## **Babak Mehmandoust**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9433628/publications.pdf

Version: 2024-02-01

21 papers

624 citations

15 h-index 713013 21 g-index

21 all docs

21 docs citations

times ranked

21

563 citing authors

#	Article	IF	CITATIONS
1	Entropy generation analysis of different nanofluid flows in the space between two concentric horizontal pipes in the presence of magnetic field: Single-phase and two-phase approaches. Computers and Mathematics With Applications, 2019, 77, 662-692.	1.4	117
2	Numerical simulation of laminar forced convection of water-CuO nanofluid inside a triangular duct. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 85, 103-108.	1.3	100
3	Natural convection of Al2O3–water nanofluid in an inclined enclosure with the effects of slip velocity mechanisms: Brownian motion and thermophoresis phenomenon. International Journal of Thermal Sciences, 2016, 105, 137-158.	2.6	99
4	Comprehensive study on hydrogen production via propane steam reforming inside a reactor. Energy Reports, 2021, 7, 929-941.	2.5	33
5	Molecular dynamics simulation of the phase transition process in the atomic scale for $Ar/Cu$ nanofluid on the platinum plates. International Communications in Heat and Mass Transfer, 2020, 117, 104798.	2.9	30
6	Numerical simulation of turbulent nanofluid flow in the narrow channel with a heated wall and a spherical dimple placed on it by using of single-phase and mixture-phase models. International Communications in Heat and Mass Transfer, 2019, 108, 104316.	2.9	26
7	Proposing a new experimental correlation for thermal conductivity of nanofluids containing of functionalized multiwalled carbon nanotubes suspended in a binary base fluid. International Communications in Heat and Mass Transfer, 2018, 98, 216-222.	2.9	24
8	Natural-forced cooling and Monte-Carlo multi-objective optimization of mechanical and thermal characteristics of a bipolar plate for use in a proton exchange membrane fuel cell. Energy Reports, 2022, 8, 2747-2761.	2.5	24
9	Curve fitting on experimental data of a new hybrid nano-antifreeze viscosity: Presenting new correlations for non-Newtonian nanofluid. Physica A: Statistical Mechanics and Its Applications, 2019, 531, 120837.	1.2	22
10	The study of atomic porosity effect on water/Fe nanofluid flow in a microchannel with a molecular dynamics method. Journal of Molecular Liquids, 2020, 317, 114291.	2.3	22
11	Molecular dynamics simulation of ferronanofluid behavior in a nanochannel in the presence of constant and time-dependent magnetic fields. Journal of Thermal Analysis and Calorimetry, 2020, 141, 2625-2633.	2.0	22
12	Molecular dynamics simulation of condensation phenomenon of nanofluid on different roughness surfaces in the presence of hydrophilic and hydrophobic structures. Journal of Molecular Liquids, 2021, 334, 116036.	2.3	18
13	Effect of MHD on the flow and heat transfer characteristics of nanofluid in a grooved channel with internal heat generation. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 1403-1431.	1.6	17
14	Molecular dynamics study of barrier effects on Ferro- nanofluid flow in the presence of constant and time-dependent external magnetic fields. Journal of Molecular Liquids, 2020, 308, 113152.	2.3	16
15	Study the time evolution of nanofluid flow in a microchannel with various sizes of Fe nanoparticle using molecular dynamics simulation. International Communications in Heat and Mass Transfer, 2020, 118, 104874.	2.9	15
16	Numerical study of natural convection of nanofluid in a semi-circular cavity with lattice Boltzmann method. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 2625-2637.	1.6	11
17	An Eulerian particle level set method for compressible deforming solids with arbitrary EOS. International Journal for Numerical Methods in Engineering, 2009, 79, 1175-1202.	1.5	10
18	An efficient reliable method to estimate the vaporization enthalpy of pure substances according to the normal boiling temperature and critical properties. Journal of Advanced Research, 2014, 5, 261-269.	4.4	9

#	Article	IF	CITATIONS
19	New water-based fluorescent nanofluid containing 2D titanium carbide MXene sheets: a comparative study of its thermophysical, electrical and optical properties with amine and carboxyl covalently functionalized graphene nanoplatelets. Journal of Thermal Analysis and Calorimetry, 2020, , 1.	2.0	7
20	MIXED-CONVECTION NANOFLUID FLOW THROUGH A GROOVED CHANNEL WITH INTERNAL HEAT GENERATING SOLID CYLINDERS IN THE PRESENCE OF AN APPLIED MAGNETIC FIELD. Heat Transfer Research, 2019, 50, 287-309.	0.9	1
21	Molecular dynamics study of the thermal behavior of ammonia refrigerant in the presence of copper nanoparticles at different volume ratios and initial temperatures. Journal of Molecular Modeling, 2022, 28, 157.	0.8	1