

Supporting Information

Waste eggshell membrane-templated synthesis of functional Cu²⁺- Cu⁺/biochar for ultrasensitive electrochemical enzyme-free glucose sensor

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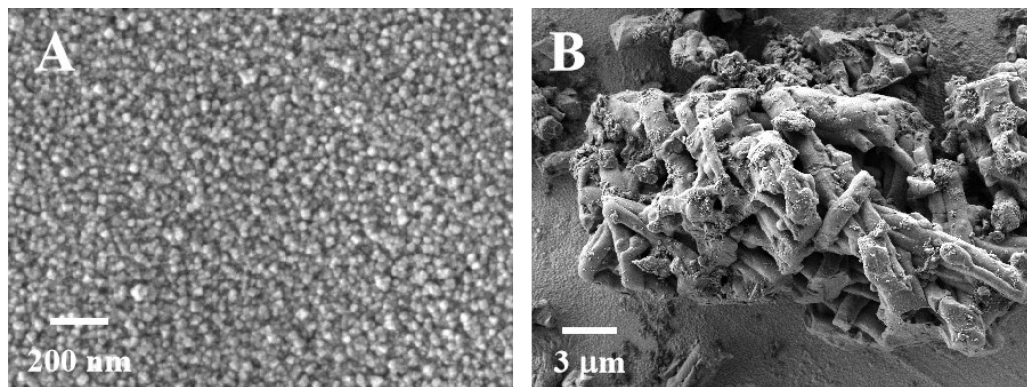


Fig.S1 The SEM images of the electrode after Au deposition(A) and Au/Cu²⁺-Cu⁺/biochar modified electrode (B).

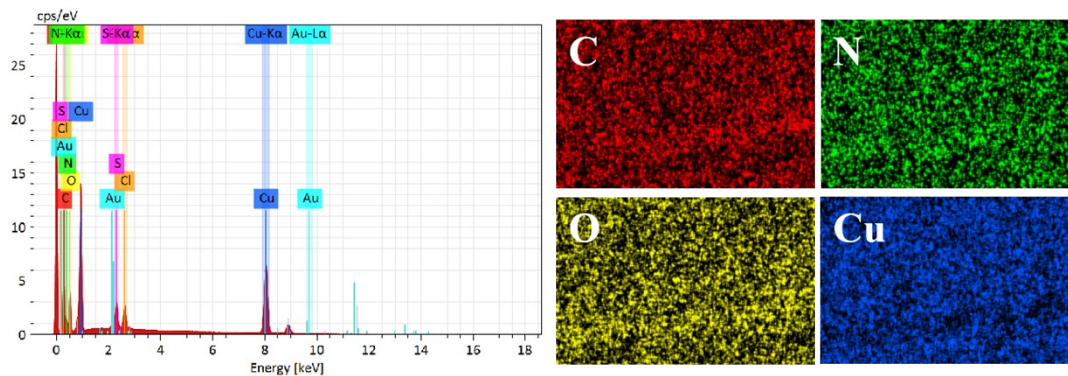


Fig.S2 EDS and EDS mapping of Au/Cu²⁺-Cu⁺/biochar.

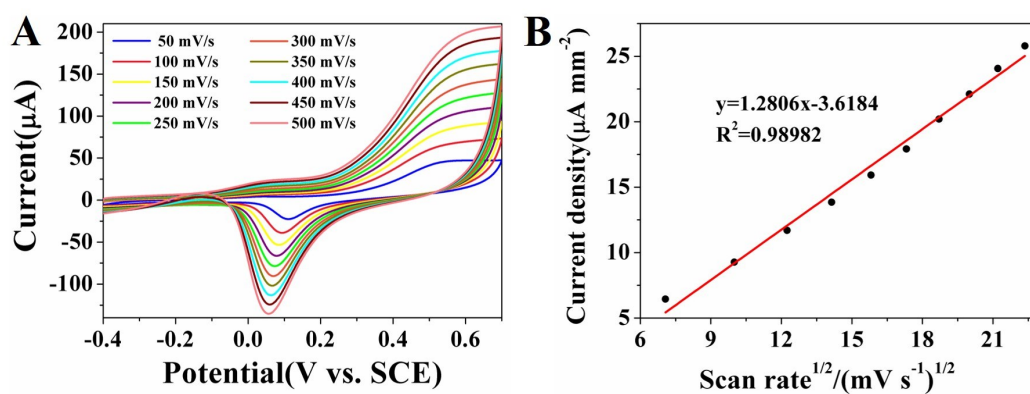


Fig. S3 (A) CV curves of Cu²⁺-Cu⁺/biochar/Au/GCE at different scan rates (50-500 mV s⁻¹) for 5 mM glucose in 0.1 M NaOH; (B) A linear relationship between the square root of the scan rate and the current density.

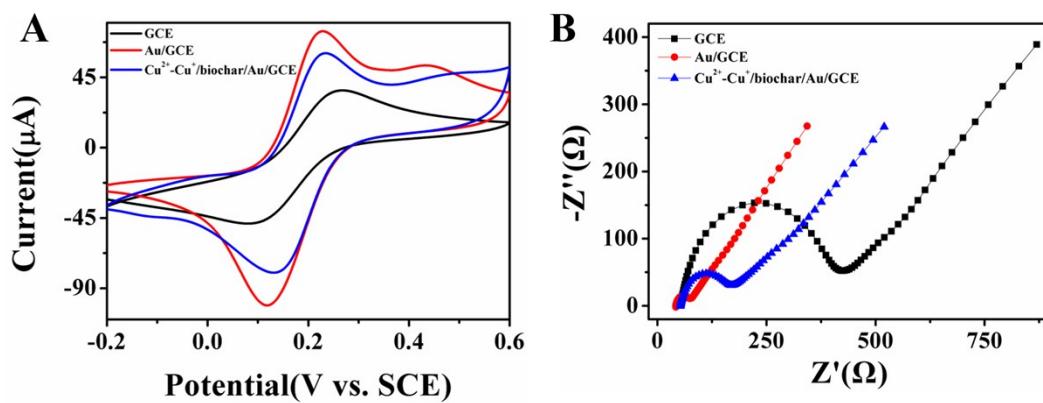


Fig. S4 (A) CV curves of bare GCE, Au/GCE and Cu²⁺-Cu⁺/biochar/Au/GCE in 5 mM [Fe(CN)₆]³⁻ and 0.1 M KCl containing 0.1 M NaOH solution; (B) Nyquist plots of EIS of bare GCE, Au/GCE and Cu²⁺-Cu⁺/biochar/Au/GCE in 10 mM [Fe(CN)₆]^{3-/4-} (1:1) and 0.1 M KCl containing 0.1 M NaOH solution.