Davood Toghraie

List of Publications by Citations

439 papers	14,450 citations	78 h-index	103 g-index
457 ext. papers	17,880 ext. citations	4.5 avg, IF	7.93 L-index

#	Paper	IF	Citations
439	Effects of temperature and nanoparticles concentration on rheological behavior of Fe3O4-Ag/EG hybrid nanofluid: An experimental study. *Experimental Thermal and Fluid Science*, **2016**, 77, 38-44	3	248
438	Measurement of thermal conductivity of ZnO-TiO2/EG hybrid nanofluid. *Journal of Thermal Analysis and Calorimetry*, **2016**, 125, 527-535	4.1	244
437	Mixed convection of copper-water nanofluid in a shallow inclined lid driven cavity using the lattice Boltzmann method. *Physica A: Statistical Mechanics and Its Applications*, **2014**, 402, 150-168	3.3	235
436	An experimental study on the effect of diameter on thermal conductivity and dynamic viscosity of Fe/water nanofluids. *Journal of Thermal Analysis and Calorimetry*, **2015**, 119, 1817-1824	4.1	225
435	Experimental study on thermal conductivity of water-based Fe3O4 nanofluid: Development of a new correlation and modeled by artificial neural network. *International Communications in Heat and Mass Transfer*, **2016**, 75, 262-269	5.8	203
434	Investigation of rib's height effect on heat transfer and flow parameters of laminar water-Al 2 O 3 nanofluid in a rib-microchannel. *Applied Mathematics and Computation*, **2016**, 290, 135-153	2.7	195
433	Thermal conductivity modeling of MgO/EG nanofluids using experimental data and artificial neural network. *Journal of Thermal Analysis and Calorimetry*, **2014**, 118, 287-294	4.1	190
432	Effects of temperature and concentration on rheological behavior of MWCNTs/SiO2(20-80)-SAE40 hybrid nano-lubricant. *International Communications in Heat and Mass Transfer*, **2016**, 76, 133-138	5.8	177
431	Designing an artificial neural network to predict dynamic viscosity of aqueous nanofluid of TiO2 using experimental data. *International Communications in Heat and Mass Transfer*, **2016**, 75, 192-196	5.8	173
430	A new correlation for predicting the thermal conductivity of ZnO-Ag (50%-50%)/water hybrid nanofluid: An experimental study. *Powder Technology*, **2018**, 323, 367-373	5.2	170
429	Developing a new correlation to estimate the thermal conductivity of MWCNT-CuO/water hybrid nanofluid via an experimental investigation. *Journal of Thermal Analysis and Calorimetry*, **2017**, 129, 859-867	4.1	168
428	Examination of rheological behavior of MWCNTs/ZnO-SAE40 hybrid nano-lubricants under various temperatures and solid volume fractions. *Experimental Thermal and Fluid Science*, **2017**, 80, 384-390	3	154
427	Influence of T-semi attached rib on turbulent flow and heat transfer parameters of a silver-water nanofluid with different volume fractions in a three-dimensional trapezoidal microchannel. *Physica E: Low-Dimensional Systems and Nanostructures*, **2017**, 88, 60-76	3	154
426	Experimental determination of viscosity of water based magnetite nanofluid for application in heating and cooling systems. *Journal of Magnetism and Magnetic Materials*, **2016**, 417, 243-248	2.8	154
425	Energy and exergy analysis of Montazeri Steam Power Plant in Iran. *Renewable and Sustainable Energy Reviews*, **2016**, 56, 454-463	16.2	145
424	The numerical modeling of water/FMWCNT nanofluid flow and heat transfer in a backward-facing contracting channel. *Physica B: Condensed Matter*, **2018**, 537, 176-183	2.8	142
423	The effect of aspect ratios of rib on the heat transfer and laminar water/TiO2 nanofluid flow in a two-dimensional rectangular microchannel. *Journal of Molecular Liquids*, **2017**, 236, 254-265	6	138

422	The effect of velocity and dimension of solid nanoparticles on heat transfer in non-Newtonian nanofluid. *Physica E: Low-Dimensional Systems and Nanostructures*, **2017**, 86, 68-75	3	138
421	Experimental investigation of rheological behavior of the hybrid nanofluid of MWCNT-alumina/water (80%)-ethylene-glycol (20%). *Journal of Thermal Analysis and Calorimetry*, **2018**, 132, 1001-1015	4.1	136
420	Experimental study of the effect of solid volume fraction and Reynolds number on heat transfer coefficient and pressure drop of CuO-Water nanofluid. *Experimental Thermal and Fluid Science*, **2016**, 76, 342-351	3	135
419	An experimental study on the stability and thermal conductivity of water-ethylene glycol/TiO2-MWCNTs hybrid nanofluid: Developing a new correlation. *Powder Technology*, **2018**, 338, 806-818	5.2	134
418	Estimation of thermal conductivity of Al2O3/water (40%)-ethylene glycol (60%) by artificial neural network and correlation using experimental data. *International Communications in Heat and Mass Transfer*, **2016**, 74, 125-128	5.8	132
417	An experimental study on viscosity of alumina-engine oil: Effects of temperature and nanoparticles concentration. *International Communications in Heat and Mass Transfer*, **2016**, 76, 202-208	5.8	127
416	Fluid flow and heat transfer of non-Newtonian nanofluid in a microtube considering slip velocity and temperature jump boundary conditions. *European Journal of Mechanics, B/Fluids*, **2017**, 61, 25-32	2.4	118
415	Increasing heat transfer of non-Newtonian nanofluid in rectangular microchannel with triangular ribs. *Physica E: Low-Dimensional Systems and Nanostructures*, **2017**, 93, 167-178	3	116
414	Experimental investigation for developing a new model for the thermal conductivity of Silica/Water-Ethylene glycol (40%-60%) nanofluid at different temperatures and solid volume fractions. *Journal of Molecular Liquids*, **2017**, 232, 105-112	6	114
413	The numerical investigation of heat transfer and pressure drop of turbulent flow in a triangular microchannel. *Physica E: Low-Dimensional Systems and Nanostructures*, **2017**, 93, 179-189	3	112
412	A numerical study of natural convection in a vertical annulus filled with gallium in the presence of magnetic field. *Journal of Magnetism and Magnetic Materials*, **2017**, 430, 22-28	2.8	110
411	Investigation of volume fraction of nanoparticles effect and aspect ratio of the twisted tape in the tube. *Journal of Thermal Analysis and Calorimetry*, **2017**, 129, 1911-1922	4.1	109
410	Numerical simulation of heat transfer and fluid flow of Water-CuO Nanofluid in a sinusoidal channel with a porous medium. *Physica E: Low-Dimensional Systems and Nanostructures*, **2017**, 87, 134-140	3	109
409	Numerical investigation of flow and heat transfer characteristics in smooth, sinusoidal and zigzag-shaped microchannel with and without nanofluid. *Journal of Thermal Analysis and Calorimetry*, **2018**, 131, 1757-1766	4.1	108
408	Application of a novel conical strip insert to improve the efficacy of water-Ag nanofluid for utilization in thermal systems: A two-phase simulation. *Energy Conversion and Management*, **2017**, 151, 573-586	10.6	108
407	Multi-objective optimization of nanofluid flow in double tube heat exchangers for applications in energy systems. *Energy*, **2017**, 137, 160-171	7.9	107
406	Numerical simulation of heat transfer and turbulent flow of water nanofluids copper oxide in rectangular microchannel with semi-attached rib. *Advances in Mechanical Engineering*, **2016**, 8, 1687814016641017	1.2	107
405	Experimental evaluation of dynamic viscosity of ZnO-MWCNTs/engine oil hybrid nanolubricant based on changes in temperature and concentration. *Journal of Thermal Analysis and Calorimetry*, **2019**, 136, 513-525	4.1	106

404	Developing dissimilar artificial neural networks (ANNs) to prediction the thermal conductivity of MWCNT-TiO2/Water-ethylene glycol hybrid nanofluid. *Powder Technology*, **2019**, 355, 602-610	5.2	106
403	Molecular dynamic simulation of Copper and Platinum nanoparticles Poiseuille flow in a nanochannels. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 84, 152-161	3	105
402	MHD mixed convection and entropy generation in a lid-driven cavity with rotating cylinders filled by a nanofluid using two phase mixture model. *Journal of Magnetism and Magnetic Materials*, **2019**, 483, 224-248	2.8	104
401	Numerical investigation of laminar flow and heat transfer of non-Newtonian nanofluid within a porous medium. *Powder Technology*, **2018**, 325, 78-91	5.2	104
400	The study of heat transfer and laminar flow of kerosene/multi-walled carbon nanotubes (MWCNTs) nanofluid in the microchannel heat sink with slip boundary condition. *Journal of Thermal Analysis and Calorimetry*, **2018**, 131, 1553-1566	4.1	103
399	An experimental study on the thermal conductivity of cerium oxide/ethylene glycol nanofluid: developing a new correlation. *Journal of Molecular Liquids*, **2018**, 266, 211-217	6	100
398	Turbulent flow and heat transfer of Water/Al 2 O 3 nanofluid inside a rectangular ribbed channel. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 96, 73-84	3	99
397	Effects of nanoparticles to present a statistical model for the viscosity of MgO-Water nanofluid. *Powder Technology*, **2019**, 342, 166-180	5.2	99
396	Investigation into the effects of slip boundary condition on nanofluid flow in a double-layer microchannel. *Journal of Thermal Analysis and Calorimetry*, **2018**, 131, 2975-2991	4.1	97
395	Mixed convection of Water-Aluminum oxide nanofluid in an inclined lid-driven cavity containing a hot elliptical centric cylinder. *International Journal of Heat and Mass Transfer*, **2018**, 116, 1237-1249	4.9	96
394	Designing an Artificial Neural Network (ANN) to predict the viscosity of Silver/Ethylene glycol nanofluid at different temperatures and volume fraction of nanoparticles. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 534, 122142	3.3	95
393	Solar parallel feed water heating repowering of a steam power plant: A case study in Iran. *Renewable and Sustainable Energy Reviews*, **2017**, 77, 474-485	16.2	94
392	The numerical investigation of angle of attack of inclined rectangular rib on the turbulent heat transfer of Water-Al2O3 nanofluid in a tube. *International Journal of Mechanical Sciences*, **2017**, 131-132, 1106-1116	5.5	94
391	An experimental study on rheological behavior of a nanofluid containing oxide nanoparticle and proposing a new correlation. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 99, 285-293	3	93
390	Experimental and numerical investigation of temperature distribution and melt pool geometry during pulsed laser welding of Ti6Al4V alloy. *Optics and Laser Technology*, **2014**, 59, 52-59	4.2	93
389	Designing artificial neural network on thermal conductivity of Al2O3–water–EG (60–40 %) nanofluid using experimental data. *Journal of Thermal Analysis and Calorimetry*, **2016**, 126, 837-843	4.1	92
388	Free convection heat transfer and entropy generation analysis of water-Fe3O4/CNT hybrid nanofluid in a concentric annulus. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2019**, 29, 915-934	4.5	92
387	Statistical investigation for developing a new model for rheological behavior of ZnO–Ag (50%–50%)/Water hybrid Newtonian nanofluid using experimental data. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 525, 741-751	3.3	91

386	An experimental study on the rheological behavior of hybrid Tungsten oxide (WO3)-MWCNTs/engine oil Newtonian nanofluids. *Journal of Molecular Structure*, **2019**, 1197, 497-507	3.4	91
385	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	3	91
384	Using artificial neural network to predict thermal conductivity of ethylene glycol with alumina nanoparticle. *Journal of Thermal Analysis and Calorimetry*, **2016**, 126, 643-648	4.1	91
383	Impact of variable fluid properties on forced convection of Fe3O4/CNT/water hybrid nanofluid in a double-pipe mini-channel heat exchanger. *Journal of Thermal Analysis and Calorimetry*, **2019**, 137, 1031-1043	4.1	90
382	Numerical study of turbulent nanofluid heat transfer in a tubular heat exchanger with twin twisted-tape inserts. *Journal of Thermal Analysis and Calorimetry*, **2018**, 132, 741-759	4.1	89
381	Experimental investigation for developing a new model for the dynamic viscosity of silver/ethylene glycol nanofluid at different temperatures and solid volume fractions. *Journal of Thermal Analysis and Calorimetry*, **2018**, 131, 1449-1461	4.1	89
380	Experimental investigation and develop ANNs by introducing the suitable architectures and training algorithms supported by sensitivity analysis: Measure thermal conductivity and viscosity for liquid paraffin based nanofluid containing Al2O3 nanoparticles. *Journal of Molecular Liquids*, **2019**, 276, 850-860	6	89
379	Experimental measurements of thermal conductivity of engine oil-based hybrid and mono nanofluids with tungsten oxide (WO3) and MWCNTs inclusions. *Powder Technology*, **2020**, 371, 37-44	5.2	88
378	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	2.7	88
377	The effect of semi-attached and offset mid-truncated ribs and Water/TiO2 nanofluid on flow and heat transfer properties in a triangular microchannel. *Thermal Science and Engineering Progress*, **2017**, 2, 140-150	3.6	86
376	The investigation of simultaneous heat transfer of water/Al2O3 nanofluid in a close enclosure by applying homogeneous magnetic field. *International Journal of Mechanical Sciences*, **2017**, 133, 674-688	5.5	86
375	An experimental study on MWCNT/water nanofluids flow and heat transfer in double-pipe heat exchanger using porous media. *Journal of Thermal Analysis and Calorimetry*, **2019**, 137, 1797-1807	4.1	86
374	The effect of using water/CuO nanofluid and L-shaped porous ribs on the performance evaluation criterion of microchannels. *Journal of Thermal Analysis and Calorimetry*, **2019**, 135, 145-159	4.1	85
373	The surface charge density effect on the electro-osmotic flow in a nanochannel: a molecular dynamics study. *Heat and Mass Transfer*, **2015**, 51, 661-670	2.2	82
372	Numerical thermal analysis of water's boiling heat transfer based on a turbulent jet impingement on heated surface. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 84, 454-465	3	82
371	Effect of twisted-tape inserts and nanofluid on flow field and heat transfer characteristics in a tube. *International Communications in Heat and Mass Transfer*, **2020**, 110, 104440	5.8	82
370	Effect of Magnetic Field on Free Convection in Inclined Cylindrical Annulus Containing Molten Potassium. *International Journal of Applied Mechanics*, **2015**, 07, 1550052	2.4	81
369	Evaluation of synchronous execution of full repowering and solar assisting in a 200 MW steam power plant, a case study. *Applied Thermal Engineering*, **2017**, 112, 111-123	5.8	81

368	Molecular dynamics simulation of Poiseuille flow in a rough nano channel with checker surface roughnesses geometry. *Heat and Mass Transfer*, **2014**, 50, 105-113	2.2	81
367	The effect of rib shape on the behavior of laminar flow of oil/MWCNT nanofluid in a rectangular microchannel. *Journal of Thermal Analysis and Calorimetry*, **2018**, 134, 1611-1628	4.1	81
366	Mixed convection of non-Newtonian nanofluid in an H-shaped cavity with cooler and heater cylinders filled by a porous material: Two phase approach. *Advanced Powder Technology*, **2019**, 30, 2666-2685	4.6	78
365	Effects of geometric parameters on the performance of solar chimney power plants. *Energy*, **2018**, 162, 1052-1061	7.9	78
364	Molecular dynamics simulation of annular flow boiling with the modified Lennard-Jones potential function. *Heat and Mass Transfer*, **2012**, 48, 141-152	2.2	78
363	Molecular dynamics study of an electro-kinetic fluid transport in a charged nanochannel based on the role of the stern layer. *Physica A: Statistical Mechanics and Its Applications*, **2015**, 426, 25-34	3.3	78
362	Molecular dynamics simulation of liquid□apor phase equilibrium by using the modified Lennard-Jones potential function. *Heat and Mass Transfer*, **2010**, 46, 287-294	2.2	78
361	Optimal arrangements of a heat sink partially filled with multilayered porous media employing hybrid nanofluid. *Journal of Thermal Analysis and Calorimetry*, **2019**, 137, 1045-1058	4.1	78
360	Impact of ribs on flow parameters and laminar heat transfer of water□luminum oxide nanofluid with different nanoparticle volume fractions in a three-dimensional rectangular microchannel. *Advances in Mechanical Engineering*, **2015**, 7, 168781401561815	1.2	77
359	The effects of surface roughness geometry of flow undergoing Poiseuille flow by molecular dynamics simulation. *Heat and Mass Transfer*, **2014**, 50, 95-104	2.2	77
358	Melting process in porous media around two hot cylinders: Numerical study using the lattice Boltzmann method. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 509, 316-335	3.3	74
357	Molecular dynamics simulation of nonodroplets with the modified Lennard-Jones potential function. *Heat and Mass Transfer*, **2011**, 47, 579-588	2.2	74
356	Simultaneous investigations the effects of non-Newtonian nanofluid flow in different volume fractions of solid nanoparticles with slip and no-slip boundary conditions. *Thermal Science and Engineering Progress*, **2018**, 5, 263-277	3.6	73
355	Nanoscale Poiseuille flow and effects of modified Lennard□ones potential function. *Heat and Mass Transfer*, **2010**, 46, 791-801	2.2	73
354	ANALYSIS OF LAMINAR MIXED CONVECTION IN AN INCLINED SQUARE LID-DRIVEN CAVITY WITH A NANOFLUID BY USING AN ARTIFICIAL NEURAL NETWORK. *Heat Transfer Research*, **2014**, 45, 361-390	3.9	73
353	Numerical simulation of heat transfer enhancement in a plate-fin heat exchanger using a new type of vortex generators. *Applied Thermal Engineering*, **2018**, 133, 671-681	5.8	72
352	The effect of geometrical parameters, roughness and the number of nanoparticles on the self-diffusion coefficient in Couette flow in a nanochannel by using of molecular dynamics simulation. *Physica B: Condensed Matter*, **2017**, 518, 20-32	2.8	71
351	A comprehensive study of the performance of a heat pipe by using of various nanofluids. *Advanced Powder Technology*, **2017**, 28, 3074-3084	4.6	68

350	Longitudinal vibration and instabilities of carbon nanotubes conveying fluid considering size effects of nanoflow and nanostructure. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 83, 164-173	3	68
349	EFFECT OF NANOFLUID VARIABLE PROPERTIES ON MIXED CONVECTION FLOW AND HEAT TRANSFER IN AN INCLINED TWO-SIDED LID-DRIVEN CAVITY WITH SINUSOIDAL HEATING ON SIDEWALLS. *Heat Transfer Research*, **2014**, 45, 409-432	3.9	67
348	Longitudinal vibration and stability analysis of carbon nanotubes conveying viscous fluid. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 83, 275-283	3	63
347	Computational fluid dynamics simulation of heat transfer and fluid flow characteristics in a vortex tube by considering the various parameters. *International Journal of Heat and Mass Transfer*, **2017**, 113, 432-443	4.9	61
346	Statistical investigation for developing a new model for rheological behavior of Silica–ethylene glycol/Water hybrid Newtonian nanofluid using experimental data. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 525, 616-627	3.3	60
345	Parametric investigation of thermal characteristic in trapezoidal cavity receiver for a linear Fresnel solar collector concentrator. *Energy*, **2018**, 153, 17-26	7.9	59
344	Modeling different structures in perturbed Poiseuille flow in a nanochannel by using of molecular dynamics simulation: Study the equilibrium. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 515, 13-30	3.3	58
343	CFD analysis of thermal and hydrodynamic characteristics of hybrid nanofluid in a new designed sinusoidal double-layered microchannel heat sink. *Journal of Thermal Analysis and Calorimetry*, **2018**, 134, 2305-2315	4.1	57
342	Measurement of the thermal conductivity of MWCNT-CuO/water hybrid nanofluid using artificial neural networks (ANNs). *Journal of Thermal Analysis and Calorimetry*, **2021**, 143, 1097-1105	4.1	57
341	Numerical investigation of the pseudopotential lattice Boltzmann modeling of liquid–vapor for multi-phase flows. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 489, 65-77	3.3	57
340	Efficiency improvement of a steam power plant through solar repowering. *International Journal of Exergy*, **2017**, 22, 158	1.2	56
339	Investigating the effect of nanoparticles diameter on turbulent flow and heat transfer properties of non-Newtonian carboxymethyl cellulose/CuO fluid in a microtube. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2019**, 29, 1699-1723	4.5	56
338	Molecular dynamics simulation of fluid flow passing through a nanochannel: Effects of geometric shape of roughnesses. *Journal of Molecular Liquids*, **2019**, 275, 192-203	6	56
337	Numerical investigation of turbulent flow and heat transfer of nanofluid inside a wavy microchannel with different wavelengths. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 2365-2380	4.1	53
336	Heat and fluid flow analysis of metal foam embedded in a double-layered sinusoidal heat sink under local thermal non-equilibrium condition using nanofluid. *Journal of Thermal Analysis and Calorimetry*, **2019**, 138, 1461-1476	4.1	52
335	Effect of radiation on laminar natural convection of nanofluid in a vertical channel with single- and two-phase approaches. *Journal of Thermal Analysis and Calorimetry*, **2019**, 138, 779-794	4.1	51
334	Energy efficiency optimization of the waste heat recovery system with embedded phase change materials in greenhouses: A thermo-economic-environmental study. *Journal of Energy Storage*, **2020**, 30, 101445	7.8	50
333	Molecular dynamic simulation to study the effects of roughness elements with cone geometry on the boiling flow inside a microchannel. *International Journal of Heat and Mass Transfer*, **2019**, 141, 1-8	4.9	49

332	Nano scale lattice Boltzmann method to simulate the mixed convection heat transfer of air in a lid-driven cavity with an endothermic obstacle inside. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 508, 681-701	3.3	48
331	Investigation of finned heat sink performance with nano enhanced phase change material (NePCM). *Thermal Science and Engineering Progress*, **2018**, 5, 50-59	3.6	45
330	The rheological behavior of MWCNTs-ZnO/Water-Ethylene glycol hybrid non-Newtonian nanofluid by using of an experimental investigation. *Journal of Materials Research and Technology*, **2020**, 9, 8401-8406	5.5	43
329	Energy, exergy and environmental (3E) analysis of the existing CHP system in a petrochemical plant. *Renewable and Sustainable Energy Reviews*, **2019**, 99, 234-242	16.2	43
328	An experimental investigation for study the rheological behavior of water-carbon nanotube/magnetite nanofluid subjected to a magnetic field. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 534, 122129	3.3	42
327	Studying the Effect of Indentation on Flow Parameters and Slow Heat Transfer of Water-Silver Nano-Fluid with Varying Volume Fraction in a Rectangular Two-Dimensional Micro Channel. *Indian Journal of Science and Technology*, **2015**, 8,	1	42
326	A comprehensive experimental investigation of thermal conductivity of a ternary hybrid nanofluid containing MWCNTs- titania-zinc oxide/water-ethylene glycol (80:20) as well as binary and mono nanofluids. *Synthetic Metals*, **2020**, 268, 116501	3.6	42
325	Two-phase investigation of water-Al2O3 nanofluid in a micro concentric annulus under non-uniform heat flux boundary conditions. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2019**, 30, 1795-1814	4.5	41
324	Dynamic stability of functionally graded nanobeam based on nonlocal Timoshenko theory considering surface effects. *Physica B: Condensed Matter*, **2017**, 520, 97-105	2.8	40
323	Molecular dynamics simulation of Couette and Poiseuille Water-Copper nanofluid flows in rough and smooth nanochannels with different roughness configurations. *Chemical Physics*, **2019**, 527, 110505	2.3	40
322	Using of Artificial Neural Networks (ANNs) to predict the thermal conductivity of Zinc Oxide-Silver (50%-50%)/Water hybrid Newtonian nanofluid. *International Communications in Heat and Mass Transfer*, **2020**, 116, 104645	5.8	40
321	Application of lattice Boltzmann method and spinodal decomposition phenomenon for simulating two-phase thermal flows. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 509, 673-689	3.3	40
320	Thermal performance improvement in water nanofluid/GNPs-SDBS in novel design of double-layer microchannel heat sink with sinusoidal cavities and rectangular ribs. *Journal of Thermal Analysis and Calorimetry*, **2019**, 136, 1333-1345	4.1	39
319	Comprehensive beam models for buckling and bending behavior of simple nanobeam based on nonlocal strain gradient theory and surface effects. *Mechanics of Materials*, **2019**, 139, 103209	3.3	38
318	Thermal performance of Ag-water nanofluid in tube equipped with novel conical strip inserts using two-phase method: Geometry effects and particle migration considerations. *Powder Technology*, **2018**, 338, 87-100	5.2	38
317	Prediction of boiling flow characteristics in rough and smooth microchannels using molecular dynamics simulation: Investigation the effects of boundary wall temperatures. *Journal of Molecular Liquids*, **2020**, 306, 112937	6	37
316	Molecular dynamics simulation of Water-Copper nanofluid flow in a three-dimensional nanochannel with different types of surface roughness geometry for energy economic management. *Journal of Molecular Liquids*, **2020**, 311, 113222	6	36
315	Effect of solid surface structure on the condensation flow of Argon in rough nanochannels with different roughness geometries using molecular dynamics simulation. *International Communications in Heat and Mass Transfer*, **2020**, 117, 104741	5.8	36

314	Pull-in instability analysis of rectangular nanoplate based on strain gradient theory considering surface stress effects. *Physica B: Condensed Matter*, **2017**, 519, 1-14	2.8	35
313	Comprehensive simulation of nanofluid flow and heat transfer in straight ribbed microtube using single-phase and two-phase models for choosing the best conditions. *Journal of Thermal Analysis and Calorimetry*, **2020**, 139, 701-720	4.1	35
312	Two phase natural convection and thermal radiation of Non-Newtonian nanofluid in a porous cavity considering inclined cavity and size of inside cylinders. *International Communications in Heat and Mass Transfer*, **2019**, 108, 104285	5.8	34
311	Technical and environmental analysis of repowering the existing CHP system in a petrochemical plant: A case study. *Energy*, **2018**, 159, 937-949	7.9	33
310	Investigation of thermal properties of DNA structure with precise atomic arrangement via equilibrium and non-equilibrium molecular dynamics approaches. *Computer Methods and Programs in Biomedicine*, **2020**, 185, 105169	6.9	32
309	Molecular dynamics simulation of Doxorubicin loading with N-isopropyl acrylamide carbon nanotube in a drug delivery system. *Computer Methods and Programs in Biomedicine*, **2020**, 184, 105303	6.9	31
308	Finite Volume Simulation of mixed convection in an inclined lid-driven cavity filled with nanofluids: Effects of a hot elliptical centric cylinder, cavity angle and volume fraction of nanoparticles. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 527, 121122	3.3	30
307	The effects of suspending Copper nanoparticles into Argon base fluid inside a microchannel under boiling flow condition by using of molecular dynamic simulation. *Journal of Molecular Liquids*, **2019**, 293, 111474	6	30
306	Removal of hexavalent chromium from water using polyaniline/ wood sawdust/ poly ethylene glycol composite: an experimental study. *Journal of Environmental Health Science & Engineering*, **2019**, 17, 53-62	2.9	30
305	Empowering the boiling condition of Argon flow inside a rectangular microchannel with suspending Silver nanoparticles by using of molecular dynamics simulation. *Journal of Molecular Liquids*, **2019**, 295, 111721	6	29
304	Numerical investigation of non-Newtonian blood flow within an artery with cone shape of stenosis in various stenosis angles. *Computer Methods and Programs in Biomedicine*, **2020**, 192, 105434	6.9	29
303	Analysis and manegement of laminar blood flow inside a cerebral blood vessel using a finite volume software program for biomedical engineering. *Computer Methods and Programs in Biomedicine*, **2020**, 190, 105384	6.9	29
302	Energy analysis of a proton exchange membrane fuel cell (PEMFC) with an open-ended anode using agglomerate model: A CFD study. *Energy*, **2019**, 188, 116090	7.9	28
301	Statistical analysis of pulsating non-Newtonian flow in a corrugated channel using Lattice-Boltzmann method. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 535, 122486	3.3	27
300	Numerical investigation of nanofluid laminar forced convection heat transfer between two horizontal concentric cylinders in the presence of porous medium. *Journal of Thermal Analysis and Calorimetry*, **2020**, 141, 2095-2108	4.1	27
299	Blood flow analysis inside different arteries using non-Newtonian Sisko model for application in biomedical engineering. *Computer Methods and Programs in Biomedicine*, **2020**, 190, 105338	6.9	26
298	Hydrothermal performance of nanofluid flow in a sinusoidal double layer microchannel in order to geometric optimization. *International Communications in Heat and Mass Transfer*, **2020**, 117, 104700	5.8	26
297	Numerical investigation of mixed convection of nanofluid flow in a trapezoidal channel with different aspect ratios in the presence of porous medium. *Case Studies in Thermal Engineering*, **2021**, 25, 100977	5.6	26

296	Heat transfer enhancement in a counter-flow sinusoidal parallel-plate heat exchanger partially filled with porous media using metal foam in the channels divergent sections. *Journal of Thermal Analysis and Calorimetry*, **2020**, 141, 1669-1685	4.1	26
295	Modeling industrial scale reaction furnace using computational fluid dynamics: A case study in Ilam gas treating plant. *Applied Thermal Engineering*, **2017**, 123, 277-289	5.8	25
294	Heat transfer enhancement of Water-Al2O3 nanofluid in an oval channel equipped with two rows of twisted conical strip inserts in various directions: A two-phase approach. *Computers and Mathematics With Applications*, **2020**, 79, 2203-2215	2.7	25
293	Spatial buckling analysis of current-carrying nanowires in the presence of a longitudinal magnetic field accounting for both surface and nonlocal effects. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 97, 191-205	3	25
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