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## Controllable One-Dimension Nanostructures of CuTNAP for Field Emission Properties

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For energy dispersive X-ray spectroscopy (EDS) analysis, The CuTNAP nanowires (NWs) was confirmed by the elemental signature in the energy depressive X-microanalysis (Fig. S1). The results of energy depressive spectra show that the CuTNAP NWs are composed of copper, carbon and nitrogen elements (Fig. S1). Furthermor, EDS analysis reveals that the atomic ratio of Cu to N is about 1: 4. These EDS spectra clearly demonstrate the successful preparing complexes nanostructures of CuTNAP.



Fig.S1 Energy depressive spectum of CuTNAP NWs.



Fig. S2 SEM images of CuTNAP (a) NPs, (b) High magnification image of NPs.



**Fig. S3** Cyclic voltammogram of CuTNAP ( $10^{-3}$  M) on glassy carbon in 0.1 mol/L *n*-Bu<sub>4</sub>NPF<sub>6</sub> CH<sub>3</sub>CN solution.