Leonor Hernandez

List of Publications by Citations

49 papers	**700** citations	**14** h-index	**25** g-index
51 ext. papers	**818** ext. citations	**4.1** avg, IF	**3.96** L-index

#	Paper	IF	Citations
49	Increment of specific heat capacity of solar salt with SiO2 nanoparticles. *Nanoscale Research Letters* , **2014**, 9, 582	5	118
48	Combining Neural Networks and Genetic Algorithms to Predict and Reduce Diesel Engine Emissions. *IEEE Transactions on Evolutionary Computation*, **2007**, 11, 46-55	15.6	108
47	Combustion simulation of turbocharger HSDI Diesel engines during transient operation using neural networks. *Applied Thermal Engineering*, **2005**, 25, 877-898	5.8	52
46	Fast classification of two-phase flow regimes based on conductivity signals and artificial neural networks. *Measurement Science and Technology*, **2006**, 17, 1511-1521	2	41
45	Forced-convective heat-transfer coefficient and pressure drop of water-based nanofluids in a horizontal pipe. *Applied Thermal Engineering*, **2016**, 98, 841-849	5.8	36
44	Study of the drying behavior of high load multiphase droplets in an acoustic levitator at high temperature conditions. *Chemical Engineering Science*, **2011**, 66, 2734-2744	4.4	29
43	Nanofluid based on self-nanoencapsulated metal/metal alloys phase change materials with tuneable crystallisation temperature. *Scientific Reports*, **2017**, 7, 17580	4.9	28
42	Application of Neural Networks for Prediction and Optimization of Exhaust Emissions in a H.D. Diesel Engine **2002**,		28
41	Influence of the production method on the thermophysical properties of high temperature molten salt-based nanofluids. *Journal of Molecular Liquids*, **2020**, 302, 112570	6	23
40	Hydrodynamic characterization of a needle sparger rectangular bubble column: Homogeneous flow, static bubble plume and oscillating bubble plume. *Chemical Engineering Science*, **2007**, 62, 6361-6377	4.4	21
39	Characterisation study of a thermal oil-based carbon black solar nanofluid. *Renewable Energy*, **2019**, 140, 493-500	8.1	19
38	Characterization of halloysite-water nanofluid for heat transfer applications. *Applied Clay Science*, **2014**, 99, 54-61	5.2	17
37	Effect of slurry properties and operational conditions on the structure and properties of porcelain tile granules dried in an acoustic levitator. *Journal of the European Ceramic Society*, **2012**, 32, 59-70	6	15
36	The development of a semi-empirical model for rapid NOx concentration evaluation using measured in-cylinder pressure in diesel engines. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2005**, 219, 621-631	1.4	14
35	Flow Regime Identification in Boiling Two-Phase Flow in a Vertical Annulus. *Journal of Fluids Engineering, Transactions of the ASME*, **2011**, 133,	2.1	13
34	Characterization of physical properties of nanofluids for heat transfer application. *Journal of Physics: Conference Series*, **2012**, 395, 012017	0.3	13
33	Stabilization and characterization of a nanofluid based on a eutectic mixture of diphenyl and diphenyl oxide and carbon nanoparticles under high temperature conditions. *International Journal of Heat and Mass Transfer*, **2017**, 113, 908-913	4.9	10

32	Modeling of Drying Curves of Silica Nanofluid Droplets Dried in an Acoustic Levitator Using the Reaction Engineering Approach (REA) Model. *Drying Technology*, **2013**, 31, 439-451	2.6	10
31	Improved thermal energy storage of nanoencapsulated phase change materials by atomic layer deposition. *Solar Energy Materials and Solar Cells*, **2020**, 206, 110322	6.4	10
30	Optical characterisation and photothermal conversion efficiency of a water-based carbon nanofluid for direct solar absorption applications. *Energy*, **2020**, 212, 118763	7.9	10
29	New coloured coatings to enhance silica sand absorbance for direct particle solar receiver applications. *Renewable Energy*, **2020**, 152, 1-8	8.1	9
28	Improving heat transfer of stabilised thermal oil-based tin nanofluids using biosurfactant and molecular layer deposition. *Applied Thermal Engineering*, **2020**, 178, 115559	5.8	8
27	Water temperature effect on upward air-water flow in a vertical pipe: Local measurements database using four-sensor conductivity probes and LDA. *EPJ Web of Conferences*, **2013**, 45, 01105	0.3	8
26	Multi-objective optimization of heavy duty diesel engines under stationary conditions. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2005**, 219, 77-87	1.4	6
25	Influence of Particle Size on the Drying Kinetics of Single Droplets Containing Mixtures of Nanoparticles and Microparticles: Modeling and Pilot-Scale Validation. *Drying Technology*, **2013**, 31, 759-768	2.6	5
24	EXPERIMENTAL STUDY ON TWO-PHASE FLOW CHARACTERISTICS USING CONDUCTIVITY PROBES AND LASER DOPPLER ANEMOMETRY IN A VERTICAL PIPE. *Chemical Engineering Communications*, **2009**, 197, 180-191	2.2	5
23	Influence of High Temperature Exposure on the Thermal and Optical Properties of Thermal Oil-Based Solar Nanofluids. *Journal of Nanofluids*, **2018**, 7, 1045-1052	2.2	5
22	Non-linear finite element modelling of light-to-heat energy conversion applied to solar nanofluids. *International Journal of Mechanical Sciences*, **2020**, 188, 105952	5.5	5
21	Optical characterisation of oxidised carbon nanohorn nanofluids for direct solar energy absorption applications. *Solar Energy*, **2019**, 191, 323-331	6.8	4
20	Effects of Carbon Nanohorn Based Nanofluids Pool Boiling on Optical Properties and Wettability of Different Metal Surfaces. *Heat Transfer Engineering*, **2020**, 1-14	1.7	4
19	Viscosity and stability analysis of hitec salt-based alumina nanofluids. *Solar Energy Materials and Solar Cells*, **2021**, 222, 110923	6.4	4
18	A Preliminary Estimation of the Direct Ultraviolet Spectral Irradiance in Valencia (Spain): Comparison with Measured Values. *Radiation Protection Dosimetry*, **2000**, 91, 177-180	0.9	3
17	Numerical and experimental characterization of the hydrodynamics and drying kinetics of a barbotine slurry spray. *Chemical Engineering Science*, **2019**, 195, 83-94	4.4	3
16	Silicone elastomers filled with rare earth oxides. *Materials Research Express*, **2020**, 7, 035703	1.7	2
15	Nanotechnology and Nanomaterials for Thermal Energy Storage **2015**, 1-13		2

14	Measurement and modelling of forced convective heat transfer coefficient and pressure drop of Al2O3- and SiO2-water nanofluids. *Journal of Physics: Conference Series*, **2012**, 395, 012038	0.3	2
13	New High-Temperature Heat Transfer and Thermal Storage Molten Salt Based Nanofluids **2017**, 287-304		2
12	K2CO3 Li2CO3 molten carbonate mixtures and their nanofluids for thermal energy storage: An overview of the literature. *Solar Energy Materials and Solar Cells*, **2022**, 236, 111525	6.4	2
11	Mechanical reliability analysis of nanoencapsulated phase change materials combining Monte Carlo technique and the finite element method. *Mechanics of Materials*, **2021**, 158, 103886	3.3	2
10	Single droplet drying of detergents: Experimentation and modelling. *Particuology*, **2021**, 58, 35-47	2.8	2
9	Effect of temperature on the internal structure of solar salt-SiO2 **2019**,		1
8	Bentonite as an active natural filler for silicone leading to piezoelectric-like response material. *Journal of Materials Research and Technology*, **2022**, 17, 79-94	5.5	1
7	Macro-porous permeability aspects of MgSO 4 salt hydrate foams for energy storage applications. *Journal of Applied Polymer Science*, **2022**, 139, 51924	2.9	0
6	Convective heat transfer performance of thermal oil-based nanofluids in a high-temperature thermohydraulic loop. *International Journal of Thermal Sciences*, **2022**, 171, 107243	4.1	0
5	Experimental Characterization and Statistical Analysis of Water-Based Gold Nanofluids for Solar Applications: Optical Properties and Photothermal Conversion Efficiency. *Solar Rrl*,2200104	7.1	0
4	On the use of area-averaged void fraction and local bubble chord length entropies as two-phase flow regime indicators. *Experiments in Fluids*, **2010**, 49, 1147-1160	2.5	
3	Numerical Modeling of the Mechanical Reliability of Multicoated Nanoencapsulated Phase-Change Materials with Improved Thermal Performance. *Solar Rrl*,2100724	7.1	
2	Characterisation of optical properties of solar nanofluids by an inverse problem based on a numerical model. *E3S Web of Conferences*, **2021**, 321, 02020	0.5	
1	Numerical analysis of mechanical reliability of multi-coated phase change materials. *E3S Web of Conferences*, **2021**, 321, 02019	0.5	