

Figure S1. Schematic description of the synthesis of MWCNT-polypyrrole core-shell nanowire.

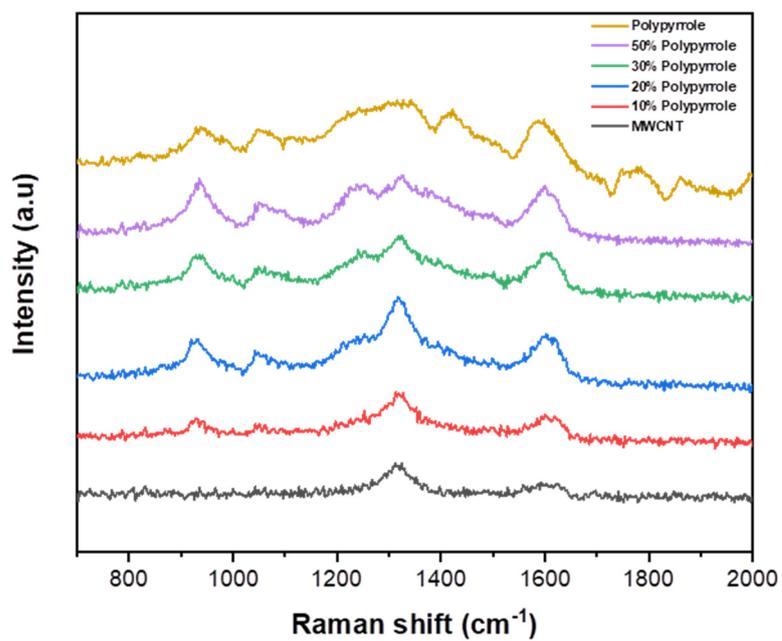


Figure S2. Raman spectra of an MWCNT and MWCNT-polypyrrole nanowire with different concentration of polypyrrole.

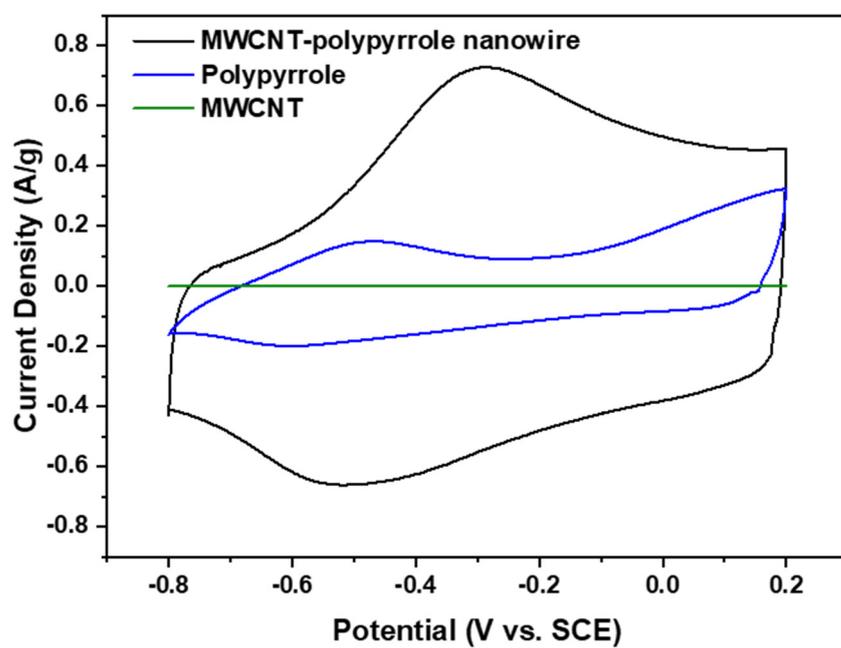


Figure S3. CV curves of MWCNT-polypyrrole nanowire, polypyrrole and MWCNT in the range from -0.8 V to 0.2 V.

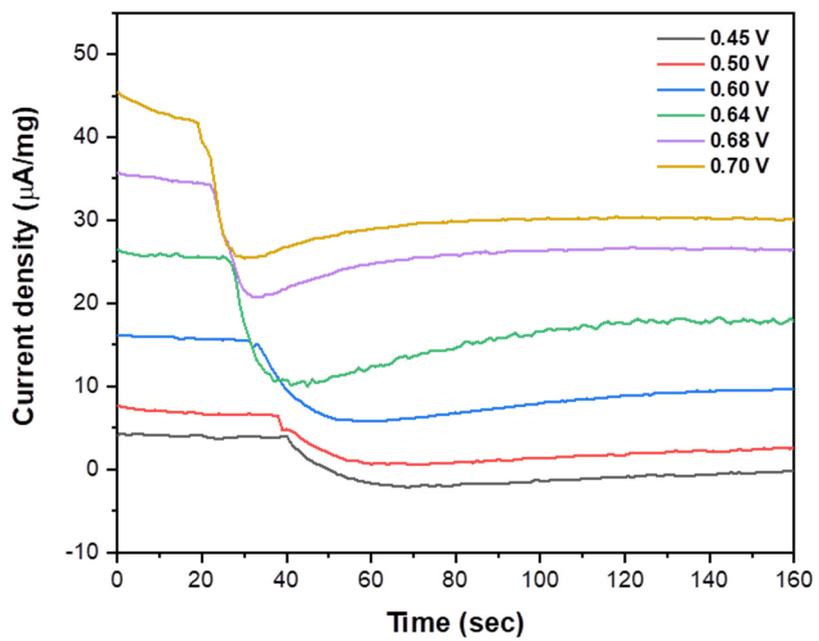


Fig. S4. Chronoamperograms of MWCNT-polypyrrole nanowire following the addition of 10 mM lactic acid at various potential.

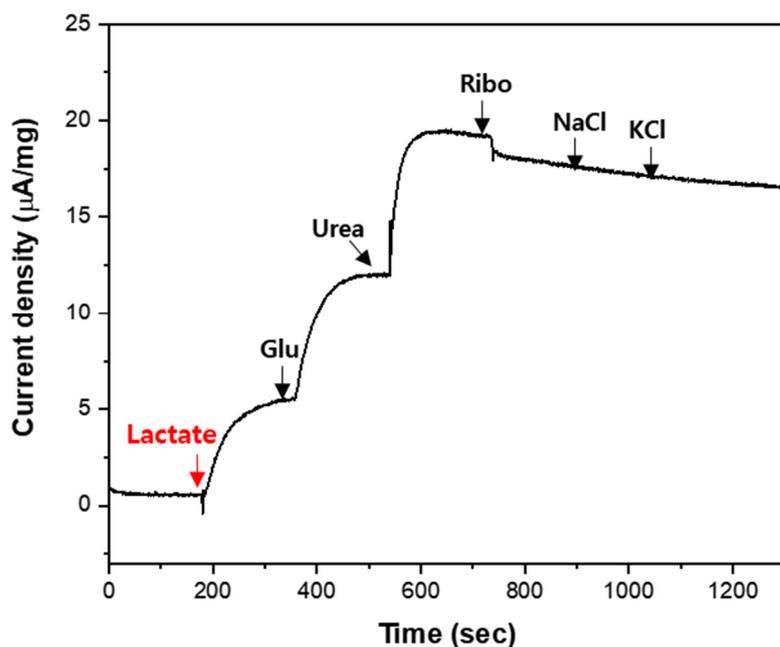


Fig. S5. Amperometric response of CuO to successive additions of 1 mM lactic acid and interfering metabolites of glucose (Glu, 1 mM), urea (1 mM), NaCl (1 mM), KCl (1 mM), and riboflavin (Ribo, 1 mM) at detection potential of 0.68 V.

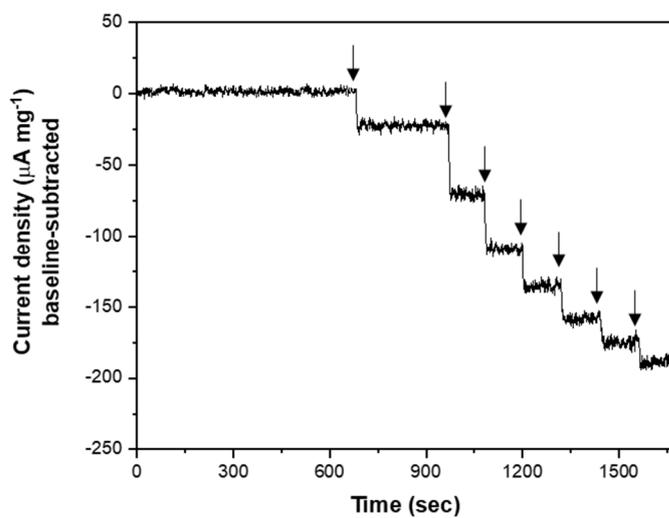


Fig. S6. Stability and reproducibility test for MWCNT-polypyrrole electrode with the repeated addition of 1 mM-lactic acid.