Pooria Akbarzadeh

List of Publications by Year in descending order

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43 papers

402 citations

932766 10 h-index 17 g-index

47 all docs

47 docs citations

47 times ranked

282 citing authors

#	Article	IF	Citations
1	Aerodynamic performance enhancement of horizontal axis wind turbines by dimples on blades: Numerical investigation. Energy, 2020, 195, 117056.	4.5	49
2	Pulsatile magneto-hydrodynamic blood flows through porous blood vessels using a third grade non-Newtonian fluids model. Computer Methods and Programs in Biomedicine, 2016, 126, 3-19.	2.6	33
3	The Jameson's numerical method for solving the incompressible viscous and inviscid flows by means of artificial compressibility and preconditioning method. Applied Mathematics and Computation, 2008, 206, 651-661.	1.4	23
4	The onset of nanofluid natural convection inside a porous layer with rough boundaries. Journal of Molecular Liquids, 2018, 272, 344-352.	2.3	23
5	The onset of MHD nanofluid convection between a porous layer in the presence of purely internal heat source and chemical reaction. Journal of Thermal Analysis and Calorimetry, 2018, 131, 2657-2672.	2.0	21
6	An improved progressive preconditioning method for steady non avitating and sheet avitating flows. International Journal for Numerical Methods in Fluids, 2012, 68, 210-232.	0.9	19
7	Numerical Study of Thermohydrodynamic Characteristics of Oil Tilting-Pad Journal Bearings with a Self-Pumping Fluid Flow Circulation. Tribology Transactions, 2015, 58, 18-30.	1.1	19
8	The effect of floating balls density on evaporation suppression of water reservoirs in the presence of surface flows. Journal of Hydrology, 2020, 591, 125323.	2.3	13
9	Multiobjective optimization of thermohydrodynamic journal bearing using MOPSO algorithm. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 657-671.	1.0	12
10	Numerical investigation on a new local preconditioning method for solving the incompressible inviscid, non-cavitating and cavitating flows. Journal of the Franklin Institute, 2011, 348, 1208-1230.	1.9	11
11	Advances in numerical approaches for microfluidic cell analysis platforms. Journal of Science: Advanced Materials and Devices, 2020, 5, 295-307.	1.5	11
12	Cavitation reduction in the globe valve using oblique perforated cages: A numerical investigation. Flow Measurement and Instrumentation, 2022, 83, 102110.	1.0	11
13	Hydrodynamic characteristics of blowing and suction on sheet-cavitating flows around hydrofoils. Ocean Engineering, 2016, 114, 25-36.	1.9	10
14	Non-Newtonian fluid flow induced by pressure gradient and time-periodic electroosmosis in a microtube. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 5015-5025.	0.8	10
15	Hydrodynamic characteristics of heated/non-heated and grooved/un-grooved spheres during free-surface water entry. Journal of Fluids and Structures, 2020, 97, 103100.	1.5	10
16	Water entry of grooved spheres: Effect of the number of grooves and impact velocity. Journal of Fluids and Structures, 2021, 100, 103198.	1.5	10
17	Natural Convection Heat Transfer in 2D and 3D Trapezoidal Enclosures Filled with Nanofluid. Journal of Applied Mechanics and Technical Physics, 2018, 59, 292-302.	0.1	9
18	A new smoothing approach for accelerating the convergence of power-law preconditioning method in steady and unsteady flows simulation. International Journal of Mechanical Sciences, 2018, 141, 316-329.	3.6	8

#	Article	IF	Citations
19	Analysis of nonlinear viscoelastic lubrication using Giesekus constitutive equation. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2021, 235, 1124-1138.	1.0	8
20	A NEW APPROACH TO NUMERICAL INVESTIGATION OF GFX AND POWER-PIPE DRAIN WATER HEAT RECOVERY (DWHR) SYSTEMS IN BUILDINGS. Heat Transfer Research, 2018, 49, 1339-1352.	0.9	8
21	Experimental study on the entry of solid spheres into Newtonian and non-Newtonian fluids. Physics of Fluids, 2022, 34, .	1.6	8
22	Experimental investigation of water entry of dimpled spheres. Ocean Engineering, 2022, 250, 110992.	1.9	8
23	Local pressure preconditioning method for steady incompressible flows. International Journal of Computational Fluid Dynamics, 2010, 24, 169-186.	0.5	6
24	The analysis of MHD blood flows through porous arteries using a locally modified homogenous nanofluids model. Bio-Medical Materials and Engineering, 2016, 27, 15-28.	0.4	6
25	Analytical solution of the low Reynolds third-grade non-Newtonian fluids flow inside rough circular pipes. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 1018-1030.	1.5	6
26	Low Reynolds unsteady flow simulation around NACA0012 airfoil with active flow control. Meccanica, 2018, 53, 3457-3476.	1.2	5
27	Numerical study of the influence of geometric form of chimney on the performance of a solar updraft tower power plant. Energy and Environment, 2019, 30, 685-706.	2.7	5
28	A New Exact-Analytical Solution for Convective Heat Transfer of Nanofluids Flow in Isothermal Pipes. Journal of Mechanics, 2019, 35, 233-242.	0.7	5
29	Numerical investigation of unsteady pulsatile Newtonian/non-Newtonian blood flow through curved stenosed arteries. Bio-Medical Materials and Engineering, 2020, 30, 525-540.	0.4	4
30	A locally modified single-phase model for analyzing magnetohydrodynamic boundary layer flow and heat transfer of nanofluids over nonlinearly stretching sheet with chemical reaction. Journal of Theoretical and Applied Mechanics, 0, , 81.	0.2	4
31	Experimental analysis of water entry problem considering hollow cylinders: The impact of hole geometry. Ocean Engineering, 2022, 259, 111906.	1.9	4
32	Peristaltic biofluids flow through vertical porous human vessels using third-grade non-Newtonian fluids model. Biomechanics and Modeling in Mechanobiology, 2018, 17, 71-86.	1.4	3
33	A Cell-Elimination method for solving steady and unsteady Navier–Stokes equations. Communications in Nonlinear Science and Numerical Simulation, 2019, 69, 304-319.	1.7	3
34	Numerical study and parameter optimization of partial journal bearing using MOPSO algorithm. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 145-158.	1.0	3
35	Cavitating/non-cavitating flows simulation by third-order finite volume scheme and power-law preconditioning method. Applied Mathematics and Mechanics (English Edition), 2013, 34, 209-228.	1.9	2
36	Determining resistance coefficient for series 60 vessels using numerical and experimental modelling. Ships and Offshore Structures, 2016, 11, 874-879.	0.9	2

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37	Numerical simulation of unsteady flows with forced periodical oscillation around hydrofoils using locally power-law preconditioning method. European Journal of Mechanics, B/Fluids, 2019, 75, 153-164.	1.2	2
38	Parallel Thomas approach development for solving tridiagonal systems in GPU programming \hat{a} steady and unsteady flow simulation. Mechanics and Industry, 2020, 21, 303.	0.5	2
39	A new insight into a thermoplastic microfluidic device aimed at improvement of oxygenation process and avoidance of shear stress during cell culture. Biomedical Microdevices, 2022, 24, 15.	1.4	2
40	SADI approach programming on GPU: convective heat transfer of nanofluids flow inside a wavy channel. Journal of Thermal Analysis and Calorimetry, 2021, 146, 31-46.	2.0	1
41	Numerical study of the cavitation effect on plain bearings in constant and variable viscosity states. Meccanica, 2021, 56, 2507-2516.	1.2	1
42	An investigation on nonlinear viscoelastic lubrication using FENE-P constitutive equation. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	0.8	1
43	Accelerate the convergence of turbulent flows simulation: A novel progressive locally power-law preconditioning method. Computers and Fluids, 2022, 241, 105483.	1.3	1