

Supplementary Information

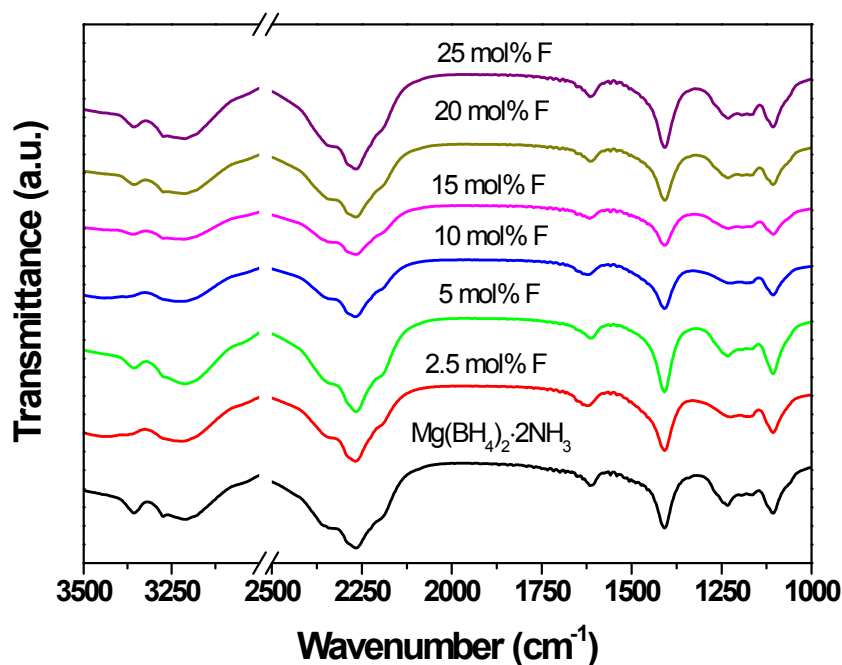


Figure S1. FTIR spectra of the $\text{Mg}(\text{BH}_4)_2 \cdot 2\text{NH}_3$ - MgF_2 samples with different F contents.

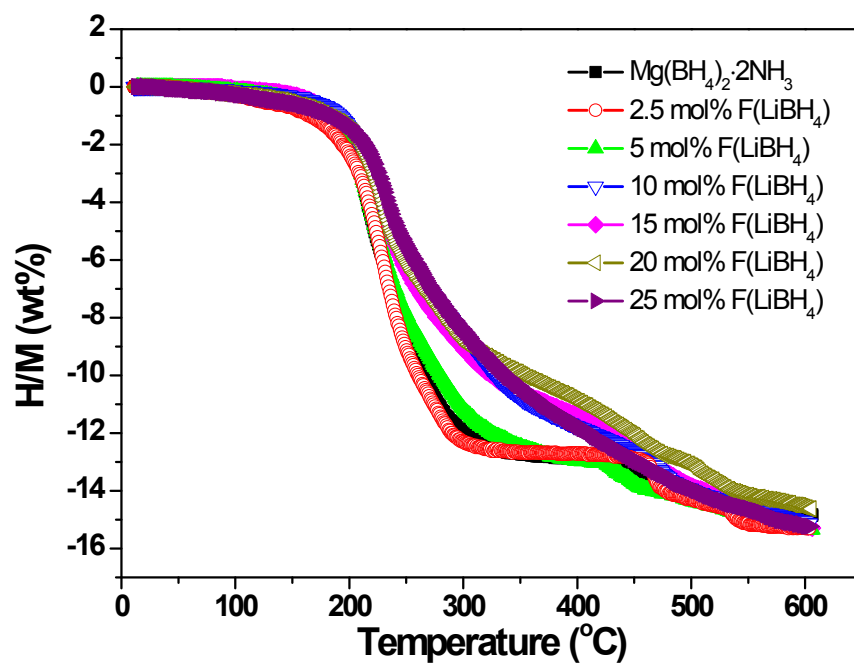


Figure S2. Volumetric release curves of the $\text{Mg}(\text{BH}_4)_2 \cdot 2\text{NH}_3$ - LiBH_4 samples.

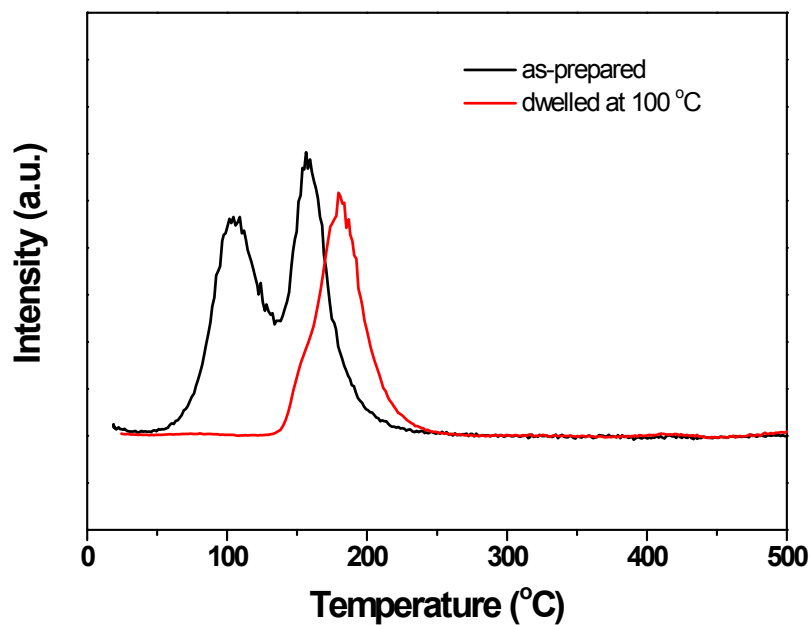


Figure S3. MS curves of the as-prepared 25 mol% F-doped $\text{Mg}(\text{BH}_4)_2 \cdot 2\text{NH}_3$ and its decomposition intermediate at 100 °C.

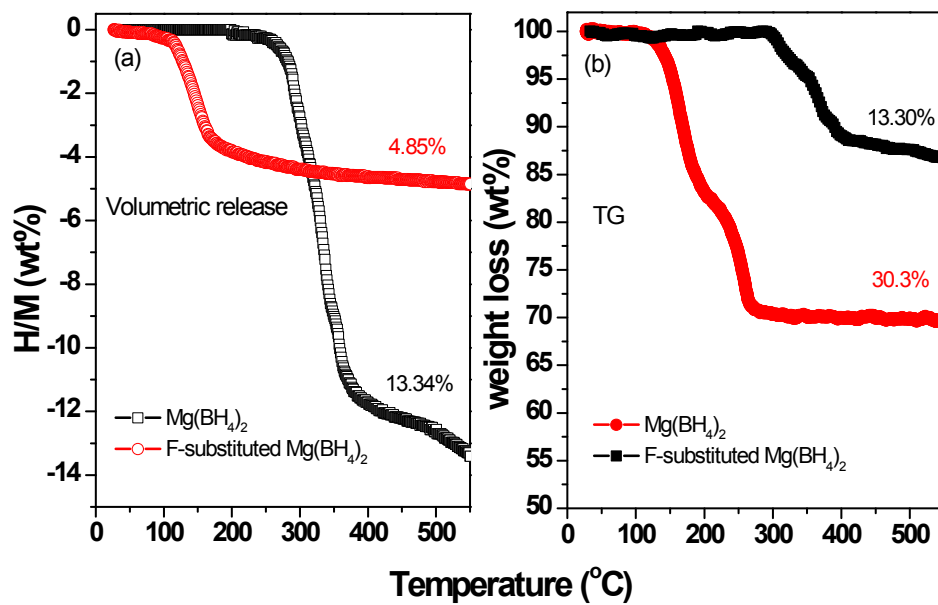


Figure S4. (a) Volumetric-release and (b) TG curves of the F-substituted $\text{Mg}(\text{BH}_4)_2$.