Supporting Information

An Electrochemical Sensor on the MOF/ZnO Composite for Highly Sensitive Detection of Cu (II) in river Water Sample

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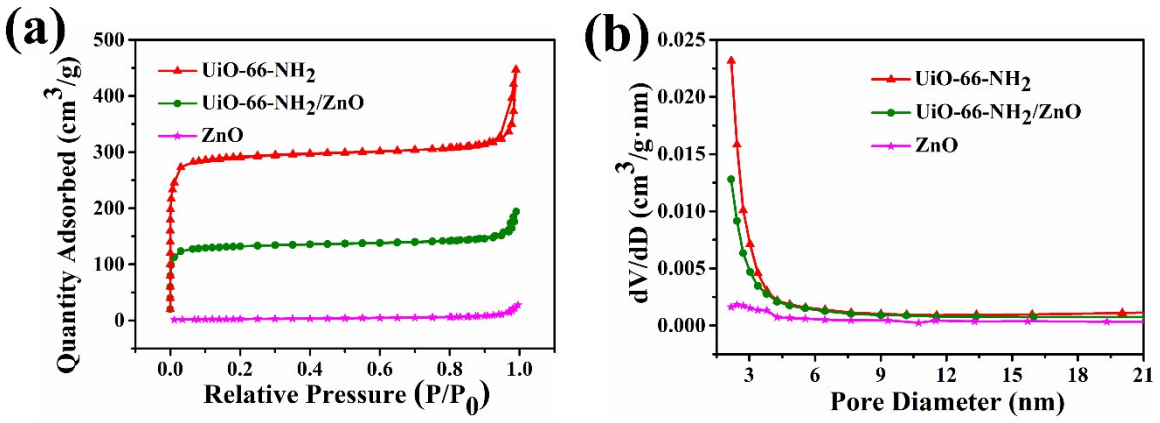

Fig. S1. (a) N_2 adsorption−desorption isotherms of UiO-66-NH_2, ZnO and UiO-66-NH_2/ZnO (b) pore size distributions of UiO-66-NH_2, ZnO and UiO-66-NH_2/ZnO.

Table S1 BET surface areas and pore volumes of UiO-66-NH_2, ZnO and UiO-66-NH_2/ZnO

Samples	Specific surface area ($m^2 \cdot g^{-1}$)	Pore volume ($cm^3 \cdot g^{-1}$)
UiO-66-NH_2	933.2075	0.6914
ZnO	9.4848	0.0425
UiO-66-NH_2/ZnO	433.4271	0.3004

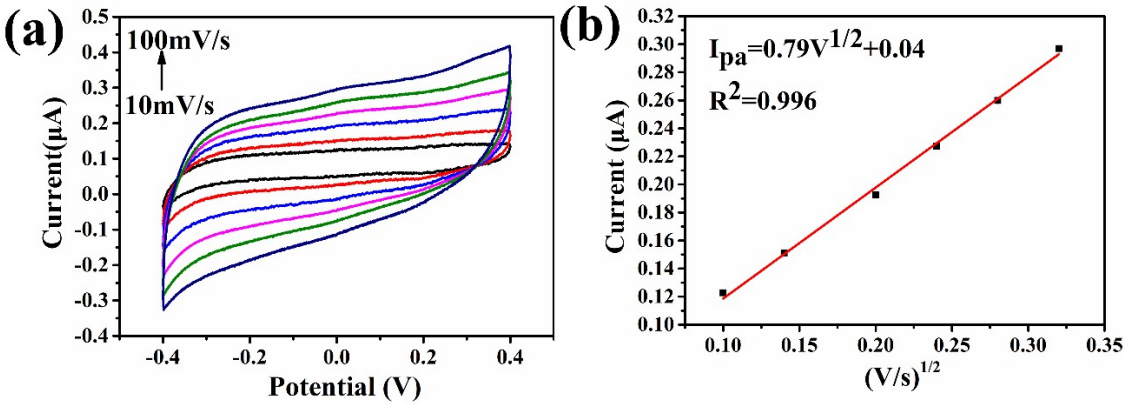

Figure S2. CV curves of 3.0 μM Cu(II) for bare GCE in 0.1 M HAc-NaAc solution (pH = 5.0) at different scan rates: 10-100 mV/s. (b) Plots of linear relationship between the anodic peak currents (I_{pa}) and the square root of scan ($V^{1/2}$).

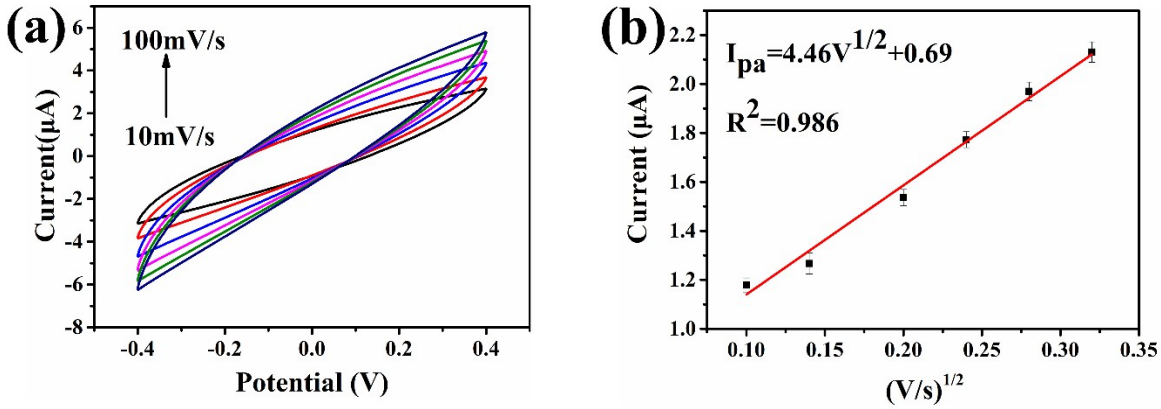

Figure S3. CV curves of 3.0 μM Cu(II) for UiO-66-NH_2/GCE in 0.1 M HAc-NaAc solution (pH = 5.0) at different scan rates: 10-100 mV/s. (b) Plots of linear relationship between the anodic peak currents (I_{pa}) and the square root of scan ($V^{1/2}$).

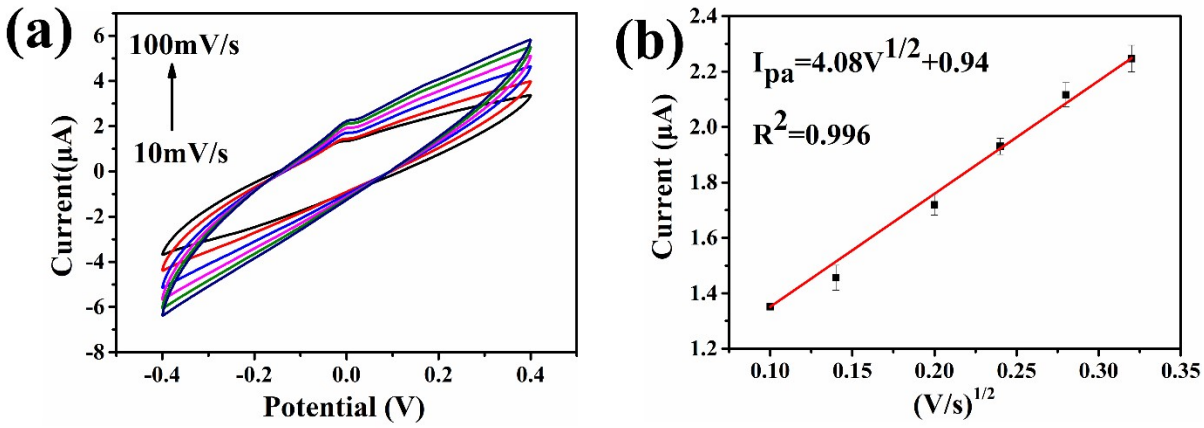

Figure S4. CV curves of 3.0 μM Cu(II) for ZnO/GCE in 0.1 M HAc-NaAc solution (pH = 5.0) at different scan rates: 10-100 mV/s. (b) Plots of linear relationship between the anodic peak currents (I_{pa}) and the square root of scan ($V^{1/2}$).