

# Tatsuya Umecky

## List of Publications by Year in descending order

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54  
papers

1,409  
citations

279487

23  
h-index

344852

36  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1451  
citing authors

#	ARTICLE	IF	CITATIONS
1	Existing Condition and Migration Property of Ions in Lithium Electrolytes with Ionic Liquid Solvent. <i>Journal of Physical Chemistry B</i> , 2007, 111, 11794-11802.	1.2	121
2	Self-diffusion coefficients of 1-butyl-3-methylimidazolium hexafluorophosphate with pulsed-field gradient spin-echo NMR technique. <i>Fluid Phase Equilibria</i> , 2005, 228-229, 329-333.	1.4	87
3	Solution Structures of 1-Butyl-3-methylimidazolium Hexafluorophosphate Ionic Liquid Saturated with CO <sub>2</sub> : <sup>Å</sup> Experimental Evidence of Specific Anion <sup>ˆ</sup> CO <sub>2</sub> Interaction. <i>Journal of Physical Chemistry B</i> , 2005, 109, 13847-13850.	1.2	87
4	Low Melting and Electrochemically Stable Ionic Liquids Based on Asymmetric Fluorosulfonyl(trifluoromethylsulfonyl)amide. <i>Chemistry Letters</i> , 2008, 37, 1020-1021.	0.7	65
5	Direct Measurements of Ionic Mobility of Ionic Liquids Using the Electric Field Applying Pulsed Gradient Spin <sup>ˆ</sup> Echo NMR. <i>Journal of Physical Chemistry B</i> , 2009, 113, 8466-8468.	1.2	60
6	CO <sub>2</sub> absorption properties, densities, viscosities, and electrical conductivities of ethylimidazolium and 1-ethyl-3-methylimidazolium ionic liquids. <i>Fluid Phase Equilibria</i> , 2014, 362, 300-306.	1.4	58
7	Infinite Dilution Binary Diffusion Coefficients of Several $\hat{\pm}$ -Amino Acids in Water over a Temperature Range from (293.2 to 333.2) K with the Taylor Dispersion Technique. <i>Journal of Chemical &amp; Engineering Data</i> , 2006, 51, 1705-1710.	1.0	55
8	CO <sub>2</sub> solubility in and physical properties for ionic liquid mixtures of 1-butyl-3-methylimidazolium acetate and 1-butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide. <i>Journal of Molecular Liquids</i> , 2016, 217, 112-119.	2.3	55
9	Ionization Condition of Lithium Ionic Liquid Electrolytes under the Solvation Effect of Liquid and Solid Solvents. <i>Journal of Physical Chemistry B</i> , 2008, 112, 3357-3364.	1.2	51
10	Electrical Conductivities, Viscosities, and Densities of <i>N,N</i> -Methoxymethyl- and <i>N,N</i> -Butyl- <i>N,N</i> -methylpyrrolidinium Ionic Liquids with the Bis(fluorosulfonyl)amide Anion. <i>Journal of Chemical &amp; Engineering Data</i> , 2012, 57, 751-755.	1.0	48
11	Interactions of Perfluoroalkyltrifluoroborate Anions with Li Ion and Imidazolium Cation: Effects of Perfluoroalkyl Chain on Motion of Ions in Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2010, 114, 11390-11396.	1.2	45
12	Alkoxy chains in ionic liquid anions; effect of introducing ether oxygen into perfluoroalkylborate on physical and thermal properties. <i>Chemical Communications</i> , 2010, 46, 1730.	2.2	43
13	Microscopic interactions of the imidazolium-based ionic liquid with molecular liquids depending on their electron-donicity. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 23627-23638.	1.3	43
14	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
15	Water-induced Acceleration of Transport Properties in Hydrophobic 1-Butyl-3-methylimidazolium Hexafluorophosphate Ionic Liquid. <i>Chemistry Letters</i> , 2005, 34, 324-325.	0.7	38
16	Pressure <sup>ˆ</sup> volume <sup>ˆ</sup> temperature <sup>ˆ</sup> composition relations for carbon dioxide+pyrrolidinium-based ionic liquid binary systems. <i>Fluid Phase Equilibria</i> , 2013, 360, 253-259.	1.4	34
17	Electrical Conductivities, Viscosities, and Densities of <i>N,N</i> -Acetoxyethyl- <i>N,N</i> , <i>N,N</i> -dimethyl- <i>N,N</i> -ethylammonium and <i>N,N</i> , <i>N,N</i> -Dimethyl- <i>N,N</i> -ethyl- <i>N,N</i> -methoxyethoxyethylammonium Bis(trifluoromethanesulfonyl)amide and Their Nonfunctionalized Analogues. <i>Journal of Chemical &amp; Engineering Data</i> , 2013, 58, 370-376.	1.0	33
18	Effects of alkyl chain on transport properties in 1-alkyl-3-methylimidazolium hexafluorophosphates. <i>Journal of Molecular Liquids</i> , 2005, 119, 77-81.	2.3	29

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19	CO <sub>2</sub> Solubilities in Ammonium Bis(trifluoromethanesulfonyl)amide Ionic Liquids: Effects of Ester and Ether Groups. <i>Journal of Chemical &amp; Engineering Data</i> , 2014, 59, 1435-1440.	1.0	28
20	Binary Diffusion Coefficients of Aqueous Phenylalanine, Tyrosine Isomers, and Aminobutyric Acids at Infinitesimal Concentration and Temperatures from (293.2 to 333.2) K. <i>Journal of Chemical &amp; Engineering Data</i> , 2013, 58, 1909-1917.	1.0	27
21	Experimental Determination of Reorientational Correlation Time of CO <sub>2</sub> over a Wide Range of Density and Temperature. <i>Journal of Physical Chemistry B</i> , 2003, 107, 12003-12008.	1.2	25
22	CO <sub>2</sub> solubility and physical properties of N-(2-hydroxyethyl)pyridinium bis(trifluoromethanesulfonyl)amide. <i>Fluid Phase Equilibria</i> , 2013, 357, 64-70.	1.4	25
23	Effects of Tetrafluoroborate and Bis(trifluoromethylsulfonyl)amide Anions on the Microscopic Structures of 1-Methyl-3-octylimidazolium-Based Ionic Liquids and Benzene Mixtures: A Multiple Approach by ATR-IR, NMR, and Femtosecond Raman-Induced Kerr Effect Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2016, 120, 513-526.	1.2	24
24	<sup>9</sup> Be NMR Relaxation Measurements of Bis(acetylacetonato)beryllium(II) in Liquid and Supercritical Carbon Dioxide: A Clear Evidence of Near-Critical Solvation Effect on Rotational Correlation Time. <i>Journal of Physical Chemistry B</i> , 2002, 106, 11114-11119.	1.2	19
25	High-pressure NMR studies on solvation structure in supercritical carbon dioxide. <i>Fluid Phase Equilibria</i> , 2002, 194-197, 859-868.	1.4	18
26	Effects of Dissolved Water on Li <sup>+</sup> Solvation in 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide Ionic Liquid Studied by NMR. <i>Journal of Physical Chemistry B</i> , 2013, 117, 16219-16226.	1.2	18
27	CO <sub>2</sub> Absorption Properties and Mechanisms for 1-Ethyl-3-methylimidazolium Ether-Functionalized Carboxylates. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 12949-12961.	1.8	18
28	Effects of hydroxyl groups on binary diffusion coefficients of $\hat{\pm}$ -amino acids in dilute aqueous solutions. <i>Fluid Phase Equilibria</i> , 2008, 264, 18-22.	1.4	17
29	Effect of partial pressure on CO <sub>2</sub> solubility in ionic liquid mixtures of 1-butyl-3-methylimidazolium acetate and 1-butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide. <i>Fluid Phase Equilibria</i> , 2016, 420, 74-82.	1.4	17
30	Binary Diffusion Coefficients of Aqueous Straight-Chain Amino Acids at Infinitesimal Concentration and Temperatures from (298.2 to 333.2) K. <i>Journal of Chemical &amp; Engineering Data</i> , 2013, 58, 2848-2853.	1.0	15
31	Development of High-Pressure Electric Conductivity Cell and its Application: Pressure Effect of Carbon Dioxide on Electric Conductivity of Ionic Liquid. <i>Electrochemistry</i> , 2004, 72, 703-705.	0.6	13
32	Solvation structure and dynamics of Li <sup>+</sup> in Lewis-basic ionic liquid of 1-octyl-4-aza-1-azoniabicyclo[2.2.2]octane bis(trifluoromethanesulfonyl)amide. <i>Journal of Molecular Liquids</i> , 2015, 209, 557-562.	2.3	13
33	Determination of anisotropic solvation structure of octafluorotoluene in supercritical carbon dioxide by means of solvent-induced <sup>19</sup> F NMR chemical shift. <i>Chemical Physics Letters</i> , 2001, 338, 95-100.	1.2	12
34	High-Pressure <sup>19</sup> F NMR Measurements of a Series of Fluorinated Benzenes in Supercritical Carbon Dioxide. <i>Journal of Solution Chemistry</i> , 2004, 33, 863-874.	0.6	12
35	SANS, ATR-IR, and 1D- and 2D-NMR studies of mixing states of imidazolium-based ionic liquid and aryl solvents. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 20565.	1.3	11
36	Solvent-Dependent Properties and Higher-Order Structures of Aryl Alcohol + Surfactant Molecular Gels. <i>Langmuir</i> , 2016, 32, 4352-4360.	1.6	11

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37	CO <sub>2</sub> absorption features of 1-ethyl-3-methylimidazolium ionic liquids with 2,4-pentanedionate and its fluorine derivatives. <i>Journal of CO<sub>2</sub> Utilization</i> , 2019, 31, 75-84.	3.3	11
38	Effect of CO <sub>2</sub> dissolution on electrical conductivity and self-diffusion coefficients of 1-butyl-3-methylimidazolium hexafluorophosphate ionic liquid. <i>Fluid Phase Equilibria</i> , 2013, 357, 76-79.	1.4	10
39	A Novel High-Pressure NMR Cell Consisting of Double Tube Structure for the Convenient On-Line Measurements. <i>Chemistry Letters</i> , 2002, 31, 118-119.	0.7	9
40	A Study of the Solvation Structure of <sup>13</sup> C-Leucine in Alcohol-Water Binary Solvents through Molecular Dynamics Simulations and FTIR and NMR Spectroscopy. <i>ChemPhysChem</i> , 2015, 16, 3190-3199.	1.0	9
41	Fluorination Effects on Rotational Correlation Times of Tris(β <sup>2</sup> -diketonato)aluminum(III) in CO <sub>2</sub> by <sup>27</sup> Al NMR Relaxation Measurements. <i>Journal of Physical Chemistry B</i> , 2011, 115, 10622-10630.	1.2	7
42	SANS, Infrared, and <sup>7</sup> Li and <sup>23</sup> Na NMR Studies on Phase Separation of Alkali Halide-Acetonitrile-Water Mixtures by Cooling. <i>Journal of Physical Chemistry B</i> , 2013, 117, 2438-2448.	1.2	7
43	Solvation Structure of 1,3-Butanediol in Aqueous Binary Solvents with Acetonitrile, 1,4-Dioxane, and Dimethyl Sulfoxide Studied by IR, NMR, and Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4864-4872.	1.2	7
44	Complex formation of nickel(II) with dimethyl sulfoxide, methanol, and acetonitrile in a TFSA-based ionic liquid of [C <sub>2</sub> mim][TFSA]. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 31335-31344.	1.3	7
45	Structures of Naphthol-AOT Self-assembly Organogels and Their Applications to Dispersing Media of Rare-earth Complexes. <i>Chemistry Letters</i> , 2014, 43, 1861-1863.	0.7	6
46	Ion Mobility of 1-Ethyl-3-methylimidazolium Tetrafluoroborate and 1-Ethyl-3-methylimidazolium Bis(trifluorosulfonyl)amide Ionic Liquids. <i>ECS Transactions</i> , 2010, 25, 23-29.	0.3	5
47	<sup>19</sup> F NMR chemical shifts of CF <sub>4</sub> in CO <sub>2</sub> over a wide pressure range at different temperatures. <i>Magnetic Resonance in Chemistry</i> , 2003, 41, 75-76.	1.1	4
48	Proton Conduction Properties of Sulfonicacid Type Polymer Gel Electrolytes. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3021-3028.	1.5	3
49	New Ionic Liquids Containing Fluorosulfonyl(trifluoromethylsulfonyl)amide and 5-Phosphoniaspiro[4.4]nonan. <i>ECS Transactions</i> , 2010, 33, 35-40.	0.3	2
50	NMR Studies on Solution Structures of Methanol and Ethanol Saturated with CO <sub>2</sub> . <i>Journal of Solution Chemistry</i> , 2014, 43, 1539-1549.	0.6	2
51	Role of water in complexation of 1,4,7,10,13,16-hexaoxacyclooctadecane (18-crown-6) with Li <sup>+</sup> and K <sup>+</sup> in hydrophobic 1-ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide ionic liquid. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2014, 80, 401-407.	0.9	2
52	Interactions of Perfluoroalkyltrifluoroborate Anions with Cations: Effects of Perfluoroalkyl Chain Length on Motion of Ions in Ionic Liquids. <i>ECS Transactions</i> , 2010, 33, 685-689.	0.3	0
53	Development of CO <sub>2</sub> Separation Technology Using Ionic Liquids. <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2018, 67, 514-520.	0.1	0
54	In-Situ Observation of Functional Solvents at High Pressures. <i>Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu</i> , 2018, 28, 88-94.	0.1	0