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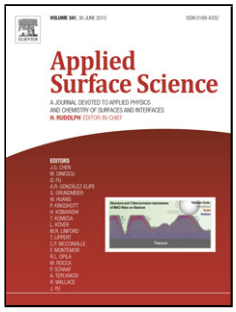

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Nanostructured interfaces with site-specific bioreceptors for immunosensing

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Highlights

Innovative and simple strategy to create sensitive immunosensing platforms.

Gold surface modification with dithiocarbamate nanoconjugates of protein A.

CS2 strongly adsorbed on gold able to block protein nonspecific adsorption.

High performance for antigen detection by properly oriented antibodies.

Keywords: gold surface modification; protein A nanobioconjugates; *in situ* dithiocarbamate formation; inhibition of nonspecific adsorption; antibody oriented immobilization; total internal reflection imaging ellipsometry.

Abstract

In this work, we propose a simple and effective approach to build nanostructured immunosensor platforms. The one-step strategy relies on i) the *in situ* formation of