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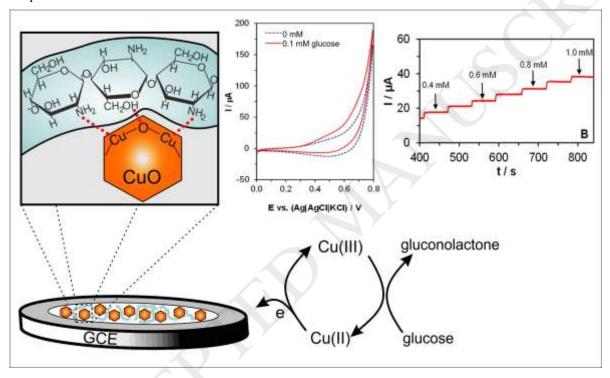
## ACCEPTED MANUSCRIPT

# Synthesis and characterization of novel copper oxide-chitosan nanocomposites for non-enzymatic glucose sensing

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#### Graphical abstract



#### Highlights

- Extreme Biomimetic approach for the development of a novel non-enzymatic electrochemical glucose sensor was used.
- CuO-chitosan nanocomposites obtained by hydrothermal methods were used as modifier glassy carbon electrode.
- The CuO-CS/GCE sensor was used for glucose detection.
- The CuO-CS/GCE sensor displays high sensitivity of 503 μA mM cm<sup>-2</sup>.

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