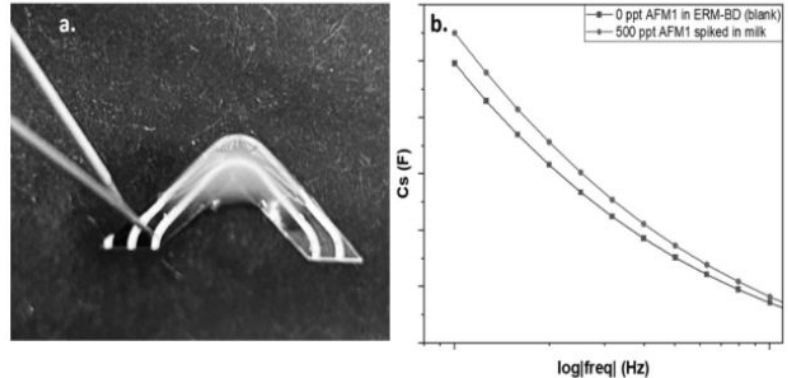


PENDING**(IN202511008672)**

Biosensor chip for the detection of toxins in food products and method for fabrication thereof



NEED

Food contamination poses a serious health risk, but current toxin detection methods are slow and require specialized equipment. The need for a fast, affordable, and easy-to-use detection system is crucial to ensure food safety.

TECHNOLOGY OVERVIEW

The invention presents a flexible biosensor chip designed for rapid, real-time toxin detection in food. Utilizing a conductive layer and bio-receptor technology, it quantifies toxins accurately, offering a simple, portable solution for food safety testing.

TECHNOLOGY KEY FEATURES

- Flexible substrate for easy deployment
- Conductive layer for signal transmission
- Bio-receptor coated to detect toxins
- Analyzer and operating device for output display

[Read more here](#)

MARKET ANALYSIS

The global food safety testing market is expected to grow at a CAGR of 7.9%, reaching \$13.5 billion by 2033. This growth is driven by increasing foodborne diseases and the demand for rapid testing methods. (Source: MarketsandMarkets)

Target Industries

1. Food Safety Testing: Technology platforms and service providers in food industry testing and contamination detection.
2. Biotechnology: Enterprises developing biosensor technologies for various applications, including toxin detection.
3. Consumer Goods & Retail: Businesses focusing on ensuring food quality and consumer health through enhanced safety standards.

AT A GLANCE

- SDG 2: Zero Hunger, SDG 3: Good Health and Well-being, SDG 9: Industry, Innovation, and Infrastructure, SDG 12: Responsible Consumption and Production

Technology is available for licensing/ co-development.

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