

Monoamine oxidase biosensors based on silver nanoparticles and graphene oxide for the antidepressants determination

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Keywords: biosensor, monoamine oxidase, carbon nanotubes, silver nanoparticles, graphene oxide, antidepressants.

Abstract

The developed monoamine oxidase amperometric biosensors based on screen-printed graphite electrodes modified by multi-walled carbon nanotubes, silver nanoparticles or graphene oxide for antidepressants determination: imipramine, afobazole and moclobemide. In the article the possibility of using biosensors for drug compound in the dosage forms. The lower limit of detectable concentrations for moclobemide, imipramine, afobazole is $2 \cdot 10^{-9}$, $6 \cdot 10^{-9}$, $8 \cdot 10^{-9}$ mol/l respectively.