

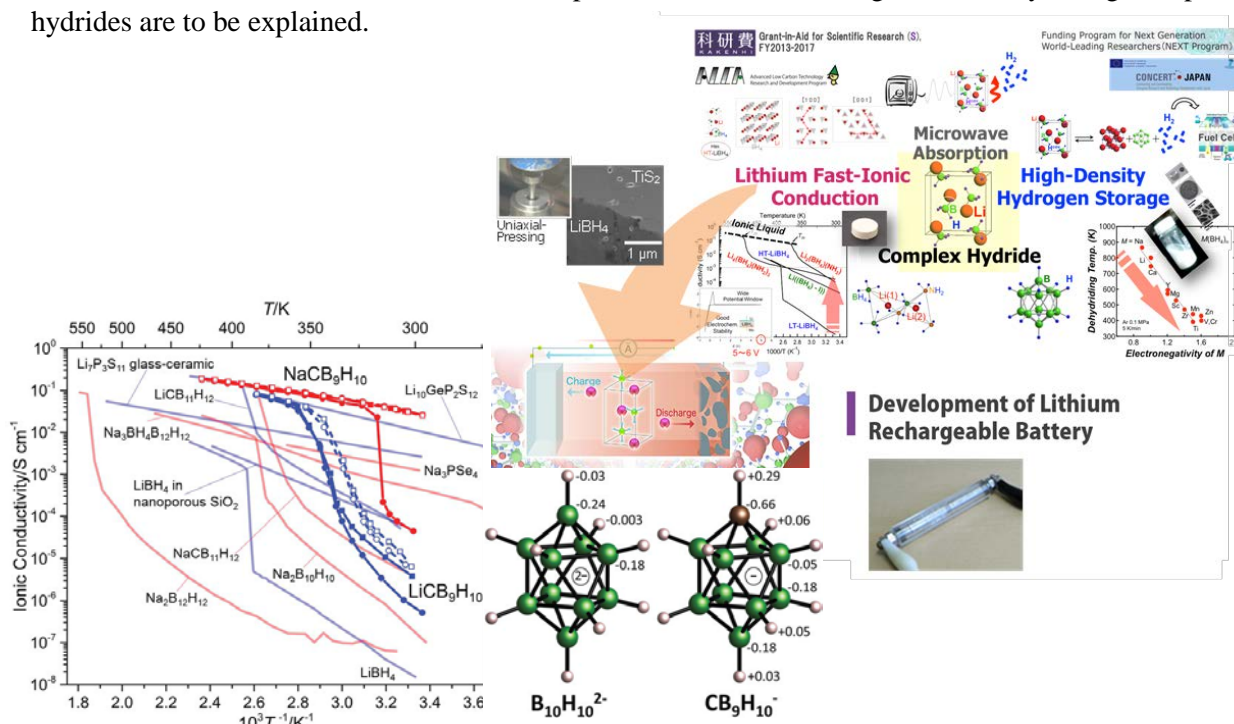
COMPLEX HYDRIDES AS ADVANCED BATTERY MATERIALS

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Complex hydrides exhibit various energy-related functions as shown below; such as high-density hydrogen storage and microwave absorption for future fuel cell technologies [1], as well as lithium/sodium superionic conduction for battery technologies [2-6]. In the presentation, intensive studies on fast-ionic conduction and development of lithium rechargeable battery using complex hydrides are to be explained.



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- [6] W.-S. Tang, S. Orimo, T.J. Udovic et al., *Energy Environ. Sci.* 8, 3637 (2015). *Adv. Energy Mater.* 1502237 (2016).



Shin-ichi ORIMO was; a JSPS research fellow (1993-1995), a research associate in Hiroshima Univ (1995-2002), and a guest researcher in Max-Planck Institute for Metal Research awarded by Humboldt Fellowship and MEXT Fellowship (1998-1999). He is currently a professor of WPI-AIMR, and the director of Energy Materials Center of Institute of Materials Research (IMR), Tohoku Univ. The related research was awarded by “The Commendation for Science and Technology (the Minister of MEXT, 2012)”, and by “Science of Hydrogen & Energy Award (2015)”.