

A Flexible and Transparent PtNP/SWCNT/PET Electrochemical Sensor for Nonenzymatic Detection of Hydrogen Peroxide Released from Living Cells with Real-Time Monitoring Capability

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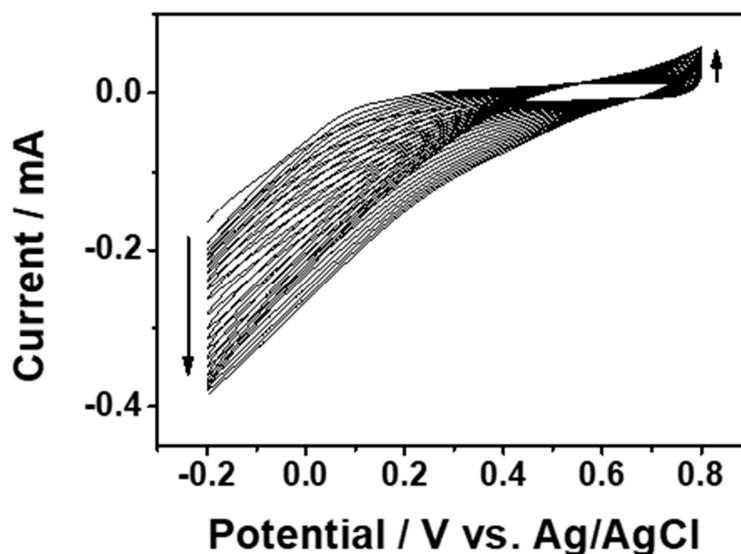


Figure S1. CV curves of SWCNT/PET film electrode in 1 mg/mL chloroplatinic acid hexahydrate at a scan rate of 50 mV for 20 cycles.

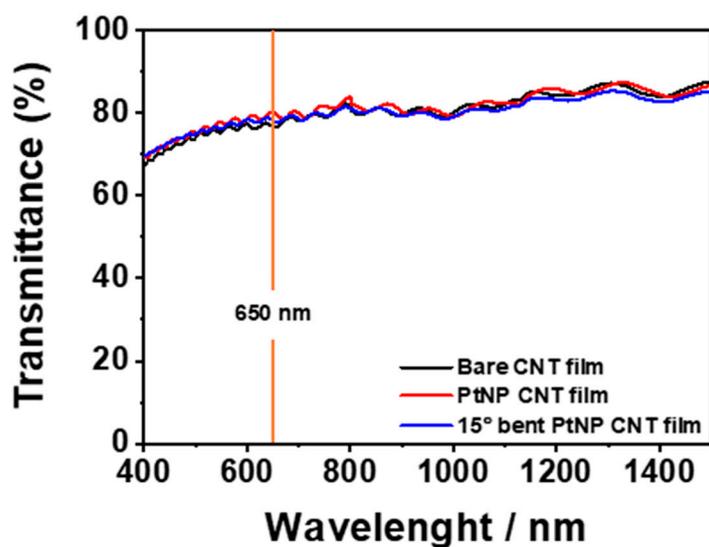


Figure S2. Transmittance of bare SWCNT, flat PtNP/SWCNT film, and bent PtNP/SWCNT film.

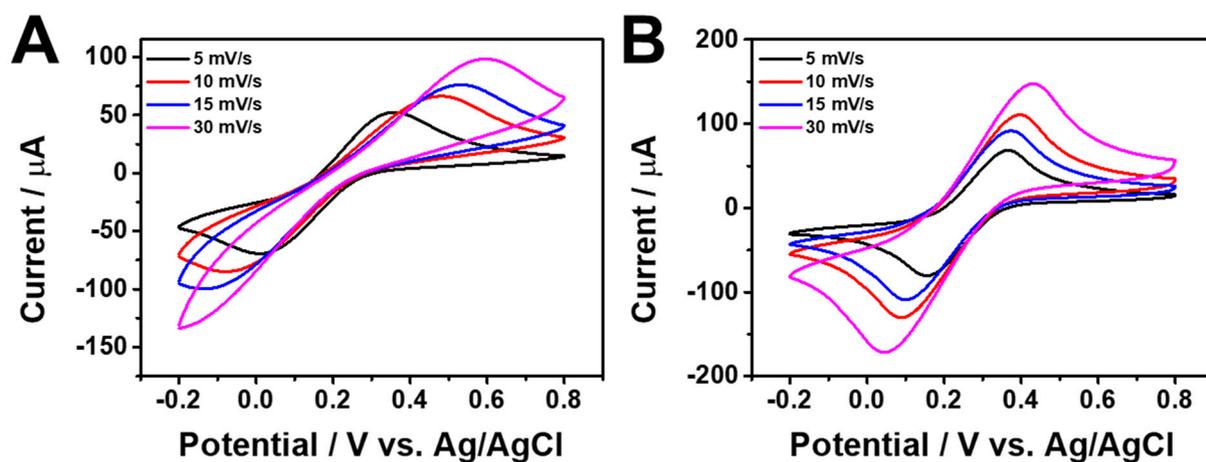


Figure S3. CV curve of (A) bare SWCNT and (B) PtNP/SWCNT film in 0.1 M KCl containing 10 mM $[\text{Fe}(\text{CN})_6]^{3-}$ at a various scan rate.

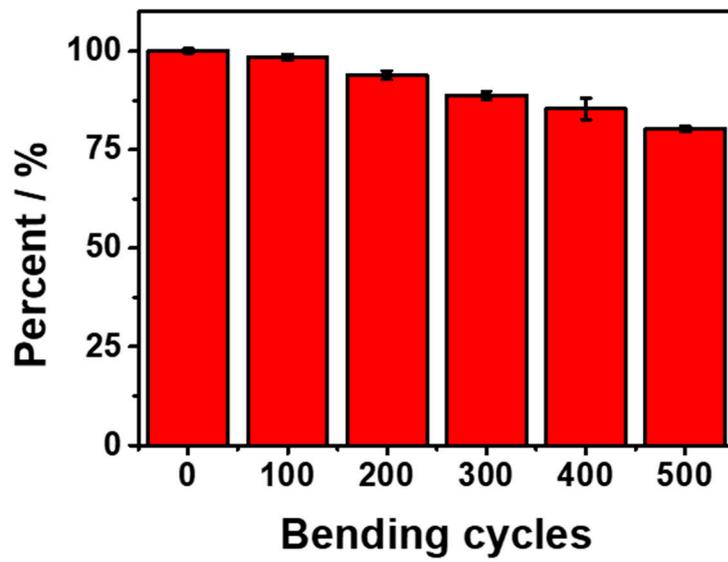


Figure S4. Effects of bending cycles on the current response to 100 μM H_2O_2 using PtNP/SWCNT film bending at 60° .

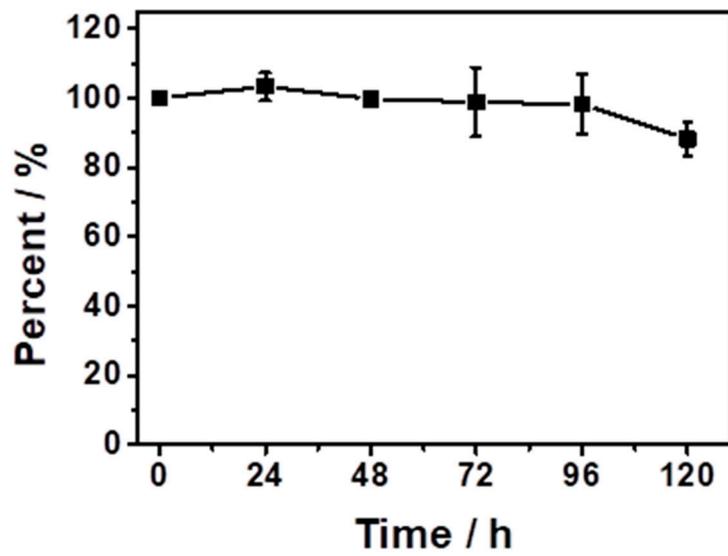


Figure S5. Stability of PtNP/SWCNT network film sensor in cell culture media without cells. Signals were compared from each amperometric response of 100 μM H_2O_2 in 10 mM PBS.

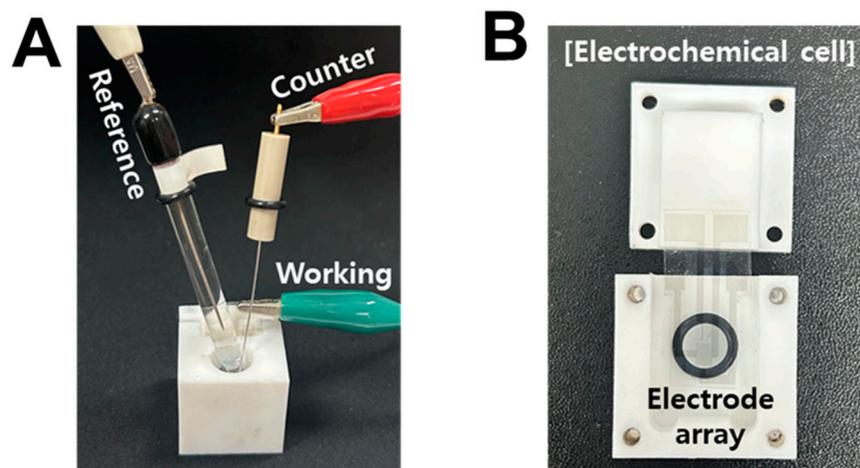


Figure S6. (A) Three-electrode setup includes the IDE as working electrodes. (B) Exploded view of the electrochemical cell.

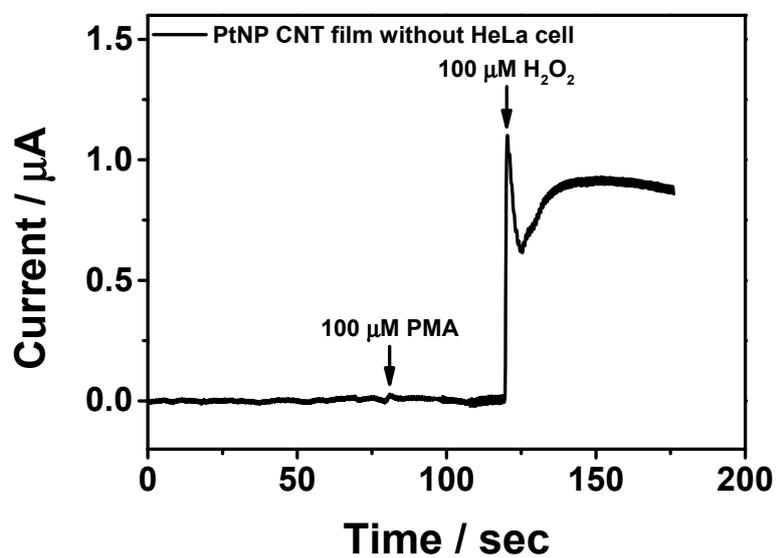


Figure S7. Monitoring of 100 μM PMA and 100 μM H₂O₂ using the flexible PtNP/SWCNT film without HeLa cell.