Accepted Manuscript

PII:

DOI:

Reference:

Revised date:

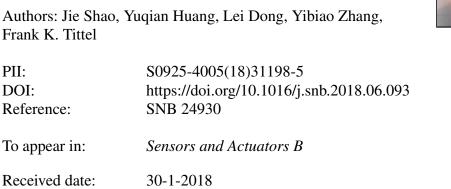
Accepted date:

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11-6-2018

20-6-2018





Please cite this article as: Shao J, Huang Y, Dong L, Zhang Y, Tittel FK, Automated rapid blood culture sensor system based on diode laser wavelength-modulation spectroscopy for microbial growth analysis, Sensors and Actuators: B. Chemical (2018), https://doi.org/10.1016/j.snb.2018.06.093

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ACCEPTED MANUSCRIPT

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 CO₂ 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 CO₂ concentration

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