

Supplementary Information for:

**Constructing Nanosized CdTe Nanocrystal Clusters with Thermo-responsive
Photoluminescence Characteristics**

Hucheng Zhang^{*a}, Huili Wang^a, Kelu Du, Xinxin Ma, Jianji Wang^{*a}

^aCollaborative Innovation Centre of Henan Province for Green Manufacturing of Fine Chemicals

Key Laboratory of Green Chemical Media and Reactions,

Ministry of Education School of Chemistry and Chemical Engineering, Henan Normal University,

Xinxiang, Henan 453007, P. R. China

E-mail: hzhang@henannu.edu.cn; jwang@henannu.edu.cn.

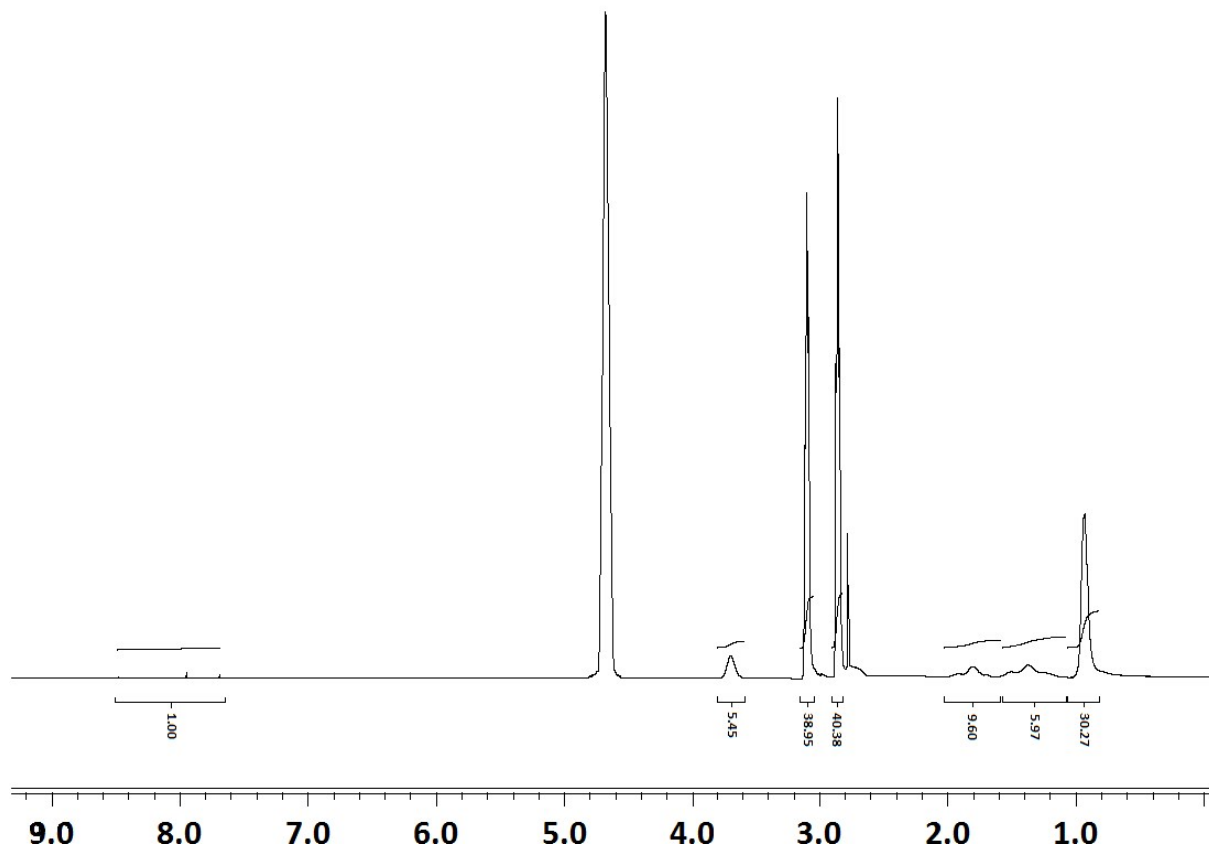


Fig. S1 integrals for ^1H NMR spectrum of PNAEAM₁₂-b-PNIPAM₂₉₀ in D₂O at room temperature.

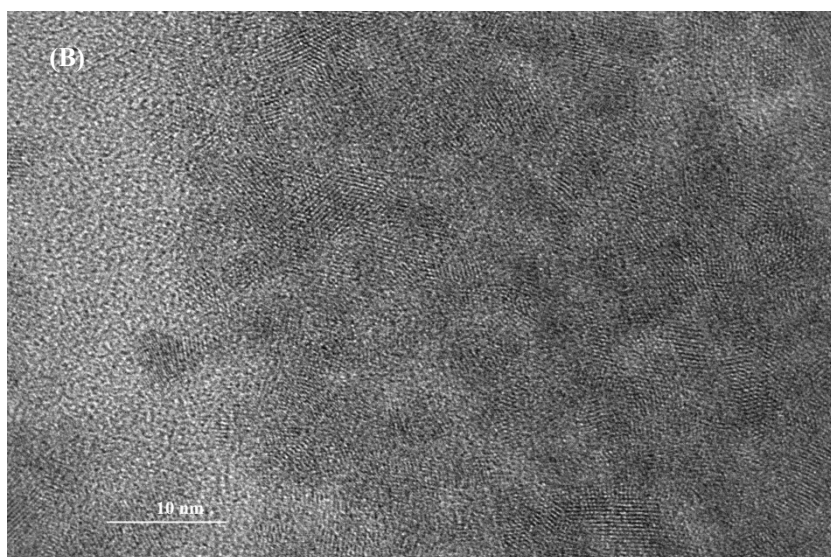
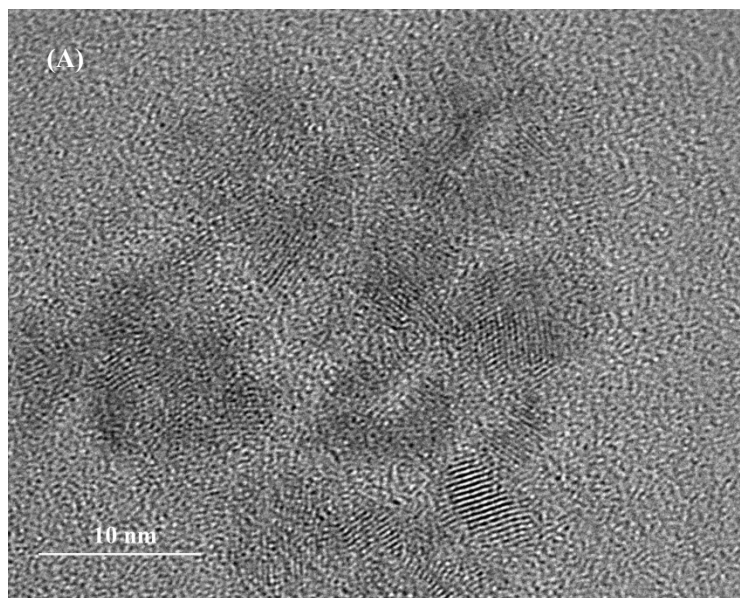


Fig. S2 HRTEM images taken respectively from a selected individual CNC of PNAEAM₁₂-b-PNIPAM₂₉₀-CdTe CN₆ (A), and from one quarter of a PNAEAM₁₂-b-PNIPAM₂₉₀-CdTe CN₂₄ CNC (B).

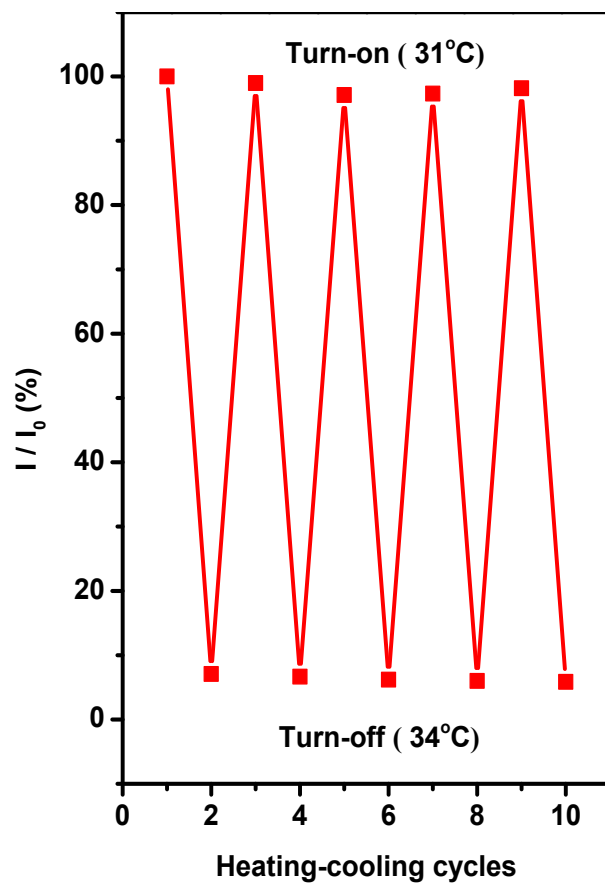


Fig. S3 Repeatedly turning off/on the PL PNAEAM₁₂-b-PNIPAM₂₉₀-CdTe CN₂₄ CNCs in aqueous solution by heating/cooling cycles between 31 and 34 °C.

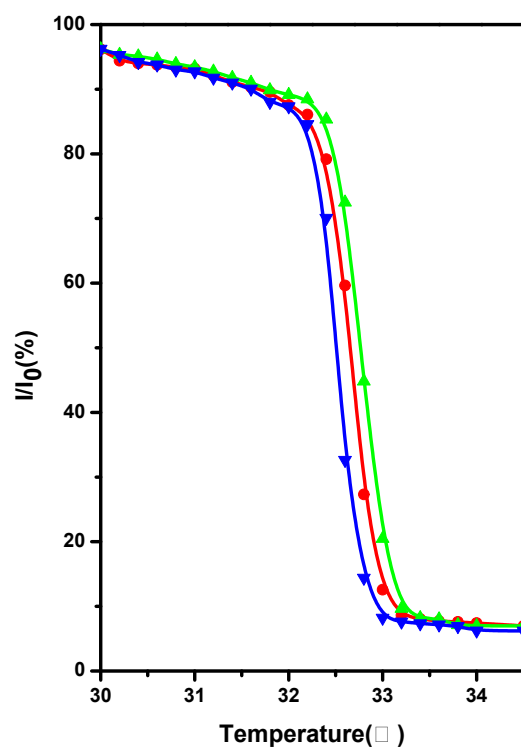


Fig. S4 I/I_0 as a function of temperature for CNCs of PNAEAM₁₂-b-PNIPAM₂₉₀-CdTe NC₂₄ (▼), PNAEAM₁₂-b-PNIPAM₄₄₀-CdTe NC₂₄ (●), PNAEAM₁₂-b-PNIPAM₅₈₀-CdTe NC₂₄ (▲).

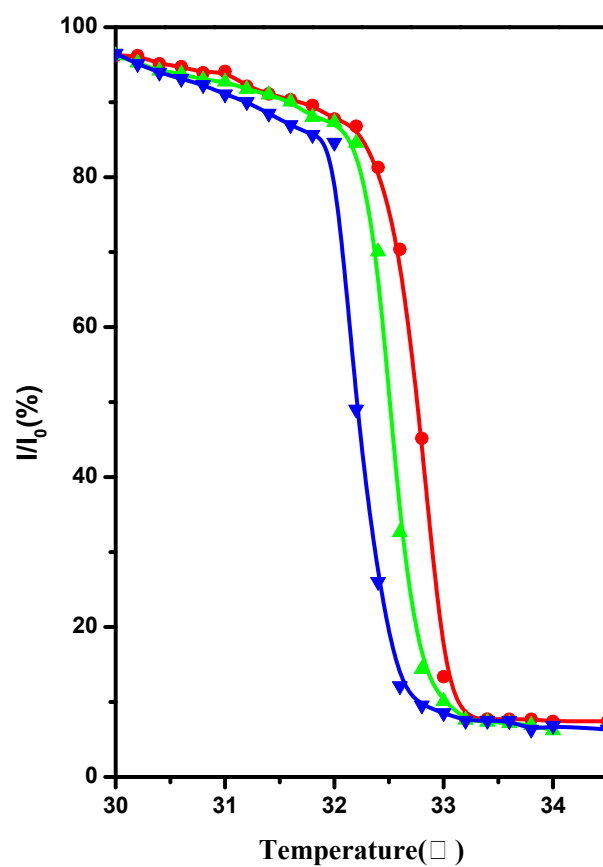


Fig. S5 I/I_0 as a function of temperature for CNCs of PNAEAM₁₂-b-PNIPAM₂₉₀-CdTe NC₂₄ at different concentration of 0.5 mg/mL (●), 1 mg/mL (▲), 5 mg/mL (▼).