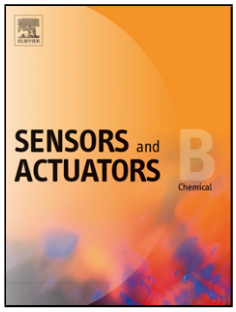

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Automated rapid blood culture sensor system based on diode laser wavelength-modulation spectroscopy for microbial growth analysis

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Highlights

- An automated blood culture system was developed for microbial growth analysis.
- The system is based on diode laser wavelength-modulation spectroscopy (DLWMS).
- An optical sensing core module was designed to realize automated rapid CO_2 detection.
- A 2-month field test was carried out in the Jinhua Guangfu hospital, Jinhua, China.
- The developed sensor system exhibits an excellent accuracy with short detection time.

Abstract

An automated rapid blood culture sensor system was developed to detect CO_2 concentration