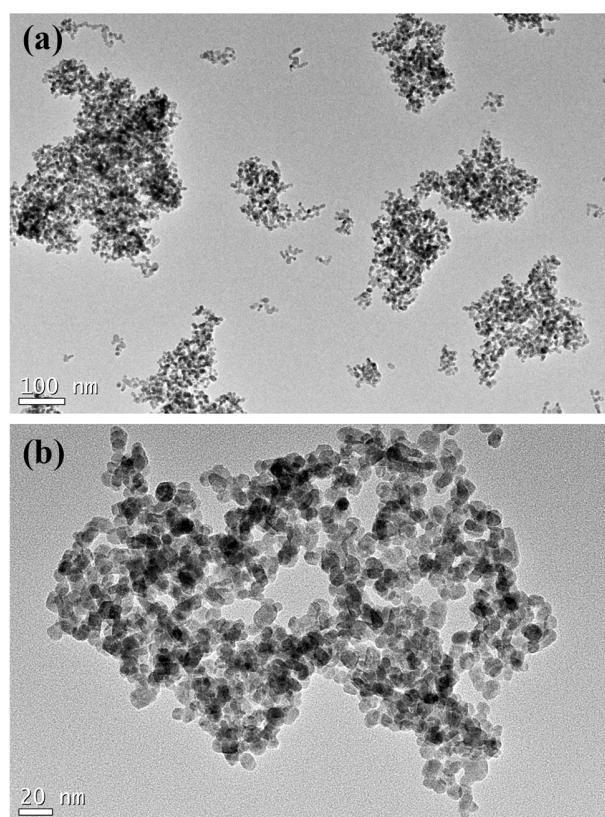


**Supporting Information**

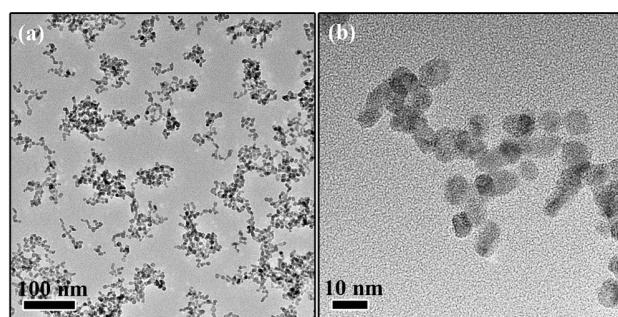
**A Facile Synthesis and Photoluminescence Properties of Water-dispersible Re<sup>3+</sup> Doped CeF<sub>3</sub> Nanocrystals and Solid Nanocomposites with Polymers**

**Chunguang Li, Feifei Li, Tao Li, Tianyu Bai, Long Wang, Zhan Shi\* and Shouhua Feng**

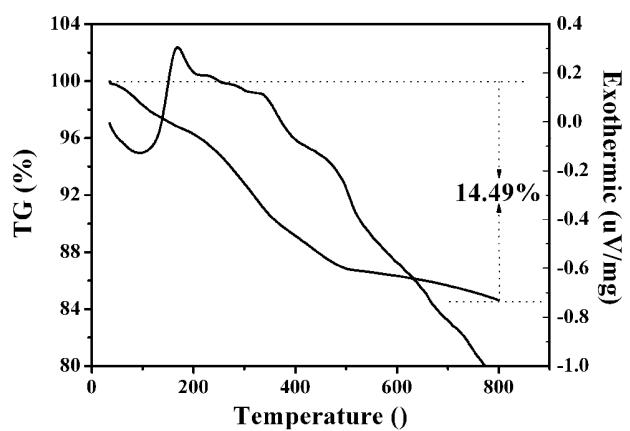
State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry, Jilin University, 2699 Qianjin Street, Changchun 130012, P. R. China



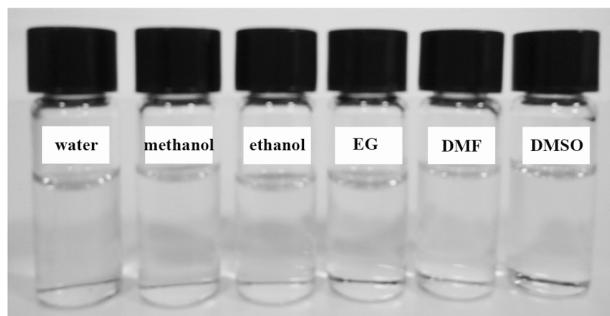
**Figure S1.** TEM images of  $\text{CeF}_3\text{: Tb}$  nanoparticles without capping agent.



**Figure S2.** TEM images of PEI capped  $\text{CeF}_3\text{: Dy}$  nanoparticles.



**Figure S3.** TG-DTA curve of PEI/  $\text{CeF}_3$ : Tb nanocrystals.



**Figure S4.** Photographs of colloidal solutions of the PEI/  $\text{CeF}_3$ : Tb nanocrystals dispersed in different solvents. DMF=N,N-dimethylformamide.