

EUROPEAN
CURRICULUM VITAE
FORMAT



Name and Surname AKIKO TSURUMAKI

EDUCATION

Date (from - to) **01/04/2012 – 25/03/2015**
Degree **Doctor of Engineering**
Title of thesis *Basic Studies and Functional Design of Fluorinated Polymer/Ionic Liquid Composites*
Institution Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology (Tokyo Univ. A&T)
Supervisor Prof. Dr. Hiroyuki Ohno
Highlights

- Elucidated correlation among structure of ionic liquids, their physicochemical properties, and their compatibility with fluorinated compounds
- Synthesized novel ionic liquids for the dissolution of barely soluble fluorinated polymers
- Designed polymer electrolytes based on poly(tetrafluoroethylene) and ionic liquids

Date (from - to) **01/04/2010 – 27/03/2012**
Degree **Master of Engineering**
Title of thesis *Evaluation of compatibility between ionic liquids and polymers for the design of ion conductive materials (written in Japanese)*
Institution Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo Univ. A&T

Date (from - to) **01/04/2006 – 25/03/2010**
Degree **Bachelor of Engineering**
Title of thesis *Factors to control solubility of poly(ethylene oxide)s in ionic liquids (written in Japanese)*
Institution Department of Biotechnology and Life Science, Faculty of Engineering, Tokyo Univ. A&T

WORK EXPERIENCE

Date (from - to) **11/05/2016 – PRESENT (6YEARS)**
Position **Postdoctoral Researcher**
Institution Department of Chemistry, Sapienza University of Rome
Project title Sviluppo di elettroliti solidi e gelificati per batterie litio e sodio ione avanzate (Development of solid and gel electrolytes for advanced lithium and sodium ion batteries)

Date (from - to) **01/04/2015 – 09/05/2016**
Position **Assistant Professor**
Institution Institute of Global Innovation Research, Tokyo Univ. A&T
Project title Development of Novel Energy Conversion Technology with Ionic Liquids

Date (from - to) **16/05/2012 – 31/03/2013**
Position **Research Assistant (40 hours)**
Institution Department of Biotechnology and Life Science, Tokyo Univ. A&T
Project title Evaluation of compatibility between ionic liquids and polymers

Date (from - to) **01/04/2010 – 31/03/2011**
Position **Research Assistant (636 hours)**

Institution Ohno-Nakamura Laboratory, Department of Biotechnology and Life Science, Tokyo Univ. A&T
Project title Construction of database of ionic liquids

TEACHING EXPERIENCE

Years **2021/2022**
Position **Docente a contratto (3CFU) – bando n°12/2021 del 03/08/2021**
Course Advanced Chemical Methods in Archaeological Material Science (CHIM/02)
Institution Department of Environmental Biology, Sapienza University of Rome

Years **2020/2021**
Position **Docente a contratto (3CFU) – bando n°50/2020 del 05/08/2020**
Course Advanced Chemical Methods in Archaeological Material Science (CHIM/02)
Institution Department of Environmental Biology, Sapienza University of Rome

Years **2019/2020**
Position **Docente a contratto (3CFU) – bando n°68/2019 del 05/08/2019**
Course Advanced Chemical Methods in Archaeological Material Science (CHIM/02)
Institution Department of Environmental Biology, Sapienza University of Rome

Years **2010/2011**
Position **Teaching Assistant (52 hours)**
Course Laboratory component of the course Biotechnology and Life Science III & IV
Institution Department of Biotechnology and Life Science, Tokyo Univ. A&T

SUPERVISION OF STUDENTS

At Sapienza University of Rome
Master's as "relatore" Bianca Werneck (2020/2021)
Development of hydrogel for the conservation of ancient roman coins
Shraddha Khaire (2019/2020)
Development of cleaning procedures of copper corrosion products by using "green" deep eutectic solvents

Master's Valentina Liberti (2020/2021)
Componenti elettrodici ed elettrolitici a base di cellulosa per accumulatori litio-ione
Rosella Rettaroli (2018/2019)
Elettroliti ibridi di nuova generazione a stato solido, funzionalizzati con liquidi ionici, per batterie Litio ione
Cristina Chiarucci (2018/2019)
Matrici polimeriche a base di cellulosa per la pulitura di manufatti metallici
Andrea Rosati (2017/2018)
I liquidi ionici nella valutazione dei fenomeni di corrosione di manufatti metallici
Alessio Rigano (2017/2018)
Nuovi liquidi ionici come additivi in soluzioni elettrolitiche per dispositivi ad elevata energia
Giulia Bortoluzzi (2016/2017)
Nuovi liquidi ionici e le loro potenzialità nello studio dei fenomeni all'interfase metallo/ambiente

At Tokyo Univ. A&T
Ph.D. Takuya Iwata (2010/2014)
Evaluation of ionic liquids as antistatic agents for polyether-based polyurethanes
Masters Mizuki Shimo (2015/2016)
Dissolution of Klason lignin in ionic liquids
Daiki Sato (2015/2016)
Design of hydrophobic ionic liquids having a dissolution ability of cellulose

Bachelor's	Sachiko Yamanaka (2015/2015)	<i>Selective extraction of cellulose and lignin from cedar using onium hydroxide aqueous solution</i>
	Saori Tajima (2013/2015)	<i>Ionic liquids as antistatic agents for polymers</i>
	Mao Nagatani (2016/2016)	<i>Dissolution of Klason lignin in onium hydroxide aqueous solutions</i>
	Koji Asanuma (2016/2016)	<i>Improved solubility of Klason lignin in tetra-n-butylphosphonium hydroxide aqueous solution with electrochemically generated H₂O₂</i>
	Takashi Akiba (2015/2016)	<i>Effect of cation structure of ionic liquids on their dissolution ability of alkaline lignin</i>
	Miyu Tajima (2015/2016)	<i>Organic onium hydroxide aqueous solution as a cellulose solvent</i>
	Saori Tajima (2012/2013)	<i>Compatibility between ionic liquids and polyurethanes</i>

RESEARCH GRANTS AS PRINCIPAL INVESTIGATOR

Years	2021/2022
Name	Progetti per Avvio alla Ricerca – Type 2
Amount	2 000 EUR
Source	Sapienza University of Rome
Project title	Development of green and environmentally-friendly polymer matrices for versatile applications: from electrochemistry to conservation of cultural heritage
Years	2020/2021
Name	Progetti per Avvio alla Ricerca – Type 2
Amount	2 200 EUR
Source	Sapienza University of Rome
Project title	Design of multifunctional surface on inorganic ceramic solid electrolytes by using ionic liquids
Years	2018/2019
Name	Progetti per Avvio alla Ricerca – Type 2
Amount	2 000 EUR
Source	Sapienza University of Rome
Project title	Novel inorganic-organic hybrid solid electrolytes integrated with ionic liquids as macro- and nano-scale binders
Years	2017/2018
Name	Progetti per Avvio alla Ricerca – Type 2
Amount	2 000 EUR
Source	Sapienza University of Rome
Project title	A new class of polymer electrolytes based on poly(tetrafluoroethylene) and fluoro-functionalized ionic liquids with the intent of improved stability of advanced lithium ion batteries
Years	2017/2018
Name	Financial support for leading research in science and technology
Amount	700 000 JPY, which is equivalent to 5300 EUR
Source	Foundation for Interaction in Science & Technology (FIST), Japan
Project title	Improvement of thermal- and electrochemical-stability of electrolytes for lithium ion batteries by using fluorinated ionic liquids
Years	2016/2017
Name	Progetti per Avvio alla Ricerca – Type 2

Amount	3 000 EUR
Source	Sapienza University of Rome
Project title	Fascicle preparation of novel polymer electrolytes based on poly(tetrafluoroethylene) and ionic liquids with the intent of improved stability of lithium ion batteries
Years	2013/2015
Name	DC2 Research Fellow
Amount	4 800 000JPY which is equivalent to 36 300 EUR as a salary 2 000 000JPY which is equivalent to 15 100 EUR as a grant-in-aid
Source	Japan Society for the Promotion of Science (JSPS)
Project title	Design of ionic liquids as a solvent for poly(tetrafluoroethylene)
Years	2012/2013
Name	JIRITSU Research Scholarship
Amount	600 000 JPY which is equivalent to 4 500 EUR
Source	Tokyo Univ. A&T
Project title	Design of ionic liquids as solvents for fluorinated polymers
Years	2011/2011 (JUN/DEC)
Name	International Training Program for Training Pre-Tenure-Track Young Researchers in Nano-Materials
Amount	1 380 000 JPY which is equivalent to 10 400 EUR as a salary 180 000 JPY which is equivalent to 1 400 EUR for traveling expenses
Source	Japan Society for the Promotion of Science (JSPS)
Project title	Design of ionic liquid/polymer composites as electrolytes (collaboration work with Prof. Bruno Scrosati's group at the Sapienza University of Rome)
Years	2011/2012
Name	JIRITSU Research Scholarship
Amount	600 000 JPY which is equivalent to 4 500 EUR
Source	Tokyo Univ. A&T
Project title	Factors to control micro-phase structures of ionic liquid/polymer composites

SCHOLARSHIPS AND AWARDS

Year	2018
Name	Financial support for conference attendance
Amount	100 000 JPY which is equivalent to 750 EUR
Source	Yoshida Foundation for Science and Technology, Japan
Year	2017
Name	Financial support for conference attendance
Amount	300 EUR
Source	21st International Conference on Solid State Ionics (SSI-21)
Year	2015
Name	Incentive Scholarship
Amount	5 000 JPY which is equivalent to 38 EUR
Source	The Graduates' Association of Tokyo Univ. A&T
Year	2013 (JUL)
Name	Incentive Scholarship
Amount	5 000 JPY which is equivalent to 38 EUR
Source	The Graduates' Association of Tokyo Univ. A&T

Year	2013 (FEB)
Name	Incentive Scholarship
Amount	5 000 JPY which is equivalent to 38 EUR
Source	The Graduates' Association of Tokyo Univ. A&T
Year	2012
Name	The Intensive Scholarship for Doctor Students
Amount	200 000 JPY which is equivalent to 1500 EUR
Source	Tokyo Univ. A&T
Year	2012
Name	Award for first-author publication during Master's program
Amount	1 056 000 JPY which is equivalent to 8 000 EUR
Source	Japan Student Services Organization (JASSO)
Year	2011
Name	Incentive Scholarship
Amount	5 000 JPY which is equivalent to 38 EUR
Source	The Graduates' Association of Tokyo Univ. A&T

FUNDED PROJECTS INVOLVED AS RESEARCHER

Years	2019/2021
Title of project	PTR 2019/2021 "Sintesi di ossidi misti come materiali catodici ad elevato potenziale redox" and "Elettroliti stabili ad alta tensione di lavoro", Piano Triennale della Ricerca di Sistema Elettrico, nell'ambito dell'Accordo di Programma Ministero dello Sviluppo Economico - ENEA (P.I. Dr. Maria Assunta Navarra)
Source	Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (ENEA)
Role	Supervision of experiments, drafting and editing of paper
Reference publications	1 recently accepted article and article No. 4 in the publication list
Years	2016/2019
Title of project	Collaboration research "Solid State Batteries using Novel Composite Anodes" (P.I. Dr. Maria Assunta Navarra)
Source	Samsung R&D Institute Japan
Role	Supervision of experiments, drafting and editing of paper
Reference publications	Article No. 1, 3 in the publication list
Years	2015/2017
Title of project	PAR2015/2017 "Preparazione e caratterizzazione di materiali elettrodi ad alta tensione e di adatte soluzioni elettrolitiche", nell'ambito dell'Accordo di Programma Ministero dello Sviluppo Economico - ENEA per la Ricerca di Sistema Elettrico (P.I. Prof. Dr. Stefania Panero)
Source	Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (ENEA)
Role	Supervision of experiments, drafting and editing of paper
Reference publications	Article No. 7, 8, 11, 13 in the publication list
Years	2015/2016
Title of project	SEEDS 2015/2016 "Creation of innovative biorefinery system by using ionic liquids (26052A)" in the Science and Technology Research Promotion Program for Agriculture (P.I. Prof. Dr. Hiroyuki Ohno)
Source	Forestry, Fisheries and Food Industry, Ministry of agriculture, forestry and fisheries (MAFF), JAPAN
Role	Coordination of project including communication and dissemination of information, management of research funds, supervision of bachelor's and master's students involved in the project, drafting of paper

Years	2015/2016
Title of project	SIP 2015/2016 "Towards technological innovation on rural area lignin biomass resources utilization system (14533483)" in the Cross-ministerial Strategic Innovation Promotion Program (P.I. Prof. Dr. Hiroyuki Ohno, Group III-1,2,5)
Source	The Cabinet of Japan
Position	Management of research fund, supervision of bachelor's and master's students involved in the project, revision of paper
Reference publications	Article No. 9, 17 in the publication list

RESEARCH FOCUS

Key words
 Ionic liquids
 Lithium ion batteries
 Biorefinery
 Electrolytes
 Thermal stability

Brief summary
 The central focus of my research lies in the development of lithium ion batteries with versatile stabilities. My expertise is in the synthesis and characterization of electrolytes, which are composed of polymer matrices and ionic liquids. Their combination can improve thermal, electrochemical, and mechanical stabilities of the electrolyte, affecting higher capacity retention during battery cycling through prohibiting evaporation and decomposition of the electrolyte. Next-generation batteries form the cornerstone of my current research, particularly all-solid-state batteries with high thermal stability based on the use of inorganic glassy solid state electrolytes, as well as greener batteries comprising bio-derived materials such as cellulose and lignin as battery components.

LIST OF PUBLICATIONS

Recently accepted article	Stable gel polymer electrolytes for high voltage Li-batteries, R. Poiana, E. Lufrano, A. Tsurumaki* , C. Simari, I. Nicotera, M. A. Navarra, <i>Electrochim. Acta</i> in press.
Already published articles	<i>CiteScore and Impact Factor (IF) were taken from Scopus and Web of Science (WoS), respectively.</i>
1	Sn/C composite anodes for bulk-type all-solid-state batteries, G. Maresca, A. Tsurumaki , N. Suzuki, K. Yoshida, S. Panero, Y. Aihara, M. A. Navarra*, <i>Electrochim. Acta</i> 2021, 395, 139104. DOI: 10.1016/j.electacta.2021.139104 Citation: 0, CiteScore (Scopus): 11.2, IF (WoS): 6.901
2	Inter- and intramolecular interactions in ether-functionalized ionic liquids, O. Palumbo*, F. Trequattrini, A. Cimini, A. Tsurumaki , M. A. Navarra, and A. Paolone, <i>J. Phys. Chem. B</i> 2021, 2021, 125, 2380-2388. DOI: 10.1021/acs.jpcc.0c11429 Citation: 0, CiteScore (Scopus): 5.1, IF (WoS): 2.991
3	Improvement of graphite interfacial stability in all-solid-state cells adopting sulfide glassy electrolytes, G. Maresca, A. Tsurumaki , N. Suzuki, T. Tsujimura, Y. Aihara, M. A. Navarra*, <i>ChemElectroChem</i> 2021, 8, 689-696. DOI: 10.1002/celec.202001291 Citation: 2, CiteScore (Scopus): 6.6, IF (WoS): 4.590
4	Different approaches to obtain functionalized alumina as additive in polymer electrolyte membranes, L. Mazzapioda, M. Sgambetterra, A. Tsurumaki , M.A. Navarra*, <i>J. Solid State Electrochem.</i> 2021. DOI: 10.1007/s10008-021-05025-6 Citation: 0, CiteScore (Scopus): 4.6, IF (WoS): 2.647
5	Effect of the cation structure on cellulose dissolution in aqueous solutions of organic onium hydroxides, A. Tsurumaki , M. Tajima, M. Abe, D. Sato, and H. Ohno*, <i>Phys. Chem. Chem. Phys.</i> 2020, 22, 22602-22608. DOI: 10.1039/D0CP03807E Citation: 0, CiteScore (Scopus): 6.1, IF (WoS): 3.676
6	A novel Li ⁺ -conducting polymer membrane gelled by fluorine-free electrolyte solutions for Li-ion batteries, M. A. Navarra*, A. Tsurumaki , F.M. Vitucci, A. Paolone, O. Palumbo, S. Panero, <i>Batteries & Supercaps</i> 2020, 3, 1112-1119. DOI: 10.1002/batt.202000078 Citation: 0, CiteScore (Scopus): N/A, IF (WoS): 7.093

- 7 Enhanced safety and galvanostatic performance of high voltage lithium batteries by using ionic liquids, **A. Tsurumaki**, M. Agostini, R. Poiana, L. Lombardo, E. Lufrano, C. Simari, A. Matic, I. Nicotera, S. Panero, M. A. Navarra*, *Electrochim. Acta* 2019, 316, 1-7.
[DOI: 10.1016/j.electacta.2019.05.086](https://doi.org/10.1016/j.electacta.2019.05.086) Citation: 11, CiteScore (Scopus): 11.2, IF (WoS): 6.901
- 8 Bis(oxalato)borate and difluoro(oxalato)borate-based ionic liquids as electrolyte additives to improve the capacity retention in high voltage lithium batteries, **A. Tsurumaki***, M. Branchi, A. Rigano, R. Poiana, S. Panero, M. A. Navarra, *Electrochim. Acta* 2019, 315, 17-23.
[DOI: 10.1016/j.electacta.2019.04.190](https://doi.org/10.1016/j.electacta.2019.04.190) Citation: 10, CiteScore (Scopus): 11.2, IF (WoS): 6.901
- 9 Preparation of epoxy resins derived from lignin solubilized in tetrabutylphosphonium hydroxide aqueous solutions, M. Nagatani, **A. Tsurumaki**, K. Takamatsu, H. Saito, N. Nakamura, H. Ohno*, *Int. J. Biol. Macromolecules* 2019, 132, 585-591.
[DOI: 10.1016/j.ijbiomac.2019.03.152](https://doi.org/10.1016/j.ijbiomac.2019.03.152) Citation: 8, CiteScore (Scopus): 8.5, IF (WoS): 6.953
- 10 Polymerized ionic liquids as durable antistatic agents for polyether-based polyurethanes, **A. Tsurumaki**, T. Iwata, M. Tokuda, H. Minami, M. A. Navarra, H. Ohno*, *Electrochim. Acta* 2019, 308, 115-120.
[DOI: 10.1016/j.electacta.2019.04.031](https://doi.org/10.1016/j.electacta.2019.04.031) Citation: 7, CiteScore (Scopus): 11.2, IF (WoS): 6.901
- 11 Novel bis(fluorosulfonyl)imide-based and ether-functionalized ionic liquids for lithium batteries with improved cycling properties, **A. Tsurumaki***, H. Ohno, S. Panero, M. A. Navarra, *Electrochim. Acta* 2019, 293, 160-165.
[DOI: 10.1016/j.electacta.2018.09.205](https://doi.org/10.1016/j.electacta.2018.09.205) Citation: 12, CiteScore (Scopus): 11.2, IF (WoS): 6.901
- 12 Gel polymer electrolytes based on silica-added poly(ethylene oxide) electrospun membranes for lithium batteries, M. A. Navarra*, L. Lombardo, P. Bruni, L. Morelli, **A. Tsurumaki**, S. Panero, F. Croce*, *Membranes* 2018, 8, 126.
[DOI: 10.3390/membranes8040126](https://doi.org/10.3390/membranes8040126) Citation: 4, CiteScore (Scopus): 3.7, IF (WoS): 4.106
- 13 The effect of ether-functionalisation in ionic liquids analysed by DFT calculation, infrared spectra, and Kamlet-Taft parameters, **A. Tsurumaki**, F. Trequatrini, O. Palumbo, S. Panero, A. Paolone, and M. A. Navarra*, *Phys. Chem. Chem. Phys.* 2018, 20, 7989-7997.
[DOI: 10.1039/C7CP08134K](https://doi.org/10.1039/C7CP08134K) Citation: 10, CiteScore (Scopus): 6.1, IF (WoS): 3.676
- 14 Dissolution of oligo(tetrafluoroethylene) and preparation of poly(tetrafluoroethylene)-based composites by using fluorinated ionic liquids, **A. Tsurumaki** and H. Ohno*, *Chem. Commun.* 2018, 54, 409-412.
[DOI: 10.1039/C7CC08449H](https://doi.org/10.1039/C7CC08449H) Citation: 7, CiteScore (Scopus): 9.4, IF (WoS): 6.222
- 15 Evaluation of ionic liquids as novel antistatic agents for polymethacrylates, **A. Tsurumaki**, S. Tajima, T. Iwata, B. Scrosati and H. Ohno*, *Electrochim. Acta* 2017, 248, 556-561.
[DOI: 10.1016/j.electacta.2017.07.181](https://doi.org/10.1016/j.electacta.2017.07.181) Citation: 14, CiteScore (Scopus): 11.2, IF (WoS): 6.901
- 16 New ether-functionalized morpholinium- and piperidinium-based ionic liquids as electrolyte components in lithium and lithium-ion batteries, M. A. Navarra*, K. Fujimura, M. Sgambetterra, **A. Tsurumaki**, S. Panero, N. Nakamura, H. Ohno, and B. Scrosati*, *ChemSusChem* 2017, 10, 2496-2504.
[DOI: 10.1002/cssc.201700346](https://doi.org/10.1002/cssc.201700346) Citation: 19, CiteScore (Scopus): 13.3, IF (WoS): 8.928
- 17 Induction of lignin solubility for a series of polar ionic liquids by the addition of a small amount of water, T. Akiba, **A. Tsurumaki**, and H. Ohno*, *Green Chem.* 2017, 19, 2260-2265.
[DOI: 10.1039/C7GC00626H](https://doi.org/10.1039/C7GC00626H) Citation: 24, CiteScore (Scopus): 15.2, IF (WoS): 10.182
- 18 Dielectric relaxations of polyether-based polyurethanes containing ionic liquids as antistatic agents, **A. Tsurumaki**, F. Bertasi, K. Vezzu, E. Negro, V. Di Noto, and H. Ohno*, *Phys. Chem. Chem. Phys.* 2016, 18, 2369-2378.
[DOI: 10.1039/C5CP04090F](https://doi.org/10.1039/C5CP04090F) Citation: 6, CiteScore (Scopus): 6.1, IF (WoS): 3.676
- 19 Antistatic effects of ionic liquids for polyether-based polyurethanes, **A. Tsurumaki**, S. Tajima, T. Iwata, B. Scrosati and H. Ohno*, *Electrochim. Acta* 2015, 175, 13-17.
[DOI: 10.1016/j.electacta.2014.12.128](https://doi.org/10.1016/j.electacta.2014.12.128) Citation: 22, CiteScore (Scopus): 11.2, IF (WoS): 6.901

- 20 Bis(trifluoromethanesulfonyl)imide-type ionic liquids as excellent antistatic agents for polyurethanes, T. Iwata, **A. Tsurumaki**, S. Tajima, and H. Ohno*, *Macromol. Mat. Eng.* 2014, 299, 794-798.
[DOI: 10.1002/mame.201300333](https://doi.org/10.1002/mame.201300333) Citation: 15, CiteScore (Scopus): 6.5, IF (WoS): 4.367
- 21 Fixation of ionic liquids into polyether-based polyurethane films to maintain long-term antistatic properties, T. Iwata, **A. Tsurumaki**, S. Tajima and H. Ohno*, *Polymer* 2014, 55, 2501-2504.
[DOI: 10.1016/j.polymer.2014.03.028](https://doi.org/10.1016/j.polymer.2014.03.028) Citation: 13, CiteScore (Scopus): 7.2, IF (WoS): 4.430
- 22 *N*-n-Butyl-*N*-methylpyrrolidinium hexafluorophosphate-added electrolyte solutions and membranes for lithium-secondary batteries, **A. Tsurumaki**, M. A. Navarra, S. Panero, B. Scrosati, and H. Ohno*, *J. Power Sources* 2013, 233, 104-109.
[DOI: 10.1016/j.jpowsour.2013.01.131](https://doi.org/10.1016/j.jpowsour.2013.01.131) Citation: 13, CiteScore (Scopus): 14.4, IF (WoS): 9.127
- 23 Properties of polymer electrolytes composed of poly(ethylene oxide) and ionic liquids according to hard and soft acids and bases theory, **A. Tsurumaki**, J. Kagimoto, and H. Ohno*, *Polym. Adv. Technol.* 2011, 22, 1223-1228.
[DOI: 10.1002/pat.1931](https://doi.org/10.1002/pat.1931) Citation: 34, CiteScore (Scopus): 4.5, IF (WoS): 3.665

Selected 18 publications 1, 3, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 21, 22, 23

BIBLIOMETRIC INDICES

(EXCLUDING RECENTLY ACCEPTED ARTICLE)

Number of articles	
Total	23
As 1 st author	12
As corresponding author	2
H-index (Scopus)	10
Total citation (Scopus)	231
Citation per products	10
Total CiteScore and IF	195.7 / 134.636
Average CiteScore and IF	8.9 / 5.854

SUBMITTED PATENT

- 1 (特開 2018-24585) セルロースアセテート溶解用イオン液体及びセルロースアセテート溶解液並びにセルロースアセテート繊維の製造方法 (Ionic liquids for dissolution and spinning of cellulose acetate)

LIST OF PRESENTATIONS

As invited speaker

- 1 (International) Dissolution of woody biomass with onium hydroxide solutions, **A. Tsurumaki**, PATHlestra, Aveiro, Portugal. (3rd Jun 2016)
- 2 (International) Overseas experiences as a postdoctoral researcher in Italy, **A. Tsurumaki**, The Fifth FILL symposium, Tokyo, Japan. (2nd Mar 2016)
- 3 (International) Ionic liquids as sustainable and designable antistatic agents for polymers, **A. Tsurumaki**, F. Bertasi, K. Vezzú, S. Lavina, V. Di Noto, and H. Ohno, The First Korea-Japan Joint Symposium on Ionic Liquids/Pre-Symposium of COIL6, PR2, Daegu, Korea. (16th Jun 2015)
- 4 (Japanese national conference) PhD Courses & Milestones, **A. Tsurumaki**, The 95th Annual Meeting of the Chemical Society of Japan, Chiba, Japan. (26th Mar 2015)
- 5 (International) Design of ionic liquids to enhance excellent and sustainable antistatic properties for polyether-based polyurethanes, **A. Tsurumaki**, The Third Green Sustainable Chemistry Seminar, Tottori, Japan. (5th Dec 2014)

As presenter, oral presentations

- 1 (International) Safe Gel Polymer Electrolytes for High Voltage Lithium Batteries, [A. Tsurumaki](#), R. Poiana, E. Lufrano, C. Simari, I. Nicotera, M.A. Navarra, Nanoinnovation 2021, TT.XI.B.3, Rome, Italy. (24th Sep 2021)
- 2 (Italian national conference) Highly Versatile Gel Polymer Electrolytes for High Voltage Lithium Batteries, [A. Tsurumaki](#), R. Poiana, E. Lufrano, C. Simari, I. Nicotera, M.A. Navarra, XXVII Congresso Nazionale della Società Chimica Italiana (SCI2021), ELE_OR61, online. (21st Sep 2021)
- 3 (International) Sn/C Anode Materials for All-Solid-State Lithium Ion Batteries with Sulfide-Based Solid Electrolytes, [A. Tsurumaki](#), G. Maresca, N. Suzuki, K. Yoshida, Y. Aihara, and M. A. Navarra, The 72nd Annual Meeting of the International Society of Electrochemistry, online. (31st Aug 2021)
- 4 (International) Development of all-solid-state batteries with Sn/C composite anodes, [A. Tsurumaki](#), G. Maresca, N. Suzuki, K. Yoshida, Y. Aihara, and M. A. Navarra, First Italian Energy Storage Workshop (IWES2021), OP31, online. (26th Feb 2021)
- 5 (International) Improved performance of liquid- and gel-state electrolytes by using borate-based salts and ionic liquids, [A. Tsurumaki](#), M. Branchi, S. Panero, M.A. Navarra, Nanoinnovation 2020, IX.D.3, online. (18th Sep 2020)
- 6 (Italian national conference) Functionalization of ionic liquid-based electrolytes for advanced lithium ion batteries, [A. Tsurumaki](#), S. Panero, M.A. Navarra, Secondo Congresso Nazionale del Gruppo Interdivisionale EnerCHEM, OP46, Padova, Italy. (14th Feb 2020)
- 7 (International) Improving capacity retention of high voltage $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ cathodes by using ionic liquids, [A. Tsurumaki](#), M. Branchi, R. Poiana, S. Panero, M.A. Navarra, European Congress and Exhibition on Advanced Materials and Processes (EUROMAT 2019), E3-TUE-PM4-4, Stockholm, Sweden. (3rd Sep 2019)
- 8 (Italian national conference) Borate-based ionic liquids as electrolyte additives to improve the capacity retention of high voltage lithium batteries, [A. Tsurumaki](#), M. Branchi, A. Rigano, R. Poiana, S. Panero, and M. A. Navarra, Convegno Giovani Ricercatori 2019, Rome, Italy. (25th Jun 2019)
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- 16 (International) Design of ionic liquids as antistatic agents for industrial polymers, o.A. Tsurumaki, GIR workshop, Tokyo, Japan. (19th Nov 2015)
- 17 (International) Ionic liquids as sustainable antistatic agents for polyether-based polyurethanes, o.A. Tsurumaki, The First FILL Symposium, Tokyo, Japan. (30th Oct 2014)
- 18 (International) Fixation of bis(trifluoromethanesulfonyl)imide-type ionic liquids onto polyether-based polyurethanes for sustainable antistatic properties, o.A. Tsurumaki, S. Tajima, T. Iwata, and H. Ohno, The Fourth International Conference on Ionic Liquids for Electrochemical Devices (ILED-4), Roma, Italy. (28th May 2014)
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- 20 (International) Preparation and properties of *N*-n-butyl-*N*-methylpyrrolidinium hexafluorophosphate-added electrolyte solutions and membranes, o.A. Tsurumaki, M. A. Navarra, S. Panero, B. Scrosati, and H. Ohno, The Third Conference of the Federation of Asian Polymer Societies (3rd FAPS), No. 1082, Bangalore, India. (19th May 2013)
- 21 (International) Preparation and properties of novel polymer electrolytes with pyrrolidinium-based ionic liquids, o.A. Tsurumaki, M. A. Navarra, J. Manzi, S. Panero, B. Scrosati, and H. Ohno, The Fifth ITP International Symposium, Oral presentation 16, Linköpings, Sweden. (19th Jun 2012)
- 22 (International) Novel ionic liquid-based polymer membranes as electrolytes for lithium batteries, o.A. Tsurumaki, M. A. Navarra, S. Panero, B. Scrosati, and H. Ohno, The Fourth ITP International Symposium, Oral presentation 1, Rome, Italy. (28th Nov 2011)
- 23 (Japanese national conference) Factors to control solubility of poly(ethylene oxide) in ionic liquids), o.A. Tsurumaki, J. Kagimoto, and H. Ohno, The 92nd Annual Meeting of the Chemical Society of Japan, 3G8-39, Osaka, Japan. (28th Mar 2010)

As presenter, poster presentations

- 1 (International) Design of ionic liquids as electrolyte additives for advanced lithium ion batteries, o.A. Tsurumaki, S. Panero, and M. A. Navarra, The Fifth International Conference on Ionic Liquid-based Materials (ILMAT V), Paris, France. (5th Nov 2019)
- 2 (International) Improvement in the cycle performance of lithium ion batteries by using bis(fluorosulfonyl)imide-based ionic liquids, o.A. Tsurumaki, M. A. Navarra, and S. Panero, The 19th International Meeting on Lithium Batteries (IMLB2018), P434, Kyoto, Japan. (19th Jun 2018)
- 3 (Italian national conference) Design of bis(fluorosulfonyl)imide-based ionic liquids for lithium ion batteries, o.A. Tsurumaki, G. Maresca, M. A. Navarra, and S. Panero, XXVI Congresso Nazionale della Societa Chimica Italiana, ELE PO19, Paestum, Italy. (11th Sep 2017)
- 4 (International) All-solid-state lithium batteries based on amorphous sulfide-based solid electrolytes, o.A. Tsurumaki, G. Maresca, S. Ito, M. A. Navarra, Y. Aihara, and S. Panero, The 21st International Conference on Solid State Ionics (SSI-21), I-3_47/P, Padova, Italy. (22nd Jun 2017)
- 5 (International) Novel Polymer Electrolytes Based on Poly(tetrafluoroethylene) with Fluorophilic Ionic Liquids, o.A. Tsurumaki, M. A. Navarra, and S. Panero, Merck Young Chemists Symposium, POS-59, Rimini, Italy. (26th Oct 2016)
- 6 (International) Preparation and electrochemical characterization of novel composites of ionic liquids and poly(tetrafluoroethylene), o.A. Tsurumaki, M. A. Navarra, H. Ohno, and S. Panero, Gordon Conference on Ionic Liquids, Maryland, U.S.A. (14th-19th Aug 2016)
- 7 (International) Preparation and characterization of fluorinated ionic liquid with the intent of improved stability of polymer electrolytes, o.A. Tsurumaki, M. A. Navarra, S. Panero, and H. Ohno, The Fifth International Conference on Ionic Liquids for Electrochemical Devices (ILED-5), Roma, Italy. (11th Jul 2016)

- 8 (International) Sustainable antistatic properties of ionic liquids for polyether-based polyurethanes, ○A. Tsurumaki, F. Bertasi, K. Vezzú, S. Lavina, V. Di Noto, and H. Ohno, The Sixth International Congress on Ionic Liquids (COIL-6), S67, Daegu, Korea. (18th Jun 2015)
- 9 (International) Design of ionic liquids as durable antistatic agents for polyether-based polyurethanes, ○A. Tsurumaki, S. Tajima, T. Iwata, and H. Ohno, XIV International Symposium on Polymer Electrolytes (ISPE-14), Geelong, Australia. (Aug 2014)
- 10 (International) Solubilization of fluorinated compound with designed ionic liquids, ○A. Tsurumaki and H. Ohno, Gordon Conference on Ionic Liquids, Maryland, U.S.A. (17th – 22nd Aug 2014)
- 11 (International) Preparation of fluorophilic ionic liquids as solvents for fluorinated polymers, ○A. Tsurumaki and H. Ohno, The Fifth Congress on Ionic Liquids (COIL-5), P19, Algarve, Portugal. (22nd Apr 2013)
- 12 (Japanese national conference) Effect of addition of pyrrolidinium salts on the properties of 1M LiPF₆-containing electrolyte solutions, ○A. Tsurumaki, M. A. Navarra, S. Panero, B. Scrosati, and H. Ohno, The Ninth TUAT-UEC Joint COE Symposium, Tokyo, Japan. (15th Dec 2012)
- 13 (Japanese national conference) Preparation of fluorophilic ionic liquids and their application for polymer electrolytes, ○A. Tsurumaki and H. Ohno, The Third Ionic Liquid Research Association Annual Symposium, P07, Okinawa, Japan. (7th Dec 2012)
- 14 (International) Compatibility of Ionic Liquids and Polyethers for the Design of Ion Conductive Polymers, ○A. Tsurumaki and H. Ohno, The Fourth Congress on Ionic Liquids (COIL-4), 206, Washington, USA. (17th Jun 2011)
- 15 (International) Factors to control solubility of poly(ethylene oxide) in ionic liquids, ○A. Tsurumaki, J. Kagimoto, and H. Ohno, Pacifichem 2010, Hawaii, USA. (17th Dec 2010)
- 16 (Japanese national conference) Design of Ion Conductive Polymers Based on Ionic Liquids and Poly(ethylene oxide), ○A. Tsurumaki, J. Kagimoto, and H. Ohno, The 59th SPSJ Symposium on Macromolecules, Hokkaido, Japan. (17th Sep 2010)
- 17 (Japanese national conference) Design of poly(ethylene oxide)-based polymer electrolytes with ionic liquids, ○A. Tsurumaki, J. Kagimoto, and H. Ohno, The 29th Summer Seminar of the Electrochemical Society of Japan Kanto Branch, Toyko, Japan. (27th Aug 2010)

As co-author

Oral 19 presentations

Poster 28 presentations

CONFERENCE AWARDS

Award and year **BEST POSTER AWARD (2019)**
 Organization and location 5th International Conference on Ionic Liquid-based Materials (ILMAT V), Paris, France

Award and year **BEST POSTER AWARD (2016)**
 Organization and location International Meeting on Ionic Liquids for Electrochemical Devices (ILED-5), Rome, Italy

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