

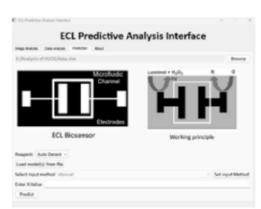




PENDING

# (IN202411002982)

Method of interactively processing electrochemiluminescence (ECL) emitted signals and a graphical user interface (GUI) system



#### **NEED**

Accurate analysis of Electrochemiluminescence (ECL) signals is crucial for biomarker detection in research and diagnostics. However, manual processing and interpretation are time-consuming and error-prone. What if machine learning could streamline this process?

### **TECHNOLOGY OVERVIEW**

This GUI system uses machine learning models to process ECL signal data interactively. It allows users to modify model parameters, train models, and predict biomarkers' concentrations, improving the accuracy and efficiency of ECL data analysis while enhancing user accessibility.

## **TECHNOLOGY KEY FEATURES**

User-driven machine learning model selection, customizable parameters, multiple data formats, improved biomarker prediction accuracy, integrated image transformation, and real-time data interpretation.

### **MARKET ANALYSIS**

The global machine learning market in healthcare is expected to grow at a CAGR of 44.5% from 2023 to 2033. Increasing demand for automated diagnostics and real-time data processing will fuel growth. [Source: Grand View Research, 2023]

## **Target Industries**

Healthcare, Diagnostics, Research Labs., Healthcare analytics providers, diagnostic equipment manufacturers, bioinformatics companies, and research institutions specializing in biomarkers and automated data processing.

### AT A GLANCE

 SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure),
 SDG 10 (Reduced Inequality)

#### Read more here

Technology is available for licensing/ co-development.

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