

Supporting Information

Ni(OH)₂@Cu dendrite structure for highly sensitive glucose determination

Hyeri Jung, Sang Ha Lee, Jiao Yang, Misuk Cho and Youngkwan Lee*

Department of Chemical Engineering,

Sungkyunkwan University, 440-746 Suwon, Korea

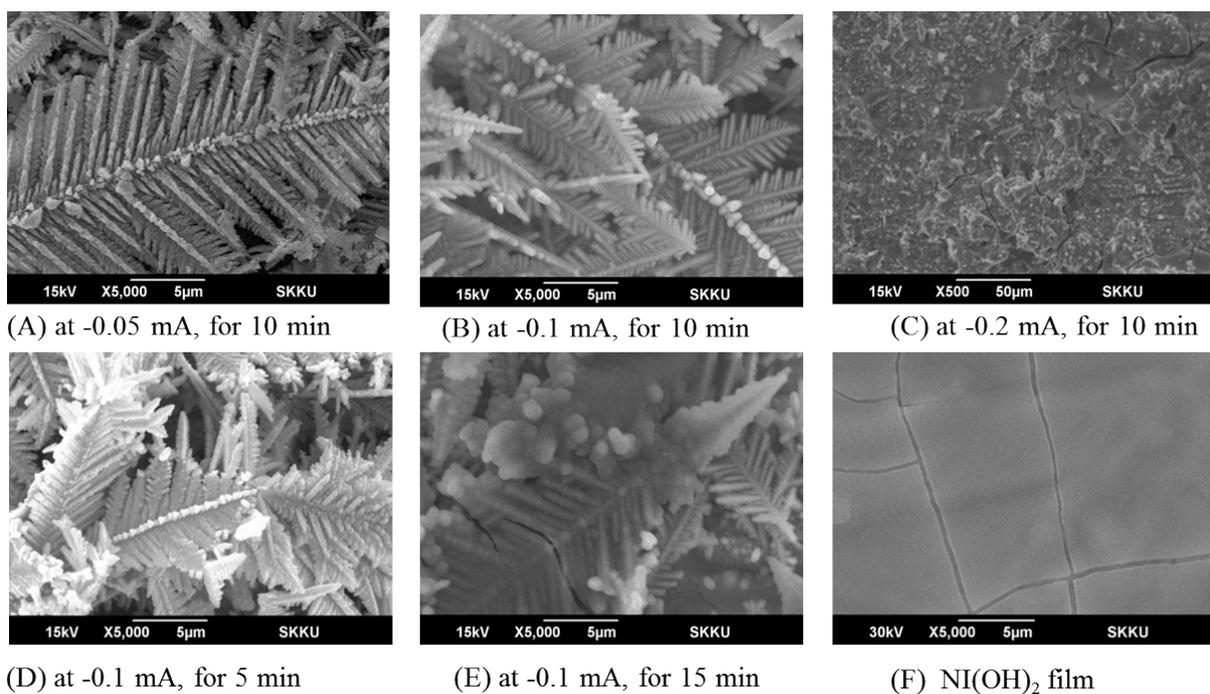
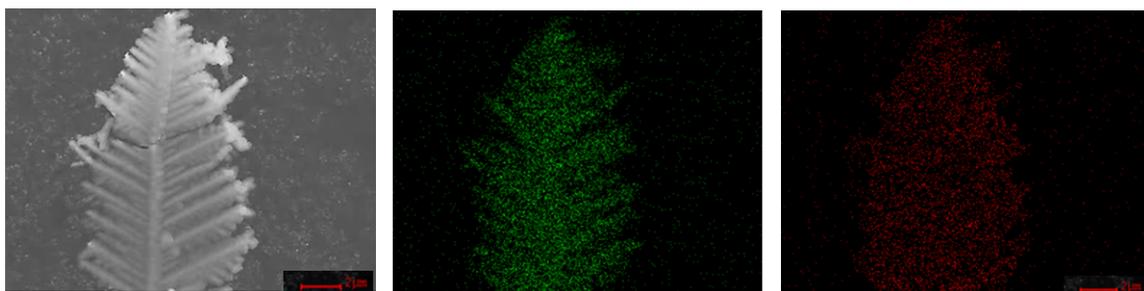


Figure S1. SEM images of various electrodes:

Ni(OH)₂ @ Cu dendrite prepared at different applied current [-0.05 mA (A), -0.1 mA (B), and -0.2 mA (C)]; Ni(OH)₂ @ Cu dendrite prepared at different deposition time [5 min (D) and 15 min (E)]; Ni(OH)₂ film (F)



(A) EDX image
of Ni(OH)₂ @ Cu dendrite

(B) Element mapping - Cu

(C) Element mapping - Ni

Figure S2. EDX image of Ni(OH)₂ @ Cu dendrite (A) and elemental mapping overlay images of Cu (B) and, Ni (C)

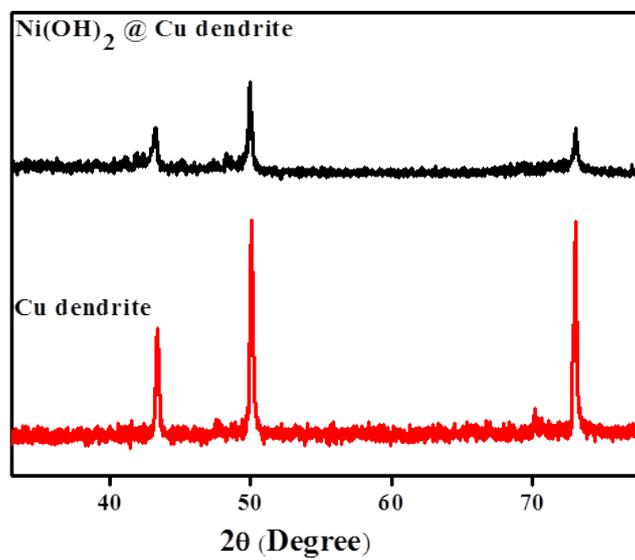


Figure S3.

XRD patterns of Ni(OH)₂ @ Cu dendrite and Cu dendrite by electrodeposition

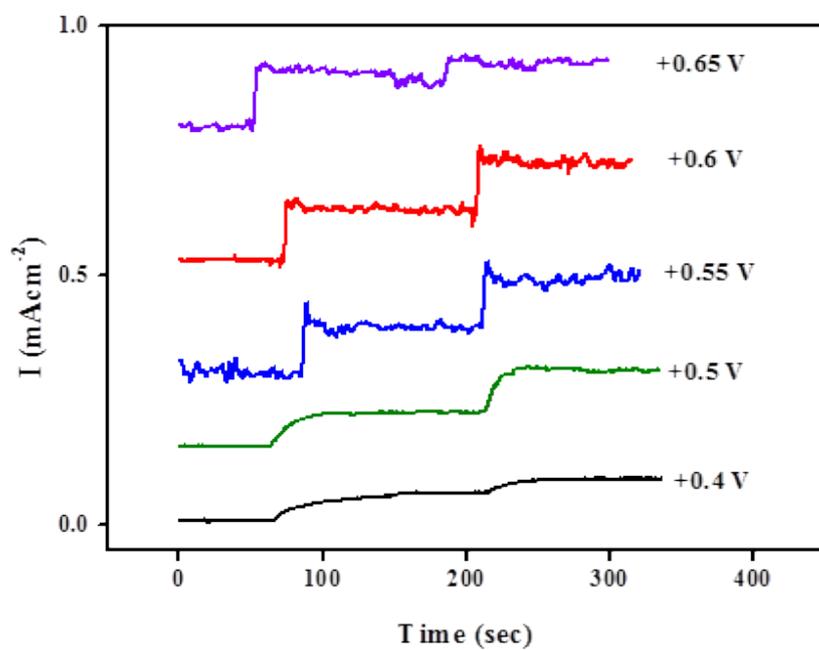


Figure S4. Amperometric responses of Ni(OH)₂ @ Cu dendrite to successive additions of 0.1 mM glucose as a function of applied potentials +0.4, +0.5, +0.55, +0.6, and +0.65 V, respectively