Muhammad Imran Khan

List of Publications by Year
in descending order

84 papers	5,160 citations	57719 44 h-index	95218 68 g-index
85 all docs	85 docs citations	85 times ranked	1900 citing authors

#	Article	IF	Citations
1	MHD stagnation point flow of viscoelastic nanofluid with non-linear radiation effects. Journal of Molecular Liquids, 2016, 221, 1097-1103.	2.3	289
2	Technical overview of compressed natural gas (CNG) as a transportation fuel. Renewable and Sustainable Energy Reviews, 2015, 51, 785-797.	8.2	285
3	Activation energy impact in nonlinear radiative stagnation point flow of Cross nanofluid. International Communications in Heat and Mass Transfer, 2018, 91, 216-224.	2.9	229
4	Entropy generation minimization and binary chemical reaction with Arrhenius activation energy in MHD radiative flow of nanomaterial. Journal of Molecular Liquids, 2018, 259, 274-283.	2.3	154
5	A modified homogeneous-heterogeneous reactions for MHD stagnation flow with viscous dissipation and Joule heating. International Journal of Heat and Mass Transfer, 2017, 113, 310-317.	2.5	134
6	New thermodynamics of entropy generation minimization with nonlinear thermal radiation and nanomaterials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 749-760.	0.9	133
7	Radiative flow of micropolar nanofluid accounting thermophoresis and Brownian moment. International Journal of Hydrogen Energy, 2017, 42, 16821-16833.	3.8	131
8	Entropy generation in radiative motion of tangent hyperbolic nanofluid in presence of activation energy and nonlinear mixed convection. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2017-2026.	0.9	129
9	Entropy generation in Darcy-Forchheimer bidirectional flow of water-based carbon nanotubes with convective boundary conditions. Journal of Molecular Liquids, 2018, 265, 629-638.	2.3	124
10	Entropy generation in flow of ferromagnetic liquid with nonlinear radiation and slip condition. Journal of Molecular Liquids, 2019, 276, 441-452.	2.3	119
11	Research progress in the development of natural gas as fuel for road vehicles: A bibliographic review (1991â€"2016). Renewable and Sustainable Energy Reviews, 2016, 66, 702-741.	8.2	115
12	Entropy optimization in flow of Williamson nanofluid in the presence of chemical reaction and Joule heating. International Journal of Heat and Mass Transfer, 2019, 133, 959-967.	2.5	108
13	Joule heating and viscous dissipation in flow of nanomaterial by a rotating disk. International Communications in Heat and Mass Transfer, 2017, 89, 190-197.	2.9	107
14	Behavior of stratification phenomenon in flow of Maxwell nanomaterial with motile gyrotactic microorganisms in the presence of magnetic field. International Journal of Mechanical Sciences, 2017, 131-132, 426-434.	3.6	104
15	Transportation of heat generation/absorption and radiative heat flux in homogeneousâ€"heterogeneous catalytic reactions of non-Newtonian fluid (Oldroyd-B model). Computer Methods and Programs in Biomedicine, 2020, 189, 105310.	2.6	103
16	Thermally stratified stretching flow with Cattaneoâ€"Christov heat flux. International Journal of Heat and Mass Transfer, 2017, 106, 289-294.	2.5	100
17	Entropy generation for flow of Sisko fluid due to rotating disk. Journal of Molecular Liquids, 2018, 264, 375-385.	2.3	96
18	Entropy generation optimization and unsteady squeezing flow of viscous fluid with five different shapes of nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 554, 197-210.	2.3	95

#	Article	IF	Citations
19	Optimization of entropy generation and dissipative nonlinear radiative Von Karman's swirling flow with Soret and Dufour effects. Journal of Molecular Liquids, 2018, 262, 261-274.	2.3	94
20	Numerical simulation of hydromagnetic mixed convective radiative slip flow with variable fluid properties: A mathematical model for entropy generation. Journal of Physics and Chemistry of Solids, 2019, 125, 153-164.	1.9	90
21	Significance of nonlinear radiation in mixed convection flow of magneto Walter-B nanoliquid. International Journal of Hydrogen Energy, 2017, 42, 26408-26416.	3.8	89
22	Entropy generation minimization (EGM) in nonlinear mixed convective flow of nanomaterial with Joule heating and slip condition. Journal of Molecular Liquids, 2018, 256, 108-120.	2.3	88
23	Physical significance of heat generation/absorption and Soret effects on peristalsis flow of pseudoplastic fluid in an inclined channel. Journal of Molecular Liquids, 2019, 275, 599-615.	2.3	87
24	Entropy generation minimization (EGM) for convection nanomaterial flow with nonlinear radiative heat flux. Journal of Molecular Liquids, 2018, 260, 279-291.	2.3	84
25	Magneto rotating flow of hybrid nanofluid with entropy generation. Computer Methods and Programs in Biomedicine, 2020, 183, 105093.	2.6	78
26	On Cattaneoâ€"Christov double diffusion impact for temperature-dependent conductivity of Powellâ€"Eyring liquid. Chinese Journal of Physics, 2017, 55, 729-737.	2.0	77
27	Chemically reactive flow of Maxwell liquid due to variable thicked surface. International Communications in Heat and Mass Transfer, 2017, 86, 231-238.	2.9	76
28	Nonlinear thermal radiation in flow induced by a slendering surface accounting thermophoresis and Brownian diffusion. European Physical Journal Plus, 2017, 132, 1.	1.2	73
29	Homogeneous-heterogeneous reactions and melting heat transfer effects in the MHD flow by a stretching surface with variable thickness. Journal of Molecular Liquids, 2016, 223, 960-968.	2.3	72
30	Impact of heat generation/absorption and homogeneous-heterogeneous reactions on flow of Maxwell fluid. Journal of Molecular Liquids, 2017, 233, 465-470.	2.3	69
31	Numerical simulation of nonlinear thermal radiation and homogeneous-heterogeneous reactions in convective flow by a variable thicked surface. Journal of Molecular Liquids, 2017, 246, 259-267.	2.3	67
32	Investigation of Sisko fluid through entropy generation. Journal of Molecular Liquids, 2018, 257, 155-163.	2.3	63
33	Evaluating the strategies of compressed natural gas industry using an integrated SWOT and MCDM approach. Journal of Cleaner Production, 2018, 172, 1035-1052.	4.6	61
34	Axisymmetric flow of Casson fluid by a swirling cylinder. Results in Physics, 2018, 9, 1250-1255.	2.0	61
35	Entropy generation optimization in flow of Prandtlâ€"Eyring nanofluid with binary chemical reaction and Arrhenius activation energy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 570, 117-126.	2.3	61
36	Entropy optimized CNTs based Darcy-Forchheimer nanomaterial flow between two stretchable rotating disks. International Journal of Hydrogen Energy, 2019, 44, 31579-31592.	3.8	60

#	Article	IF	Citations
37	Salient aspects of entropy generation optimization in mixed convection nanomaterial flow. International Journal of Heat and Mass Transfer, 2018, 126, 1337-1346.	2.5	58
38	Thermal activity of conventional Casson nanoparticles with ramped temperature due to an infinite vertical plate via fractional derivative approach. Case Studies in Thermal Engineering, 2021, 27, 101191.	2.8	57
39	Solar energy aspects of gyrotactic mixed bioconvection flow of nanofluid past a vertical thin moving needle influenced by variable Prandtl number. Chaos, Solitons and Fractals, 2021, 151, 111244.	2.5	56
40	Entropy generation optimization and activation energy in nonlinear mixed convection flow of a tangent hyperbolic nanofluid. European Physical Journal Plus, 2018, 133, 1.	1.2	53
41	Chemically reactive flow of upper-convected Maxwell fluid with Cattaneoâ€"Christov heat flux model. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 4571-4578.	0.8	51
42	Nanomaterial based flow of Prandtl-Eyring (non-Newtonian) fluid using Brownian and thermophoretic diffusion with entropy generation. Computer Methods and Programs in Biomedicine, 2019, 180, 105017.	2.6	51
43	MHD flow of carbon in micropolar nanofluid with convective heat transfer in the rotating frame. Journal of Molecular Liquids, 2017, 231, 353-363.	2.3	50
44	Implementation of modified Buongiornoâ€™s model for the investigation of chemically reacting <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si246.svg"><mml:mrow><mml:mi mathvariant="italic">rGO</mml:mi><mml:mo linebreak="badbreak">-</mml:mo><mml:msub><mml:mrow><mml:mi mathvariant="italic">Fe</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mro linebreak="badbreak">-</mml. Chemical Physics Letters, 2022, 786, 139194.	1.2	50
45	Entropy analysis for comparative study of effective Prandtl number and without effective Prandtl number via Î³Al2O3-H2O and Î³Al2O3-C2H6O2 nanoparticles. Journal of Molecular Liquids, 2018, 266, 814-823.	2.3	49
46	Development of natural gas as a vehicular fuel in Pakistan: Issues and prospects. Journal of Natural Gas Science and Engineering, 2014, 17, 99-109.	2.1	44
47	2014 oil plunge: Causes and impacts on renewable energy. Renewable and Sustainable Energy Reviews, 2017, 68, 609-622.	8.2	43
48	Development of thixotropic nanomaterial in fluid flow with gyrotactic microorganisms, activation energy, mixed convection. Computer Methods and Programs in Biomedicine, 2020, 187, 105186.	2.6	43
49	Falling oil prices: Causes, consequences and policy implications. Journal of Petroleum Science and Engineering, 2017, 149, 409-427.	2.1	42
50	Entropy generation (irreversibility) associated with flow and heat transport mechanism in Sisko nanomaterial. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2343-2353.	0.9	40
51	Policy options for the sustainable development of natural gas as transportation fuel. Energy Policy, 2017, 110, 126-136.	4.2	33
52	Life cycle (well-to-wheel) energy and environmental assessment of natural gas as transportation fuel in Pakistan. Applied Energy, 2019, 242, 1738-1752.	5.1	33
53	Theoretical and numerical investigation of Carreauâ€"Yasuda fluid flow subject to Soret and Dufour effects. Computer Methods and Programs in Biomedicine, 2020, 186, 105145.	2.6	33
54	Significances of exponential heating and Darcy's law for second grade fluid flow over oscillating plate by using Atangana-Baleanu fractional derivatives. Case Studies in Thermal Engineering, 2021, 27, 101266.	2.8	31

#	Article	IF	Citations
55	EMHD creeping rheology of nanofluid through a micro-channel via ciliated propulsion under porosity and thermal effects. Case Studies in Thermal Engineering, 2022, 30, 101746.	2.8	31
56	International experience with compressed natural gas (CNG) as environmental friendly fuel. Energy Systems, 2015, 6, 507-531.	1.8	27
57	A failure analysis of the exhaust valve from a heavy duty natural gas engine. Engineering Failure Analysis, 2018, 85, 77-88.	1.8	25
58	Effectiveness of radiative heat flux in MHD flow of Jeffrey-nanofluid subject to Brownian and thermophoresis diffusions. Journal of Hydrodynamics, 2019, 31, 421-427.	1.3	24
59	Heat transfer and melting flow of a Reiner-Philippoff fluid over a surface with Darcy-Forchheimer medium. Case Studies in Thermal Engineering, 2021, 28, 101649.	2.8	22
60	Entropy generation optimization in flow of non-Newtonian nanomaterial with binary chemical reaction and Arrhenius activation energy. Physica A: Statistical Mechanics and Its Applications, 2020, 538, 122806.	1.2	21
61	Computer simulations for the thermal determination of graphene oxide $(\,$ disulphide	2.8	20
62	Theoretical and mathematical analysis of entropy generation in fluid flow subject to aluminum and ethylene glycol nanoparticles. Computer Methods and Programs in Biomedicine, 2019, 182, 105057.	2.6	19
63	Entropy optimization analysis in MHD nanomaterials (TiO2-GO) flow with homogeneous and heterogeneous reactions. Computer Methods and Programs in Biomedicine, 2020, 184, 105111.	2.6	17
64	Exploring the potential of compressed natural gas as a viable fuel option to sustainable transport: A bibliography (2001â€"2015). Journal of Natural Gas Science and Engineering, 2016, 31, 351-381.	2.1	16
65	Salient aspects of thermo-diffusion and diffusion thermo on unsteady dissipative flow with entropy generation. Journal of Molecular Liquids, 2019, 282, 557-565.	2.3	16
66	Irreversibility analysis in hydromagnetic flow of Newtonian fluid with Joule heating: Darcy-Forchheimer model. Journal of Petroleum Science and Engineering, 2022, 212, 110206.	2.1	16
67	Safety issues associated with the use and operation of natural gas vehicles: learning from accidents in Pakistan. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 2481-2497.	0.8	15
68	Identifying and addressing barriers for the sustainable development of natural gas as automotive fuel. International Journal of Hydrogen Energy, 2017, 42, 25453-25473.	3.8	15
69	Optimization of SWCNTs and MWCNTs (single and multi-wall carbon nanotubes) in peristaltic transport with thermal radiation in a non-uniform channel. Journal of Molecular Liquids, 2019, 273, 383-391.	2.3	15
70	Theoretical investigation of the doubly stratified flow of an Eyring-Powell nanomaterial via heat generation/absorption. European Physical Journal Plus, 2017, 132, 1.	1.2	14
71	Comparative Well-to-Tank energy use and greenhouse gas assessment of natural gas as a transportation fuel in Pakistan. Energy for Sustainable Development, 2018, 43, 38-59.	2.0	13
72	MHD peristaltic motion of Johnsonâ€"Segalman fluid in an inclined channel subject to radiative flux and convective boundary conditions. Computer Methods and Programs in Biomedicine, 2019, 180, 104999.	2.6	12

#	Article	IF	Citations
73	Numerical simulation for electrical conducting rotating flow of Au (Gold)-Zn (Zinc)/EG (Ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	2.9	11
74	A frame work for heat generation/absorption and modified homogeneous–heterogeneous reaction in flow based on non-Darcy–Forchheimer medium. Nuclear Engineering and Technology, 2018, 50, 389-395.	1.1	10
75	Numerical simulation of Darcy–Forchheimer flow of third grade liquid with Cattaneo–Christov heat flux model. Mathematical Methods in the Applied Sciences, 2018, 41, 4352-4359.	1.2	10
76	Aspects of constructive/destructive chemical reaction with activation energy for Darcy-Forchheimer hybrid nanofluid flow due to semi-infinite asymmetric channel with absorption and generation features. Ain Shams Engineering Journal, 2021, 12, 2981-2989.	3.5	9
77	Effectiveness of induced magnetic force and non-uniform heat source/sink features for enhancing the thermal efficiency of third grade nanofluid containing microorganisms. Case Studies in Thermal Engineering, 2021, 27, 101305.	2.8	9
78	Erosion–Corrosion of Low Carbon (AISI 1008 Steel) Ring Gasket Under Dynamic High Pressure CO_2 Environment. Journal of Failure Analysis and Prevention, 2014, 14, 537-548.	0.5	8
79	Dynamics of unsteady reactive flow of viscous nanomaterial subject to Ohmic heating, heat source and viscous dissipation. Ain Shams Engineering Journal, 2021, 12, 3997-4005.	3.5	8
80	Dynamic consequences of nonlinear radiative heat flux and heat generation/absorption effects in cross-diffusion flow of generalized micropolar nanofluid. Case Studies in Thermal Engineering, 2021, 28, 101451.	2.8	8
81	Modeling and computational analysis of 3D radiative stagnation point flow of Darcy-Forchheimer subject to suction/injection. Computer Methods and Programs in Biomedicine, 2020, 184, 105104.	2.6	7
82	Evaluation of entropy generation in cubic autocatalytic unsteady squeezing flow of nanofluid between two parallel plates. Computer Methods and Programs in Biomedicine, 2020, 185, 105149.	2.6	7
83	Comparative analysis for radiative slip flow of magnetized viscous fluid with mixed convection features: Atangana-Baleanu and Caputo-Fabrizio fractional simulations. Case Studies in Thermal Engineering, 2021, 28, 101682.	2.8	7
84	Electro-magneto flow of nanomaterial with irreversibility. Computer Methods and Programs in Biomedicine, 2020, 187, 105255.	2.6	5