Fluorescence sensor based on molecularly imprinted polymers and upconversion micro-particles@metal-organic frameworks for detection of fipronil

Supporting information

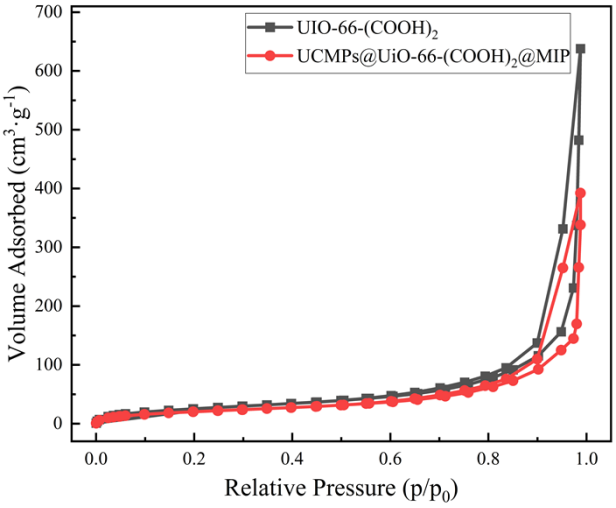
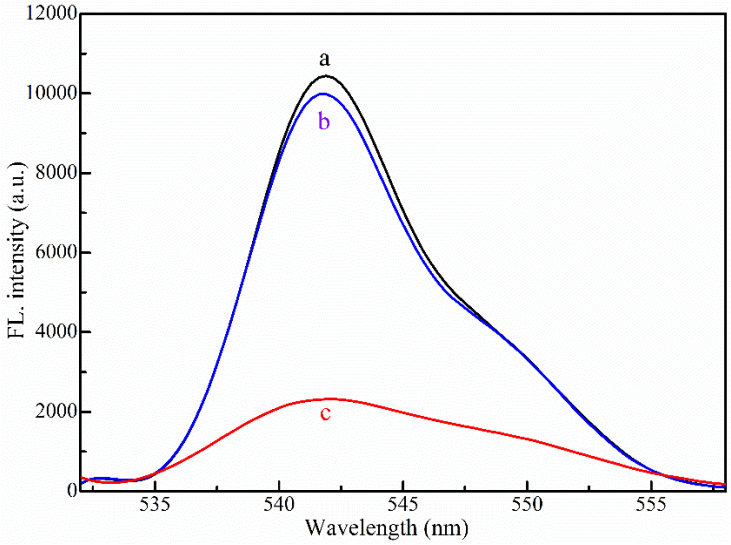


Fig. S1 N_2 adsorption-desorption isotherms of UiO-66-$(COOH)_2$ and UCMPs@UiO-66-



$(COOH)_2$@MIP

Fig. S2 Fluorescence Response and Quenching Mechanism of UCMPs@UiO-66-$(COOH)_2$@MIP to Fipronil (a)-UCMPs@UiO-66-$(COOH)_2$@NIP; (b)-UCMPs@UiO-66-$(COOH)_2$@MIP after template elution; and (c)-before template elution.

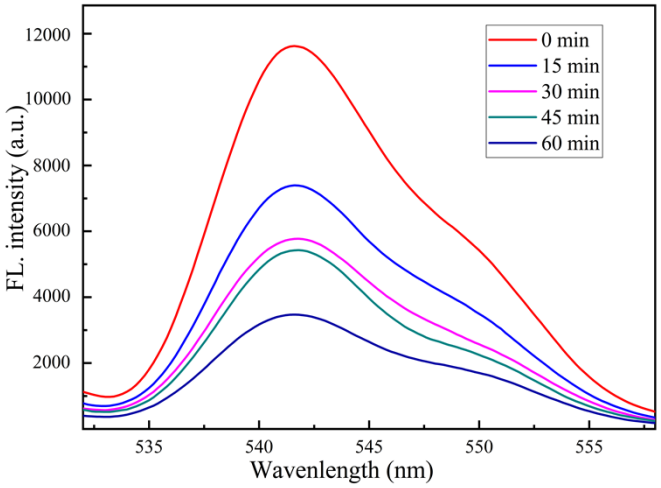


Fig. S3 The effect of adsorption time on fluorescence intensity

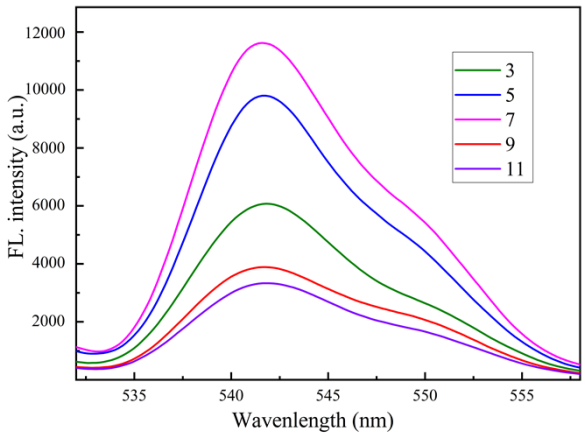


Fig. S4 The effect of pH on fluorescence intensity

Table S1. Summary of the surface area, pore size , and pore volume of the prepared materials.

BJH-adsorption summary			
Sample	Specific surface area ($m^2 \cdot g^{-1}$)	Average pore size (nm)	Total pore volume ($cm^3 \cdot g^{-1}$)
UiO-66-$(COOH)_2$	98.65	3.41	0.242
UCMPs@UiO-66-	79.01	4.06	0.194

$(COOH)_2$@MIP