Masoud Afrand

List of Publications by Year
in descending order

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Version: 2024-02-01

437 papers	29,730 citations	1980 101 h-index	9839 141 g-index
440 all docs	440 docs citations	440 times ranked	7152 citing authors

#	Article	IF	Citations
1	Experimental determination of thermal conductivity and dynamic viscosity of Agâ€“MgO/water hybrid nanofluid. International Communications in Heat and Mass Transfer, 2015, 66, 189-195.	2.9	512
2	Measurement of thermal conductivity of ZnOâ€“TiO2/EG hybrid nanofluid. Journal of Thermal Analysis and Calorimetry, 2016, 125, 527-535.	2.0	312
3	Effects of temperature and nanoparticles concentration on rheological behavior of Fe 3 O 4 â€“Ag/EG hybrid nanofluid: An experimental study. Experimental Thermal and Fluid Science, 2016, 77, 38-44.	1.5	309
4	An experimental study on thermal conductivity of F-MWCNTsâ€“Fe 3 O 4 /EG hybrid nanofluid: Effects of temperature and concentration. International Communications in Heat and Mass Transfer, 2016, 76, 171-177.	2.9	300
5	An updated review on application of nanofluids in heat exchangers for saving energy. Energy Conversion and Management, 2019, 198, 111886.	4.4	293
6	Experimental study on thermal conductivity of ethylene glycol containing hybrid nano-additives and development of a new correlation. Applied Thermal Engineering, 2017, 110, 1111-1119.	3.0	290
7	A review of melting and freezing processes of PCM/nano-PCM and their application in energy storage. Energy, 2020, 211, 118698.	4.5	271
8	Effects of temperature and solid volume fraction on viscosity of SiO2-MWCNTs/SAE40 hybrid nanofluid as a coolant and lubricant in heat engines. Applied Thermal Engineering, 2016, 102, 45-54.	3.0	269
9	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.	2.0	265
10	Mixed convection of copperâ€“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.	1.2	263
11	Heat transfer efficiency of Al2O3-MWCNT/thermal oil hybrid nanofluid as a cooling fluid in thermal and energy management applications: An experimental and theoretical investigation. International Journal of Heat and Mass Transfer, 2018, 117, 474-486.	2.5	263
12	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.	2.9	241
13	Simulation of copperâ€“water nanofluid in a microchannel in slip flow regime using the lattice Boltzmann method. European Journal of Mechanics, B/Fluids, 2015, 49, 89-99.	1.2	231
14	An applicable study on the thermal conductivity of SWCNT-MgO hybrid nanofluid and price-performance analysis for energy management. Applied Thermal Engineering, 2017, 111, 1202-1210.	3.0	217
15	A new correlation for predicting the thermal conductivity of ZnOâ€“Ag (50%â€“50%)/water hybrid nanofluid: An experimental study. Powder Technology, 2018, 323, 367-373.	2.1	217
16	Experimental studies on the convective heat transfer performance and thermophysical properties of MgOâ€“water nanofluid under turbulent flow. Experimental Thermal and Fluid Science, 2014, 52, 68-78.	1.5	216
17	Thermal conductivity modeling of MgO/EG nanofluids using experimental data and artificial neural network. Journal of Thermal Analysis and Calorimetry, 2014, 118, 287-294.	2.0	210
18	Evaluation of thermal conductivity of MgO-MWCNTs/EG hybrid nanofluids based on experimental data by selecting optimal artificial neural networks. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 85, 90-96.	1.3	210

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19	An inspection of thermal conductivity of CuO-SWCNTs hybrid nanofluid versus temperature and concentration using experimental data, ANN modeling and new correlation. Journal of Molecular Liquids, 2017, 231, 364-369.	2.3	208
20	Thermophysical properties, heat transfer and pressure drop of COOH-functionalized multi walled carbon nanotubes/water nanofluids. International Communications in Heat and Mass Transfer, 2014, 58, 176-183.	2.9	206
21	Heat transfer reduction in buildings by embedding phase change material in multi-layer walls: Effects of repositioning, thermophysical properties and thickness of PCM. Energy Conversion and Management, 2019, 195, 43-56.	4.4	206
22	Effects of temperature and concentration on rheological behavior of MWCNTs/SiO 2 (20â€“80)-SAE40 hybrid nano-lubricant. International Communications in Heat and Mass Transfer, 2016, 76, 133-138.	2.9	203
23	Experimental study on thermal conductivity of ethylene glycol based nanofluids containing Al 2 O 3 nanoparticles. International Journal of Heat and Mass Transfer, 2015, 88, 728-734.	2.5	191
24	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.	2.9	191
25	Effect of sonication characteristics on stability, thermophysical properties, and heat transfer of nanofluids: A comprehensive review. Ultrasonics Sonochemistry, 2019, 58, 104701.	3.8	188
26	An experimental study on rheological behavior of non-Newtonian hybrid nano-coolant for application in cooling and heating systems. Experimental Thermal and Fluid Science, 2016, 76, 221-227.	1.5	187
27	Designing an artificial neural network to predict thermal conductivity and dynamic viscosity of ferromagnetic nanofluid. International Communications in Heat and Mass Transfer, 2015, 68, 50-57.	2.9	185
28	Nanofluids: Physical phenomena, applications in thermal systems and the environment effects- a critical review. Journal of Cleaner Production, 2021, 320, 128573.	4.6	183
29	Investigation of heat transfer performance and friction factor of a counter-flow double-pipe heat exchanger using nitrogen-doped, graphene-based nanofluids. International Communications in Heat and Mass Transfer, 2016, 76, 16-23.	2.9	179
30	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.	1.5	178
31	Thermal conductivity enhancement of COOH-functionalized MWCNTs/ethylene glycolâ€“water nanofluid for application in heating and cooling systems. Applied Thermal Engineering, 2016, 105, 716-723.	3.0	176
32	Effect of suspending hybrid nano-additives on rheological behavior of engine oil and pumping power. Applied Thermal Engineering, 2016, 109, 524-534.	3.0	176
33	An experimental investigation and new correlation of viscosity of ZnOâ€“EG nanofluid at various temperatures and different solid volume fractions. Experimental Thermal and Fluid Science, 2014, 55, 1-5.	1.5	175
34	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.	1.0	172
35	Experimental evaluation, sensitivity analyzation and ANN modeling of thermal conductivity of ZnO-MWCNT/EG-water hybrid nanofluid for engineering applications. Applied Thermal Engineering, 2017, 125, 673-685.	3.0	170
36	A renewable energy-driven thermoelectric-utilized solar still with external condenser loaded by silver/nanofluid for simultaneously water disinfection and desalination. Desalination, 2020, 480, 114354.	4.0	165

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37	Applicability of artificial neural network and nonlinear regression to predict thermal conductivity modeling of Al2O3â€“water nanofluids using experimental data. International Communications in Heat and Mass Transfer, 2015, 66, 246-249.	2.9	164
38	Experimental study on thermal conductivity of DWCNT-ZnO/water-EG nanofluids. International Communications in Heat and Mass Transfer, 2015, 68, 248-251.	2.9	164
39	An experimental study on stability and thermal conductivity of water/silica nanofluid: Eco-friendly production of nanoparticles. Journal of Cleaner Production, 2019, 206, 1089-1100.	4.6	164
40	Prediction of dynamic viscosity of a hybrid nano-lubricant by an optimal artificial neural network. International Communications in Heat and Mass Transfer, 2016, 76, 209-214.	2.9	163
41	Recent advances in preparation methods and thermophysical properties of oil-based nanofluids: A state-of-the-art review. Powder Technology, 2019, 352, 209-226.	2.1	163
42	Heat transfer characteristics and pressure drop of COOH-functionalized DWCNTs/water nanofluid in turbulent flow at low concentrations. International Journal of Heat and Mass Transfer, 2014, 73, 186-194.	2.5	162
43	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.	2.1	162
44	Thermal conductivity of Al2O3/water nanofluids. Journal of Thermal Analysis and Calorimetry, 2014, 117, 675-681.	2.0	159
45	Investigation of rheological behavior of MWCNT (COOH-functionalized)/MgO - Engine oil hybrid nanofluids and modelling the results with artificial neural networks. Journal of Molecular Liquids, 2017, 241, 173-181.	2.3	157
46	Study on thermal conductivity of water-based nanofluids with hybrid suspensions of CNTs/Al2O3 nanoparticles. Journal of Thermal Analysis and Calorimetry, 2016, 124, 455-460.	2.0	153
47	An experimental study on rheological behavior of hybrid nanofluids made of iron and copper oxide in a binary mixture of water and ethylene glycol: Non-Newtonian behavior. Experimental Thermal and Fluid Science, 2016, 79, 231-237.	1.5	150
48	Studies on optimum fins number in PCM-based heat sinks. Energy, 2019, 171, 1088-1099.	4.5	150
49	Effects of temperature and concentration on the viscosity of nanofluids made of single-wall carbon nanotubes in ethylene glycol. International Communications in Heat and Mass Transfer, 2016, 74, 108-113.	2.9	149
50	Energy-matrices, exergy, economic, environmental, exergoeconomic, enviroeconomic, and heat transfer (6E/HT) analysis of two passive/active solar still water desalination nearly 4000m: Altitude concept. Journal of Cleaner Production, 2020, 261, 121243.	4.6	149
51	Modeling of thermal conductivity of MWCNT-SiO2 (30:70%)/EG hybrid nanofluid, sensitivity analyzing and cost performance for industrial applications. Journal of Thermal Analysis and Calorimetry, 2018, 131, 1437-1447.	2.0	147
52	Experimental evaluation of dynamic viscosity of ZnOâ€“MWCNTs/engine oil hybrid nanolubricant based on changes in temperature and concentration. Journal of Thermal Analysis and Calorimetry, 2019, 136, 513-525.	2.0	143
53	Evaluating the effect of temperature and concentration on the thermal conductivity of ZnO-TiO2/EG hybrid nanofluid using artificial neural network and curve fitting on experimental data. Physica A: Statistical Mechanics and Its Applications, 2019, 519, 209-216.	1.2	143
54	Thermal conductivity enhancement of SiO2â€“MWCNT (85:15Â%)â€“EG hybrid nanofluids. Journal of Thermal Analysis and Calorimetry, 2017, 128, 249-258.	2.0	140

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55	A comprehensive review on rheological behavior of mono and hybrid nanofluids: Effective parameters and predictive correlations. International Journal of Heat and Mass Transfer, 2018, 127, 997-1012.	2.5	140
56	Estimation of thermal conductivity of Al2O3/water (40%)â€“ethylene glycol (60%) by artificial neural network and correlation using experimental data. International Communications in Heat and Mass Transfer, 2016, 74, 125-128.	2.9	139
57	Effect of two isothermal obstacles on the natural convection of nanofluid in the presence of magnetic field inside an enclosure with sinusoidal wall temperature distribution. International Journal of Heat and Mass Transfer, 2018, 121, 565-578.	2.5	139
58	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.	2.9	135
59	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.	1.2	134
60	Turbulent forced convection heat transfer and thermophysical properties of Mgoâ€“water nanofluid with consideration of different nanoparticles diameter, an empirical study. Journal of Thermal Analysis and Calorimetry, 2015, 119, 1205-1213.	2.0	132
61	Numerical investigation of heat transfer in a power-law non-Newtonian fluid in a C-Shaped cavity with magnetic field effect using finite difference lattice Boltzmann method. Computers and Fluids, 2018, 176, 51-67.	1.3	132
62	Natural convective heat transfer and entropy generation of alumina/water nanofluid in a tilted enclosure with an elliptic constant temperature: Applying magnetic field and radiation effects. International Journal of Mechanical Sciences, 2020, 174, 105470.	3.6	130
63	Predicting the viscosity of multi-walled carbon nanotubes/water nanofluid by developing an optimal artificial neural network based on experimental data. International Communications in Heat and Mass Transfer, 2016, 77, 49-53.	2.9	128
64	Multi-objective optimization of nanofluid flow in double tube heat exchangers for applications in energy systems. Energy, 2017, 137, 160-171.	4.5	128
65	Investigation of free convection heat transfer and entropy generation of nanofluid flow inside a cavity affected by magnetic field and thermal radiation. Journal of Thermal Analysis and Calorimetry, 2019, 137, 997-1019.	2.0	128
66	Modeling of thermal conductivity of ZnO-EG using experimental data and ANN methods. International Communications in Heat and Mass Transfer, 2015, 63, 35-40.	2.9	126
67	First approach on nanofluid-based solar still in high altitude for water desalination and solar water disinfection (SODIS). Desalination, 2020, 491, 114592.	4.0	126
68	An experimental evaluation of the effect of ZnO nanoparticles on the rheological behavior of engine oil. Journal of Molecular Liquids, 2017, 236, 198-204.	2.3	125
69	Evaluation of thermal conductivity of COOH-functionalized MWCNTs/water via temperature and solid volume fraction by using experimental data and ANN methods. Journal of Thermal Analysis and Calorimetry, 2015, 121, 1273-1278.	2.0	124
70	Estimation of thermal conductivity of ethylene glycol-based nanofluid with hybrid suspensions of SWCNTâ€“Al2O3 nanoparticles by correlation and ANN methods using experimental data. Journal of Thermal Analysis and Calorimetry, 2017, 128, 1359-1371.	2.0	124
71	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.	2.9	124
72	Natural convection in a trapezoidal enclosure filled with carbon nanotubeâ€“EGâ€“water nanofluid. International Journal of Heat and Mass Transfer, 2016, 92, 76-82.	2.5	123

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73	An experimental study on thermal conductivity of MgO nanoparticles suspended in a binary mixture of water and ethylene glycol. International Communications in Heat and Mass Transfer, 2015, 67, 173-175.	2.9	121
74	Applications of feedforward multilayer perceptron artificial neural networks and empirical correlation for prediction of thermal conductivity of Mg(OH) 2 â€“EG using experimental data. International Communications in Heat and Mass Transfer, 2015, 67, 46-50.	2.9	120
75	Improving engine oil lubrication in light-duty vehicles by using of dispersing MWCNT and ZnO nanoparticles in 5W50 as viscosity index improvers (VII). Applied Thermal Engineering, 2018, 143, 493-506.	3.0	120
76	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.	2.0	120
77	A novel comparative experimental study on rheological behavior of mono & hybrid nanofluids concerned graphene and silica nano-powders: Characterization, stability and viscosity measurements. Powder Technology, 2020, 366, 216-229.	2.1	120
78	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.	1.0	119
79	Electro- and thermophysical properties of water-based nanofluids containing copper ferrite nanoparticles coated with silica: Experimental data, modeling through enhanced ANN and curve fitting. International Journal of Heat and Mass Transfer, 2018, 127, 925-935.	2.5	119
80	Effect of a novel clay/silica nanocomposite on water-based drilling fluids: Improvements in rheological and filtration properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 555, 339-350.	2.3	119
81	Performance investigation of micro- and nano-sized particle erosion in a 90Â° elbow using an ANFIS model. Powder Technology, 2015, 284, 336-343.	2.1	117
82	Molecular dynamic simulation of Copper and Platinum nanoparticles Poiseuille flow in a nanochannels. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 152-161.	1.3	117
83	Experimental evaluation, new correlation proposing and ANN modeling of thermal properties of EG based hybrid nanofluid containing ZnO-DWCNT nanoparticles for internal combustion engines applications. Applied Thermal Engineering, 2018, 133, 452-463.	3.0	116
84	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.	2.3	114
85	Optimization, modeling and accurate prediction of thermal conductivity and dynamic viscosity of stabilized ethylene glycol and water mixture Al 2 O 3 nanofluids by NSGA-II using ANN. International Communications in Heat and Mass Transfer, 2017, 82, 154-160.	2.9	113
86	Effects of geometric parameters on the performance of solar chimney power plants. Energy, 2018, 162, 1052-1061.	4.5	113
87	Assessment of thermal conductivity enhancement of nano-antifreeze containing single-walled carbon nanotubes: Optimal artificial neural network and curve-fitting. Physica A: Statistical Mechanics and Its Applications, 2019, 521, 138-145.	1.2	113
88	Evaluation of rheological behavior of 10W40 lubricant containing hybrid nano-material by measuring dynamic viscosity. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 92, 47-54.	1.3	112
89	Experimental investigation and development of new correlations for thermal conductivity of CuO/EGâ€“water nanofluid. International Communications in Heat and Mass Transfer, 2015, 65, 47-51.	2.9	111
90	Empirical analysis of heat transfer and friction factor of water/graphene oxide nanofluid flow in turbulent regime through an isothermal pipe. Applied Thermal Engineering, 2017, 126, 538-547.	3.0	111

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91	Application of nanofluids and fluids in photovoltaic thermal system: An updated review. Solar Energy, 2020, 199, 796-818.	2.9	111
92	Develop 24 dissimilar ANNs by suitable architectures & training algorithms via sensitivity analysis to better statistical presentation: Measure MSEs between targets & ANN for Feâ€“CuO/Egâ€“Water nanofluid. Physica A: Statistical Mechanics and Its Applications, 2019, 519, 159-168.	1.2	110
93	Thermal conductivity and viscosity of Mg(OH)2-ethylene glycol nanofluids. Journal of Thermal Analysis and Calorimetry, 2015, 120, 1145-1149.	2.0	109
94	Experimental investigation of thermal conductivity of CNTs-Al2O3/water: A statistical approach. International Communications in Heat and Mass Transfer, 2015, 69, 29-33.	2.9	109
95	Thermal conductivity and viscosity optimization of nanodiamond-Co 3 O 4 /EG (40:60) aqueous nanofluid using NSGA-II coupled with RSM. Journal of Molecular Liquids, 2017, 238, 545-552.	2.3	108
96	Rheological behavior characteristics of TiO2-MWCNT/10w40 hybrid nano-oil affected by temperature, concentration and shear rate: An experimental study and a neural network simulating. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 94, 231-240.	1.3	108
97	Effects of graphene oxideâ€‘silicon oxide hybrid nanomaterials on rheological behavior of water at various time durations and temperatures: Synthesis, preparation and stability. Powder Technology, 2018, 335, 375-387.	2.1	106
98	Appraising influence of COOH-MWCNTs on thermal conductivity of antifreeze using curve fitting and neural network. Physica A: Statistical Mechanics and Its Applications, 2019, 514, 36-45.	1.2	106
99	Using of Artificial Neural Networks (ANNs) to predict the thermal conductivity of Zinc Oxideâ€“Silver (50%â€“50%)/Water hybrid Newtonian nanofluid. International Communications in Heat and Mass Transfer, 2020, 116, 104645.	2.9	106
100	Price-performance evaluation of thermal conductivity enhancement of nanofluids with different particle sizes. Applied Thermal Engineering, 2018, 128, 373-380.	3.0	105
101	ANN modeling, cost performance and sensitivity analyzing of thermal conductivity of DWCNTâ€“SiO2/EG hybrid nanofluid for higher heat transfer. Journal of Thermal Analysis and Calorimetry, 2018, 131, 2381-2393.	2.0	105
102	A novel applicable experimental study on the thermal behavior of SWCNTs(60%)-MgO(40%)/EG hybrid nanofluid by focusing on the thermal conductivity. Powder Technology, 2019, 342, 998-1007.	2.1	104
103	Using artificial neural network to predict thermal conductivity of ethylene glycol with alumina nanoparticle. Journal of Thermal Analysis and Calorimetry, 2016, 126, 643-648.	2.0	103
104	Empirical study and model development of thermal conductivity improvement and assessment of cost and sensitivity of EG-water based SWCNT-ZnO (30%:70%) hybrid nanofluid. Journal of Molecular Liquids, 2017, 244, 252-261.	2.3	103
105	Experimental investigation and model development of the non-Newtonian behavior of CuO-MWCNT-10w40 hybrid nano-lubricant for lubrication purposes. Journal of Molecular Liquids, 2018, 249, 677-687.	2.3	103
106	Entropy generation of boehmite alumina nanofluid flow through a minichannel heat exchanger considering nanoparticle shape effect. Physica A: Statistical Mechanics and Its Applications, 2019, 521, 724-736.	1.2	103
107	Designing artificial neural network on thermal conductivity of Al2O3â€“waterâ€“EG (60â€“40Â%) nanofluid using experimental data. Journal of Thermal Analysis and Calorimetry, 2016, 126, 837-843.	2.0	102
108	Measuring the viscosity of Fe3O4-MWCNTs/EG hybrid nanofluid for evaluation of thermal efficiency: Newtonian and non-Newtonian behavior. Journal of Molecular Liquids, 2018, 253, 169-177.	2.3	102

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109	Using experimental data to estimate the heat transfer and pressure drop of non-Newtonian nanofluid flow through a circular tube: Applicable for use in heat exchangers. Applied Thermal Engineering, 2018, 129, 1573-1581.	3.0	102
110	A survey on experimental and numerical studies of convection heat transfer of nanofluids inside closed conduits. Advances in Mechanical Engineering, 2016, 8, 168781401667356.	0.8	101
111	An experimental study on rheological behavior of ethylene glycol based nanofluid: Proposing a new correlation as a function of silica concentration and temperature. Journal of Molecular Liquids, 2017, 233, 352-357.	2.3	101
112	Multi-objective optimization of cost and thermal performance of double walled carbon nanotubes/water nanofluids by NSGA-II using response surface method. Applied Thermal Engineering, 2017, 112, 1648-1657.	3.0	101
113	An experimental study of rheological behavior of Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e340" altimg="si1.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e348" altimg="si2.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub>	1.2	101
114	Experimental study for developing an accurate model to predict viscosity of CuOâ€“ethylene glycol nanofluid using genetic algorithm based neural network. Powder Technology, 2018, 338, 383-390.	2.1	101
115	Viscosity and rheological properties of antifreeze based nanofluid containing hybrid nano-powders of MWCNTs and TiO2 under different temperature conditions. Powder Technology, 2019, 342, 808-816.	2.1	101
116	Efficiency of ferromagnetic nanoparticles suspended in ethylene glycol for applications in energy devices: Effects of particle size, temperature, and concentration. International Communications in Heat and Mass Transfer, 2014, 58, 138-146.	2.9	100
117	Predicting the effects of magnesium oxide nanoparticles and temperature on the thermal conductivity of water using artificial neural network and experimental data. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 87, 242-247.	1.3	100
118	An experimental study on heat transfer and pressure drop of water/graphene oxide nanofluid in a copper tube under air cross-flow: Applicable as a heat exchanger. Applied Thermal Engineering, 2017, 125, 69-79.	3.0	99
119	Estimation of thermal conductivity of CNTs-water in low temperature by artificial neural network and correlation. International Communications in Heat and Mass Transfer, 2016, 76, 376-381.	2.9	98
120	Modeling and estimation of thermal conductivity of MgOâ€“water/EG (60:40) by artificial neural network and correlation. International Communications in Heat and Mass Transfer, 2015, 68, 98-103.	2.9	97
121	Numerical study on thermal performance of an air-cooled heat exchanger: Effects of hybrid nanofluid, pipe arrangement and cross section. Energy Conversion and Management, 2018, 164, 615-628.	4.4	97
122	Proposing new hybrid nano-engine oil for lubrication of internal combustion engines: Preventing cold start engine damages and savingÂenergy. Energy, 2019, 170, 228-238.	4.5	96
123	Investigation of permeability effect on slip velocity and temperature jump boundary conditions for FMWNT/Water nanofluid flow and heat transfer inside a microchannel filled by a porous media. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 226-238.	1.3	95
124	Natural convection and entropy generation of a nanofluid around a circular baffle inside an inclined square cavity under thermal radiation and magnetic field effects. International Communications in Heat and Mass Transfer, 2020, 116, 104650.	2.9	95
125	Mixed-convection flow and heat transfer in an inclined cavity equipped to a hot obstacle using nanofluids considering temperature-dependent properties. International Journal of Heat and Mass Transfer, 2015, 85, 656-666.	2.5	94
126	Mixed convection heat transfer from surface-mounted block heat sources in a horizontal channel with nanofluids. International Journal of Heat and Mass Transfer, 2015, 89, 783-791.	2.5	94

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127	Effect of induced electric field on magneto-natural convection in a vertical cylindrical annulus filled with liquid potassium. International Journal of Heat and Mass Transfer, 2015, 90, 418-426.	2.5	94
128	Using a magnetic field to reduce natural convection in a vertical cylindrical annulus. International Journal of Thermal Sciences, 2017, 118, 12-23.	2.6	94
129	Effects of functionalized single walled carbon nanotubes on thermal performance of antifreeze: An experimental study on thermal conductivity. Applied Thermal Engineering, 2017, 120, 358-366.	3.0	94
130	The variations of heat transfer and slip velocity of FMWNT-water nano-fluid along the micro-channel in the lack and presence of a magnetic field. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 474-481.	1.3	92
131	Experimental investigation on non-Newtonian behavior of Al 2 O 3 -MWCNT/5W50 hybrid nano-lubricant affected by alterations of temperature, concentration and shear rate for engine applications. International Communications in Heat and Mass Transfer, 2017, 82, 97-102.	2.9	92
132	Designing a neural network for predicting the heat transfer and pressure drop characteristics of Ag/water nanofluids in a heat exchanger. Applied Thermal Engineering, 2017, 126, 559-565.	3.0	92
133	A novel study on rheological behavior of ZnO-MWCNT/10w40 nanofluid for automotive engines. Journal of Molecular Liquids, 2018, 254, 406-413.	2.3	92
134	Application of three-level general factorial design approach for thermal conductivity of MgO/water nanofluids. Applied Thermal Engineering, 2017, 127, 1194-1199.	3.0	91
135	Prediction of rheological behavior of SiO2-MWCNTs/10W40 hybrid nanolubricant by designing neural network. Journal of Thermal Analysis and Calorimetry, 2018, 131, 2741-2748.	2.0	91
136	Effect of magnetic field on mixed convection and entropy generation of hybrid nanofluid in an inclined enclosure: Sensitivity analysis and optimization. European Physical Journal Plus, 2019, 134, 1.	1.2	91
137	Effect of Magnetic Field on Free Convection in Inclined Cylindrical Annulus Containing Molten Potassium. International Journal of Applied Mechanics, 2015, 07, 1550052.	1.3	90
138	The rheological behavior of MWCNTsâ€“ZnO/Waterâ€“Ethylene glycol hybrid non-Newtonian nanofluid by using of an experimental investigation. Journal of Materials Research and Technology, 2020, 9, 8401-8406.	2.6	90
139	Free convection and entropy generation of a nanofluid in a tilted triangular cavity exposed to a magnetic field with sinusoidal wall temperature distribution considering radiation effects. International Communications in Heat and Mass Transfer, 2020, 112, 104507.	2.9	90
140	Rheological characteristics of MgO/oil nanolubricants: Experimental study and neural network modeling. International Communications in Heat and Mass Transfer, 2017, 86, 245-252.	2.9	89
141	display="inline" overflow="scroll" id="d1e1477" altimg="si16.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e1485" altimg="si2.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math>(90%)/5W50 nanofluid	1.2	89
142	Experimental investigation of switchable behavior of CuO-MWCNT (85%â€“15%)/10W-40 hybrid nano-lubricants for applications in internal combustion engines. Journal of Molecular Liquids, 2017, 242, 326-335.	2.3	88
143	3-D numerical investigation of natural convection in a tilted cylindrical annulus containing molten potassium and controlling it using various magnetic fields. International Journal of Applied Electromagnetics and Mechanics, 2014, 46, 809-821.	0.3	87
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