Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supplementary Material

Turn on Fluorescence Detection of Ciprofloxacin in Tablet Based on Lanthanide Coordination Polymer Nanoparticles

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Figure S1

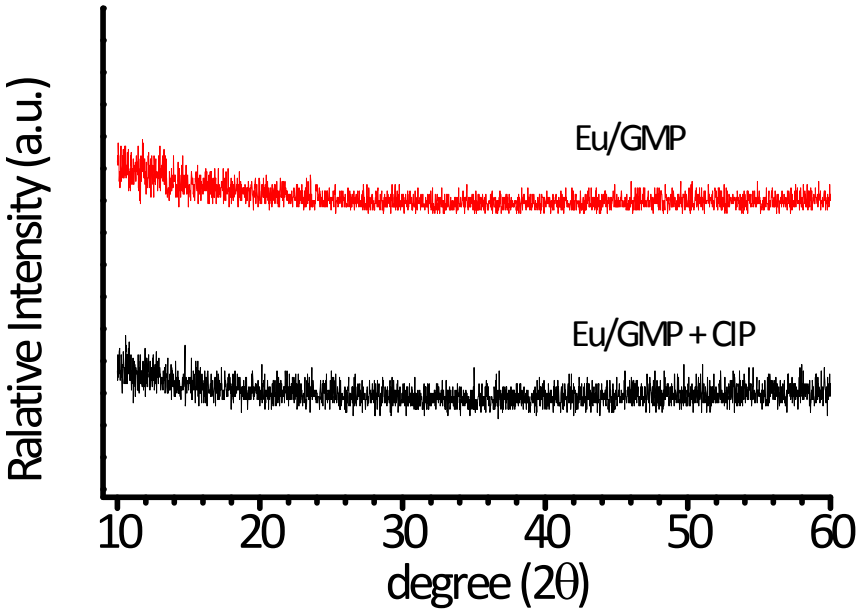


Figure S1 X-ray diffraction (XRD) spectra of Eu/GMP NPs (a) and Eu/GMP NPs in the presence of CIP (b).

Figure S2

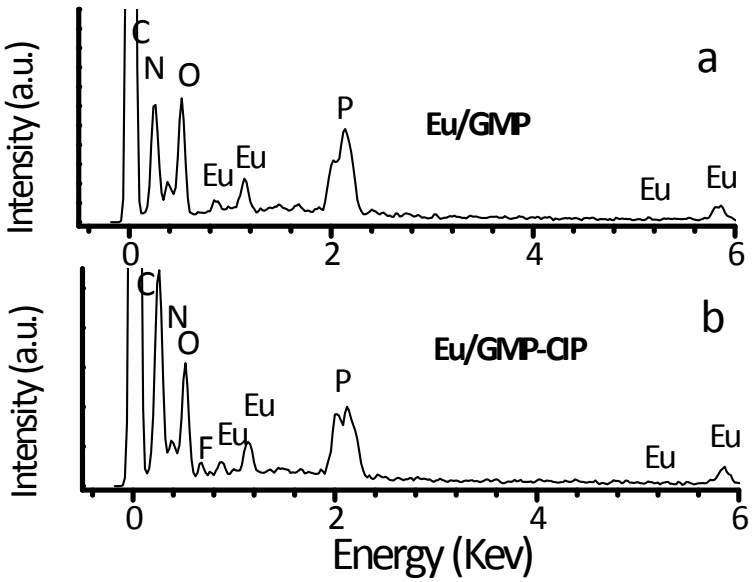


Figure S2 Energy-dispersive X-ray (EDX) spectra of Eu/GMP NPs (a) and Eu/GMP NPs after the addition of CIP (b).

Figure S3

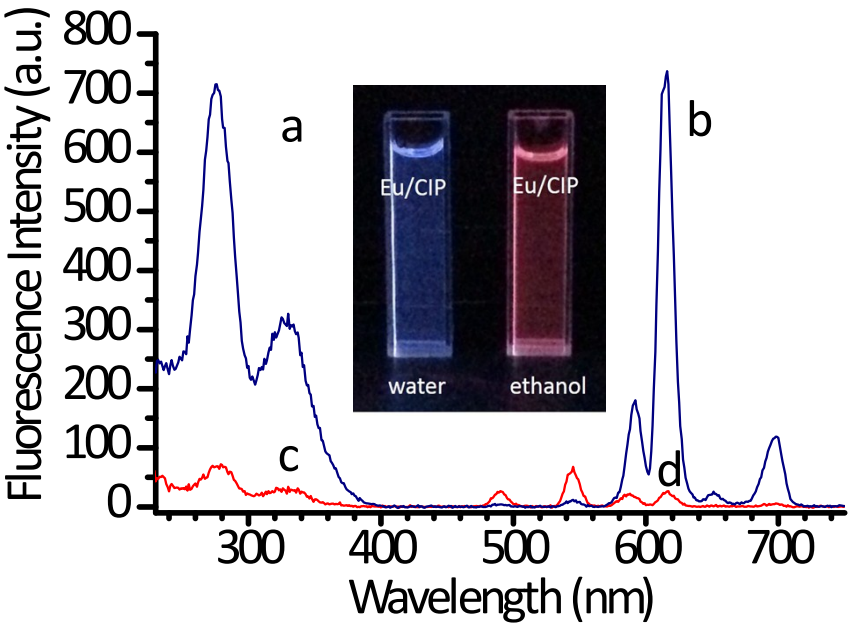


Figure S3 Excitation (left: a and c) and emission (right: b and d) spectra of Eu-CIP in water solutions (c, d) and in ethanol (a, b). (Inset is their fluorescences under a UV lamp).

Figure S4

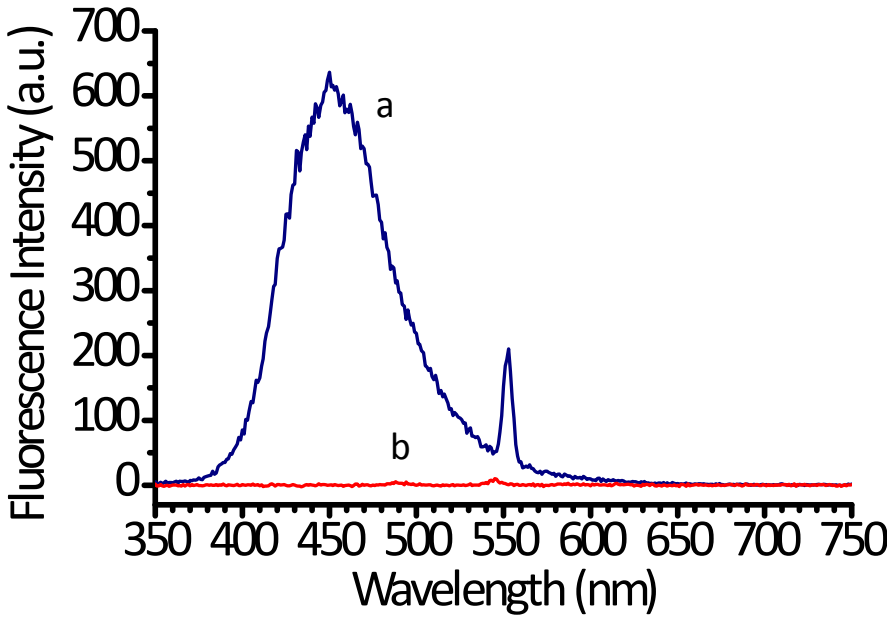


Figure S4 Fluorescence of CIP under fluorescence mode (a) and time-resolve fluorescence mode with UV excitation (b).

Figure S5

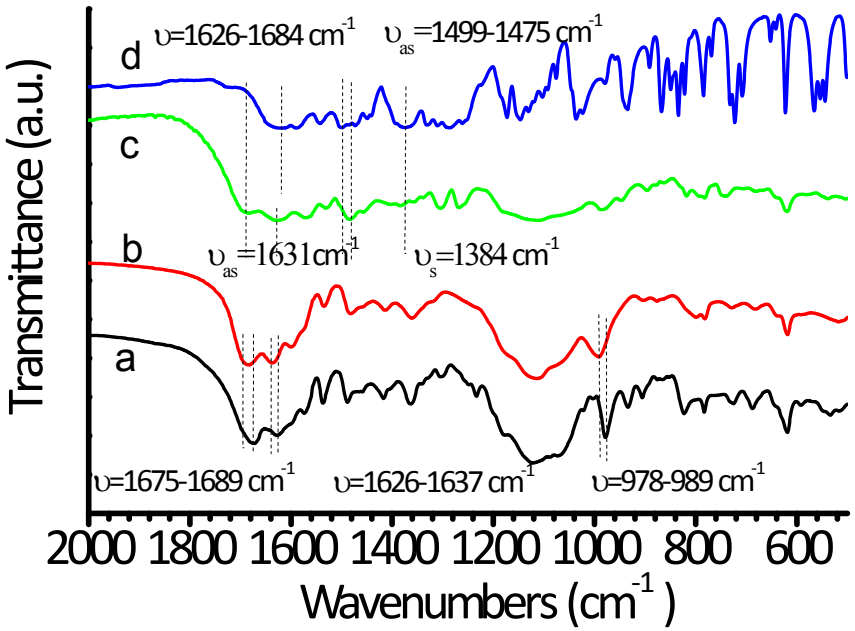


Figure S5 FTIR spectra of GMP (a), Eu/GMP NPs (b), Eu/GMP-CIP NPs (c), and pure CIP (d). v: stretching vibration; δ: scissoring vibration.

Figure S6

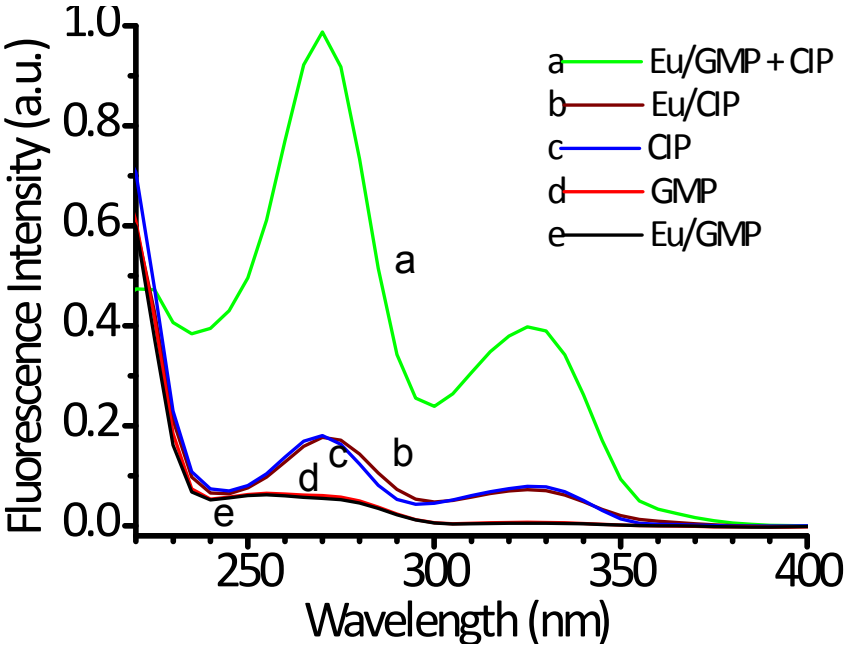
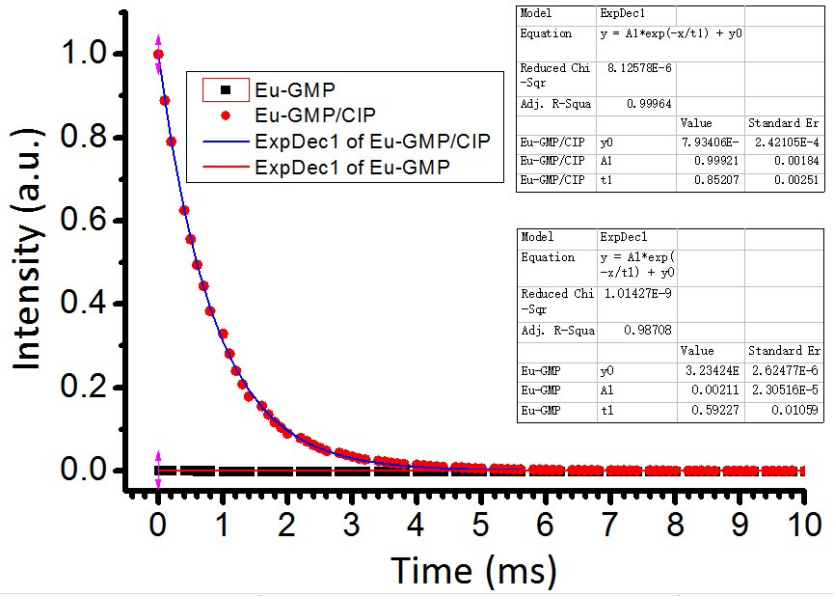


Figure S6 UV-vis spectra of Eu/GMP NPs (1:1, molar ratio), Eu/GMP NPs after the addition of CIP (1:1:6, molar ratio), Eu/CIP (1:1, molar ratio), CIP and GMP in HEPES (pH 7.4).

Figure S7



Model	ExpDec1		
Equation	y = A1*exp(-x/t1) + y0		
Reduced Chi-Sqr	8.12578E-6		
Adj. R-Squa	0.99964		
		Value	Standard Er
Eu-GMP/CIP	y0	7.93406E-	2.42105E-4
Eu-GMP/CIP	A1	0.99921	0.00184
Eu-GMP/CIP	t1	0.85207	0.00251

Model	ExpDec1		
Equation	y = A1*exp(-x/t1) + y0		
Reduced Chi-Sqr	1.01427E-9		
Adj. R-Squa	0.98708		
		Value	Standard Er
Eu-GMP	y0	3.23424E	2.62477E-6
Eu-GMP	A1	0.00211	2.30516E-5
Eu-GMP	t1	0.59227	0.01059

Figure S7. Fluorescence lifetimes of Eu/GMP NPs (a) and Eu/GMP NPs in the presence of CIP (b).

Figure S8

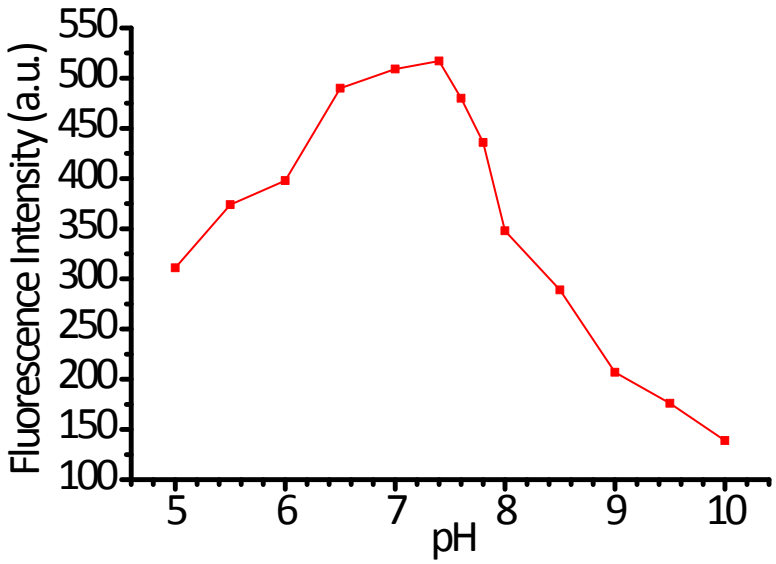


Figure S8. Effect of pH on fluorescence intensity of Eu/GMP NPs in the presence of CIP (20 μM).

Figure S9

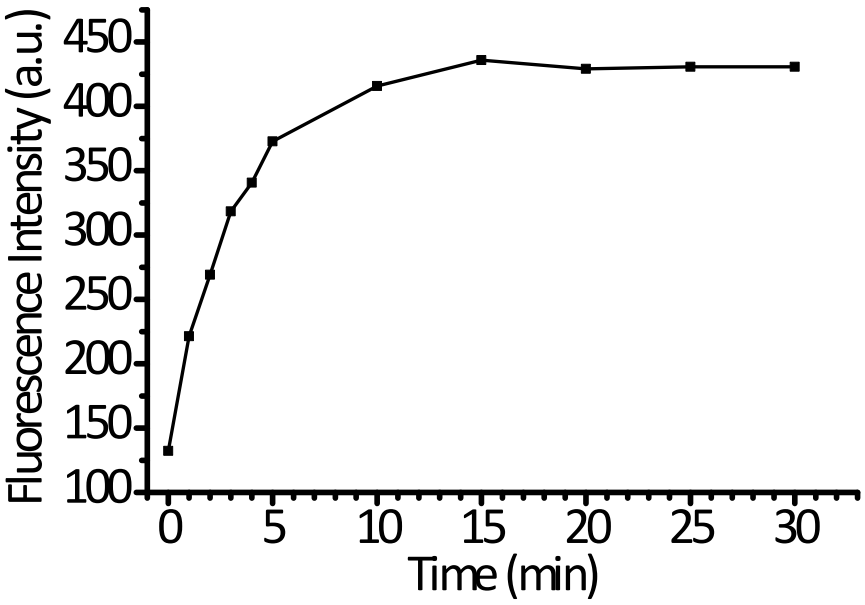


Figure S9. Effect of reaction time on the fluorescence intensity of Eu/GMP NPs at 615 nm in the presence of CIP (20 μM)