Electrochemical reduction behavior of Cu^{2+} in chitosan hydrogel compared with Cu^{2+} in solution.

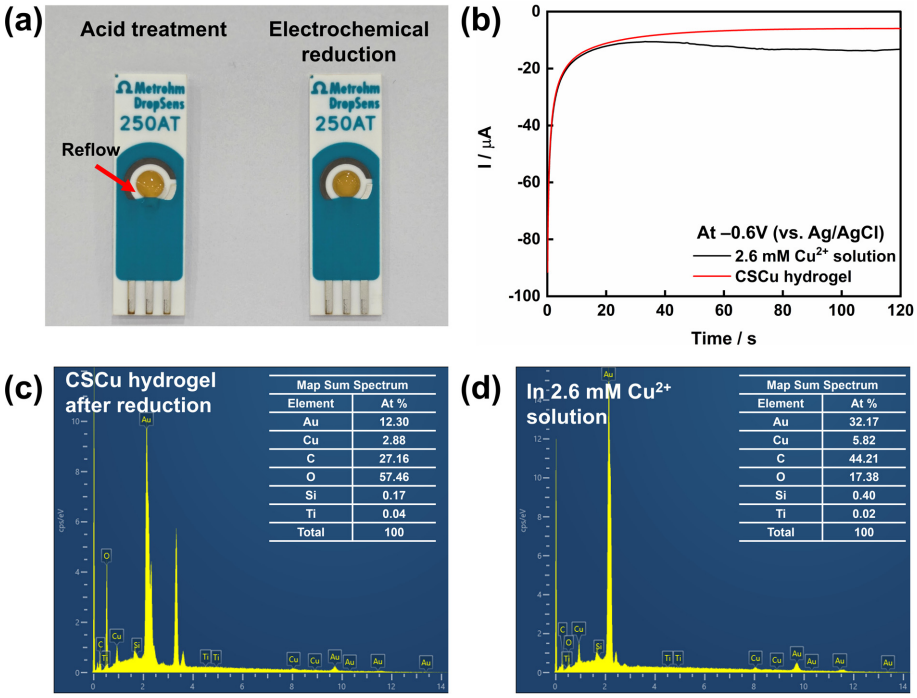

Fig. S7. (a) Optical images of the vertically positioned SPGE comparing the effects of acid treatment and electrochemical reduction after CSCu gel formation. (b) Chronoamperometric reduction curves recorded at –0.6 V (vs. Ag/AgCl) for a 2 mM Cu^{2+} aqueous solution and the Cu^{2+}-coordinated chitosan (CSCu) hydrogel in 0.1 M K_2SO_4 electrolyte. (c) EDS spectrum of the gold surface after reduction in the CSCu hydrogel following removal of the hydrogel layer, and the SPGE after reduction in a 2 mM Cu^{2+} aqueous solution.

Cyclic voltametric behavior of chitosan hydrogel (without Cu^{2+} ions) in 0.1 M NaOH.

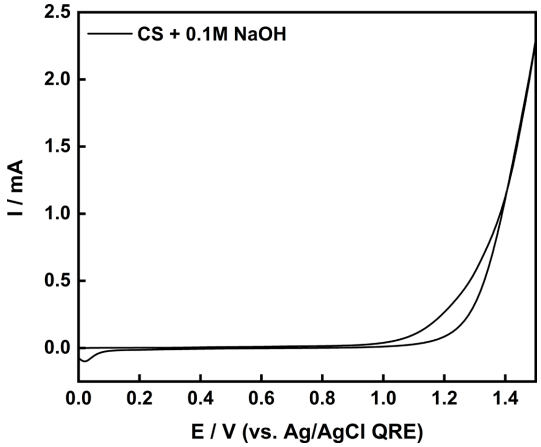

Fig. S8. Cyclic voltammograms of CS hydrogel in 0.1 M NaOH (scan rate : 50 mV/s).