

Supporting Information

Inorganic Cluster Syntheses of TM^{2+} -Doped Quantum Dots (CdSe, CdS, CdSe/CdS): Physical Property Dependence on Dopant Locale

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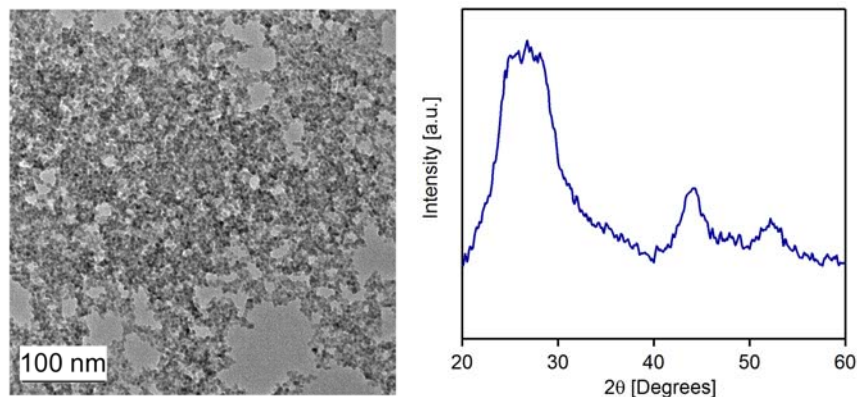


Figure S1. Overview TEM image and XRD data for the $d \approx 4.6$ nm 1.5% Co^{2+} :CdS NCs described in the manuscript text.

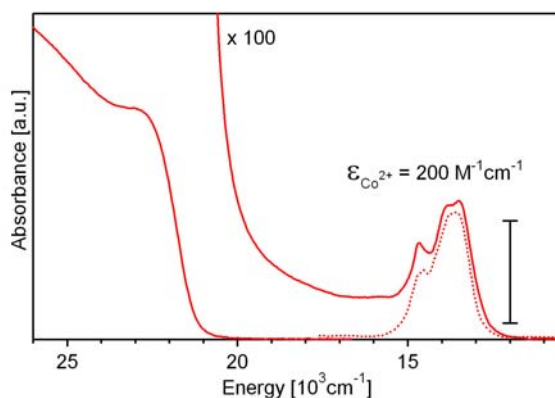


Figure S2. 300 K electronic absorption spectrum of a toluene suspension of the TOPO-capped $d \approx 4.6$ nm 1.5% Co^{2+} :CdS nanocrystals described in the text. The excitonic transition of CdS at $\sim 23\,000 \text{ cm}^{-1}$ and the ${}^4\text{A}_2(\text{F}) \rightarrow {}^4\text{T}_1(\text{P})$ ligand-field transition of tetrahedral Co^{2+} ($\sim 13\,600 \text{ cm}^{-1}$) are both observed. The bulk spectrum of Co^{2+} :CdS in the ligand field region is included for reference (adapted from ref. 1).

- (1) Weakliem, H. A., *J. Chem. Phys.* **1962**, *36*, 2117-2140.

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