

Electronic Supplementary Information

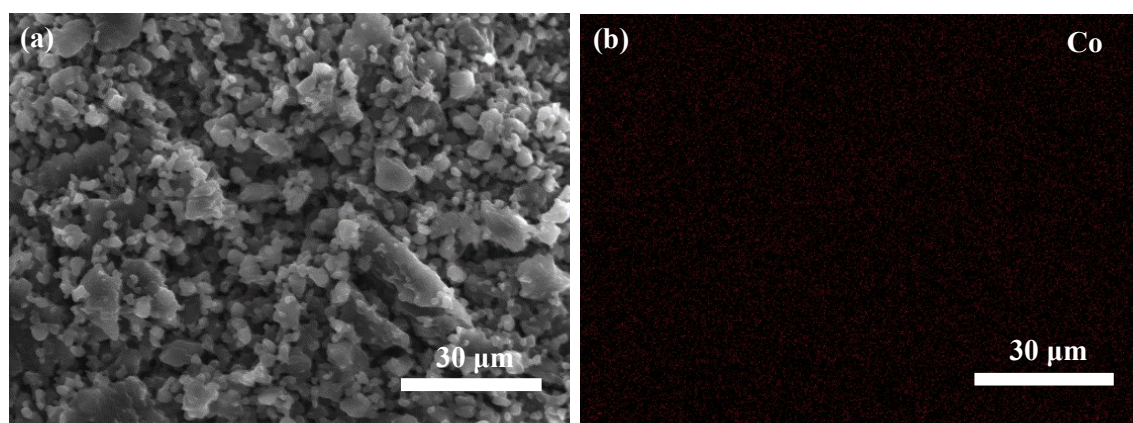


Fig. S1 EDS mapping of the as-prepared $\text{LiBH}_4\text{-}2\text{LiNH}_2\text{-}5\text{ wt\% Co@C}$ sample.

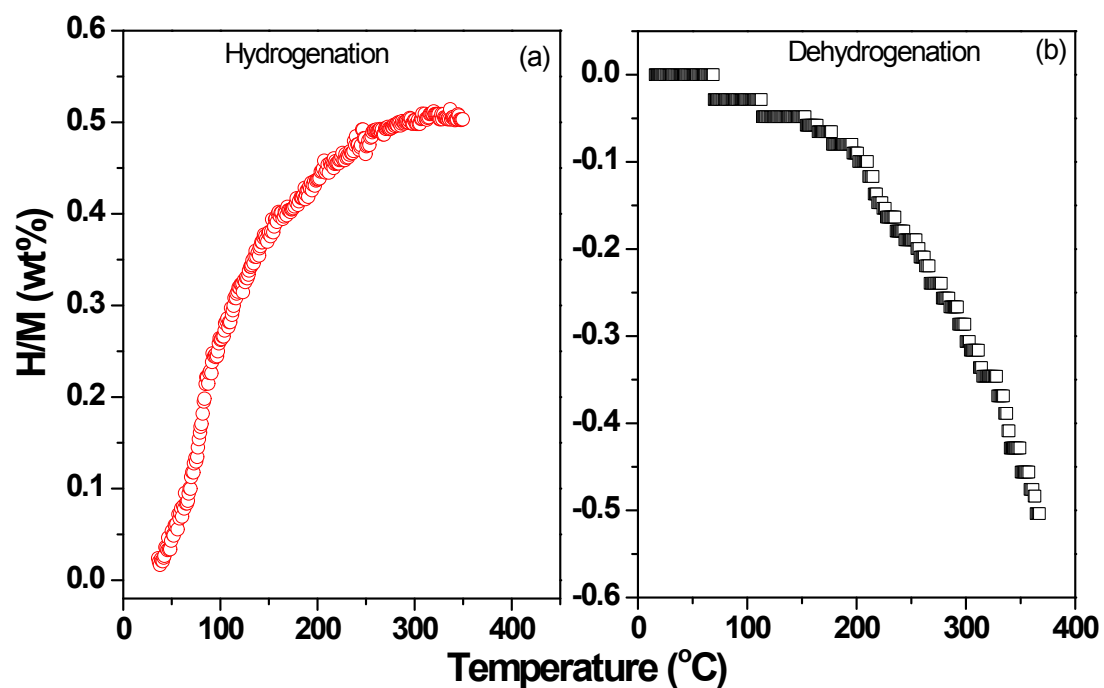


Fig. S2 Hydrogenation (a) and dehydrogenation (b) curves of the $\text{LiBH}_4\text{-}2\text{LiNH}_2\text{-}5\text{ wt\% Co@C}$ sample at 3rd cycle.

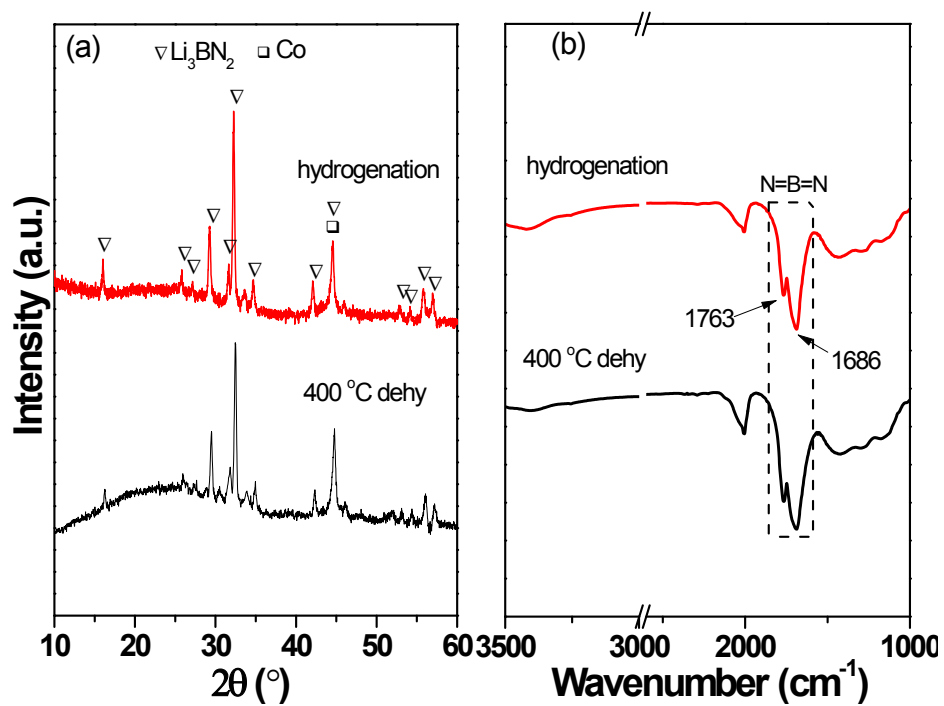


Fig. S3 XRD (a) and FTIR (b) of the hydrogenated 5 wt% Co@C-containing sample.