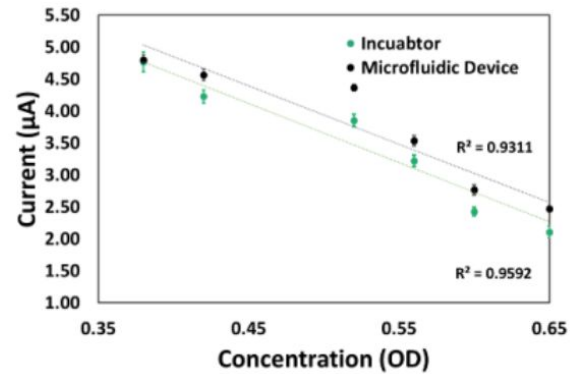


PENDING**(IN202211058942)**

Device for simultaneous culturing and detection of microorganisms



NEED

Current methods for microorganism culturing and detection often require multiple stages and separate devices. These approaches delay results and increase costs. But what if a single device could streamline this process, offering faster, simultaneous culturing and detection?

TECHNOLOGY OVERVIEW

The device integrates culturing and detection of microorganisms within a single platform, utilizing microfluidic reservoirs, electrode systems, and a temperature control system. This innovation provides faster and more efficient monitoring of microbial growth and detection.

TECHNOLOGY KEY FEATURES

Embedded electrode systems; Microfluidic reservoirs for culturing; Real-time detection; Temperature control via laser-induced graphene heater; Compact design for rapid results

[Read more here](#)

MARKET ANALYSIS

The global biotechnology market is projected to grow at a CAGR of 9.4%, reaching \$1.4T by 2033. The demand for faster microbial testing in healthcare and food industries is fueling this growth. (Source: Global Market Insights)

Target Industries

Biotechnology; Healthcare Diagnostics; Environmental Monitoring

AT A GLANCE

- SDG 3: Good Health and Well-being; SDG 12: Responsible Consumption and Production

Technology is available for licensing/ co-development.

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