

Article

## The Discovering of Rapid Formation $\text{La}(\text{OH})_3$ from $\text{LaH}_3$

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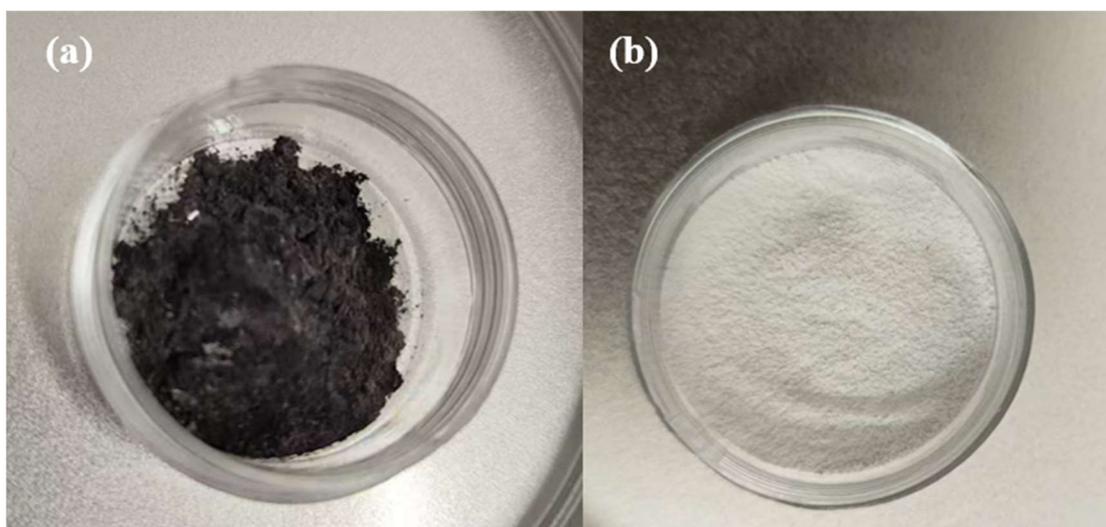
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It was found that the  $\text{LaH}_3$  sample will change into white powder when exposed in the air within 24 hours. The volume of  $\text{La}(\text{OH})_3$  white solid powder after phase change was significantly higher than that of  $\text{LaH}_3$  black solid powder, and the mass of the sample increased by 1.07g after complete phase change.



**Figure S1.** Morphology of the sample before and after the phase transition.