Electronic Supplementary Material (ESI) for RSC Advances.

Synthesis of Magnetic Core-Shell Fe_3O_4@PDA@Cu-MOFs Composites for Enrichment of MC-LR by MALDI-TOF-MS Analysis

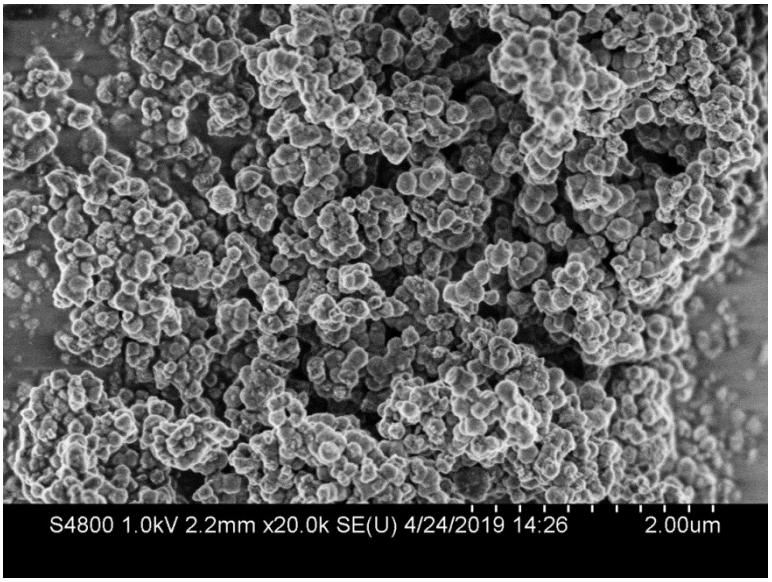

Fig. S1. SEM images of Fe_3O_4@PDA@Cu-MOFs.

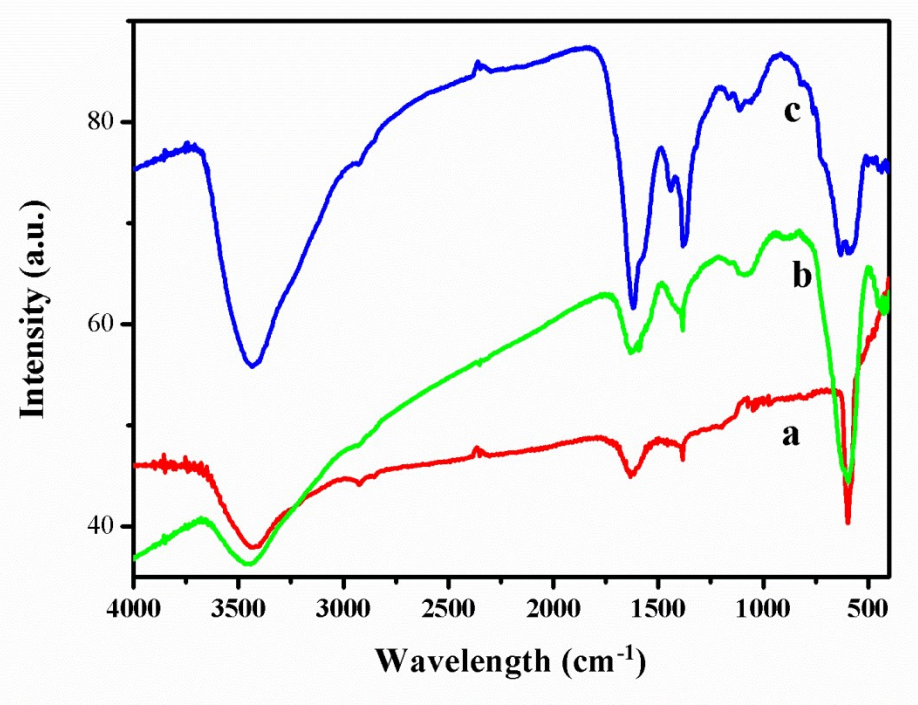

Fig. S2. FT-IR spectra of Fe_3O_4 (a), Fe_3O_4@PDA (b) and Fe_3O_4@PDA@Cu-MOFs composites (c).

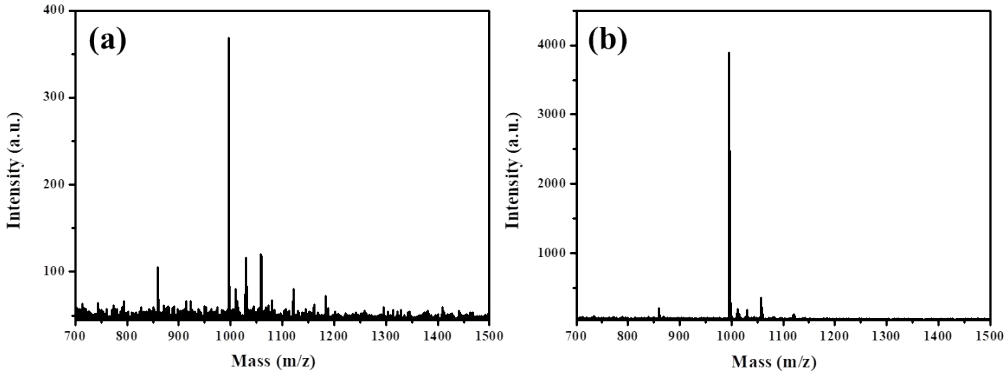

Fig. S3. The MALDI-TOF MS of 1 μg/L MC-LR before (a) and after (b) enrichment by the Fe_3O_4@PDA@Cu-MOFs.

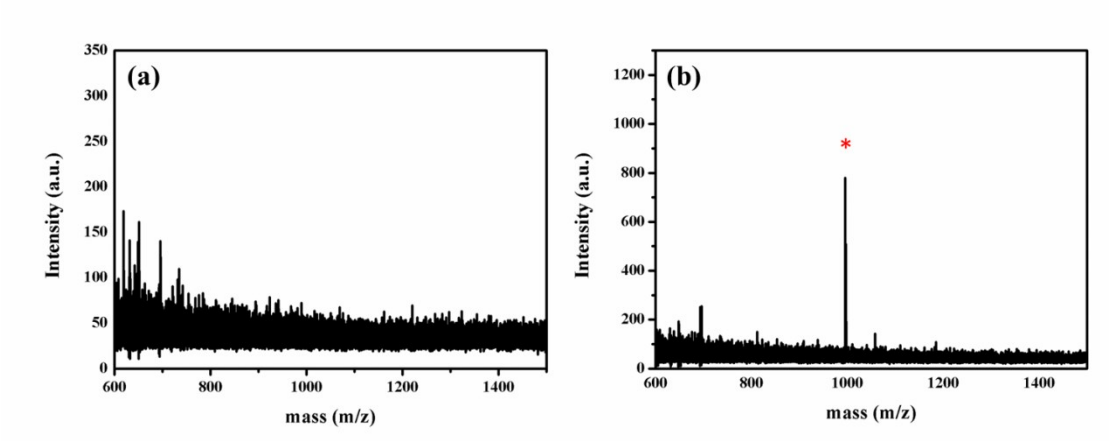

Fig. S4. MALDI-TOF MS of MC-LR before (a) and after (b) enrichment using the Fe_3O_4@PDA@Cu-MOFs composites from a real water sample.

Table S1 Comparison of the LODs of different methods for MC-LR analysis.

Method	LOD	Reference
Colorimetric	0.368 μg/L	[1]
Optical biosensor	0.05 μg/L	[2]
Chemiluminescent	0.03 μg/L	[3]
Fluorescence	0.035 μg/L	[4]
Aptamer	0.1 μg/L	[5]
HPLC-MS	43 μg/L	[6]
MALDI-TOF MS	0.015μg/L	Our Method

Notes and references

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