

Supporting Information for

Growth of Cu particles on Cu₂O truncated octahedron: tuning of the Cu content for efficient glucose sensing

Gang Wang, Hong Sun, Lu Ding, Gang Zhou, and Zhong-Sheng Wang*

Department of Chemistry, Laboratory of Advanced Materials, iChEM (Collaborative Innovation Center of Chemistry for Energy Materials), Fudan University, 2205

Songhu Road, Shanghai 200438, P. R. China.

* Corresponding author: zs.wang@fudan.edu.cn

Table S1. Molar ratio of Cu/Cu₂O in the hybrid structure

Sample	n(Cu)/n(Cu ₂ O)
Cu-Cu ₂ O(60)	0.22
Cu-Cu ₂ O(80)	0.44
Cu-Cu ₂ O(100)	0.83
Cu-Cu ₂ O(120)	3.38

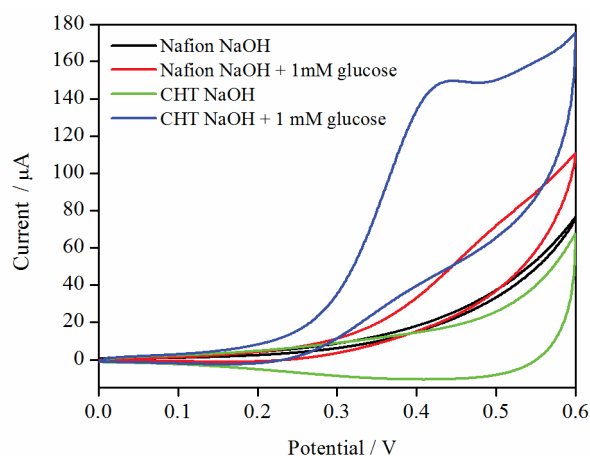


Fig. S1. CV curves of Nafion/Cu-Cu₂O(100)/FTO and CHT/Cu-Cu₂O(100)/FTO in 0.1 M NaOH with 0 mM glucose and 1 mM glucose.

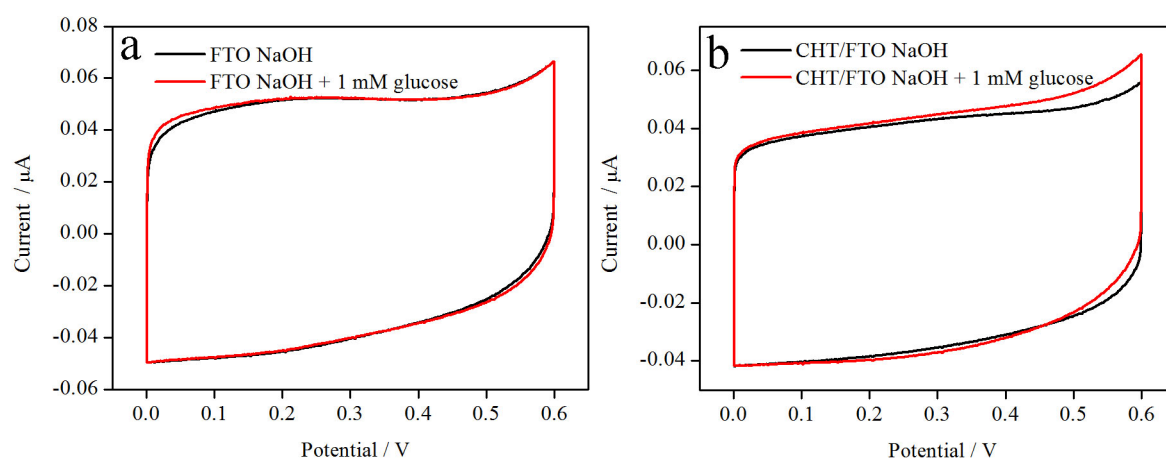


Fig. S2. CV curves of (a) bare FTO and (b) CHT/FTO in 0.1 M NaOH in the absence (black line) and presence (red line) of 1 mM glucose.

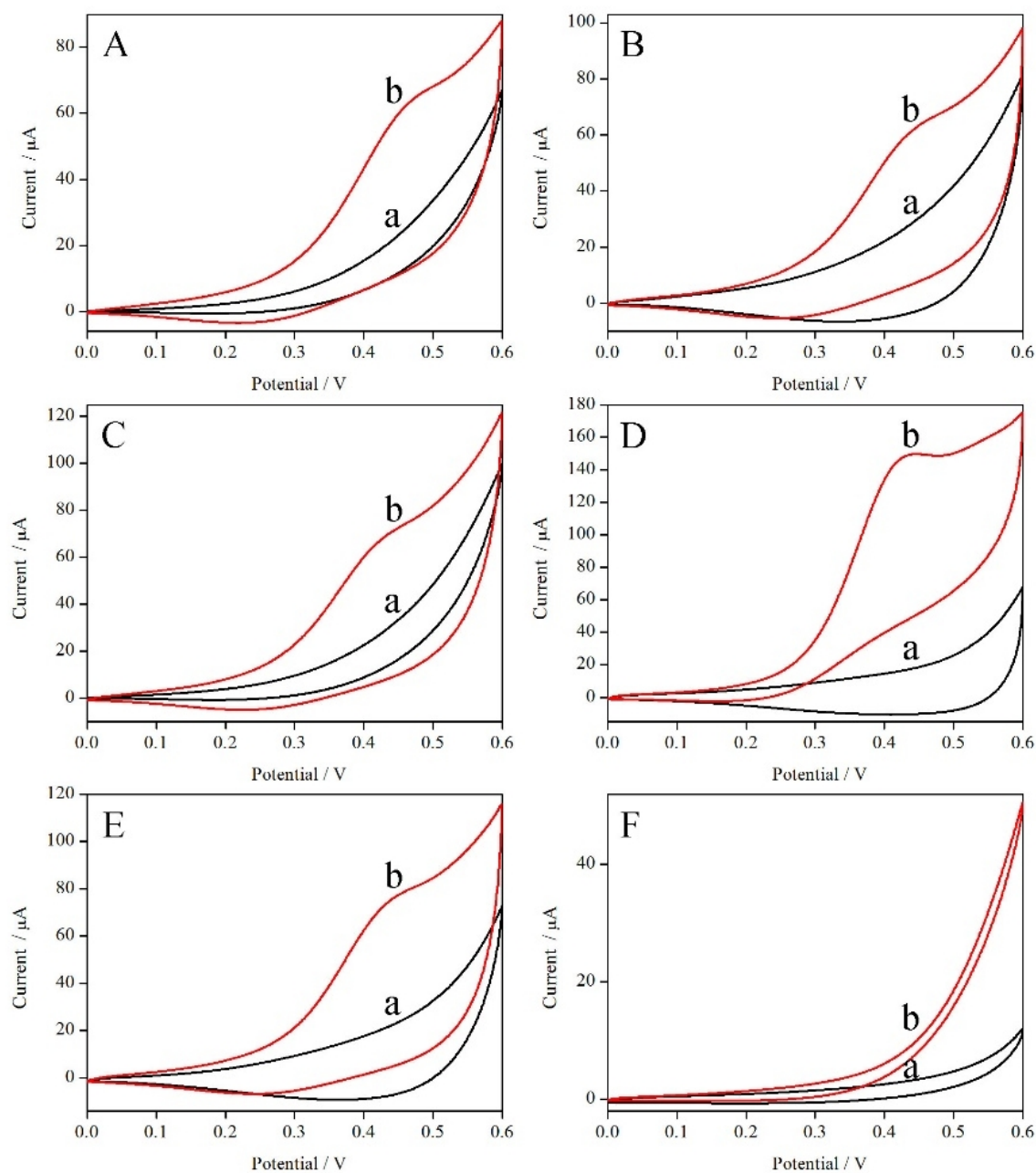


Fig. S3. CV curves of (A) CHT/Cu₂O/FTO, (B) CHT/Cu-Cu₂O(60)/FTO, (C) CHT/Cu-Cu₂O(80)/FTO, (D) CHT/Cu-Cu₂O(100)/FTO, (E) CHT/Cu-Cu₂O(120)/FTO, and (F) CHT/Cu/FTO at a scan rate of 50 mV s⁻¹ in 0.1 M NaOH solution without (curve a, black line) and with (curve b, red line) 1 mM glucose.

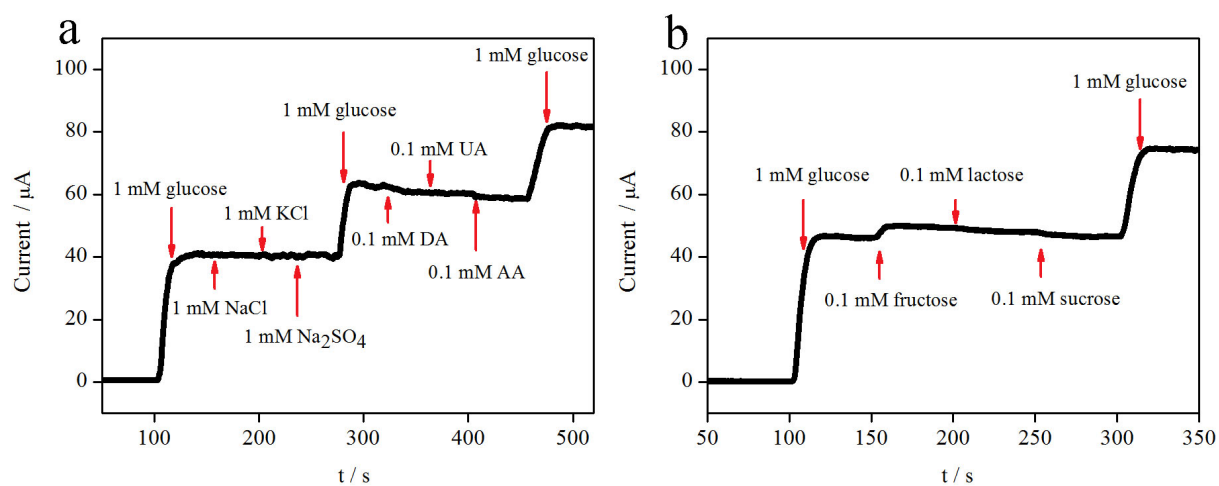


Fig. S4. Current responses to glucose followed by addition of various interferents at 0.40 V.

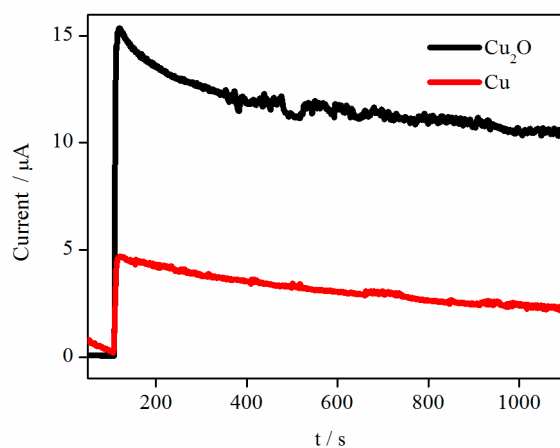


Fig. S5. The amperometric response of CHT/Cu₂O/FTO and CHT/Cu/FTO to 1 mM glucose during 1000 s.