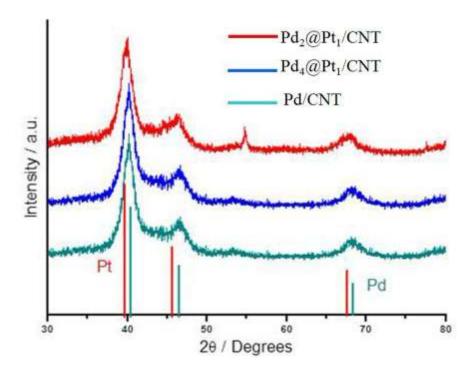
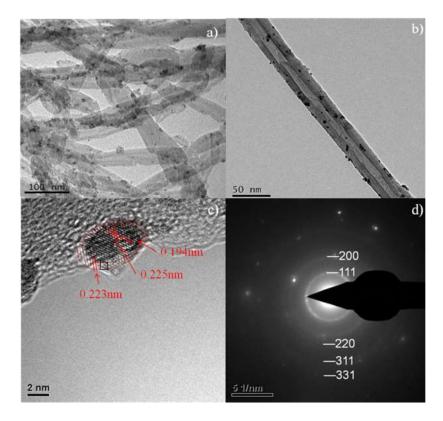
## Pd induced Pt( $\overline{\rm IV}$ ) reduction to form Pd@Pt/CNT core-shell catalyst for a more complete oxygen reduction

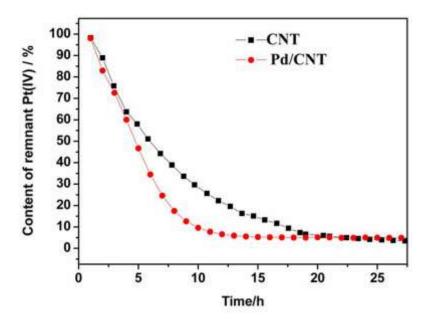
Meirong Xia, Ying Liu, Zidong Wei, Siguo Chen, Kun xiong, Li Li, Wei Ding, Jinsong Hu, Li-Jun Wan, Kong Li, and Shahnaz Fatima Alvia



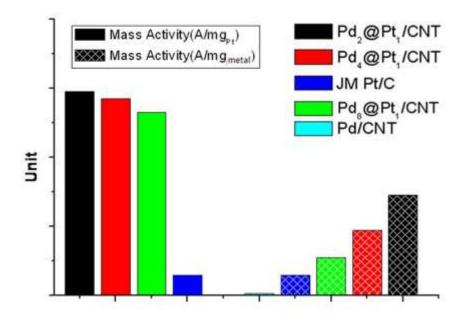
**Fig. S1.** X-ray diffraction of the prepared Pd/CNT,Pd<sub>4</sub>@Pt<sub>1</sub>/CNT and Pd<sub>2</sub>@Pt<sub>1</sub>/CNT.



**Fig. S2.** TEM images of Pd/CNT (a) and Pd<sub>2</sub>@Pt<sub>1</sub>/CNT (b). HRTEM image of Pd<sub>2</sub>@Pt<sub>1</sub>/CNT(c), and selected area electron diffraction (d) of the ring in the (c).



**Fig. S3.**The relative content of remnant  $PtCl_6^{2-}$  vs. reduction time



**Fig. S4.** The mass activity (MA, A mg<sup>-1</sup>) at 0.9 V for the different samples.

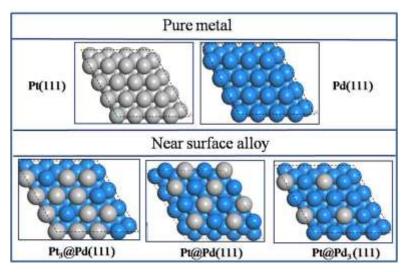


Fig. S5. Models of pure metals and near surface alloy PdPt