Acm Sousa

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/500553/publications.pdf

Version: 2024-02-01

120 papers	5,001 citations	101384 36 h-index	95083 68 g-index
121 all docs	121 docs citations	121 times ranked	3691 citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced heat transfer and friction factor of MWCNTâ€“Fe3O4/water hybrid nanofluids. International Communications in Heat and Mass Transfer, 2014, 52, 73-83.	2.9	482
2	Hybrid nanofluids preparation, thermal properties, heat transfer and friction factor â€“ A review. Renewable and Sustainable Energy Reviews, 2017, 68, 185-198.	8.2	406
3	Investigation of thermal conductivity and viscosity of Fe3O4 nanofluid for heat transfer applications. International Communications in Heat and Mass Transfer, 2013, 44, 7-14.	2.9	350
4	A general model for the permeability of fibrous porous media based on fluid flow simulations using the lattice Boltzmann method. Composites Part A: Applied Science and Manufacturing, 2009, 40, 860-869.	3.8	220
5	Thermal conductivity and viscosity of stabilized ethylene glycol and water mixture Al2O3 nanofluids for heat transfer applications: An experimental study. International Communications in Heat and Mass Transfer, 2014, 56, 86-95.	2.9	219
6	Thermal conductivity of ethylene glycol and water mixture based Fe3O4 nanofluid. International Communications in Heat and Mass Transfer, 2013, 49, 17-24.	2.9	159
7	Nanodiamond-Fe 3 O 4 nanofluids: Preparation and measurement of viscosity, electrical and thermal conductivities. International Communications in Heat and Mass Transfer, 2016, 73, 62-74.	2.9	157
8	Minimization of thermal non-uniformity in lithium-ion battery pack cooled by channeled liquid flow. International Journal of Heat and Mass Transfer, 2019, 129, 660-670.	2.5	138
9	Experimental investigation of Al2O3/water nanofluids on the effectiveness of solar flat-plate collectors with and without twisted tape inserts. Renewable Energy, 2018, 119, 820-833.	4.3	123
10	Experimental investigation of the thermal transport properties of graphene oxide/Co 3 O 4 hybrid nanofluids. International Communications in Heat and Mass Transfer, 2017, 84, 1-10.	2.9	117
11	Thermal conductivity and viscosity of hybrid nanfluids prepared with magnetic nanodiamond-cobalt oxide (ND-Co3O4) nanocomposite. Case Studies in Thermal Engineering, 2016, 7, 66-77.	2.8	106
12	Thermal conductivity and viscosity of water based nanodiamond (ND) nanofluids: An experimental study. International Communications in Heat and Mass Transfer, 2016, 76, 245-255.	2.9	100
13	Heat transfer, friction factor and effectiveness analysis of Fe 3 O 4 /water nanofluid flow in a double pipe heat exchanger with return bend. International Communications in Heat and Mass Transfer, 2017, 81, 155-163.	2.9	89
14	Experimental investigations in heat transfer and friction factor of magnetic Ni nanofluid flowing in a tube. International Journal of Heat and Mass Transfer, 2014, 70, 224-234.	2.5	78
15	Exergetic and environmental life cycle assessment analysis of concentrated solar power plants. Renewable and Sustainable Energy Reviews, 2016, 56, 145-155.	8.2	76
16	Effectiveness analysis of solar flat plate collector with Al2O3 water nanofluids and with longitudinal strip inserts. International Journal of Heat and Mass Transfer, 2018, 127, 422-435.	2.5	75
17	Experimental study of heat transfer and friction factor of Al2O3 nanofluid in U-tube heat exchanger with helical tape inserts. Experimental Thermal and Fluid Science, 2015, 62, 141-150.	1.5	71
18	Effects of enhanced surfaces and surface orientation on nucleate and film boiling heat transfer in R-11. International Journal of Heat and Mass Transfer, 1987, 30, 2627-2639.	2.5	70

#	Article	IF	Citations
19	SIMULATION OF COUPLED FLOWS IN ADJACENT POROUS AND OPEN DOMAINS USING ACONTROL-VOLUME FINITE-ELEMENT METHOD. Numerical Heat Transfer; Part A: Applications, 2004, 45, 675-697.	1.2	69
20	Turbulent heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube: An experimental study. International Journal of Heat and Mass Transfer, 2018, 117, 223-234.	2.5	68
21	Physical and numerical modelling of a solar chimney-based ventilation system for buildings. Building and Environment, 1992, 27, 433-445.	3.0	62
22	Heat transfer and friction factor of multi-walled carbon nanotubesâ€“Fe 3 O 4 nanocomposite nanofluids flow in a tube with/without longitudinal strip inserts. International Journal of Heat and Mass Transfer, 2016, 100, 691-703.	2.5	62
23	Experimental heat transfer, friction factor and effectiveness analysis of Fe3O4 nanofluid flow in a horizontal plain tube with return bend and wire coil inserts. International Journal of Heat and Mass Transfer, 2017, 109, 440-453.	2.5	60
24	Modeling of flow and thermo-kinetics during the cure of thick laminated composites. International Journal of Thermal Sciences, 2003, 42, 15-22.	2.6	59
25	Mesoscale SPH modeling of fluid flow in isotropic porous media. Computer Physics Communications, 2007, 176, 471-480.	3.0	55
26	Experimental investigation of thermo-physical properties, heat transfer, pumping power, entropy generation, and exergy efficiency of nanodiamondÂ+ÂFe3O4/60:40% water-ethylene glycol hybrid nanofluid flow in a tube. Thermal Science and Engineering Progress, 2021, 21, 100799.	1.3	55
27	Moisture transport in initially fully saturated concrete during drying. Transport in Porous Media, 1996, 24, 81-106.	1.2	54
28	Experimental thermal conductivity and viscosity of nanodiamond-based propylene glycol and water mixtures. Diamond and Related Materials, 2016, 69, 49-60.	1.8	49
29	Experimental and numerical simulation of flow around two-dimensional hills. Journal of Wind Engineering and Industrial Aerodynamics, 1995, 54-55, 173-181.	1.7	48
30	Effect of twisted tape inserts on heat transfer, friction factor of Fe3O4 nanofluids flow in a double pipe U-bend heat exchanger. International Communications in Heat and Mass Transfer, 2018, 95, 53-62.	2.9	47
31	Thermal response analysis of LPG tanks exposed to fire. Journal of Hazardous Materials, 1988, 20, 239-262.	6.5	43
32	Through-thickness permeability prediction of three-dimensional multifilament woven fabrics. Composites Part A: Applied Science and Manufacturing, 2010, 41, 453-463.	3.8	43
33	Electrical conductivity enhancement of nanodiamondâ€“nickel (NDâ€“Ni) nanocomposite based magnetic nanofluids. International Communications in Heat and Mass Transfer, 2014, 57, 1-7.	2.9	42
34	Prediction of building interference effects on pedestrian level comfort. Journal of Wind Engineering and Industrial Aerodynamics, 2002, 90, 305-319.	1.7	41
35	Heat transfer, friction factor and effectiveness of Fe 3 O 4 nanofluid flow in an inner tube of double pipe U-bend heat exchanger with and without longitudinal strip inserts. Experimental Thermal and Fluid Science, 2017, 85, 331-343.	1.5	39
36	Heat transfer and effectiveness experimentally-based analysis of wire coil with core-rod inserted in Fe3O4/water nanofluid flow in a double pipe U-bend heat exchanger. International Journal of Heat and Mass Transfer, 2019, 134, 405-419.	2.5	39

#	Article	IF	Citations
37	Properties, heat transfer, energy efficiency and environmental emissions analysis of flat plate solar collector using nanodiamond nanofluids. Diamond and Related Materials, 2020, 110, 108115.	1.8	39
38	Wind tunnel and computational study of the stoss slope effect on the aeolian erosion of transverse sand dunes. Aeolian Research, 2011, 3, 303-314.	1.1	36
39	Integrated biomimetic carbon nanotube composites for in vivo systems. Nanoscale, 2010, 2, 2855.	2.8	35
40	Laminar natural convection in a vertical stack of parallelogrammic partial enclosures with variable geometry. International Journal of Heat and Mass Transfer, 2005, 48, 779-792.	2.5	34
41	Combination of Co3O4 deposited rGO hybrid nanofluids and longitudinal strip inserts: Thermal properties, heat transfer, friction factor, and thermal performance evaluations. Thermal Science and Engineering Progress, 2020, 20, 100695.	1.3	33
42	A study of the effect of the tank diameter on the thermal stratification in LPG tanks subjected to fire engulfment. Journal of Hazardous Materials, 1990, 25, 19-31.	6.5	32
43	Heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube with longitudinal strip inserts. International Journal of Heat and Mass Transfer, 2018, 121, 390-401.	2.5	32
44	Energy, efficiency, economic impact, and heat transfer aspects of solar flat plate collector with Al2O3 nanofluids and wire coil with core rod inserts. Sustainable Energy Technologies and Assessments, 2020, 40, 100772.	1.7	32
45	Experimental analysis of exergy efficiency and entropy generation of diamond/water nanofluids flow in a thermosyphon flat plate solar collector. International Communications in Heat and Mass Transfer, 2021, 120, 105057.	2.9	32
46	Neural network analysis of experimental data for air/water spray cooling. Journal of Materials Processing Technology, 2001, 113, 439-445.	3.1	30
47	Control of laminar natural convection in differentially heated square enclosures using solid inserts at the corners. International Journal of Heat and Mass Transfer, 2003, 46, 3529-3537.	2.5	30
48	Moisture and Heat Flow in Concrete Walls Exposed to Fire. Journal of Engineering Mechanics - ASCE, 1994, 120, 2028-2043.	1.6	29
49	The Numerical and Experimental Study of a Power Plant Condenser. Journal of Heat Transfer, 1993, 115, 435-445.	1.2	28
50	NUMERICAL SIMULATION OF TURBULENT FLOW AND FIRE PROPAGATION IN COMPLEX TOPOGRAPHY. Numerical Heat Transfer; Part A: Applications, 1995, 27, 229-253.	1.2	27
51	Effective thermal conductivity of heterogeneous multi-component materials: an SPH implementation. Heat and Mass Transfer, 2007, 43, 479-491.	1.2	27
52	Filling carbon nanotubes with magnetic particles. Journal of Materials Chemistry C, 2013, 1, 2860.	2.7	25
53	Prediction of the Mechanical Properties of Hydroxyapatite/Polymethyl Methacrylate/Carbon Nanotubes Nanocomposite. Journal of Nanoscience and Nanotechnology, 2008, 8, 4279-4284.	0.9	24
54	Enhanced thermal properties of nanodiamond nanofluids. Chemical Physics Letters, 2016, 644, 99-110.	1.2	24

#	Article	IF	Citations
55	Smoothed Particle Hydrodynamics Modeling of Transverse Flow in Randomly Aligned Fibrous Porous Media. Transport in Porous Media, 2008, 75, 17-33.	1.2	23
56	Natural convection in square enclosures filled with fluid-saturated porous media under the influence of the magnetic field induced by two parallel vertical electric currents. International Journal of Heat and Mass Transfer, 2012, 55, 7321-7329.	2.5	22
57	Analytical Solution for Hyperbolic Heat Conduction in a Hollow Sphere. Journal of Thermophysics and Heat Transfer, 2005, 19, 595-598.	0.9	20
58	Thermal entropy and exergy efficiency analyses of nanodiamond/water nanofluid flow in a plate heat exchanger. Diamond and Related Materials, 2021, 120, 108648.	1.8	19
59	Efficiency, energy and economic analysis of twisted tape inserts in a thermosyphon solar flat plate collector with Cu nanofluids. Renewable Energy Focus, 2020, 35, 10-31.	2.2	18
60	SPH simulation of transition to turbulence for planar shear flow subjected to a streamwise magnetic field. Journal of Computational Physics, 2006, 217, 485-501.	1.9	17
61	Heat Transfer of rGO/CO3O4 Hybrid Nanomaterial-Based Nanofluids and Twisted Tape Configurations in a Tube. Journal of Thermal Science and Engineering Applications, 2021, 13, .	0.8	17
62	Full-scale measurements for evaluation of coal dust release from train wagons with two different shelter covers. Journal of Wind Engineering and Industrial Aerodynamics, 2003, 91, 1271-1283.	1.7	16
63	SPH Numerical Modeling for Ballistic-Diffusive Heat Conduction. Numerical Heat Transfer, Part B: Fundamentals, 2006, 50, 499-515.	0.6	16
64	FMR study of carbon nanotubes filled with Fe3O4 nanoparticles. Journal of Magnetism and Magnetic Materials, 2014, 358-359, 44-49.	1.0	16
65	Numerical simulation of non-Darcian flows through spaces partially filled with a porous medium. Computers and Structures, 2004, 82, 1535-1541.	2.4	15
66	A convectionâ€“diffusion CFD model for aeolian particle transport. International Journal for Numerical Methods in Fluids, 2004, 45, 797-817.	0.9	15
67	Numerical Simulation of Turbulent Shear Flow in an Isothermal Heat Exchanger Model. Journal of Fluids Engineering, Transactions of the ASME, 1990, 112, 48-55.	0.8	13
68	Computational modeling of the wind erosion on a sinusoidal pile using a moving boundary method. Geomorphology, 2011, 130, 299-311.	1.1	13
69	Second law of thermodynamic analysis of 40:60% propylene glycol and water mixture based nanodiamond nanofluid under transition flow. Diamond and Related Materials, 2021, 117, 108480.	1.8	12
70	An efficient algorithm for solving the incompressible fluid flow equations. International Journal for Numerical Methods in Fluids, 1986, 6, 557-572.	0.9	11
71	Fluid flow simulation at openâ€“porous medium interface using the lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2008, 56, 1449-1456.	0.9	11
72	Deployment of parabolic trough concentrated solar power plants in North Africa â€“ a case study for Libya. International Journal of Green Energy, 2019, 16, 72-85.	2.1	11

#	Article	IF	Citations
73	A parametric study of the Hazelett thin-slab casting process. Journal of Materials Processing Technology, 1995, 49, 41-56.	3.1	10
74	Ignition of epoxy by a high radiation source. A numerical study. International Journal of Thermal Sciences, 1999, 38, 315-323.	2.6	10
75	Solar energy absorbed thermosyphon flat plate collector analysis using Cu/H2O nanofluid â€“ An experimental study. Energy and Climate Change, 2021, 2, 100028.	2.2	10
76	Experimental Heat Transfer and Friction Factor of Fe3O4 Magnetic Nanofluids Flow in a Tube under Laminar Flow at High Prandtl Numbers. International Journal of Heat and Technology, 2020, 38, 301-313.	0.3	10
77	The effect of surface regression on the downward flame spread over a solid fuel in a quiescent ambient. Thermal Science, 2007, 11, 67-86.	0.5	10
78	Mathematical modelling of LPG tanks subjected to full and partial fire engulfment. International Journal for Numerical Methods in Engineering, 1990, 30, 629-646.	1.5	9
79	Numerical and experimental analysis of wind erosion on a sinusoidal pile. Environmental Fluid Mechanics, 2011, 11, 167-181.	0.7	9
80	Prediction of erosion intermittency using Large Eddy Simulation. Geomorphology, 2020, 364, 107179.	1.1	9
81	Flow field predictions in a model heat exchanger. Computational Mechanics, 1988, 3, 419-428.	2.2	8
82	SPH Simulation of Low Reynolds Number Planar Shear Flow and Heat Convection. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 613-619.	0.5	8
83	Modelling on the mechanical properties of nanocomposite hydroxyapatite/PMMA/carbon nanotube coatings. International Journal of Nano and Biomaterials, 2007, 1, 107.	0.1	8
84	Biocompatibility and biotoxicity of in-situ synthesized carboxylated nanodiamond-cobalt oxide nanocomposite. Journal of Materials Science and Technology, 2017, 33, 879-888.	5.6	8
85	Simulation of Thermomagnetic Convection in a Cavity Using the Lattice Boltzmann Model. Journal of Applied Mathematics, 2011, 2011, 1-14.	0.4	7
86	Effect of a non-constant magnetic field on natural convection in a horizontal porous layer heated from the bottom. Journal of Engineering Mathematics, 2013, 81, 141-155.	0.6	7
87	Heat Transfer and Friction Factor of Al₂O₃ Nanofluid Flow in a Double Pipe U-Tube Heat Exchanger and with Longitudinal Strip Inserts: An Experimental Study. Journal of Nanofluids, 2015, 4, 293-301.	1.4	7
88	The second law of thermodynamic analysis for longitudinal strip inserted nanodiamond-Fe3O4/water hybrid nanofluids. International Journal of Thermal Sciences, 2022, 181, 107721.	2.6	7
89	Transient laminar free convection in horizontal cylinders. Heat and Mass Transfer, 1986, 20, 59-67.	0.2	6
90	Hydrogen Adsorption onto Nickel Modified Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2008, 8, 4023-4028.	0.9	5

#	Article	IF	Citations
91	Biotoxicity study of bone cement based on a functionalised multi-walled carbon nanotube-reinforced PMMA/HAp nanocomposite. International Journal of Nano and Biomaterials, 2009, 2, 442.	0.1	5
92	Augmentation of Heat Transfer of High Prandtl Number Fe3O4/vacuum pump oil nanofluids flow in a tube with twisted tape inserts in laminar flow. Heat and Mass Transfer, 2020, 56, 3111-3125.	1.2	5
93	Numerical investigation of the influence of air gaps upon the solidification in a rotary caster. Journal of Materials Processing Technology, 1995, 48, 657-665.	3.1	4
94	Arbitrary Motions in Long Cylindrical Squeeze Films: Numerical Model and Experimental Validation. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 1984, 198, 137-143.	1.1	3
95	Heat and fluid flow simulation of the melt-drag single-roll strip casting process. Journal of Materials Processing Technology, 1992, 34, 473-480.	3.1	3
96	The effect of radiation on the laminar natural convection induced by a line heat source. International Journal of Numerical Methods for Heat and Fluid Flow, 2006, 16, 28-45.	1.6	3
97	SPH as an Inverse Numerical Tool for the Prediction of Diffusive Properties in Porous Media. Materials Science Forum, 2007, 553, 171-189.	0.3	3
98	The Cobalt Oxide-Based Composite Nanomaterial Synthesis and Its Biomedical and Engineering Applications. , 0, , .		3
99	Fire Engulfment of Pressure-Liquefied Gas Tanks: Experiments and Modeling. , 1992, , 100-115.		3
100	Evaluation of pressure levels in pipelines due to solar heat gains. Applied Mathematical Modelling, 1985, 9, 16-20.	2.2	2
101	SMOOTHED PARTICLE HYDRODYNAMICS SIMULATION OF EFFECTIVE THERMAL CONDUCTIVITY IN POROUS MEDIA OF VARIOUS PORE STRUCTURES. Journal of Porous Media, 2010, 13, 951-960.	1.0	2
102	Three-dimensional numerical predictions of internally heated free convective flows. Heat and Mass Transfer, 1987, 21, 283-290.	0.2	1
103	Numerical simulation of non-Darcian flows through spaces partially filled with a porous medium. Computers and Structures, 2004, 82, 1535-1535.	2.4	1
104	Modeling of multiphase flow with phase change in porous media - a case study. Materialwissenschaft Und Werkstofftechnik, 2005, 36, 594-601.	0.5	1
105	Lattice Boltzmann Simulation of Three-Dimensional Thermomagnetic Convection in a Micro-Channel. , 2011, , .		1
106	Automated high-throughput screening of carbon nanotube-based bio-nanocomposites for bone cement applications. Pure and Applied Chemistry, 2011, 83, 2063-2069.	0.9	1
107	SPH Simulations for Turbulence Control of Magnetohydrodynamic Poiseuille Flow. , 2005, , .		1
108	Numerical and experimental simulation of the wind field in the EXPO '98 area. Wind and Structures, an International Journal, 1998, 1, 337-349.	0.8	1

#	Article	IF	Citations
109	A CFD study on the Irwin probe flows. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 219, 104808.	1.7	1
110	LBM mesoscale modelling of porous media. WIT Transactions on Engineering Sciences, 2008, , .	0.0	1
111	Three-dimensional simulation of slip-flow and heat transfer in a microchannel using the lattice Boltzmann method. , 2010, , .		1
112	Thermophysical, electrical, magnetic, and dielectric properties of hybrid nanofluids. , 2022, , 65-92.		1
113	Hydrothermal properties of hybrid nanofluids. , 2022, , 93-109.		1
114	Void fraction and temperature Measurements for Pool Boiling around a Horizontal Cylindrical Surface.. 880-02 Nihon Kikai Gakkai RonbunshÅ« Transactions of the Japan Society of Mechanical Engineers Series B B-hen, 1991, 57, 1819-1822.	0.2	0
115	Large eddy simulation of a tunnel fire using two step combustion chemistry. , 2007, , 753-753.		0
116	A Second Opportunity for Old â€œFriendsâ€?. Journal of Phase Equilibria and Diffusion, 2007, 28, 321-321.	0.5	0
117	Numerical Simulation of Thermomagnetic Convection in an Enclosure Using the Lattice Boltzmann Method. , 2010, , .		0
118	Two-Dimensional Simulation of Magnetohydrodynamic Two-Phase Flow in Random Porous Media Using the Lattice Boltzmann Method. , 2010, , .		0
119	Supplementary information â€” Computational modeling of the wind erosion on a sinusoidal pile using a moving boundary method, Geomorphology, Volume 130, Issues 3â€“4, Pages 299â€“311, July 2011. Geomorphology, 2015, 228, 805-806.	1.1	0
120	Experimental correlations for Nusselt number and friction factor of nanofluids. , 2022, , 1-23.		0