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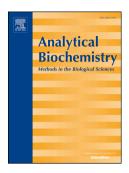
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#### ACCEPTED MANUSCRIPT

### MUCIN AND CARBON NANOTUBE-BASED BIOSENSOR FOR DETECTION OF

#### **GLUCOSE IN HUMAN PLASMA**

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#### **ABSTRACT**

This work reports an amperometric enzyme-electrode prepared with glucose oxidase, which have been immobilized by a cross-linking step with glutaraldehyde

in a mixture containing albumin and a novel carbon nanotubes-mucin composite

(CNT-muc). The obtained hydrogel matrix was trapped between two polycarbonate

membranes and then fixed at the surface of a Pt working electrode. The developed

biosensor was optimized by evaluating different compositions and the analytical

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