Supporting Information for:

A Facile Synthesis Method for Ni(OH)₂ Ultrathin Nanosheets and Their Conversion to Porous NiO Nanosheets Used for Formaldehyde Sensing

Guanghui Li,‡, Xuewen Wang,‡ and Ting Zhang,*

Fig. S1: Photograph of electrolyte (60 mmol NaCl, 10 mmol NH₄Cl, and 7.5 mmol NaOH in 100 ml deionized water) at different reaction time (0, 20, 90 min).
Fig. S2: (a) SEM image and (b) XRD pattern of irregular shaped α-Ni(OH)₂ obtained via electrochemical reaction with 1 M NaCl (without NaOH and NH₄Cl).
Fig. S3 (a) Typical N$_2$ adsorption-desorption isotherm, and (b) pore-size distribution of the NiO nanosheets.
Fig. S4 (a, c) SEM images and (b, d) XRD patterns of obtained \( \text{Zn}_3(\text{OH})_8\text{Cl}_2\cdot\text{H}_2\text{O} \) and \( \text{Fe(OH)}_3 \) nanosheets, which were synthesized by electrochemical reactions of Zn and Fe electrodes with electrolyte composed of 0.2 M NaCl, 0.1 M \( \text{NH}_4\text{Cl} \) and 0.075 M NaOH under potentiostatic (5 V) control for 90 min.