Luis Lugo

List of Publications by Year
in descending order

118	4,403	81743	123241
papers	citations	39 h-index	61 g-index

121	121	121	3007
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermal conductivity and viscosity measurements of ethylene glycol-based Al2O3 nanofluids. Nanoscale Research Letters, 2011, 6, 221.	3.1	184
2	Influence of Molecular Structure on Densities and Viscosities of Several Ionic Liquids. Journal of Chemical & Engineering Data, 2011, 56, 4984-4999.	1.0	157
3	Current trends in surface tension and wetting behavior of nanofluids. Renewable and Sustainable Energy Reviews, 2018, 94, 931-944.	8.2	125
4	Rheological and volumetric properties of TiO2-ethylene glycol nanofluids. Nanoscale Research Letters, 2013, 8, 286.	3.1	122
5	Automated densimetric system: Measurements and uncertainties for compressed fluids. Journal of Chemical Thermodynamics, 2009, 41, 632-638.	1.0	115
6	Specific heat of metal oxide nanofluids at high concentrations for heat transfer. International Journal of Heat and Mass Transfer, 2015, 88, 872-879.	2.5	105
7	Thermophysical profile of ethylene glycol-based ZnO nanofluids. Journal of Chemical Thermodynamics, 2014, 73, 23-30.	1.0	104
8	Rheological non-Newtonian behaviour of ethylene glycol-based Fe2O3 nanofluids. Nanoscale Research Letters, 2011, 6, 560.	3.1	103
9	Thermal conductivity, rheological behaviour and density of non-Newtonian ethylene glycol-based SnO2 nanofluids. Fluid Phase Equilibria, 2013, 337, 119-124.	1.4	103
10	Compressed Liquid Densities of Squalane and Pentaerythritol Tetra(2-ethylhexanoate)â€. Journal of Chemical & Engineering Data, 2005, 50, 939-946.	1.0	102
11	Density and viscosity of three (2,2,2-trifluoroethanol + 1-butyl-3-methylimidazolium) ionic liquid binary systems. Journal of Chemical Thermodynamics, 2014, 70, 101-110.	1.0	102
12	Co3O4 ethylene glycol-based nanofluids: Thermal conductivity, viscosity and high pressure density. International Journal of Heat and Mass Transfer, 2015, 85, 54-60.	2.5	101
13	Enhancement of thermal conductivity and volumetric behavior of FexOy nanofluids. Journal of Applied Physics, 2011, 110, .	1.1	98
14	(p, Vm, T, x) measurements of dimethyl carbonate+octane binary mixtures. Fluid Phase Equilibria, 2001, 186, 235-255.	1.4	93
15	Functionalized graphene nanoplatelet-nanofluids for solar thermal collectors. Solar Energy Materials and Solar Cells, 2018, 185, 205-209.	3.0	86
16	Thermal conductivity of dry anatase and rutile nano-powders and ethylene and propylene glycol-based TiO2 nanofluids. Journal of Chemical Thermodynamics, 2015, 83, 67-76.	1.0	85
17	Nanodiamonds â€“ Ethylene Glycol nanofluids: Experimental investigation of fundamental physical properties. International Journal of Heat and Mass Transfer, 2018, 121, 1201-1213.	2.5	73
18	Experimental evaluation of the effect in the stability and thermophysical properties of water-Al2O3 based nanofluids using SDBS as dispersant agent. Advanced Powder Technology, 2020, 31, 560-570.	2.0	70

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19	Isobaric heat capacity and density of ethylene glycol based nanofluids containing various nitride nanoparticle types: An experimental study. Journal of Molecular Liquids, 2018, 261, 530-539.	2.3	67
20	PEG 400-Based Phase Change Materials Nano-Enhanced with Functionalized Graphene Nanoplatelets. Nanomaterials, 2018, 8, 16.	1.9	65
21	Hybrid or mono nanofluids for convective heat transfer applications. A critical review of experimental research. Applied Thermal Engineering, 2022, 203, 117926.	3.0	63
22	Heat Transfer Capability of (Ethylene Glycol + Water)-Based Nanofluids Containing Graphene Nanoplatelets: Design and Thermophysical Profile. Nanoscale Research Letters, 2017, 12, 53.	3.1	62
23	Volumetric properties under pressure for the binary system ethanol+toluene. Fluid Phase Equilibria, 2005, 235, 139-151.	1.4	61
24	High-Pressure Characterization of Dynamic Viscosity and Derived Properties for Squalane and Two Pentaerythritol Ester Lubricants:â€‰ Pentaerythritol Tetra-2-ethylhexanoate and Pentaerythritol Tetrananonanoate. Industrial & Engineering Chemistry Research, 2006, 45, 2394-2404.	1.8	60
25	Characterization and measurements of thermal conductivity, density and rheological properties of zinc oxide nanoparticles dispersed in (ethane-1,2-diol+water) mixture. Journal of Chemical Thermodynamics, 2013, 58, 405-415.	1.0	58
26	Volumetric behaviour of the environmentally compatible lubricants pentaerythritol tetraheptanoate and pentaerythritol tetrananonanoate at high pressures. Green Chemistry, 2005, 7, 775.	4.6	54
27	Heat Transfer Performance of Functionalized Graphene Nanoplatelet Aqueous Nanofluids. Materials, 2016, 9, 455.	1.3	54
28	Experimental investigation on heat transfer and pressure drop of ZnO/ethylene glycol-water nanofluids in transition flow. Applied Thermal Engineering, 2016, 93, 537-548.	3.0	53
29	Compressibilities and viscosities of reference and vegetable oils for their use as hydraulic fluids and lubricants. Green Chemistry, 2011, 13, 1293.	4.6	52
30	Transport properties and heat transfer coefficients of ZnO/(ethylene glycol + water) nanofluids. International Journal of Heat and Mass Transfer, 2015, 89, 433-443.	2.5	52
31	Phase Equilibria,PVTBehavior, and Critical Phenomena in Carbon Dioxide +n-Alkane Mixtures Using the Perturbed-Chain Statistical Associating Fluid Theory Approach. Industrial & Engineering Chemistry Research, 2004, 43, 8345-8353.	1.8	51
32	Solubility of Carbon Dioxide in Two Pentaerythritol Ester Oils between (283 and 333) K. Journal of Chemical & Engineering Data, 2008, 53, 1854-1861.	1.0	51
33	Experimental Dynamic Viscosities of 2,3-Dimethylpentane up to 60 MPa and from (303.15 to 353.15) K Using a Rolling-Ball Viscometerâ€. Journal of Chemical & Engineering Data, 2005, 50, 849-855.	1.0	50
34	High pressure volumetric properties of 1-ethyl-3-methylimidazolium ethylsulfate and 1-(2-methoxyethyl)-1-methyl-pyrrolidinium bis(trifluoromethylsulfonyl)imide. Journal of Chemical Thermodynamics, 2012, 48, 213-220.	1.0	47
35	Potential heat transfer enhancement of functionalized graphene nanoplatelet dispersions in a propylene glycol-water mixture. Thermophysical profile. Journal of Chemical Thermodynamics, 2018, 123, 174-184.	1.0	45
36	Experimental study on thermophysical properties of alumina nanoparticle enhanced ionic liquids. Journal of Molecular Liquids, 2019, 291, 111332.	2.3	45

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37	Thermophysical properties of (diphenyl ether+biphenyl) mixtures for their use as heat transfer fluids. Journal of Chemical Thermodynamics, 2012, 50, 80-88.	1.0	43
38	(Solid+liquid) phase equilibria and heat capacity of (diphenyl ether+biphenyl) mixtures used as thermal energy storage materials. Journal of Chemical Thermodynamics, 2014, 74, 43-50.	1.0	41
39	Rheological behaviour of functionalized graphene nanoplatelet nanofluids based on water and propylene glycol:water mixtures. International Communications in Heat and Mass Transfer, 2018, 99, 43-53.	2.9	41
40	Temperature dependence of the excess molar volume of (dimethyl carbonate, or diethyl carbonate+) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.0	40
41	Experimental excess volumes of organic carbonate+alkane systems. Estimation of the parameters of the Nittaâ€“Chao model for this kind of binary mixture. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 1707-1712.	1.7	39
42	Flow behaviour of suspensions of functionalized graphene nanoplatelets in propylene glycolâ€“water mixtures. International Communications in Heat and Mass Transfer, 2018, 91, 150-157.	2.9	39
43	Influence of the pressure, temperature, cation and anion on the volumetric properties of ionic liquids: New experimental values for two salts. Journal of Chemical Thermodynamics, 2013, 58, 440-448.	1.0	37
44	MWCNT in PEG-400 nanofluids for thermal applications: A chemical, physical and thermal approach. Journal of Molecular Liquids, 2019, 294, 111616.	2.3	37
45	Influence of Six Carbon-Based Nanomaterials on the Rheological Properties of Nanofluids. Nanomaterials, 2019, 9, 146.	1.9	37
46	Thermophysical profile of ethylene glycol based nanofluids containing two types of carbon black nanoparticles with different specific surface areas. Journal of Molecular Liquids, 2021, 326, 115255.	2.3	36
47	Density Measurements under Pressure for Mixtures of Pentaerythritol Ester Lubricants. Analysis of a Densityâ^'Viscosity Relationship. Journal of Chemical & Engineering Data, 2007, 52, 1429-1436.	1.0	35
48	Functionalized graphene nanoplatelet nanofluids based on a commercial industrial antifreeze for the thermal performance enhancement of wind turbines. Applied Thermal Engineering, 2019, 152, 113-125.	3.0	33
49	Physico-chemical properties of C60(OH)22â€“24 water solutions: Density, viscosity, refraction index, isobaric heat capacity and antioxidant activity. Journal of Molecular Liquids, 2019, 278, 342-355.	2.3	31
50	Viscosity and isobaric specific heat capacity of alumina nanoparticle enhanced ionic liquids: An experimental approach. Journal of Molecular Liquids, 2020, 317, 114020.	2.3	31
51	Experimental densities and dynamic viscosities of organic carbonate + n-alkane or p-xylene systems at 298.15 K. Fluid Phase Equilibria, 2003, 204, 233-243.	1.4	30
52	Tailored silver/graphene nanoplatelet hybrid nanofluids for solar applications. Journal of Molecular Liquids, 2019, 296, 112007.	2.3	30
53	NePCM Based on Silver Dispersions in Poly(Ethylene Glycol) as a Stable Solution for Thermal Storage. Nanomaterials, 2020, 10, 19.	1.9	29
54	Enhancing the Thermal Performance of a Stearate Phase Change Material with Graphene Nanoplatelets and MgO Nanoparticles. ACS Applied Materials & Interfaces, 2020, 12, 39108-39117.	4.0	29

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55	Temperature and pressure dependences of volumetric properties of two poly(propylene glycol) dimethyl ether lubricants. Journal of Chemical Thermodynamics, 2010, 42, 84-89.	1.0	28
56	Influence of the Molecular Structure on the Volumetric Properties and Viscosities of Dialkyl Adipates (Dimethyl, Diethyl, and Diisobutyl Adipates). Journal of Chemical & Engineering Data, 2010, 55, 3697-3703.	1.0	28
57	Liquid Density Measurements of Diethylene Glycol Monoalkyl Ethers as a Function of Temperature and Pressure. Journal of Chemical & Engineering Data, 2004, 49, 376-379.	1.0	27
58	Density measurements under pressure for the binary system (ethanol+methylcyclohexane). Journal of Chemical Thermodynamics, 2005, 37, 1294-1304.	1.0	27
59	Volumetric behaviour of six ionic liquids from T = (278 to 398) K and up to 120 MPa. Journal of Chemical Thermodynamics, 2016, 93, 24-33.	1.0	25
60	Heat transfer performance of a nano-enhanced propylene glycol:water mixture. International Journal of Thermal Sciences, 2019, 139, 413-423.	2.6	25
61	Behavior of the Environmentally Compatible Absorbent 1-Butyl-3-methylimidazolium Tetrafluoroborate with 2,2,2-Trifluoroethanol: Experimental Densities at High Pressures and Modeling of PVT and Phase Equilibria Behavior with PC-SAFT EoS. Industrial & Engineering Chemistry Research, 2011, 50, 4065-4076.	1.8	24
62	Ionic liquids as hydraulic fluids: comparison of several properties with those of conventional oils. Lubrication Science, 2014, 26, 488-499.	0.9	24
63	Effect of ZrO2 nanoparticles on thermophysical and rheological properties of three synthetic oils. Journal of Molecular Liquids, 2018, 262, 126-138.	2.3	24
64	Comparative study of different functionalized graphene-nanoplatelet aqueous nanofluids for solar energy applications. Renewable Energy, 2019, 141, 791-801.	4.3	24
65	An In Situ Hyaluronic Acid-Fibrin Hydrogel Containing Drug-Loaded Nanocapsules for Intra-Articular Treatment of Inflammatory Joint Diseases. Regenerative Engineering and Translational Medicine, 2020, 6, 201-216.	1.6	24
66	High pressure density and solubility for the CO2+1-ethyl-3-methylimidazolium ethylsulfate system. Journal of Supercritical Fluids, 2014, 88, 46-55.	1.6	23
67	Solubility of carbon dioxide in pentaerythritol ester oils. New data and modeling using the PC-SAFT model. Journal of Supercritical Fluids, 2010, 55, 62-70.	1.6	22
68	Density and isothermal compressibility for two trialkylimidazolium-based ionic liquids at temperatures from (278 to 398) K and up to 120 MPa. Journal of Chemical Thermodynamics, 2015, 81, 124-130.	1.0	22
69	pÏ‡Measurements and EoS Predictions of Glycol Ethers from (283.15 to 353.15) K at Pressures up to 25 MPa. Journal of Chemical & Engineering Data, 2004, 49, 1400-1405.	1.0	20
70	Dynamic Viscosity under Pressure for Mixtures of Pentaerythritol Ester Lubricants with 32 Viscosity Grade:Â Measurements and Modeling. Industrial & Engineering Chemistry Research, 2007, 46, 1826-1835.	1.8	20
71	Volumetric Properties of Binary Tetraethylene Glycol Dimethyl Ether + Heptane Mixtures between (278.15 and 353.15) K and up to 25 MPa. Journal of Chemical & Engineering Data, 2003, 48, 1271-1278.	1.0	19
72	(p, Vm, T, x) measurements of dimethyl carbonate + octane binary mixtures. Fluid Phase Equilibria, 2002, 199, 135-145.	1.4	18

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73	Title is missing!. International Journal of Thermophysics, 2003, 24, 1043-1060.	1.0	18
74	Thermophysical, rheological and electrical properties of mono and hybrid TiB2/B4C nanofluids based on a propylene glycol:water mixture. Powder Technology, 2022, 395, 391-399.	2.1	18
75	Tribological and Thermophysical Properties of Environmentally-Friendly Lubricants Based on Trimethylolpropane Trioleate with Hexagonal Boron Nitride Nanoparticles as an Additive. Coatings, 2019, 9, 509.	1.2	17
76	Experimental Convection Heat Transfer Analysis of a Nano-Enhanced Industrial Coolant. Nanomaterials, 2019, 9, 267.	1.9	17
77	Graphene IoNanofluids, Thermal and Structural Characterization. Nanomaterials, 2019, 9, 1549.	1.9	16
78	Tuning the thermal properties of aqueous nanofluids by taking advantage of size-customized clusters of iron oxide nanoparticles. Journal of Molecular Liquids, 2021, 344, 117727.	2.3	16
79	Compressed liquid densities of two dipentaerythritol esters. Fluid Phase Equilibria, 2010, 296, 30-36.	1.4	15
80	Influence of molecular mass of PEG on rheological behaviour of MWCNT-based nanofluids for thermal energy storage. Journal of Molecular Liquids, 2020, 318, 113965.	2.3	15
81	Phase equilibria and pVT predictions for alkyl carbonate + n-alkane systems using equations of state. Fluid Phase Equilibria, 2003, 212, 111-128.	1.4	14
82	Characterization of Tuna Gelatin-Based Hydrogels as a Matrix for Drug Delivery. Gels, 2022, 8, 237.	2.1	14
83	Tribological performance of silicon nitride and carbon black Ionanofluids based on 1-ethyl-3-methylimidazolium methanesulfonate. Journal of Molecular Liquids, 2020, 319, 114335.	2.3	13
84	Improving the tribological performance of a biodegradable lubricant adding graphene nanoplatelets as additives. Journal of Molecular Liquids, 2022, 345, 117797.	2.3	13
85	High pressure densities of carbon dioxide + dipentaerythritol hexaheptanoate: New experimental setup and volumetric behavior. Journal of Supercritical Fluids, 2011, 58, 189-197.	1.6	12
86	Convective heat transfer in pipe flow for glycolated water-based carbon nanofluids. A thorough analysis. Journal of Molecular Liquids, 2020, 301, 112370.	2.3	12
87	Experimental Methodology to Determine Thermal Conductivity of Nanofluids by Using a Commercial Transient Hot-Wire Device. Applied Sciences (Switzerland), 2022, 12, 329.	1.3	12
88	Solubilities of Carbon Dioxide in a Dipentaerythritol Ester and in a Polyether. Journal of Chemical & Engineering Data, 2010, 55, 5483-5488.	1.0	11
89	Carbon dioxide solubility in reference and vegetable lubricants developed for two stroke engines. Journal of Supercritical Fluids, 2012, 68, 123-130.	1.6	11
90	An experimental setup for isobaric heat capacities for viscous fluids at high pressure: Squalane, bis(2-ethylhexyl) sebacate and bis(2-ethylhexyl) phthalate. Journal of Chemical Thermodynamics, 2012, 49, 75-80.	1.0	11

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91	Isobaric heat capacity at high pressure, density, and viscosity of (diphenyl ether + biphenyl) mixtures. Journal of Chemical Thermodynamics, 2016, 93, 86-94.	1.0	11
92	Numerical analysis of performance uncertainty of heat exchangers operated with nanofluids. International Journal of Thermofluids, 2022, 14, 100144.	4.0	11
93	An experimental study of novel nanofluids based on deep eutectic solvents (DESs) by Choline chloride and ethylene glycol. Journal of Molecular Liquids, 2022, 360, 119521.	2.3	11
94	Experimental study on the density, surface tension and electrical properties of ZrO₂â€“EG nanofluids. Physics and Chemistry of Liquids, 2023, 61, 14-24.	0.4	9
95	Krytox GPL102 Oil as Reference Fluid for High Viscosities: High Pressure Volumetric Properties, Heat Capacities, and Thermal Conductivities. Journal of Chemical & Engineering Data, 2015, 60, 3660-3669.	1.0	8
96	Experimental measurements and modeling of CO2 solubility in sunflower, castor and rapeseed oils. Journal of Supercritical Fluids, 2013, 82, 191-199.	1.6	7
97	Phase equilibrium of two CO2+ biodegradable oil systems up to 72MPa. Journal of Supercritical Fluids, 2014, 91, 90-97.	1.6	7
98	Compressibilities and Viscosities of Reference, Vegetable, and Synthetic Gear Lubricants. Industrial & Engineering Chemistry Research, 2014, 53, 4499-4510.	1.8	7
99	Pressure and temperature dependence of the excess thermodynamic properties of binary dimethyl carbonate + n-octane mixtures. Canadian Journal of Chemistry, 2003, 81, 840-849.	0.6	6
100	High Pressure Rheological Behavior of 1-Ethyl-3-methylimidazolium n-Hexylsulfate and Trihexyl(tetradecyl)phosphonium Tris(pentafluoroethyl)trifluorophosphate. Journal of Chemical & Engineering Data, 2017, 62, 2927-2936.	1.0	6
101	Determination of derived volumetric properties and heat capacities at high pressures using two density scaling based equations of state. Application to dipentaerythritol hexa(3,5,5-trimethylhexanoate). Physical Chemistry Chemical Physics, 2018, 20, 3531-3542.	1.3	6
102	A new relationship on transport properties of nanofluids. Evidence with novel magnesium oxide based n-tetradecane nanodispersions. Powder Technology, 2022, 397, 117082.	2.1	6
103	Development and Thermophysical Profile of Cetyl Alcohol-in-Water Nanoemulsions for Thermal Management. Fluids, 2022, 7, 11.	0.8	6
104	Analysis of Heat Transfer Characteristics of a GnP Aqueous Nanofluid through a Double-Tube Heat Exchanger. Nanomaterials, 2021, 11, 844.	1.9	5
105	Analysis of the molecular interactions of organic anhydride+alkane binary mixtures using the Nittaâ€“Chao model. Fluid Phase Equilibria, 2000, 170, 69-85.	1.4	4
106	Prediction of the pressure dependence on the thermodynamic properties of dialkyl carbonate + alkane mixtures using Nittaâ€“Chao model. Fluid Phase Equilibria, 2004, 217, 165-173.	1.4	4
107	Volumetric properties of 1-iodoperfluorohexane+n-octane binary system at several temperatures. Journal of Thermal Analysis and Calorimetry, 2007, 87, 179-187.	2.0	4
108	Volumetric Properties and Surface Tension of Few-Layer Graphene Nanofluids Based on a Commercial Heat Transfer Fluid. Energies, 2020, 13, 3462.	1.6	4

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109	A Comprehensive Physical Profile for Aqueous Dispersions of Carbon Derivatives as Solar Working Fluids. Applied Sciences (Switzerland), 2020, 10, 528.	1.3	4
110	Physicochemical investigation of water-soluble C60(C2NH4O2)4H4 (C60-Gly) adduct. Journal of Molecular Liquids, 2021, 344, 117658.	2.3	4
111	Excess molar volumes of liquid 1-bromoalkane + alkane mixtures. Nitta-Chao characterization of the bromine-bromine and bromine-methylene interactions in binary 1-bromoalkane + alkane mixtures. Canadian Journal of Chemistry, 1999, 77, 299-307.	0.6	4
112	Magnetorheological behaviour of propylene glycol-based hematite nanofluids. Rheologica Acta, 2015, 54, 757-769.	1.1	3
113	Excess molar volumes of liquid 1-bromoalkane + alkane mixtures. Nittaâ€“Chao characterization of the bromineâ€“bromine and bromineâ€“methylene interactions in binary 1-bromoalkane + alkane mixtures. Canadian Journal of Chemistry, 1999, 77, 299-307.	0.6	2
114	Modelling thermodynamic properties of iodoalkane + alkane systems using group contribution models. Physical Chemistry Chemical Physics, 2001, 3, 5006.	1.3	2
115	Sakoâ€“Wuâ€“Prausnitz equation of state for modelling phase equilibria and high-pressures PVT of mixtures containing dialkyl carbonate and alkane. Fluid Phase Equilibria, 2003, 210, 77-89.	1.4	2
116	UNIFAC calculation of thermodynamic properties of binary 1-chloroalkane + alkane and Î±,Ï‰-dichloroalkane + alkane mixtures: Comparison with NittaÂ–Chao and DISQUAC predictions. Canadian Journal of Chemistry, 2003, 81, 392-405.	0.6	2
117	Phase change characterization of eco-friendly isopropyl palmitate-based graphene nanoplatelet nanofluid for thermal energy applications. Journal of Molecular Liquids, 2022, 360, 119456.	2.3	2
118	Reply to the letter to the editor by J. Gmehling and J. Lohmann about the paper â€œAnalysis of the molecular interactions of organic anhydride + alkane binary mixtures using the Nittaâ€“Chao modelâ€• [Fluid Phase Equilib. 170 (2000) 69â€“85]. Fluid Phase Equilibria, 2001, 189, 197-201.	1.4	0