Takatsugu Endo

List of Publications by Year
in descending order

53 papers	1,132 citations	361045 20 h-index	414034 32 g-index
54 all docs	54 docs citations	54 times ranked	1239 citing authors

#	Article	IF	Citations
1	Phase Behaviors of Room Temperature Ionic Liquid Linked with Cation Conformational Changes: 1-Butyl-3-methylimidazolium Hexafluorophosphate. Journal of Physical Chemistry B, 2010, 114, 407-411.	1.2	102
2	Effects of Methylation at the 2 Position of the Cation Ring on Phase Behaviors and Conformational Structures of Imidazolium-Based Ionic Liquids. Journal of Physical Chemistry B, 2010, 114, 9201-9208.	1.2	92
3	Ionic liquid/ultrasound pretreatment and in situ enzymatic saccharification of bagasse using biocompatible cholinium ionic liquid. Bioresource Technology, 2015, 176, 169-174.	4.8	76
4	Efficient and rapid direct transesterification reactions of cellulose with isopropenyl acetate in ionic liquids. RSC Advances, 2015, 5, 72071-72074.	1.7	62
5	Observation of the transition state for pressure-induced BO ₃ â†' BO ₄ conversion in glass. Science, 2014, 345, 1027-1029.	6.0	47
6	Effects of Methylation at Position 2 of Cation Ring on Rotational Dynamics of Imidazolium-Based Ionic Liquids Investigated by NMR Spectroscopy: [C₄mim]Br vs [C₄C₁mim]Br. Journal of Physical Chemistry A, 2011, 115, 2999-3005.	1.1	45
7	NMR Study of Cation Dynamics in Three Crystalline States of 1-Butyl-3-methylimidazolium Hexafluorophosphate Exhibiting Crystal Polymorphism. Journal of Physical Chemistry B, 2012, 116, 3780-3788.	1.2	39
8	Saccharification and ethanol fermentation from cholinium ionic liquid-pretreated bagasse with a different number of post-pretreatment washings. Bioresource Technology, 2015, 189, 203-209.	4.8	37
9	A Comparative Study of the Rotational Dynamics of PF₆^{â€"} Anions in the Crystals and Liquid States of 1-Butyl-3-methylimidazolium Hexafluorophosphate: Results from ³¹P NMR Spectroscopy. Journal of Physical Chemistry B, 2013, 117, 326-332.	1.2	36
10	Development of Apparatus for Simultaneous Measurements of Raman Spectroscopy and High-Sensitivity Calorimetry. Japanese Journal of Applied Physics, 2008, 47, 1775.	0.8	31
11	Ultraslow Dynamics at Crystallization of a Room-Temperature Ionic Liquid, 1-Butyl-3-methylimidazolium Bromide. Journal of Physical Chemistry B, 2012, 116, 3991-3997.	1.2	30
12	Cellulose triacetate synthesis via one-pot organocatalytic transesterification and delignification of pretreated bagasse. RSC Advances, 2018, 8, 21768-21776.	1.7	30
13	Isomer Populations in Liquids for 1-Isopropyl-3-methylimidazolium Bromide and Its Iodide and Their Conformational Changes Accompanying the Crystallizing and Melting Processes. Journal of Physical Chemistry A, 2008, 112, 7543-7550.	1.1	27
14	Determination of Missing Crystal Structures in the 1-Alkyl-3-methylimidazolium Hexafluorophosphate Series: Implications on Structureâ€"Property Relationships. Crystal Growth and Design, 2013, 13, 5383-5390.	1.4	27
15	Anion Bridging-Induced Structural Transformation of Cellulose Dissolved in Ionic Liquid. Journal of Physical Chemistry Letters, 2016, 7, 5156-5161.	2.1	27
16	Structure and dynamics of ionic liquids: Trimethylsilylpropyl-substituted cations and bis(sulfonyl)amide anions. Journal of Chemical Physics, 2016, 145, 244506.	1.2	27
17	Investigation of accessibility and reactivity of cellulose pretreated by ionic liquid at high loading. Carbohydrate Polymers, 2017, 176, 365-373.	5.1	27
18	Crystal polymorphism of a room-temperature ionic liquid, 1,3-dimethylimidazolium hexafluorophosphate: Calorimetric and structural studies of two crystal phases having melting points of âˆ¼50 K difference. Chemical Physics Letters, 2011, 517, 162-165.	1.2	24

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19	Comprehensive Conformational and Rotational Analyses of the Butyl Group in Cyclic Cations: DFT Calculations for Imidazolium, Pyridinium, Pyrrolidinium, and Piperidinium. Journal of Physical Chemistry B, 2016, 120, 10336-10349.	1.2	23
20	Melting and Crystallization Behaviors of an Ionic Liquid, 1-Isopropyl-3-methylimidazolium Bromide, Studied by Using Nanowatt-Stabilized Differential Scanning Calorimetry. Bulletin of the Chemical Society of Japan, 2009, 82, 806-812.	2.0	22
21	Efficient pretreatment of bagasse at high loading in an ionic liquid. Industrial Crops and Products, 2018, 119, 243-248.	2.5	22
22	Cation and anion dynamics in supercooled and glassy states of the ionic liquid 1-butyl-3-methylimidazolium hexafluorophosphate: Results from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>13</mml:mn></mml:msup></mml:math>C,<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>31</mml:mn></mml:msup></mml:math>P, and<mml:math xmlns:mml="http://www.w3.org/199	1.1	20
23	Efficient Hydrolysis of Polysaccharides in Bagasse by <i>in Situ</i> Synthesis of an Acidic Ionic Liquid after Pretreatment. ACS Sustainable Chemistry and Engineering, 2017, 5, 708-713.	3.2	20
24	Nano-Structural Investigation on Cellulose Highly Dissolved in Ionic Liquid: A Small Angle X-ray Scattering Study. Molecules, 2017, 22, 178.	1.7	17
25	Thermal phase behavior of 1-butyl-3-methylimidazolium hexafluorophosphate: Simultaneous measurements of the melting of two polymorphic crystals by Raman spectroscopy and calorimetry. Chemical Physics Letters, 2013, 584, 79-82.	1.2	16
26	Origin of low melting point of ionic liquids: dominant role of entropy. Chemical Science, 2022, 13, 7560-7565.	3.7	16
27	Ionic Dynamics in [C₄mim]NTf₂in the Glassy and Liquid States: Results from¹³C and¹H NMR Spectroscopy. Journal of Physical Chemistry B, 2014, 118, 14888-14898.	1.2	15
28	Structural Analysis of Crystalline R(+)-Î±-Lipoic Acid-Î±-cyclodextrin Complex Based on Microscopic and Spectroscopic Studies. International Journal of Molecular Sciences, 2015, 16, 24614-24628.	1.8	11
29	Fast solute diffusivity in ionic liquids with silyl or siloxane groups studied by the transient grating method. Chemical Physics, 2016, 472, 128-134.	0.9	11
30	Flame-retardant thermoplastics derived from plant cell wall polymers by single ionic liquid substitution. New Journal of Chemistry, 2019, 43, 2057-2064.	1.4	11
31	Polymorphic Properties of Ionic Liquid of 1-Isopropyl-3-methylimidazolium Bromide. Chemistry Letters, 2009, 38, 1136-1137.	0.7	10
32	Structural disorder and the effects of aging in a phosphate glass: Results from two-dimensional 31P PASS NMR spectroscopy. Journal of Non-Crystalline Solids, 2013, 359, 33-39.	1.5	10
33	Systematic estimation and interpretation of fractional free volume in 1-alkyl-3-methylimidazolium-based ionic liquids. Fluid Phase Equilibria, 2019, 498, 144-150.	1.4	10
34	DFT Study on Conformation of 1-Alkyl-3-methylimidazolium with Ethyl, Propyl, Butyl, Pentyl, and Hexyl Group. Bulletin of the Chemical Society of Japan, 2020, 93, 720-729.	2.0	10
35	Structural Characterization of the Body Frame and Spicules of a Glass Sponge. Minerals (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.8	9
36	Nonâ€Flammable and Highly Concentrated Carbonate Esterâ€Free Electrolyte Solutions for 5 Vâ€Class Positive Electrodes in Lithiumâ€Ion Batteries. ChemSusChem, 2021, 14, 2445-2451.	3.6	9

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37	Structure and dynamics of room temperature ionic liquids with bromide anion: results from 81 Br NMR spectroscopy. Magnetic Resonance in Chemistry, 2015, 53, 369-378.	1.1	8
38	Extension of Anodic Potential Window of Ester-Based Electrolyte Solutions for High-Voltage Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 7728-7732.	2.5	8
39	Photo-excitation dynamics of N, N-dimethyl-p-nitroaniline in ionic liquids: Effect of cation alkyl-chain length. Journal of Molecular Liquids, 2019, 289, 111128.	2.3	8
40	Heterogeneous Structures of Ionic Liquids as Probed by CO Rotation with Nuclear Magnetic Resonance Relaxation Analysis and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2020, 124, 10465-10476.	1.2	8
41	Fast cation dynamics in the crystalline state of an imidazolium-based room temperature ionic liquid due to the presence of a tiny amount of H2O. Solid State Ionics, 2014, 259, 41-45.	1.3	7
42	Efficient recovery of ionic liquid by electrodialysis in the acid hydrolysis process. Separation Science and Technology, 2017, 52, 1240-1245.	1.3	7
43	Multifunctional photo acid generator for fluorescence imaging based on self-contained photoreaction. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 200, 181-186.	2.0	6
44	Cellulose Preferentially Dissolved over Xylan in Ionic Liquids through Precise Anion Interaction Regulated by Bulky Cations. ACS Sustainable Chemistry and Engineering, 2021, 9, 8686-8691.	3.2	6
45	Crystal Polymorphism of 1-Butyl-3-methylimidazolium Hexafluorophosphate: Phase Diagram, Structure, and Dynamics. Australian Journal of Chemistry, 2019, 72, 11.	0.5	5
46	Excited-State Intramolecular Proton Transfer Reaction and Ground-State Hole Dynamics of 4â€²-<i>N</i>,<i>N</i>-Dialkylamino-3-hydroxyflavone in Ionic Liquids Studied by Transient Absorption Spectroscopy. Journal of Physical Chemistry B, 2021, 125, 5373-5386.	1.2	5
47	Self-Assembly and Complexation of Cellulose/Ionic Liquid at High Cellulose Concentration: Anion Dependence. Crystal Growth and Design, 2020, 20, 6267-6271.	1.4	4
48	Transport Properties of Various Ionic Liquids During Electrodialysis. Journal of Solution Chemistry, 2015, 44, 2405-2415.	0.6	3
49	Structureâ€“Property Relationship for 1-Isopropyl-3-methylimidazolium- and 1-<i>tert</i>-Butyl-3-methylimidazolium-Based Ionic Liquids: Thermal Properties, Densities, Viscosities, and Quantum Chemical Calculations. Journal of Chemical & Engineering Data, 2019, 64, 5857-5868.	1.0	3
50	Formulation of Diffraction Intensity of Ionic Plastic Crystal and Its Application to Trimethylethylammonium Bis(fluorosulfonyl)amide. Bulletin of the Chemical Society of Japan, 2021, 94, 2011-2018.	2.0	3
51	Understanding of Unique Thermal Phase Behavior of Room Temperature Ionic Liquids: 1-Butyl-3-Methylimdiazolium Hexafluorophosphate as a Great Example. Springer Series in Materials Science, 2015, , 379-401.	0.4	1
52	Alkane Oxidation with H2O2 Catalyzed by Dicopper Complex with 6-hpa Ligand: Mechanistic Insights as Key Features for Methane Oxidation. Bulletin of the Chemical Society of Japan, 2022, 95, 1148-1155.	2.0	1
53	Understanding Thermal Phase Behaviors of PF₆^{ï¼}-Paired Imidazolium-Based Ionic Liquids at the Molecular Level. Nihon Kessho Gakkaishi, 2016, 58, 7-12.	0.0	0