

Supporting Information

0D versus 1D water soluble CdTe Nanocrystals – Synthesis and Photophysical Characterization

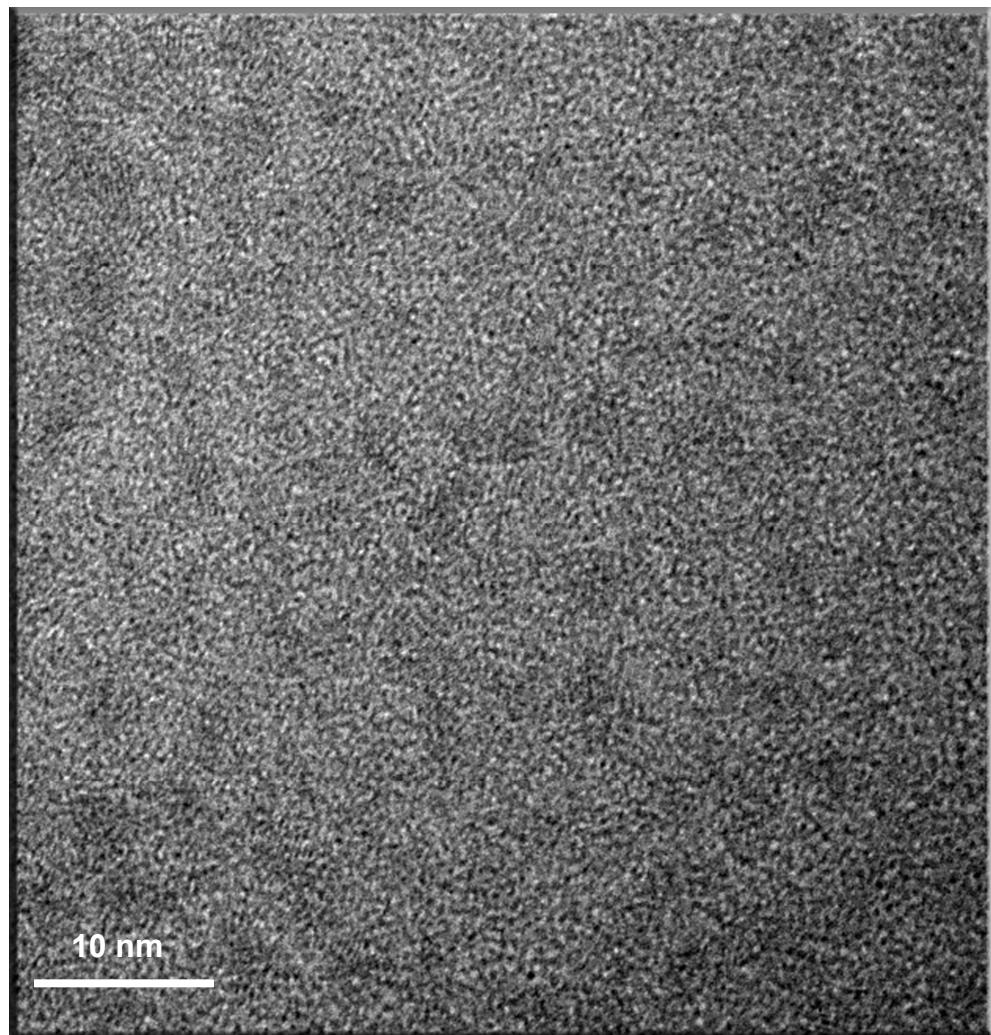


Figure S1: HRTEM image of CdTe QD after 18 hours reaction time

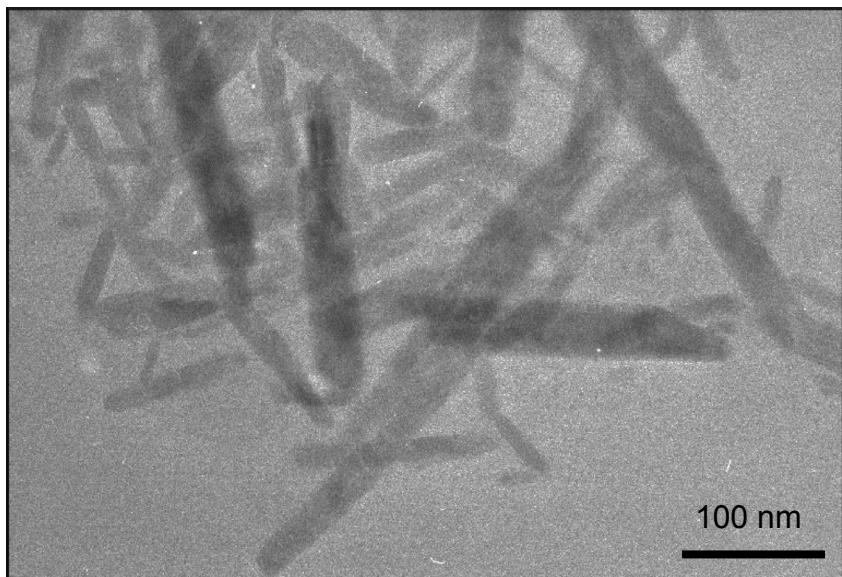


Figure S2: TEM image of CdTe QR after 30 hours reaction time

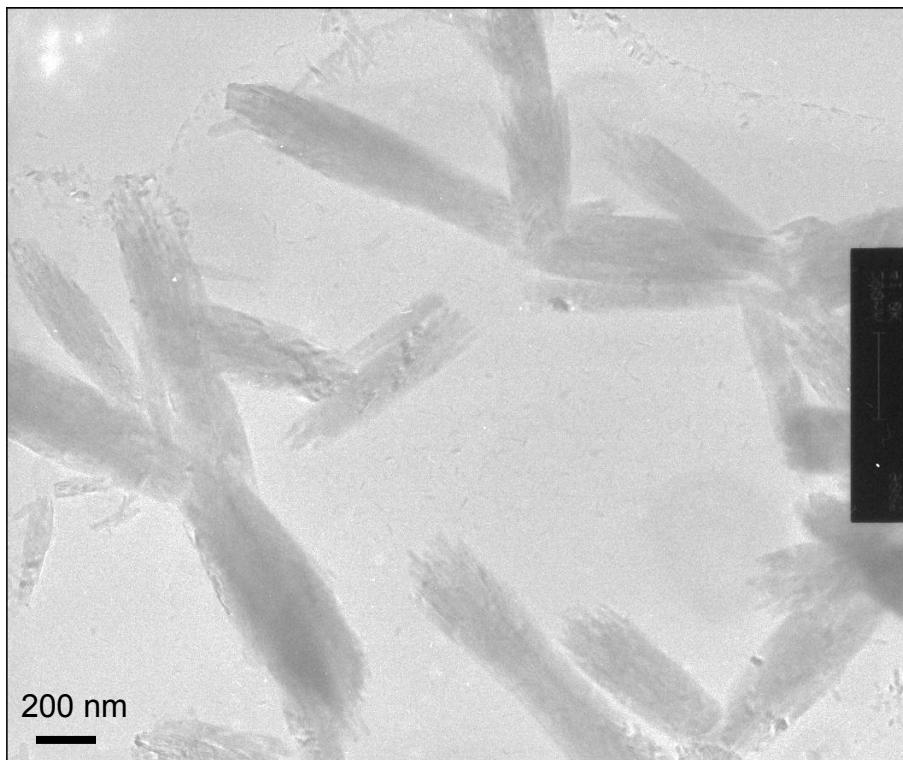


Figure S3: TEM image of CdTe QR after 30 hours reaction time

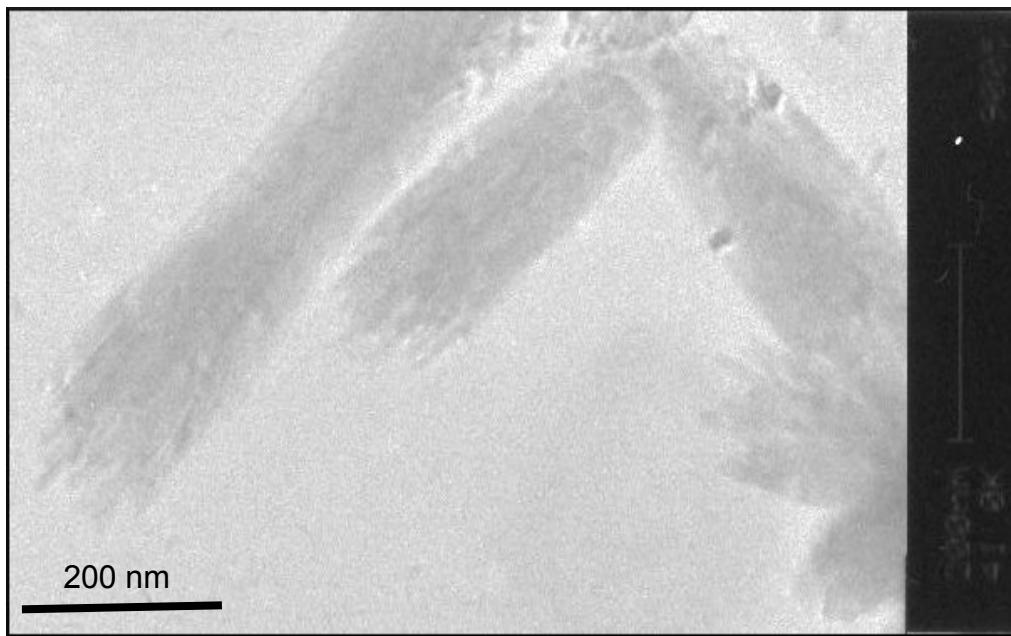


Figure S4: Bundle-like aggregation of CdTe QR

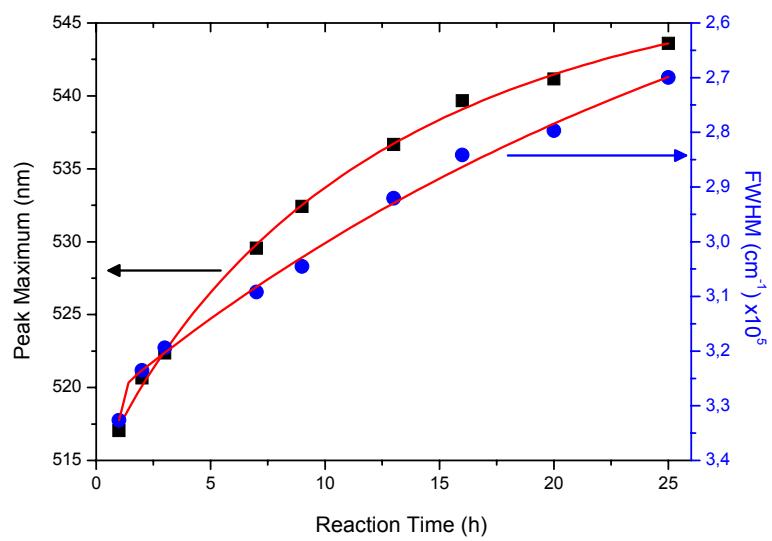


Figure S5: Emission peak positions (squares) and FWHM values (circles) of CdTe QD



Figure S6: Photograph of various samples of aqueous solutions of positively capped CdTe Rods under sunlight.



Figure S7: Photograph of various samples of aqueous solutions of positively capped CdTe Rods under UV-light.

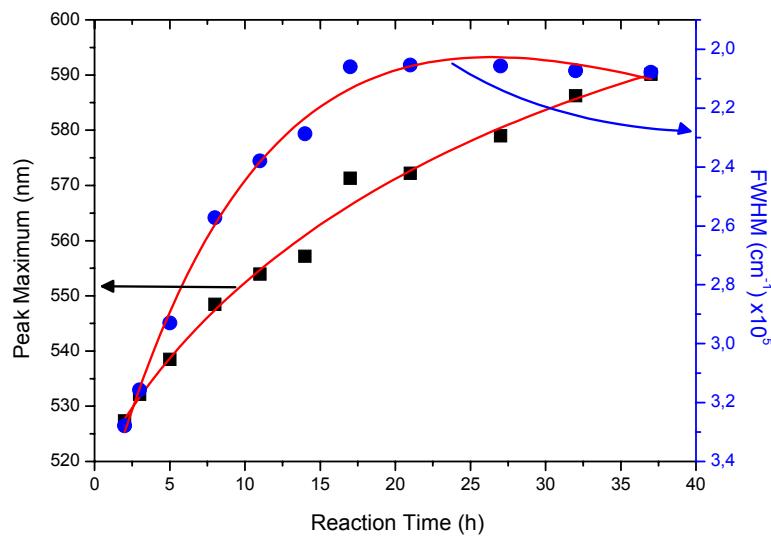


Figure S8: Emission peak positions (squares) and FWHM values (circles) of CdTe QR

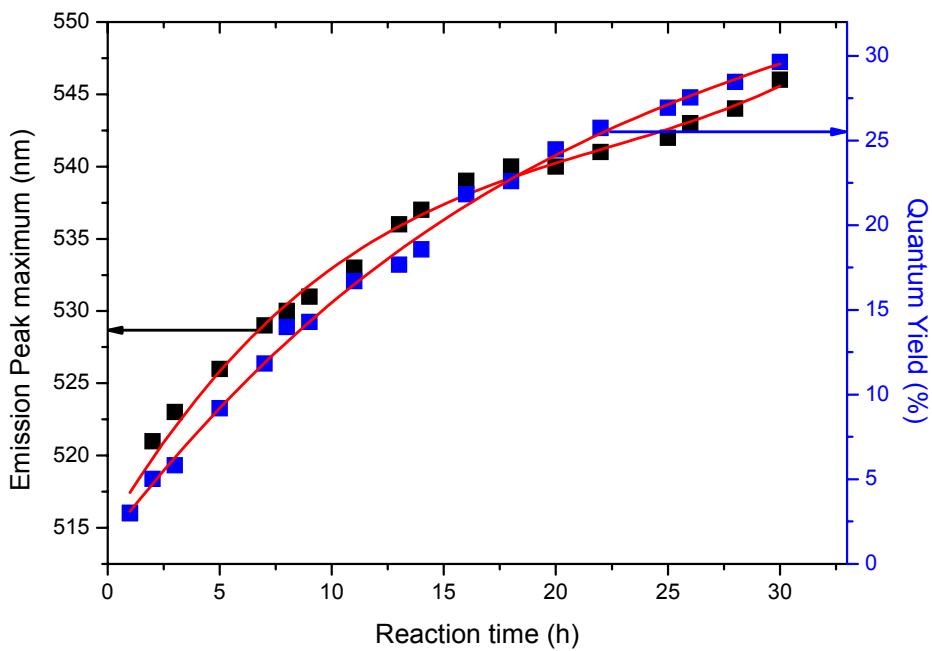


Figure S9: Quantum yield (circles) and emission maximum (squares) of CdTe QD

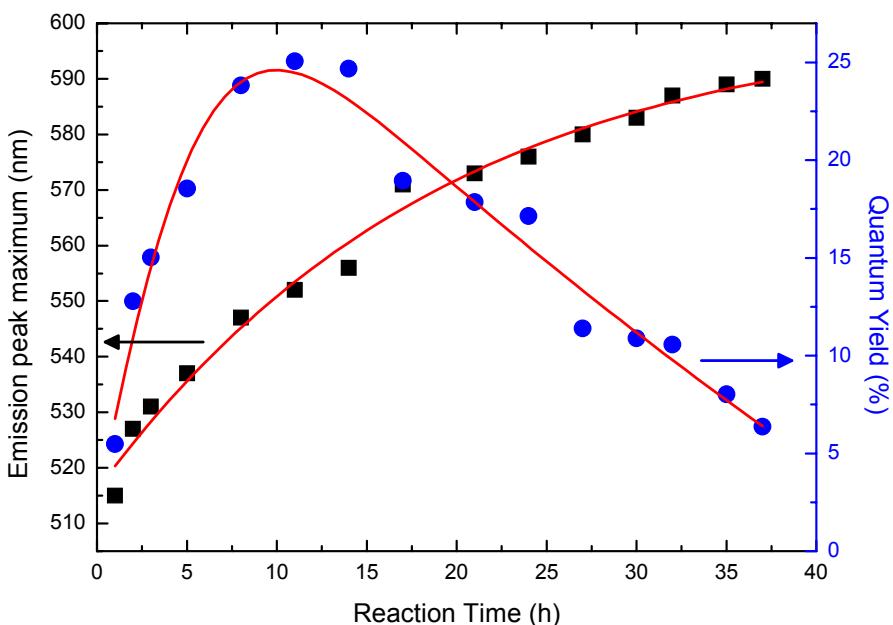


Figure S10: Quantum yield (circles) and emission maximum (squares) of CdTe QR

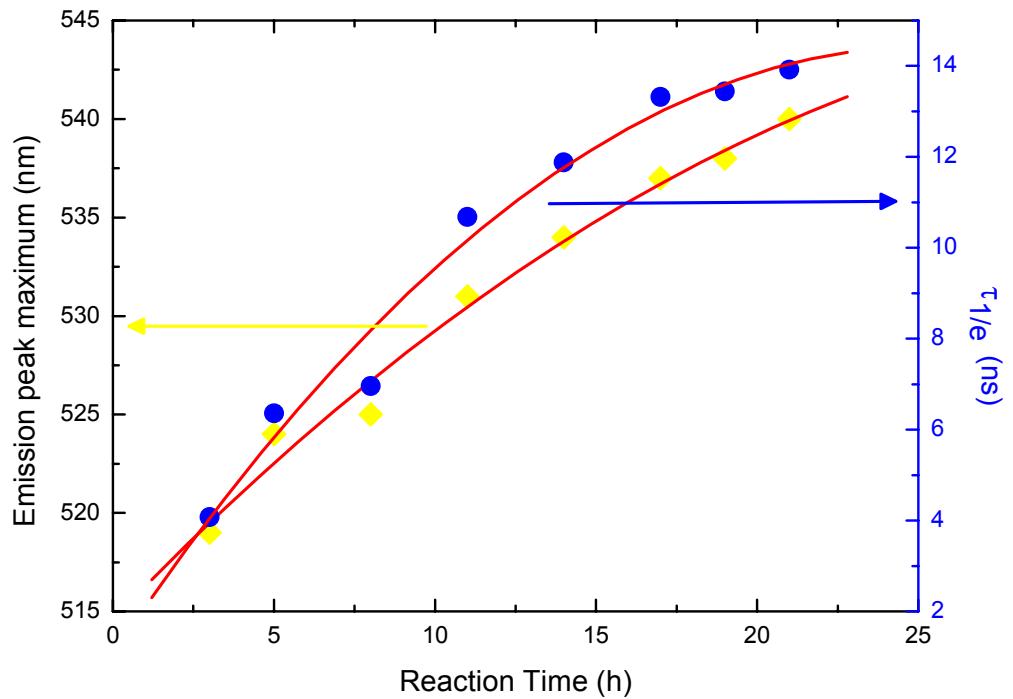


Figure S11: Emission lifetime (circles) and emission maximum (diamonds) of CdTe QR

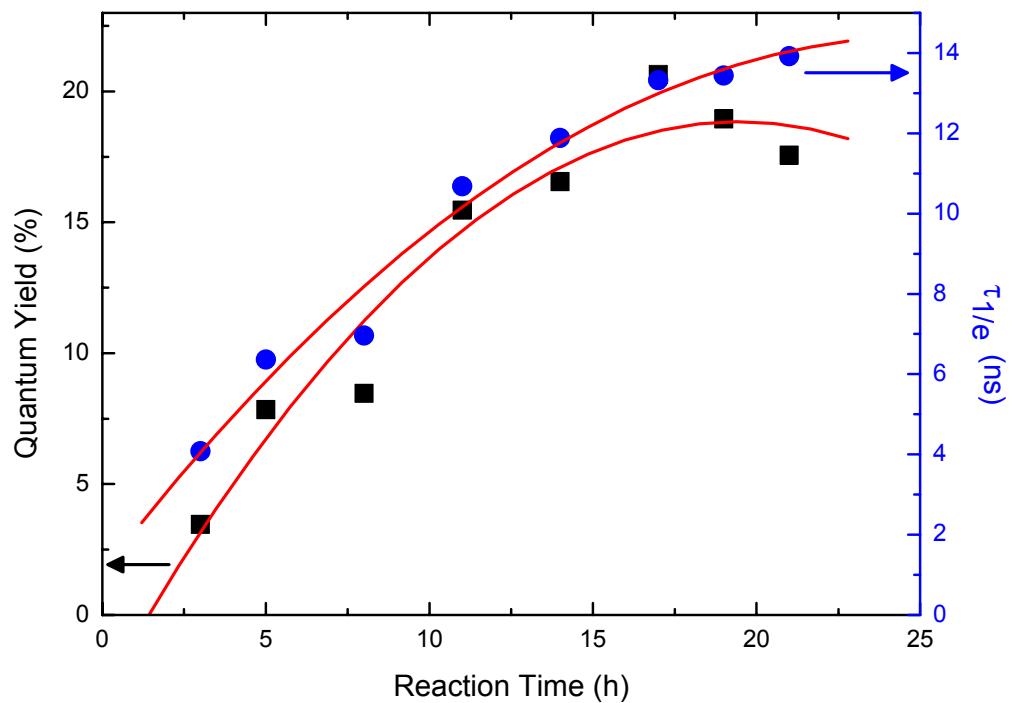


Figure S12: Emission lifetime (circles) and quantum yield (squares) of CdTe QR

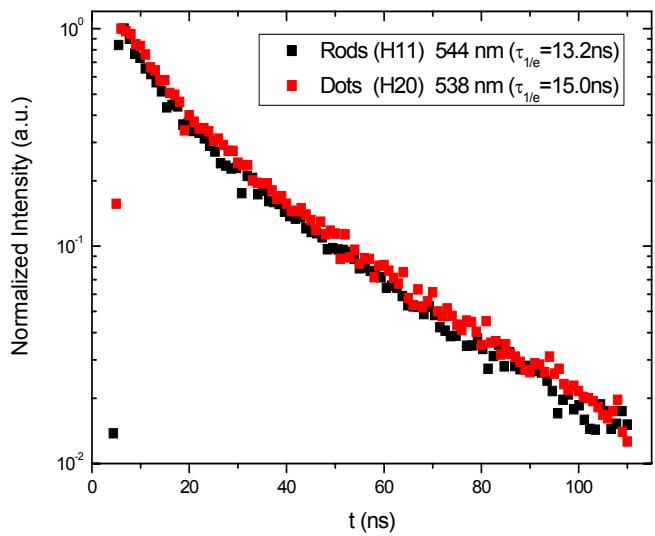


Figure S13: CdTe QD and CdTe QD emission decays with an absorption maximum at 523 nm ($\lambda_{\text{ex}} = 337\text{ nm}$) Indicated are the reaction times of the samples and the decay times at which the fluorescent signals had decreased to $1/e$ of their original values.

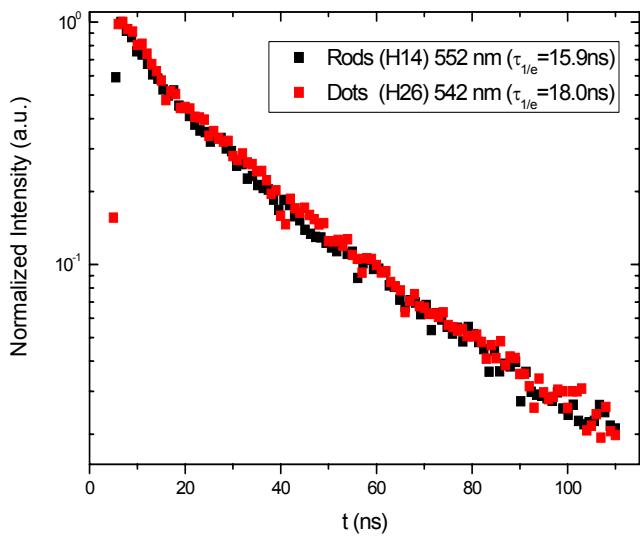


Figure S14: CdTe nanodots and CdTe nanorods emission decays at 525 nm ($\lambda_{\text{ex}} = 337\text{ nm}$) Indicated are the reaction times of the samples and the decay times at which the fluorescent signals had decreased to $1/e$ of their original values.

	AbsMax	χ^2	Preexp 1	Lifetime 1 (ns)	Preexp 2	Lifetime 2 (ns)
Rods	523	0.81	0.40	4.36	0.43	17.13
Dots	523	0.68	0.34	3.76	0.60	16.30

Rods	525	1.04	0.25	1.99	0.56	16.10
Dots	525	0.76	0.39	3.36	0.57	19.85

Table S1: Acquired data from the bi-exponential fit using the Instrument Software (PTI TimeMaster FeliXTM).