

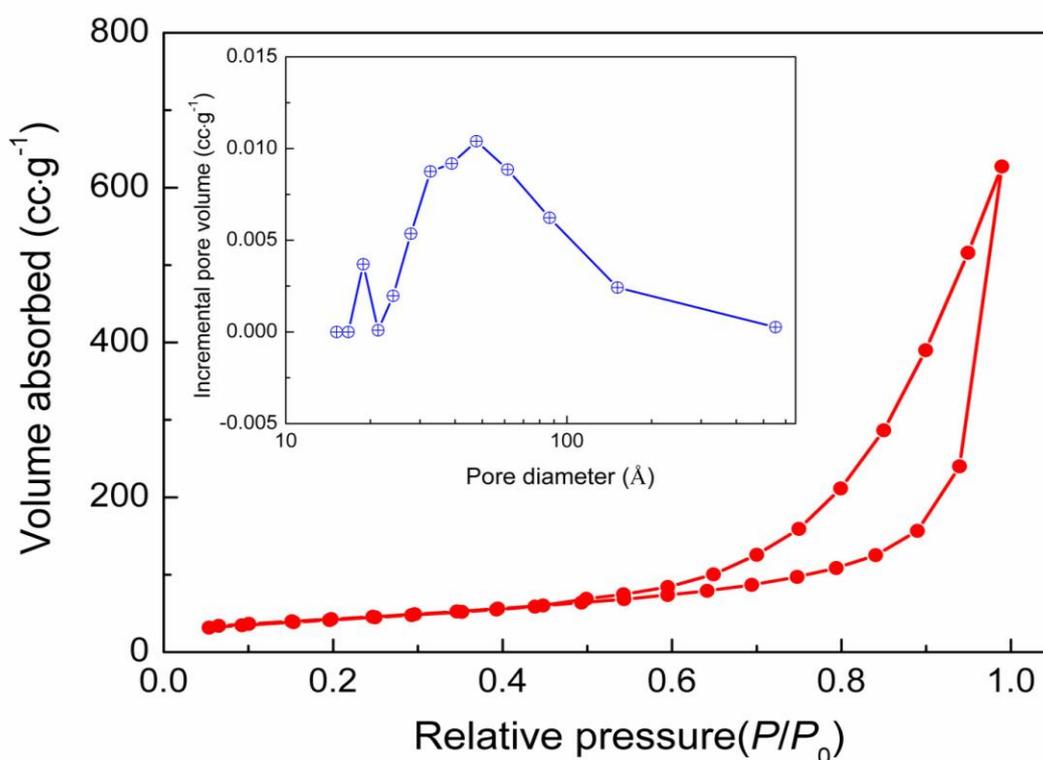
## Supporting Information

# Polymorphous $\alpha$ - and $\beta$ -Ni(OH)<sub>2</sub> Complex Architectures: Morphological and Phasal Evolution Mechanism and Enhanced Catalytic Activity as Non-enzymatic Glucose Sensors

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**Figure S1.** Nitrogen adsorption/desorption isotherm of the  $\beta$ -Ni(OH)<sub>2</sub> samples and their corresponding pore size distribution curves (inset).

As shown in the figure, the flower-like  $\beta$ -Ni(OH)<sub>2</sub> nanostructures showed type IV isotherms with H3 hysteresis loops according to BDDT classification. The  $\beta$ -Ni(OH)<sub>2</sub> samples had a large  $S_{\text{BET}}$  of 152.77 m<sup>2</sup>·g<sup>-1</sup>, pore volume of 1.033 cc·g<sup>-1</sup>, and average pore size of 4.76 nm. As shown in the insets of Figure S1, the flower-like  $\beta$ -Ni(OH)<sub>2</sub> nanostructures had a bimodal pore-size distribution, containing small mesopores (peak pore ca. 18.6 nm) and large mesopores (peak pore ca. 47.5 nm).