Supporting Information

Design and Assembly of aqueous red CdTe QD-LED: Major factors to fabricate aqueous QD-LEDs

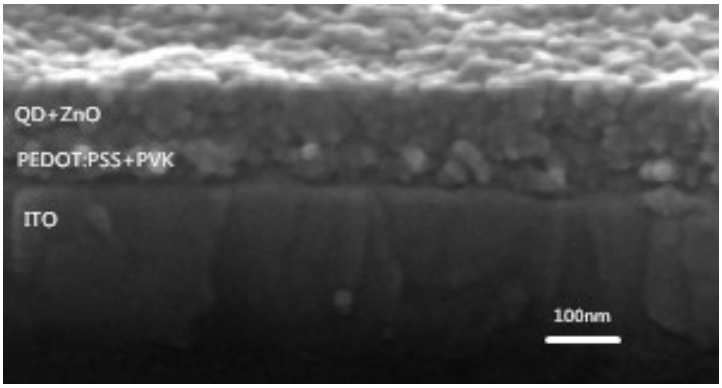
Jinhua Du[1], Shuhong Xu[1*], Chunlei Wang[1], Jiangyong Pan[2], Jing Chen[2], Li Zhu[2], Changgui Lv[2], Yiping Cui[1,*]

[1]Advanced Photonics Center, Southeast University, Nanjing 210096, Jiangsu, China

[2]Display Center, Southeast University, Nanjing 210096, Jiangsu, China

E-mail: xush@seu.edu.cn; cyp@seu.edu.cn.

Figure S1: Cross-sectional scanning electron microscope image of the aqueous red CdTe QD-LED.



The method of preparing QDs solution used in sample B

The experimental steps in detail are as follows:

(1)14mL $CdCl_2$ solution and 290 μ L MPA were mixed in 26mL DI water to make a kind of solvent.

(2)The pH of the solvent was adjusted to 6.8 by adding NaOH solution.

(3)35mL aqueous red CdTe QDs solution (4×10^{-3} mol/L) was centrifuged, purified and re-dispersed in a 4mL the solvent /Triton X-100 mixed solution with volume ratio of 2000:1.

(4)The new CdTe QDs solution (0.035mol/L) was the QDs solution used in sample B.