

Supplementary Information

Photoluminescent Properties of Self-Assembled Chitosan-Based Composites Containing Semiconductor Nanocrystals

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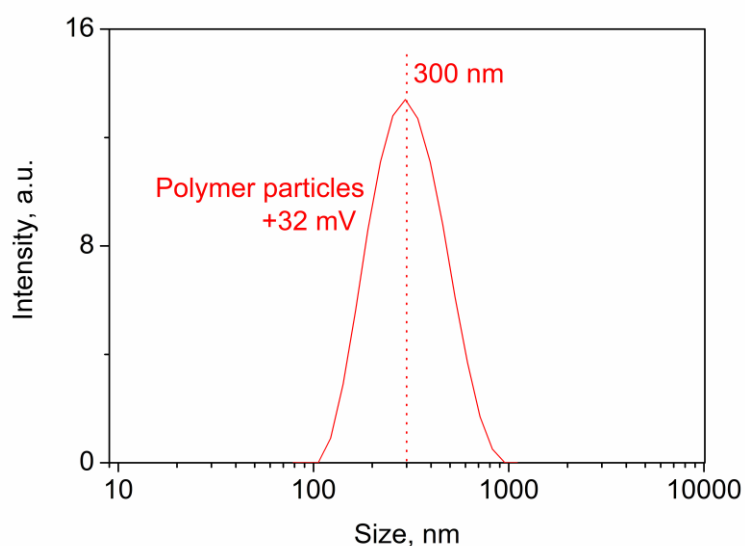


Figure S1. ζ -potential and size distribution of polymer molecules and polymer particles.

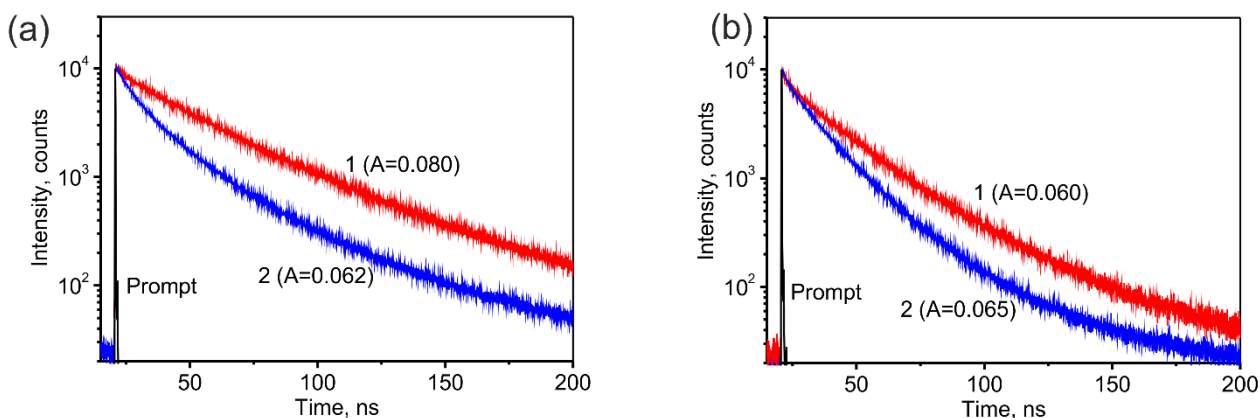


Figure S2. Time-resolved PL decays of (a) CdTe and (b) CdSe/ZnS dispersed in water (1) and embedded in polymer particles (2).

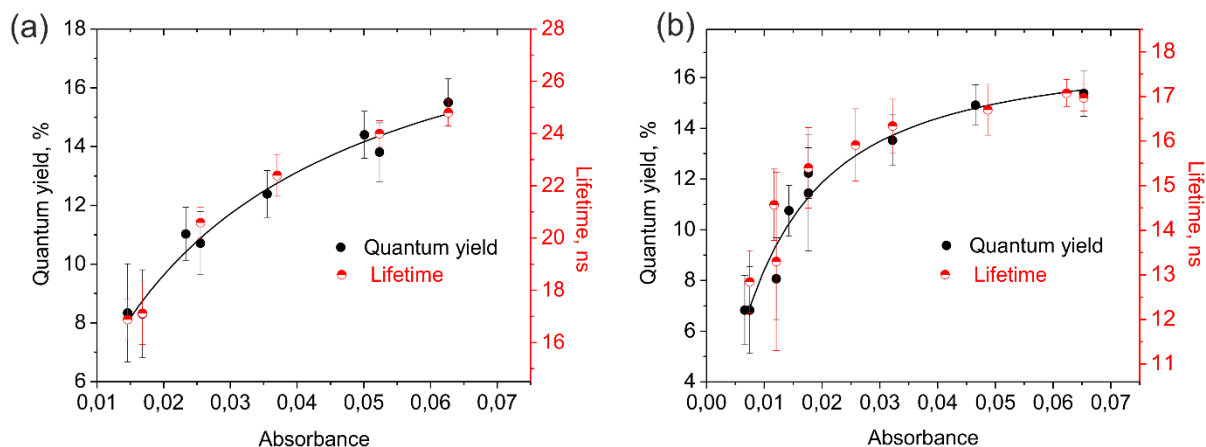


Figure S3. The PL quantum yields and lifetimes of (a) CdTe- and (b) CdSe/ZnS-containing particles.

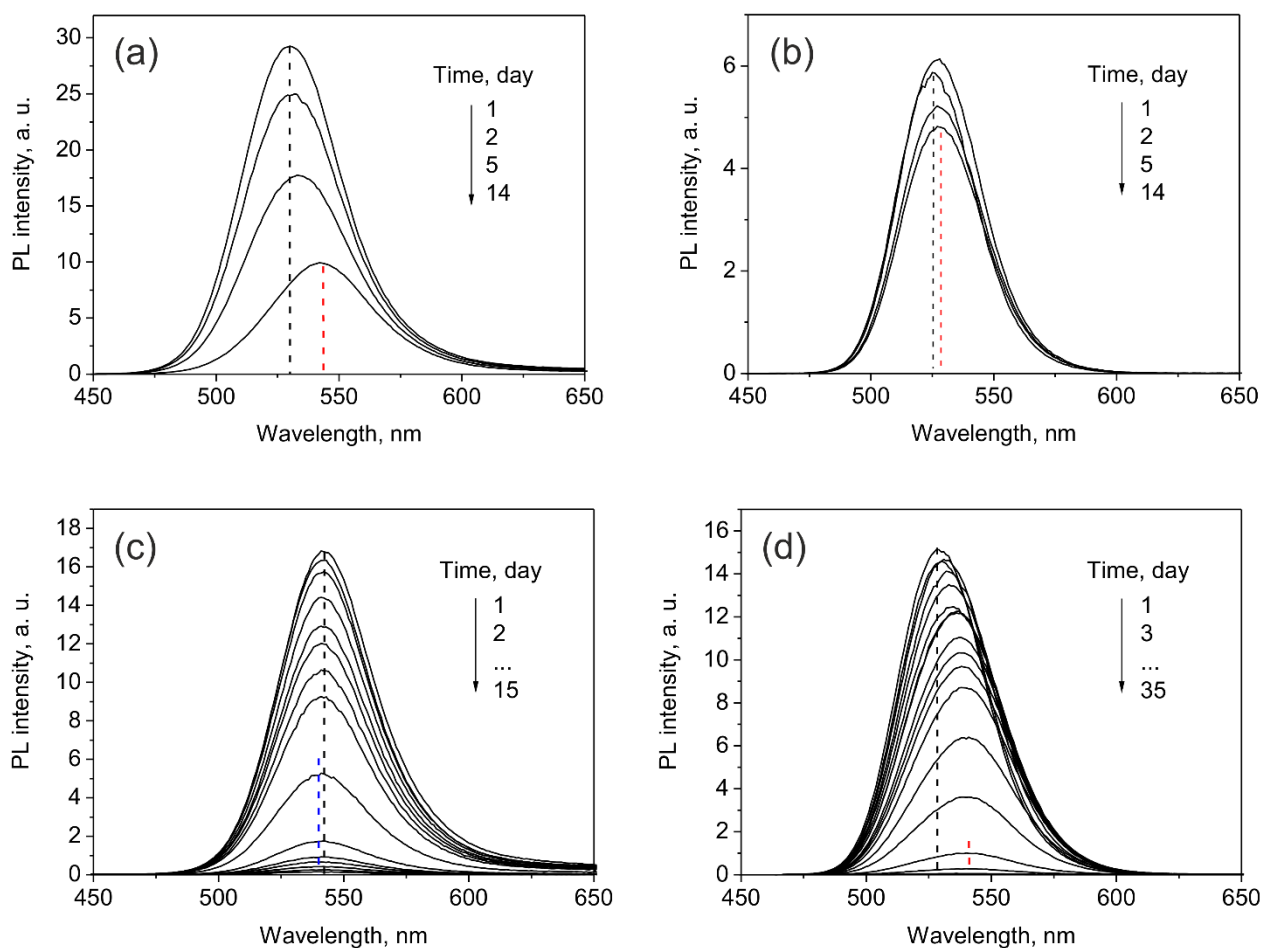


Figure S4. The temporal evolution of PL spectra of water dispersed (a) CdTe ($A=0.023$), (b) CdSe/ZnS ($A=0.011$) and (c) CdTe ($A=0.052$), (d) CdSe/ZnS ($A=0.065$) NCs-containing particles. Color dashed lines show the variation range of the position of spectral maximum (blue and red shift).

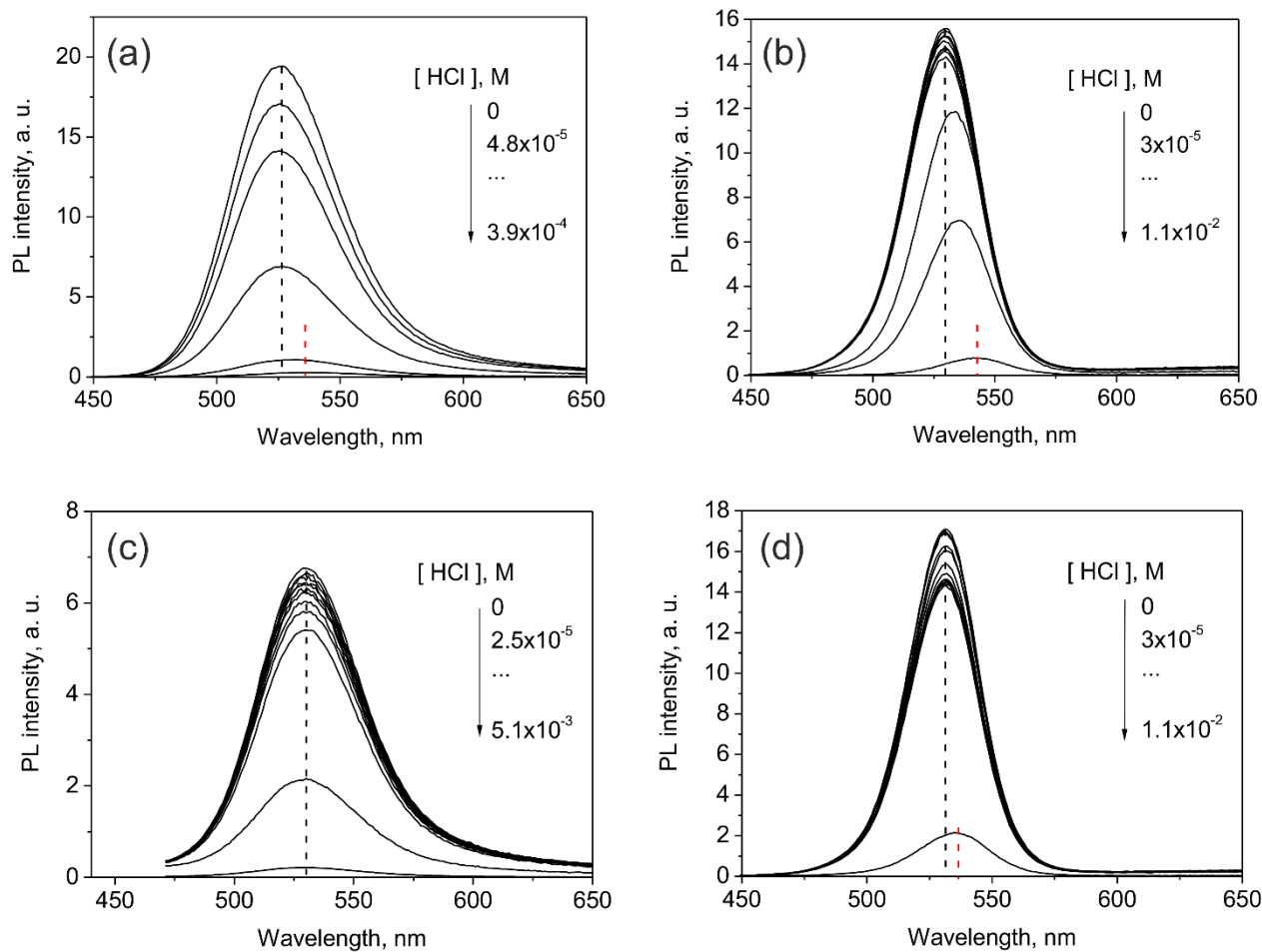


Figure S5. Dependences of the PL intensity on HCl concentration of water dispersed (a) CdTe ($A=0.039$) and (b) CdSe/ZnS NCs ($A=0.058$) and (c) CdTe ($A=0.058$), (d) CdSe/ZnS ($A=0.062$) NCs-containing particles. Color dashed lines show the variation range of the position of spectral maximum (red shift).

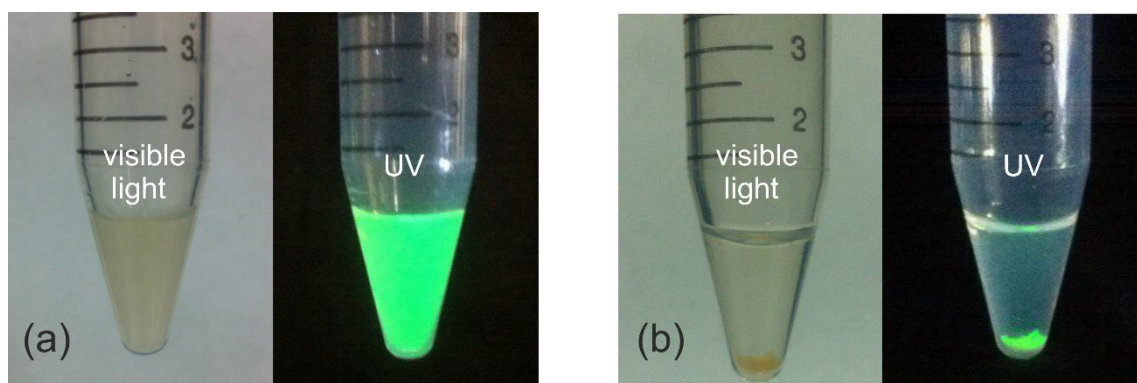


Figure S6. CdTe NCs-containing particles immediately after the synthesis (a) and (b) 10 days after the synthesis.