

Supporting Information

Figure S1. DTA curve of $\text{Li}(\text{H}_2\text{O})_{2-x}[\text{Zr}_2(\text{PO}_4)_3]$ ($x = 0$) at low temperature from $-170\text{ }^\circ\text{C}$ to $25\text{ }^\circ\text{C}$ and back to $-170\text{ }^\circ\text{C}$.

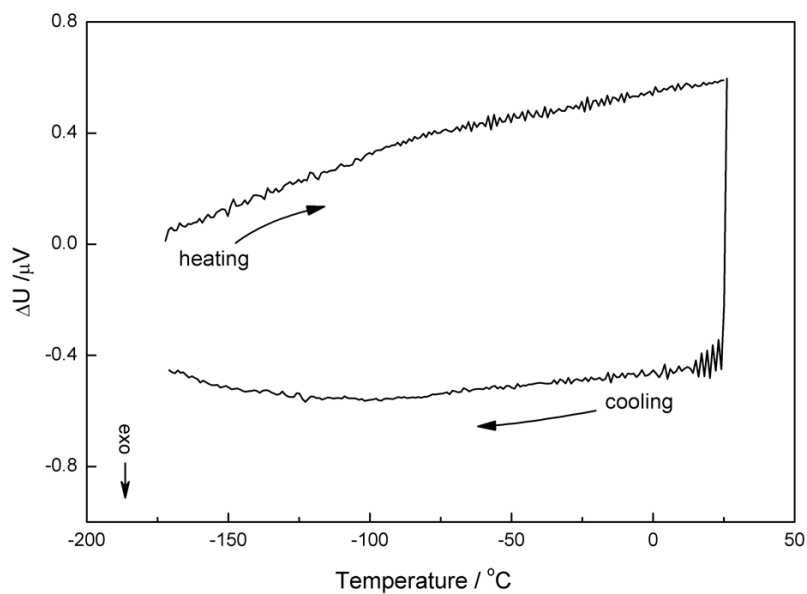


Figure S2. DTA curves of anhydrous cubic $\text{Li}(\text{H}_2\text{O})_{2-x}[\text{Zr}_2(\text{PO}_4)_3]$ ($x = 2$) from $-180\text{ }^\circ\text{C}$ to $600\text{ }^\circ\text{C}$ and back to $-180\text{ }^\circ\text{C}$.

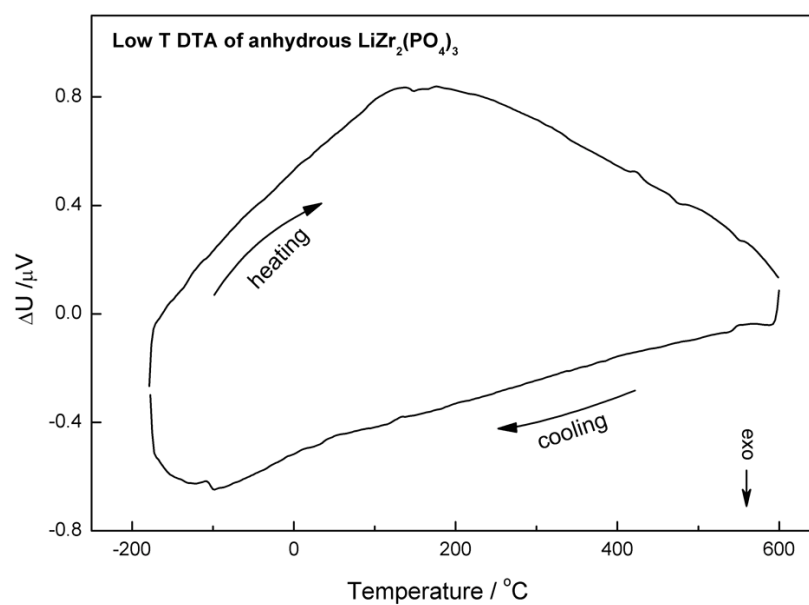


Figure S3. DTA curves of α' -LiZr₂(PO₄)₃ from -180 °C to 600 °C and back to -180 °C (insert: DTA curve of α' -LiZr₂(PO₄)₃ at high temperature up to 1200 °C).

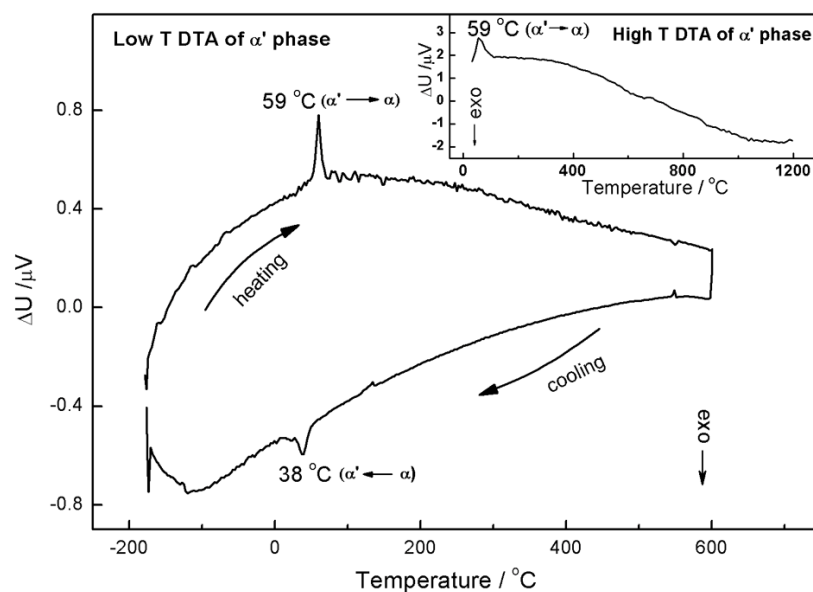


Figure S4. DTA curves of β' -LiZr₂(PO₄)₃ from -180 °C to 600 °C and back to -180 °C.

