

Supporting information

Li₄SiO₄ Doped-Li₇P₂S₈I solid electrolytes with high lithium stability synthesised using liquid-phase shaking

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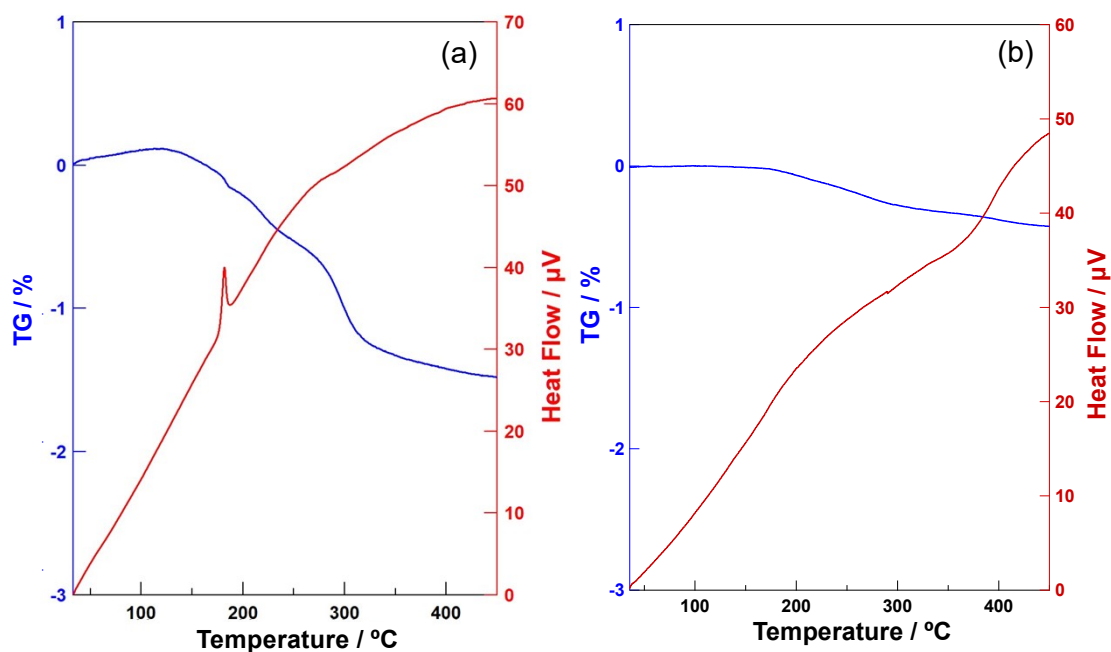


Figure S1. TG-DTA curves of the $\text{Li}_7\text{P}_2\text{S}_8\text{I} \cdot 10\text{Li}_4\text{SiO}_4$ solid electrolytes synthesized by the mechanical milling methods (a) before, (b) after the heat treatment at $150\text{ }^\circ\text{C}$ 2

h.

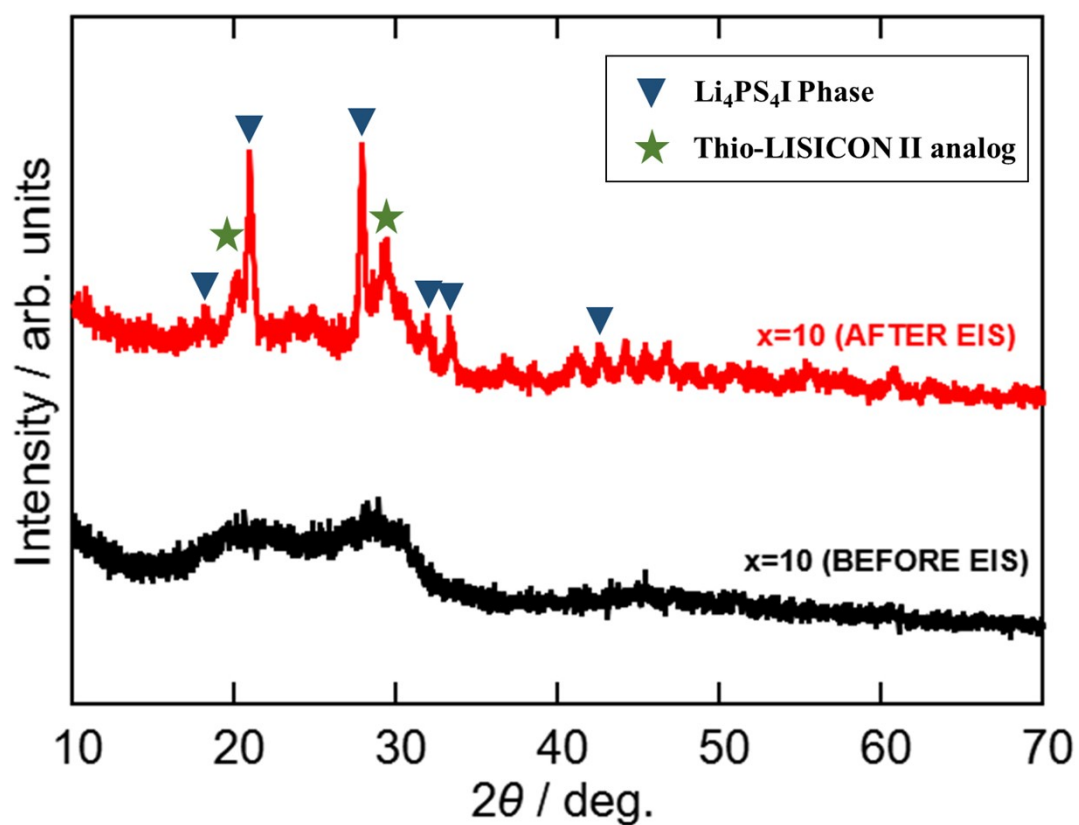


Figure S2. X-ray diffraction patterns of the $\text{Li}_7\text{P}_2\text{S}_8\text{I} \cdot 10\text{Li}_4\text{SiO}_4$ solid electrolytes synthesized by the mechanical milling method before and after the EIS measurement.

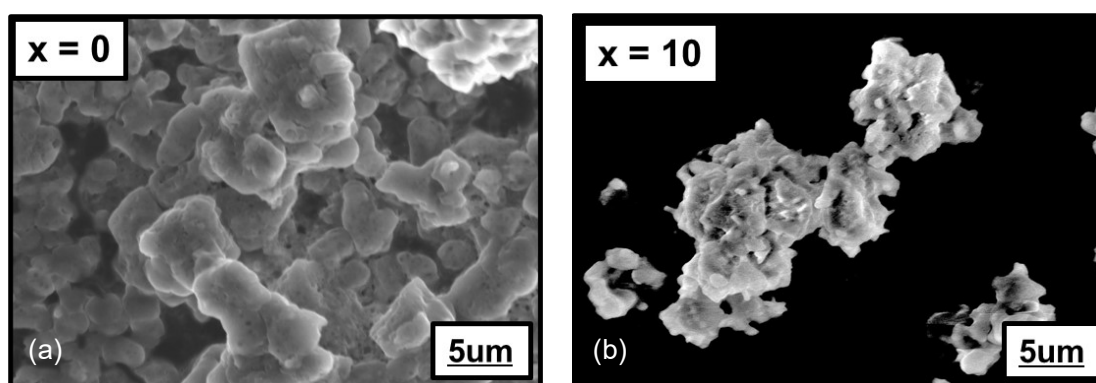


Figure S3. (a) SEM images of the $\text{Li}_7\text{P}_2\text{S}_8\text{I} \cdot x\text{Li}_4\text{SiO}_4$ ((a) $x=0$, (b) $x=10$) solid electrolytes synthesized by liquid phase shaking method.