Vasu Buddakkagari

List of Publications by Year
in descending order

45 papers	799 citations	567144 15 h-index	580701 25 g-index
48 all docs	48 docs citations	48 times ranked	427 citing authors

#	Article	IF	Citations
1	Free convection heat and mass transfer from an isothermal sphere to a micropolar regime with Soret/Dufour effects. International Journal of Heat and Mass Transfer, 2011, 54, 9-18.	2.5	62
2	NUMERICAL STUDY OF MIXED BIOCONVECTION IN POROUS MEDIA SATURATED WITH NANOFLUID CONTAINING OXYTACTIC MICROORGANISMS. Journal of Mechanics in Medicine and Biology, 2013, 13, 1350067.	0.3	62
3	Computational simulations of hybrid mediated nano- hemodynamics (Ag-Au/Blood) through an irregular symmetric stenosis. Computers in Biology and Medicine, 2021, 130, 104213.	3.9	43
4	Thermo-diffusion and diffusion-thermo effects on MHD free convection flow past a vertical porous plate embedded in a non-Darcian porous medium. Chemical Engineering Journal, 2011, 173, 598-606.	6.6	42
5	Thermal radiation effects on magnetohydrodynamic free convection heat and mass transfer from a sphere in a variable porosity regime. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 654-671.	1.7	40
6	Modelling laminar transport phenomena in a Casson rheological fluid from a horizontal circular cylinder with partial slip. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2013, 227, 309-326.	1.4	39
7	Mixed convection from a wavy surface embedded in a thermally stratified nanofluid saturated porous medium with non-linear Boussinesq approximation. International Communications in Heat and Mass Transfer, 2016, 77, 78-86.	2.9	38
8	Unsteady Flow of a Nanofluid over a Sphere with Nonlinear Boussinesq Approximation. Journal of Thermophysics and Heat Transfer, 2019, 33, 343-355.	0.9	38
9	Computational fluid dynamic simulation of two-fluid non-Newtonian nanohemodynamics through a diseased artery with a stenosis and aneurysm. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 345-371.	0.9	31
10	Magneto-bioconvection flow of a casson thin film with nanoparticles over an unsteady stretching sheet. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 4277-4309.	1.6	29
11	Homotopy Semi-Numerical Modeling of Non-Newtonian Nanofluid Transport External to Multiple Geometries Using a Revised Buongiorno Model. Inventions, 2019, 4, 54.	1.3	24
12	Computational simulation of rheological blood flow containing hybrid nanoparticles in an inclined catheterized artery with stenotic, aneurysmal and slip effects. Computers in Biology and Medicine, 2021, 139, 105009.	3.9	21
13	Entropy Generation Analysis in Nonlinear Convection Flow of Thermally Stratified Fluid in Saturated Porous Medium With Convective Boundary Condition. Journal of Heat Transfer, 2017, 139, .	1.2	20
14	Unsteady free convection heat and mass transfer in a Walters-B viscoelastic flow past a semi-infinite vertical plate: A numerical study. Thermal Science, 2011, 15, 291-305.	0.5	20
15	Non-similar Solution of Eyring–Powell Fluid Flow and Heat Transfer with Convective Boundary Condition: Homotopy Analysis Method. International Journal of Applied and Computational Mathematics, 2020, 6, 1.	0.9	19
16	Micropolar pulsatile blood flow conveying nanoparticles in a stenotic tapered artery: NON-Newtonian pharmacodynamic simulation. Computers in Biology and Medicine, 2020, 126, 104025.	3.9	19
17	THERMAL RADIATION EFFECTS ON MAGNETOHYDRODYNAMIC HEAT AND MASS TRANSFER FROM A HORIZONTAL CYLINDER IN A VARIABLE POROSITY REGIME. Journal of Porous Media, 2012, 15, 261-281.	1.0	18
18	Unsteady hybrid nanoparticle-mediated magneto-hemodynamics and heat transfer through an overlapped stenotic artery: Biomedical drug delivery simulation. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2021, 235, 1175-1196.	1.0	18

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19	Numerical study of Carreau nanofluid flow past vertical plate with the Cattaneo–Christov heat flux model. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 702-723.	1.6	15
20	Entropy Analysis of a Convective Film Flow of a Power-Law Fluid with Nanoparticles Along an Inclined Plate. Journal of Applied Mechanics and Technical Physics, 2019, 60, 827-841.	0.1	14
21	Thermo-Diffusion and Diffusion-Thermo Effects on MHD Free Convective Heat and Mass Transfer from a Sphere Embedded in a Non-Darcian Porous Medium. Journal of Thermodynamics, 2012, 2012, 1-17.	0.8	13
22	Blood Flow Mediated Hybrid Nanoparticles in Human Arterial System: Recent Research, Development and Applications. Journal of Nanofluids, 2021, 10, 1-30.	1.4	13
23	Transient Boundary Layer Laminar Free Convective Flow of a Nanofluid Over a Vertical Cone/Plate. International Journal of Applied and Computational Mathematics, 2015, 1, 427-448.	0.9	12
24	Finite element analysis of non‐Newtonian magnetohemodynamic flow conveying nanoparticles through a stenosed coronary artery. Heat Transfer - Asian Research, 2020, 49, 33-66.	2.8	12
25	Homotopy Simulation of Dissipative Micropolar Flow and Heat Transfer from a Two-Dimensional Body with Heat Sink Effect. Chemical and Biochemical Engineering Quarterly, 2021, 34, 257-275.	0.5	12
26	Finite element computation of magneto-hemodynamic flow and heat transfer in a bifurcated artery with saccular aneurysm using the Carreau-Yasuda biorheological model. Microvascular Research, 2021, 138, 104221.	1.1	12
27	Numerical simulation of the transport of nanoparticles as drug carriers in hydromagnetic blood flow through a diseased artery with vessel wall permeability and rheological effects. Microvascular Research, 2022, 139, 104241.	1.1	12
28	Unsteady Convective Heat Transfer to a Stretching Surface in a Non-Newtonian Nanofluid. Journal of Nanofluids, 2016, 5, 581-594.	1.4	10
29	Computational modeling of magnetohydrodynamic convection from a rotating cone in orthotropic Darcian porous media. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 2035-2054.	0.8	9
30	Convective Flow of Non-homogeneous Fluid Conveying Nano-Sized Particles with Non-Fourier Thermal Relaxation: Application in Polymer Coating. Arabian Journal for Science and Engineering, 2022, 47, 6559-6576.	1.7	8
31	Thermophoresis on boundary layer heat and mass transfer flow of Walters-B fluid past a radiate plate with heat sink/source. Heat and Mass Transfer, 2017, 53, 1553-1570.	1.2	7
32	Computation of Metallic Nanofluid Natural Convection in a Two-Dimensional Solar Enclosure with Radiative Heat Transfer, Aspect Ratio and Volume Fraction Effects. Arabian Journal for Science and Engineering, 2020, 45, 9075-9093.	1.7	7
33	Unsteady nonlinear magnetohydrodynamic micropolar transport phenomena with Hall and Ion-slip current effects: Numerical study. International Journal of Applied Electromagnetics and Mechanics, 2021, 65, 371-403.	0.3	7
34	A REVIEW ON RECENT ADVANCEMENTS IN THE HEMODYNAMICS OF NANO-DRUG DELIVERY SYSTEMS. Nanoscience and Technology, 2020, 11, 73-98.	0.6	7
35	Homotopy Simulation of Non-Newtonian Spriggs Fluid Flow Over a Flat Plate with Oscillating Motion. International Journal of Applied Mechanics and Engineering, 2019, 24, 359-385.	0.3	7
36	Transient Combined Convective Heat Transfer over a Stretching Surface in a Non-Newtonian Nanofluid Using Buongiorno's Model. Journal of Applied Mathematics and Physics, 2016, 04, 443-460.	0.2	6

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37	THERMO-DIFFUSION AND DIFFUSION-THERMO EFFECTS ON FREE CONVECTION FLOW PAST A HORIZONTAL CIRCULAR CYLINDER IN A NON-DARCY POROUS MEDIUM. Journal of Porous Media, 2013, 16, 315-334.	1.0	5
38	COMPUTATION OF GOLD-WATER NANOFLUID NATURAL CONVECTION IN A THREE-DIMENSIONAL TILTED PRISMATIC SOLAR ENCLOSURE WITH ASPECT RATIO AND VOLUME FRACTION EFFECTS. Nanoscience and Technology, 2020, 11, 141-167.	0.6	4
39	MHD Free Convection-Radiation Interaction in a Porous Medium - Part II: Soret/Dufour Effects. International Journal of Applied Mechanics and Engineering, 2020, 25, 157-175.	0.3	4
40	Influence of chemically radiative nanoparticles on flow of Maxwell electrically conducting fluid over a convectively heated exponential stretching sheet. World Journal of Engineering, 2019, 16, 791-805.	1.0	3
41	On Retrieval of Nearly Identical Video Clips with Query Frame. , 2019, , .		2
42	MHD free convection flow of power-law nanofluid film along an inclined surface with viscous dissipation and joule heating. World Journal of Engineering, 2019, 16, 115-124.	1.0	2
43	Free convective heat transfer in Jeffrey fluid with suspended nanoparticles and Cattaneoâ€"Christov heat flux. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanomaterials, Nanoengineering and Nanosystems, 2020, 234, 99-114.	0.5	2
44	MHD Free Convection-Radiation Interaction in a Porous Medium - Part I: Numerical Investigation. International Journal of Applied Mechanics and Engineering, 2020, 25, 198-218.	0.3	2
45	Finite Element Analysis of MHD Blood Flow in Stenosed Coronary Artery with the Suspension of Nanoparticles. Springer Proceedings in Mathematics and Statistics, 2020, , 219-239.	0.1	1