

Collaborative research report for SOIFIT

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Collaborative research with Mr. Yu Zhou and Prof. Stephen Skinner

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When I was a master course student of Tokyo Tech., I stayed at Prof. Skinner's group at Imperial College London to investigate the transport properties of new ionic conductors. These materials were discovered by Yashima's group at Tokyo Tech. Thanks to Mr Zhou's cooperation, we were able to determine the oxygen diffusion and surface exchange coefficients of these new materials. These mass transport kinetics parameters are important as basic data on solid state ionics. These two visits have provided data that will contribute to my PhD thesis and to at least two papers.

I also enjoyed the workshop "The Power of Interfaces" where I had discussions with the top-level researchers about my exploration of new ionic conductors.