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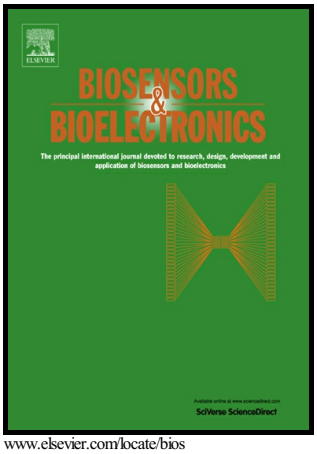

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A three-dimensional graphene-based ratiometric signal amplification aptasensor for MUC1 detection

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ABSTRACT

A three-dimensional graphene-based ratiometric signal amplification aptasensor for highly sensitive and selective detection of mucin1 (MUC1) by electrochemical method has been developed. Au-reduced graphene oxide (Au-RGO) composite, which was synthesized through hydrothermal reaction and freeze-drying treatment, was used as substrate for fabricating the sensor interface on glassy carbon electrode (GCE). The application of Au-RGO is beneficial for

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