

Supporting Information

Boronate affinity-based surface-imprinted quantum dots as novel fluorescent nanosensors for rapid and efficient detection of rutin

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Supporting Figures

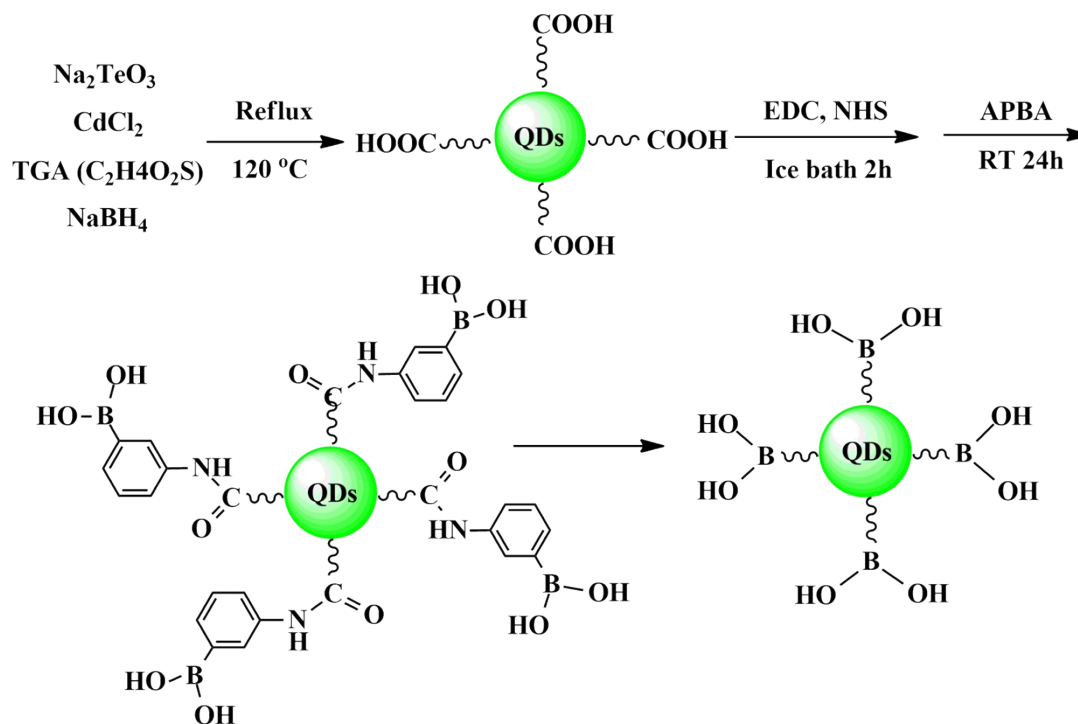


Fig. S1 Synthesis routes of BA-CdTe QDs.

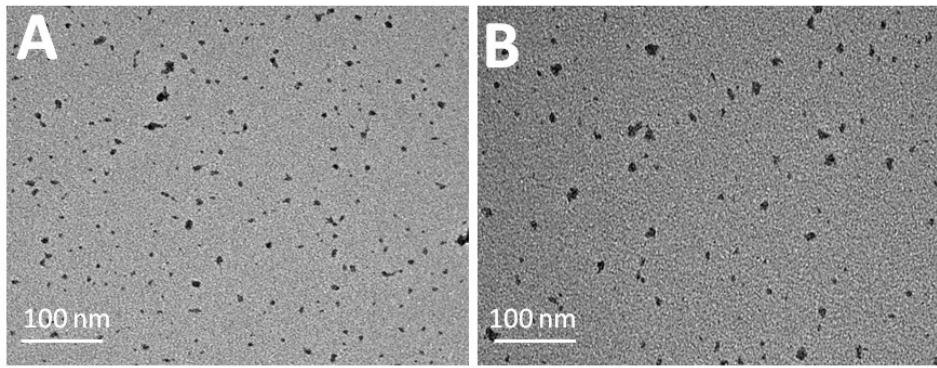


Fig. S2 TEM characterization of BA-CdTe QDs (A) and (B) BA-CdTe@MIPs QDs

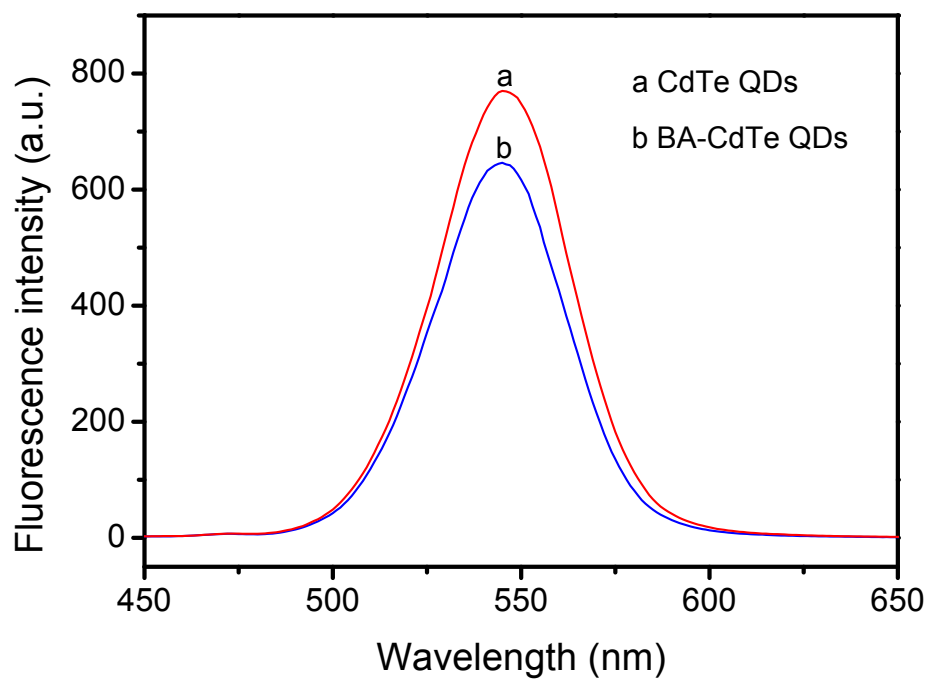


Fig. S3 Fluorescence spectra of CdTe QDs (a) and BA-CdTe QDs (b).

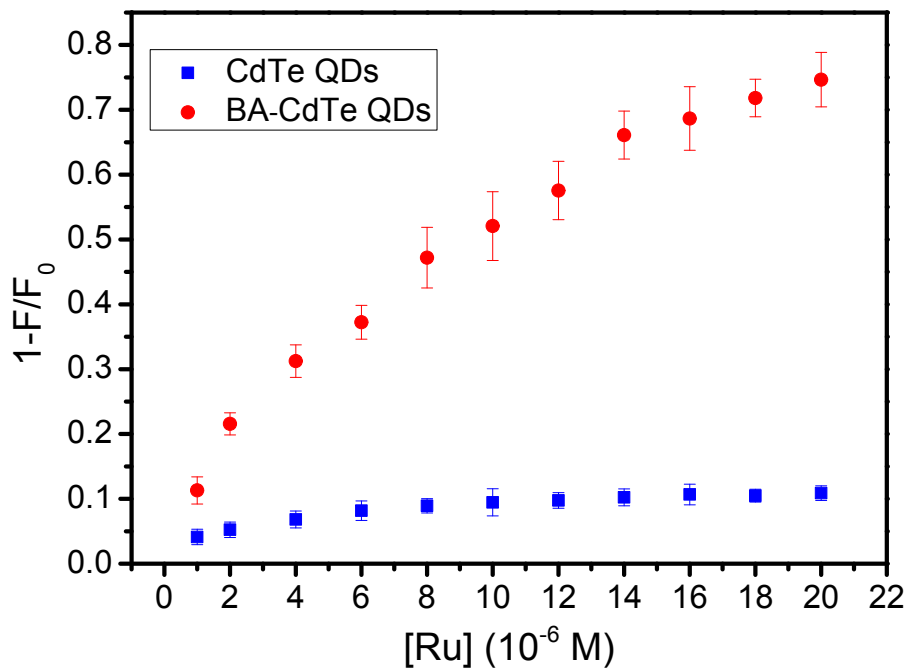


Fig. S4 Fluorescence intensity change of CdTe QDs and BA-CdTe QDs with various amount of Ru.

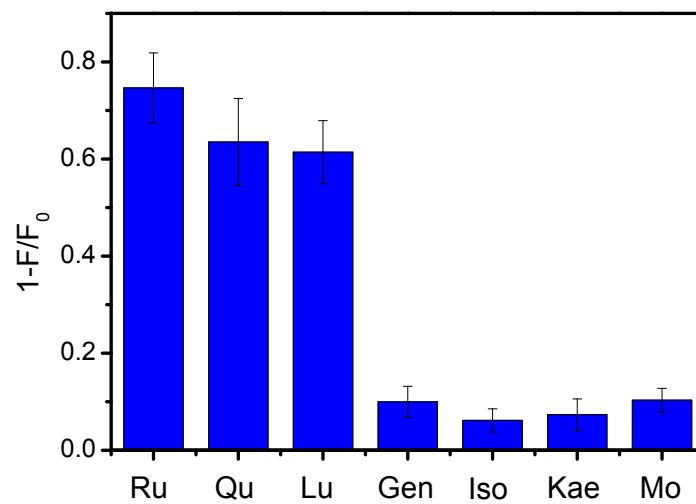


Fig. S5 Binding behaviors of cis-diol-containing compounds (Ru, Qu and Lu) and non-cis-diol-containing compounds (Gen, Iso, Kae and Mo) on the BA-CdTe QDs. [Ru] = [Qu] = [Lu] = [Gen] = [Kae] = [Mo] = [Iso] = 2×10^{-5} M.

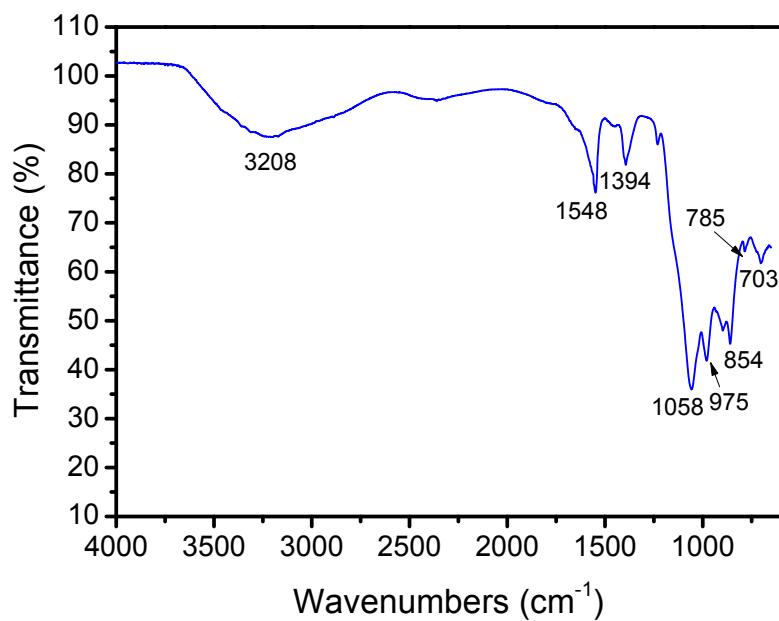


Fig. S6 FT-IR spectra of the BA-CdTe@MIPs QDs.

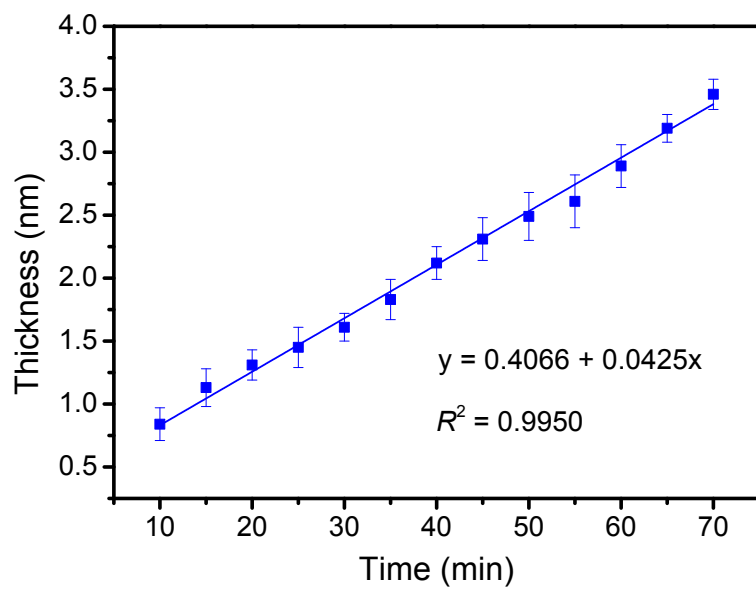


Fig. S7 Dependence of the thickness of the silica thin layer on polymerization time.

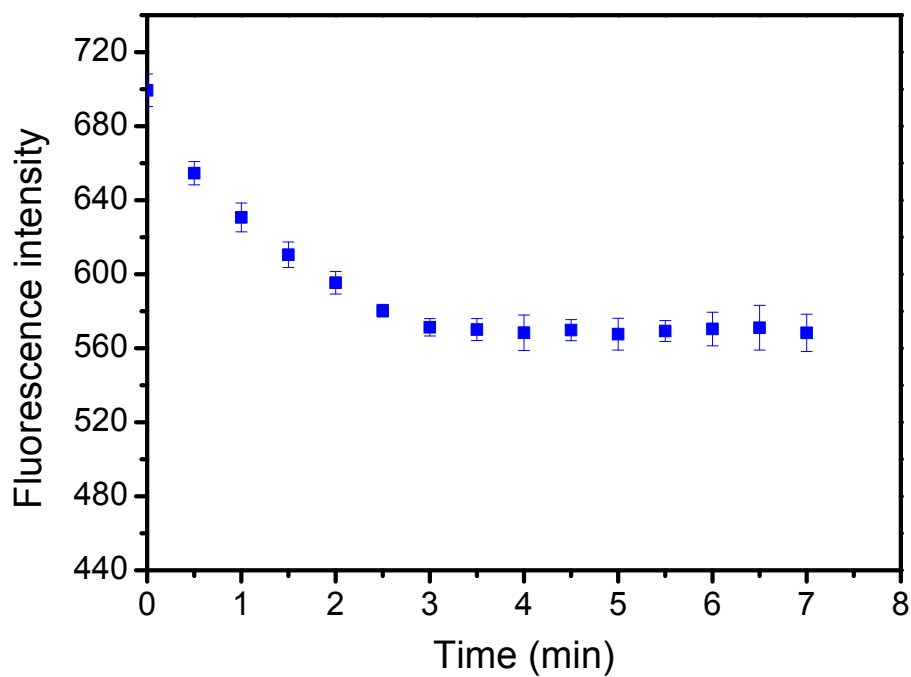


Fig. S8 Effect of incubation time on the fluorescence intensity of BA-CdTe@MIPs QDs after adding Ru. Fluorescence value was obtained at a fixed excitation wavelength of 545 nm; [Ru] = 2×10^{-5} M.