**Fig. S1** CV of Pd NWAs modified electrode in 0.5 M H$_2$SO$_4$, Scan rate: 50 mV s$^{-1}$

**Fig. S2** DPV response of PdNWs modified electrode for the detection of G and A in fish sperm DNA sample ss-DNA sample in pH 7.1 PB solution. Inset: Plot of anodic peak currents of adenine(A) and guanine(G) versus the concentration of A and G. Concentrations from inner to outer of curves: G (0, 20, 30, 40, 50 µM), A (0, 20, 30, 40, 50 µM).