Mohammad Hossein Doranehgard

List of Publications by Year
in descending order

48 papers	1,935 citations	236612 25 h-index	253896 43 g-index
48 all docs	48 docs citations	48 times ranked	1438 citing authors

#	Article	IF	Citations
1	Electroâ€magnetoâ€hydrodynamic Eyringâ€Powell fluid flow through microâ€parallel plates with heat transfer and nonâ€Darcian effects. Mathematical Methods in the Applied Sciences, 2023, 46, 11642-11656.	1.2	4
2	Predicting the effects of environmental parameters on the spatio-temporal distribution of the droplets carrying coronavirus in public transport â€“ A machine learning approach. Chemical Engineering Journal, 2022, 430, 132761.	6.6	40
3	Machine-Learning Enhanced Analysis of Mixed Biothermal Convection of Single Particle and Hybrid Nanofluids within a Complex Configuration. Industrial & Engineering Chemistry Research, 2022, 61, 8478-8494.	1.8	12
4	CFD simulation of thermal performance of hybrid oil-Cu-Al2O3 nanofluid flowing through the porous receiver tube inside a finned parabolic trough solar collector. Sustainable Energy Technologies and Assessments, 2022, 50, 101888.	1.7	14
5	Enhancement of heat transfer in solar collectors by vortex generation. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 1731-1750.	1.2	4
6	Numerical study on the hybrid nanofluid (Co3O4-Go/H2O) flow over a circular elastic surface with non-Darcy medium: Application in solar energy. Journal of Molecular Liquids, 2022, 361, 119655.	2.3	68
7	Analysis of unsteady mixed convection of Cuâ€“water nanofluid in an oscillatory, lid-driven enclosure using lattice Boltzmann method. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2045-2061.	2.0	55
8	Abilities of porous materials for energy saving in advanced thermal systems. Journal of Thermal Analysis and Calorimetry, 2021, 143, 2437-2452.	2.0	25
9	Numerical simulations of ultra-low-Re flow around two tandem airfoils in ground effect: isothermal and heated conditions. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2063-2079.	2.0	1
10	Unsteady ultra-lean combustion of methane and biogas in a porous burner â€“ An experimental study. Applied Thermal Engineering, 2021, 182, 116099.	3.0	32
11	A Machine Learning Approach to Predicting the Heat Convection and Thermodynamics of an External Flow of Hybrid Nanofluid. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	1.4	61
12	Energy and environmental enhancement of power generation units by means of <scp>zeroâ€flow</scp> coolant strategy. International Journal of Energy Research, 2021, 45, 10064-10085.	2.2	5
13	Experimental study of a hemispherical three-dimensional solar collector operating with silver-water nanofluid. Sustainable Energy Technologies and Assessments, 2021, 44, 101043.	1.7	21
14	On the Response of Ultralean Combustion of CH₄/H₂ Blends in a Porous Burner to Fluctuations in Fuel Flowâ€”an Experimental Investigation. Energy & Fuels, 2021, 35, 8909-8921.	2.5	13
15	A dynamic multi-objective optimization procedure for water cooling of a photovoltaic module. Sustainable Energy Technologies and Assessments, 2021, 45, 101111.	1.7	20
16	Selecting the best nanofluid type for A photovoltaic thermal (PV/T) system based on reliability, efficiency, energy, economic, and environmental criteria. Journal of the Taiwan Institute of Chemical Engineers, 2021, 124, 351-358.	2.7	78
17	Prediction of the spread of Corona-virus carrying droplets in a bus - A computational based artificial intelligence approach. Journal of Hazardous Materials, 2021, 413, 125358.	6.5	57
18	Special topic on turbulent and multiphase flows. Physics of Fluids, 2021, 33, 090401.	1.6	1

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19	Modeling of natural-gas diffusion in oil-saturated tight porous media. Fuel, 2021, 300, 120999.	3.4	22
20	A method for improving the accuracy of numerical simulations of a photovoltaic panel. Sustainable Energy Technologies and Assessments, 2021, 47, 101433.	1.7	8
21	Darcyâ€“Brinkmanâ€“Forchheimer Model for Nano-Bioconvection Stratified MHD Flow through an Elastic Surface: A Successive Relaxation Approach. Mathematics, 2021, 9, 2514.	1.1	5
22	Measuring diffusion coefficients of gaseous propane in heavy oil at elevated temperatures. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2633-2645.	2.0	20
23	Heat transfer enhancement in a flat plate solar collector with different flow path shapes using nanofluid. Renewable Energy, 2020, 146, 2316-2329.	4.3	224
24	CFD study of heat transfer and fluid flow in a parabolic trough solar receiver with internal annular porous structure and synthetic oilâ€“Al2O3 nanofluid. Renewable Energy, 2020, 145, 2598-2614.	4.3	151
25	A CFD investigation of the effect of non-Newtonian behavior of Cuâ€“water nanofluids on their heat transfer and flow friction characteristics. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2601-2621.	2.0	35
26	A numerical study on discrete combustion of polydisperse magnesium aero-suspensions. Energy, 2020, 194, 116872.	4.5	17
27	Modeling of cetane number of biodiesel from fatty acid methyl ester (FAME) information using GA-, PSO-, and HGAPSO- LSSVM models. Renewable Energy, 2020, 150, 924-934.	4.3	94
28	Numerical study on the application of biodiesel and bioethanol in a multiple injection diesel engine. Renewable Energy, 2020, 150, 1019-1029.	4.3	57
29	Enhancing the efficiency of a symmetric flat-plate solar collector via the use of rutile TiO2-water nanofluids. Sustainable Energy Technologies and Assessments, 2020, 40, 100783.	1.7	43
30	Quantifying Oil-Recovery Mechanisms During Natural-Gas Huff n Puff Experiments on Ultratight Core Plugs. , 2020, , .		1
31	Recent developments of advanced numerical heat transfer in porous media. Journal of Thermal Analysis and Calorimetry, 2020, 141, 1489-1491.	2.0	6
32	Numerical simulation of the heterogeneous combustion of dust clouds containing polydisperse porous iron particles. Energy, 2020, 212, 118759.	4.5	3
33	Quantification of convective and diffusive transport during CO2 dissolution in oil: A numerical and analytical study. Physics of Fluids, 2020, 32, 085110.	1.6	32
34	Analysis of transport processes in a reacting flow of hybrid nanofluid around a bluff-body embedded in porous media using artificial neural network and particle swarm optimization. Journal of Molecular Liquids, 2020, 313, 113492.	2.3	67
35	Eccentricity effects of heat source inside a porous annulus on the natural convection heat transfer and entropy generation of Cu-water nanofluid. International Communications in Heat and Mass Transfer, 2019, 109, 104367.	2.9	73
36	Entropy generation in the intake pipe of an internal combustion engine. European Physical Journal Plus, 2019, 134, 1.	1.2	9

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37	Combustion and emission characteristics of biomass derived biofuel, premixed in a diesel engine: A CFD study. Renewable Energy, 2019, 138, 79-89.	4.3	36
38	Numerical analysis of mixed convection of two-phase non-Newtonian nanofluid flow inside a partially porous square enclosure with a rotating cylinder. Journal of Thermal Analysis and Calorimetry, 2019, 137, 267-287.	2.0	124
39	Parallel processing of numerical simulation of two-phase flow in fractured reservoirs considering the effect of natural flow barriers using the streamline simulation method. International Journal of Heat and Mass Transfer, 2019, 131, 574-583.	2.5	23
40	The effect of different operational parameters on hydrogen rich syngas production from biomass gasification in a dual fluidized bed gasifier. Chemical Engineering and Processing: Process Intensification, 2018, 126, 210-221.	1.8	45
41	Parametric investigation on biomass gasification in a fluidized bed gasifier and conceptual design of gasifier. Chemical Engineering and Processing: Process Intensification, 2018, 127, 271-291.	1.8	45
42	Lattice Boltzmann method based on Dual-MRT model for three-dimensional natural convection and entropy generation in CuOâ€“water nanofluid filled cuboid enclosure included with discrete active walls. Computers and Mathematics With Applications, 2018, 75, 1795-1813.	1.4	50
43	Volatization & combustion of biomass particles in random media: Mathematical modeling and analyze the effect of Lewis number. Chemical Engineering and Processing: Process Intensification, 2018, 126, 232-238.	1.8	18
44	The effect of temperature dependent relative permeability on heavy oil recovery during hot water injection process using streamline-based simulation. Applied Thermal Engineering, 2018, 129, 106-116.	3.0	55
45	High-purity hydrogen production with in situ CO 2 capture based on biomass gasification. Fuel, 2017, 202, 29-35.	3.4	72
46	Particle swarm optimization of thermal enhanced oil recovery from oilfields with temperature control. Applied Thermal Engineering, 2017, 123, 658-669.	3.0	52
47	Numerical simulation of two-phase flow in fractured porous media using streamline simulation and IMPES methods and comparing results with a commercial software. Journal of Central South University, 2016, 23, 2630-2637.	1.2	30
48	The role of radiation and bioconvection as an external agent to control the temperature and motion of fluid over the radially spinning circular surface: A theoretical analysis via Chebyshev spectral approach. Mathematical Methods in the Applied Sciences, 0, , .	1.2	7