

A New Single Particle Matrix-Assisted Laser Desorption and Ionization Mass Spectrometer

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TECHNOLOGY DESCRIPTION

Researchers at UC San Diego have developed a MALDI (or chemical ionization) time of flight MS with extensively modified single particle sampling and simultaneous, on-line and real-time, positive and negative, mass detection.

Effects, such as initial spatial distribution, initial kinetic distribution, initial temporal distribution, and space charge, which results in poor mass resolution and/or unstable and inaccurate mass calibration are fully eliminated. By eliminating such effects, accurate and stable mass analysis can be obtained for continuous analysis of numerous particles.

APPLICATIONS

Potential applications to particulate analysis are many, such as bio-warfare detection, protein structural analysis, and environmental air and water-quality monitoring.

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OTHER INFORMATION

KEYWORDS

behavior modification

CATEGORIZED AS

- **Sensors & Instrumentation**
 - Analytical
 - Biosensors
 - Environmental Sensors
 - Scientific/Research

RELATED CASES

2004-117-0

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