

Supplementary Material (ESI) for Chemical Communications  
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Supporting Information

**Arrangement of Palladium Nanoparticles Templated by Supramolecular Self-Assembly  
of SDS Wrapped on Single-Walled Carbon Nanotubes**

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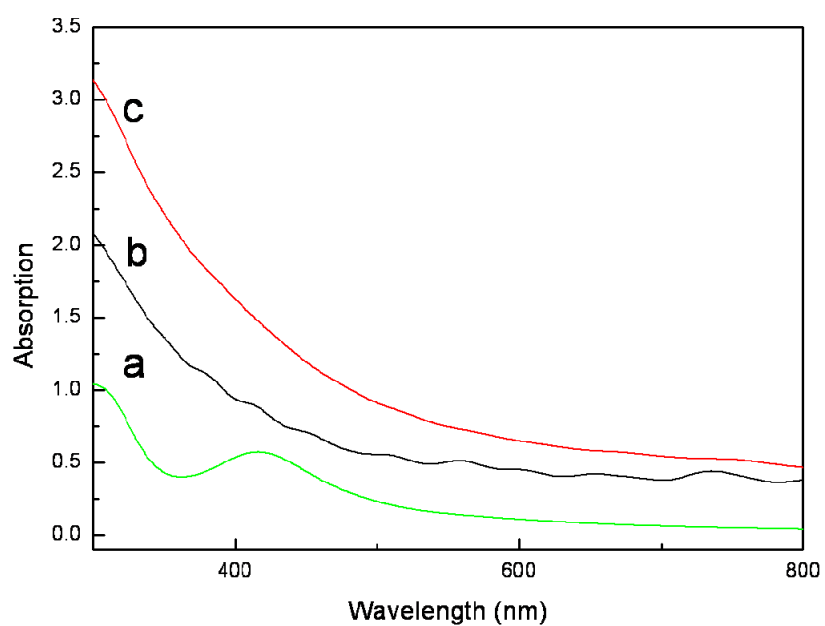
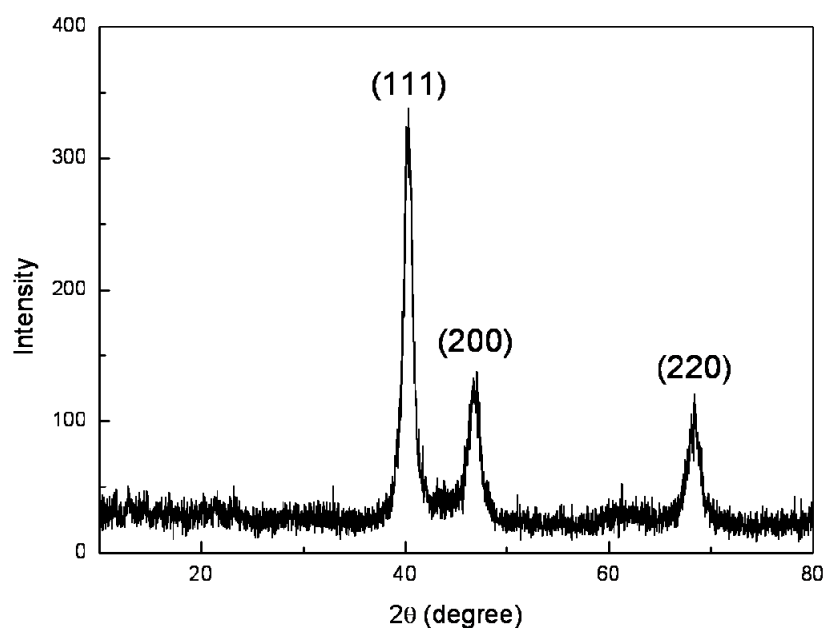


Figure S1. UV-Vis absorption spectrum of (a) Palladium chloride aqueous solution, (b) SDS-functionalized SWCNTs aqueous dispersion and (c) Pd nanoparticles decorated SWCNTs aqueous dispersion.



**Figure S2.** XRD profile of SWCNT supported Pd nanoparticles measured by JDX-3530M XRD system (JEOL). The SWCNTs supported Pd nanoparticles revealed three diffraction peaks at  $2\theta = 40.3, 46.7$  and  $68.4^\circ$  (Fig. 5), which are assigned to the (111), (200) and (220) planes, respectively. The lattice parameters of the Pd nanoparticles evaluated by the XRD measurement were determined to be 0.388 nm, which is in agreement with the standard value (0.389 nm).