Electronic Supplementary Material (ESI) for RSC Advances.
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Supporting information

Europium^{3+}-doped Ionogels-Functionalized Carbon dots Monolith with bright white photoluminescence

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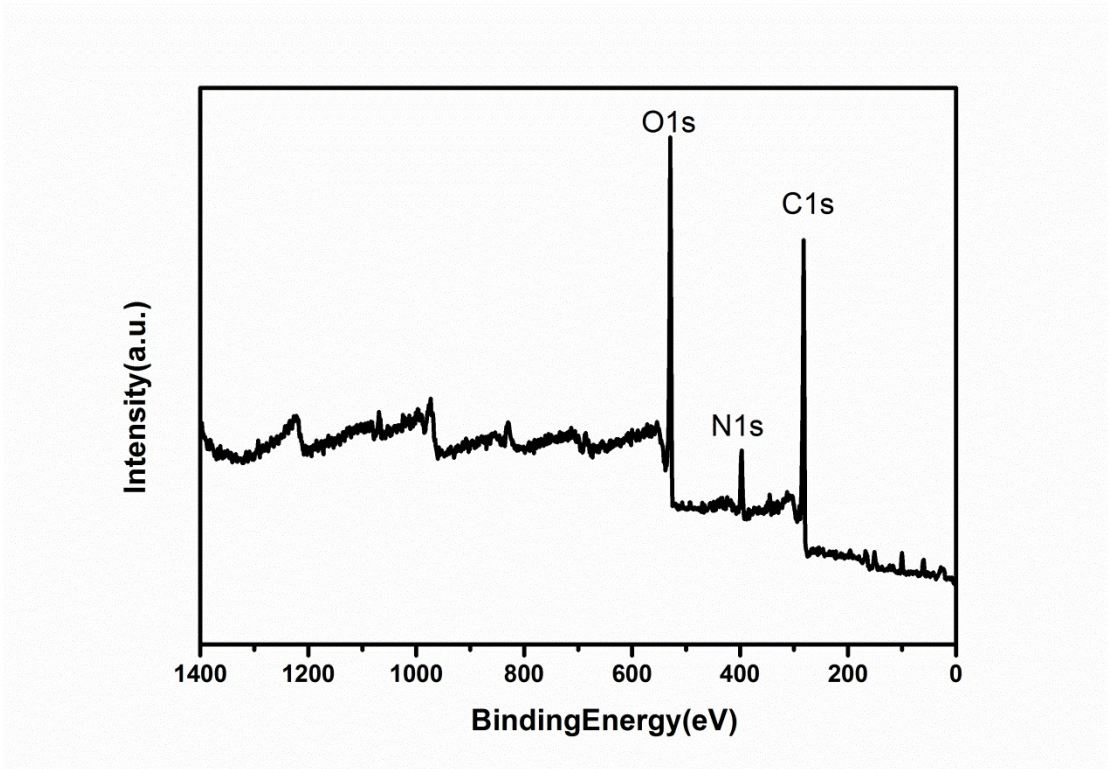

Fig.S1 XPS spectra of CDs.

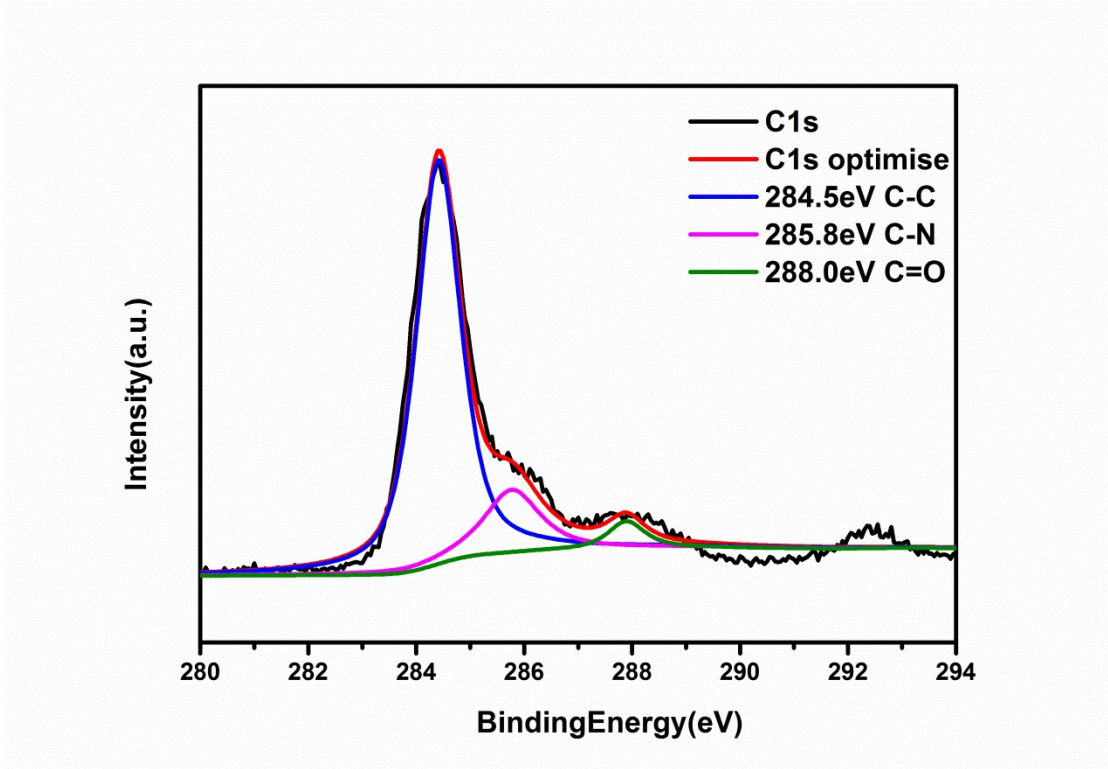

Fig.S2 C1s spectra of as-prepared CDs.

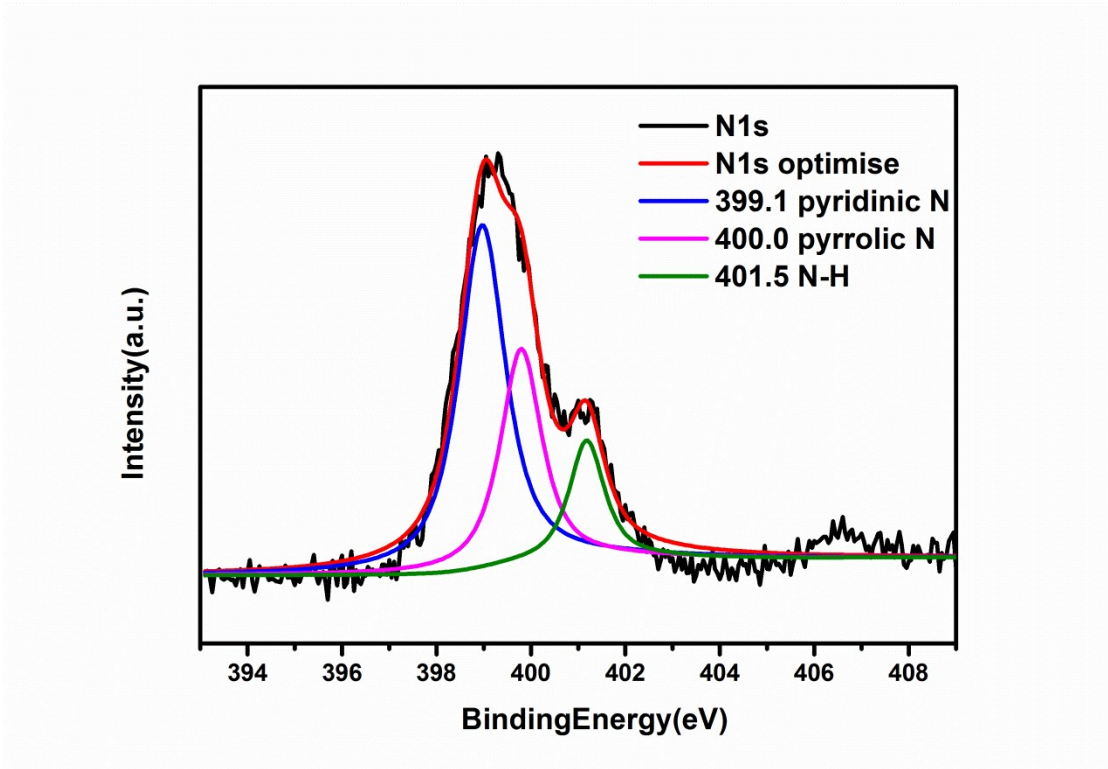

Fig.S3 N1s spectra of as-prepared CDs.

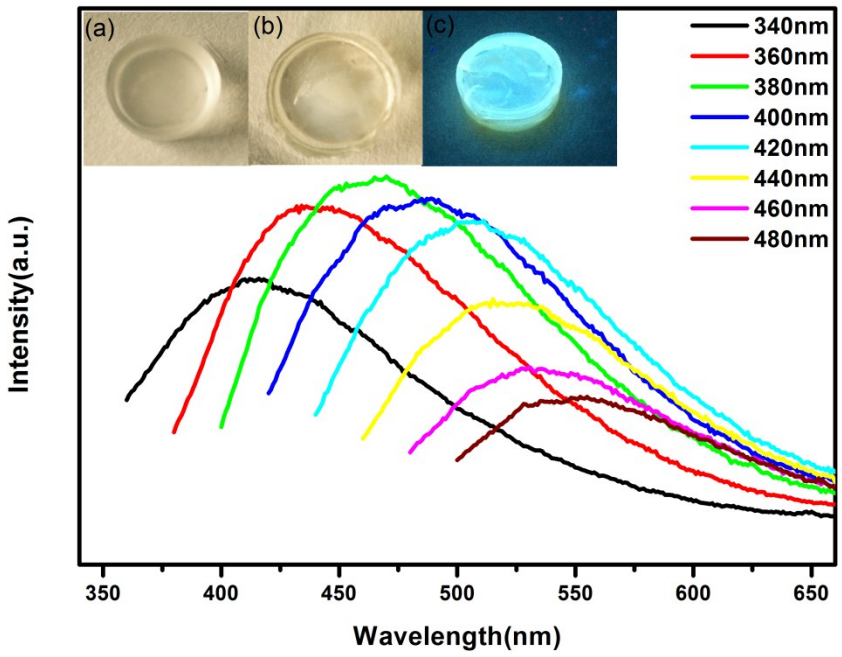

Fig.S4 PL spectra of the ionogels-functionalized CDs monolith; inset: optical photograph of ionogels monolith(a), ionogels-functionalized CDs monoliths(b) and ionogels-functionalized CDs monoliths upon UV light (365nm) illumination(c).

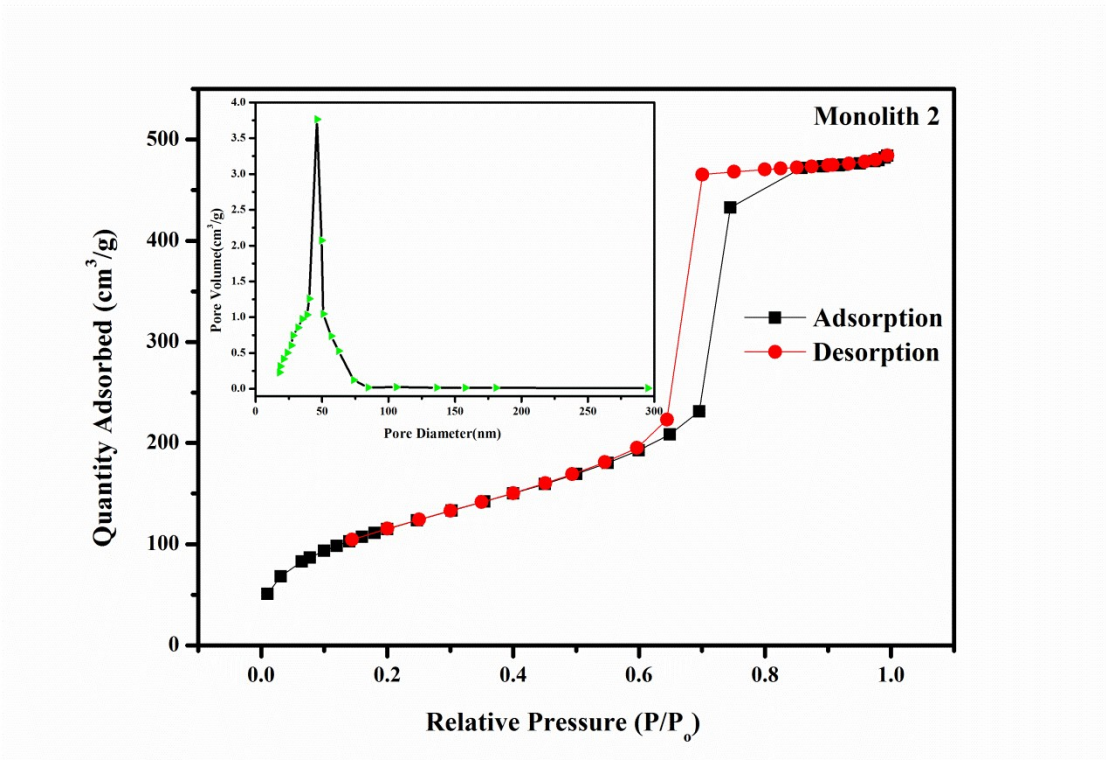

Fig.S5 N_2 Adsorption–desorption isotherms of the silica-based ionogels monolith 2; inset: corresponding pore size distribution.

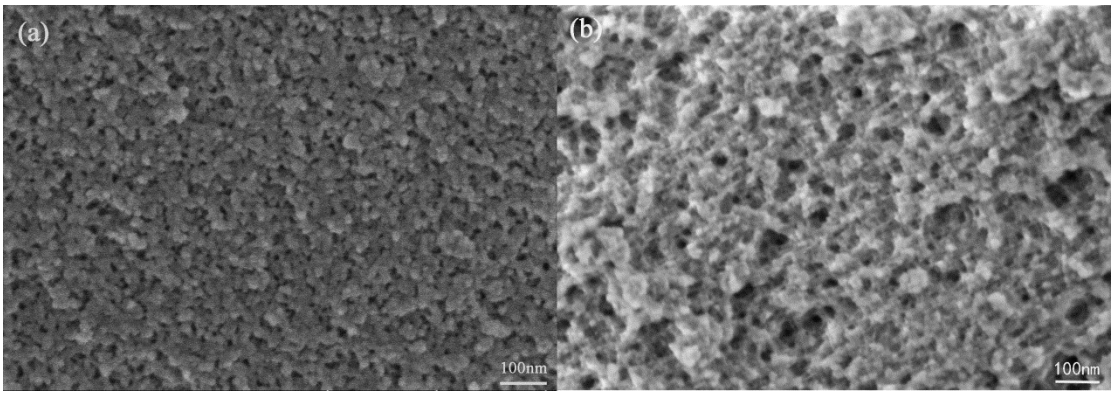

Fig.S6 (a) SEM of ionogels-functionalized CDs monolith 1; (b) SEM of europium^{3+}-doped ionogels-functionalized CDs monolith 1.

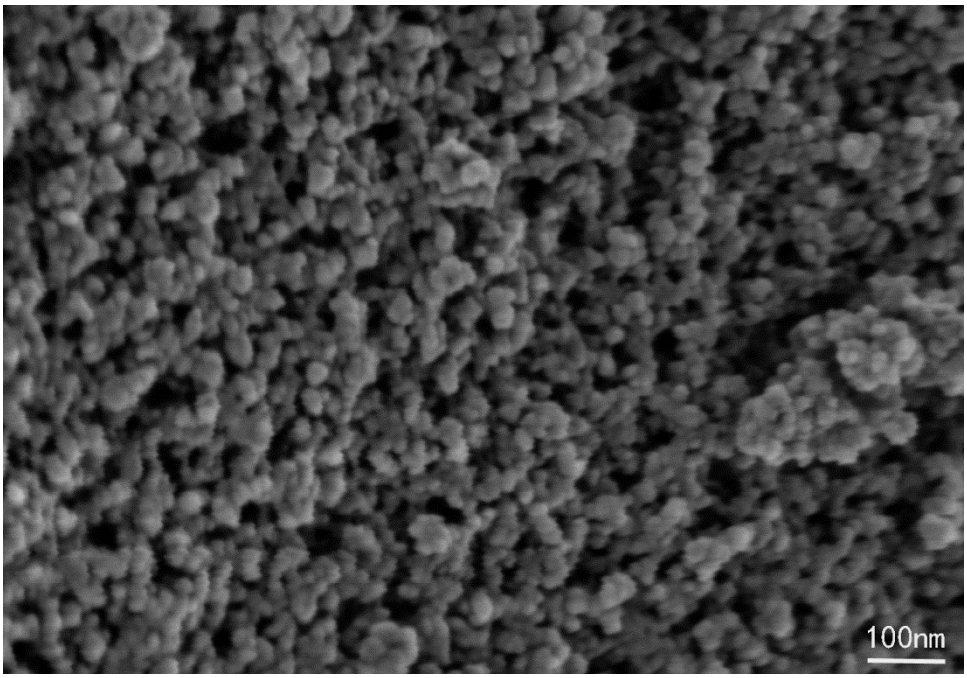

Fig.S7 SEM image of the ionogels monolith without any dopants.

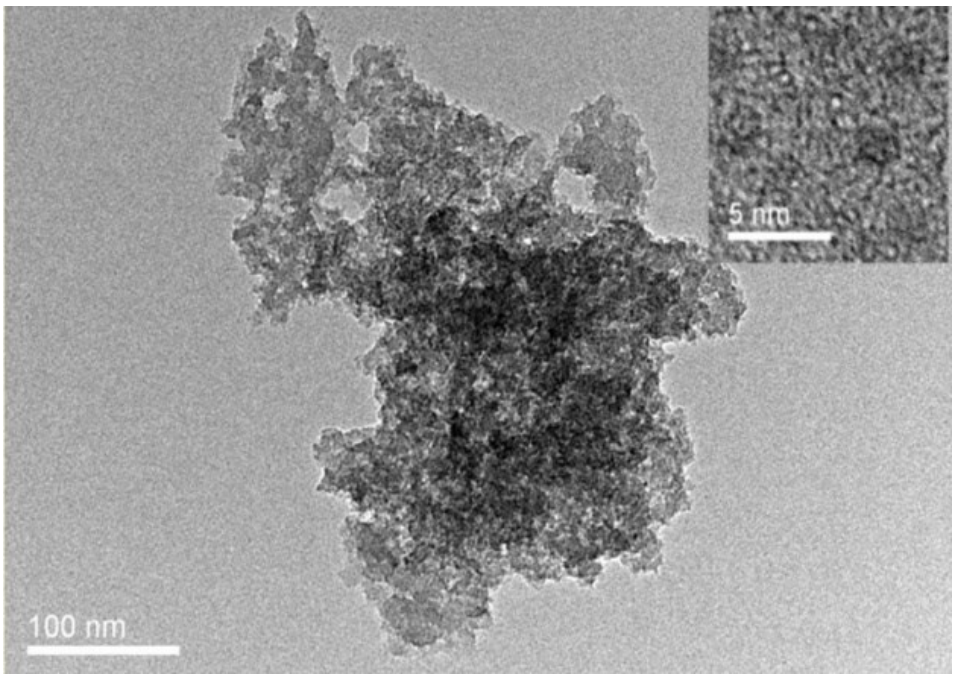

Fig.S8 TEM images of the ionogels-functionalized CDs monolith. Inset: TEM image of the CDs.

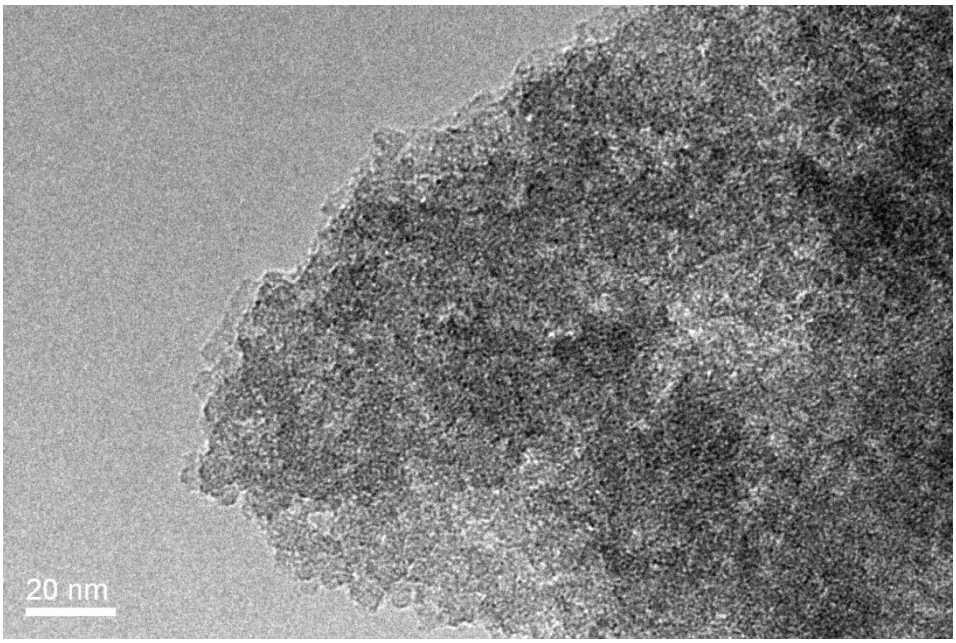

Fig.S9 TEM images of the ionogels-functionalized CDs monolith.

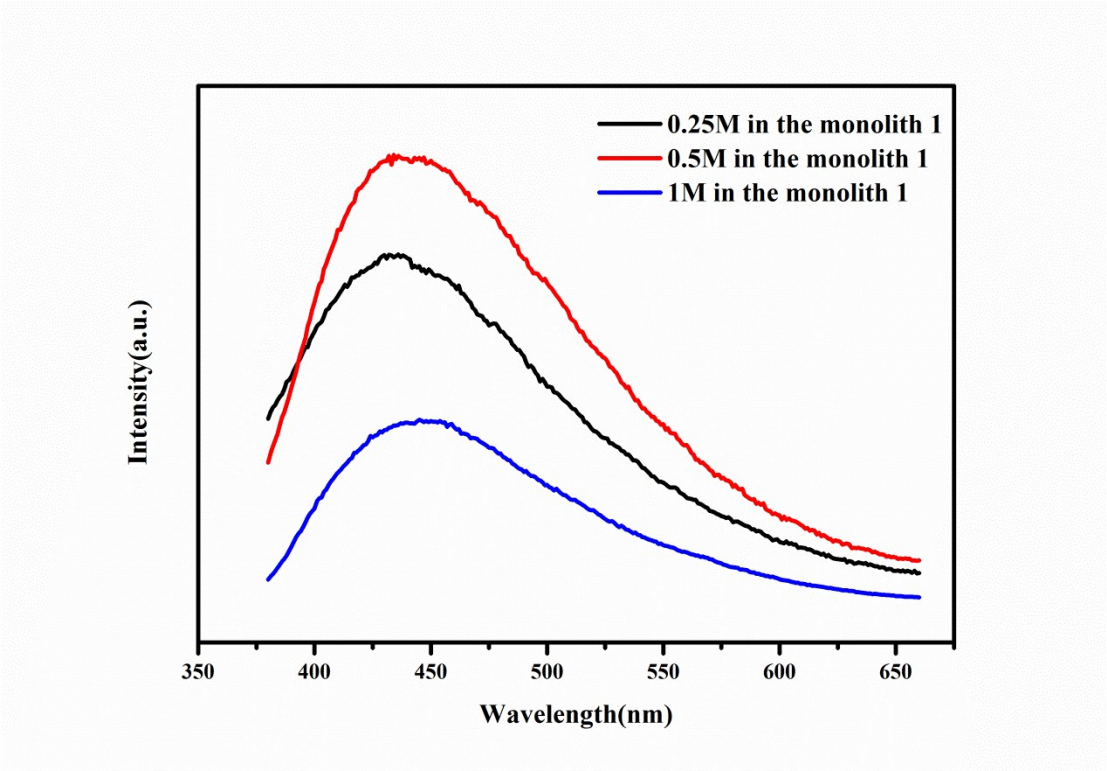

Fig.S10 The emission spectrum of CDs in monolith 1 for different concentration.

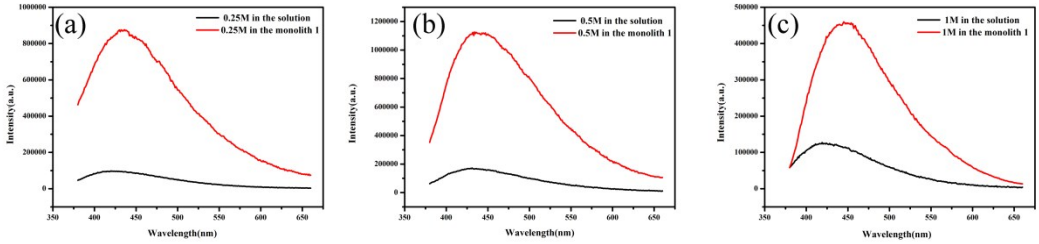

Fig.S11 (a) 0.25M CDs in solution and in the monolith 1, which has around 8 fold enhanced; (b) 0.5M CDs in different environment with around 5 fold enhanced; (c) 1M CDs with around 4 fold enhance after entrapped in the monolith1.

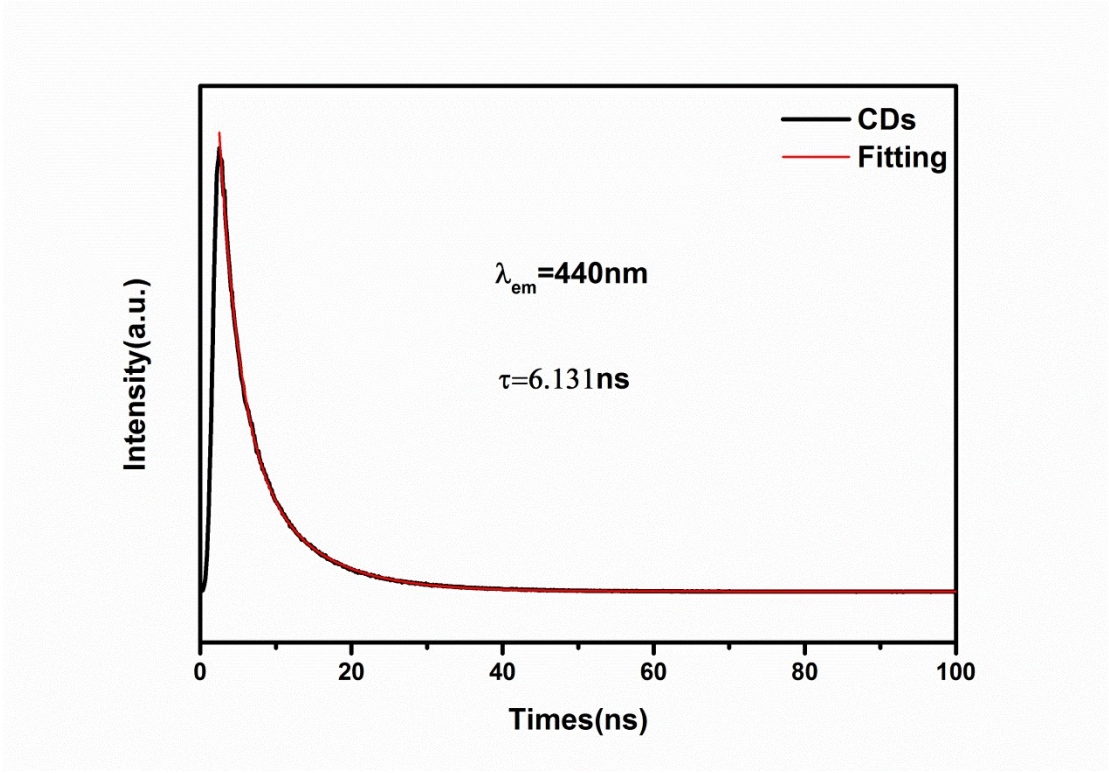

Fig.S12 Fluorescence decay profile of the ionogels-functionalized CDs monolith.

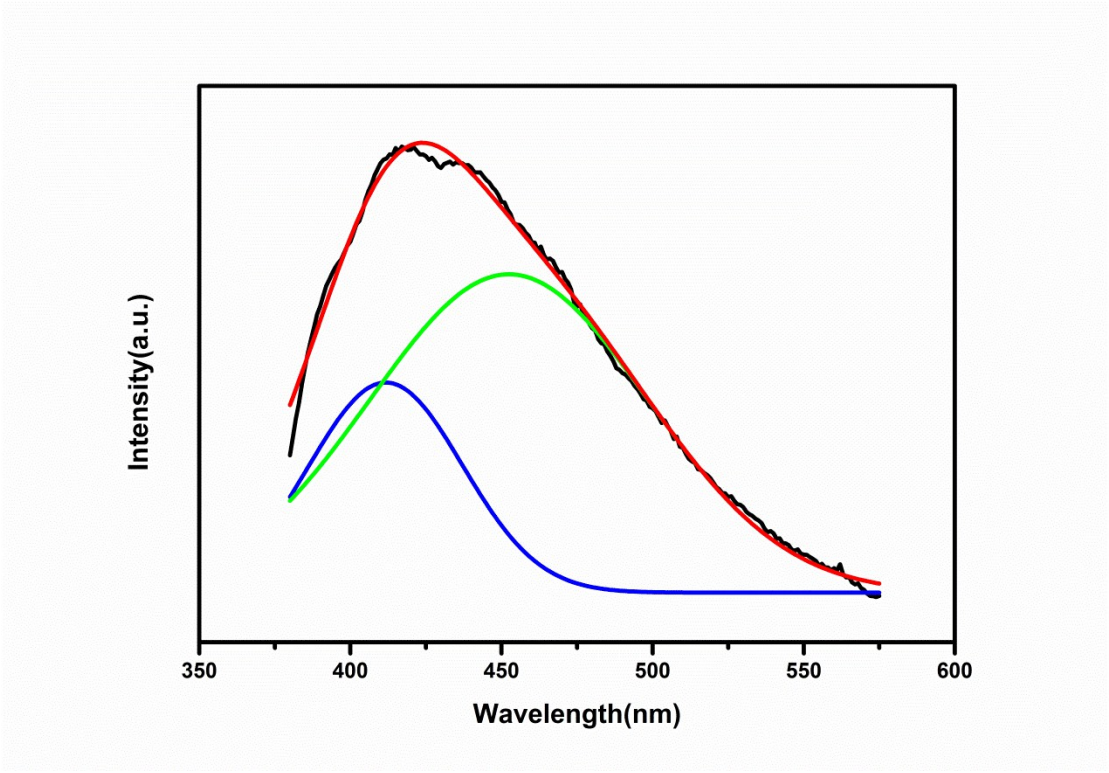

Fig.S13 PL emission of CDs excited by 360nm and fitted by two- Gaussian function which consistent with the fluorescence decay.

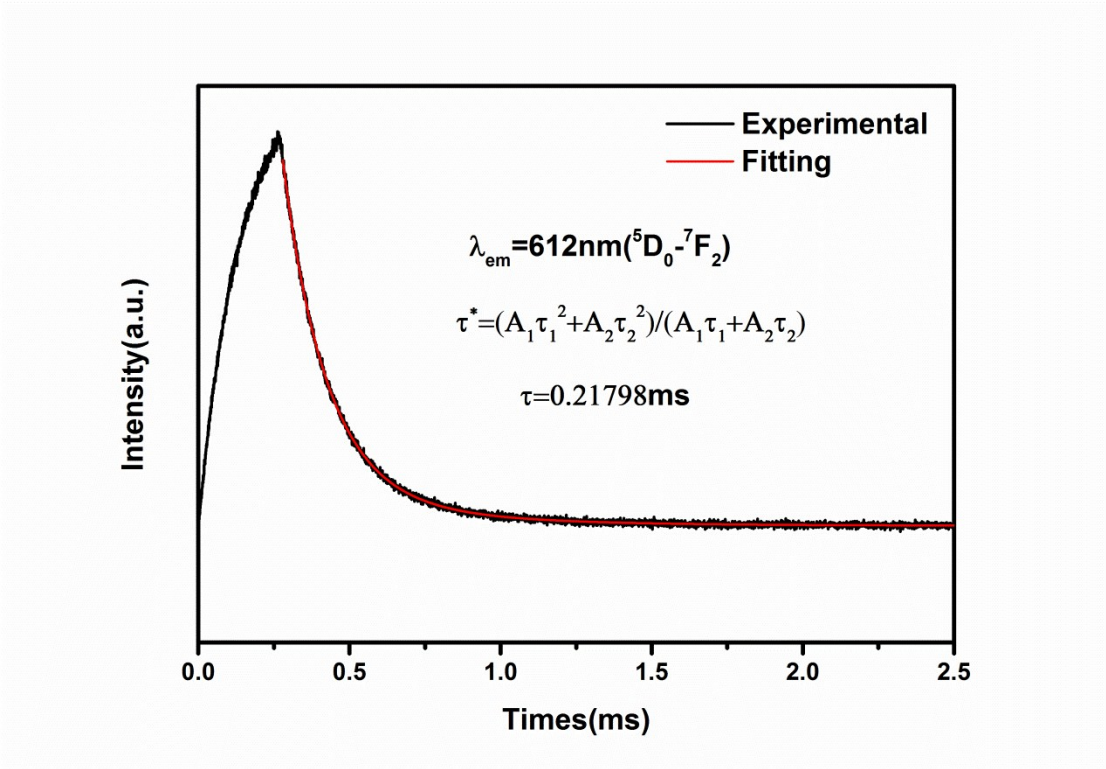

Fig.S14 Fluorescence decay profile of the europium^{3+}-doped ionogels-functionalized CDs monoliths monitored at 612nm.

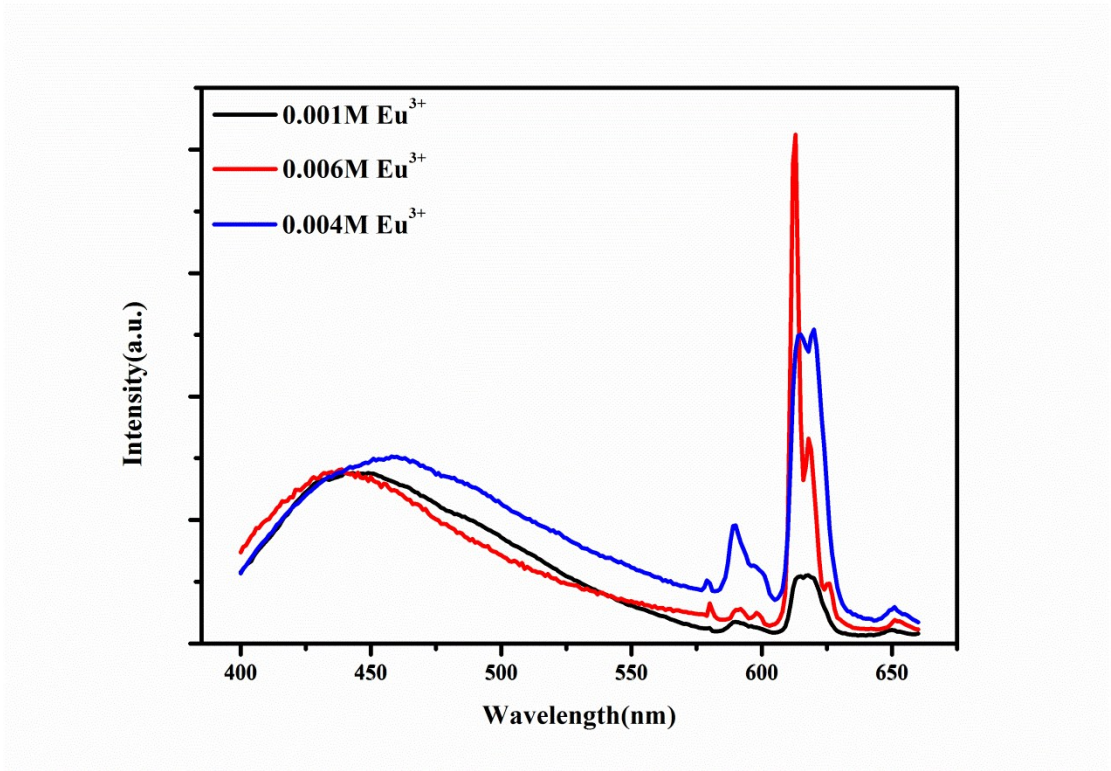

Fig.S15 PL of different concentration Eu^{3+}-doped ionogels-functionalized CDs monoliths.