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## **Rapid detection method and portable device based on the photothermal effect of gold nanoparticles**

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### **ABSTRACT**

Gold nanoparticle (GNP)-labeled immunochromatography test strip (ICTS) has been widely used in different fields, but its sensitivity still require further improvement. In this work, a rapid and quantitative test strip detection method based on the photothermal effect of GNPs was established using a temperature sensor. A portable sensor device was fabricated based on the above method, and the main operating parameters

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