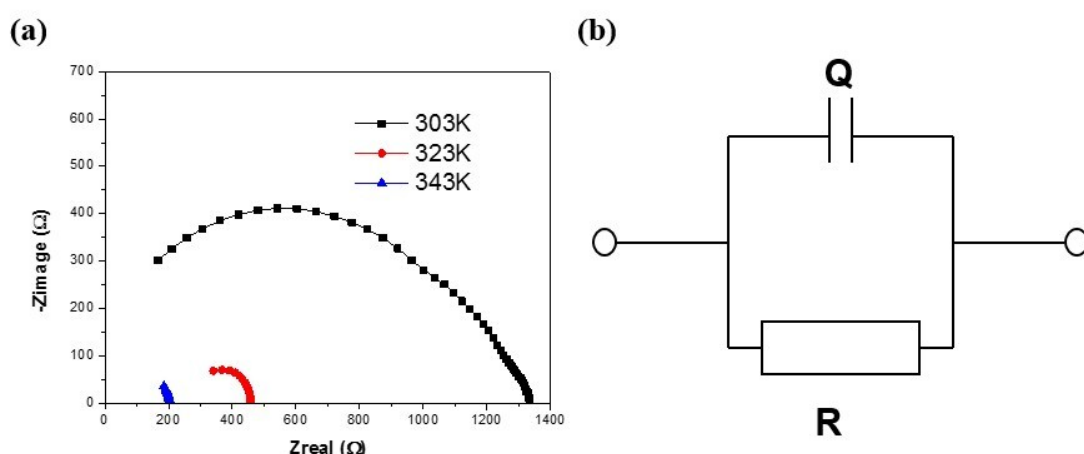
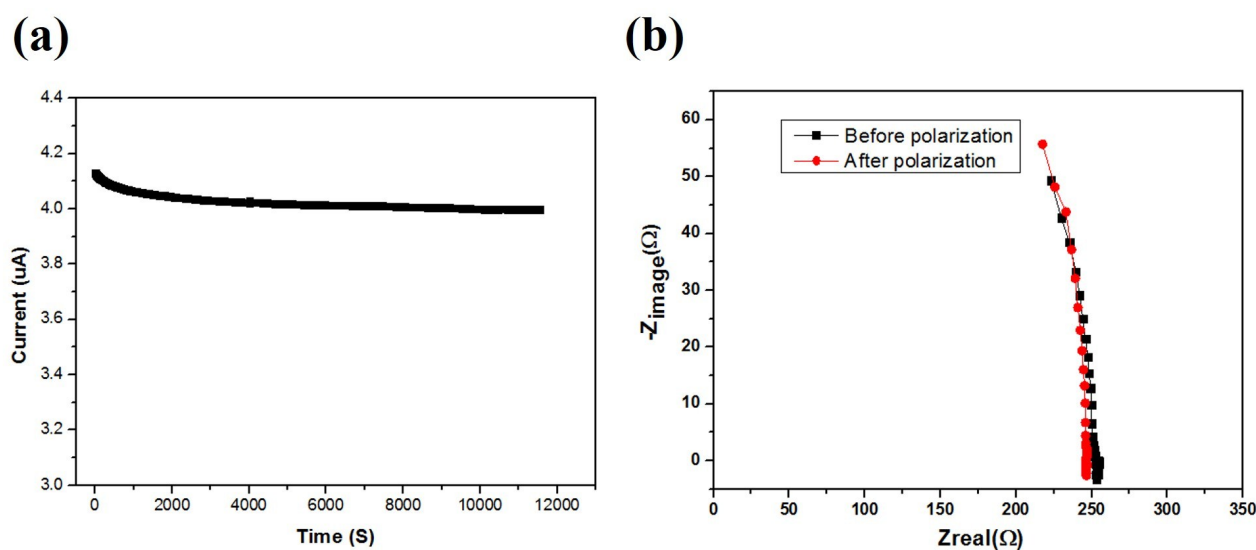


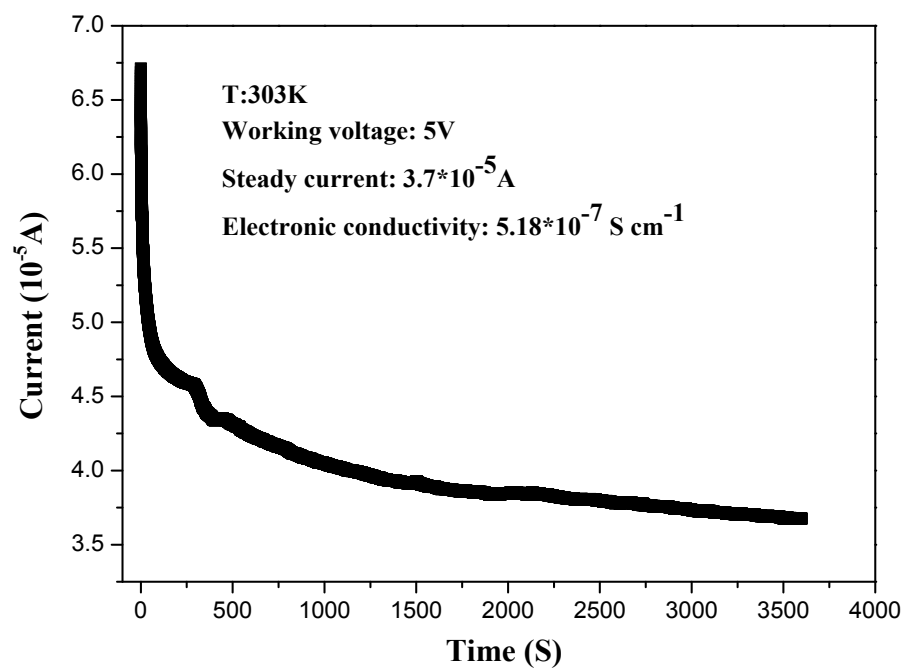
Supporting information of Lithium migration pathways at composite
interface of LiBH_4 and two-dimensional MoS_2 enabling superior ionic
conductivity at room temperature



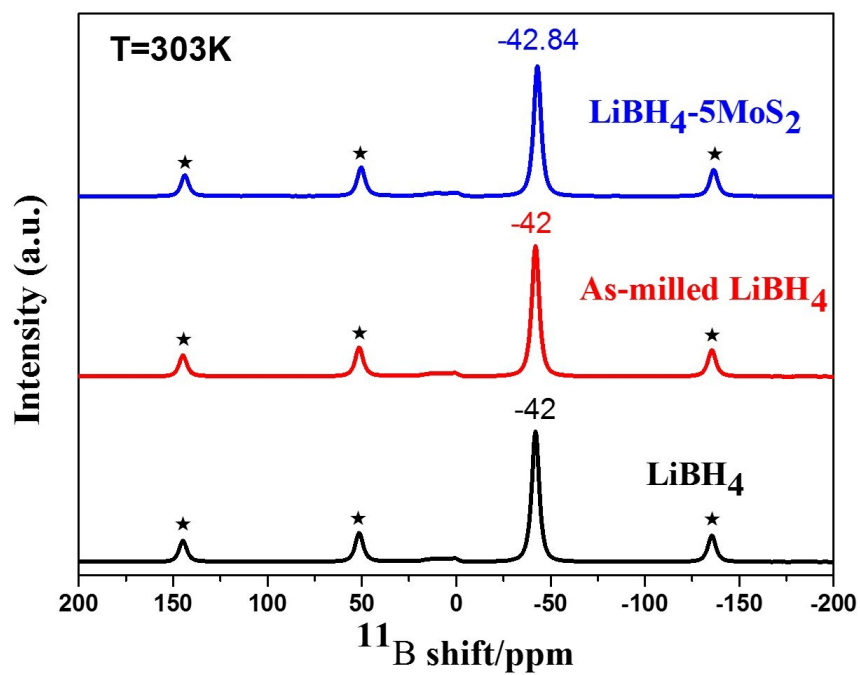
Supplementary Figure 1 (a) The Nyquist plots of the as-prepared LiBH_4 -5 MoS_2 composite at different temperatures. Dots are experimental results, while lines are fitted results with (RQ) equivalent circuit; (b) The equivalent circuit for AC impedance spectra.



Supplementary Figure 2 Transference number of LiBH_4 -5 MoS_2 measured by direct current polarization and EIS techniques



Supplementary Figure 3 DC polarization curve of the as-prepared LiBH₄-5MoS₂ composite.



Supplementary Figure 4 MAS NMR spectra ^{11}B in as-prepared $\text{LiBH}_4\text{-MoS}_2$ composite, as-milled LiBH_4 and bulk LiBH_4 . All spectra are obtained at 303K. Spinning sidebands are marked by asterisks.