 2022, 1-11.	1.1	8
4	Thermal phenomenon of Joule heating in the radiative flow of Carreau nanofluid. Pramana - Journal of Physics, 2022, 96, .	1.5	6
5	Importance of heat generation in chemically reactive flow subjected to convectively heated surface. Indian Journal of Physics, 2021, 95, 89-97.	1.8	35
6	Analysis of Cattaneo–Christov theory for unsteady flow of Maxwell fluid over stretching cylinder. Journal of Thermal Analysis and Calorimetry, 2021, 144, 145-154.	3.6	34
7	Theoretical analysis of new mass flux theory and Arrhenius activation energy in Carreau nanofluid with magnetic influence. International Communications in Heat and Mass Transfer, 2021, 120, 105051.	5.6	40
8	Arrhenius activation energy theory in radiative flow of Maxwell nanofluid. Physica Scripta, 2021, 96, 045002.	2.5	33
9	Fractional calculus approach for the phase dynamics of Josephson junction. Chaos, Solitons and Fractals, 2021, 143, 110572.	5.1	11
10	Study of Brownian motion and thermophoretic diffusion on non-linear mixed convection flow of Carreau nanofluid subject to variable properties. Surfaces and Interfaces, 2021, 23, 100926.	3.0	46
11	A non-linear mathematical analysis of thermally radiative stratified nanoliquid featuring the aspects of magnetic field, Robin conditions and thermal radiation. International Communications in Heat and Mass Transfer, 2021, 125, 105199.	5.6	13
12	Thermal performance of Joule heating in Oldroyd-B nanomaterials considering thermal-solutal convective conditions. Chinese Journal of Physics, 2021, 71, 444-457.	3.9	30
13	Impact of stratification phenomena on a nonlinear radiative flow of sutterby nanofluid. Journal of Materials Research and Technology, 2021, 15, 306-314.	5.8	65
14	Visualization of non-linear convective Williamson liquid based on generalized heat-mass theories. Physica Scripta, 2021, 96, 015218.	2.5	2
15	Evaluating the performance of new mass flux theory on Carreau nanofluid using the thermal aspects of convective heat transport. Pramana - Journal of Physics, 2021, 95, 1.	1.8	18
16	Chemically reactive and nonlinear radiative heat flux in mixed convection flow of Oldroyd-B nanofluid. Applied Nanoscience (Switzerland), 2020, 10, 3133-3141.	3.1	13
17	A rheological analysis of nanofluid subjected to melting heat transport characteristics. Applied Nanoscience (Switzerland), 2020, 10, 3161-3170.	3.1	65
18	Mathematical modeling and analysis of Cross nanofluid flow subjected to entropy generation. Applied Nanoscience (Switzerland), 2020, 10, 3149-3160.	3.1	47

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19	Simultaneous impact of nonlinear radiative heat flux and Arrhenius activation energy in flow of chemically reacting Carreau nanofluid. Applied Nanoscience (Switzerland), 2020, 10, 2977-2988.	3.1	15
20	Computational analysis of entropy generation for cross-nanofluid flow. Applied Nanoscience (Switzerland), 2020, 10, 3045-3055.	3.1	45
21	Entropy optimized stretching flow based on non-Newtonian radiative nanoliquid under binary chemical reaction. Computer Methods and Programs in Biomedicine, 2020, 188, 105274.	4.7	35
22	Von KÃ¡rmÃ¡n swirling analysis for modeling Oldroyd-B nanofluid considering cubic autocatalysis. Physica Scripta, 2020, 95, 015206.	2.5	28
23	A note on activation energy and magnetic dipole aspects for Cross nanofluid subjected to cylindrical surface. Applied Nanoscience (Switzerland), 2020, 10, 3235-3244.	3.1	44
24	MHD Maxwell flow modeled by fractional derivatives with chemical reaction and thermal radiation. Chinese Journal of Physics, 2020, 67, 512-533.	3.9	47
25	Heat generation in mixed convected Williamson liquid stretching flow under generalized Fourier concept. Applied Nanoscience (Switzerland), 2020, 10, 4439-4444.	3.1	23
26	Electrified fractional nanofluid flow with suspended carbon nanotubes. Computers and Mathematics With Applications, 2020, 80, 1375-1386.	2.7	27
27	Heat sink/source and chemical reaction in stagnation pointÂflow ofÂMaxwell nanofluid. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	30
28	Influence of thermal-solutal stratifications and thermal aspects of non-linear radiation in stagnation point Oldroyd-B nanofluid flow. International Communications in Heat and Mass Transfer, 2020, 116, 104636.	5.6	38
29	Evaluation of Arrhenius activation energy and new mass flux condition in Carreau nanofluid: dual solutions. Applied Nanoscience (Switzerland), 2020, 10, 5279-5289.	3.1	15
30	Activation energy analysis in entropy optimized reactive flow. Applied Nanoscience (Switzerland), 2020, 10, 2673-2683.	3.1	3
31	Physical aspects of shear thinning/thickening behavior in radiative flow of magnetite Carreau nanofluid with nanoparticle mass flux conditions. Applied Nanoscience (Switzerland), 2020, 10, 3021-3033.	3.1	16
32	Arrhenius activation energy aspects in mixed convection Carreau nanofluid with nonlinear thermal radiation. Applied Nanoscience (Switzerland), 2020, 10, 4403-4413.	3.1	27
33	Exploring the features for flow of Oldroyd-B liquid film subjected to rotating disk with homogeneous/heterogeneous processes. Computer Methods and Programs in Biomedicine, 2020, 189, 105323.	4.7	29
34	On the evaluation of stratification based entropy optimized hydromagnetic flow featuring dissipation aspect and Robin conditions. Computer Methods and Programs in Biomedicine, 2020, 190, 105347.	4.7	38
35	Numerical analysis of unsteady Carreau nanofluid flow with variable conductivity. Applied Nanoscience (Switzerland), 2020, 10, 3075-3084.	3.1	25
36	Transient MHD flow of Maxwell nanofluid subject to non-linear thermal radiation and convective heat transport. Applied Nanoscience (Switzerland), 2020, 10, 5361-5373.	3.1	26

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37	Physical significance of chemical processes and Lorentz's forces aspects on Sisko fluid flow in curved configuration. Soft Computing, 2020, 24, 16213-16223.	3.6	18
38	Transport of radiative heat transfer in dissipative Cross nanofluid flow with entropy generation and activation energy. Physica Scripta, 2019, 94, 115224.	2.5	20
39	Modeling and analysis of von Kármán swirling flow for Oldroyd-B nanofluid featuring chemical processes. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	11
40	Importance of entropy generation and infinite shear rate viscosity for non-Newtonian nanofluid. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	26
41	Heat transfer enhancement for Maxwell nanofluid flow subject to convective heat transport. Pramana - Journal of Physics, 2019, 92, 1.	1.8	33
42	Numerical treatment of activation energy for the three-dimensional flow of a cross magnetonanoliquid with variable conductivity. Pramana - Journal of Physics, 2019, 93, 1.	1.8	18
43	Characteristics of chemical processes and heat source/sink with wedge geometry. Case Studies in Thermal Engineering, 2019, 14, 100432.	5.7	22
44	Impact of homogeneous–heterogeneous reactions and non-Fourier heat flux theory in Oldroyd-B fluid with variable conductivity. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	32
45	Consequence of convective conditions for flow of Oldroyd-B nanofluid by a stretching cylinder. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	22
46	Influence of binary chemical reaction with Arrhenius activation energy in MHD nonlinear radiative flow of unsteady Carreau nanofluid: dual solutions. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	52
47	Mathematical analysis of thermally radiative time-dependent Sisko nanofluid flow for curved surface. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 3498-3514.	2.8	45
48	Importance of convective heat transfer in flow of non-Newtonian nanofluid featuring Brownian and thermophoretic diffusions. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 4624-4641.	2.8	47
49	Magnetohydrodynamic Stagnation Point Flow of a Maxwell Nanofluid with Variable Conductivity. Communications in Theoretical Physics, 2019, 71, 1493.	2.5	16
50	Numerical interpretation of autocatalysis chemical reaction for nonlinear radiative 3D flow of cross magnetofluid. Pramana - Journal of Physics, 2019, 92, 1.	1.8	41
51	Theoretical aspects of thermophoresis and Brownian motion for three-dimensional flow of the cross fluid with activation energy. Pramana - Journal of Physics, 2019, 92, 1.	1.8	47
52	Consequences of activation energy and binary chemical reaction for 3D flow of Cross-nanofluid with radiative heat transfer. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	89
53	Impact of non-uniform heat sink/source and convective condition in radiative heat transfer to Oldroyd-B nanofluid: A revised proposed relation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 376-382.	2.1	45
54	Influence of Arrhenius activation energy in chemically reactive radiative flow of 3D Carreau nanofluid with nonlinear mixed convection. Journal of Physics and Chemistry of Solids, 2019, 125, 141-152.	4.0	110

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55	Thermophysical properties of unsteady 3D flow of magneto Carreau fluid in the presence of chemical species: a numerical approach. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	15
56	Interaction between chemical species and generalized Fourier's law on 3D flow of Carreau fluid with variable thermal conductivity and heat sink/source: A numerical approach. Results in Physics, 2018, 10, 107-117.	4.1	50
57	Impact of heat source/sink on radiative heat transfer to Maxwell nanofluid subject to revised mass flux condition. Results in Physics, 2018, 9, 851-857.	4.1	50
58	On model for three-dimensional Carreau fluid flow with Cattaneo–Christov double diffusion and variable conductivity: a numerical approach. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	31
59	Behavior of stratifications and convective phenomena in mixed convection flow of 3D Carreau nanofluid with radiative heat flux. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	14
60	Impact of autocatalysis chemical reaction on nonlinear radiative heat transfer of unsteady three-dimensional Eyring–Powell magneto-nanofluid flow. Pramana - Journal of Physics, 2018, 91, 1.	1.8	56
61	Significance of static–moving wedge for unsteady Falkner–Skan forced convective flow of MHD cross fluid. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	36
62	Thermal and solutal stratifications in flow of Oldroyd-B nanofluid with variable conductivity. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	37
63	Simultaneous investigation of MHD and convective phenomena on time-dependent flow of Carreau nanofluid with variable properties: Dual solutions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2334-2342.	2.1	28
64	Chemically reactive flow and heat transfer of magnetite Oldroyd-B nanofluid subject to stratifications. Applied Nanoscience (Switzerland), 2018, 8, 1743-1754.	3.1	30
65	Modern development on the features of magnetic field and heat sink/source in Maxwell nanofluid subject to convective heat transport. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1992-2002.	2.1	84
66	Aspects of improved heat conduction relation and chemical processes in 3D Carreau fluid flow. Pramana - Journal of Physics, 2018, 91, 1.	1.8	14
67	Impact of nonlinear thermal radiation and gyrotactic microorganisms on the Magneto-Burgers nanofluid. International Journal of Mechanical Sciences, 2017, 130, 375-382.	6.7	162
68	Modeling and simulation for 3D magneto Eyring–Powell nanomaterial subject to nonlinear thermal radiation and convective heating. Results in Physics, 2017, 7, 1899-1906.	4.1	50
69	Impact of chemical processes on magneto nanoparticle for the generalized Burgers fluid. Journal of Molecular Liquids, 2017, 234, 201-208.	4.9	115
70	Numerical analysis of unsteady 3D flow of Carreau nanofluid with variable thermal conductivity and heat source/sink. Results in Physics, 2017, 7, 3315-3324.	4.1	69
71	An improved heat conduction and mass diffusion models for rotating flow of an Oldroyd-B fluid. Results in Physics, 2017, 7, 3583-3589.	4.1	55
72	A new modeling for 3D Carreau fluid flow considering nonlinear thermal radiation. Results in Physics, 2017, 7, 2692-2704.	4.1	71

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73	Numerical assessment of solar energy aspects on 3D magneto-Carreau nanofluid: A revised proposed relation. International Journal of Hydrogen Energy, 2017, 42, 22054-22065.	7.1	48
74	Impact of forced convective radiative heat and mass transfer mechanisms on 3D Carreau nanofluid: A numerical study. European Physical Journal Plus, 2017, 132, 1.	2.6	21
75	Impact of melting heat transfer and nonlinear radiative heat flux mechanisms for the generalized Burgers fluids. Results in Physics, 2017, 7, 4025-4032.	4.1	37
76	Rough S-acts. Lobachevskii Journal of Mathematics, 2008, 29, 98-109.	0.9	7
77	Theory of activation energy and thermophoretic dispersion of nanoparticles in nonlinear radiative Maxwell nanofluid. Waves in Random and Complex Media, 0, , 1-12.	2.7	3
78	On the Cattaneoâ€"Christov heat flux theory for mixed convection flow due to the rotating disk with slip effects. Waves in Random and Complex Media, 0, , 1-15.	2.7	9
79	Phenomena of thermo-sloutal timeâ€™s relaxation in mixed convection Carreau fluid with heat sink/source. Waves in Random and Complex Media, 0, , 1-13.	2.7	7