

Supplementary Material

Post-synthetic modified luminescent metal-organic framework for the detection of berberine hydrochloride in traditional Chinese herb

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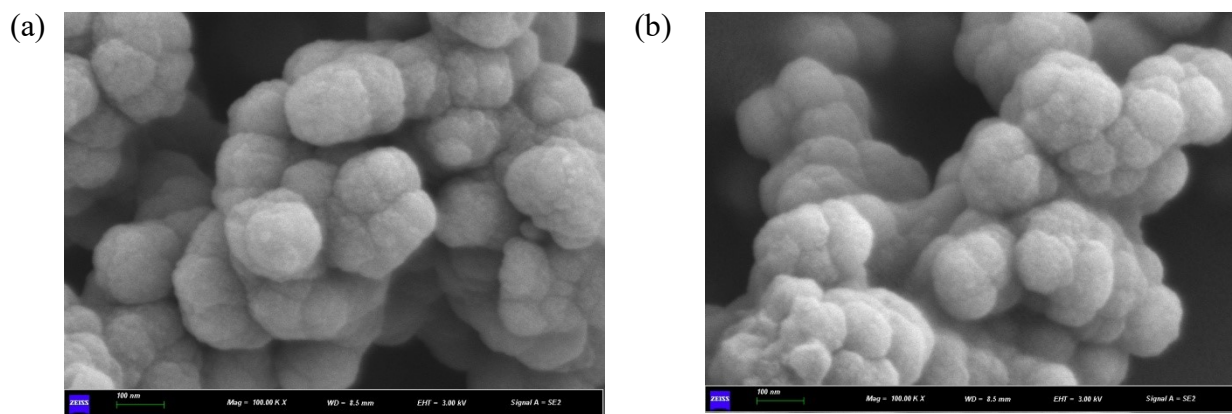


Fig. S1 SEM images of (a) UiO-66-NH₂ and (b) UiO-66-PSM.



Fig. S2 Photo image of UiO-66-NH₂ and UiO-66-PSM under 365 nm UV light.

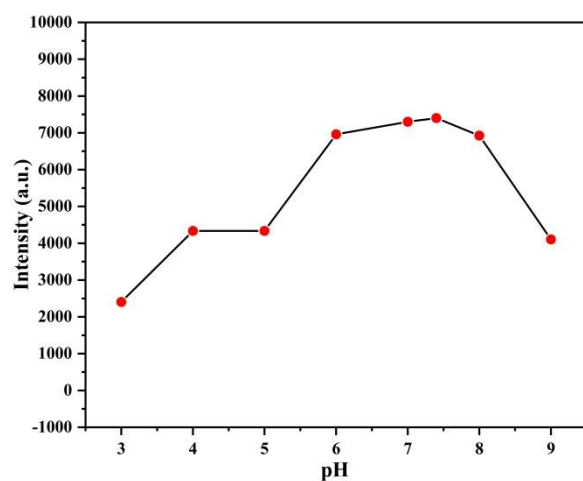


Fig. S3 Fluorescence intensity of UiO-66-PSM at different pH values.

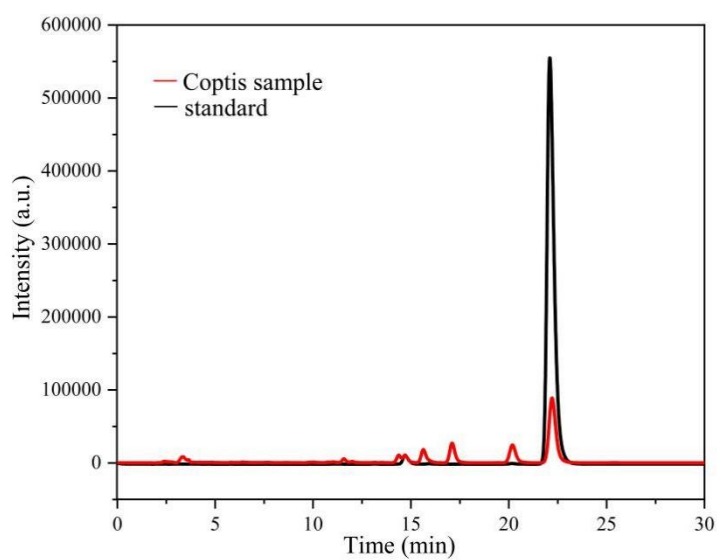


Fig. S4 HPLC-UV chromatograms of BBH standard solution and *Coptis* sample.

Table S1 Comparison of the present method with other reported methods for BBH determination

Methods	Linear range	LOD	Response time	Ref.
HPLC	10–2360 ng/mL	0.6 ng/mL	2.5 min	1
Colorimetry	0.05–0.4 $\mu\text{mol/L}$	13 n $\mu\text{mol/L}$	5 min	2
Electrochemistry	0.25–30 $\mu\text{mol/L}$	140 n $\mu\text{mol/L}$	30s	3
Fluorescence	1–100 $\mu\text{mol/L}$	75 n $\mu\text{mol/L}$	2 min	4
Fluorescence	0.5–30 $\mu\text{mol/L}$	50 n $\mu\text{mol/L}$	10 min	5
Fluorescence	0–200 $\mu\text{mol/L}$	57.35 n $\mu\text{mol/L}$	—	6
Fluorescence	0.5–320 $\mu\text{mol/L}$	78 n $\mu\text{mol/L}$	15 min	7
Fluorescence	1×10^3 – 1×10^6 $\mu\text{mol/L}$	0.3 n $\mu\text{mol/L}$	—	8
Fluorescence	10–130 $\mu\text{mol/L}$	3.5 n $\mu\text{mol/L}$	10 min	9
Fluorescence	3.3×10^{-6} – 6.6×10^{-4} $\mu\text{mol/L}$	96 n $\mu\text{mol/L}$	30 s	This work

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