

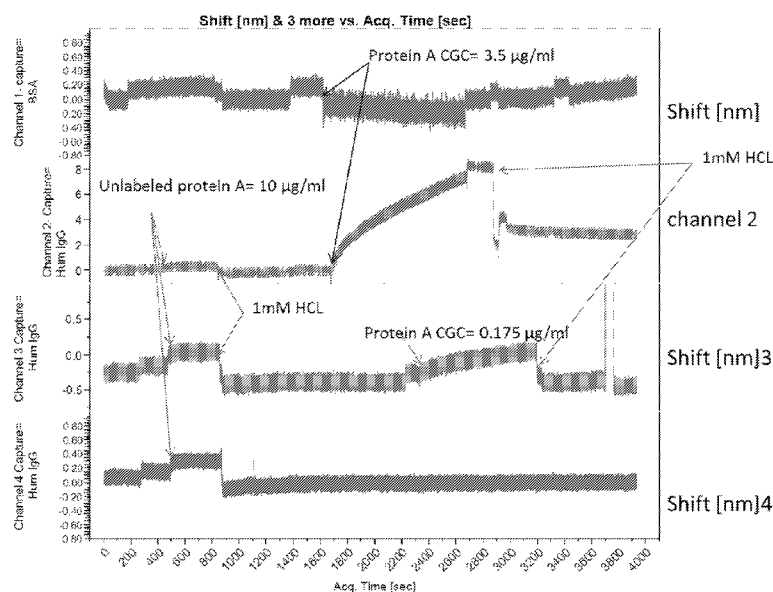


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(54) **Title:** SIGNAL AMPLIFICATION IN PLASMONIC SPECIFIC-BINDING PARTNER ASSAYS

FIGURE 1



(57) **Abstract:** The present invention relates to analyte detection devices and methods of using such devices to detect minute quantities of a target analyte in a sample. In particular, the invention provides an analyte detection device comprising a plurality of composite metallic nanostructures conjugated to analyte binding partners and a surface containing a metallic nanolayer on which a plurality of capture molecules is immobilized. Methods of preparing composite nanostructures are also described.

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