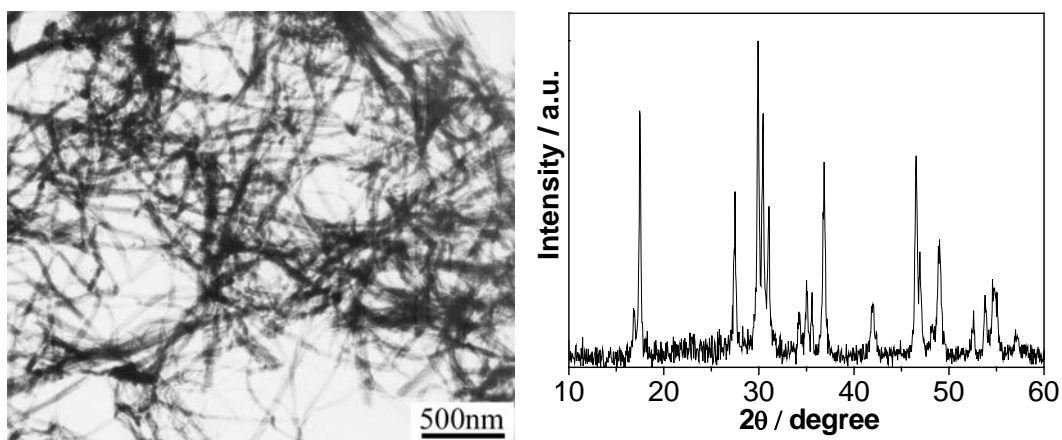
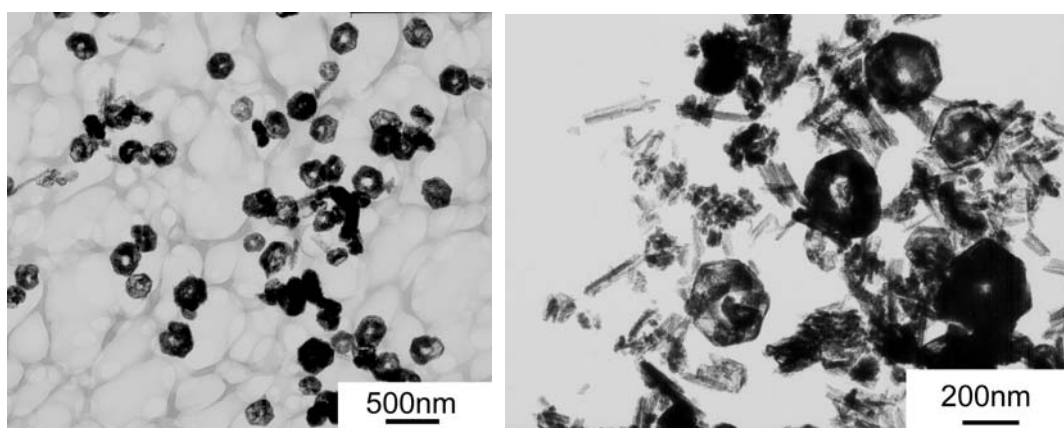


## Supplementary Information

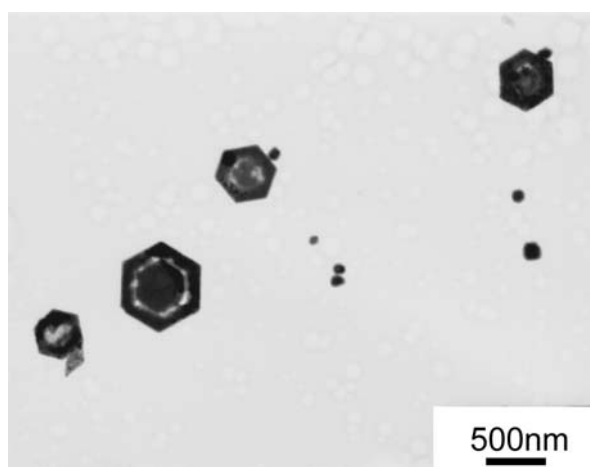
### Fabrication of $\text{Cd}(\text{OH})_2$ nanorings by ultrasonic chiseling on $\text{Cd}(\text{OH})_2$ nanoplates



**Fig. S1** TEM image and XRD pattern of the  $\text{Cd}(\text{OH})_2$  nanowire byproduct



**Fig. S2** CdS (left) and CdSe(right) rings synthesized by using the  $\text{Cd}(\text{OH})_2$  nanorings as template



**Fig. S3** TEM image of  $\text{PbF}_2$  nanoplates with hole in the center synthesized by ultrasonic irradiation