

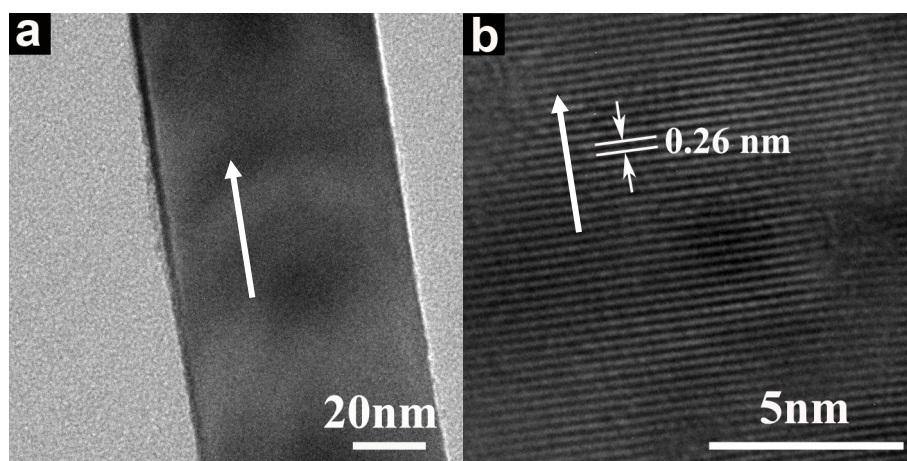
## **Supporting information**

### **Radial Sandwich Hybrid Nanorods by Analogously Inserting Au Nanoparticles in ZnO Nanorods**

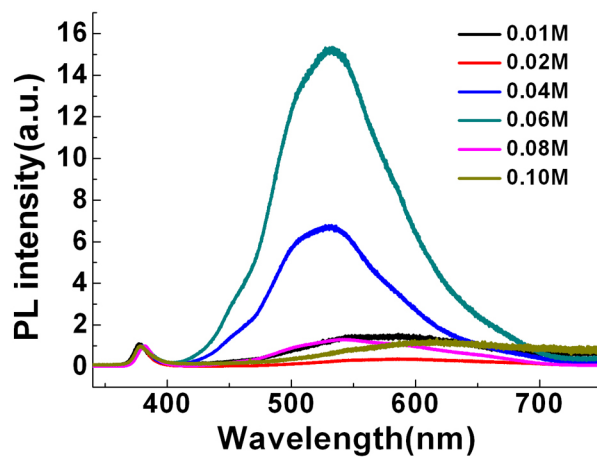
Chanyan Huang, Wenjing Dong, Kenan Zhang, Juanjuan Zou, Yun Zhang, Tiaoxing  
Wei, Yan Sun, Xin Chen,\* Ning Dai\*

National Laboratory for Infrared Physics, Shanghai Institute of Technical Physics,  
Chinese Academy of Sciences, Shanghai 200083, China

Email: xinchen@mail.sitp.ac.cn (X.C.), ndai@mail.sitp.ac.cn (N.D.)



**Figure S1** TEM images of ZnO nanorods indicates that the priority direction of crystal growth is [0001] direction with the interplanar spacing of 0.26 nm during hydrothermal reaction



**Figure S2** Normalized room temperature photoluminescence spectra of ZnO nanorod array samples which were synthesized with different precursor concentration. We noted that ZnO nanorods synthesized with 0.02 M zinc precursor had lower deep level emission, which were used as a given concentration for the growth of ZnO nanorods.