

Ammonia Borane Confined by Nitrogen-containing Carbon Nanotube: Enhanced Dehydrogenation Properties Originating from the Synergetic Catalysis and Nanoconfinement

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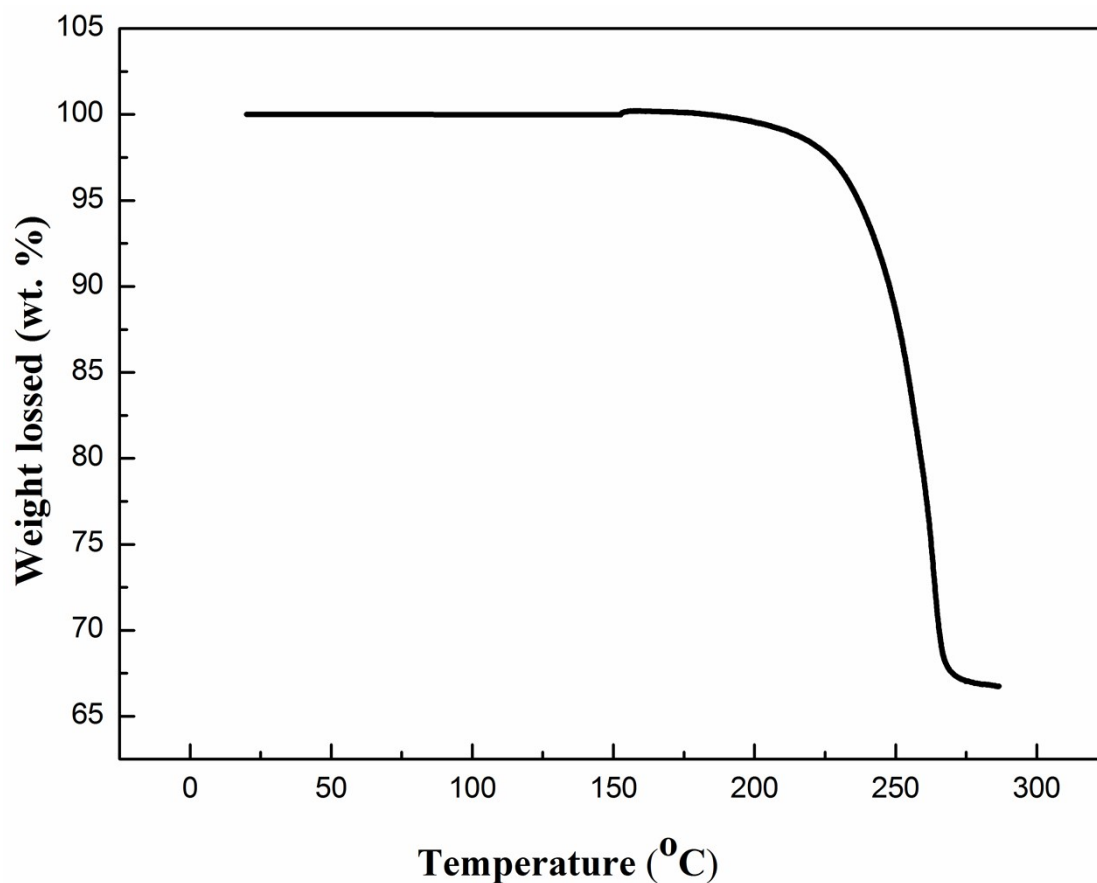


Fig. 1 TG curve of the pure PPy with a heating rate of $5^{\circ}\text{C}\cdot\text{min}^{-1}$ in nitrogen.

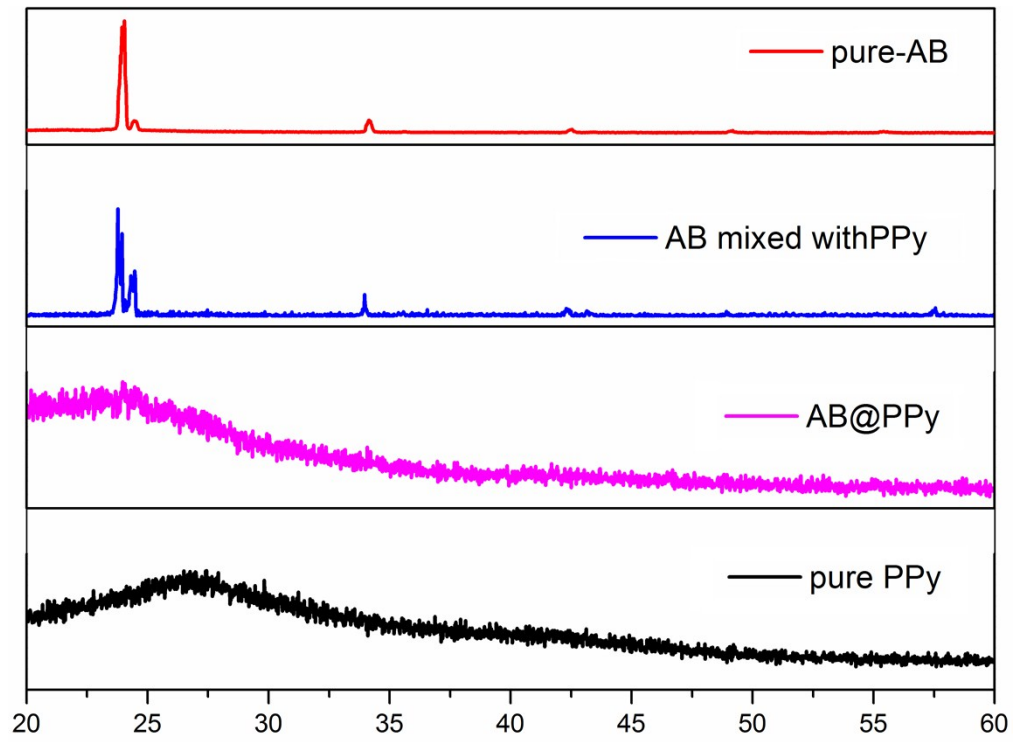


Fig. 2 XRD spectra for pure AB, AB mixed with PPy, AB@PPy and pure PPy.

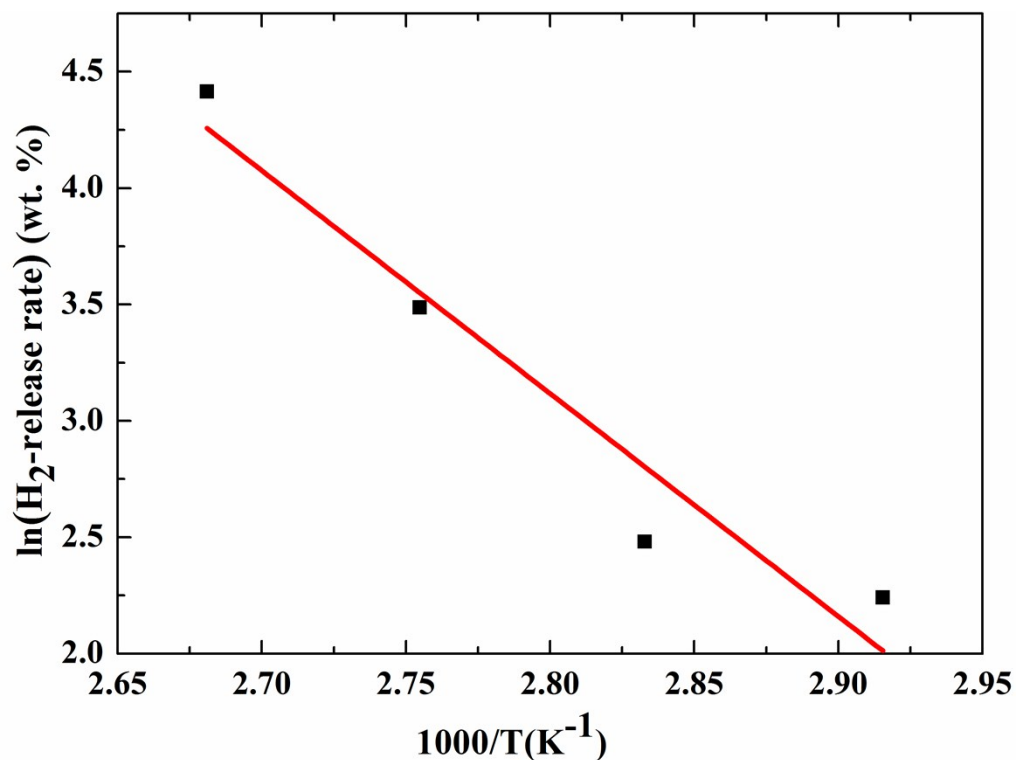
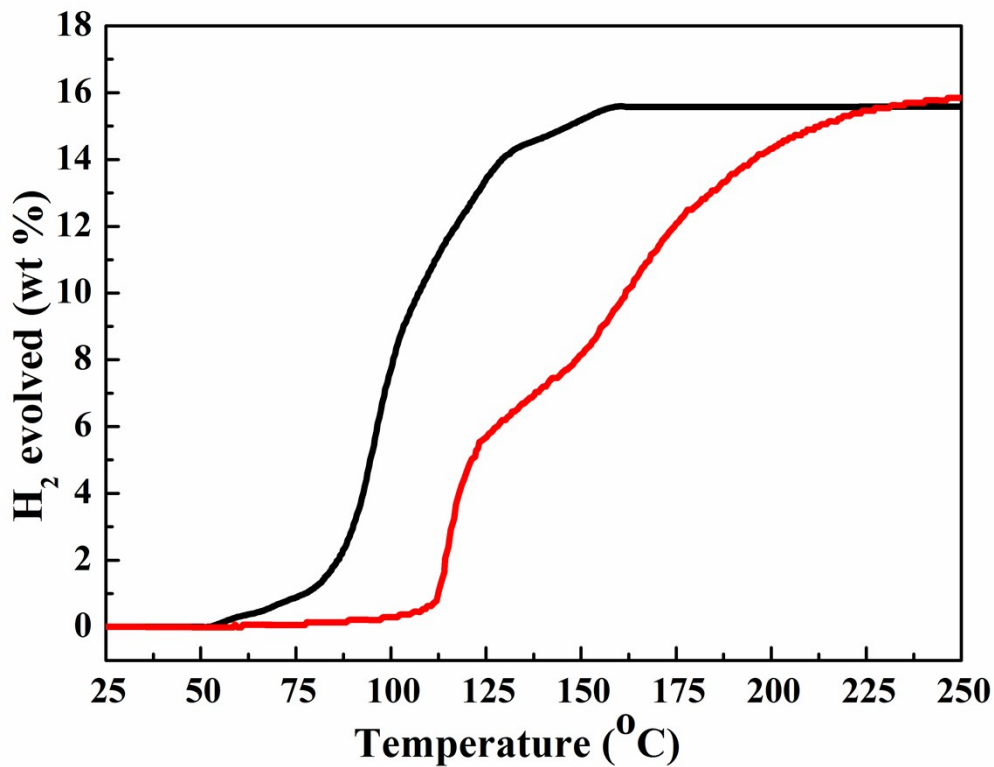


Fig. 3 (a) TPD results for pure AB (red line) and AB@PPy (black line) with a heating rate of 5 °C·min⁻¹ in nitrogen. (b) Arrhenius profiles of the dehydrogenation kinetics of the AB@PPy. Straight lines show that data are exponential with reciprocal temperature and comply with the Arrhenius equation: rate (wt %/h) = $k_o \exp(-E_a / RT)$.