Yasuhiro Umebayashi

List of Publications by Year
in descending order

84	4,977	87888 38	88630 70
papers	citations	h-index	g-index

85	85	85	3568
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionic conduction within non-stoichiometric N-Methylimidazole-Acetic Acid Pseudo-Protic ionic liquid mixtures. Journal of Molecular Liquids, 2022, 352, 118705.	4.9	5
2	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
3	Thermodynamic and Structural Aspects of Solvate Ionic Liquid Formation. , 2021, , 287-300.		0
4	Local Structure of Li⁺ in Superconcentrated Aqueous LiTFSA Solutions. Journal of Physical Chemistry B, 2021, 125, 7477-7484.	2.6	9
5	Effect of BrÃ¸nsted Acidity on Ion Conduction in Fluorinated Acetic Acid and N-Methylimidazole Equimolar Mixtures as Pseudo-protic Ionic Liquids. Journal of Physical Chemistry B, 2020, 124, 11157-11164.	2.6	13
6	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. Journal of Physical Chemistry B, 2020, 124, 7291-7305.	2.6	22
7	Speciation Analysis and Thermodynamic Criteria of Solvated Ionic Liquids: Ionic Liquids or Superconcentrated Solutions?. Journal of Physical Chemistry Letters, 2020, 11, 4517-4523.	4.6	16
8	Solvation Structure of Li⁺ in Concentrated Acetonitrile and N,N-Dimethylformamide Solutions Studied by Neutron Diffraction with ⁶Li/⁷Li Isotopic Substitution Methods. Journal of Physical Chemistry B, 2020, 124, 10456-10464.	2.6	9
9	Possible Proton Conduction Mechanism in Pseudo-Protic Ionic Liquids: A Concept of Specific Proton Conduction. Journal of Physical Chemistry B, 2019, 123, 6244-6252.	2.6	43
10	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
11	Solvation Structure of Li⁺ in Methanol and 2-Propanol Solutions Studied by ATR-IR and Neutron Diffraction with ⁶Li/⁷Li Isotopic Substitution Methods. Journal of Physical Chemistry B, 2019, 123, 4967-4975.	2.6	2
12	Dynamic Chelate Effect on the Li⁺-Ion Conduction in Solvate Ionic Liquids. Journal of Physical Chemistry C, 2019, 123, 30228-30233.	3.1	10
13	Anion Coordination Characteristics of Ion-pair Complexes in Highly Concentrated Aqueous Lithium Bis(trifluoromethane- sulfonyl)amide Electrolytes. Analytical Sciences, 2019, 35, 289-294.	1.6	15
14	Direct Evidence for Li Ion Hopping Conduction in Highly Concentrated Sulfolane-Based Liquid Electrolytes. Journal of Physical Chemistry B, 2018, 122, 10736-10745.	2.6	165
15	Neutron Diffraction Study on Partial Pair Correlation Functions of Water at Ambient Temperature. Bulletin of the Chemical Society of Japan, 2018, 91, 1586-1595.	3.2	9
16	Enhanced Electrochemical Stability of Molten Li Salt Hydrate Electrolytes by the Addition of Divalent Cations. Journal of Physical Chemistry C, 2018, 122, 20167-20175.	3.1	23
17	Local Structure of Li⁺ in Concentrated Ethylene Carbonate Solutions Studied by Low-Frequency Raman Scattering and Neutron Diffraction with ⁶Li/⁷Li Isotopic Substitution Methods. Journal of Physical Chemistry B, 2017, 121, 10979-10987.	2.6	23
18	Li⁺ Local Structure in Liâ€“Tetraglyme Solvate Ionic Liquid Revealed by Neutron Total Scattering Experiments with the ^{6/7}Li Isotopic Substitution Technique. Journal of Physical Chemistry Letters, 2016, 7, 2832-2837.	4.6	44

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19	A pH Scale for the Protic Ionic Liquid Ethylammonium Nitrate. Angewandte Chemie - International Edition, 2016, 55, 6266-6269.	13.8	34
20	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
21	Local structure of Li+ in concentrated LiPF6â€“dimethyl carbonate solutions. Journal of Molecular Liquids, 2016, 217, 17-22.	4.9	24
22	A pH Scale for the Protic Ionic Liquid Ethylammonium Nitrate. Angewandte Chemie, 2016, 128, 6374-6377.	2.0	22
23	Effects of non-equimolar lithium salt glyme solvate ionic liquid on the control of interfacial degradation in lithium secondary batteries. RSC Advances, 2016, 6, 33043-33047.	3.6	18
24	Li⁺ Local Structure in Hydrofluoroether Diluted Li-Glyme Solvate Ionic Liquid. Journal of Physical Chemistry B, 2016, 120, 3378-3387.	2.6	81
25	Hydrogen bond in imidazolium based protic and aprotic ionic liquids. Journal of Molecular Liquids, 2016, 217, 35-42.	4.9	45
26	Li⁺ solvation in glymeâ€“Li salt solvate ionic liquids. Physical Chemistry Chemical Physics, 2015, 17, 8248-8257.	2.8	222
27	Structural and aggregate analyses of (Li salt + glyme) mixtures: the complex nature of solvate ionic liquids. Physical Chemistry Chemical Physics, 2015, 17, 22321-22335.	2.8	78
28	Microscopic Solvation Structure of Glucose in 1-Ethyl-3-methylimidazolium Methylphosphonate Ionic Liquid. Journal of Physical Chemistry B, 2015, 119, 6262-6270.	2.6	9
29	Structural modification by adding Li cations into Mg/Cs-TFSA molten salt facilitating Mg electrodeposition. RSC Advances, 2015, 5, 3063-3069.	3.6	3
30	Structures of [Li(glyme)]⁺ complexes and their interactions with anions in equimolar mixtures of glymes and Li[TFSA]: analysis by molecular dynamics simulations. Physical Chemistry Chemical Physics, 2015, 17, 126-129.	2.8	87
31	High-Energy X-ray Diffraction and MD Simulation Study on the Ion-Ion Interactions in 1-Ethyl-3-methylimidazolium Bis(fluorosulfonyl)amide. Journal of Solution Chemistry, 2014, 43, 1655-1668.	1.2	11
32	Chelate Effects in Glyme/Lithium Bis(trifluoromethanesulfonyl)amide Solvate Ionic Liquids. I. Stability of Solvate Cations and Correlation with Electrolyte Properties. Journal of Physical Chemistry B, 2014, 118, 5144-5153.	2.6	194
33	Solvation Structure of Poly(ethylene glycol) in Ionic Liquids Studied by High-energy X-ray Diffraction and Molecular Dynamics Simulations. Macromolecules, 2013, 46, 2369-2375.	4.8	33
34	Unusual Li⁺Ion Solvation Structure in Bis(fluorosulfonyl)amide Based Ionic Liquid. Journal of Physical Chemistry C, 2013, 117, 19314-19324.	3.1	133
35	A New Proton Conductive Liquid with No Ions: Pseudoâ€Protic Ionic Liquids. Chemistry - A European Journal, 2013, 19, 11522-11526.	3.3	60
36	Communication: Collective dynamics of room-temperature ionic liquids and their Li ion solutions studied by high-resolution inelastic X-ray scattering. Journal of Chemical Physics, 2013, 138, 151101.	3.0	15

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37	BrÃ¸nsted Basicity of Solute Butylamine in an Aprotic Ionic Liquid Investigated by Potentiometric Titration. Chemistry Letters, 2013, 42, 1250-1251.	1.3	16
38	Intermolecular Interactions in Li⁺â€glyme and Li⁺â€glymeâ€“TFSA^{â¯} Complexes: Relationship with Physicochemical Properties of [Li(glyme)][TFSA] Ionic Liquids. ChemPhysChem, 2013, 14, 1993-2001.	2.1	79
39	Specific Solvation of Benzyl Methacrylate in 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide Ionic Liquid. Analytical Sciences, 2013, 29, 311-314.	1.6	27
40	Relationship between mesoscale dynamics and shear relaxation of ionic liquids with long alkyl chain. Journal of Chemical Physics, 2012, 137, 104511.	3.0	35
41	Physicochemical and Acid-base Properties of a Series of 2-Hydroxyethylammonium-based Protic Ionic Liquids. Analytical Sciences, 2012, 28, 469-474.	1.6	30
42	Structural Heterogeneity and Unique Distorted Hydrogen Bonding in Primary Ammonium Nitrate Ionic Liquids Studied by High-Energy X-ray Diffraction Experiments and MD Simulations. Journal of Physical Chemistry B, 2012, 116, 2801-2813.	2.6	116
43	Comprehensive Refractive Index Property for Room-Temperature Ionic Liquids. Journal of Chemical & Engineering Data, 2012, 57, 2211-2216.	1.9	191
44	Acidâ€“Base Property of N-Methylimidazolium-Based Protic Ionic Liquids Depending on Anion. Journal of Physical Chemistry B, 2012, 116, 14146-14152.	2.6	57
45	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. Journal of Physical Chemistry B, 2011, 115, 12179-12191.	2.6	102
46	Experimental evidences for molecular origin of low-Q peak in neutron/x-ray scattering of 1-alkyl-3-methylimidazolium bis(trifluoromethanesulfonyl)amide ionic liquids. Journal of Chemical Physics, 2011, 135, 244502.	3.0	140
47	Thermodynamic Study of the Solvation States of Acid and Base in a Protic Ionic Liquid, Ethylammonium Nitrate, and Its Aqueous Mixtures. Chemistry Letters, 2010, 39, 578-579.	1.3	27
48	Structure, solvation, and acidâ€“base property in ionic liquids. Pure and Applied Chemistry, 2010, 82, 1927-1941.	1.9	14
49	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. Journal of Chemical Physics, 2010, 133, 194505.	3.0	129
50	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. Journal of Physical Chemistry B, 2010, 114, 6513-6521.	2.6	107
51	Dependence of the Conformational Isomerism in 1-n-Butyl-3-methylimidazolium Ionic Liquids on the Nature of the Halide Anion. Journal of Physical Chemistry B, 2010, 114, 11715-11724.	2.6	66
52	Solvation and microscopic properties of ionic liquid/acetonitrile mixtures probed by high-pressure infrared spectroscopy. Journal of Chemical Physics, 2009, 131, 234502.	3.0	29
53	Structural change of ionic association in ionic liquid/water mixtures: A high-pressure infrared spectroscopic study. Journal of Chemical Physics, 2009, 130, 124503.	3.0	43
54	Ionâ€“ion interaction in room temperature ionic liquid 1-ethyl-3-methylimidazolium tetrafluoroborate studied by large angle X-ray scattering experiment and molecular dynamics simulations. Journal of Molecular Liquids, 2009, 147, 77-82.	4.9	53

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55	Raman Spectroscopic Study, DFT Calculations and MD Simulations on the Conformational Isomerism of N-Alkyl-N-methylpyrrolidinium Bis-(trifluoromethanesulfonyl) Amide Ionic Liquids. Journal of Physical Chemistry B, 2009, 113, 4338-4346.	2.6	56
56	Relationships between center atom species (N, P) and ionic conductivity, viscosity, density, self-diffusion coefficient of quaternary cation room-temperature ionic liquids. Physical Chemistry Chemical Physics, 2009, 11, 3509.	2.8	80
57	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. Chemistry Letters, 2009, 38, 340-341.	1.3	42
58	Liquid structure of N-butyl-N-methylpyrrolidinium bis-(trifluoromethanesulfonyl) amide ionic liquid studied by large angle X-ray scattering and molecular dynamics simulations. Journal of Molecular Liquids, 2008, 143, 2-7.	4.9	54
59	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. Journal of Molecular Liquids, 2008, 143, 64-69.	4.9	75
60	Liquid Structure of Room-Temperature Ionic Liquid, 1-Ethyl-3-methylimidazolium Bis-(trifluoromethanesulfonyl) Imide. Journal of Physical Chemistry B, 2008, 112, 4329-4336.	2.6	159
61	Potential Energy Landscape of Bis(fluorosulfonyl)amide. Journal of Physical Chemistry B, 2008, 112, 9449-9455.	2.6	81
62	Raman Spectroscopic Study on Alkaline Metal Ion Solvation in 1-Butyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide Ionic Liquid. Analytical Sciences, 2008, 24, 1297-1304.	1.6	38
63	Acidity and Basicity of Aqueous Mixtures of a Protic Ionic Liquid, Ethylammonium Nitrate. Analytical Sciences, 2008, 24, 1347-1349.	1.6	54
64	Solvation Structures of Some Transition Metal(II) Ions in a Room-Temperature Ionic Liquid, 1-Ethyl-3-methylimidazolium Bis(trifluoromethanesulfonyl)amide. Analytical Sciences, 2008, 24, 1377-1380.	1.6	76
65	Liquid Structure and the Ion-Ion Interactions of Ethylammonium Nitrate Ionic Liquid Studied by Large Angle X-Ray Scattering and Molecular Dynamics Simulations. Journal of Computer Chemistry Japan, 2008, 7, 125-134.	0.1	97
66	Acidâ€“Base Property of Ethylammonium Nitrate Ionic Liquid Directly Obtained Using Ion-selective Field Effect Transistor Electrode. Chemistry Letters, 2007, 36, 684-685.	1.3	61
67	Anion Conformation of Low-Viscosity Room-Temperature Ionic Liquid 1-Ethyl-3-methylimidazolium Bis(fluorosulfonyl) Imide. Journal of Physical Chemistry B, 2007, 111, 12829-12833.	2.6	127
68	Lithium Ion Solvation in Room-Temperature Ionic Liquids Involving Bis(trifluoromethanesulfonyl) Imide Anion Studied by Raman Spectroscopy and DFT Calculations. Journal of Physical Chemistry B, 2007, 111, 13028-13032.	2.6	321
69	Solvation Structure of Li+in Concentrated LiPF6â^'Propylene Carbonate Solutions. Journal of Physical Chemistry B, 2007, 111, 6104-6109.	2.6	131
70	Solvation structure of magnesium, zinc, and alkaline earth metal ions inN,N-dimethylformamide,N,N-dimethylacetamide, and their mixtures studied by means of Raman spectroscopy and DFT calculationsâ€"Ionic size and electronic effects on steric congestion. Journal of Raman Spectroscopy, 2007, 38, 417-426.	2.5	33
71	Conformational Equilibrium of Bis(trifluoromethanesulfonyl) Imide Anion of a Room-Temperature Ionic Liquid:Â Raman Spectroscopic Study and DFT Calculations. Journal of Physical Chemistry B, 2006, 110, 8179-8183.	2.6	333
72	Solvent conformation and ion solvation: From molecular to ionic liquids. Pure and Applied Chemistry, 2006, 78, 1595-1609.	1.9	13

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73	Evidence of Conformational Equilibrium of 1-Ethyl-3-methylimidazolium in Its Ionic Liquid Salts:Â Raman Spectroscopic Study and Quantum Chemical Calculations. Journal of Physical Chemistry A, 2005, 109, 8976-8982.	2.5	199
74	Thermodynamic Aspects of Metalâ€“Ion Complexation in the Structured Solvent, N-Methylformamide. Journal of Solution Chemistry, 2005, 34, 739-753.	1.2	14
75	Solvation Structure and Complexation of the Manganese(II) Ion in N,N-Dimethylpropionamide and N,N,Nâ€²,Nâ€²-Tetramethylurea Studied by Means of Titration Calorimetry and Raman Spectroscopy. Journal of Solution Chemistry, 2005, 34, 1429-1443.	1.2	7
76	Conformation of SolventN,N-Dimethylpropionamide in the Coordination Sphere of the Zinc(II) Ion Studied by Raman Spectroscopy and DFT Calculations. Journal of Physical Chemistry A, 2005, 109, 4862-4868.	2.5	18
77	Thermodynamics and Fluorescence Spectra of 1,10-Phenanthroline in Micelles of Poly (Ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	1.2	4
78	Conformational equilibria of solvent N,N-dimethylpropionamide in the bulk and in the coordination sphere of the manganese(ii) ionElectronic supplementary information (ESI) available: non-planar staggered and planar cis Gaussian results. See http://www.rsc.org/suppdata/cp/b3/b302143b/. Physical Chemistry Chemical Physics, 2003, 5, 2552.	2.8	24
79	Solvation structure of lanthanide(III) ions in solvent mixtures of N,N-dimethylformamide and N,N-dimethylacetamide studied by titration Raman spectroscopyElectronic supplementary information (ESI) available: Crystallographic data (single crystal, [Gd(DMF)4(DMA)4](ClO4)3), (CCDC reference) Tj ETQq1 1 0.784314 rgBT /Over	2.8	38
80	Title is missing!. Journal of Solution Chemistry, 2002, 31, 931-946.	1.2	5
81	Individual solvation number of first-row transition metal(II) ions in solvent mixtures of N,N-dimethylformamide and N,N-dimethylacetamideâ€”Solvation steric effect. Physical Chemistry Chemical Physics, 2001, 3, 5475-5481.	2.8	38
82	Individual Solvation Numbers around the Nickel (II) Ion in an N,N-Dimethylformamide and N,N-Dimethylacetamide Mixture Determined by Raman Spectrophotometry.. Analytical Sciences, 2001, 17, 323-326.	1.6	31
83	Thermodynamics of [Co(NCS)4]2â^' at Poly(ethylene Oxide) and Octylphenyl Moieties in Micelles of Nonionic Surfactants. Journal of Colloid and Interface Science, 2001, 237, 167-173.	9.4	14
84	Spectrophotometric study of thiocyanato complexation of cobalt(II) and nickel(II) ions in micellar solutions of a nonionic surfactant triton X-100. Journal of Solution Chemistry, 1996, 25, 731-746.	1.2	12