Toshiyuki Takamuku

List of Publications by Year
in descending order

97	3,944	109321	123424
papers	citations	35 h-index	61 g-index

98	98	98	3607
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Liquid Structure of Acetonitrileâ^'Water Mixtures by X-ray Diffraction and Infrared Spectroscopy. Journal of Physical Chemistry B, 1998, 102, 8880-8888.	2.6	270
3	Hydrogen-Bonded Cluster Formation and Hydrophobic Solute Association in Aqueous Solutions of Ethanol. The Journal of Physical Chemistry, 1995, 99, 462-468.	2.9	190
4	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
5	Thermal Property, Structure, and Dynamics of Supercooled Water in Porous Silica by Calorimetry, Neutron Scattering, and NMR Relaxation. Journal of Physical Chemistry B, 1997, 101, 5730-5739.	2.6	147
6	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
7	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
8	Exposure assessment of organophosphorus and organobromine flame retardants via indoor dust from elementary schools and domestic houses. Chemosphere, 2015, 123, 17-25.	8.2	123
9	Structure of Clusters in Ethanolâ€“Water Binary Solutions Studied by Mass Spectrometry and X-Ray Diffraction. Bulletin of the Chemical Society of Japan, 1995, 68, 1775-1783.	3.2	120
10	Effect of Water on Structure of Hydrophilic Imidazolium-Based Ionic Liquid. Journal of Physical Chemistry B, 2009, 113, 10817-10824.	2.6	109
11	X-ray diffraction studies on methanolâ€“water, ethanolâ€“water, and 2-propanolâ€“water mixtures at low temperatures. Journal of Molecular Liquids, 2005, 119, 133-146.	4.9	85
12	Structure and dynamics of 1,4-dioxane-water binary solutions studied by X-ray diffraction, mass spectrometry, and NMR relaxation. Journal of Molecular Liquids, 1999, 83, 163-177.	4.9	78
13	Effects of the alkyl-chain length on the mixing state of imidazolium-based ionic liquidâ€“methanol solutions. Physical Chemistry Chemical Physics, 2010, 12, 12316.	2.8	78
14	Large-angle X-ray scattering, small-angle neutron scattering, and NMR relaxation studies on mixing states of 1,4-dioxane-water, 1,3-dioxane-water, and tetrahydrofuran-water mixtures. Journal of Molecular Liquids, 2003, 103-104, 143-159.	4.9	76
15	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
16	Structure and dynamics of hexafluoroisopropanol-water mixtures by x-ray diffraction, small-angle neutron scattering, NMR spectroscopy, and mass spectrometry. Journal of Chemical Physics, 2003, 119, 6132-6142.	3.0	70
17	Large-Angle X-ray Scattering and Small-Angle Neutron Scattering Study on Phase Separation of Acetonitrileâ^'Water Mixtures by Addition of NaCl. Journal of Physical Chemistry B, 2001, 105, 6236-6245.	2.6	66
18	Structure of Clusters in Methanol-Water Binary Solutions Studied by Mass Spectrometry and X-ray Diffraction. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2000, 55, 513-525.	1.5	63

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19	Clusters of Imidazolium-Based Ionic Liquid in Benzene Solutions. Journal of Physical Chemistry B, 2011, 115, 8518-8527.	2.6	62
20	A New Proton Conductive Liquid with No Ions: Pseudoâ€Protic Ionic Liquids. Chemistry - A European Journal, 2013, 19, 11522-11526.	3.3	60
21	Intermolecular interactions in mixtures of 1-n-butyl-3-methylimidazolium acetate and water: Insights from IR, Raman, NMR spectroscopy and quantum chemistry calculations. Journal of Molecular Liquids, 2015, 210, 227-237.	4.9	58
22	Structure of 1-Propanolâ€“Water Mixtures Investigated by Large-Angle X-ray Scattering Technique. Journal of Solution Chemistry, 2004, 33, 641-660.	1.2	55
23	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
24	Thermal Properties and Mixing State of Ethylene Glycolâ^'Water Binary Solutions by Calorimetry, Large-Angle X-ray Scattering, and Small-Angle Neutron Scattering. Journal of Physical Chemistry B, 2006, 110, 12372-12379.	2.6	53
25	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
26	NaCl-Induced Phase Separation of 1,4-Dioxaneâ^'Water Mixtures Studied by Large-Angle X-ray Scattering and Small-Angle Neutron Scattering Techniques. Journal of Physical Chemistry B, 2001, 105, 10101-10110.	2.6	51
27	Liquid Structure of Acetic Acidâ^'Water and Trifluoroacetic Acidâ^'Water Mixtures Studied by Large-Angle X-ray Scattering and NMR. Journal of Physical Chemistry B, 2007, 111, 9270-9280.	2.6	48
28	Hydrogen bonding in ethanolâ€“water and trifluoroethanolâ€“water mixtures studied by NMR and molecular dynamics simulation. Journal of Molecular Liquids, 2016, 217, 3-11.	4.9	47
29	Liquid Structure and Preferential Solvation of Metal Ions in Solvent Mixtures of N,N-Dimethylformamide and N-Methylformamide. Journal of Physical Chemistry A, 2006, 110, 1798-1804.	2.5	46
30	Liquid Structure of 1-Propanol by Molecular Dynamics Simulations and X-Ray Scattering. Journal of Solution Chemistry, 2004, 33, 797-809.	1.2	43
31	Microscopic interactions of the imidazolium-based ionic liquid with molecular liquids depending on their electron-donicity. Physical Chemistry Chemical Physics, 2014, 16, 23627-23638.	2.8	43
32	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
33	Scandium(III) hydration in aqueous solution from X-ray diffraction and X-ray absorption fine structure measurements. Chemical Physics Letters, 1997, 274, 485-490.	2.6	42
34	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
35	An X-Ray Diffraction Study on the Structure of Solvated Cadmium(II) Ion and Tetrathiocyanatocadmate(II) Complex inN,N-Dimethylformamide. Bulletin of the Chemical Society of Japan, 1989, 62, 1875-1879.	3.2	41
36	Structure and Dynamics of Halogenoethanolâ^'Water Mixtures Studied by Large-Angle X-ray Scattering, Small-Angle Neutron Scattering, and NMR Relaxation. Journal of Physical Chemistry A, 2005, 109, 7667-7676.	2.5	37

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37	Heterogeneity of acetonitrileâ€“water mixtures in the temperature range 279â€“307ÂK studied by small-angle neutron scattering technique. Journal of Molecular Liquids, 2007, 136, 147-155.	4.9	36
38	Large-Angle X-ray Scattering Investigation of the Structure of 2-Propanolâ€“Water Mixtures. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2002, 57, 982-994.	1.5	31
39	Neutron Scattering and Dielectric Studies on Dynamics of Methanol and Ethanol Confined in MCM-41. Journal of Physical Chemistry C, 2008, 112, 14385-14393.	3.1	31
40	Aggregation of Imidazolium Ionic Liquids in Molecular Liquids Studied by Small-Angle Neutron Scattering and NMR. Analytical Sciences, 2008, 24, 1285-1290.	1.6	30
41	Local Structure in Terms of Nearest-Neighbor Approach in 1-Butyl-3-methylimidazolium-Based Ionic Liquids: MD Simulations. Journal of Physical Chemistry B, 2016, 120, 5029-5041.	2.6	30
42	Preferential Solvation in Aqueousâ€“Organic Mixed Solvents Using Solvatochromic Indicators. Journal of Solution Chemistry, 2002, 31, 381-395.	1.2	29
43	Structure of Methanol Confined in MCM-41 Investigated by Large-Angle X-ray Scattering Technique. Journal of Physical Chemistry B, 2005, 109, 892-899.	2.6	29
44	ATR-IR spectroscopic observation on intermolecular interactions in mixtures of imidazolium-based ionic liquids C n mimTFSA (n = 2â€“12) with DMSO. Journal of Molecular Liquids, 2017, 232, 431-439.	4.9	29
45	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, 513-526.	2.6	24
46	Structure of Aqueous Mixtures ofN,N-Dimethylacetamide Studied by Infrared Spectroscopy, X-ray Diffraction, and Mass Spectrometry. Journal of Physical Chemistry B, 2003, 107, 6070-6078.	2.6	23
47	Solvation of the Amphiphilic Diol Molecule in Aliphatic Alcoholâ^'Water and Fluorinated Alcoholâ^'Water Solutions. Journal of Physical Chemistry B, 2010, 114, 4252-4260.	2.6	23
48	Competition between Cationâ€“Solvent and Cationâ€“Anion Interactions in Imidazolium Ionic Liquids with Polar Aprotic Solvents. ChemPhysChem, 2017, 18, 718-721.	2.1	21
49	Hydrogen bonds of the imidazolium rings of ionic liquids with DMSO studied by NMR, soft X-ray spectroscopy, and SANS. Physical Chemistry Chemical Physics, 2018, 20, 12858-12869.	2.8	21
50	An extended Johnsonâ€“Furter equation to salting-out phase separation of aqueous solution of water-miscible organic solvents. Fluid Phase Equilibria, 2001, 192, 1-12.	2.5	19
51	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, 16219-16226.	2.6	18
52	N,N-Dimethylformamide-induced phase separation of hexafluoroisopropanolâ€“water mixtures. Physical Chemistry Chemical Physics, 2011, 13, 11222.	2.8	16
53	Amide-induced phase separation of hexafluoroisopropanolâ€“water mixtures depending on the hydrophobicity of amides. Physical Chemistry Chemical Physics, 2012, 14, 8335.	2.8	16
54	Intermolecular interactions, ion solvation, and association in mixtures of 1â€nâ€butylâ€3â€methylimidazolium hexafluorophosphate and Î³â€butyrolactone: insights from Raman spectroscopy. Journal of Raman Spectroscopy, 2015, 46, 339-352.	2.5	16

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55	Solvation Properties of Aliphatic Alcoholâ€“Water and Fluorinated Alcoholâ€“Water Solutions for Amide Molecules Studied by IR and NMR Techniques. Journal of Solution Chemistry, 2011, 40, 2046-2056.	1.2	15
56	Distance Angle Descriptors of the Interionic and Ionâ€“Solvent Interactions in Imidazolium-Based Ionic Liquid Mixtures with Aprotic Solvents: A Molecular Dynamics Simulation Study. Journal of Physical Chemistry B, 2019, 123, 6065-6075.	2.6	15
57	Calorimetric and Raman Spectroscopic Studies of Cadmium(II) Thiocyanato Complexes inN,N-Dimethylformamide. Bulletin of the Chemical Society of Japan, 1988, 61, 3901-3906.	3.2	14
58	A Rayleigh light scattering study on mixing states of 2-propanolâ€“water binary mixtures widely used as mobile phase in separation. Talanta, 2001, 54, 69-77.	5.5	14
59	Aggregation of 1-dodecyl-3-methylimidazolium nitrate in water and benzene studied by SANS and 1H NMR. Physical Chemistry Chemical Physics, 2012, 14, 11070.	2.8	14
60	Small-Angle Neutron Scattering Study on Aggregation in Acetonitrileâ€“D2O and Acetonitrileâ€“D2Oâ€“NaCl Mixtures. Chemistry Letters, 2000, 29, 878-879.	1.3	13
61	Thermal Properties and Mixing State of Diolâˆ’Water Mixtures Studied by Calorimetry, Large-Angle X-Ray Scattering, and NMR Relaxation. Journal of Physical Chemistry B, 2008, 112, 13300-13309.	2.6	13
62	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.	4.9	13
63	Local structure of dilute aqueous DMSO solutions, as seen from molecular dynamics simulations. Journal of Chemical Physics, 2017, 146, 234507.	3.0	13
64	Microinhomogeneity for Aqueous Mixtures of Water-miscible Organic Solvents. Journal of the Ceramic Society of Japan, 2007, 115, 861-866.	1.1	12
65	Correlation between Soft X-ray Absorption and Emission Spectra of the Nitrogen Atoms within Imidazolium-Based Ionic Liquids. Journal of Physical Chemistry B, 2016, 120, 7480-7487.	2.6	12
66	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.	2.8	11
67	Solvent-Dependent Properties and Higher-Order Structures of Aryl Alcohol + Surfactant Molecular Gels. Langmuir, 2016, 32, 4352-4360.	3.5	11
68	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.	6.8	11
69	A novel preparation method of lead-based layered perovskite Langmuir films with a negligible amount of PbBr2. New Journal of Chemistry, 2013, 37, 568.	2.8	10
70	A Study of the Solvation Structure of <scp>l</scp>â€Leucine in Alcoholâ€“Water Binary Solvents through Molecular Dynamics Simulations and FTIR and NMR Spectroscopy. ChemPhysChem, 2015, 16, 3190-3199.	2.1	9
71	Low-Frequency Spectra of 1-Methyl-3-octylimidazolium Tetrafluoroborate Mixtures with Methanol, Acetonitrile, and Dimethyl Sulfoxide: A Combined Study of Femtosecond Raman-Induced Kerr Effect Spectroscopy and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2020, 124, 7857-7871.	2.6	9
72	Raman Spectroscopic and X-ray Diffraction Studies on Concentrated Aqueous Zinc (II) Bromide Solution at High Temperatures. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1992, 47, 485-492.	1.5	8

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73	Solvation power of HFIP for the hydrophilic and the hydrophobic moieties of l-leucine studied by MD, IR, and NMR techniques. Journal of Molecular Liquids, 2017, 230, 261-270.	4.9	8
74	NMR study on dynamics of water molecules in concentrated aqueous zinc(II) bromide solutions at various temperatures. The Journal of Physical Chemistry, 1992, 96, 9487-9492.	2.9	7
75	SANS, Infrared, and ⁷Li and ²³Na NMR Studies on Phase Separation of Alkali Halideâ€“Acetonitrileâ€“Water Mixtures by Cooling. Journal of Physical Chemistry B, 2013, 117, 2438-2448.	2.6	7
76	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.	2.6	7
77	Complex formation of nickel(<scp>ii</scp>) with dimethyl sulfoxide, methanol, and acetonitrile in a TFSA^â</sup>-based ionic liquid of [C₂mim][TFSA]. Physical Chemistry Chemical Physics, 2017, 19, 31335-31344.	2.8	7
78	Effects of the long octyl chain on complex formation of nickel(<scp>ii</scp>) with dimethyl sulfoxide, methanol, and acetonitrile in ionic liquid of [C₈mim][TFSA]. Physical Chemistry Chemical Physics, 2019, 21, 3154-3163.	2.8	7
79	EXAFS and X-Ray Diffraction Studies on the Structure of the Tetrathiocyanatocadmate(II) Complex in Dimethyl Sulfoxide. Bulletin of the Chemical Society of Japan, 1992, 65, 2104-2113.	3.2	6
80	Structure of Supercooled Aqueous Zinc(II) Bromide Solutions by Raman and X-Ray Scattering Methods. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1992, 47, 841-848.	1.5	6
81	Structures of Naphtholâ€“AOT Self-assembly Organogels and Their Applications to Dispersing Media of Rare-earth Complexes. Chemistry Letters, 2014, 43, 1861-1863.	1.3	6
82	Voronoi Polyhedra as a Tool for the Characterization of Inhomogeneous Distribution in 1-Butyl-3-methylimidazolium Cation-Based Ionic Liquids. Journal of Physical Chemistry B, 2020, 124, 10419-10434.	2.6	6
83	Conformational change of L-phenylalanine in fluorinated alcohol-water mixed solvents studied by IR, NMR, and MD simulations. Journal of Molecular Liquids, 2019, 290, 111192.	4.9	5
84	Mixing states of imidazolium-based ionic liquid, [C₄mim][TFSI], with cycloethers studied by SANS, IR, and NMR experiments and MD simulations. Physical Chemistry Chemical Physics, 2020, 22, 5332-5346.	2.8	4
85	Solvation Structures of Tetraethylammonium Bromide and Tetrafluoroborate in Aqueous Binary Solvents with Ethanol, Trifluoroethanol, and Acetonitrile. Journal of Physical Chemistry B, 2020, 124, 5009-5020.	2.6	4
86	X-ray Diffraction Studies on Supercooled Aqueous Lithium Bromide and Lithium Iodide Solutions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1997, 52, 521-527.	1.5	3
87	Hydrogen bonding in protic and aprotic amide mixtures: Low-frequency Raman spectroscopy, small-angle neutron scattering, and molecular dynamics simulations. Journal of Molecular Liquids, 2017, 238, 518-522.	4.9	3
88	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.	1.6	2
89	Aggregation of the Dipeptide Leuâ€“Gly in Alcoholâ€“Water Binary Solvents Elucidated from the Solvation Structure for Each Moiety. Journal of Physical Chemistry B, 2021, 125, 240-252.	2.6	2
90	Assessment of the UCST-type liquidâ€“liquid phase separation mechanism of imidazolium-based ionic liquid, [C8mim][TFSI], and 1,4-dioxane by SANS, NMR, IR, and MD simulations. Physical Chemistry Chemical Physics, 2021, 23, 24449-24463.	2.8	2

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91	Anion Effects on the Mixing States of 1-Methyl-3-octylimidazolium Tetrafluoroborate and Bis(trifluoromethylsulfonyl)amide with Methanol, Acetonitrile, and Dimethyl Sulfoxide on the Meso- and Microscopic Scales. Journal of Physical Chemistry B, 2021, 125, 13896-13907.	2.6	2
92	Heat-induced phase separation of alkali chlorideâ€“HFIPâ€“water mixtures. Journal of Molecular Liquids, 2014, 189, 113-121.	4.9	1
93	Mixing States of Ionic Liquid-Molecular Liquid Mixed Solvents and Their Effects on Metal Complex Formation. Physical Chemistry in Action, 2021, , 233-253.	0.6	1
94	Local Structure in Mixtures of Ionic Liquid with Molecular Solvent: Vibration Spectroscopy, NMR and Molecular Dynamics Simulation. Physical Chemistry in Action, 2021, , 289-334.	0.6	1
95	Effects of the self-hydrogen bonding among formamide molecules on UCST-type liquidâ^'liquid phase separation of binary solutions with imidazolium-based ionic liquid, [C_nmim][TFSI], studied by NMR, IR, MD simulations, and SANS. Physical Chemistry Chemical Physics, 0, , .	2.8	1
96	Raman Scattering and X-ray Diffraction Studies on Zinc(II)Bromide Solutions in Methanol and N,N-Dimethylformamide in the Temperature Range 77-333 K. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1994, 49, 1119-1130.	1.5	0
97	What Kinds of Liquids are Ionic Liquids?. Hamon, 2019, 29, 95-99.	0.0	0