

## Elucidating the promotion of $\text{Na}_2\text{CO}_3$ in $\text{CO}_2$ capture by $\text{Li}_4\text{SiO}_4$

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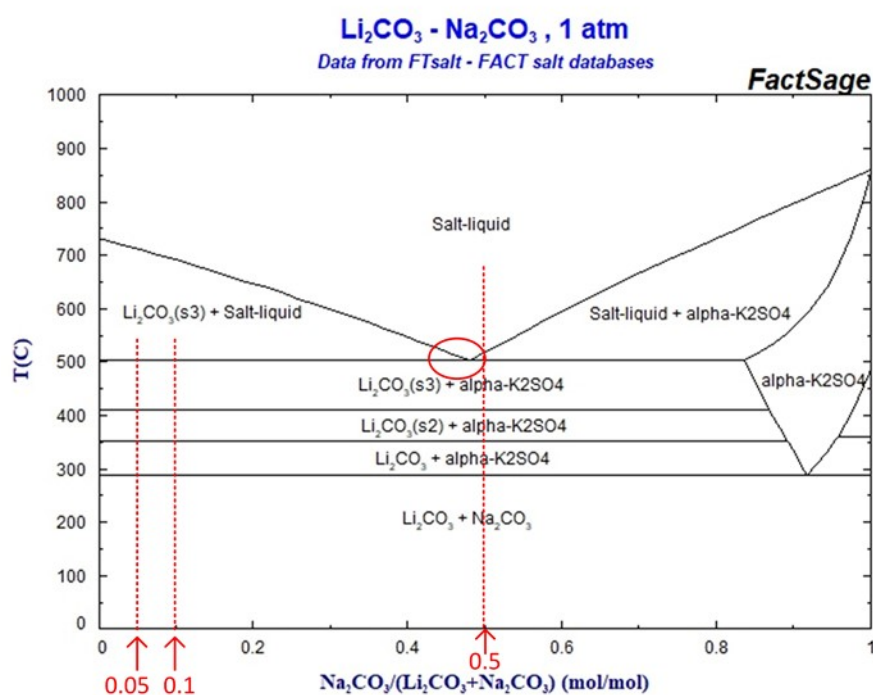


Fig. S1 Phase diagram of  $\text{Li}_2\text{CO}_3\text{-K}_2\text{CO}_3$  system from FTsalt-FACT salt databases (FactSage<sup>TM</sup>, 2021).

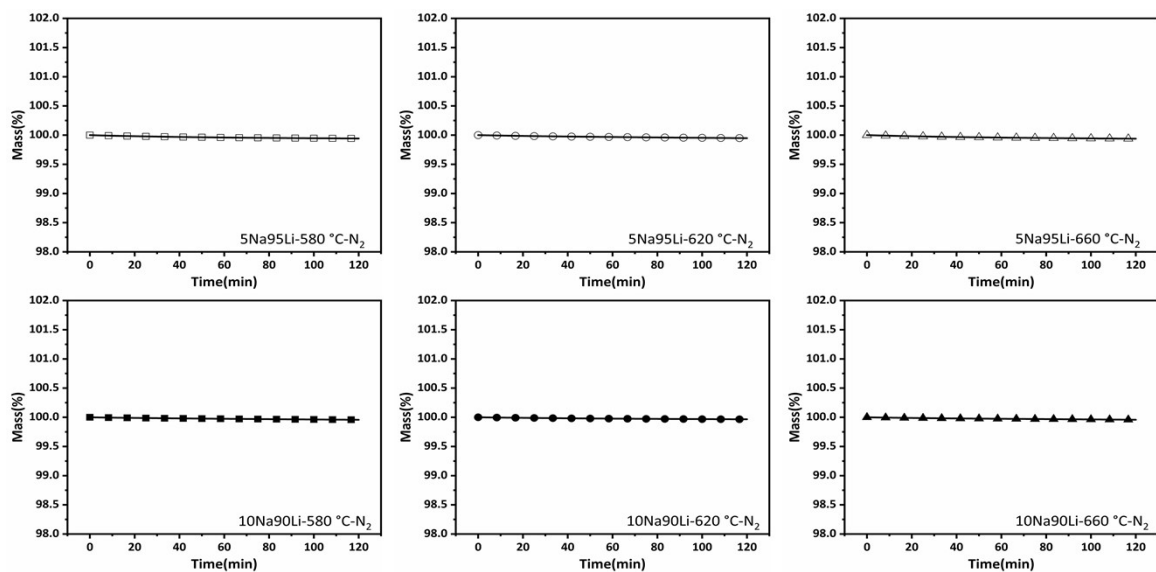


Fig. S2 Isothermal analysis of  $\text{Na}_2\text{CO}_3$  and  $\text{Li}_4\text{SiO}_4$  with different molar ratios in the 100% $\text{N}_2$  atmosphere at different temperatures.