Electronic Supplementary Material (ESI) for RSC Advances.
This journal is © The Royal Society of Chemistry 2017

Supporting Information

A novel dual-emission QDs/PCDs assembled composite nanoparticles for high sensitive visual detection of Hg^{2+}

Jian Cui[a], Tianjiao Liu[a], Dapeng Liang[a], Jiale Liu[b], Kai Zhang[b], Bai Yang[b], Yang Ning[a,b]*

[a]*Key lab of groundwater resources and environment ministry of education, College of environment and Resources, Jilin University, 2699 Qianjin Avenue, Changchun, 130012, P. R. China.*

[b]*State Key Laboratory of Supramolecular Structure and Materials, College of Chemistry, Jilin University, Changchun, 130012, P. R. China.*

*Address correspondence to ningyang@jlu.edu.cn

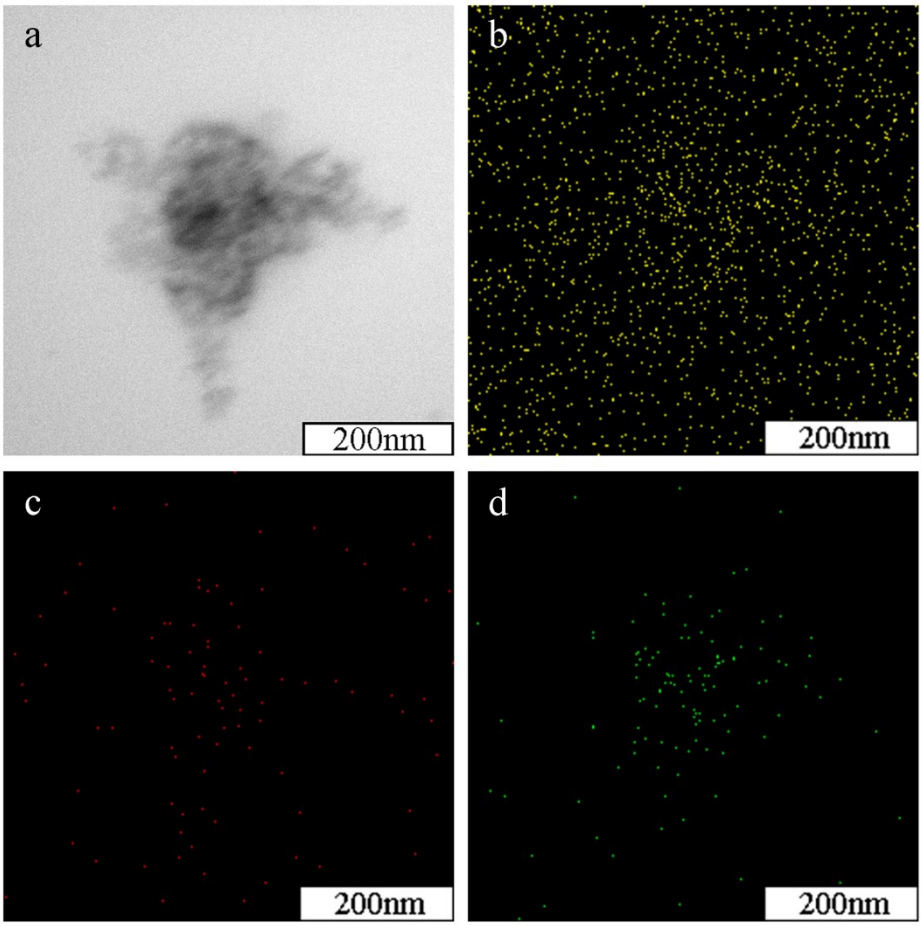

Figure S1: The TEM image of composite nanoparticle (a) and its element mapping images of C (b), Te (c) and Cd (d).

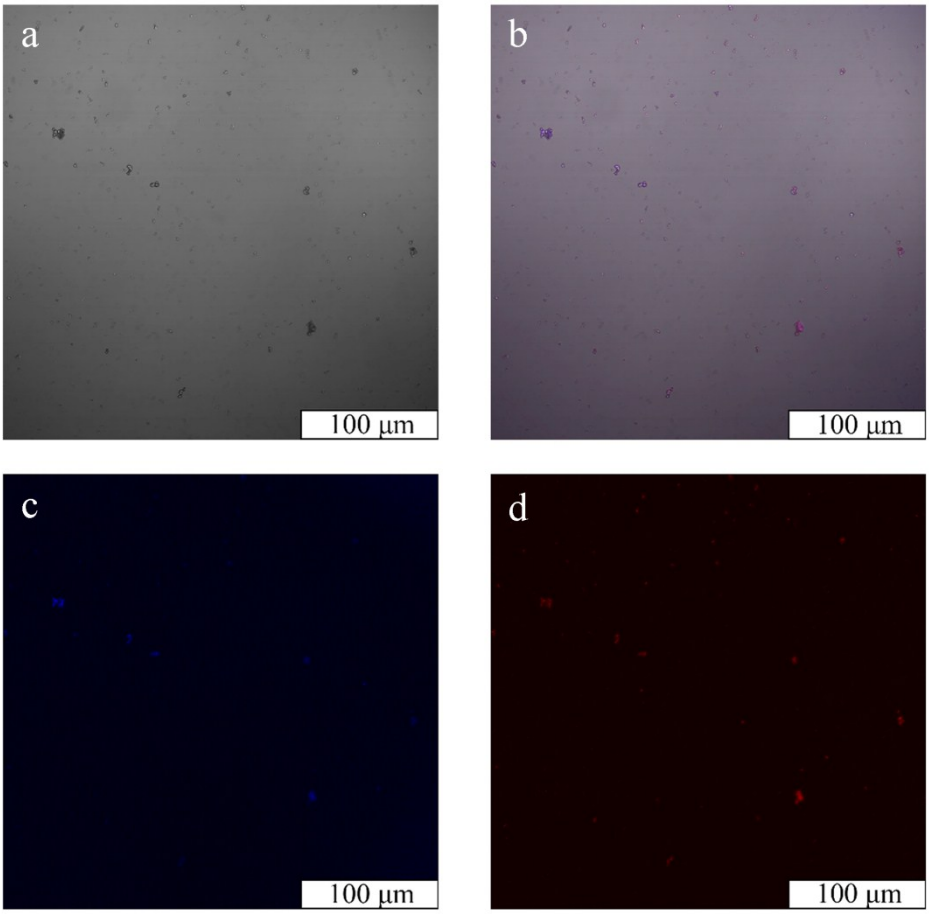

Figure S2: Confocal laser scanning microscope images of the dual-emission assembled composite nanoparticles under the bright field (a), dark field (b), ex 405 nm and em 422-472 nm (c), ex 488 nm and em 600-700 nm (d).

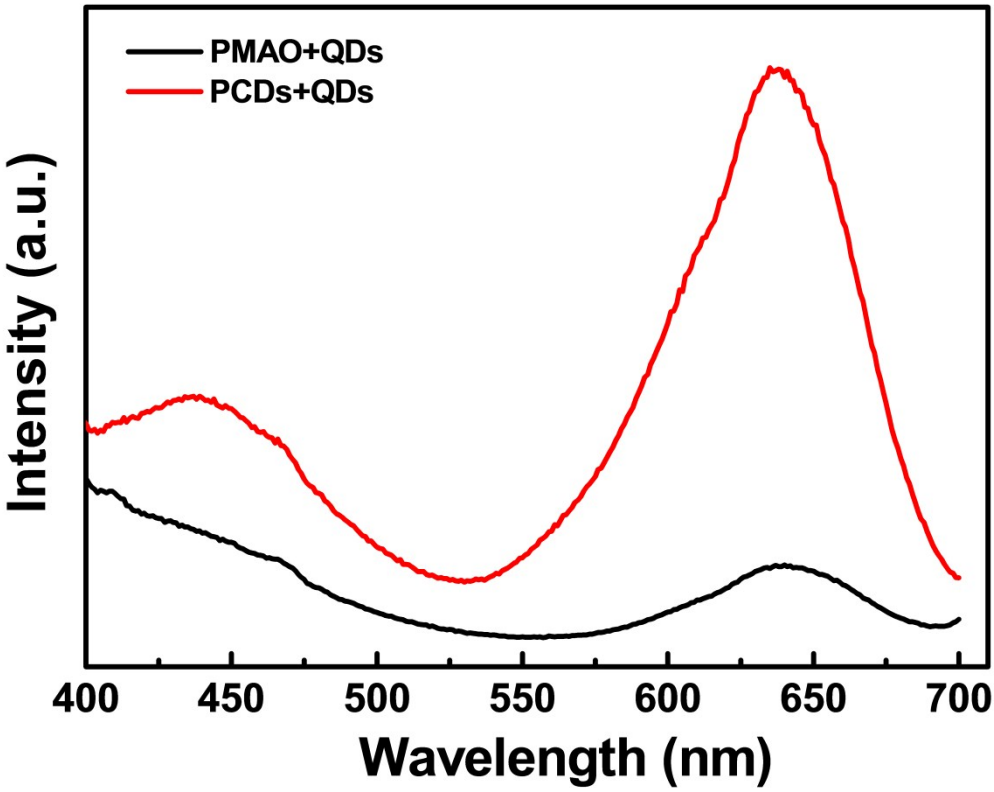

Figure S3: The Photoluminescence spectrum of different composite nanoparticles.

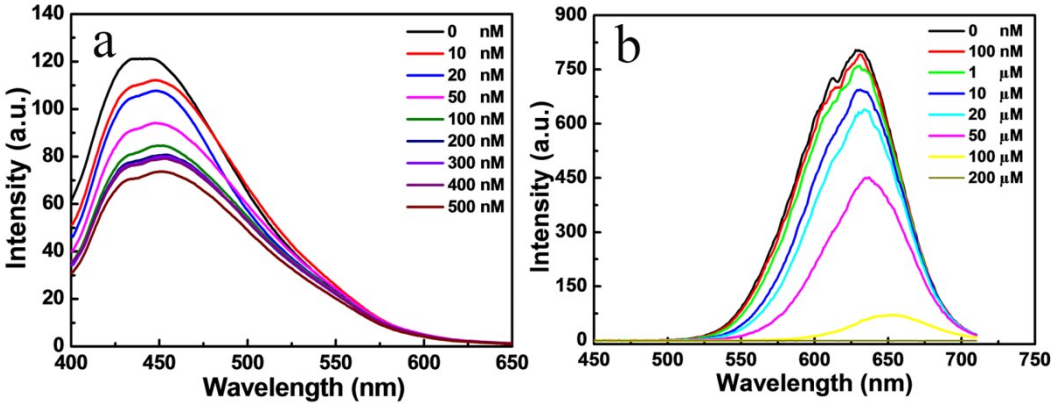

Figure S4: The Photoluminescence spectrum of Hg^{2+} detection by PCDs (a) and CdTe QDs.