Supporting Information for:

**Hybrid ionogel electrolytes for high temperature lithium batteries**

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Fig S1. $^1$H NMR of BMPTFSI in CDCl$_3$

Fig S2. Interfacial Resistance as a function of time

Fig S3. Cyclic Voltammogram for a symmetrical Li/HI-2/Li cell
Fig S4. Chemical structure of a well-studied organic crosslinker, ETPTA

Fig S5. Representative discharge profiles for reference LiFePO₄/1M LiTFSI BMPTFSI/Li Cells at 0.1C charge-0.1C discharge conditions (90°C)