

**SURFACE ENHANCED RAMAN SPECTROSCOPY (SERS) MICROFLUIDICS
BIOSENSOR FOR DETECTING SINGLE AND/OR MULTIPLE ANALYTES**

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ABSTRACT

A biosensor for the detection of an analyte using surface-enhanced Raman spectroscopy (SERS) is provided. The biosensor includes a SERS-active substrate and a microfluidic circuit device arranged to be in fluid communication with the SERS-active substrate. Method of manufacturing a biosensor, and methods for detecting an analyte using the biosensor, wherein the analyte may be haptoglobin, are also provided.

15 FIG. 10