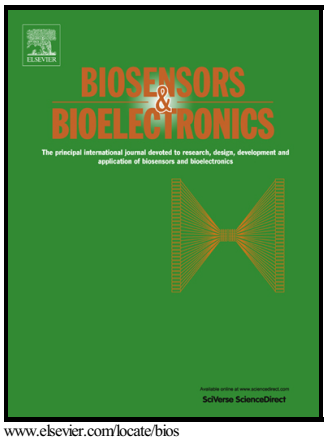

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An ultrasensitive sandwich type electrochemiluminescence immunosensor for triiodothyronine detection using silver nanoparticle-decorated graphene oxide as a nanocarrier

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Abstract

An ultrasensitive electrochemiluminescence (ECL) immunosensor was constructed to detect 3,3',5–triiodothyronine (T3). The system employed T3-conjugated, silver nanoparticle-decorated carboxylic graphene oxide (Ag@fGO-T3) as a carrier and anti-T3 antibody-tris(2,2'-bipyridyl) ruthenium(II) ($Ru(bpy)_3^{2+}$) as a probe. The Ag@fGO-T3 and $Ru(bpy)_3^{2+}$ complex could be