Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information:

Preparation of CdTe Superparticles for White Light-Emitting Diodes without Förster Resonance Energy Transfer

Haoyang Zou,[a] *Deli Wang,*[*b] *Baijuan Gong,*[*c] *Yi Liu,*[*a]

[a]State Key Laboratory of Supramolecular Structure and Materials, Jilin University, Changchun 130012, P. R. China.

[b]School of Life Sciences，Jilin University, Changchun 130012, P. R. China.

[c]Department of Orthodontics, Jilin University, School and Hospital of Stomatology, #1500 Qinghua Road, Changchun, Jilin, 130021, P. R. China.

Figure S1. XRD patterns of the as-prepared CdTe NPs (black line) and CdTe SPs (red line).

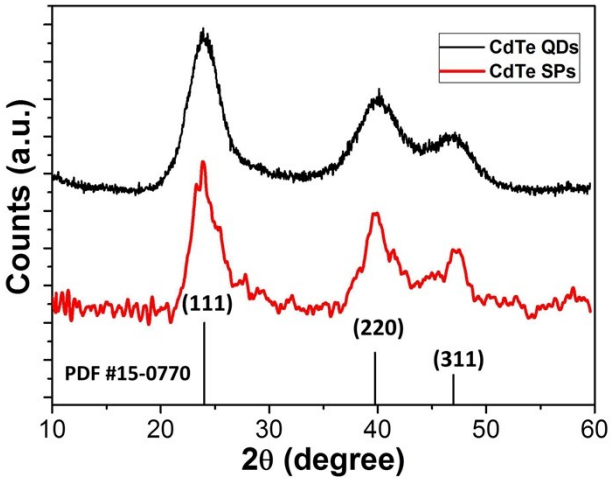

Figure S2. SEM images of green-emitting CdTe SPs (a) and red-emitting CdTe SPs (b) prepared with same synthetic procedure. The average sizes of both SPs are 130 nm.

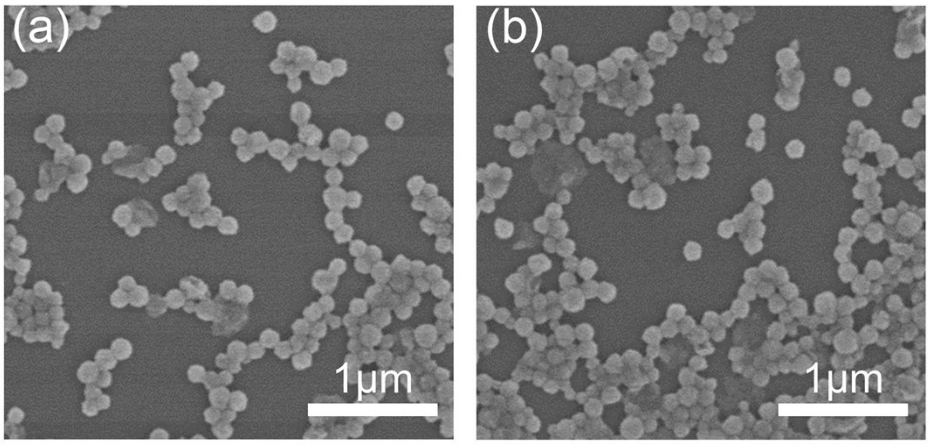

Figure S3. PL emission spectra of CdTe SPs before and after storing in the air for 3 months.

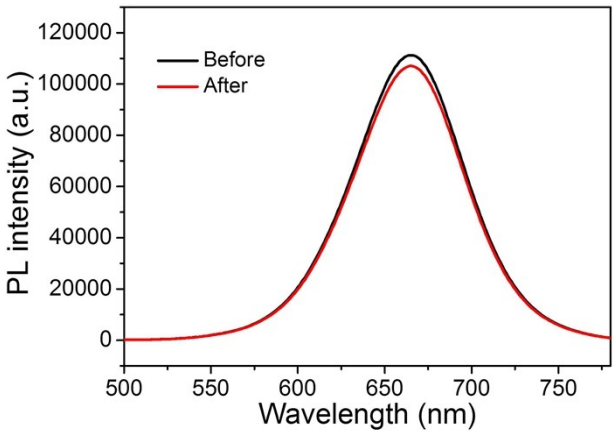

Figure S4. TEM image of CdTe SP-PVA composite film.

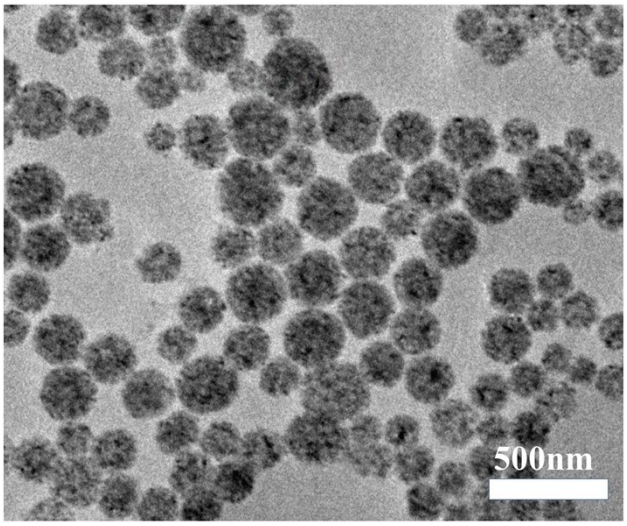

Figure S5. PL emission spectrum (a) and CIE (b) of the LED fabricated by mixing green-, yellow-, and red-emitting CdTe QDs in a certain ratio.

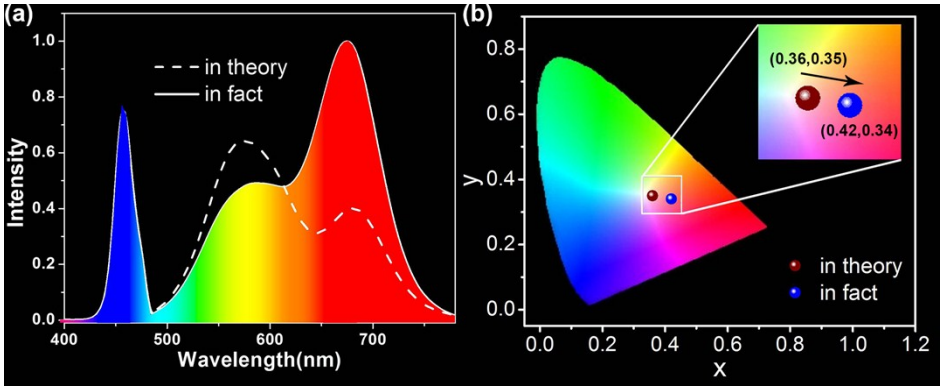

Table S1. Effect of reflux time on size, PL wavelength of maximum emission, and color of CdTe QDs.

reflux time(h)	QD size(nm)	PL wavelength (nm)	color
0.6	1.29	510	green
4	3.12	560	yellow
9	3.56	600	orange
20	4.12	650	red

Table S2. Molar ratio of Cd/Te in CdTe NPs and SPs analyzed by ICP.

	Cd	Te	Cd/Te
NPs	177.5	18.3	9.7/1
SPs	45.9	24.2	1.9/1