

# Acm Sousa

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

111  
papers

3,735  
citations

32  
h-index

58  
g-index

121  
ext. papers

4,347  
ext. citations

4.1  
avg, IF

5.98  
L-index

#	Paper	IF	Citations
111	Thermophysical, electrical, magnetic, and dielectric properties of hybrid nanofluids <b>2022</b> , 65-92		
110	Hydrothermal properties of hybrid nanofluids <b>2022</b> , 93-109		0
109	Experimental correlations for Nusselt number and friction factor of nanofluids <b>2022</b> , 1-23		
108	Heat Transfer of rGO/CO <sub>3</sub> O <sub>4</sub> Hybrid Nanomaterial-Based Nanofluids and Twisted Tape Configurations in a Tube. <i>Journal of Thermal Science and Engineering Applications</i> , <b>2021</b> , 13,	1.9	11
107	A CFD study on the Irwin probe flows. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2021</b> , 219, 104808	3.7	1
106	Thermal entropy and exergy efficiency analyses of nanodiamond/water nanofluid flow in a plate heat exchanger. <i>Diamond and Related Materials</i> , <b>2021</b> , 120, 108648	3.5	4
105	Experimental analysis of exergy efficiency and entropy generation of diamond/water nanofluids flow in a thermosyphon flat plate solar collector. <i>International Communications in Heat and Mass Transfer</i> , <b>2021</b> , 120, 105057	5.8	12
104	Experimental investigation of thermo-physical properties, heat transfer, pumping power, entropy generation, and exergy efficiency of nanodiamond-Fe <sub>3</sub> O <sub>4</sub> /60:40% water-ethylene glycol hybrid nanofluid flow in a tube. <i>Thermal Science and Engineering Progress</i> , <b>2021</b> , 21, 100799	3.6	34
103	Second law of thermodynamic analysis of 40:60% propylene glycol and water mixture based nanodiamond nanofluid under transition flow. <i>Diamond and Related Materials</i> , <b>2021</b> , 117, 108480	3.5	2
102	Solar energy absorbed thermosyphon flat plate collector analysis using Cu/H <sub>2</sub> O nanofluid [An experimental study. <i>Energy and Climate Change</i> , <b>2021</b> , 2, 100028	1.2	2
101	Energy, efficiency, economic impact, and heat transfer aspects of solar flat plate collector with Al <sub>2</sub> O <sub>3</sub> nanofluids and wire coil with core rod inserts. <i>Sustainable Energy Technologies and Assessments</i> , <b>2020</b> , 40, 100772	4.7	23
100	Prediction of erosion intermittency using Large Eddy Simulation. <i>Geomorphology</i> , <b>2020</b> , 364, 107179	4.3	5
99	Combination of Co <sub>3</sub> O <sub>4</sub> deposited rGO hybrid nanofluids and longitudinal strip inserts: Thermal properties, heat transfer, friction factor, and thermal performance evaluations. <i>Thermal Science and Engineering Progress</i> , <b>2020</b> , 20, 100695	3.6	26
98	Efficiency, energy and economic analysis of twisted tape inserts in a thermosyphon solar flat plate collector with Cu nanofluids. <i>Renewable Energy Focus</i> , <b>2020</b> , 35, 10-31	5.4	13
97	Augmentation of Heat Transfer of High Prandtl Number Fe <sub>3</sub> O <sub>4</sub> /vacuum pump oil nanofluids flow in a tube with twisted tape inserts in laminar flow. <i>Heat and Mass Transfer</i> , <b>2020</b> , 56, 3111-3125	2.2	1
96	Properties, heat transfer, energy efficiency and environmental emissions analysis of flat plate solar collector using nanodiamond nanofluids. <i>Diamond and Related Materials</i> , <b>2020</b> , 110, 108115	3.5	27
95	Heat transfer and effectiveness experimentally-based analysis of wire coil with core-rod inserted in Fe <sub>3</sub> O <sub>4</sub> /water nanofluid flow in a double pipe U-bend heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 134, 405-419	4.9	22

94	The Cobalt Oxide-Based Composite Nanomaterial Synthesis and Its Biomedical and Engineering Applications <b>2019</b> ,		2
93	Deployment of parabolic trough concentrated solar power plants in North Africa [A case study for Libya. <i>International Journal of Green Energy</i> , <b>2019</b> , 16, 72-85	3	6
92	Minimization of thermal non-uniformity in lithium-ion battery pack cooled by channeled liquid flow. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 129, 660-670	4.9	71
91	Heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube with longitudinal strip inserts. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 121, 390-401	4.9	24
90	Effect of twisted tape inserts on heat transfer, friction factor of Fe <sub>3</sub> O <sub>4</sub> nanofluids flow in a double pipe U-bend heat exchanger. <i>International Communications in Heat and Mass Transfer</i> , <b>2018</b> , 95, 53-62	5.8	36
89	Experimental investigation of Al <sub>2</sub> O <sub>3</sub> /water nanofluids on the effectiveness of solar flat-plate collectors with and without twisted tape inserts. <i>Renewable Energy</i> , <b>2018</b> , 119, 820-833	8.1	91
88	Turbulent heat transfer and friction factor of nanodiamond-nickel hybrid nanofluids flow in a tube: An experimental study. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 117, 223-234	4.9	47
87	Effectiveness analysis of solar flat plate collector with Al <sub>2</sub> O <sub>3</sub> water nanofluids and with longitudinal strip inserts. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 127, 422-435	4.9	52
86	Experimental heat transfer, friction factor and effectiveness analysis of Fe <sub>3</sub> O <sub>4</sub> nanofluid flow in a horizontal plain tube with return bend and wire coil inserts. <i>International Journal of Heat and Mass Transfer</i> , <b>2017</b> , 109, 440-453	4.9	44
85	Experimental investigation of the thermal transport properties of graphene oxide/Co <sub>3</sub> O <sub>4</sub> hybrid nanofluids. <i>International Communications in Heat and Mass Transfer</i> , <b>2017</b> , 84, 1-10	5.8	88
84	Biocompatibility and biotoxicity of in-situ synthesized carboxylated nanodiamond-cobalt oxide nanocomposite. <i>Journal of Materials Science and Technology</i> , <b>2017</b> , 33, 879-888	9.1	7
83	Heat transfer, friction factor and effectiveness of Fe <sub>3</sub> O <sub>4</sub> nanofluid flow in an inner tube of double pipe U-bend heat exchanger with and without longitudinal strip inserts. <i>Experimental Thermal and Fluid Science</i> , <b>2017</b> , 85, 331-343	3	27
82	Heat transfer, friction factor and effectiveness analysis of Fe <sub>3</sub> O <sub>4</sub> /water nanofluid flow in a double pipe heat exchanger with return bend. <i>International Communications in Heat and Mass Transfer</i> , <b>2017</b> , 81, 155-163	5.8	61
81	Hybrid nanofluids preparation, thermal properties, heat transfer and friction factor [A review. <i>Renewable and Sustainable Energy Reviews</i> , <b>2017</b> , 68, 185-198	16.2	281
80	Thermal conductivity and viscosity of water based nanodiamond (ND) nanofluids: An experimental study. <i>International Communications in Heat and Mass Transfer</i> , <b>2016</b> , 76, 245-255	5.8	76
79	Exergetic and environmental life cycle assessment analysis of concentrated solar power plants. <i>Renewable and Sustainable Energy Reviews</i> , <b>2016</b> , 56, 145-155	16.2	54
78	Thermal conductivity and viscosity of hybrid nanofluids prepared with magnetic nanodiamond-cobalt oxide (ND-Co <sub>3</sub> O <sub>4</sub> ) nanocomposite. <i>Case Studies in Thermal Engineering</i> , <b>2016</b> , 7, 66-77	5.6	79
77	Nanodiamond-Fe <sub>3</sub> O <sub>4</sub> nanofluids: Preparation and measurement of viscosity, electrical and thermal conductivities. <i>International Communications in Heat and Mass Transfer</i> , <b>2016</b> , 73, 62-74	5.8	116

76	Enhanced thermal properties of nanodiamond nanofluids. <i>Chemical Physics Letters</i> , <b>2016</b> , 644, 99-110	2.5	19
75	Heat transfer and friction factor of multi-walled carbon nanotubes/Fe <sub>3</sub> O <sub>4</sub> nanocomposite nanofluids flow in a tube with/without longitudinal strip inserts. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 100, 691-703	4.9	47
74	Experimental thermal conductivity and viscosity of nanodiamond-based propylene glycol and water mixtures. <i>Diamond and Related Materials</i> , <b>2016</b> , 69, 49-60	3.5	39
73	Experimental study of heat transfer and friction factor of Al <sub>2</sub> O <sub>3</sub> nanofluid in U-tube heat exchanger with helical tape inserts. <i>Experimental Thermal and Fluid Science</i> , <b>2015</b> , 62, 141-150	3	55
72	Supplementary information [Computational modeling of the wind erosion on a sinusoidal pile using a moving boundary method, <i>Geomorphology</i> , Volume 130, Issues 3&4, Pages 299&311, July 2011. <i>Geomorphology</i> , <b>2015</b> , 228, 805-806	4.3	
71	Heat Transfer and Friction Factor of Al <sub>2</sub> O <sub>3</sub> Nanofluid Flow in a Double Pipe U-Tube Heat Exchanger and with Longitudinal Strip Inserts: An Experimental Study. <i>Journal of Nanofluids</i> , <b>2015</b> , 4, 293-301	2.2	7
70	Enhanced heat transfer and friction factor of MWCNT/Fe <sub>3</sub> O <sub>4</sub> /water hybrid nanofluids. <i>International Communications in Heat and Mass Transfer</i> , <b>2014</b> , 52, 73-83	5.8	345
69	FMR study of carbon nanotubes filled with Fe <sub>3</sub> O <sub>4</sub> nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2014</b> , 358-359, 44-49	2.8	15
68	Experimental investigations in heat transfer and friction factor of magnetic Ni nanofluid flowing in a tube. <i>International Journal of Heat and Mass Transfer</i> , <b>2014</b> , 70, 224-234	4.9	56
67	Thermal conductivity and viscosity of stabilized ethylene glycol and water mixture Al <sub>2</sub> O <sub>3</sub> nanofluids for heat transfer applications: An experimental study. <i>International Communications in Heat and Mass Transfer</i> , <b>2014</b> , 56, 86-95	5.8	172
66	Electrical conductivity enhancement of nanodiamond/nickel (ND/Ni) nanocomposite based magnetic nanofluids. <i>International Communications in Heat and Mass Transfer</i> , <b>2014</b> , 57, 1-7	5.8	31
65	Thermal conductivity of ethylene glycol and water mixture based Fe <sub>3</sub> O <sub>4</sub> nanofluid. <i>International Communications in Heat and Mass Transfer</i> , <b>2013</b> , 49, 17-24	5.8	127
64	Filling carbon nanotubes with magnetic particles. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 2860	7.1	25
63	Effect of a non-constant magnetic field on natural convection in a horizontal porous layer heated from the bottom. <i>Journal of Engineering Mathematics</i> , <b>2013</b> , 81, 141-155	1.2	7
62	Investigation of thermal conductivity and viscosity of Fe <sub>3</sub> O <sub>4</sub> nanofluid for heat transfer applications. <i>International Communications in Heat and Mass Transfer</i> , <b>2013</b> , 44, 7-14	5.8	253
61	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. <i>International Journal of Heat and Mass Transfer</i> , <b>2012</b> , 55, 7321-7329	4.9	18
60	Wind tunnel and computational study of the stoss slope effect on the aeolian erosion of transverse sand dunes. <i>Aeolian Research</i> , <b>2011</b> , 3, 303-314	3.9	32
59	Computational modeling of the wind erosion on a sinusoidal pile using a moving boundary method. <i>Geomorphology</i> , <b>2011</b> , 130, 299-311	4.3	11

58	Lattice Boltzmann Simulation of Three-Dimensional Thermomagnetic Convection in a Micro-Channel <b>2011</b> ,		1
57	Numerical and experimental analysis of wind erosion on a sinusoidal pile. <i>Environmental Fluid Mechanics</i> , <b>2011</b> , 11, 167-181	2.2	9
56	Automated high-throughput screening of carbon nanotube-based bio-nanocomposites for bone cement applications. <i>Pure and Applied Chemistry</i> , <b>2011</b> , 83, 2063-2069	2.1	1
55	Simulation of Thermomagnetic Convection in a Cavity Using the Lattice Boltzmann Model. <i>Journal of Applied Mathematics</i> , <b>2011</b> , 2011, 1-14	1.1	5
54	Through-thickness permeability prediction of three-dimensional multifilament woven fabrics. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2010</b> , 41, 453-463	8.4	36
53	Integrated biomimetic carbon nanotube composites for in vivo systems. <i>Nanoscale</i> , <b>2010</b> , 2, 2855-63	7.7	32
52	SMOOTHED PARTICLE HYDRODYNAMICS SIMULATION OF EFFECTIVE THERMAL CONDUCTIVITY IN POROUS MEDIA OF VARIOUS PORE STRUCTURES. <i>Journal of Porous Media</i> , <b>2010</b> , 13, 951-960	2.9	2
51	A general model for the permeability of fibrous porous media based on fluid flow simulations using the lattice Boltzmann method. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2009</b> , 40, 860-869	8.4	179
50	Biotoxicity study of bone cement based on a functionalised multi-walled carbon nanotube-reinforced PMMA/HAp nanocomposite. <i>International Journal of Nano and Biomaterials</i> , <b>2009</b> , 2, 442	0.2	4
49	Prediction of the mechanical properties of hydroxyapatite/polymethyl methacrylate/carbon nanotubes nanocomposite. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2008</b> , 8, 4279-84	1.3	22
48	Hydrogen adsorption onto nickel modified carbon nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2008</b> , 8, 4023-8	1.3	5
47	Smoothed Particle Hydrodynamics Modeling of Transverse Flow in Randomly Aligned Fibrous Porous Media. <i>Transport in Porous Media</i> , <b>2008</b> , 75, 17-33	3.1	16
46	Fluid flow simulation at open porous medium interface using the lattice Boltzmann method. <i>International Journal for Numerical Methods in Fluids</i> , <b>2008</b> , 56, 1449-1456	1.9	7
45	Effective thermal conductivity of heterogeneous multi-component materials: an SPH implementation. <i>Heat and Mass Transfer</i> , <b>2007</b> , 43, 479-491	2.2	21
44	Mesoscale SPH modeling of fluid flow in isotropic porous media. <i>Computer Physics Communications</i> , <b>2007</b> , 176, 471-480	4.2	43
43	Modelling on the mechanical properties of nanocomposite hydroxyapatite/PMMA/carbon nanotube coatings. <i>International Journal of Nano and Biomaterials</i> , <b>2007</b> , 1, 107	0.2	6
42	SPH as an Inverse Numerical Tool for the Prediction of Diffusive Properties in Porous Media. <i>Materials Science Forum</i> , <b>2007</b> , 553, 171-189	0.4	3
41	Large eddy simulation of a tunnel fire using two step combustion chemistry <b>2007</b> , 753-753		

40	The effect of surface regression on the downward flame spread over a solid fuel in a quiescent ambient. <i>Thermal Science</i> , <b>2007</b> , 11, 67-86	1.2	7
39	SPH simulation of transition to turbulence for planar shear flow subjected to a streamwise magnetic field. <i>Journal of Computational Physics</i> , <b>2006</b> , 217, 485-501	4.1	15
38	The effect of radiation on the laminar natural convection induced by a line heat source. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , <b>2006</b> , 16, 28-45	4.5	2
37	SPH Numerical Modeling for Ballistic-Diffusive Heat Conduction. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , <b>2006</b> , 50, 499-515	1.3	15
36	Laminar natural convection in a vertical stack of parallelogrammic partial enclosures with variable geometry. <i>International Journal of Heat and Mass Transfer</i> , <b>2005</b> , 48, 779-792	4.9	31
35	Modeling of multiphase flow with phase change in porous media – a case study. <i>Materialwissenschaft Und Werkstofftechnik</i> , <b>2005</b> , 36, 594-601	0.9	1
34	SPH Simulation of Low Reynolds Number Planar Shear Flow and Heat Convection. <i>Materialwissenschaft Und Werkstofftechnik</i> , <b>2005</b> , 36, 613-619	0.9	7
33	Analytical Solution for Hyperbolic Heat Conduction in a Hollow Sphere. <i>Journal of Thermophysics and Heat Transfer</i> , <b>2005</b> , 19, 595-598	1.3	17
32	SIMULATION OF COUPLED FLOWS IN ADJACENT POROUS AND OPEN DOMAINS USING A CONTROL-VOLUME FINITE-ELEMENT METHOD. <i>Numerical Heat Transfer; Part A: Applications</i> , <b>2004</b> , 45, 675-697	2.3	63
31	Numerical simulation of non-Darcian flows through spaces partially filled with a porous medium. <i>Computers and Structures</i> , <b>2004</b> , 82, 1535-1541	4.5	13
30	A convection-diffusion CFD model for aeolian particle transport. <i>International Journal for Numerical Methods in Fluids</i> , <b>2004</b> , 45, 797-817	1.9	13
29	Numerical simulation of non-Darcian flows through spaces partially filled with a porous medium. <i>Computers and Structures</i> , <b>2004</b> , 82, 1535-1535	4.5	
28	Modeling of flow and thermo-kinetics during the cure of thick laminated composites. <i>International Journal of Thermal Sciences</i> , <b>2003</b> , 42, 15-22	4.1	52
27	Full-scale measurements for evaluation of coal dust release from train wagons with two different shelter covers. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2003</b> , 91, 1271-1283	3.7	14
26	Control of laminar natural convection in differentially heated square enclosures using solid inserts at the corners. <i>International Journal of Heat and Mass Transfer</i> , <b>2003</b> , 46, 3529-3537	4.9	28
25	Prediction of building interference effects on pedestrian level comfort. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2002</b> , 90, 305-319	3.7	32
24	Neural network analysis of experimental data for air/water spray cooling. <i>Journal of Materials Processing Technology</i> , <b>2001</b> , 113, 439-445	5.3	25
23	Ignition of epoxy by a high radiation source. A numerical study. <i>International Journal of Thermal Sciences</i> , <b>1999</b> , 38, 315-323	4.1	7

22	Numerical and experimental simulation of the wind field in the EXPO 88 area. <i>Wind and Structures, an International Journal</i> , <b>1998</b> , 1, 337-349		1
21	Moisture transport in initially fully saturated concrete during drying. <i>Transport in Porous Media</i> , <b>1996</b> , 24, 81-106	3.1	46
20	Numerical investigation of the influence of air gaps upon the solidification in a rotary caster. <i>Journal of Materials Processing Technology</i> , <b>1995</b> , 48, 657-665	5.3	3
19	NUMERICAL SIMULATION OF TURBULENT FLOW AND FIRE PROPAGATION IN COMPLEX TOPOGRAPHY. <i>Numerical Heat Transfer; Part A: Applications</i> , <b>1995</b> , 27, 229-253	2.3	23
18	Experimental and numerical simulation of flow around two-dimensional hills. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>1995</b> , 54-55, 173-181	3.7	33
17	A parametric study of the Hazelett thin-slab casting process. <i>Journal of Materials Processing Technology</i> , <b>1995</b> , 49, 41-56	5.3	8
16	Moisture and Heat Flow in Concrete Walls Exposed to Fire. <i>Journal of Engineering Mechanics - ASCE</i> , <b>1994</b> , 120, 2028-2043	2.4	24
15	The Numerical and Experimental Study of a Power Plant Condenser. <i>Journal of Heat Transfer</i> , <b>1993</b> , 115, 435-445	1.8	25
14	Heat and fluid flow simulation of the melt-drag single-roll strip casting process. <i>Journal of Materials Processing Technology</i> , <b>1992</b> , 34, 473-480	5.3	2
13	Physical and numerical modelling of a solar chimney-based ventilation system for buildings. <i>Building and Environment</i> , <b>1992</b> , 27, 433-445	6.5	53
12	Numerical Simulation of Turbulent Shear Flow in an Isothermal Heat Exchanger Model. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>1990</b> , 112, 48-55	2.1	9
11	Mathematical modelling of LPG tanks subjected to full and partial fire engulfment. <i>International Journal for Numerical Methods in Engineering</i> , <b>1990</b> , 30, 629-646	2.4	7
10	A study of the effect of the tank diameter on the thermal stratification in LPG tanks subjected to fire engulfment. <i>Journal of Hazardous Materials</i> , <b>1990</b> , 25, 19-31	12.8	28
9	Flow field predictions in a model heat exchanger. <i>Computational Mechanics</i> , <b>1988</b> , 3, 419-428	4	8
8	Thermal response analysis of LPG tanks exposed to fire. <i>Journal of Hazardous Materials</i> , <b>1988</b> , 20, 239-262	12.8	35
7	Effects of enhanced surfaces and surface orientation on nucleate and film boiling heat transfer in R-11. <i>International Journal of Heat and Mass Transfer</i> , <b>1987</b> , 30, 2627-2639	4.9	65
6	Three-dimensional numerical predictions of internally heated free convective flows. <i>Heat and Mass Transfer</i> , <b>1987</b> , 21, 283-290		1
5	An efficient algorithm for solving the incompressible fluid flow equations. <i>International Journal for Numerical Methods in Fluids</i> , <b>1986</b> , 6, 557-572	1.9	11

4	Transient laminar free convection in horizontal cylinders. <i>Heat and Mass Transfer</i> , <b>1986</b> , 20, 59-67		5
3	Evaluation of pressure levels in pipelines due to solar heat gains. <i>Applied Mathematical Modelling</i> , <b>1985</b> , 9, 16-20	4-5	2
2	Arbitrary Motions in Long Cylindrical Squeeze Films: Numerical Model and Experimental Validation. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , <b>1984</b> , 198, 137-143	1-3	2
1	Fire Engulfment of Pressure-Liquefied Gas Tanks: Experiments and Modeling	100-100-16	3