

Nidal H Abu-Hamdeh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4718582/publications.pdf>

Version: 2024-02-01

207
papers

6,235
citations

61984

43
h-index

95266

68
g-index

208
all docs

208
docs citations

208
times ranked

3874
citing authors

#	ARTICLE	IF	CITATIONS
1	Soil Thermal Conductivity Effects of Density, Moisture, Salt Concentration, and Organic Matter. Soil Science Society of America Journal, 2000, 64, 1285-1290.	2.2	465
2	Thermal Properties of Soils as affected by Density and Water Content. Biosystems Engineering, 2003, 86, 97-102.	4.3	305
3	MHD natural convection and entropy generation of ferrofluid in an open trapezoidal cavity partially filled with a porous medium. International Journal of Mechanical Sciences, 2018, 136, 493-502.	6.7	160
4	Nanoparticle enhanced PCM exergy loss and thermal behavior by means of FVM. Journal of Molecular Liquids, 2020, 320, 114457.	4.9	133
5	Natural convection of nanofluid inside a wavy cavity with a non-uniform heating. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 958-980.	2.8	123
6	Heatline visualization of MHD natural convection in an inclined wavy open porous cavity filled with a nanofluid with a local heater. International Journal of Heat and Mass Transfer, 2016, 99, 872-881.	4.8	121
7	Effect of uniform inclined magnetic field on mixed convection in a lid-driven cavity having a horizontal porous layer saturated with a ferrofluid. International Journal of Heat and Mass Transfer, 2017, 114, 1086-1097.	4.8	105
8	Impact of magnetic dipole on ferromagnetic hybrid nanofluid flow over a stretching cylinder. Physica Scripta, 2021, 96, 045215.	2.5	105
9	Heat recovery application of nanomaterial with existence of turbulator. Journal of Molecular Liquids, 2021, 326, 115268.	4.9	103
10	A review on exergy analysis of solar electricity production. Renewable and Sustainable Energy Reviews, 2017, 74, 755-770.	16.4	99
11	Entropy generation due to natural convection of a nanofluid in a partially open triangular cavity. Advanced Powder Technology, 2017, 28, 244-255.	4.1	98
12	MHD thermogravitational convection and thermal radiation of a micropolar nanofluid in a porous chamber. International Communications in Heat and Mass Transfer, 2020, 110, 104409.	5.6	98
13	A comparison of two methods used to evaluate thermal conductivity for some soils. International Journal of Heat and Mass Transfer, 2001, 44, 1073-1078.	4.8	96
14	Simulation of hybrid nanofluid flow within a microchannel heat sink considering porous media analyzing CPU stability. Journal of Petroleum Science and Engineering, 2022, 208, 109734.	4.2	93
15	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.	2.6	91
16	Analysis of Entropy Generation in Natural Convection of Nanofluid inside a Square Cavity Having Hot Solid Block: Tiwari and Das's Model. Entropy, 2016, 18, 9.	2.2	90
17	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.	5.6	90
18	3D magneto-convective heat transfer in CNT-nanofluid filled cavity under partially active magnetic field. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 99, 294-303.	2.7	85

#	ARTICLE	IF	CITATIONS
19	Coupled FHDâ€“MHD free convection of a hybrid nanoliquid in an inversed T-shaped enclosure occupied by partitioned porous media. Numerical Heat Transfer; Part A: Applications, 2019, 76, 479-498.	2.1	85
20	4S consideration (synthesis, sonication, surfactant, stability) for the thermal conductivity of CeO ₂ with MWCNT and water based hybrid nanofluid: An experimental assessment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125918.	4.7	85
21	Natural convection of alumina-water nanofluid in an open cavity having multiple porous layers. International Journal of Heat and Mass Transfer, 2018, 125, 648-657.	4.8	82
22	Mixed convection of Al ₂ O ₃ -water nanofluid in a lid-driven cavity having two porous layers. International Journal of Heat and Mass Transfer, 2018, 118, 527-537.	4.8	80
23	Compaction and Subsoiling Effects on Corn Growth and Soil Bulk Density. Soil Science Society of America Journal, 2003, 67, 1213-1219.	2.2	77
24	Mixed convection due to rotating cylinder in an internally heated and flexible walled cavity filled with SiO ₂ â€“water nanofluids: Effect of nanoparticle shape. International Communications in Heat and Mass Transfer, 2016, 71, 9-19.	5.6	77
25	Heatline visualization of natural convection in a thick walled open cavity filled with a nanofluid. International Journal of Heat and Mass Transfer, 2017, 109, 175-186.	4.8	75
26	Approaches for expedition of discharging of PCM involving nanoparticles and radial fins. Journal of Molecular Liquids, 2021, 329, 115052.	4.9	74
27	Design and multi-criteria optimisation of a trigeneration district energy system based on gas turbine, Kalina, and ejector cycles: Exergoeconomic and exergoenvironmental evaluation. Energy Conversion and Management, 2021, 227, 113581.	9.2	70
28	Solar liquid desiccant regeneration and nanofluids in evaporative cooling for greenhouse food production in Saudi Arabia. Solar Energy, 2016, 134, 202-210.	6.1	63
29	Natural Convection and Entropy Generation in Nanofluid Filled Entrapped Trapezoidal Cavities under the Influence of Magnetic Field. Entropy, 2016, 18, 43.	2.2	60
30	Nanomaterial transportation and exergy loss modeling incorporating CVFEM. Journal of Molecular Liquids, 2021, 330, 115591.	4.9	60
31	Entropy Optimization of First-Grade Viscoelastic Nanofluid Flow over a Stretching Sheet by Using Classical Keller-Box Scheme. Mathematics, 2021, 9, 2563.	2.2	57
32	Natural convection of a nanofluid between two eccentric cylinders saturated by porous material: Buongiornoâ€™s two phase model. International Journal of Heat and Mass Transfer, 2018, 127, 67-75.	4.8	56
33	Effect of tillage treatments on soil thermal conductivity for some Jordanian clay loam and loam soils. Soil and Tillage Research, 2000, 56, 145-151.	5.6	55
34	Assessment of thermal performance of PCM in latent heat storage system for different applications. Solar Energy, 2019, 177, 317-323.	6.1	55
35	Mixed convection of Al ₂ O ₃ â€“H ₂ O nanoliquid in a square chamber with complicated fin. International Journal of Mechanical Sciences, 2020, 165, 105192.	6.7	55
36	Design and performance characteristics of solar adsorption refrigeration system using parabolic trough collector: Experimental and statistical optimization technique. Energy Conversion and Management, 2013, 74, 162-170.	9.2	53

#	ARTICLE	IF	CITATIONS
37	Effects of inclined magnetic field on mixed convection in a nanofluid filled double lid-driven cavity with volumetric heat generation or absorption using finite element method. Chinese Journal of Physics, 2018, 56, 484-501.	3.9	53
38	MHD mixed convective heat transfer in a lid-driven enclosure filled with Ag-water nanofluid with center heater. International Journal of Mechanical Sciences, 2018, 142-143, 407-419.	6.7	53
39	Natural convection of Al ₂ O ₃ /H ₂ O nanofluid in an open inclined cavity with a heat-generating element. International Journal of Heat and Mass Transfer, 2018, 126, 184-191.	4.8	53
40	A Significant Solar Energy Note on Powell-Eyring Nanofluid with Thermal Jump Conditions: Implementing Cattaneo-Christov Heat Flux Model. Mathematics, 2021, 9, 2669.	2.2	51
41	Effect of geometrical parameters on natural convection in a porous undulant-wall enclosure saturated by a nanofluid using Buongiorno's model. Journal of Molecular Liquids, 2018, 255, 148-159.	4.9	50
42	Natural convective heat transfer of Ag-water nanofluid flow inside enclosure with center heater and bottom heat source. Chinese Journal of Physics, 2018, 56, 1497-1507.	3.9	50
43	A computational work on a three dimensional analysis of natural convection and entropy generation in nanofluid filled enclosures with triangular solid insert at the corners. Journal of Molecular Liquids, 2016, 218, 260-274.	4.9	49
44	Effect of multibanded magnetic field on convective heat transport in linearly heated porous systems filled with hybrid nanofluid. Physics of Fluids, 2021, 33, .	4.0	49
45	Mixed convection characteristic in a lid-driven cavity containing heated triangular block: Effect of location and size of block. International Journal of Heat and Mass Transfer, 2018, 124, 860-875.	4.8	46
46	A comparative study of almond and palm oils as two bio-diesel fuels for diesel engine in terms of emissions and performance. Fuel, 2015, 150, 318-324.	6.4	45
47	Laboratory techniques to evaluate thermal conductivity for some soils. Heat and Mass Transfer, 2003, 39, 119-123.	2.1	44
48	Techno-economic comparison of solar power tower system/photovoltaic system/wind turbine/diesel generator in supplying electrical energy to small loads. Journal of Taibah University for Science, 2019, 13, 216-224.	2.5	44
49	A computational analysis of heat transport irreversibility phenomenon in a magnetized porous channel. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 2197-2222.	2.8	44
50	SWâ€”Soil and Water. Biosystems Engineering, 2001, 80, 209-216.	0.4	43
51	3D Buoyancy-Induced Flow and Entropy Generation of Nanofluid-Filled Open Cavities Having Adiabatic Diamond Shaped Obstacles. Entropy, 2016, 18, 232.	2.2	43
52	Effect of cooling the recirculated exhaust gases on diesel engine emissions. Energy Conversion and Management, 2003, 44, 3113-3124.	9.2	42
53	Numerical investigation and sensitivity analysis of effective parameters to obtain potential maximum power output: A case study on Zanjan prototype solar chimney power plant. Energy Conversion and Management, 2017, 136, 350-360.	9.2	40
54	Mixed convection analysis in heat transfer enhancement of a nanofluid filled porous enclosure with various wall speed ratios. International Journal of Heat and Mass Transfer, 2017, 113, 716-729.	4.8	40

#	ARTICLE	IF	CITATIONS
55	Transient natural convection in a partially open trapezoidal cavity filled with a water-based nanofluid under the effects of Brownian diffusion and thermophoresis. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2018, 28, 606-623.	2.8	37
56	Forced Convection of Fe ₃ O ₄ -Water Nanofluid in a Bifurcating Channel under the Effect of Variable Magnetic Field. <i>Energies</i> , 2019, 12, 666.	3.1	36
57	Soil compaction and root distribution for okra as affected by tillage and vehicle parameters. <i>Soil and Tillage Research</i> , 2003, 74, 25-35.	5.6	34
58	Optimization of solar adsorption refrigeration system using experimental and statistical techniques. <i>Energy Conversion and Management</i> , 2010, 51, 1610-1615.	9.2	34
59	3D natural convection in a cubical cavity with a thermally active heater under the presence of an external magnetic field. <i>Computers and Fluids</i> , 2016, 128, 30-40.	2.5	34
60	Mixed convection with entropy generation of nanofluid in a lid-driven cavity under the effects of a heat-conducting solid wall and vertical temperature gradient. <i>European Journal of Mechanics, B/Fluids</i> , 2018, 70, 148-159.	2.5	34
61	Design considerations and construction of an experimental prototype of concentrating solar power tower system in Saudi Arabia. <i>Energy Conversion and Management</i> , 2016, 117, 63-73.	9.2	32
62	Mixed convection heat transfer of a nanofluid in a lid-driven enclosure with two adherent porous blocks. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 1095-1105.	3.6	32
63	Numerical analysis of entropy generation due to natural convection in three-dimensional partially open enclosures. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2017, 75, 131-140.	5.3	31
64	Effects of surfactant on thermal conductivity of aqueous silica nanofluids. <i>Journal of Molecular Liquids</i> , 2021, 327, 114883.	4.9	31
65	Using phase change material as an energy-efficient technique to reduce energy demand in air handling unit integrated with absorption chiller and recovery unit – Applicable for high solar-irradiance regions. <i>Journal of Energy Storage</i> , 2021, 42, 103080.	8.1	31
66	Natural convection in nanofluid filled and partially heated annulus: Effect of different arrangements of heaters. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 538, 122479.	2.6	30
67	Thermal solar sorption cooling systems - A review of principle, technology, and applications. <i>AEJ - Alexandria Engineering Journal</i> , 2022, 61, 367-402.	6.4	30
68	Construction and numerical analysis of a collapsible vertical axis wind turbine. <i>Energy Conversion and Management</i> , 2017, 151, 400-413.	9.2	29
69	Measuring and predicting Stress Distribution under Tractive Devices in Undisturbed Soils. <i>Biosystems Engineering</i> , 2003, 85, 493-502.	4.3	27
70	Analysis of the electro-thermo-convection induced by a strong unipolar injection between two concentric or eccentric cylinders. <i>Numerical Heat Transfer; Part A: Applications</i> , 2017, 71, 789-804.	2.1	27
71	The thermal properties of water-copper nanofluid in the presence of surfactant molecules using molecular dynamics simulation. <i>Journal of Molecular Liquids</i> , 2021, 325, 115149.	4.9	26
72	Mixing efficiency of hydrogen and air co-flow jets via wedge shock generator in dual-combustor ramjet. <i>Aerospace Science and Technology</i> , 2021, 116, 106846.	4.8	26

#	ARTICLE	IF	CITATIONS
73	Analysis of the thermal and hydraulic performance of the sector-by-sector helically coiled tube heat exchangers as a new type of heat exchangers. <i>International Journal of Thermal Sciences</i> , 2020, 150, 106229.	4.9	25
74	Numerical simulation and sensitivity analysis of effective parameters on heat transfer and homogeneity of Al ₂ O ₃ nanofluid in a channel using DPM and RSM. <i>Advanced Powder Technology</i> , 2016, 27, 1980-1991.	4.1	24
75	A nonlinear 3D finite element analysis of the soil forces acting on a disk plow. <i>Soil and Tillage Research</i> , 2003, 74, 115-124.	5.6	23
76	Numerical Study of Periodic Magnetic Field Effect on 3D Natural Convection of MWCNT-Water/Nanofluid with Consideration of Aggregation. <i>Processes</i> , 2019, 7, 957.	2.8	23
77	A novel proposed flexible thin-film solar annular thermoelectric generator. <i>Applied Thermal Engineering</i> , 2021, 183, 116245.	6.0	23
78	Nanoparticle transportation of CuO-H ₂ O nanofluid in a porous semi annulus due to Lorentz forces. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019, 29, 294-308.	2.8	22
79	A Comparative Study of Almond Biodiesel-Diesel Blends for Diesel Engine in Terms of Performance and Emissions. <i>BioMed Research International</i> , 2015, 2015, 1-8.	1.9	21
80	Thermal convection in Al ₂ O ₃ -water nanofluid rotating chamber with a local isothermal heater. <i>International Journal of Mechanical Sciences</i> , 2019, 156, 137-145.	6.7	21
81	Controlled drug delivery using the magnetic nanoparticles in non-Newtonian blood vessels. <i>AEJ - Alexandria Engineering Journal</i> , 2020, 59, 4049-4062.	6.4	21
82	The effect of injection pressure on the thermal performance and emission characteristics of an oil burner operating on B20 palm oil biodiesel-diesel blend fuel. <i>Fuel</i> , 2020, 278, 118174.	6.4	21
83	Analysis of double U-tube ground heat exchanger for renewable energy applications with two-region simulation model by combining analytical and numerical techniques. <i>International Communications in Heat and Mass Transfer</i> , 2021, 123, 105144.	5.6	21
84	Magnetohydrodynamic mixed thermo-bioconvection in porous cavity filled by oxytactic microorganisms. <i>Thermal Science</i> , 2018, 22, 2711-2721.	1.1	21
85	A computational study on mixed convection in a porous media filled and partially heated lid-driven cavity with an open side. <i>AEJ - Alexandria Engineering Journal</i> , 2020, 59, 1735-1750.	6.4	20
86	Three-dimensional analysis of natural convection in nanofluid-filled parallelogrammic enclosure opened from top and heated with square heater. <i>Journal of Central South University</i> , 2019, 26, 1077-1088.	3.0	19
87	Molecular dynamics simulation of the thermal properties of the Cu-water nanofluid on a roughed Platinum surface: Simulation of phase transition in nanofluids. <i>Journal of Molecular Liquids</i> , 2021, 327, 114832.	4.9	19
88	Natural convective heat transfer and nanofluid flow in a cavity with top wavy wall and corner heater. <i>Journal of Hydrodynamics</i> , 2016, 28, 873-885.	3.2	18
89	Analysis of heat transfer of different nanofluids flow through an abrupt expansion pipe. <i>Applied Thermal Engineering</i> , 2017, 112, 965-974.	6.0	18
90	Annual performance analysis of small scale industrial waste heat assisted solar tower power plant and application of nanofluid. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 124, 216-227.	5.3	18

#	ARTICLE	IF	CITATIONS
91	Simulation study of solar air heater. <i>Solar Energy</i> , 2003, 74, 309-317.	6.1	17
92	Efficacy of incorporating PCM into the building envelope on the energy saving and AHU power usage in winter. <i>Sustainable Energy Technologies and Assessments</i> , 2021, 43, 100969.	2.7	17
93	Computer simulation of stability and control of tractor-trailed implement combinations under different operating conditions. <i>Bragantia</i> , 2004, 63, 149-162.	1.3	16
94	Numerical study of a three-dimensional forced laminar flow in a channel equipped with a perforated baffle. <i>Numerical Heat Transfer; Part A: Applications</i> , 2018, 73, 881-894.	2.1	16
95	Heat transfer intensification induced by electrically generated convection between two elliptical cylinders. <i>International Journal of Thermal Sciences</i> , 2019, 135, 523-532.	4.9	16
96	Performance prediction of a solar refrigeration system under various operating pressure of evaporator and condenser. <i>Solar Energy</i> , 2020, 209, 485-492.	6.1	16
97	Effects of ribs on thermal performance of curved absorber tube used in cylindrical solar collectors. <i>Renewable Energy</i> , 2020, 161, 1260-1275.	8.9	16
98	Exergoeconomic analysis of a Peltier effect air cooler using experimental data. <i>Applied Thermal Engineering</i> , 2021, 186, 116513.	6.0	16
99	Three-dimensional computational fluid dynamics analysis of buoyancy-driven natural ventilation and entropy generation in a prismatic greenhouse. <i>Thermal Science</i> , 2018, 22, 73-85.	1.1	16
100	Implicit Finite Difference Simulation of Prandtl-Eyring Nanofluid over a Flat Plate with Variable Thermal Conductivity: A Tiwari and Das Model. <i>Mathematics</i> , 2021, 9, 3153.	2.2	16
101	Study of the flat plate solar collector's efficiency for sustainable and renewable energy management in a building by a phase change material: Containing paraffin-wax/Graphene and Paraffin-wax/graphene oxide carbon-based fluids. <i>Journal of Building Engineering</i> , 2022, 57, 104804.	3.4	16
102	Three dimensional analysis of natural convection and entropy generation in a sharp edged finned cavity. <i>AEJ - Alexandria Engineering Journal</i> , 2016, 55, 991-1004.	6.4	15
103	Magnetohydrodynamic flow and heat transfer of ferrofluid in a channel with non-symmetric cavities. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 140, 811-823.	3.6	15
104	Numerical modelling of a parallel flow heat exchanger with two-phase heat transfer process. <i>International Communications in Heat and Mass Transfer</i> , 2021, 120, 105005.	5.6	15
105	Heat transfer optimization through new form of pin type of finned tube heat exchangers using the exergy and energy analysis. <i>International Journal of Refrigeration</i> , 2020, 117, 12-22.	3.4	14
106	Performing regression-based methods on viscosity of nano-enhanced PCM - Using ANN and RSM. <i>Journal of Materials Research and Technology</i> , 2021, 10, 1184-1194.	5.8	14
107	Natural convection and entropy generation in a three dimensional volumetrically heated and partially divided cavity. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2016, 26, 2492-2508.	2.8	13
108	Effect of tillage systems and polyacrylamide on soil physical properties and wheat grain yield in arid regions differing in fine soil particles. <i>Archives of Agronomy and Soil Science</i> , 2019, 65, 182-196.	2.6	13

#	ARTICLE	IF	CITATIONS
109	Mixed convection due to a rotating cylinder in a 3D corrugated cavity filled with single walled CNT-water nanofluid. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 135, 341-355.	3.6	13
110	Simulation and Analysis with Wavelet Transform Technique and the Vibration Characteristics for Early Revealing of Cracks in Structures. <i>Mathematical Problems in Engineering</i> , 2021, 2021, 1-16.	1.1	13
111	Effect of Compaction and Deep Tillage on Soil Hydraulic and Aeration Properties and Wheat Yield. <i>Communications in Soil Science and Plant Analysis</i> , 2003, 34, 2277-2290.	1.4	12
112	An Experimental Study and Mathematical Simulation of Wheat Drying. <i>Drying Technology</i> , 2004, 22, 491-506.	3.1	12
113	Hydrothermal irreversibility analysis based on multi-criteria assessment in a modified spiral piping system utilized in solar ponds. <i>Renewable Energy</i> , 2020, 162, 355-370.	8.9	12
114	Double diffusive buoyancy induced convection in stepwise open porous cavities filled nanofluid. <i>International Communications in Heat and Mass Transfer</i> , 2020, 119, 104949.	5.6	12
115	Darcy-Brinkman flow of a viscous fluid through a porous duct: Application in blood filtration process. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 117, 223-230.	5.3	12
116	Numerical analysis on heat transfer of a pyramid-shaped photovoltaic panel. <i>Journal of Thermal Analysis and Calorimetry</i> , 2022, 147, 1727-1738.	3.6	12
117	Multiple-relaxation-time lattice Boltzmann analysis of entropy generation in a hot-block-inserted square cavity for different Prandtl numbers. <i>International Journal of Thermal Sciences</i> , 2021, 165, 106948.	4.9	12
118	Free Convection in an Open Triangular Cavity Filled With a Nanofluid Under the Effects of Brownian Diffusion, Thermophoresis and Local Heater. <i>Journal of Heat Transfer</i> , 2018, 140, .	2.1	11
119	The effect of various forms of the tube cross on the energetic and exergetic analysis of helical tube in tube heat exchangers of an AHU with energy recovery unit in heating mode: injection of vapor/water particles. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 144, 2709.	3.6	11
120	Numerical study on heat loss from the surface of solar collector tube filled by oil-NE-PCM/Al ₂ O ₃ in the presence of the magnetic field. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 144, 2627.	3.6	11
121	The effects of incident solar radiation on the collector efficiency using coolant hybrid nanofluid via simulation of solar tower system with the parallel heat exchangers. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 124, 106-115.	5.3	11
122	Specific Heat and Volumetric Heat Capacity of Granular Materials as Affected by Moisture and Density. <i>Applied Mechanics and Materials</i> , 0, 575, 103-107.	0.2	10
123	Unsteady natural convection with entropy generation in partially open triangular cavities with a local heat source. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2017, 27, 2696-2716.	2.8	10
124	Investigation of the effect of the finned coiled wire insert on the heat transfer intensification of circular tube: Energy and exergy analysis. <i>Chemical Engineering and Processing: Process Intensification</i> , 2021, 160, 108245.	3.6	10
125	A three-dimensional computational analysis of ellipsoidal radiator with phase change. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2021, 31, 2072-2087.	2.8	10
126	Exergetic performance of the helically coiled tube heat exchangers: Comparison the sector-by-sector with tube in tube types. <i>AEJ - Alexandria Engineering Journal</i> , 2021, 60, 979-993.	6.4	10

#	ARTICLE	IF	CITATIONS
127	Multi-physics investigation within a porous media with involving magnetic field impact on nanofluid. Journal of Petroleum Science and Engineering, 2021, 207, 109173.	4.2	10
128	Mixing efficiency of hydrogen jet through multi lobe-injectors at scramjet engine: A numerical study. Aerospace Science and Technology, 2022, 120, 107293.	4.8	10
129	Hydraulically powered soil core sampler and its application to soil density and porosity estimation. Soil and Tillage Research, 1999, 52, 113-120.	5.6	9
130	Control of a liquid-liquid heat exchanger. Heat and Mass Transfer, 2002, 38, 687-693.	2.1	9
131	Mixed convectionâ€“radiation in lid-driven cavities with nanofluids and time-dependent heat-generating body. Journal of Thermal Analysis and Calorimetry, 2021, 146, 725-738.	3.6	9
132	A review on ferrofluids with the effect of MHD and entropy generation due to convective heat transfer. European Physical Journal Plus, 2022, 137, 1.	2.6	9
133	Energy and exergy analysis and optimum working conditions of a renewable energy system using a transient systems simulation program. Energy Exploration and Exploitation, 2020, 38, 1248-1261.	2.3	8
134	Numerical investigation of molten salt/SiO ₂ nano-fluid in the solar power plant cycle and examining different arrangements of shell and tube heat exchangers and plate heat exchangers in these cycles. Journal of the Taiwan Institute of Chemical Engineers, 2021, 124, 1-8.	5.3	8
135	CONTROL OF HEAT TRANSFER AND FLUID FLOW VIA A MOVING FIN IN A TRIANGULAR ENCLOSURE FILLED WITH NANOFUID. Heat Transfer Research, 2019, 50, 159-181.	1.6	8
136	A case study in the field of sustainability energy: Transient heat transfer analysis of an ice thermal storage system with boiling heat transfer process for air-conditioning application. Energy Reports, 2022, 8, 1034-1045.	5.1	8
137	Development and Mechanistic Studies of Ternary Nanocomposites for Hydrogen Production from Water Splitting to Yield Sustainable/Green Energy and Environmental Remediation. Polymers, 2022, 14, 1290.	4.5	8
138	Effects of different models of thermal conductivity on turbulent nanofluid flow through rectangular cavity in duct. Journal of Molecular Liquids, 2015, 212, 915-921.	4.9	7
139	Experimental investigation on the heat transfer performance of MHTHS using ethylene glycol-based nanofluids. Journal of Thermal Analysis and Calorimetry, 2021, 143, 61-71.	3.6	7
140	Surface modification of transversely twisted-turbulator using perforations and winglets: An extended study. International Communications in Heat and Mass Transfer, 2021, 120, 105020.	5.6	7
141	Charging process of thermal energy storage system under varying incident heat flux: interaction the fluid neighbour nodes and particles in order to heat transfer. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2423.	3.6	7
142	Influence of upstream angled ramp on fuel mixing of hydrogen jet at supersonic cross flow. Aerospace Science and Technology, 2021, 119, 107099.	4.8	7
143	Integration of a solar air heater to a building equipped with PCM to reduce the energy demand. Journal of Building Engineering, 2022, 48, 103948.	3.4	7
144	Numerical Crank-Nicolson transient thermal analysis of a single U-tube vertical ground battery borehole heat exchanger filled with the phase change material. Journal of Energy Storage, 2022, 53, 105119.	8.1	7

#	ARTICLE	IF	CITATIONS
145	Impacts of conductive inner L-shaped obstacle and elastic bottom wall on MHD forced convection of a nanofluid in vented cavity. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 141, 465-482.	3.6	6
146	Use of artificial neural network in forecasting optimal distance of enclosures containing PCM-introduced for improving the performance of the evacuated tube solar collectors. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 2177-2190.	3.6	6
147	Navigating viscosity of ferrofluid using response surface methodology and artificial neural network. <i>Journal of Materials Research and Technology</i> , 2020, 9, 16339-16348.	5.8	6
148	Natural convection and entropy production in a cubic cavity heated via pin-fins heat sinks. <i>International Journal of Heat and Technology</i> , 2017, 35, 109-115.	0.6	6
149	Runoff and erosion as affected by tillage system and polyacrylamide in two sandy loam soils differing in silt and clay contents in semi-arid regions. <i>Soil and Environment</i> , 2018, 37, 11-20.	1.1	6
150	On the solitary wave solution of the viscosity capillarity van der Waals p-system along with Painleve analysis. <i>Chaos, Solitons and Fractals</i> , 2021, 153, 111495.	5.1	6
151	Measurement of thermophysical properties with nanomaterials on the Melting/Freezing characteristics of phase change material. <i>Measurement: Journal of the International Measurement Confederation</i> , 2022, 199, 111477.	5.0	6
152	The disturbance of topsoil using ultrasonic waves. <i>Soil and Tillage Research</i> , 2004, 75, 87-92.	5.6	5
153	The First Solar Power Tower System in Saudi Arabia. <i>Applied Mechanics and Materials</i> , 0, 672-674, 123-126.	0.2	5
154	Effects of moving lid direction on mixed convection and entropy generation in a cubical cavity with longitudinal triangular fin insertion. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2017, 27, 839-860.	2.8	5
155	Natural convection in a differentially heated enclosure having two adherent porous blocks saturated with a nanofluid. <i>European Physical Journal Plus</i> , 2017, 132, 1.	2.6	5
156	Thermal and hydraulic performance of the twisted tube bank as a new arrangement and its comparison with other common arrangements. <i>Chemical Engineering Research and Design</i> , 2020, 157, 46-57.	5.6	5
157	An investigation on effects of blade angle and magnetic field on flow and heat transfer of non-Newtonian nanofluids: A numerical simulation. <i>International Communications in Heat and Mass Transfer</i> , 2021, 120, 105074.	5.6	5
158	Optimal selection and techno-economic analysis of a hybrid power generation system. <i>Journal of Renewable and Sustainable Energy</i> , 2019, 11, 055902.	2.0	4
159	Thermogravitational convection of $Al_2O_3-H_2O$ nanofluid in a square chamber with intermittent blocks. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2020, 30, 1365-1378.	2.8	4
160	Hydrodynamic analysis of a heat exchanger with crosscut twisted tapes and filled with thermal oil-based SWCNT nanofluid: applying ANN for prediction of objective parameters. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 2163-2176.	3.6	4
161	The effects of using corrugated booster reflectors to improve the performance of a novel solar collector to apply in cooling PV cells-Navigating performance using ANN. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 2151-2162.	3.6	4
162	An investigation of the second law performance for a condenser used in 210MW thermal power station. <i>Case Studies in Thermal Engineering</i> , 2021, 26, 100992.	5.7	4

#	ARTICLE	IF	CITATIONS
163	Thermal behavior of heat storage system with incorporating nanomaterial. Case Studies in Thermal Engineering, 2022, 31, 101827.	5.7	4
164	Thermal management of a lithium ion battery pack connected to a solar panel using a comparison of two cavities filled with phase change materials: Oval and rectangular. Journal of Energy Storage, 2022, 52, 105061.	8.1	4
165	Reducing electricity demand by integrating a sustainable pack into HVAC- adding PCM in sustainable pack as well as building envelopes. Journal of Building Engineering, 2022, 57, 104915.	3.4	4
166	An analytical solution of the dynamics of a symmetrically operated parallel flow heat exchanger. Heat and Mass Transfer, 2013, 49, 1471-1479.	2.1	3
167	Third-grade non-Newtonian fluid flow and heat transfer in two coaxial pipes with a variable radius ratio with magnetic field. International Journal of Numerical Methods for Heat and Fluid Flow, 2021, 31, 959-981.	2.8	3
168	Enhancement of heat extraction from solar ponds by using twisted coil tubes. Environmental Progress and Sustainable Energy, 2021, 40, e13604.	2.3	3
169	Exergetic performance analysis on helically coiled tube heat exchanger-forecasting thermal conductivity of SiO ₂ /EG nanofluid using ANN and RSM to examine effectiveness of using nanofluids. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2721.	3.6	3
170	Multi-objective optimization of heat transfer through the various types of tube banks arrangements. AEJ - Alexandria Engineering Journal, 2021, 60, 2905-2919.	6.4	3
171	Using Phase Change Materials (PCMs) in a Hot and Humid Climate to Reduce Heat Gain and Energy Consumption. Sustainability, 2021, 13, 10965.	3.2	3
172	Using proportional-integral-derivative controllers and PCM and a new design of building air intake with five scenarios to present a multi-zone CAV-AHU for tackling high energy consumption. Journal of Building Engineering, 2022, 56, 104764.	3.4	3
173	IT Information Technology. Biosystems Engineering, 2001, 79, 177-185.	0.4	2
174	Study of heat transfer intensification through new types of tubular heat exchangers with rod bank insert. Chemical Engineering and Processing: Process Intensification, 2020, 152, 107912.	3.6	2
175	Sensitivity analysis on thermophysical properties efficacy on PCM-based heat sink usefulness: effects of solid particles versus liquid phase fraction. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2699.	3.6	2
176	Thermal systems energy optimization employing two independent circuits of double vertical ground U-tube with PCM as the backfill material for building. Journal of Building Engineering, 2022, 56, 104752.	3.4	2
177	Increasing electricity generation Installing photovoltaic cells coupled to a battery pack, to provide the electricity. Journal of Energy Storage, 2022, 54, 105264.	8.1	2
178	Conceptual Design of Solar Powered Unmanned Arial Vehicle. Applied Mechanics and Materials, 2012, 225, 299-304.	0.2	1
179	Application of Finite Element to Spur Gear Stress Reduction Using Stress Relieving Feature. Applied Mechanics and Materials, 0, 575, 296-299.	0.2	1
180	Bio-Diesel from Almond Oil as an Alternative Fuel for Diesel Engines. Applied Mechanics and Materials, 0, 575, 624-627.	0.2	1

#	ARTICLE	IF	CITATIONS
181	A Small Concentrating Solar Power Tower System. Applied Mechanics and Materials, 0, 575, 640-643.	0.2	1
182	Design of Methane Digester for Jeddah Industrial Estate Waste Water Treatment Plant. Applied Mechanics and Materials, 0, 675-677, 615-618.	0.2	1
183	Three-dimensional analysis of heat transfer in a channel provided with solid baffle, single and double perforation. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 30, 4267-4280.	2.8	1
184	Three separated phase's equations regarding nano-encapsulated phase change material/multi-walled carbon nanotube-Fe ₃ O ₄ -water mixture in a porous half-annulus collector with corrugated wall using Buongiorno's model: Brownian and thermophoresis effects. Mathematical Methods in the Applied Sciences, 0, , .	2.3	1
185	Evaluation of a tube equipped with different inserts: competition between improvements in heat transfer versus increase in pressure drop. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2665.	3.6	1
186	Transient performance analysis of a heliostat field: Using artificial neural network to predict the net radiation. Mathematical Methods in the Applied Sciences, 0, , .	2.3	1
187	FVM method based on $K \sim \mu$ model to simulate the turbulent convection of nanofluid through the heat exchanger porous media. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2689.	3.6	1
188	Investigation of the impact of the reactants temperature and equivalence ratio on the outlet mixture temperature, velocity and mole fraction for the combustion of the carbon monoxide and nitrous. AEJ - Alexandria Engineering Journal, 2020, 59, 1013-1025.	6.4	1
189	EFFECTS OF VARIABLE TEMPERATURE ON MIXED CONVECTION OF A CU-WATER NANOFLUID IN A DOUBLE-LID-DRIVEN POROUS ENCLOSURE WITH ACTIVE MIDDLE VERTICAL WALL. Journal of Porous Media, 2019, 22, 481-497.	1.9	1
190	Heat storage unit for melting of paraffin considering hybrid nanomaterial and helical tubes. Journal of Energy Storage, 2021, 44, 103427.	8.1	1
191	Thermal management of carbon-based dental laminate via additives carbon nanotube and hydroxyapatite in a vessel micro-flow based on the numerical/empirical data. European Physical Journal Plus, 2022, 137, .	2.6	1
192	Thermal systems energy optimization using multifunctional hybrid clean solar energy joined with chiller-based cooling: Effects of solar-assisted system on efficiency. Sustainable Energy Technologies and Assessments, 2022, 53, 102397.	2.7	1
193	Using PCM for building energy management to postpone the electricity demand peak load and approving a new PID controller to activate alternative chiller. Journal of Building Engineering, 2022, 57, 104884.	3.4	1
194	Combine Tractive Devices: Effects on Soil Compaction. , 0, , .		0
195	The behavior of welded dissimilar metals structures under rotating reversed cyclic bending. Journal of Materials Processing Technology, 2014, 214, 1259-1274.	6.3	0
196	The role of convective heat transfer coefficient in CuO nanoparticles-PCM cooling ability in heat sinks with insulated side walls: comparison with the air cooled one. Journal of Thermal Analysis and Calorimetry, 2021, 144, 2615.	3.6	0
197	Design development and thermal performance assessment of latent heat storage of a solar stove unit involving NEPCM. Applied Nanoscience (Switzerland), 0, , 1.	3.1	0
198	Numerical study and artificial neural network modeling of the tube banks arrangement considering exergetic performance. Journal of Thermal Analysis and Calorimetry, 2021, 145, 2241-2259.	3.6	0

#	ARTICLE	IF	CITATIONS
199	Improving energy storage and performance through implementing artificial neural network modeling to forecast heat transfer and entropy generation within a wavy-wall microchannel under discontinuous boundary condition hybrid nanofluid utilization. <i>Mathematical Methods in the Applied Sciences</i> , 0, , .	2.3	0
200	Mathematical modeling of carbon nanotube nanofluid behavior within mechanical system considering gradient effects. <i>Applied Nanoscience (Switzerland)</i> , 0, , 1.	3.1	0
201	Beams, Plates and Shells in the Special Theory of Gradient Elasticity (GRADELA). <i>Journal of King Abdulaziz University-Engineering Sciences</i> , 2014, 25, 115-142.	0.0	0
202	Two-temperature dual-phase-lags theory in a thermoelastic solid half-space due to an inclined load. <i>Mechanical Sciences</i> , 2016, 7, 179-187.	1.0	0
203	Combined Artificial Neural Network/Fuzzy modelling to optimize the Prototype of Concentrating Solar Tower using Analytic Hierarchy Process Technique. <i>International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems</i> , 0, , .	1.9	0
204	Simulation for discharging of phase change material within a porous duct utilizing multi layers. <i>Journal of Petroleum Science and Engineering</i> , 2022, 213, 110305.	4.2	0
205	Flow and heat transfer of ferro nanofluid in a porous medium under the impact of a static magnetic field. <i>Waves in Random and Complex Media</i> , 0, , 1-19.	2.7	0
206	Simulation for converting of two phase of water in complex container with finite element approach. <i>Journal of Petroleum Science and Engineering</i> , 2022, , 110675.	4.2	0
207	Effect of lithium-ion batteries on heating a residential building using PCM: Changing the horizontal distance between batteries. <i>Journal of Building Engineering</i> , 2022, 57, 104931.	3.4	0