

# Hajime Matsumoto

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8264797/hajime-matsumoto-publications-by-citations.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

95  
papers

5,915  
citations

38  
h-index

76  
g-index

103  
ext. papers

6,222  
ext. citations

4.6  
avg, IF

5.7  
L-index

#	Paper	IF	Citations
95	N-Methyl-N-propylpiperidinium bis(trifluoromethanesulfonyl)imide (PP13 $\square$ FSI) [Novel electrolyte base for Li battery. <i>Electrochemistry Communications</i> , <b>2003</b> , 5, 594-598	5.1	659
94	Fast cycling of Li/LiCoO <sub>2</sub> cell with low-viscosity ionic liquids based on bis(fluorosulfonyl)imide [FSI] $\square$ <i>Journal of Power Sources</i> , <b>2006</b> , 160, 1308-1313	8.9	480
93	Preparation of room temperature ionic liquids based on aliphatic onium cations and asymmetric amide anions and their electrochemical properties as a lithium battery electrolyte. <i>Journal of Power Sources</i> , <b>2005</b> , 146, 45-50	8.9	372
92	Low-melting, low-viscous, hydrophobic ionic liquids: aliphatic quaternary ammonium salts with perfluoroalkyltrifluoroborates. <i>Chemistry - A European Journal</i> , <b>2005</b> , 11, 752-66	4.8	323
91	Cyclic quaternary ammonium ionic liquids with perfluoroalkyltrifluoroborates: synthesis, characterization, and properties. <i>Chemistry - A European Journal</i> , <b>2006</b> , 12, 2196-212	4.8	299
90	Highly Conductive Room Temperature Molten Salts Based on Small Trimethylalkylammonium Cations and Bis(trifluoromethylsulfonyl)imide. <i>Chemistry Letters</i> , <b>2000</b> , 29, 922-923	1.7	285
89	Low-melting, low-viscous, hydrophobic ionic liquids: 1-alkyl(alkyl ether)-3-methylimidazolium perfluoroalkyltrifluoroborate. <i>Chemistry - A European Journal</i> , <b>2004</b> , 10, 6581-91	4.8	235
88	Application of room temperature ionic liquids to Li batteries. <i>Electrochimica Acta</i> , <b>2007</b> , 53, 1048-1054	6.7	198
87	The Application of Room Temperature Molten Salt with Low Viscosity to the Electrolyte for Dye-Sensitized Solar Cell. <i>Chemistry Letters</i> , <b>2001</b> , 30, 26-27	1.7	176
86	Discharge/charge properties of Li/LiCoO <sub>2</sub> cell using room temperature ionic liquids (RTILs) based on quaternary ammonium cation [Effect of the structure. <i>Journal of Power Sources</i> , <b>2005</b> , 146, 693-697	8.9	166
85	Application of nonflammable electrolyte with room temperature ionic liquids (RTILs) for lithium-ion cells. <i>Journal of Power Sources</i> , <b>2007</b> , 174, 1021-1026	8.9	133
84	Room temperature ionic liquids based on small aliphatic ammonium cations and asymmetric amide anions. <i>Chemical Communications</i> , <b>2002</b> , 1726-7	5.8	131
83	Physicochemical Properties of 1,3-Dialkylimidazolium Fluorohydrogenate Room-Temperature Molten Salts. <i>Journal of the Electrochemical Society</i> , <b>2003</b> , 150, D195	3.9	129
82	Preparation of Monodisperse CdS Nanocrystals by Size Selective Photocorrosion. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 13781-13785		121
81	Oligomeric electrolyte as a multifunctional gelator. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 11039-41	16.4	105
80	Structure and properties of new ionic liquids based on alkyl- and alkenyltrifluoroborates. <i>ChemPhysChem</i> , <b>2005</b> , 6, 1324-32	3.2	100
79	Room Temperature Molten Salts Based on Trialkylsulfonium Cations and Bis(trifluoromethylsulfonyl)imide. <i>Chemistry Letters</i> , <b>2000</b> , 29, 1430-1431	1.7	98

78	Electrochemical properties and actuation mechanisms of actuators using carbon nanotube-ionic liquid gel. <i>Sensors and Actuators B: Chemical</i> , <b>2009</b> , 139, 624-630	8.5	83
77	Ionic liquid electrolytes based on multi-methoxyethyl substituted ammoniums and perfluorinated sulfonimides: Preparation, characterization, and properties. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 7134-7144	6.7	78
76	Effect of solvents on photocatalytic reduction of carbon dioxide using TiO <sub>2</sub> nanocrystal photocatalyst embedded in SiO <sub>2</sub> matrices. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>1997</b> , 108, 187-192	4.7	73
75	Ionic liquids and plastic crystals based on tertiary sulfonium and bis(fluorosulfonyl)imide. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 1221-1226	6.7	72
74	Observation of electrodeposited lithium by optical microscope in room temperature ionic liquid-based electrolyte. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 6663-6669	8.9	64
73	Room Temperature Molten Salts Based on Tetraalkylammonium Cations and Bis(trifluoromethylsulfonyl)imide. <i>Chemistry Letters</i> , <b>2001</b> , 30, 182-183	1.7	64
72	High performance polymer actuator based on carbon nanotube-ionic liquid gel: Effect of ionic liquid. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 156, 539-545	8.5	63
71	Lithium-doped, organic ionic plastic crystal electrolytes exhibiting high ambient-temperature conductivities. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 1017-1022	5.1	62
70	Design, synthesis, and electrochemistry of room-temperature ionic liquids functionalized with propylene carbonate. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 1310-3	16.4	60
69	Low Melting and Electrochemically Stable Ionic Liquids Based on Asymmetric Fluorosulfonyl(trifluoromethylsulfonyl)amide. <i>Chemistry Letters</i> , <b>2008</b> , 37, 1020-1021	1.7	59
68	Effect of Current Density on Morphology of Lithium Electrodeposited in Ionic Liquid-Based Electrolytes. <i>Journal of the Electrochemical Society</i> , <b>2014</b> , 161, A1236-A1240	3.9	50
67	Effects of conformational flexibility of alkyl chains of cations on diffusion of ions in ionic liquids. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 5987-93	3.6	50
66	Low-melting, Low-viscous, Hydrophobic Ionic Liquids:N-Alkyl(alkyl ether)-N-methylpyrrolidinium Perfluoroethyltrifluoroborate. <i>Chemistry Letters</i> , <b>2004</b> , 33, 1636-1637	1.7	50
65	Direct measurements of ionic mobility of ionic liquids using the electric field applying pulsed gradient spin-echo NMR. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 8466-8	3.4	49
64	Effect of Ionic Additives on the Limiting Cathodic Potential of EMI-Based Room Temperature Ionic Liquids. <i>Electrochemistry</i> , <b>2003</b> , 71, 1058-1060	1.2	49
63	A New Class of Hydrophobic Ionic Liquids: Trialkyl(2-methoxyethyl)ammonium Perfluoroethyltrifluoroborate. <i>Chemistry Letters</i> , <b>2004</b> , 33, 886-887	1.7	47
62	Effect of Organic Additives on Electrochemical Properties of Li Anode in Room Temperature Ionic Liquid. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, A316	3.9	45
61	Effective scCO <sub>2</sub> -ionic Liquid Reaction System Based on Symmetric Aliphatic Ammonium Salts for the Rapid CO <sub>2</sub> Fixation with Aziridine to 2-Oxazolidinone. <i>Chemistry Letters</i> , <b>2005</b> , 34, 60-61	1.7	44

60	Characterization of Covalently Immobilized Q-CdS Particles on Au(111) by Scanning Tunneling Microscopy and Tunneling Spectroscopy with High Reproducibility. <i>Langmuir</i> , <b>1997</b> , 13, 742-746	4	42
59	Photoinduced Reduction of Viologens on Size-Separated CdS Nanocrystals. <i>The Journal of Physical Chemistry</i> , <b>1994</b> , 98, 11549-11556		42
58	Interactions of perfluoroalkyltrifluoroborate anions with li ion and imidazolium cation: effects of perfluoroalkyl chain on motion of ions in ionic liquids. <i>Journal of Physical Chemistry B</i> , <b>2010</b> , 114, 11390-11394	3.4	40
57	Alkoxy chains in ionic liquid anions; effect of introducing ether oxygen into perfluoroalkylborate on physical and thermal properties. <i>Chemical Communications</i> , <b>2010</b> , 46, 1730-2	5.8	37
56	Ab initio study of EMIM-BF <sub>4</sub> molecule adsorption on Li surfaces as a model for ionic liquid/Li interfaces in Li-ion batteries. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	37
55	Low-Viscous, Low-Melting, Hydrophobic Ionic Liquids: 1-Alkyl-3-methylimidazolium Trifluoromethyltrifluoroborate. <i>Chemistry Letters</i> , <b>2004</b> , 33, 680-681	1.7	37
54	Investigation of an Intermediate Temperature Molten Lithium Salt Based on Fluorosulfonyl(trifluoromethylsulfonyl)amide as a Solvent-Free Lithium Battery Electrolyte. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 18829-18836	3.8	32
53	Hydrogels Based on Surfactant-Free Ionene Polymers with N,N'-(p-Phenylene)dibenzamide Linkages. <i>Macromolecules</i> , <b>2008</b> , 41, 8841-8846	5.5	32
52	Ab initio study of EMIM-BF <sub>4</sub> crystal interaction with a Li (100) surface as a model for ionic liquid/Li interfaces in Li-ion batteries. <i>Journal of Chemical Physics</i> , <b>2009</b> , 131, 244705	3.9	31
51	The structures of alkylimidazolium fluorohydrogenate molten salts studied by high-energy X-ray diffraction. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 312-314, 414-418	3.9	31
50	Glucose sensitivity of poly(pyrrole) films containing immobilized glucose dehydrogenase, nicotinamide adenine dinucleotide, and 1-naphthoquinonesulphonate ions. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , <b>1991</b> , 319, 185-194		30
49	Graphene Nanoplatelet Composite Cathode for a Chloroaluminate Ionic Liquid-Based Aluminum Secondary Battery. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 2269-2274	6.1	28
48	Solvation-Structure Modification by Concentrating Mg(TFSA)-MgCl-Triglyme Ternary Electrolyte. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 4732-4737	6.4	28
47	Highly Efficient and Specific Gelation of Ionic Liquids by Polymeric Electrolytes to Form Ionogels with Substantially High Gel-Sol Transition Temperatures and Rheological Properties Like Self-Standing Ability and Rapid Recovery. <i>ACS Macro Letters</i> , <b>2012</b> , 1, 1108-1112	6.6	28
46	First-Principles Study of EMIM-FAFSA Molecule Adsorption on a Li(100) Surface as a Model for Li-Ion Battery Electrodes. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 8493-8509	3.8	26
45	Electrochemical Windows of Room-Temperature Ionic Liquids <b>2005</b> , 35-54		21
44	Cation and anion dependence of stable geometries and stabilization energies of alkali metal cation complexes with FSA(-), FTA(-), and TFSA(-) anions: relationship with physicochemical properties of molten salts. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 16212-8	3.4	19
43	Electron Injection Efficiency in Ru-Dye Sensitized TiO <sub>2</sub> in the Presence of Room Temperature Ionic Liquid Solvents Probed by Femtosecond Transient Absorption Spectroscopy: Effect of Varying Anions. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 20213-20219	3.8	19

42	Thermal Properties of Alkali (Fluorosulfonyl)(trifluoromethylsulfonyl)amides. <i>Chemistry Letters</i> , <b>2010</b> , 39, 1303-1304	1.7	19
41	Electrochemical desorption of a self-assembled monolayer of alkanethiol in ionic liquids. <i>Journal of Electroanalytical Chemistry</i> , <b>2008</b> , 615, 110-116	4.1	19
40	Effect of Charge Transfer Resistance on Morphology of Lithium Electrodeposited in Ionic Liquid. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, D3076-D3079	3.9	19
39	Narrowing Size Distribution of CdS Nanocrystals by Size Selective Photocorrosion. <i>Chemistry Letters</i> , <b>1995</b> , 24, 595-596	1.7	15
38	?????????????????????. <i>Electrochemistry</i> , <b>2002</b> , 70, 190-194	1.2	15
37	Honeycomb layered oxides: structure, energy storage, transport, topology and relevant insights. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 3990-4030	58.5	15
36	Ionic Liquid-Based Electrolytes Containing Surface-Functionalized Inorganic Nanofibers for Quasisolid Lithium Batteries. <i>ACS Omega</i> , <b>2017</b> , 2, 835-841	3.9	14
35	Cation Mixtures of Alkali Metal (Fluorosulfonyl)(trifluoromethylsulfonyl)Amide as Electrolytes for Lithium Secondary Battery. <i>Journal of the Electrochemical Society</i> , <b>2014</b> , 161, A902-A907	3.9	13
34	EQCM study of Room Temperature Ionic Liquids Based on Perfluoroethyltrifluoroborate with and without Li[BF <sub>4</sub> ]. <i>Electrochemistry</i> , <b>2005</b> , 73, 633-635	1.2	13
33	In-situ Optical Microscope Morphology Observation of Lithium Electrodeposited in Room Temperature Ionic Liquids Containing Aliphatic Quaternary Ammonium Cation. <i>Electrochemistry</i> , <b>2012</b> , 80, 777-779	1.2	12
32	Photoelectrochemistry of p-type Cu <sub>2</sub> O semiconductor electrode in ionic liquid. <i>Research on Chemical Intermediates</i> , <b>2006</b> , 32, 575-583	2.8	11
31	Effect of Temperature on Li Electrodeposition Behavior in Room-Temperature Ionic Liquids Comprising Quaternary Ammonium Cation. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, A2973-A2979	3.9	9
30	Graphene Nanoplatelet-Polysulfone Composite Cathodes for High-Power Aluminum Rechargeable Batteries. <i>Electrochemistry</i> , <b>2018</b> , 86, 72-76	1.2	9
29	Tuning of solubility and gelation ability of oligomeric electrolyte by anion exchange. <i>Polymer Journal</i> , <b>2010</b> , 42, 759-765	2.7	9
28	Influence of the Iodine Content on the Photocurrent in Dye-sensitized Solar Cells using Liquid Polyiodide. <i>Electrochemistry</i> , <b>2002</b> , 70, 446-448	1.2	9
27	In Situ Morphology Observations of Electrodeposited Lithium in Room-Temperature Ionic Liquids by Optical Microscopy. <i>Chemistry Letters</i> , <b>2013</b> , 42, 77-79	1.7	8
26	Modulation of Electron Injection Dynamics of Ru-Based Dye/TiO <sub>2</sub> System in the Presence of Three Different Organic Solvents: Role of Solvent Dipole Moment and Donor Number. <i>ChemPhysChem</i> , <b>2015</b> , 16, 1657-62	3.2	7
25	Melting and Crystallization Behaviors of Alkali Metal (Fluorosulfonyl)(trifluoromethylsulfonyl)amides. <i>Chemistry Letters</i> , <b>2011</b> , 40, 1105-1106	1.7	7

24	Design, Synthesis, and Electrochemistry of Room-Temperature Ionic Liquids Functionalized with Propylene Carbonate. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 1346-1349	3.6	7
23	Charge and Discharge Property of Li/LiCoO <sub>2</sub> Cell Using Ionic Liquids Composed of N,N-Diethyl-N-Methyl-N-(2-Methoxyethyl)Ammonium and Fluorosulfonyl (Trifluoromethylsulfonyl) Amide. <i>ECS Transactions</i> , <b>2010</b> , 33, 37-42	1	7
22	Diffusion of Lithium Cation in Low-Melting Lithium Molten Salts. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 4144-4149	3.8	6
21	Alkali Metal Salts with Designable Aryltrifluoroborate Anions. <i>Journal of Physical Chemistry B</i> , <b>2016</b> , 120, 9468-76	3.4	6
20	Photoelectrochemical Cells 221-234		6
19	Analytical Measurements to Elucidate Structural Behavior of 2,5-Dimethoxy-1,4-benzoquinone During Charge and Discharge. <i>ChemSusChem</i> , <b>2020</b> , 13, 2354-2363	8.3	4
18	Effects of polyethylene spacer length in polymeric electrolytes on gelation of ionic liquids and ionogel properties. <i>Journal of Polymer Science Part A</i> , <b>2015</b> , 53, 249-255	2.5	4
17	Physical and Electrochemical Properties of Room Temperature Molten Salt Based on Aliphatic Onium Cations and Asymmetric Amide Anion. <i>ECS Proceedings Volumes</i> , <b>2002</b> , 2002-19, 1057-1065		4
16	Recent Advances in Ionic Liquids for Lithium Secondary Batteries. <i>Modern Aspects of Electrochemistry</i> , <b>2014</b> , 209-225		2
15	Electrochemical Windows of Room-Temperature Ionic Liquids (RTILs) <b>2011</b> , 43-63		2
14	New Ionic Liquids Containing Fluorosulfonyl(trifluoromethylsulfonyl)amide and 5-Phosphoniaspiro[4.4]nonan. <i>ECS Transactions</i> , <b>2010</b> , 33, 35-40	1	2
13	Ion Mobility of 1-Ethyl-3-methylimidazolium Tetrafluoroborate and 1-Ethyl-3-methylimidazolium Bis(trifluorosulfonyl)amide Ionic Liquids. <i>ECS Transactions</i> , <b>2009</b> , 25, 23-29	1	2
12	Lithium Electrodeposition in Single Molten Salt with Constant Lithium-Ion Concentration at Any Time and Location. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 070502	3.9	2
11	Electrochemically synthesized liquid-sulfur/sulfide composite materials for high-rate magnesium battery cathodes. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 16585-16593	13	2
10	????????????????????,?????□ <i>Electrochemistry</i> , <b>2012</b> , 80, 1022-1027	1.2	1
9	Application of Ionic Liquids to Photoelectrochemical Cells <b>2005</b> , 187-198		1
8	Preparation of Magnesium Salts Composed of Perfluoro Anions and These Electrochemical Behaviors in Molten Salts. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 020541	3.9	1
7	Lithium Molten Salt Battery at Near Room Temperature Using Low-Melting Alkali Metal Melts. <i>ECS Transactions</i> , <b>2016</b> , 73, 95-100	1	1

- 6 Lithium Redox in Imidazolium Ionic Liquids Composed of Five-Membered Cyclic Amide. *ECS Transactions*, **2014**, 62, 223-230 1
- 5 3.????????? ?????????? *Electrochemistry*, **2012**, 80, 591-595 1.2
- 4 1.?????/Li?????????:?????????. *Electrochemistry*, **2012**, 80, 920-924 1.2
- 3 Application of Ionic Liquids to Li Batteries **2005**, 171-186
- 2 Preparation and electrochemical properties of ionic liquids for secondary batteries. *Denki Kagaku*, **2020**, 88, 129-134 0
- 1 Li Batteries 203-220