

Kenneth R. Harris

List of Publications by Year in descending order

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106
papers

5,360
citations

66315

42
h-index

88593

70
g-index

116
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116
docs citations

116
times ranked

3335
citing authors

#	ARTICLE	IF	CITATIONS
1	Temperature and Pressure Dependence of the Viscosity of the Ionic Liquids 1-Hexyl-3-methylimidazolium Hexafluorophosphate and 1-Butyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)imide. <i>Journal of Chemical & Engineering Data</i> , 2007, 52, 1080-1085.	1.0	312
2	Temperature and Pressure Dependence of the Viscosity of the Ionic Liquid 1-Butyl-3-methylimidazolium Hexafluorophosphate. <i>Journal of Chemical & Engineering Data</i> , 2005, 50, 1777-1782.	1.0	296
3	Temperature and Pressure Dependence of the Viscosity of the Ionic Liquids 1-Methyl-3-octylimidazolium Hexafluorophosphate and 1-Methyl-3-octylimidazolium Tetrafluoroborate. <i>Journal of Chemical & Engineering Data</i> , 2006, 51, 1161-1167.	1.0	234
4	Pressure and temperature dependence of the self diffusion coefficient of water and oxygen-18 water. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1980, 76, 377.	1.0	227
5	Temperature and Pressure Dependence of the Viscosity of the Ionic Liquid 1-Butyl-3-methylimidazolium Tetrafluoroborate: Viscosity and Density Relationships in Ionic Liquids. <i>Journal of Chemical & Engineering Data</i> , 2007, 52, 2425-2430.	1.0	216
6	Relations between the Fractional Stokes-Einstein and Nernst-Einstein Equations and Velocity Correlation Coefficients in Ionic Liquids and Molten Salts. <i>Journal of Physical Chemistry B</i> , 2010, 114, 9572-9577.	1.2	170
7	Temperature and Volume Dependence of the Viscosity of Water and Heavy Water at Low Temperatures. <i>Journal of Chemical & Engineering Data</i> , 2004, 49, 1064-1069.	1.0	147
8	The fractional Stokes-Einstein equation: Application to Lennard-Jones, molecular, and ionic liquids. <i>Journal of Chemical Physics</i> , 2009, 131, 054503.	1.2	133
9	Effect of Pressure on Transport Properties of the Ionic Liquid 1-Butyl-3-methylimidazolium Hexafluorophosphate. <i>Journal of Physical Chemistry B</i> , 2007, 111, 2062-2069.	1.2	130
10	The density dependence of the self-diffusion coefficient of liquid methane. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1980, 104, 262-280.	1.2	103
11	Transport Properties of 1-Butyl-3-methylpyrrolidinium Bis(trifluoromethylsulfonyl)amide. <i>Journal of Chemical & Engineering Data</i> , 2011, 56, 4672-4685.	1.0	99
12	Self-Diffusion Coefficients and Related Transport Properties for a Number of Fragile Ionic Liquids. <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 2399-2411.	1.0	92
13	Density scaling of the transport properties of molecular and ionic liquids. <i>Journal of Chemical Physics</i> , 2011, 134, 144507.	1.2	91
14	Mutual and tracer diffusion coefficients and frictional coefficients for the systems benzene-chlorobenzene, benzene-n-hexane, and benzene-n-heptane at 25.deg.. <i>The Journal of Physical Chemistry</i> , 1970, 74, 3518-3529.	2.9	90
15	Temperature and density dependence of the self-diffusion coefficient of n-hexane from 223 to 333 K and up to 400 MPa. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1982, 78, 2265.	1.0	89
16	Temperature and Pressure Dependence of the Viscosities of 2-Ethylhexyl Benzoate, Bis(2-ethylhexyl) Phthalate, 2,6,10,15,19,23-Hexamethyltetracosane (Squalane), and Diisodecyl Phthalate. <i>Journal of Chemical & Engineering Data</i> , 2009, 54, 2729-2738.	1.0	84
17	Reference Correlation for the Viscosity of Liquid Toluene from 213 to 373 K at Pressures to 250 MPa. <i>International Journal of Thermophysics</i> , 2001, 22, 789-799.	1.0	83
18	The effect of isotopic substitution on diffusion in liquids. <i>Chemical Society Reviews</i> , 1976, 5, 215.	18.7	82

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19	Alcohol tracer diffusion, density, NMR and FTIR studies of aqueous ethanol and 2,2,2-trifluoroethanol solutions at 25°C. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 1963-1970.	1.7	82
20	The density dependence of the self-diffusion coefficient of methane at 50°C, 25°C and 50°C. Physica A: Statistical Mechanics and Its Applications, 1978, 94, 448-464.	1.2	81
21	Effect of Pressure on the Transport Properties of Ionic Liquids: 1-Alkyl-3-methylimidazolium Salts. Journal of Physical Chemistry B, 2008, 112, 9830-9840.	1.2	78
22	Temperature and Density Dependence of the Viscosity of Octane and Toluene. Journal of Chemical & Engineering Data, 1997, 42, 1254-1260.	1.0	71
23	Self-diffusion, velocity cross-correlation, distinct diffusion and resistance coefficients of the ionic liquid [BMIM][Tf ₂ N] at high pressure. Physical Chemistry Chemical Physics, 2015, 17, 23977-23993.	1.3	70
24	Self-Diffusion of Water at Low Temperatures and High Pressure. Journal of Chemical & Engineering Data, 1997, 42, 346-348.	1.0	68
25	An apparatus for degassing liquids by vacuum sublimation. The Journal of Physical Chemistry, 1968, 72, 4693-4695.	2.9	65
26	Temperature and pressure dependence of the electrical conductivity of the ionic liquids 1-methyl-3-octylimidazolium hexafluorophosphate and 1-methyl-3-octylimidazolium tetrafluoroborate. Fluid Phase Equilibria, 2007, 261, 414-420.	1.4	65
27	Temperature and density dependence of the selfdiffusion coefficients of liquidn-octane and toluene. Molecular Physics, 1993, 78, 235-248.	0.8	64
28	Temperature and Density Dependence of the Viscosity of Toluene. Journal of Chemical & Engineering Data, 2000, 45, 893-897.	1.0	64
29	Excess second virial coefficients for some dilute binary gas mixtures. Australian Journal of Chemistry, 1982, 35, 1525.	0.5	62
30	Electrolytes for Lithium (Sodium) Batteries Based on Ionic Liquids: Highlighting the Key Role Played by the Anion. Batteries and Supercaps, 2020, 3, 793-827.	2.4	62
31	Temperature and Pressure Dependence of the Viscosity of Diisodecyl Phthalate at Temperatures between (0 and 100) °C and at Pressures to 1 GPa. Journal of Chemical & Engineering Data, 2007, 52, 272-278.	1.0	60
32	High pressure studies of the transport properties of ionic liquids. Faraday Discussions, 2012, 154, 425-438.	1.6	58
33	Can the Transport Properties of Molten Salts and Ionic Liquids Be Used To Determine Ion Association?. Journal of Physical Chemistry B, 2016, 120, 12135-12147.	1.2	58
34	On the Use of the Angell-Walden Equation To Determine the Ionicity of Molten Salts and Ionic Liquids. Journal of Physical Chemistry B, 2019, 123, 7014-7023.	1.2	57
35	Density of 1-Butyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide and 1-Hexyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide over an Extended Pressure Range up to 250 MPa. Journal of Chemical & Engineering Data, 2015, 60, 1408-1418.	1.0	56
36	The temperature and density dependence of the self-diffusion coefficient of n-hexadecane. Molecular Physics, 1992, 75, 461-466.	0.8	50

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37	Diffusion and thermal diffusion in some dilute binary gaseous systems between 195 and 400 K: Tests of several asymmetric potentials using the infinite order sudden approximation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1985, 131, 506-519.	1.2	49
38	Viscosity measurements for squalane at high pressures to 350MPa from T=(293.15 to 363.15)K. <i>Journal of Chemical Thermodynamics</i> , 2014, 69, 201-208.	1.0	48
39	Vapour pressures and excess Gibbs energies of mixtures of benzene with chlorobenzene, n-hexane, and n-heptane at 25Å°C. <i>Journal of Chemical Thermodynamics</i> , 1970, 2, 805-811.	1.0	46
40	Velocity correlation coefficients as an expression of particleâ€“particle interactions in (electrolyte) solutions. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1978, 74, 933.	1.0	45
41	An Industrial Reference Fluid for Moderately High Viscosity. <i>Journal of Chemical & Engineering Data</i> , 2008, 53, 2003-2011.	1.0	43
42	Possible Proton Conduction Mechanism in Pseudo-Protic Ionic Liquids: A Concept of Specific Proton Conduction. <i>Journal of Physical Chemistry B</i> , 2019, 123, 6244-6252.	1.2	43
43	Diffusion and Structure in Dilute Aqueous Alcohol Solutions:Â Evidence for the Effects of Large Apolar Solutes on Water. <i>Journal of Physical Chemistry B</i> , 1998, 102, 8874-8879.	1.2	42
44	Reference Correlation of the Viscosity of Squalane from 273 to 373 K at 0.1 MPa. <i>Journal of Physical and Chemical Reference Data</i> , 2013, 42, .	1.9	42
45	The density dependence of the self-diffusion coefficient of chlorotrifluoromethane near the critical temperature. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1978, 93, 593-610.	1.2	41
46	Association of caffeine in aqueous solution. Effects on caffeine intradiffusion. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1989, 85, 3281.	1.0	41
47	The temperature and density dependences of the self-diffusion coefficient and the shear viscosity of liquid trichloromethane. <i>Molecular Physics</i> , 1990, 71, 1205-1221.	0.8	41
48	Diffusion and Structure in Waterâˆ“Alcohol Mixtures:â€‰ Water + tert-Butyl Alcohol (2-Methyl-2-Propanol). <i>Journal of Physical Chemistry A</i> , 1999, 103, 6508-6513.	1.1	41
49	Mutual diffusion coefficients for the systems waterâ€“ethanol and waterâ€“propan-1-ol at 25 Å°C. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 1969-1974.	1.7	38
50	Revised and Extended Values for Self-Diffusion Coefficients of 1-Alkyl-3-methylimidazolium Tetrafluoroborates and Hexafluorophosphates: Relations between the Transport Properties. <i>Journal of Physical Chemistry B</i> , 2016, 120, 12937-12949.	1.2	38
51	Reference Correlations for the Density and Viscosity of Squalane from 273 to 473 K at Pressures to 200 MPa. <i>Journal of Physical and Chemical Reference Data</i> , 2014, 43, .	1.9	37
52	Densities and excess volumes of mixtures of benzene with chlorobenzene, cyclohexene, n-hexane, n-heptane, and n-octane at 25Å°C. <i>Journal of Chemical Thermodynamics</i> , 1970, 2, 813-819.	1.0	36
53	Measurement of the Viscosity and Density of a Reference Fluid, with Nominal Viscosity at T= 298 K and p= 0.1 MPa of 29 mPaÂ’s, at Temperatures between (273 and 423) K and Pressures below 275 MPa. <i>Journal of Chemical & Engineering Data</i> , 2006, 51, 2185-2196.	1.0	35
54	Transport, Electrochemical and Thermophysical Properties of Two Nâ€“Donorâ€“Functionalised Ionic Liquids. <i>Chemistry - A European Journal</i> , 2013, 19, 17733-17744.	1.7	35

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55	Scaling the transport properties of molecular and ionic liquids. <i>Journal of Molecular Liquids</i> , 2016, 222, 520-534.	2.3	34
56	The self-diffusion coefficient and viscosity of the hard sphere fluid revisited: a comparison with experimental data for xenon, methane, ethene and trichloromethane. <i>Molecular Physics</i> , 1992, 77, 1153-1167.	0.8	31
57	Velocity Correlations in Aqueous Electrolyte Solutions from Diffusion, Conductance, and Transference Data. Part 2, Applications to Concentrated Solutions of 1 ⁺ Electrolytes. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1977, 81, 664-670.	0.9	30
58	Temperature and Pressure Dependence of the Electrical Conductivity of 1-Butyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide. <i>Journal of Chemical & Engineering Data</i> , 2015, 60, 1495-1503.	1.0	29
59	Intradiffusion coefficients for zinc and water and shear viscosities in aqueous zinc(II) perchlorate solutions at 25.degree.. <i>The Journal of Physical Chemistry</i> , 1990, 94, 5109-5114.	2.9	28
60	Temperature and Density Dependence of the Viscosity of Cyclopentane. <i>Journal of Chemical & Engineering Data</i> , 2004, 49, 138-142.	1.0	28
61	Viscosity scaling of the self-diffusion and velocity cross-correlation coefficients of two functionalised ionic liquids and of their non-functionalized analogues. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 9161-9170.	1.3	28
62	Temperature and Density Dependence of the Transport Properties of the Ionic Liquid Triethylpentylphosphonium Bis(trifluoromethanesulfonyl)amide, [P _{222,5}][Tf ₂ N]. <i>Journal of Chemical & Engineering Data</i> , 2018, 63, 2015-2027.	1.0	28
63	An improved NMR spin-echo apparatus for the measurement of self-diffusion coefficients: The diffusion of water in aqueous electrolyte solutions. <i>Journal of Magnetic Resonance</i> , 1978, 29, 473-482.	0.5	27
64	A lattice-hole theory for conductivity in ionic liquid mixtures: application to ionic liquid + water mixtures. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 1172-1176.	1.3	26
65	Viscous Calibration Liquids for Self-Diffusion Measurements. <i>Journal of Chemical & Engineering Data</i> , 2015, 60, 3506-3517.	1.0	25
66	Excess and Interaction Second Virial Coefficients for Ten Binary Gaseous Systems Containing SF ₆ . <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1982, 86, 626-627.	0.9	24
67	Communications: The fractional Stokes-Einstein equation: Application to water. <i>Journal of Chemical Physics</i> , 2010, 132, 231103.	1.2	23
68	Diffusion and Structure in Aqueous Amphiphile Mixtures: Water-Acetonitrile. <i>Journal of Physical Chemistry B</i> , 1999, 103, 7015-7018.	1.2	21
69	The importance of transport property studies for battery electrolytes: revisiting the transport properties of lithium-N-methyl-N-propylpyrrolidinium bis(fluorosulfonyl)imide mixtures. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 10527-10542.	1.3	21
70	Temperature and Pressure Dependence of the Viscosities of Krytox GPL102 Oil and Di(pentaerythritol) Hexa(isononanoate). <i>Journal of Chemical & Engineering Data</i> , 2015, 60, 1510-1519.	1.0	20
71	Comment on "Negative effective Li transference numbers in Li salt/ionic liquid mixtures: does Li drift in the "Wrong" direction?" by M. Gouverneur, F. Schmidt and M. SchÃ¶nhoff, <i>Phys. Chem. Chem. Phys.</i> , 2018, 20, 7470. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 30041-30045.	1.3	18
72	Temperature and Pressure Dependence of the Viscosity of the Ionic Liquid 1-Butyl-3-methylimidazolium Acetate. <i>Journal of Chemical & Engineering Data</i> , 2020, 65, 804-813.	1.0	17

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73	Temperature and Pressure Dependence of the Viscosity of the Ionic Liquids 1-Hexyl-3-methylimidazolium Tetrafluoroborate and 1-Ethyl- and 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)amides. Journal of Chemical & Engineering Data, 2021, 66, 4618-4628.	1.0	17
74	On the use of the Edgeworth-Cramér series to obtain diffusion coefficients from Taylor dispersion peaks. Journal of Solution Chemistry, 1991, 20, 595-606.	0.6	16
75	On the density scaling of $\rho V T$ data and transport properties for molecular and ionic liquids. Journal of Chemical Physics, 2012, 136, 214502.	1.2	16
76	Isotope effects and the thermal offset effect for diffusion and viscosity coefficients of liquid water. Physical Chemistry Chemical Physics, 2002, 4, 5841-5845.	1.3	15
77	The Concentration Dependences of the Binary Diffusion Coefficients of the Systems H_2 -Ne, D_2 -Ne, H_2 - N_2 , D_2 - N_2 , H_2 -Ar, and D_2 -Ar at 1 atm Pressure and 300 K. Canadian Journal of Physics, 1972, 50, 1644-1647.	0.4	14
78	Mutual-diffusion coefficients and viscosities for the water-2-methylpropan-2-ol system at 15 and 25 °C. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 4071-4077.	1.7	14
79	Comment on "Ionic Conductivity, Diffusion Coefficients, and Degree of Dissociation in Lithium Electrolytes, Ionic Liquids, and Hydrogel Polyelectrolytes". Journal of Physical Chemistry B, 2018, 122, 10964-10967.	1.2	13
80	Reference Correlation for the Viscosity of Liquid Cyclopentane from 220 to 310 K at Pressures to 25 MPa. International Journal of Thermophysics, 2004, 25, 13-20.	1.0	11
81	Viscosity of Water + tert-Butyl Alcohol (2-Methyl-2-propanol) Mixtures at Low Temperatures and High Pressure. Journal of Chemical & Engineering Data, 2009, 54, 581-588.	1.0	11
82	Thermodynamic or density scaling of the thermal conductivity of liquids. Journal of Chemical Physics, 2020, 153, 104504.	1.2	11
83	Osmotic coefficient data for the system benzene-benzoic acid at 25 degree. The Journal of Physical Chemistry, 1967, 71, 483-486.	2.9	10
84	Rough hard spheres treatment of tracer diffusion of each component in two-component liquid systems. Chemical Physics, 1978, 32, 349-352.	0.9	10
85	Thermodynamic property measurements for 2-methyl-2-propanol + water from the freezing surface to 75 °C. High Temperatures - High Pressures, 1998, 30, 51-62.	0.3	10
86	The pressure and composition dependence of mutual diffusion in the system helium-nitrogen at 300 K. Chemical Physics Letters, 1975, 32, 561-565.	1.2	9
87	Comment on "Self-diffusion near the liquid-vapor critical point". J. Chem. Phys. 114, 4912 (2001)]. Journal of Chemical Physics, 2002, 116, 6379-6380.	1.2	9
88	The Concentration Dependence at 1 atm Pressure and 300 °K of the Binary Diffusion Coefficients of the Systems Helium-Carbon Dioxide, Helium-Nitrous Oxide, and Helium-Sulfur Hexafluoride. Canadian Journal of Chemistry, 1972, 50, 1874-1876.	0.6	8
89	Isotopic mass effects in the diffusion of small light solutes in a solvent of larger and heavier molecules. The Journal of Physical Chemistry, 1977, 81, 2191-2192.	2.9	8
90	Mutual Diffusion Coefficients for the Systems HD - N_2 and HD -Ar at 1 atm Pressure and 300 K. Canadian Journal of Physics, 1973, 51, 2101-2107.	0.4	7

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91	Hartley's Crank equation and standard velocity correlation coefficients. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1982, 78, 957.	1.0	7
92	The self-diffusion coefficient of sulphuric acid. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1982, 78, 1629.	1.0	6
93	Nucleation in complex multi-component and multi-phase systems: general discussion. <i>Faraday Discussions</i> , 2015, 179, 503-542.	1.6	6
94	Comments on the preparation and transport properties of novel lithium ionic liquids [electrochim. Acta 50 (2004) 1-5] and ion transport properties of lithium ionic liquids and their ion gels. [Electrochim. acta 50 (2005) 3872-3877]. <i>Electrochimica Acta</i> , 2020, 337, 135806.	2.6	5
95	Does $T_f < 2N >^{\sup} < /sup >$ slither? Equivalence of cation and anion self-diffusion activation volumes in 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)amide. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 14430-14439.	1.3	4
96	On the Correlation of Tracer Diffusion Coefficients. <i>Journal of Chemical & Engineering Data</i> , 1996, 41, 891-894.	1.0	3
97	H-Bonding in 2,2,2-Trifluoroethanol: Application of the Stokes-Einstein-Sutherland Equation to Self-Diffusion and Viscosity at High Pressures. <i>Journal of Chemical & Engineering Data</i> , 2018, 63, 1443-1453.	1.0	3
98	Effect of Pressure on the Transport Properties of 1-Hexyl-3-methylimidazolium Bis(trifluoromethylsulfonyl)amide and 1-Hexyl-3-methylimidazolium Tetrafluoroborate. <i>Journal of Molecular Liquids</i> , 2022, , 119109.	2.3	3
99	Mutual diffusion coefficients for the system benzene-cyclohexene at 25 °C. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1994, 98, 560-562.	0.9	2
100	Correlation of dense fluid self-diffusion, shear viscosity, and thermal conductivity coefficients. <i>International Journal of Thermophysics</i> , 1995, 16-16, 155-165.	1.0	2
101	CHAPTER 5. Thermal Conductivity and Diffusivity. , 0, , 132-172.		2
102	Correction to "Temperature and Pressure Dependence of the Viscosities of Krytox GPL102 Oil and Di(pentaerythritol) Hexa(isononanoate)". <i>Journal of Chemical & Engineering Data</i> , 2016, 61, 1682-1683.	1.0	2
103	The determination of the pH of standard buffer solutions: A laboratory experiment. <i>Journal of Chemical Education</i> , 1985, 62, 350.	1.1	1
104	Determination of Potential Functions for Unlike Interactions from Transport Properties of Dilute Gases. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1993, 97, 1061-1068.	0.9	1
105	A minimal volume gas sampling valve. <i>Journal of Physics E: Scientific Instruments</i> , 1973, 6, 1177-1178.	0.7	0
106	Thermodynamic or density scaling of the electrical conductivity of molten salts. <i>Journal of Chemical Physics</i> , 2022, 156, 054501.	1.2	0