Thomas J Hughes

List of Publications by Year
in descending order

47 papers	739 citations	516215 16 h-index	580395 25 g-index
48 all docs	48 docs citations	48 times ranked	499 citing authors

#	Article	IF	Citations
1	CO2 sequestration for enhanced gas recovery: New measurements of supercritical CO2â€“CH4 dispersion in porous media and a review of recent research. International Journal of Greenhouse Gas Control, 2012, 9, 457-468.	2.3	84
2	Thermodynamic properties of hydrofluoroolefin (R1234yf and R1234ze(E)) refrigerant mixtures: Density, vapour-liquid equilibrium, and heat capacity data and modelling. International Journal of Refrigeration, 2019, 98, 249-260.	1.8	58
3	Heat Capacities and Low Temperature Thermal Transitions of 1-Hexyl and 1-Octyl-3-methylimidazolium bis(trifluoromethylsulfonyl)amide. Journal of Chemical & Engineering Data, 2011, 56, 2153-2159.	1.0	46
4	Dispersion of supercritical CO2 and CH4 in consolidated porous media for enhanced gas recovery simulations. International Journal of Greenhouse Gas Control, 2013, 19, 234-242.	2.3	42
5	Extending the GERG-2008 equation of state: Improved departure function and interaction parameters for (methane + butane). Journal of Chemical Thermodynamics, 2016, 97, 206-213.	1.0	33
6	Reference Quality Vaporâ€“Liquid Equilibrium Data for the Binary Systems Methane + Ethane, + Propane, + Butane, and + 2-Methylpropane, at Temperatures from (203 to 273) K and Pressures to 9 MPa. Journal of Chemical & Engineering Data, 2015, 60, 3606-3620.	1.0	30
7	Isobaric Heat Capacity Measurements of Liquid Methane, Ethane, and Propane by Differential Scanning Calorimetry at High Pressures and Low Temperatures. Journal of Chemical & Engineering Data, 2012, 57, 3573-3580.	1.0	25
8	Advanced predictions of solidification in cryogenic natural gas and LNG processing. Journal of Chemical Thermodynamics, 2019, 137, 22-33.	1.0	23
9	Surface tension and critical point measurements of methane + propane mixtures. Journal of Chemical Thermodynamics, 2017, 111, 173-184.	1.0	20
10	Improved Methods for Gas Mixture Viscometry Using a Vibrating Wire Clamped at Both Ends. Journal of Chemical & Engineering Data, 2014, 59, 1619-1628.	1.0	19
11	Thermal conductivity data for refrigerant mixtures containing R1234yf and R1234ze(E). Journal of Chemical Thermodynamics, 2019, 133, 135-142.	1.0	19
12	Viscosity of {xCH₄ + (1 â€“ x)C₃H₈} with x = 0.949 for Temperatures between (200 and 423) K and Pressures between (10 and 31) MPa. Journal of Chemical & Engineering Data, 2015, 60, 118-123.	1.0	18
13	Phase equilibrium measurements of (methane + benzene) and (methane + methylbenzene) at temperatures from (188 to 348) K and pressures to 13 MPa. Journal of Chemical Thermodynamics, 2015, 85, 141-147.	1.0	17
14	Viscosity of {xCO2+(1â^'x)CH4} with x=0.5174 for temperatures between (229 and 348)K and pressures between (1 and 32)MPa. Journal of Chemical Thermodynamics, 2015, 87, 162-167.	1.0	17
15	Determination of melting temperatures in hydrocarbon mixtures by differential scanning calorimetry. Journal of Chemical Thermodynamics, 2017, 108, 59-70.	1.0	17
16	Isobaric Heat Capacity Measurements of Liquid Methane + Propane, Methane + Butane, and a Mixed Refrigerant by Differential Scanning Calorimetry at High Pressures and Low Temperatures. Journal of Chemical & Engineering Data, 2014, 59, 968-974.	1.0	16
17	NMR Studies of the Effect of CO₂ on Oilfield Emulsion Stability. Energy & Fuels, 2016, 30, 5555-5562.	2.5	16
18	Rapid Simulation of Solid Deposition in Cryogenic Heat Exchangers To Improve Risk Management in Liquefied Natural Gas Production. Energy & Fuels, 2018, 32, 255-267.	2.5	16

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19	Viscosity of a [xCH4â€¯+â€¯(1â€¯â^'â€¯x)C3H8] mixture with xâ€¯=â€¯0.8888 at temperatures between (203 and 424)â€¯K and pressures between (2 and 31)â€¯MPa. Fuel, 2018, 225, 563-572.	3.4	15
20	Solubility of p-xylene in methane and ethane and implications for freeze-out at LNG conditions. Experimental Thermal and Fluid Science, 2019, 105, 47-57.	1.5	15
21	Liquid and Vapor Viscosities of Binary Refrigerant Mixtures Containing R1234yf or R1234ze(E). Journal of Chemical & Engineering Data, 2019, 64, 1122-1130.	1.0	15
22	Viscosity and Dew Point Measurements of {xCH₄ + (1 â€“) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (x)C Journal of Chemical & Engineering Data, 2015, 60, 3688-3695.	1.0	14
23	Density Measurements of Methane + Propane Mixtures at Temperatures between (256 and 422) K and Pressures from (24ÂtoÂ35)ÂMPa. Journal of Chemical & Engineering Data, 2016, 61, 2782-2790.	1.0	13
24	Methane Semi-Clathrate Hydrate Phase Equilibria with Tetraisopentylammonium Fluoride. Journal of Chemical & Engineering Data, 2011, 56, 4597-4603.	1.0	12
25	Visual Measurements of Solidâ€“Liquid Equilibria and Induction Times for Cyclohexane + Octadecane Mixtures at Pressures to 5 MPa. Journal of Chemical & Engineering Data, 2017, 62, 2896-2910.	1.0	12
26	High pressure multi-component vapor-liquid equilibrium data and model predictions for the LNG industry. Journal of Chemical Thermodynamics, 2017, 113, 81-90.	1.0	10
27	High-Pressure Thermal Conductivity Measurements of a (Methane + Propane) Mixture with a Transient Hot-Wire Apparatus. Journal of Chemical & Engineering Data, 2020, 65, 906-915.	1.0	10
28	Simulating the capture of CO2 from natural gas: New data and improved models for methane + carbon dioxide + methanol. International Journal of Greenhouse Gas Control, 2014, 31, 121-127.	2.3	9
29	Isobaric heat capacity measurements of natural gas model mixtures (methaneÂ+Ân-heptane) and (propaneÂ+Ân-heptane) by differential scanning calorimetry at temperatures from 313ÂK to 422ÂK and pressures up to 31ÂMPa. Fuel, 2021, 296, 120668.	3.4	9
30	On the application of silica gel for mitigating CO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e927" altimg="si129.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> leakage in CCS projects: Rheological properties and chemical stability. Journal of Petroleum Science and Engineering, 2021, 207, 109155.	2.1	9
31	Effective Critical Constants for Helium for Use in Equations of State for Natural Gas Mixtures. Journal of Chemical & Engineering Data, 2017, 62, 2799-2811.	1.0	8
32	Reliable prediction of aqueous dew points in CO2 pipelines and new approaches for control during shut-in. International Journal of Greenhouse Gas Control, 2018, 70, 97-104.	2.3	8
33	Isobaric heat capacities of a methane (1)Â+Âpropane (2) mixture by differential scanning calorimetry at near-critical and supercritical conditions. Fuel, 2021, 289, 119840.	3.4	7
34	Natural gas density measurements and the impact of accuracy on process design. Fuel, 2021, 304, 121395.	3.4	7
35	High pressure viscosity measurements of ternary (methane + propane + heptane) mixtures. Fuel Processing Technology, 2021, 223, 106984.	3.7	7
36	Hydrate Plug Dissociation via Active Heating: Uniform Heating and a Simple Predictive Model. Energy & Fuels, 2016, 30, 9275-9284.	2.5	6

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37	Enthalpy of Vaporization Measurements of Liquid Methane, Ethane, and Methane + Ethane by Differential Scanning Calorimetry at Low Temperatures and High Pressures. Journal of Chemical & Engineering Data, 2017, 62, 2253-2260.	1.0	6
38	Rapid hydrocarbon dew points by infrared spectroscopy: Results and validation for binary mixtures of methane + {propane, isobutane and butane}. Journal of Industrial and Engineering Chemistry, 2018, 58, 304-310.	2.9	5
39	Phase equilibrium studies of high-pressure natural gas mixtures with toluene for LNG applications. Fluid Phase Equilibria, 2020, 518, 112620.	1.4	5
40	Measurement and Modeling of Hydrate Composition during Formation of Clathrate Hydrate from Gas Mixtures. Industrial & Engineering Chemistry Research, 2011, 50, 694-700.	1.8	4
41	Vapor Pressure of Dichlorosilane, Trichlorosilane, and Tetrachlorosilane from 300 K to 420 K. Journal of Chemical & Engineering Data, 2016, 61, 2799-2804.	1.0	3
42	Extended calibration of a vibrating tube densimeter and new reference density data for a methane-propane mixture at temperatures from (203 to 423) K and pressures to 35ÂMPa. Journal of Molecular Liquids, 2020, 310, 113219.	2.3	3
43	High-Pressure Melting Temperature Measurements in Mixtures Relevant to Liquefied Natural Gas Production and Comparisons with Model Predictions. Journal of Chemical & Engineering Data, 2021, 66, 4103-4111.	1.0	2
44	Isobaric heat capacity measurements on ternary mixtures of natural gas components methane, propane and n-heptane by differential scanning calorimetry at temperatures from 197ÂK to 422ÂK and pressures up to 32ÂMPa. Fuel, 2022, 308, 121904.	3.4	2
45	Interfacial tension measurements of methaneÂ+Âpropane binary and methaneÂ+ÂpropaneÂ+Ân-heptane ternary mixtures at low temperatures. Journal of Chemical Thermodynamics, 2022, 171, 106786.	1.0	2
46	Memorial Issue in Honor of Kenneth N. Marsh: Preface. Journal of Chemical & Engineering Data, 2017, 62, 2475-2480.	1.0	1
47	High Pressure Thermal Conductivity Measurements of Ternary (Methaneâ€‰+â€‰Propaneâ€‰+â€‰Heptane) Mixtures with a Transient Hot-Wire Apparatus. International Journal of Thermophysics, 2021, 42, 1.	1.0	1