Xiangyang Liu

List of Publications by Year in descending order

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85 papers	1,447 citations	304743 22 h-index	414414 32 g-index
85 all docs	85 docs citations	85 times ranked	757 citing authors

#	Article	IF	Citations
1	Performance comparison of two absorption-compression hybrid refrigeration systems using R1234yf/ionic liquid as working pair. Energy Conversion and Management, 2019, 181, 319-330.	9.2	87
2	Solubilities of some gases in four immidazolium-based ionic liquids. Journal of Chemical Thermodynamics, 2013, 63, 88-94.	2.0	66
3	Vaporâ€“Liquid Equilibrium of R1234yf/[HMIM][Tf₂N] and R1234ze(E)/[HMIM][Tf₂N] Working Pairs for the Absorption Refrigeration Cycle. Journal of Chemical & Engineering Data, 2016, 61, 3952-3957.	1.9	53
4	Vaporâ€“Liquid Equilibrium of Three Hydrofluorocarbons with [HMIM][Tf₂N]. Journal of Chemical & Engineering Data, 2015, 60, 1354-1361.	1.9	52
5	High Solubilities of Small Hydrocarbons in Trihexyl Tetradecylphosphonium Bis(2,4,4-trimethylpentyl) Phosphinate. Journal of Physical Chemistry B, 2013, 117, 10534-10539.	2.6	45
6	Investigation on the condensation process of HFO refrigerants by molecular dynamics simulation. Journal of Molecular Liquids, 2019, 288, 111034.	4.9	42
7	Solubilities of Small Hydrocarbons in Tetrabutylphosphonium Bis(2,4,4-trimethylpentyl) Phosphinate and in 1-Ethyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide. Industrial & Engineering Chemistry Research, 2013, 52, 14975-14978.	3.7	40
8	Solubilities of R-161 and R-143a in 1-Hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide. Fluid Phase Equilibria, 2015, 388, 37-42.	2.5	39
9	Vapor-liquid equilibrium and diffusion coefficients of R32â€¯+â€¯[HMIM][FEP], R152aâ€¯+â€¯[HMIM][FEP] and R161â€¯+â€¯[HMIM][FEP]. Journal of Molecular Liquids, 2018, 253, 28-35.	4.9	35
10	Solubilities of R32, R245fa, R227ea and R236fa in a phosphonium-based ionic liquid. Journal of Molecular Liquids, 2016, 218, 525-530.	4.9	31
11	Determination of critical properties for binary and ternary mixtures containing propanol and alkanes using a flow view-type apparatus. Journal of Supercritical Fluids, 2016, 108, 35-44.	3.2	30
12	Measurement and correlation of viscosities and densities of methyl dodecanoate and ethyl dodecanoate at elevated pressures. Thermochimica Acta, 2018, 663, 85-92.	2.7	30
13	High Solubilities of Carbon Dioxide in Tetraalkyl Phosphonium-Based Ionic Liquids and the Effect of Diluents on Viscosity and Solubility. Journal of Chemical & Engineering Data, 2014, 59, 954-960.	1.9	29
14	Heat capacities of fatty acid methyl esters from 300 K to 380 K and up to 4.25 MPa. Fuel, 2015, 157, 240-244.	6.4	27
15	Diffusion coefficients and Henryâ€™s constants of hydrofluorocarbons in [HMIM][Tf 2 N], [HMIM][TfO], and [HMIM][BF 4]. Journal of Chemical Thermodynamics, 2017, 112, 43-51.	2.0	27
16	High Solubilities for Methane, Ethane, Ethylene, and Propane in Trimethyloctylphosphonium Bis(2,4,4-trimethylpentyl) Phosphinate ([P8111][TMPP]). Industrial & Engineering Chemistry Research, 2014, 53, 363-368.	3.7	26
17	Estimating the viscosity of pure refrigerants and their mixtures by free-volume theory. International Journal of Refrigeration, 2015, 54, 55-66.	3.4	25
18	Molecular dynamics simulation of thermophysical properties and condensation process of R1233zd(E). International Journal of Refrigeration, 2020, 112, 341-347.	3.4	25

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19	Selective absorption of CO 2 from H 2 , O 2 and N 2 by 1-hexyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate. Journal of Chemical Thermodynamics, 2016, 97, 48-54.	2.0	24
20	Gaseous absorption of fluorinated ethanes by ionic liquids. Fluid Phase Equilibria, 2015, 405, 1-6.	2.5	23
21	Viscosity of oxygenated fuel: A model based on Eyringâ€™s absolute rate theory. Fuel, 2019, 241, 218-226.	6.4	23
22	Densities and Viscosities of Ethyl Heptanoate and Ethyl Octanoate at Temperatures from 303 to 353 K and at Pressures up to 15 MPa. Journal of Chemical & Engineering Data, 2017, 62, 2454-2460.	1.9	22
23	Solubilities and diffusivities of R227ea, R236fa and R245fa in 1-hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide. Journal of Chemical Thermodynamics, 2018, 123, 158-164.	2.0	22
24	Estimating the viscosity of ionic liquid at high pressure using Eyring's absolute rate theory. Fluid Phase Equilibria, 2018, 458, 170-176.	2.5	22
25	Experimental and correlational study of isobaric molar heat capacities of fatty acid esters: Ethyl nonanoate and ethyl dodecanoate. Fluid Phase Equilibria, 2019, 479, 47-51.	2.5	22
26	Isobaric molar heat capacities of 1-ethyl-3-methylimidazolium acetate and 1-hexyl-3-methylimidazolium acetate up to 16ÂMPa. Fluid Phase Equilibria, 2016, 427, 187-193.	2.5	20
27	Vaporâ€“liquid equilibria and inter-diffusion coefficients for working pairs for absorption refrigeration systems composed of [HMIM][BF4] and fluorinated propanes. International Journal of Refrigeration, 2019, 104, 34-41.	3.4	20
28	Temperature and pressure dependence of densities and viscosities for binary mixtures of methyl decanoate plus n-heptane. Thermochimica Acta, 2018, 670, 211-218.	2.7	19
29	Solubilities of small hydrocarbons, viscosities of diluted tetraalkylphosphonium bis(2,4,4â€trimethylpentyl) phosphinates. AICHE Journal, 2014, 60, 2607-2612.	3.6	17
30	Isobaric heat capacities of ethyl heptanoate and ethyl cinnamate at pressures up to 16.3 MPa. Journal of Chemical Thermodynamics, 2016, 93, 70-74.	2.0	17
31	Prediction of Thermal Conductivity for Guiding Molecular Design of Liquids. ACS Sustainable Chemistry and Engineering, 2020, 8, 6022-6032.	6.7	17
32	Measurement of isobaric heat capacity of pure water up to supercritical conditions. Journal of Supercritical Fluids, 2015, 100, 1-6.	3.2	16
33	Isobaric molar heat capacities of binary mixtures containing methyl caprate and methyl laurate at pressures up to 16.2 MPa. Thermochimica Acta, 2017, 651, 43-46.	2.7	16
34	Prediction of the critical properties of mixtures based on group contribution theory. Journal of Molecular Liquids, 2018, 271, 313-318.	4.9	16
35	Caged Nitric Oxideâ€“Thiyl Radical Pairs. Journal of the American Chemical Society, 2019, 141, 3361-3365.	13.7	16
36	Surface Tension of Aqueous Solutions of Small-Chain Amino and Organic Acids. Journal of Chemical & Engineering Data, 2019, 64, 5049-5056.	1.9	16

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37	Heat Capacities of Fluids: The Performance of Various Equations of State. Journal of Chemical & Engineering Data, 2020, 65, 5654-5676.	1.9	16
38	Robust predictive visual servoing control for an inertially stabilized platform with uncertain kinematics. ISA Transactions, 2021, 114, 347-358.	5.7	16
39	Isobaric molar heat capacities measurement of binary mixtures containing ethyl laurate and ethanol at high pressures. Journal of Molecular Liquids, 2019, 280, 301-306.	4.9	15
40	The adsorption of hydrogen sulfide in calcite pores: A molecular simulation study. Journal of Molecular Liquids, 2020, 299, 112253.	4.9	15
41	Synergistic effect of supercritical water and nano-catalyst on lignin gasification. International Journal of Hydrogen Energy, 2021, 46, 34626-34637.	7.1	15
42	Mutual diffusion coefficients of isopropanol + n-heptane and isobutanol + n-heptane. Journal of Chemical Thermodynamics, 2016, 96, 127-133.	2.0	14
43	Absorption and separation of CO2/C3H8 and C3H6/C3H8 by ionic liquid: Effect of molar volume. Journal of Natural Gas Science and Engineering, 2018, 58, 266-274.	4.4	14
44	Isobaric Molar Heat Capacity of Ethyl Octanoate and Ethyl Decanoate at Pressures up to 24 MPa. Journal of Chemical & Engineering Data, 2018, 63, 2252-2256.	1.9	14
45	Physical data for a process to separate krypton from air by selective absorption in an ionic liquid. Fluid Phase Equilibria, 2015, 404, 124-130.	2.5	13
46	Correlation for viscosities of pure liquids at high pressures. Journal of Molecular Liquids, 2017, 231, 404-410.	4.9	13
47	Quantification of Dipolar Contribution and Modeling of Green Polar Fluids with the Polar Cubic-Plus-Association Equation of State. ACS Sustainable Chemistry and Engineering, 2021, 9, 7602-7619.	6.7	13
48	Modelling co-gasification of plastic waste and lignin in supercritical water using reactive molecular dynamics simulations. International Journal of Hydrogen Energy, 2022, 47, 21060-21066.	7.1	13
49	Unusual trend of viscosities and densities for four ionic liquids containing a tetraalkyl phosphonium cation and the anion bis(2,4,4-trimethylpentyl) phosphinate. Journal of Chemical Thermodynamics, 2014, 70, 122-126.	2.0	11
50	Experimental investigation and modeling of thermophysical properties of ethyl decanoate at high temperatures. Fluid Phase Equilibria, 2019, 501, 112274.	2.5	11
51	Experimental Study on Isobaric Molar Heat Capacities of a Deep Eutectic Solvent: Choline Chloride + Ethylene Glycol. Journal of Chemical & Engineering Data, 2020, 65, 690-695.	1.9	11
52	Isobaric Heat Capacity of Boric Acid Solution. Journal of Chemical & Engineering Data, 2014, 59, 4200-4204.	1.9	10
53	Prediction of critical temperature and critical pressure of multi-component mixtures. Fluid Phase Equilibria, 2017, 441, 2-8.	2.5	10
54	Determination of critical properties for binary and ternary mixtures containing dimethyl carbonate and alkanes. Journal of Supercritical Fluids, 2018, 137, 40-49.	3.2	10

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55	Mutual diffusion coefficients of ethanolÂ+Ân-heptane and diethyl carbonateÂ+Ân-heptane from 288.15ÂK to 318.15ÂK. Journal of Chemical Thermodynamics, 2020, 144, 106089.	2.0	10
56	Measurement of the Critical Properties of the Ternary Systems Hexane + Heptane + Octane and Octane + Nonane + Decane Using a Flow Apparatus. Journal of Chemical & Engineering Data, 2016, 61, 12-18.	1.9	9
57	Measurement of critical properties for binary and ternary mixtures containing potential gasoline additive diethyl carbonate (DEC). Fluid Phase Equilibria, 2018, 471, 17-23.	2.5	9
58	Gaseous Absorption of trans-1-Chloro-3,3,3-trifluoropropene in Three Immidazolium-Based Ionic Liquids. Journal of Chemical & Engineering Data, 2018, 63, 1780-1788.	1.9	9
59	Mutual diffusion behavior of short chain alcohols+n-octane mixtures. Thermochimica Acta, 2016, 624, 1-7.	2.7	8
60	A new power/cooling cogeneration system using R1234ze(E)/ionic liquid working fluid. International Journal of Energy Research, 2020, 44, 4703-4716.	4.5	8
61	Solubilities of isobutane and cyclopropane in ionic liquids. Journal of Chemical Thermodynamics, 2015, 88, 30-35.	2.0	7
62	Experimental determination of critical data of multi-component mixtures containing potential gasoline additives 2-butanol by a flow-type apparatus. Journal of Chemical Thermodynamics, 2016, 101, 35-43.	2.0	7
63	Fouling formed on SS316L tube surface from thermal oxidative degradation of exo -tetrahydrodicyclopentadiene. Applied Thermal Engineering, 2017, 118, 464-470.	6.0	7
64	Propane/propylene separation and CO2 capture in magnetic ionic liquid [bmim][FeCl4]. Chemical Engineering Research and Design, 2018, 137, 186-193.	5.6	7
65	A Comprehensive Study on Thermophysical Properties of Carbon Dioxide through the Cubic-Plus-Association and Crossover Cubic-Plus-Association Equations of State. Journal of Chemical & Engineering Data, 2020, 65, 4268-4284.	1.9	7
66	Speed of Sound and Derived Properties of Ethyl Nonanoate. Journal of Chemical & Engineering Data, 2019, 64, 3632-3640.	1.9	6
67	Solubilities of propane and cyclopropane in 1-hexyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate. International Journal of Refrigeration, 2016, 67, 69-76.	3.4	5
68	Densities and Viscosities of Mixtures of Methyl Dodecanoate + Ethyl Octanoate at Pressures up to 15 MPa. Journal of Chemical & Engineering Data, 2018, 63, 4085-4094.	1.9	5
69	Measurement of Critical Properties for Binary and Ternary Mixtures Containing n-Butanol and n-Alkane. Journal of Chemical & Engineering Data, 2018, 63, 3956-3965.	1.9	5
70	General Model Based on Artificial Neural Networks for Estimating the Viscosities of Oxygenated Fuels. ACS Omega, 2019, 4, 16564-16571.	3.5	5
71	A new activity coefficient model for the solution of molecular soluteÂ+Âionic liquid. Fluid Phase Equilibria, 2019, 493, 144-152.	2.5	5
72	A new thermodynamic cycle of heat pump relying on excess enthalpy changing. Applied Thermal Engineering, 2019, 150, 605-611.	6.0	5

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73	Measurement of critical temperature and critical pressure of tert-butanol and alkane mixtures. Journal of Molecular Liquids, 2020, 302, 112582.	4.9	5
74	Critical properties for the mixtures of ethanol and some biodiesel surrogates. Journal of Supercritical Fluids, 2019, 153, 104591.	3.2	4
75	Speed of sound and thermal diffusivity of ethyl myristate. Journal of Chemical Thermodynamics, 2020, 140, 105899.	2.0	4
76	Two-Binary-Interaction-Parameter Model for Molecular Solute + Ionic Liquid Solution. Industrial & Engineering Chemistry Research, 2021, 60, 11490-11501.	3.7	4
77	Viscosities and Densities of Phosphonium-Based Ionic Liquids Mixed with Dodecane. Zeitschrift Fur Physikalische Chemie, 2014, 228, 839-850.	2.8	3
78	Isobaric heat capacities of exo-tetrahydrodicyclopentadiene at temperatures from 323ÂK to 523ÂK and pressures up to 6ÂMPa. Fluid Phase Equilibria, 2017, 434, 102-106.	2.5	3
79	Measurement and Correlation of the Solubilities of Oxygen, Nitrogen, and Carbon Dioxide in JP-10. Journal of Chemical & Engineering Data, 2017, 62, 3998-4005.	1.9	3
80	Measurement of the speed of sound in supercritical nâ€“hexane at temperatures from (509.17â€“637.99) K and pressures from (3.5â€“7.5) MPa. Fluid Phase Equilibria, 2019, 497, 97-103.	2.5	2
81	Numerical Study of Flow and Heat Transfer in a Rectangular Channel Partially Filled with Porous Media at the Pore Scale Using Lattice Boltzmann Method. Heat Transfer Engineering, 2022, 43, 818-829.	1.9	2
82	Isobaric Molar Heat Capacities of Binary Mixtures of Diethyl Carbonate and Methyl Caprate at High Pressures. Journal of Chemical & Engineering Data, 2022, 67, 661-668.	1.9	2
83	Thermodynamics analysis on absorption refrigeration system using new working pairs of R227ea + [P(14)666][TMPP], R236fa + [P(14)666][TMPP] and R245fa + [P(14)666][TMPP]. AIP Conference Proceedings, 2018, , .	0.4	0
84	Dynamic motions and architectural changes in DNA supramolecular aggregates visualized via transmission electron microscopy without liquid cells. Nanoscale, 2021, 13, 15928-15936.	5.6	0
85	Isobaric molar heat capacities of dimethyl carbonate and alkane binary mixtures at high pressures. Journal of Thermal Analysis and Calorimetry, 0, , 1.	3.6	0