Electronic Supplementary Material (ESI) for CrystEngComm

Supporting Information

Dopant Induced Diameter Tuning of Mn-Doped CdTe Nanorods in Aqueous Solution

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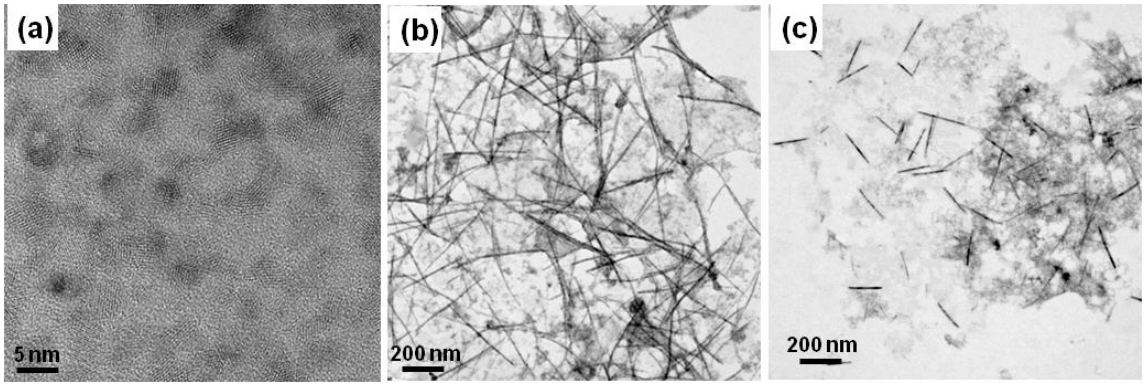

Fig. S1 Aging conditions comparison of 2.2 % Mn doped CdTe nanocrystals. (a) Nanoparticles retained average size of 3.4 nm after 12 days at 4 °C (b) 455 nm nanowires (average) formed after 4 day at room temperature and (c) 176 ± 8 nm nanorods formed after 8 days (4 days at 4 °C and 4 days at room temperature).

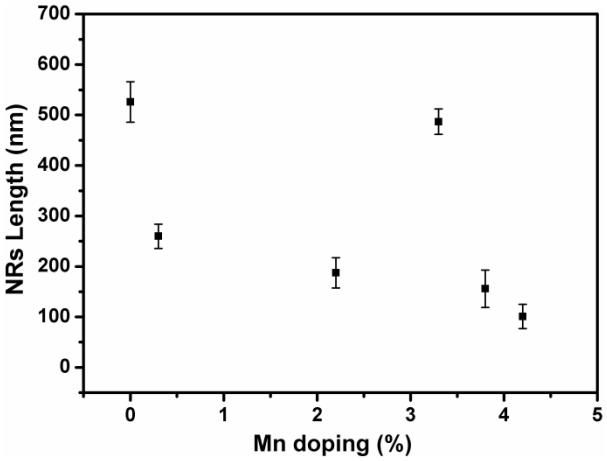

Fig. S2 Dependences of Mn doped CdTe NRs length. The error bars represent the standard deviation.

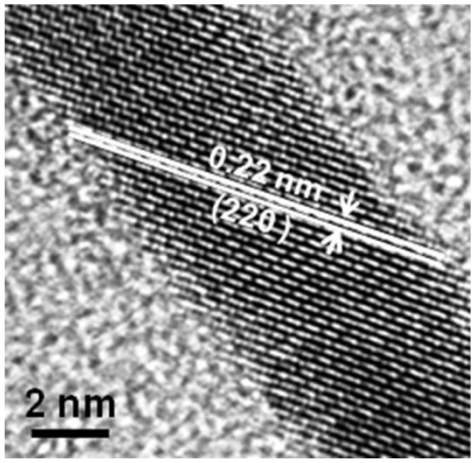

Fig. S3 HRTEM image of 2.2 % Mn doped CdTe nanorods, the interplanar distance is 0.22 nm, which corresponds to (220) plane of the zinc-blende structure.

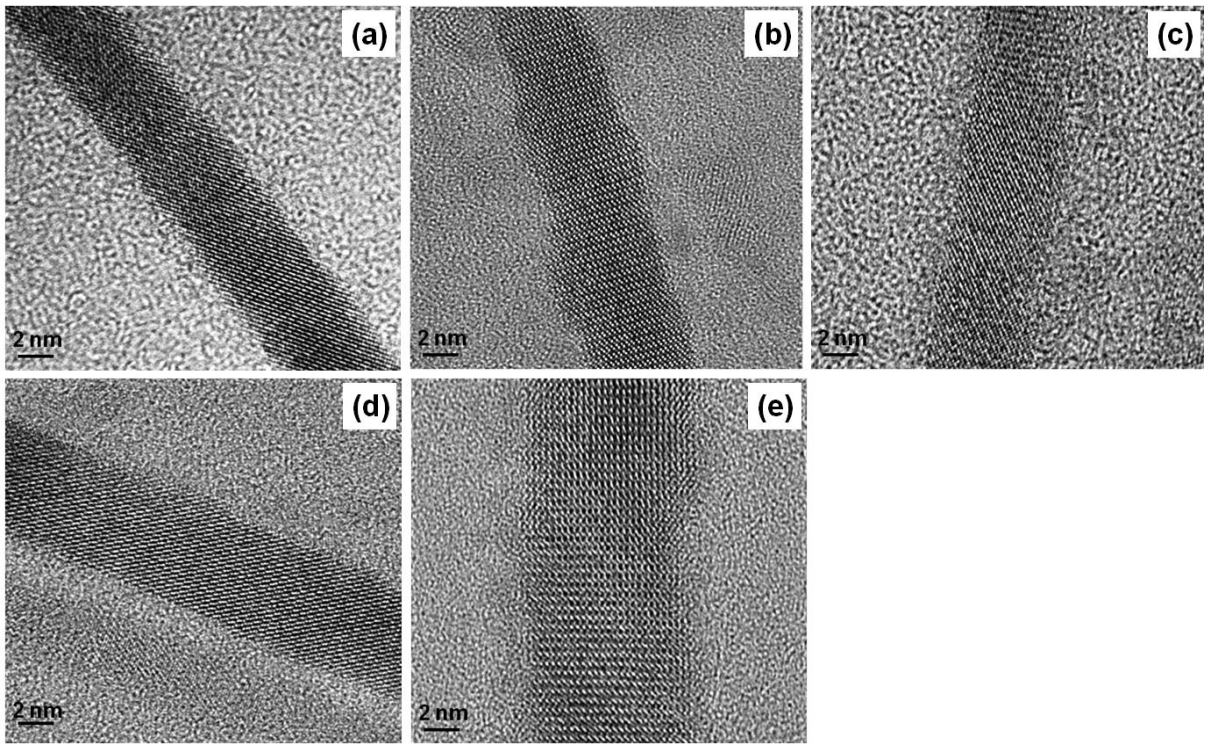

Fig. S4 HRTEM image of (a) CdTe nanorods (b) 0.3 % (c) 3.3 % (d) 3.8 % and (e) 4.2 % Mn doped CdTe nanorods.

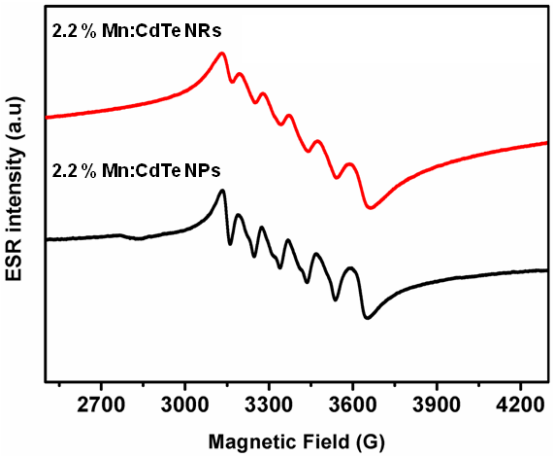

Fig. S5. ESR spectra of 1% Mn-doped CdTe (a) nanoparticles and (b) nanorods.

Nanocrystals	**Zeta potential** (ζ) (mV)
CdTe	- 31.50
1% Mn:CdTe	- 31.66
2.5% Mn:CdTe	- 29.80
5% Mn:CdTe	- 35.44
7.5% Mn:CdTe	- 30.13
10% Mn:CdTe	- 24.31

Table S1. Zeta potential (ζ) values for CdTe and Mn doped CdTe nanocrystals.