研究成果

【招待講演（国際）】

1. Masahiro Tatsumisago, Akitoshi Hayashi, “Development of All-Solid-State Batteries Using Sulfide Glass-Ceramic Electrolytes”, 1st Joint Meeting of DGG-ACerS GOMD, Aachen, Germany, (2014.5.25-30)
2. Akitoshi Hayashi, Masahiro Tatsumisago, “Interface Formation for All-Solid-State Batteries with Sulfide Electrolytes”, 7th International Conference on Advanced Lithium Batteries for Automobile Applications (ABAA-7), Nara, (2014.7.29-8.1).
3. Akitoshi Hayashi, Masahiro Tatsumisago, “Sulfide Glass-Ceramic Electrolytes for All-Solid-State Rechargeable Batteries”, The 10th Japan-France Joint Seminar on Battery, Hakone, (2014.9.22-24)
4. Akitoshi Hayashi and Masahiro Tatsumisago, “Formation of Electrode-Electrolyte Interfaces in All-Solid-State Rechargeable Lithium Batteries”, Materials Challenges in Alternative and Renewable Energy 2016, Clearwater, USA, (2016.4.17-21)
5. Akitoshi Hayashi and Masahiro Tatsumisago, “High-Capacity Sulfide Active Materials for All-Solid-State Rechargeable Lithium Batteries”, International Union of Materials Research Societies- International Conference on Electronic Materials 2016 (IUMRS-ICEM2016), Singapore, (2016.7.4-8)
6. Kota Suzuki, “Fabrication, structure and electrochemical properties of sulfur-carbon-solid electrolyte composites for all-solid-state lithium-sulfur battery”, EMN Meeting on Power Sources 2016, Bali, Indonesia, (2016.8.3)
7. Akitoshi Hayashi and Masahiro Tatsumisago, “Development of Glass-Ceramic Solid Electrolytes for All-Solid-State Rechargeable Li or Na Batteries”, 252nd American Chemical Society National Meeting & Exposition, Philadelphia, USA, (2016.8.21-25)
8. Atsunori Matsuda, “Development of New Solid Electrolytes for the Next Generation Batteries”, ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) Regional Conference 2016 on Materials Engineering, “High-Tech Materials for Developing Science & Innovation” Programme and Abstract Book, pp.13-14 Yangon Myanmar, (2016.10.25-26).
9. Atsunori Matsuda, “New Solid Electrolytes for Intermediate Temperature Fuel Cells and All-Solid-State Lithium Ion Batteries”, Advances in Materials & Processing Technology Conference (AMPT) 2016, Abstracts & Programme Book, p.8, Kuala Lumpur, Malaysia (2016.11.8-11).
10. Masahiro Tatsumisago and Akitoshi Hayashi, “Glass-Based All-Solid-State Lithium Batteries”, CerSJ-GOMD Joint Symposium on Glass Science and Technologies, Kyoto, (2016.11.13-15)
11. Masahiro Tatsumisago and Akitoshi Hayashi, “Sulfide-Based Amorphous Materials in All-Solid-State Lithium Batteries”, International Battery Association (IBA2017), Nara, (2017.3.5-10)
12. Akitoshi Hayashi and Masahiro Tatsumisago, “Amorphous Sulfide Positive Electrodes with High Capacity in All-Solid-State Lithium Batteries”, The 12th Pacific Rim Conference on Ceramic and Glass Technology (PACRIM12) including - Glass & Optical Materials Division Annual Meeting (GOMD2017), Waikoloa, Hawaii, U.S.A. (2017.5.21-26)
13. Ryoji Kanno, “LGPS-type Solid Electrolytes - Materials Varieties and Their Structure-property

Relationships", 21st International Conference of Solid State Ionics (SSI-21), Padua, Italy, I-3_2, (2017.6.18)

14. Satoru Watano, "Cutting-Edge Technologies in Powder Handling Processes" 7th Asian Particle Technology Symposium, Taiwan, (2017.8.1)
15. Yoshiharu Uchimoto, "Study on High Energy Density Rechargeable Magnesium Battery", The 9th Asian Conference on Electrochemical Power Sources 2017 (ACEPS-9), Korea, (2017.8.20-23)
16. Ryoji Kanno, "All-solid-state battery - Developments of materials and devices", The 9th Asian Conference on Electrochemical Power Sources 2017, HICO, Gyeongju, Korea, (2017.8.21)
17. Atsunori Matsuda, Shota Azuma, Hideo Yamada, Hiroyuki Muto, Tetsuo Uchikoshi, "EPD FOR COMPOSITE CATHODE LAYER IN ALL-SOLID-ATATE LITHIUM ION BATTERY BASED ON SULFIDE ELECTROLYTE", 6th International Conference on Electrophoretic Deposition Fundamentals and Applications Abstracts、Gyeongju, South Korea (2017.10.1-6)
18. Ryoji Kanno, "Developments of New Ionic Conductors and Their Application to All-Solid-State Batteries", 232nd ECS Meeting, Maryland, USA, Battery Division Research Award43, (2017.10.3)
19. Akitoshi Hayashi, "Development of Ion-Conducting Glasses for Solid-State Batteries", Materials Science & Technology Technical Meeting and Exhibition (MS&T17), Pittsburgh, Pennsylvania, U.S.A., (2017.10.8-12)
20. Akitoshi Hayashi and Masahiro Tatsumisago, "Amorphous Sulfide Active Materials with High Capacity for All-Solid-State Rechargeable Batteries", JSPM International Conference on Powder and Powder Metallurgy～60th Anniversary～, Kyoto, Japan, (2017.11.6-9)
21. Atsushi Sakuda, "Design of Solid-Solid Interface for All-Solid-State Lithium Secondary Batteries", Joint of Symposium of Asia Five Universities, The 6th OPU-KIST-ECUST-TKU Joint Symposium & The 5th OPU-TKU Joint Symposium & The 3rd OPU-FZU Joint Symposium, Osaka, Japan, (2017.11.9-11)
22. Akitoshi Hayashi, "All Solid State Battery based on Sulfide Materials", Work Shop on Lithium Ion Battery and Next Generation Batteries among Three Important Countries (WSLIBNGB) –China, Korea and Japan-, Tokyo, Japan, (2017.11.12-13)
23. Atsunori Matsuda, Nguyen Huu Huy Phuc, Reiko Matsuda, Hiroyuki Muto, "Liquid Phase Synthesis of Sulfide-Based Solid Electrolyte for All-Solid-State Lithium Ion Batteries", The 6th International Symposium on Advanced Ceramics (ISAC-6) (2018.3.12-14)
24. Akitoshi Hayashi, "Formation of Favorable Solid-Solid Interfaces Using Ductile Electrolytes and Electrodes for All-Solid-State Lithium Batteries", 2018 MRS Spring Meeting & Exhibit, Phoenix, AZ, USA, (2018.4.2-6)
25. Akitoshi Hayashi, "Design of Positive Electrode Layers for All-Solid-State Rechargeable Batteries with High Energy Density", 2018 MRS Spring Meeting & Exhibit, Phoenix, AZ, USA, (2018.4.2-6)
26. Ryoji Kanno, "Solid State Battery", International Electric Vehicle Technology Conference and Exhibition (iEVTech 2018 & ITEC Asia-Pacific 2018), (2018.6.8)
27. Akitoshi Hayashi, Atsushi Sakuda, Masahiro Ttsumisago, "Glass-Ceramic Solid Electrolytes for All-Solid-State Rechargeable Batteries", The 19th International Meeting on Lithium Batteries (IMLB2018), Kyoto, (2018.6.17-22)
28. Ryoji Kanno, Satoshi Hori, Kota Suzuki, Masaaki Hirayama, "All-solid-state battery - Developments of

the electrolytes", The 19th International Meeting on Lithium Batteries(IMLB2018), Kyoto, (2018.6.21)

29. Masahiro Tatsumisago, "All-Solid-State Rechargeable Lithium Batteries with Amorphous-Based Electrolyte and Electrode Materials", 12th International Conference on Ceramic Materials and Components for Energy and Environmental Applications (CMCEE2018), Singapore, (2018.7.22-27)
30. Kota Suzuki, "Synthesis, structure, and phase relationship of the $Li_{10}GeP_2S_{12}$-type solid electrolytes in the Li_3PS_4–Li_4SnS_4–Li_4SiS_4 quasi-ternary system", 12th International Conference on Ceramic Materials and Components for Energy and Environmental Applications (CMCEE2018), Singapore, (2018.7.22-27)
31. Ryoji Kanno, "All-solid-state battery - Developments of the solid-electrolytes", 16th Asian Conference on Solid State Ionics, (2018.8.6)
32. Akitoshi Hayashi, Atsushi Sakuda, Masahiro Tatsumisago, "Glass-based Solid Electrolytes for Interface Formation in All-Solid-State Batteries", The 12th Japan-France Joint Seminar on Battery, Kyoto, (2018.9.19-21)
33. Masahiro Tatsumisago, Atsushi Sakuda, Akitoshi Hayashi, "Amorphous-Based Electrolyte and Electrode Materials in All-Solid-State Lithium Batteries", ICG Annual Meeting 2018 (59th Meeting on the Glass and Photonic Materials, 14th Symposium of the Glass Industry Conference of Japan), Yokohama, (2018.9.23-26)
34. Masahiro Tatsumisago, "All-Solid-State Lithium Batteries Using Amorphous-based Ionics Materials", 10th KIFEE Symposium, Tromso-Trondheim, MS Finnmarken, Norway, (2018.10.5-8)
35. Ryoji Kanno, Satoshi Hori, Kota Suzuki, Masaaki Hirayama, "Developments of New Lithium Ion Conductors and Their Application to All-solid-state Batteries", Materials Science &Technology (MS&T18), (2018.10.15)
36. Ryoji Kanno, "All-Solid-State Battery- History, Current Status and Future Perspectives", 2018 IEEE 14th International Conference on Solid-State and Integrated Circuit Technology, (2018.11.1)
37. Akitoshi Hayashi, Atsushi Sakuda, Masahiro Tatsumisago, "All-Solid-State Rechargeable Batteries with Ductile Glass Electrolytes", The 5th International Conference on Electronic Materials and Nanotechnology for Green Environment (ENGE2018), Jeju, Korea, (2018.11.11-14)
38. Ryoji Kanno, "The developments of solid electrolytes for the all-solid-state battery", Third Bunsen Colloquium on Solid-State Batteries, (2018.11.14)
39. Akitoshi Hayashi, "Development of Glass-Based Solid Electrolyte for All-Solid-State Lithium and Sodium Batteries", 43rd International Conference and Exposition on Advanced Ceramics and Composites (ICACC2019), Daytona Beach, Florida, USA, (2019.1.27)
40. Ryoji Kanno, "Development of Lithium Ion Conductors with the LGPS type for All-Solid-State Batteries", 2019 MRS Spring Meeting, (2019.4.23)
41. Ryoji Kanno, "All-solid-state battery using sulfide electrolytes-History, current status and future perspectives", 22nd International Conference on Solid State Ionics(SSI-22), PyeongChang, Korea, (2019.6.21)
42. Akitoshi Hayashi, Atsushi Sakuda, Masahiro Tatsumisago, "Sulfide and Oxide Glassy Electrolytes for All-Solid-State Batteries", 2nd World Conference on Solid Electrolytes for Advanced Applications: Garnets and Competitors, Shizuoka, (2019.9.23)
43. Ryoji Kanno, "Lithium Solid Electrolytes with the Sulfide-Type Materials Based on the LGPS Structure",

2nd World Conference on Solid Electrolytes for Advanced applications, Garnets and Competitors, Shizuoka, (2019.9.24)

44. Akitoshi Hayashi, Atsushi Sakuda, Masahiro Tatsumisago, “Development of All-Solid-State Rechargeable Batteries with Ductile Amorphous Materials”, The 13th Pacific Rim Conference of Ceramic Societies (PACRIM13), Okinawa, (2019.10.27-11.1)