

## Electronic supplementary information (ESI)

### Controlled Synthesis of CdE (E=S, Se and Te) Nanowires

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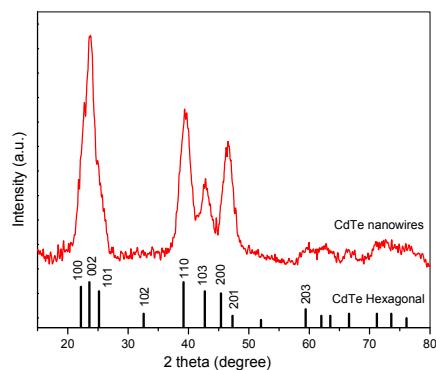
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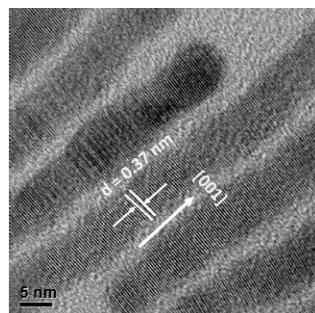
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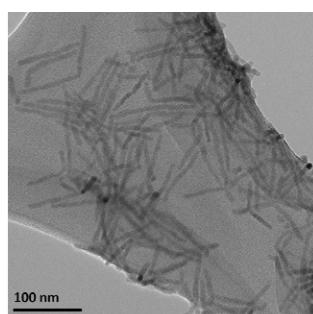
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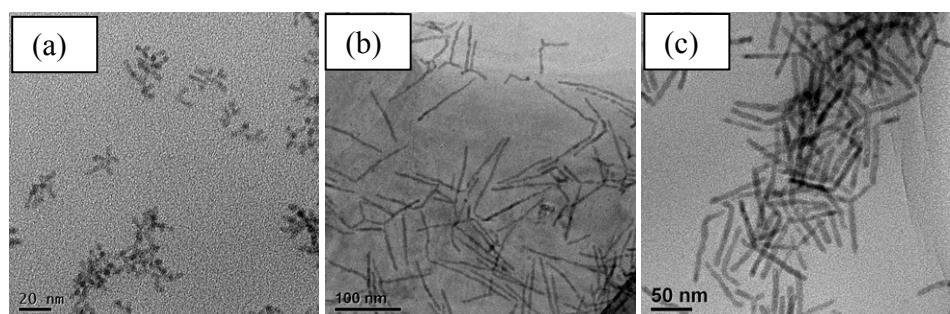
**Fig. S1** Typical X-ray diffraction (XRD) patterns of (a) CdTe nanowires and (b) JCPDS hexagonal CdTe pattern.



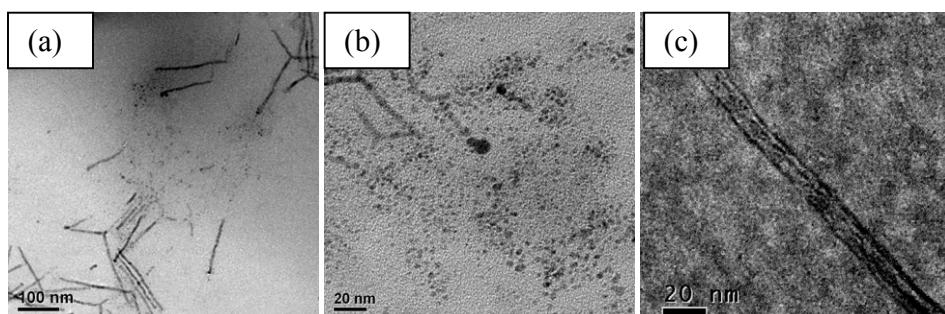
**Fig. S2** High-resolution TEM (HRTEM) image of CdTe nanowires.



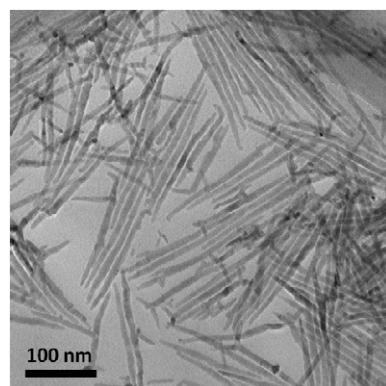
**Fig. S3** CdTe nanocrystals synthesized with DDPA-to-Cd mole ratios: 2.5:1. The ligand used for Te complexes is TOP.



**Fig. S4** TEM images of CdTe nanocrystals synthesized with DDPA at (a) 250 °C, (b) 280 °C and (c) 322 °C.



**Fig. S5** Additional TEM images of CdTe (a - b) and (b) CdS nanocrystals show evidence of oriented attachment.



**Fig. S6** TEM image of CdSe with rough surface.

