Michael H Rausch

List of Publications by Year
in descending order

75 papers	2,097 citations	201385 27 h-index	264894 42 g-index
77 all docs	77 docs citations	77 times ranked	1451 citing authors

#	Article	IF	Citations
1	Determination of hydrogen loading in the carrier system diphenylmethane/dicyclohexylmethane by depolarized Raman spectroscopy. International Journal of Hydrogen Energy, 2022, 47, 9331-9345.	3.8	6
2	Effect of the degree of hydrogenation on the viscosity, surface tension, and density of the liquid organic hydrogen carrier system based on diphenylmethane. International Journal of Hydrogen Energy, 2022, 47, 6111-6130.	3.8	19
3	Viscosity and Interfacial Tension of Binary Mixtures Consisting of Linear, Branched, Cyclic, or Oxygenated Hydrocarbons with Dissolved Gases Using Surface Light Scattering and Equilibrium Molecular Dynamics Simulations. International Journal of Thermophysics, 2022, 43, 1.	1.0	9
4	Viscosity, surface tension, and density of binary mixtures of the liquid organic hydrogen carrier diphenylmethane with benzophenone. International Journal of Hydrogen Energy, 2022, 47, 15789-15806.	3.8	14
5	Viscosity, surface tension, and density of the liquid organic hydrogen carrier system based on diphenylmethane, biphenyl, and benzophenone. International Journal of Hydrogen Energy, 2022, 47, 22078-22092.	3.8	10
6	Diffusivities in Binary Mixtures of n-Hexane or 1-Hexanol with Dissolved CH₄, Ne, Kr, R143a, SF₆, or R236fa Close to Infinite Dilution. Journal of Chemical & Engineering Data, 2021, 66, 2218-2232.	1.0	14
7	Viscosity, Interfacial Tension, and Density of Binary-Liquid Mixtures of n-Hexadecane with n-Octacosane, 2,2,4,4,6,8,8-Heptamethylnonane, or 1-Hexadecanol at Temperatures between 298.15 and 573.15 K by Surface Light Scattering and Equilibrium Molecular Dynamics Simulations. Journal of Chemical & Engineering Data, 2021, 66, 2264-2280.	1.0	12
8	Hydrogen solubility, interfacial tension, and density of the liquid organic hydrogen carrier system diphenylmethane/dicyclohexylmethane. International Journal of Hydrogen Energy, 2021, 46, 19446-19466.	3.8	25
9	Viscosity and Interfacial Tension of Binary Mixtures of n-Hexadecane with Dissolved Gases Using Surface Light Scattering and Equilibrium Molecular Dynamics Simulations. Journal of Chemical & Engineering Data, 2021, 66, 3205-3218.	1.0	17
10	Diffusivities of Binary Mixtures Consisting of Carbon Dioxide, Methane, and Propane by Dynamic Light Scattering. Journal of Chemical & Engineering Data, 2020, 65, 1068-1082.	1.0	13
11	Diffusion of Gold Nanoparticles in Inverse Opals Probed by Heterodyne Dynamic Light Scattering. Transport in Porous Media, 2020, 131, 723-737.	1.2	11
12	Thermophysical properties of diphenylmethane and dicyclohexylmethane as a reference liquid organic hydrogen carrier system from experiments and molecular simulations. International Journal of Hydrogen Energy, 2020, 45, 28903-28919.	3.8	38
13	Simultaneous determination of multiple transport properties over a wide range of temperatures and pressures from the analysis of non-equilibrium fluctuations by the shadowgraph method. Journal of Chemical Physics, 2020, 153, 144201.	1.2	10
14	Surface Tension and Viscosity of Binary Mixtures of the Fluorinated and Non-fluorinated Ionic Liquids [PFBMIm][PF6] and [C4C1Im][PF6] by the Pendant Drop Method and Surface Light Scattering. International Journal of Thermophysics, 2020, 41, 1.	1.0	17
15	Thermal Conductivity of Hydrocarbon Liquid Organic Hydrogen Carrier Systems: Measurement and Prediction. Journal of Chemical & Engineering Data, 2020, 65, 5003-5017.	1.0	15
16	Diffusivities in Binary Mixtures of [AMIM][NTf₂] Ionic Liquids with the Dissolved Gases H₂, He, N₂, CO, CO₂, or Kr Close to Infinite Dilution. Journal of Chemical & Engineering Data, 2020, 65, 4116-4129.	1.0	21
17	Effective Thermal Conductivity of Nanofluids: Measurement and Prediction. International Journal of Thermophysics, 2020, 41, 1.	1.0	25
18	Mutual and Thermal Diffusivities as well as Fluid-Phase Equilibria of Mixtures of 1-Hexanol and Carbon Dioxide. Journal of Physical Chemistry B, 2020, 124, 2482-2494.	1.2	32

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19	Characterization of Long Linear and Branched Alkanes and Alcohols for Temperatures up to 573.15 K by Surface Light Scattering and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2020, 124, 4146-4163.	1.2	46
20	Dynamic Light Scattering for Studying Mutual Diffusion Coefficients in Electrolyte Systems Comprised Entirely of Ions. Journal of the Electrochemical Society, 2020, 167, 133502.	1.3	6
21	Translational and Rotational Diffusion Coefficients of Gold Nanorods Dispersed in Mixtures of Water and Glycerol by Polarized Dynamic Light Scattering. Journal of Physical Chemistry B, 2019, 123, 9491-9502.	1.2	24
22	Liquid Viscosity and Surface Tension of n-Hexane, n-Octane, n-Decane, and n-Hexadecane up to 573 K by Surface Light Scattering. Journal of Chemical & Engineering Data, 2019, 64, 4116-4131.	1.0	58
23	Wetting behavior and interfacial tension of a refrigerant oil in air and refrigerant atmospheres. International Journal of Refrigeration, 2019, 107, 225-233.	1.8	4
24	Diffusivities in 1-Alcohols Containing Dissolved H₂, He, N₂, CO, or CO₂ Close to Infinite Dilution. Journal of Physical Chemistry B, 2019, 123, 8777-8790.	1.2	36
25	Thermal and mutual diffusivities of fuel-related binary liquid mixtures under pre-combustion conditions. Fuel, 2019, 242, 562-572.	3.4	27
26	Simultaneous study of molecular and micelle diffusion in a technical microemulsion system by dynamic light scattering. Journal of Colloid and Interface Science, 2019, 544, 144-154.	5.0	11
27	Liquid Viscosity and Interfacial Tension of Binary and Ternary Mixtures Containing n-Octacosane by Surface Light Scattering. Journal of Chemical & Engineering Data, 2019, 64, 817-826.	1.0	9
28	Binary Diffusion Coefficients for Gas Mixtures of Propane with Methane and Carbon Dioxide Measured in a Loschmidt Cell Combined with Holographic Interferometry. International Journal of Thermophysics, 2019, 40, 1.	1.0	10
29	Thermal, Mutual, and Self-Diffusivities of Binary Liquid Mixtures Consisting of Gases Dissolved in n-Alkanes at Infinite Dilution. Journal of Physical Chemistry B, 2018, 122, 3163-3175.	1.2	47
30	Concentration-Dependent Diffusion Coefficients of Binary Gas Mixtures Using a Loschmidt Cell with Holographic Interferometry. International Journal of Thermophysics, 2018, 39, 1.	1.0	2
31	Concentration-Dependent Diffusion Coefficients of Binary Gas Mixtures Using a Loschmidt Cell with Holographic Interferometry. International Journal of Thermophysics, 2018, 39, 1.	1.0	3
32	Viscosity and Surface Tension of Branched Alkanes 2-Methylnonane and 4-Methylnonane. Journal of Chemical & Engineering Data, 2018, 63, 2833-2839.	1.0	15
33	Influence of Liquid Structure on Fickian Diffusion in Binary Mixtures of n-Hexane and Carbon Dioxide Probed by Dynamic Light Scattering, Raman Spectroscopy, and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2018, 122, 7122-7133.	1.2	39
34	Thermophysical Properties of Homologous Tetracyanoborate-Based Ionic Liquids Using Experiments and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2017, 121, 4145-4157.	1.2	16
35	Study on the applicability of dynamic light scattering (DLS) to microemulsions including supercritical carbon dioxide-swollen micelles. Journal of Colloid and Interface Science, 2017, 499, 202-208.	5.0	17
36	A Simple Prediction Method for the Surface Tension of Ionic Liquids as a Function of Temperature. International Journal of Thermophysics, 2017, 38, 1.	1.0	15

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37	Liquid Viscosity and Surface Tension of n-Dodecane, n-Octacosane, Their Mixtures, and a Wax between 323 and 573 K by Surface Light Scattering. Journal of Chemical & Engineering Data, 2017, 62, 3319-3333.	1.0	76
38	Binary Diffusion Coefficients of Glycerolâ€"Water Mixtures for Temperatures from 323 to 448 K by Dynamic Light Scattering. Journal of Chemical & Engineering Data, 2017, 62, 4364-4370.	1.0	11
39	Simultaneous Analysis of Equilibrium Fluctuations at the Surface and in the Bulk of a Binary Liquid Mixture by Dynamic Light Scattering. Journal of Physical Chemistry B, 2017, 121, 10950-10956.	1.2	9
40	Characterization of Water Solubility in n-Octacosane Using Raman Spectroscopy. Journal of Physical Chemistry B, 2017, 121, 10665-10673.	1.2	13
41	The influence of fin structure and fin density on the condensation heat transfer of R134a on single finned tubes and in tube bundles. International Journal of Heat and Mass Transfer, 2016, 100, 582-589.	2.5	32
42	Thermal and Mutual Diffusivity of Binary Mixtures of n-Dodecane and n-Tetracontane with Carbon Monoxide, Hydrogen, and Water from Dynamic Light Scattering (DLS). Journal of Chemical & Engineering Data, 2016, 61, 1333-1340.	1.0	35
43	Effective thermal conductivity of nanofluids â€" A new model taking into consideration Brownian motion. International Journal of Heat and Mass Transfer, 2016, 99, 532-540.	2.5	54
44	Diffusivities of Ternary Mixtures of n-Alkanes with Dissolved Gases by Dynamic Light Scattering. Journal of Physical Chemistry B, 2016, 120, 10808-10823.	1.2	28
45	Binary Diffusion Coefficients of the Liquid Organic Hydrogen Carrier System Dibenzyltoluene/Perhydrodibenzyltoluene. Journal of Chemical & Engineering Data, 2016, 61, 504-511.	1.0	42
46	Systematic Study of Mass Transfer in a Loschmidt Cell for Binary Gas Mixtures. International Journal of Thermophysics, 2015, 36, 3116-3132.	1.0	4
47	Mutual and Self-Diffusivities in Binary Mixtures of [EMIM][B(CN)₄] with Dissolved Gases by Using Dynamic Light Scattering and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2015, 119, 8583-8592.	1.2	31
48	Dynamic Viscosity of Tetracyanoborate- and Tricyanomethanide-Based Ionic Liquids by Dynamic Light Scattering. Industrial & Engineering Chemistry Research, 2015, 54, 3071-3081.	1.8	27
49	Binary Diffusion Coefficient Data of Various Gas Systems Determined Using a Loschmidt Cell and Holographic Interferometry. International Journal of Thermophysics, 2015, 36, 3169-3185.	1.0	11
50	Viscosity of heavy n -alkanes and diffusion of gases therein based on molecular dynamics simulations and empirical correlations. Journal of Chemical Thermodynamics, 2015, 91, 101-107.	1.0	21
51	Surface Tension of Tricyanomethanide- and Tetracyanoborate-Based Imidazolium Ionic Liquids by Using the Pendant Drop Method. Journal of Chemical & Engineering Data, 2015, 60, 2665-2673.	1.0	23
52	Density, Surface Tension, and Kinematic Viscosity of Hydrofluoroethers HFE-7000, HFE-7100, HFE-7200, HFE-7300, and HFE-7500. Journal of Chemical & Engineering Data, 2015, 60, 3759-3765.	1.0	127
53	Measurement and Prediction of the Thermal Conductivity of Tricyanomethanide- and Tetracyanoborate-Based Imidazolium Ionic Liquids. International Journal of Thermophysics, 2014, 35, 195-217.	1.0	58
54	Simultaneous Determination of Thermal and Mutual Diffusivity of Binary Mixtures of n-Octacosane with Carbon Monoxide, Hydrogen, and Water by Dynamic Light Scattering. Journal of Physical Chemistry B, 2014, 118, 3981-3990.	1.2	41

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55	Mutual and Thermal Diffusivity of Binary Mixtures of the Ionic Liquids [BMIM][C(CN)₃] and [BMIM][B(CN)₄] with Dissolved CO₂ by Dynamic Light Scattering. Journal of Physical Chemistry B, 2014, 118, 4636-4646.	1.2	41
56	Thermophysical Properties of the Ionic Liquids [EMIM][B(CN)₄] and [HMIM][B(CN)₄]. Journal of Physical Chemistry B, 2013, 117, 8512-8523.	1.2	39
57	Binary Diffusion Coefficients for Mixtures of Ionic Liquids [EMIM][N(CN)₂], [EMIM][NTf₂], and [HMIM][NTf₂] with Acetone and Ethanol by Dynamic Light Scattering (DLS). Journal of Physical Chemistry B, 2013, 117, 2429-2437.	1.2	21
58	A new guarded parallel-plate instrument for the measurement of the thermal conductivity of fluids and solids. International Journal of Heat and Mass Transfer, 2013, 58, 610-618.	2.5	32
59	Measurement of Binary Diffusion Coefficients for Neonâ€“Argon Gas Mixtures Using a Loschmidt Cell Combined with Holographic Interferometry. International Journal of Thermophysics, 2013, 34, 47-63.	1.0	10
60	Investigation of Binary Diffusion Coefficients in Argonâ€Neon Mixtures Using a Loschmidt Cell Combined with Holographic Interferometry. Chemie-Ingenieur-Technik, 2013, 85, 732-739.	0.4	0
61	Viscosity, Interfacial Tension, Self-Diffusion Coefficient, Density, and Refractive Index of the Ionic Liquid 1-Ethyl-3-methylimidazolium Tetracyanoborate as a Function of Temperature at Atmospheric Pressure. Journal of Chemical & Engineering Data, 2012, 57, 828-835.	1.0	68
62	Thermophysical Properties of the Refrigerant Mixtures R417A and R417B from Dynamic Light Scattering (DLS). International Journal of Thermophysics, 2012, 33, 396-411.	1.0	18
63	Mutual diffusion in binary mixtures of ionic liquids and molecular liquids by dynamic light scattering (DLS). Physical Chemistry Chemical Physics, 2011, 13, 9525.	1.3	34
64	Studies on the Origin of Dropwise Condensation of Steam on Ion Implanted Metallic Surfaces. Chemie-Ingenieur-Technik, 2011, 83, 545-551.	0.4	6
65	Measurement and Prediction of the Thermal Conductivity of Ionic Liquids. Chemie-Ingenieur-Technik, 2011, 83, 1510-1514.	0.4	4
66	Thermal Conductivity of Ionic Liquids: Measurement and Prediction. International Journal of Thermophysics, 2010, 31, 2059-2077.	1.0	161
67	Dropwise condensation of steam on ion implanted titanium surfaces. International Journal of Heat and Mass Transfer, 2010, 53, 423-430.	2.5	57
68	Experimental Study on the Origin of Dropwise Condensation of Steam on Ion Implanted Metallic Surfaces. , 2010, , .		0
69	On the Mechanism of Dropwise Condensation of Steam on Ion Implanted Metallic Surfaces. Journal of Heat Transfer, 2010, 132, .	1.2	9
70	Mechanism of Dropwise Condensation on Ion Implanted Metallic Surfaces. , 2010, , .		0
71	Densities and Excess Molar Volumes for Binary Mixtures of Ionic Liquid 1-Ethyl-3-methylimidazolium Ethylsulfate with Solvents. Journal of Chemical & Engineering Data, 2010, 55, 4068-4074.	1.0	77
72	On the Characteristics of Ion Implanted Metallic Surfaces Inducing Dropwise Condensation of Steam. Langmuir, 2010, 26, 5971-5975.	1.6	26

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73	Dropwise Condensation Heat Transfer on Plasma-Ion-Implanted Small Horizontal Tube Bundles. Heat Transfer Engineering, 2010, 31, 821-828.	1.2	14
74	Dropwise condensation heat transfer on ion implanted aluminum surfaces. International Journal of Heat and Mass Transfer, 2008, 51, 1061-1070.	2.5	85
75	Experimental study of dropwise condensation on plasma-ion implanted stainless steel tubes. International Journal of Heat and Mass Transfer, 2006, 49, 5018-5026.	2.5	55