

## Electronic Supporting Information

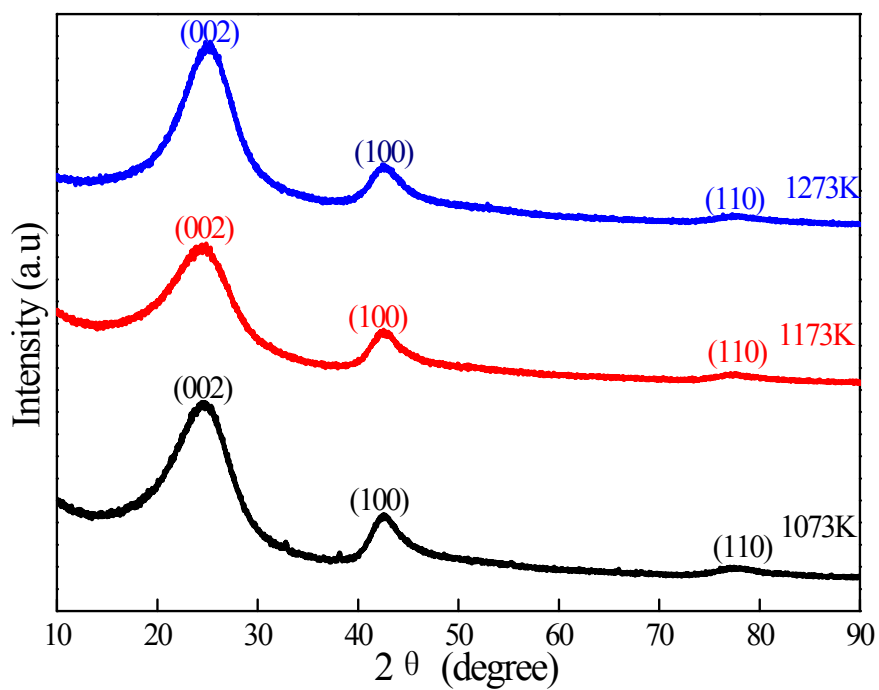
# **Preparation of hexagonal BN whiskers synthesized at low temperature and its application in fabricating electrochemical nitrite sensor**

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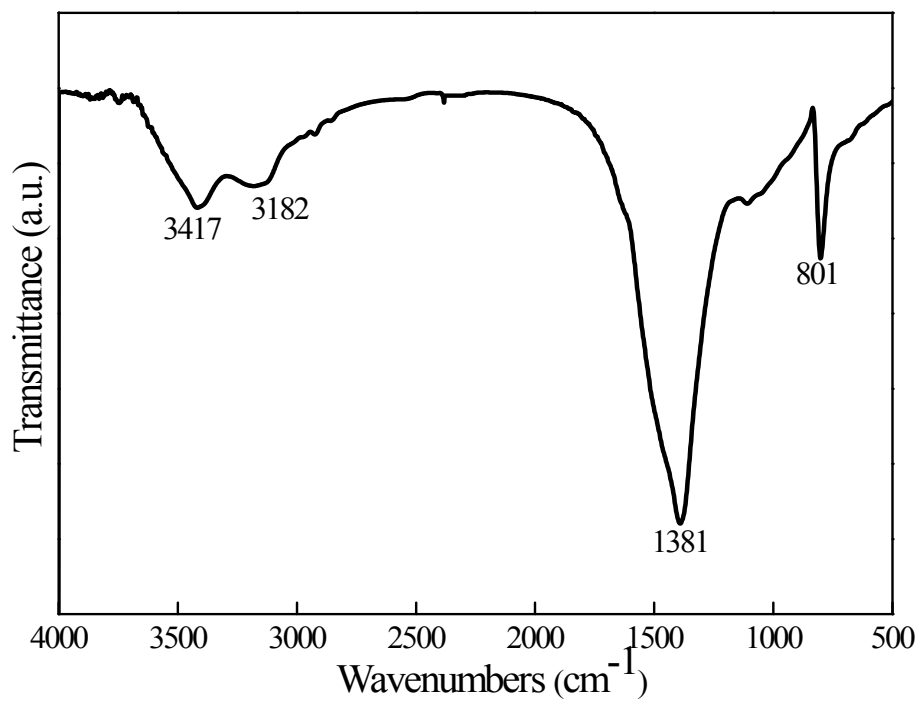
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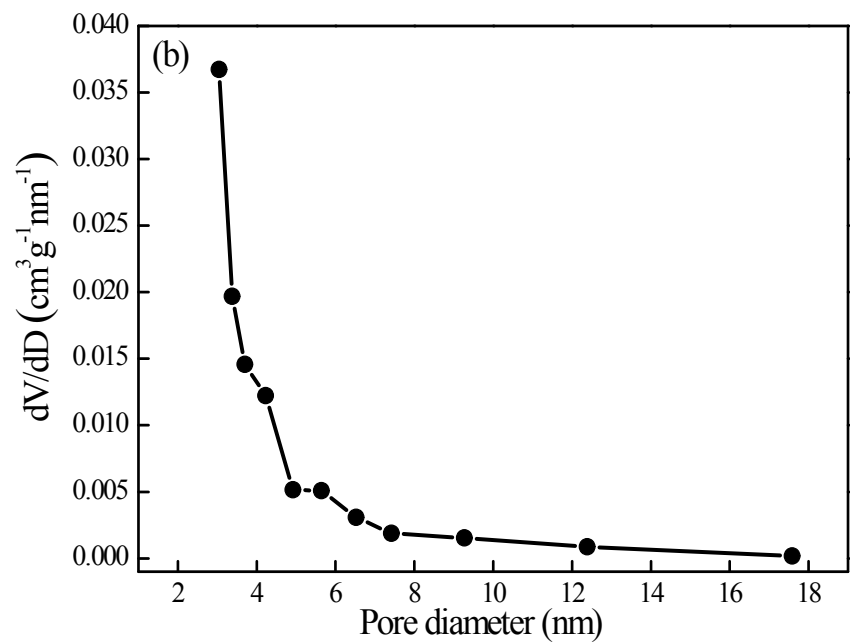
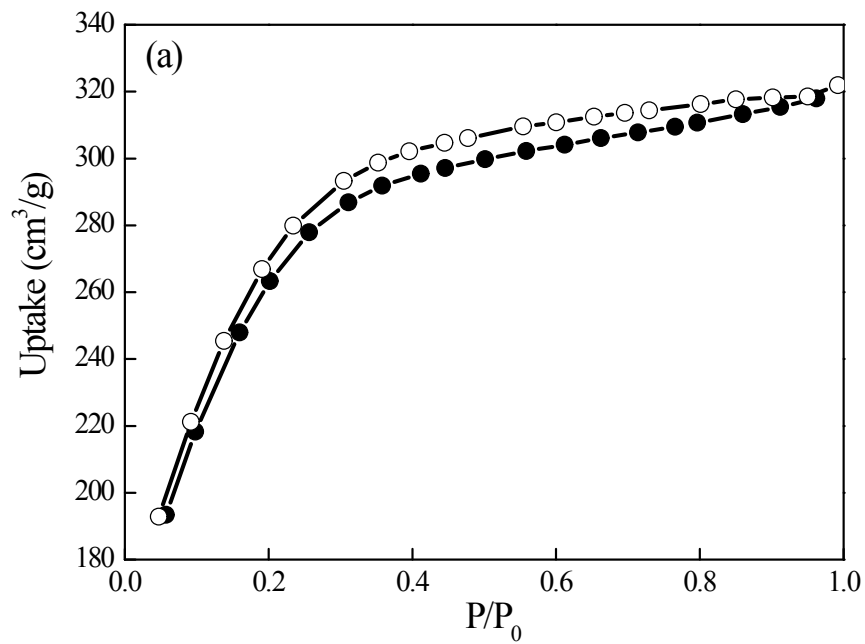
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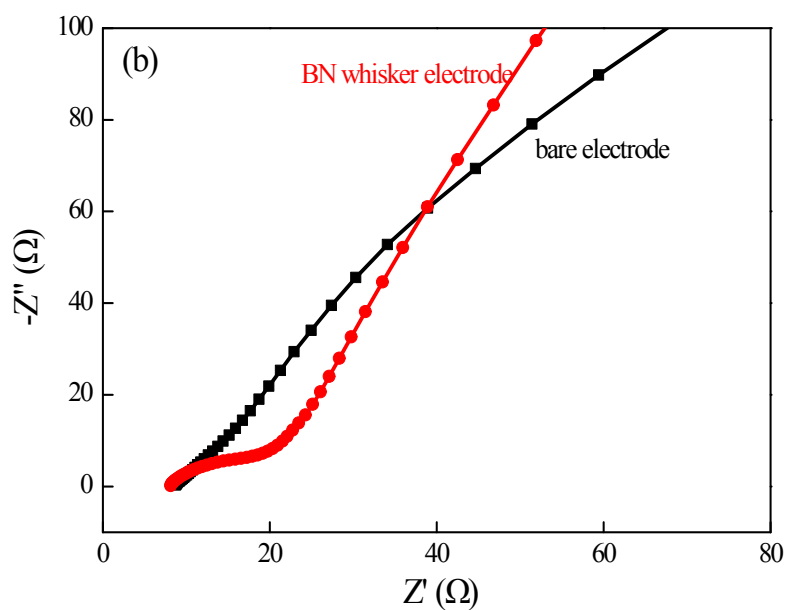
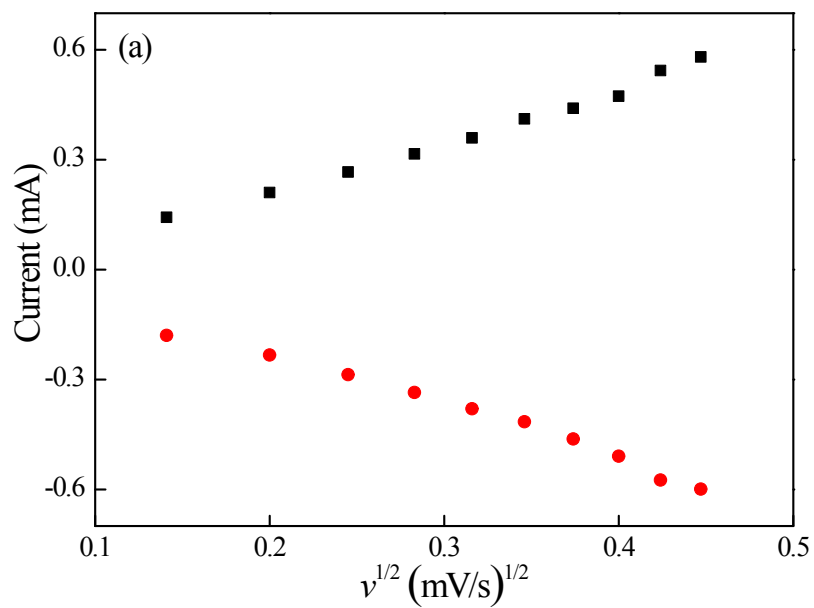
**Fig. S1** XRD pattern of the sample obtained at different temperature



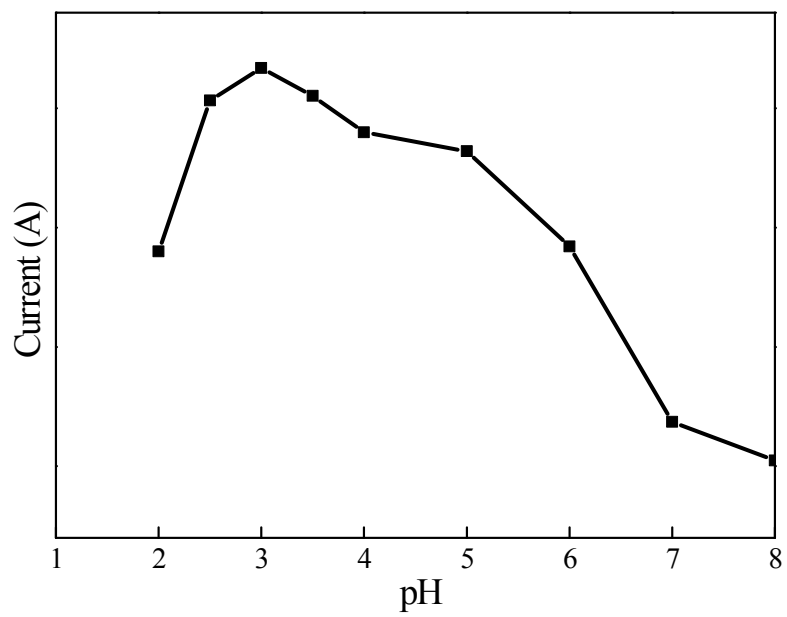
**Fig. S2** FT-IR spectra of the BN whiskers



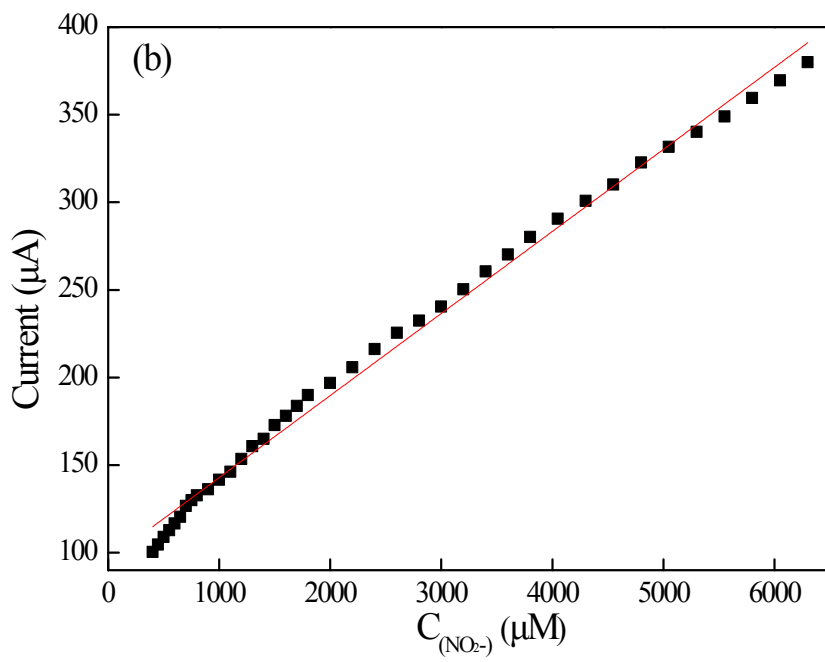
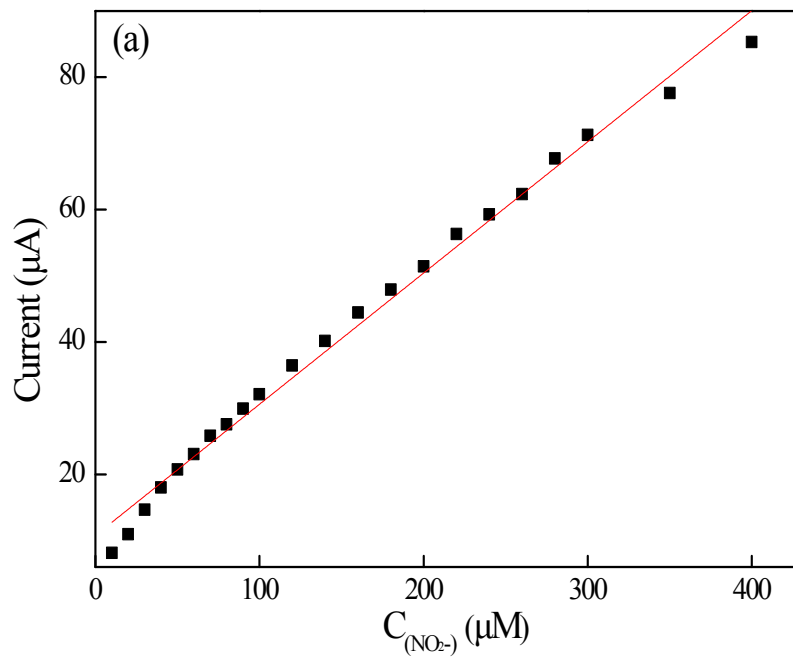
**Fig. S3** (a) N<sub>2</sub> adsorption-desorption isotherms and (b) pore size distribution of the poorly crystallized BN whiskers

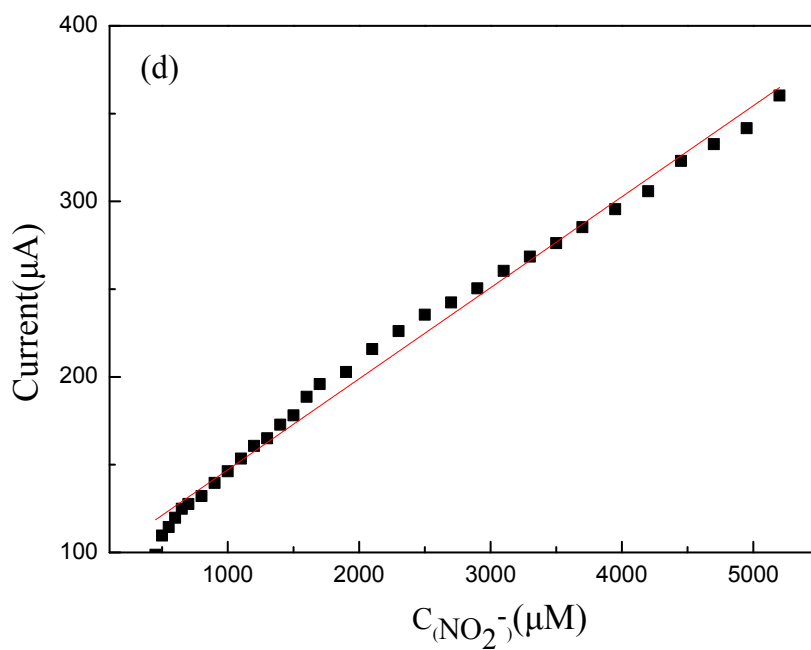
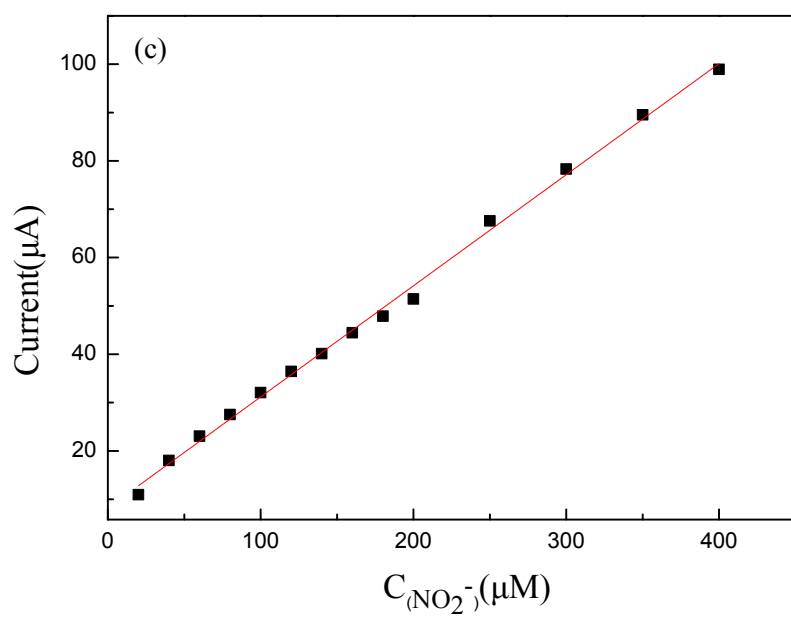


**Fig. S4** (a) The plot of anodic/cathodic peak currents versus the square root of scan rate; (b) Nyquist plots of the BN whisker electrode and bare electrode without BN whisker in 0.10 M KCl containing 5 mM  $[\text{Fe}(\text{CN})_6]^{3-/4-}$

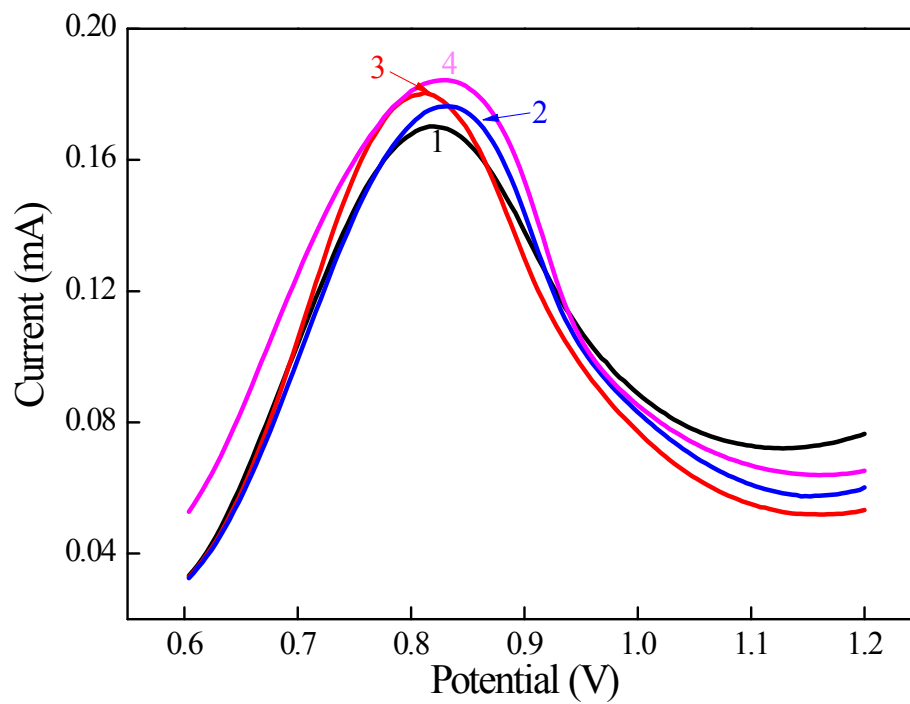


**Fig. S5** The relationship between the oxidation peak currents and the pH values





**Fig. S6** The relationship between the current and corresponding concentration of  $\text{NaNO}_2$  (a,b): the poorly crystallized BN whiskers electrode; (c,d): the highly crystallized BN whiskers electrode



**Fig. S7** DPV curves of 4 different BN whiskers electrodes