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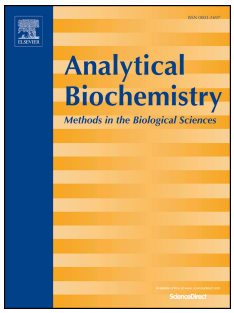

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MUCIN AND CARBON NANOTUBE-BASED BIOSENSOR FOR DETECTION OF GLUCOSE IN HUMAN PLASMA

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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