

Yasuhiro Umebayashi

List of Publications by Year in descending order

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87888

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88630

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docs citations

85
times ranked

3568
citing authors

#	ARTICLE	IF	CITATIONS
1	Conformational Equilibrium of Bis(trifluoromethanesulfonyl) Imide Anion of a Room-Temperature Ionic Liquid: A Raman Spectroscopic Study and DFT Calculations. <i>Journal of Physical Chemistry B</i> , 2006, 110, 8179-8183.	2.6	333
2	Lithium Ion Solvation in Room-Temperature Ionic Liquids Involving Bis(trifluoromethanesulfonyl) Imide Anion Studied by Raman Spectroscopy and DFT Calculations. <i>Journal of Physical Chemistry B</i> , 2007, 111, 13028-13032.	2.6	321
3	Li ⁺ solvation in glyme ⁺ Li salt solvate ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8248-8257.	2.8	222
4	Evidence of Conformational Equilibrium of 1-Ethyl-3-methylimidazolium in Its Ionic Liquid Salts: A Raman Spectroscopic Study and Quantum Chemical Calculations. <i>Journal of Physical Chemistry A</i> , 2005, 109, 8976-8982.	2.5	199
5	Chelate Effects in Glyme/Lithium Bis(trifluoromethanesulfonyl)amide Solvate Ionic Liquids. I. Stability of Solvate Cations and Correlation with Electrolyte Properties. <i>Journal of Physical Chemistry B</i> , 2014, 118, 5144-5153.	2.6	194
6	Comprehensive Refractive Index Property for Room-Temperature Ionic Liquids. <i>Journal of Chemical & Engineering Data</i> , 2012, 57, 2211-2216.	1.9	191
7	Direct Evidence for Li Ion Hopping Conduction in Highly Concentrated Sulfolane-Based Liquid Electrolytes. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10736-10745.	2.6	165
8	Liquid Structure of Room-Temperature Ionic Liquid, 1-Ethyl-3-methylimidazolium Bis-(trifluoromethanesulfonyl) Imide. <i>Journal of Physical Chemistry B</i> , 2008, 112, 4329-4336.	2.6	159
9	Experimental evidences for molecular origin of low- <i>Q</i> peak in neutron/x-ray scattering of 1-alkyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide ionic liquids. <i>Journal of Chemical Physics</i> , 2011, 135, 244502.	3.0	140
10	Unusual Li ⁺ Ion Solvation Structure in Bis(fluorosulfonyl)amide Based Ionic Liquid. <i>Journal of Physical Chemistry C</i> , 2013, 117, 19314-19324.	3.1	133
11	Solvation Structure of Li ⁺ in Concentrated LiPF ₆ Propylene Carbonate Solutions. <i>Journal of Physical Chemistry B</i> , 2007, 111, 6104-6109.	2.6	131
12	Studies on the translational and rotational motions of ionic liquids composed of N-methyl-N-propyl-pyrrolidinium (P13) cation and bis(trifluoromethanesulfonyl)amide and bis(fluorosulfonyl)amide anions and their binary systems including lithium salts. <i>Journal of Chemical Physics</i> , 2010, 133, 194505.	3.0	129
13	Anion Conformation of Low-Viscosity Room-Temperature Ionic Liquid 1-Ethyl-3-methylimidazolium Bis(fluorosulfonyl) Imide. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12829-12833.	2.6	127
14	Structural Heterogeneity and Unique Distorted Hydrogen Bonding in Primary Ammonium Nitrate Ionic Liquids Studied by High-Energy X-ray Diffraction Experiments and MD Simulations. <i>Journal of Physical Chemistry B</i> , 2012, 116, 2801-2813.	2.6	116
15	Raman Spectroscopic Studies and Ab Initio Calculations on Conformational Isomerism of 1-Butyl-3-methylimidazolium Bis-(trifluoromethanesulfonyl)amide Solvated to a Lithium Ion in Ionic Liquids: Effects of the Second Solvation Sphere of the Lithium Ion. <i>Journal of Physical Chemistry B</i> , 2010, 114, 6513-6521.	2.6	107
16	Liquid Structure of and Li ⁺ Ion Solvation in Bis(trifluoromethanesulfonyl)amide Based Ionic Liquids Composed of 1-Ethyl-3-methylimidazolium and N-Methyl-N-propylpyrrolidinium Cations. <i>Journal of Physical Chemistry B</i> , 2011, 115, 12179-12191.	2.6	102
17	Liquid Structure and the Ion-Ion Interactions of Ethylammonium Nitrate Ionic Liquid Studied by Large Angle X-Ray Scattering and Molecular Dynamics Simulations. <i>Journal of Computer Chemistry Japan</i> , 2008, 7, 125-134.	0.1	97
18	Structures of [Li(glyme)] ⁺ complexes and their interactions with anions in equimolar mixtures of glymes and Li[TFSA]: analysis by molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 126-129.	2.8	87

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19	Potential Energy Landscape of Bis(fluorosulfonyl)amide. <i>Journal of Physical Chemistry B</i> , 2008, 112, 9449-9455.	2.6	81
20	Li ⁺ Local Structure in Hydrofluoroether Diluted Li-Glyme Solvate Ionic Liquid. <i>Journal of Physical Chemistry B</i> , 2016, 120, 3378-3387.	2.6	81
21	Relationships between center atom species (N, P) and ionic conductivity, viscosity, density, self-diffusion coefficient of quaternary cation room-temperature ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 3509.	2.8	80
22	Intermolecular Interactions in Li ⁺ -glyme and Li ⁺ -glyme-TFSA ⁻ Complexes: Relationship with Physicochemical Properties of [Li(glyme)][TFSA] Ionic Liquids. <i>ChemPhysChem</i> , 2013, 14, 1993-2001.	2.1	79
23	Structural and aggregate analyses of (Li salt + glyme) mixtures: the complex nature of solvate ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 22321-22335.	2.8	78
24	Solvation Structures of Some Transition Metal(II) Ions in a Room-Temperature Ionic Liquid, 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide. <i>Analytical Sciences</i> , 2008, 24, 1377-1380.	1.6	76
25	Liquid structure and conformation of a low-viscosity ionic liquid, N-methyl-N-propyl-pyrrolidinium bis(fluorosulfonyl) imide studied by high-energy X-ray scattering. <i>Journal of Molecular Liquids</i> , 2008, 143, 64-69.	4.9	75
26	Dependence of the Conformational Isomerism in 1- <i>n</i> -Butyl-3-methylimidazolium Ionic Liquids on the Nature of the Halide Anion. <i>Journal of Physical Chemistry B</i> , 2010, 114, 11715-11724.	2.6	66
27	Acid-Base Property of Ethylammonium Nitrate Ionic Liquid Directly Obtained Using Ion-selective Field Effect Transistor Electrode. <i>Chemistry Letters</i> , 2007, 36, 684-685.	1.3	61
28	A New Proton Conductive Liquid with No Ions: Pseudo-Protic Ionic Liquids. <i>Chemistry - A European Journal</i> , 2013, 19, 11522-11526.	3.3	60
29	Acid-Base Property of <i>N</i> -Methylimidazolium-Based Protic Ionic Liquids Depending on Anion. <i>Journal of Physical Chemistry B</i> , 2012, 116, 14146-14152.	2.6	57
30	Raman Spectroscopic Study, DFT Calculations and MD Simulations on the Conformational Isomerism of <i>N</i> -Alkyl- <i>N</i> -methylpyrrolidinium Bis-(trifluoromethanesulfonyl) Amide Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2009, 113, 4338-4346.	2.6	56
31	Liquid structure of N-butyl-N-methylpyrrolidinium bis-(trifluoromethanesulfonyl) amide ionic liquid studied by large angle X-ray scattering and molecular dynamics simulations. <i>Journal of Molecular Liquids</i> , 2008, 143, 2-7.	4.9	54
32	Acidity and Basicity of Aqueous Mixtures of a Protic Ionic Liquid, Ethylammonium Nitrate. <i>Analytical Sciences</i> , 2008, 24, 1347-1349.	1.6	54
33	Ion-ion interaction in room temperature ionic liquid 1-ethyl-3-methylimidazolium tetrafluoroborate studied by large angle X-ray scattering experiment and molecular dynamics simulations. <i>Journal of Molecular Liquids</i> , 2009, 147, 77-82.	4.9	53
34	Hydrogen bond in imidazolium based protic and aprotic ionic liquids. <i>Journal of Molecular Liquids</i> , 2016, 217, 35-42.	4.9	45
35	Li ⁺ Local Structure in Tetraglyme Solvate Ionic Liquid Revealed by Neutron Total Scattering Experiments with the ⁶ Li Isotopic Substitution Technique. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 2832-2837.	4.6	44
36	Structural change of ionic association in ionic liquid/water mixtures: A high-pressure infrared spectroscopic study. <i>Journal of Chemical Physics</i> , 2009, 130, 124503.	3.0	43

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37	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.	2.6	43
38	Effect of Methylation at the C2 Position of Imidazolium on the Structure of Ionic Liquids Revealed by Large Angle X-ray Scattering Experiments and MD Simulations. <i>Chemistry Letters</i> , 2009, 38, 340-341.	1.3	42
39	Individual solvation number of first-row transition metal(II) ions in solvent mixtures of N,N-dimethylformamide and N,N-dimethylacetamide—Solvation steric effect. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 5475-5481.	2.8	38
40	Raman Spectroscopic Study on Alkaline Metal Ion Solvation in 1-Butyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide Ionic Liquid. <i>Analytical Sciences</i> , 2008, 24, 1297-1304.	1.6	38
41	Relationship between mesoscale dynamics and shear relaxation of ionic liquids with long alkyl chain. <i>Journal of Chemical Physics</i> , 2012, 137, 104511.	3.0	35
42	A pH Scale for the Protic Ionic Liquid Ethylammonium Nitrate. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6266-6269.	13.8	34
43	Solvation structure of magnesium, zinc, and alkaline earth metal ions in N,N-dimethylformamide, N,N-dimethylacetamide, and their mixtures studied by means of Raman spectroscopy and DFT calculations—ionic size and electronic effects on steric congestion. <i>Journal of Raman Spectroscopy</i> , 2007, 38, 417-426.	2.5	33
44	Solvation Structure of Poly(ethylene glycol) in Ionic Liquids Studied by High-energy X-ray Diffraction and Molecular Dynamics Simulations. <i>Macromolecules</i> , 2013, 46, 2369-2375.	4.8	33
45	Individual Solvation Numbers around the Nickel (II) Ion in an N,N-Dimethylformamide and N,N-Dimethylacetamide Mixture Determined by Raman Spectrophotometry.. <i>Analytical Sciences</i> , 2001, 17, 323-326.	1.6	31
46	Physicochemical and Acid-base Properties of a Series of 2-Hydroxyethylammonium-based Protic Ionic Liquids. <i>Analytical Sciences</i> , 2012, 28, 469-474.	1.6	30
47	Solvation and microscopic properties of ionic liquid/acetone nitrile mixtures probed by high-pressure infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2009, 131, 234502.	3.0	29
48	Solvation structure of lanthanide(III) ions in solvent mixtures of N,N-dimethylformamide and N,N-dimethylacetamide studied by titration Raman spectroscopy Electronic supplementary information (ESI) available: Crystallographic data (single crystal, [Gd(DMF)4(DMA)4](ClO4)3), (CCDC reference) Tj ETQq0 0 0 r g B T / O v e r l o c k 1 0 T f 5 2002, 4, 5599-5605.	2.8	28
49	Thermodynamic Study of the Solvation States of Acid and Base in a Protic Ionic Liquid, Ethylammonium Nitrate, and Its Aqueous Mixtures. <i>Chemistry Letters</i> , 2010, 39, 578-579.	1.3	27
50	Specific Solvation of Benzyl Methacrylate in 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide Ionic Liquid. <i>Analytical Sciences</i> , 2013, 29, 311-314.	1.6	27
51	Conformational equilibria of solvent N,N-dimethylpropionamide in the bulk and in the coordination sphere of the manganese(II) ion Electronic supplementary information (ESI) available: non-planar staggered and planar cis Gaussian results. See http://www.rsc.org/suppdata/cp/b3/b302143b/ . <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 2552.	2.8	24
52	Local structure of Li ⁺ in concentrated LiPF ₆ -dimethyl carbonate solutions. <i>Journal of Molecular Liquids</i> , 2016, 217, 17-22.	4.9	24
53	Local Structure of Li ⁺ in Concentrated Ethylene Carbonate Solutions Studied by Low-Frequency Raman Scattering and Neutron Diffraction with ⁶ Li/ ⁷ Li Isotopic Substitution Methods. <i>Journal of Physical Chemistry B</i> , 2017, 121, 10979-10987.	2.6	23
54	Enhanced Electrochemical Stability of Molten Li Salt Hydrate Electrolytes by the Addition of Divalent Cations. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20167-20175.	3.1	23

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55	A pH Scale for the Protic Ionic Liquid Ethylammonium Nitrate. <i>Angewandte Chemie</i> , 2016, 128, 6374-6377.	2.0	22
56	Transport Properties of Ionic Liquid and Sodium Salt Mixtures for Sodium-Ion Battery Electrolytes from Molecular Dynamics Simulation with a Self-Consistent Atomic Charge Determination. <i>Journal of Physical Chemistry B</i> , 2020, 124, 7291-7305.	2.6	22
57	Conformation of Solvent N,N-Dimethylpropionamide in the Coordination Sphere of the Zinc(II) Ion Studied by Raman Spectroscopy and DFT Calculations. <i>Journal of Physical Chemistry A</i> , 2005, 109, 4862-4868.	2.5	18
58	Effects of non-equimolar lithium salt glyme solvate ionic liquid on the control of interfacial degradation in lithium secondary batteries. <i>RSC Advances</i> , 2016, 6, 33043-33047.	3.6	18
59	Brønsted Basicity of Solute Butylamine in an Aprotic Ionic Liquid Investigated by Potentiometric Titration. <i>Chemistry Letters</i> , 2013, 42, 1250-1251.	1.3	16
60	Speciation Analysis and Thermodynamic Criteria of Solvated Ionic Liquids: Ionic Liquids or Superconcentrated Solutions?. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4517-4523.	4.6	16
61	Communication: Collective dynamics of room-temperature ionic liquids and their Li ion solutions studied by high-resolution inelastic X-ray scattering. <i>Journal of Chemical Physics</i> , 2013, 138, 151101.	3.0	15
62	Anion Coordination Characteristics of Ion-pair Complexes in Highly Concentrated Aqueous Lithium Bis(trifluoromethane-sulfonyl)amide Electrolytes. <i>Analytical Sciences</i> , 2019, 35, 289-294.	1.6	15
63	Thermodynamics of $[\text{Co}(\text{NCS})_4]^{2-}$ at Poly(ethylene Oxide) and Octylphenyl Moieties in Micelles of Nonionic Surfactants. <i>Journal of Colloid and Interface Science</i> , 2001, 237, 167-173.	9.4	14
64	Thermodynamic Aspects of Metal-Ion Complexation in the Structured Solvent, N-Methylformamide. <i>Journal of Solution Chemistry</i> , 2005, 34, 739-753.	1.2	14
65	Structure, solvation, and acid-base property in ionic liquids. <i>Pure and Applied Chemistry</i> , 2010, 82, 1927-1941.	1.9	14
66	Solvent conformation and ion solvation: From molecular to ionic liquids. <i>Pure and Applied Chemistry</i> , 2006, 78, 1595-1609.	1.9	13
67	Effect of Brønsted Acidity on Ion Conduction in Fluorinated Acetic Acid and 1-Methylimidazole Equimolar Mixtures as Pseudo-protic Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2020, 124, 11157-11164.	2.6	13
68	Spectrophotometric study of thiocyanato complexation of cobalt(II) and nickel(II) ions in micellar solutions of a nonionic surfactant triton X-100. <i>Journal of Solution Chemistry</i> , 1996, 25, 731-746.	1.2	12
69	High-Energy X-ray Diffraction and MD Simulation Study on the Ion-Ion Interactions in 1-Ethyl-3-methylimidazolium Bis(fluorosulfonyl)amide. <i>Journal of Solution Chemistry</i> , 2014, 43, 1655-1668.	1.2	11
70	Dynamic Chelate Effect on the Li ⁺ -Ion Conduction in Solvate Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2019, 123, 30228-30233.	3.1	10
71	Microscopic Solvation Structure of Glucose in 1-Ethyl-3-methylimidazolium Methylphosphonate Ionic Liquid. <i>Journal of Physical Chemistry B</i> , 2015, 119, 6262-6270.	2.6	9
72	Neutron Diffraction Study on Partial Pair Correlation Functions of Water at Ambient Temperature. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 1586-1595.	3.2	9

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73	Local Structure of Li ⁺ in Superconcentrated Aqueous LiTfSA Solutions. Journal of Physical Chemistry B, 2021, 125, 7477-7484.	2.6	9
74	Solvation Structure of Li ⁺ in Concentrated Acetonitrile and N,N-Dimethylformamide Solutions Studied by Neutron Diffraction with ⁶ Li/ ⁷ Li Isotopic Substitution Methods. Journal of Physical Chemistry B, 2020, 124, 10456-10464.	2.6	9
75	Mixture of monoglyme-based solvent and lithium Bis(trifluoromethanesulfonyl)amide as electrolyte for lithium ion battery using silicon electrode. Materials Chemistry and Physics, 2019, 225, 105-110.	4.0	8
76	Solvation Structure and Complexation of the Manganese(II) Ion in N,N-Dimethylpropionamide and N,N,N',N'-Tetramethylurea Studied by Means of Titration Calorimetry and Raman Spectroscopy. Journal of Solution Chemistry, 2005, 34, 1429-1443.	1.2	7
77	Title is missing!. Journal of Solution Chemistry, 2002, 31, 931-946.	1.2	5
78	Raman Spectroscopic Speciation Analyses and Liquid Structures by High-Energy X-ray Total Scattering and Molecular Dynamics Simulations for N-methylimidazolium-Based Protic Ionic Liquids. Bulletin of the Chemical Society of Japan, 2016, 89, 965-972.	3.2	5
79	Ionic conduction within non-stoichiometric N-Methylimidazole-Acetic Acid Pseudo-Protic ionic liquid mixtures. Journal of Molecular Liquids, 2022, 352, 118705.	4.9	5
80	Thermodynamics and Fluorescence Spectra of 1,10-Phenanthroline in Micelles of Poly (Ethylene) Terephthalate. Journal of Fluorescence, 2010, 20, 105-110.	1.2	4
81	Structural modification by adding Li cations into Mg/Cs-TFSA molten salt facilitating Mg electrodeposition. RSC Advances, 2015, 5, 3063-3069.	3.6	3
82	Solvation Structure of Li ⁺ in Methanol and 2-Propanol Solutions Studied by ATR-IR and Neutron Diffraction with ⁶ Li/ ⁷ Li Isotopic Substitution Methods. Journal of Physical Chemistry B, 2019, 123, 4967-4975.	2.6	2
83	Tools for studying ion solvation and ion pair formation in ionic liquids: isotopic substitution Raman spectroscopy. Analytical Sciences, 2022, 38, 1025-1031.	1.6	1
84	Thermodynamic and Structural Aspects of Solvate Ionic Liquid Formation. , 2021, , 287-300.		0