# Tatsuya Umecky

## List of Publications by Year in Descending Order



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| 53 papers | 1,229 citations | 21 h-index | 33 g-index |
| 54 ext. papers | 1,302 ext. citations | 2.9 avg, IF | 4.24 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 53 | CO2 absorption features of 1-ethyl-3-methylimidazolium ionic liquids with 2,4-pentanedionate and its fluorine derivatives. *Journal of CO2 Utilization*, **2019**, 31, 75-84 | 7.6 | 9 |
| 52 | Possible Proton Conduction Mechanism in Pseudo-Protic Ionic Liquids: A Concept of Specific Proton Conduction. *Journal of Physical Chemistry B*, **2019**, 123, 6244-6252 | 3.4 | 24 |
| 51 | In-Situ Observation of Functional Solvents at High Pressures. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2018**, 28, 88-94 | 0 | |
| 50 | Development of CO2 Separation Technology Using Ionic Liquids. *Zairyo/Journal of the Society of Materials Science, Japan*, **2018**, 67, 514-520 | 0.1 | |
| 49 | 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. *Journal of Physical Chemistry B*, **2017**, 121, 4864-4872 | 3.4 | 5 |
| 48 | Complex formation of nickel(ii) with dimethyl sulfoxide, methanol, and acetonitrile in a TFSA-based ionic liquid of [Cmim][TFSA]. *Physical Chemistry Chemical Physics*, **2017**, 19, 31335-31344 | 3.6 | 5 |
| 47 | Solvent-Dependent Properties and Higher-Order Structures of Aryl Alcohol + Surfactant Molecular Gels. *Langmuir*, **2016**, 32, 4352-60 | 4 | 10 |
| 46 | Effect of partial pressure on CO2 solubility in ionic liquid mixtures of 1-butyl-3-methylimidazolium acetate and 1-butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide. *Fluid Phase Equilibria* , **2016**, 420, 74-82 | 2.5 | 17 |
| 45 | CO2 solubility in and physical properties for ionic liquid mixtures of 1-butyl-3-methylimidazolium acetate and 1-butyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide. *Journal of Molecular Liquids*, **2016**, 217, 112-119 | 6 | 46 |
| 44 | 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. *Journal of Physical Chemistry B*, **2016**, 120, 513-26 | 3.4 | 21 |
| 43 | CO2 Absorption Properties and Mechanisms for 1-Ethyl-3-methylimidazolium Ether-Functionalized Carboxylates. *Industrial & Engineering Chemistry Research*, **2016**, 55, 12949-12961 | 3.9 | 15 |
| 42 | Solvation structure and dynamics of Li+ in Lewis-basic ionic liquid of 1-octyl-4-aza-1-azoniabicyclo[2.2.2]octane bis(trifluoromethanesulfonyl)amide. *Journal of Molecular Liquids*, **2015**, 209, 557-562 | 6 | 8 |
| 41 | A Study of the Solvation Structure of L-Leucine in Alcohol-Water Binary Solvents through Molecular Dynamics Simulations and FTIR and NMR Spectroscopy. *ChemPhysChem*, **2015**, 16, 3190-9 | 3.2 | 9 |
| 40 | CO2 absorption properties, densities, viscosities, and electrical conductivities of ethylimidazolium and 1-ethyl-3-methylimidazolium ionic liquids. *Fluid Phase Equilibria*, **2014**, 362, 300-306 | 2.5 | 41 |
| 39 | Microscopic interactions of the imidazolium-based ionic liquid with molecular liquids depending on their electron-donicity. *Physical Chemistry Chemical Physics*, **2014**, 16, 23627-38 | 3.6 | 38 |
| 38 | CO2 Solubilities in Ammonium Bis(trifluoromethanesulfonyl)amide Ionic Liquids: Effects of Ester and Ether Groups. *Journal of Chemical & Engineering Data*, **2014**, 59, 1435-1440 | 2.8 | 24 |
| 37 | Role of water in complexation of 1,4,7,10,13,16-hexaoxacyclooctadecane (18-crown-6) with Li and K in hydrophobic 1-ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide ionic liquid. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2014**, 80, 401-407 | 1.7 | 2 |

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| 36 | Structures of Naphthol/AOT Self-assembly Organogels and Their Applications to Dispersing Media of Rare-earth Complexes. *Chemistry Letters*, **2014**, 43, 1861-1863 | 1.7 | 6 |
| 35 | NMR Studies on Solution Structures of Methanol and Ethanol Saturated with CO2. *Journal of Solution Chemistry*, **2014**, 43, 1539-1549 | 1.8 | 2 |
| 34 | Electrical Conductivities, Viscosities, and Densities of N-Acetoxyethyl-N,N-dimethyl-N-ethylammonium and N,N-Dimethyl-N-ethyl-N-methoxyethoxyethylammonium Bis(trifluoromethanesulfonyl)amide and Their Nonfunctionalized Analogues. *Journal of Chemical & Engineering Data*, **2013**, 58, 370-376 | 2.8 | 31 |
| 33 | CO2 solubility and physical properties of N-(2-hydroxyethyl)pyridinium bis(trifluoromethanesulfonyl)amide. *Fluid Phase Equilibria*, **2013**, 357, 64-70 | 2.5 | 20 |
| 32 | Pressure/volume/temperature/composition relations for carbon dioxide+pyrrolidinium-based ionic liquid binary systems. *Fluid Phase Equilibria*, **2013**, 360, 253-259 | 2.5 | 27 |
| 31 | Binary Diffusion Coefficients of Aqueous Straight-Chain Amino Acids at Infinitesimal Concentration and Temperatures from (298.2 to 333.2) K. *Journal of Chemical & Engineering Data*, **2013**, 58, 2848-2853 | 2.8 | 12 |
| 30 | SANS, ATR-IR, and 1D- and 2D-NMR studies of mixing states of imidazolium-based ionic liquid and aryl solvents. *Physical Chemistry Chemical Physics*, **2013**, 15, 20565-76 | 3.6 | 11 |
| 29 | Effect of CO2 dissolution on electrical conductivity and self-diffusion coefficients of 1-butyl-3-methylimidazolium hexafluorophosphate ionic liquid. *Fluid Phase Equilibria*, **2013**, 357, 76-79 | 2.5 | 10 |
| 28 | Binary Diffusion Coefficients of Aqueous Phenylalanine, Tyrosine Isomers, and Aminobutyric Acids at Infinitesimal Concentration and Temperatures from (293.2 to 333.2) K. *Journal of Chemical & Engineering Data*, **2013**, 58, 1909-1917 | 2.8 | 25 |
| 27 | SANS, infrared, and 7Li and 23Na NMR studies on phase separation of alkali halide-acetonitrile-water mixtures by cooling. *Journal of Physical Chemistry B*, **2013**, 117, 2438-48 | 3.4 | 5 |
| 26 | Effects of dissolved water on Li+ solvation in 1-ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide ionic liquid studied by NMR. *Journal of Physical Chemistry B*, **2013**, 117, 16219-26 | 3.4 | 17 |
| 25 | Electrical Conductivities, Viscosities, and Densities of N-Methoxymethyl- and N-Butyl-N-methylpyrrolidinium Ionic Liquids with the Bis(fluorosulfonyl)amide Anion. *Journal of Chemical & Engineering Data*, **2012**, 57, 751-755 | 2.8 | 47 |
| 24 | Fluorination effects on rotational correlation times of tris(β-diketonato)aluminum(III) in CO2 by 27Al NMR relaxation measurements. *Journal of Physical Chemistry B*, **2011**, 115, 10622-30 | 3.4 | 5 |
| 23 | New Ionic Liquids Containing Fluorosulfonyl(trifluoromethylsulfonyl)amide and 5-Phosphoniaspiro[4.4]nonan. *ECS Transactions*, **2010**, 33, 35-40 | 1 | 2 |
| 22 | Interactions of perfluoroalkyltrifluoroborate anions with li ion and imidazolium cation: effects of perfluoroalkyl chain on motion of ions in ionic liquids. *Journal of Physical Chemistry B*, **2010**, 114, 11390-6 | 3.4 | 40 |
| 21 | Alkoxy chains in ionic liquid anions; effect of introducing ether oxygen into perfluoroalkylborate on physical and thermal properties. *Chemical Communications*, **2010**, 46, 1730-2 | 5.8 | 37 |
| 20 | Proton Conduction Properties of Sulfonicacid Type Polymer Gel Electrolytes. *Journal of Physical Chemistry C*, **2009**, 113, 3021-3028 | 3.8 | 3 |
| 19 | Direct measurements of ionic mobility of ionic liquids using the electric field applying pulsed gradient spin-echo NMR. *Journal of Physical Chemistry B*, **2009**, 113, 8466-8 | 3.4 | 49 |

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| 18 | Ion Mobility of 1-Ethyl-3-methylimidazolium Tetrafluoroborate and 1-Ethyl-3-methylimidazolium Bis(trifluorosulfonyl)amide Ionic Liquids. *ECS Transactions*, **2009**, 25, 23-29 | 1 | 2 |
| 17 | Ionization condition of lithium ionic liquid electrolytes under the solvation effect of liquid and solid solvents. *Journal of Physical Chemistry B*, **2008**, 112, 3357-64 | 3.4 | 49 |
| 16 | Low Melting and Electrochemically Stable Ionic Liquids Based on Asymmetric Fluorosulfonyl(trifluoromethylsulfonyl)amide. *Chemistry Letters*, **2008**, 37, 1020-1021 | 1.7 | 59 |
| 15 | Effects of hydroxyl groups on binary diffusion coefficients of □amino acids in dilute aqueous solutions. *Fluid Phase Equilibria*, **2008**, 264, 18-22 | 2.5 | 15 |
| 14 | Existing condition and migration property of ions in lithium electrolytes with ionic liquid solvent. *Journal of Physical Chemistry B*, **2007**, 111, 11794-802 | 3.4 | 109 |
| 13 | Infinite Dilution Binary Diffusion Coefficients of Several □Amino Acids in Water over a Temperature Range from (293.2 to 333.2) K with the Taylor Dispersion Technique. *Journal of Chemical & Engineering Data*, **2006**, 51, 1705-1710 | 2.8 | 47 |
| 12 | Solution structures of 1-butyl-3-methylimidazolium hexafluorophosphate ionic liquid saturated with CO2: Experimental evidence of specific anion-CO2 interaction. *Journal of Physical Chemistry B*, **2005**, 109, 13847-50 | 3.4 | 78 |
| 11 | Water-induced Acceleration of Transport Properties in Hydrophobic 1-Butyl-3-methylimidazolium Hexafluorophosphate Ionic Liquid. *Chemistry Letters*, **2005**, 34, 324-325 | 1.7 | 35 |
| 10 | Effects of alkyl chain on transport properties in 1-alkyl-3-methylimidazolium hexafluorophosphates. *Journal of Molecular Liquids*, **2005**, 119, 77-81 | 6 | 29 |
| 9 | Self-diffusion coefficients of 1-butyl-3-methylimidazolium hexafluorophosphate with pulsed-field gradient spin-echo NMR technique. *Fluid Phase Equilibria*, **2005**, 228-229, 329-333 | 2.5 | 79 |
| 8 | Development of High-Pressure Electric Conductivity Cell and its Application: Pressure Effect of Carbon Dioxide on Electric Conductivity of Ionic Liquid. *Electrochemistry*, **2004**, 72, 703-705 | 1.2 | 13 |
| 7 | High-Pressure 19F NMR Measurements of a Series of Fluorinated Benzenes in Supercritical Carbon Dioxide. *Journal of Solution Chemistry*, **2004**, 33, 863-874 | 1.8 | 12 |
| 6 | 19F NMR chemical shifts of CF4 in CO2 over a wide pressure range at different temperatures. *Magnetic Resonance in Chemistry*, **2003**, 41, 75-76 | 2.1 | 3 |
| 5 | Experimental Determination of Reorientational Correlation Time of CO2 over a Wide Range of Density and Temperature. *Journal of Physical Chemistry B*, **2003**, 107, 12003-12008 | 3.4 | 25 |
| 4 | High-pressure NMR studies on solvation structure in supercritical carbon dioxide. *Fluid Phase Equilibria*, **2002**, 194-197, 859-868 | 2.5 | 16 |
| 3 | A Novel High-Pressure NMR Cell Consisting of Double Tube Structure for the Convenient On-Line Measurements. *Chemistry Letters*, **2002**, 31, 118-119 | 1.7 | 8 |
| 2 | 9Be 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. *Journal of Physical Chemistry B*, **2002**, 106, 11114-11119 | 3.4 | 16 |
| 1 | Determination of anisotropic solvation structure of octafluorotoluene in supercritical carbon dioxide by means of solvent-induced 19F NMR chemical shift. *Chemical Physics Letters*, **2001**, 338, 95-100 | 2.5 | 11 |