

Title (en)

ON-LINE LIQUID SAMPLE DEPOSITION INTERFACE FOR MATRIX ASSISTED LASER DESORPTION IONIZATION-TIME OF FLIGHT (MALDI-TOF) MASS SPECTROSCOPY

Title (de)

SCHNITTSTELLE ZUM ON-LINE ABLEGEN VON FLÜSSIGE PROBEN FÜR MATRIXUNTERSTÜTZTER LASERIONISATIONS UND - DESORPTIONSFLUGZEITMASSENSPEKTROMETRIE

Title (fr)

INTERFACE DE DEPOT EN LIGNE D'ECHANTILLONS LIQUIDES POUR SPECTROSCOPIE DE MASSE A TEMPS DE VOL A IONISATION-DESORPTION LASER ASSISTEE PAR MATRICE (MALDI-TOF)

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Application

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Priority

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Abstract (en)

[origin: WO9853308A1] An universal interface for continuous on-line liquid sample introduction directly into the source chamber (5) of a time-of-flight mass spectrometer (20) for matrix-assisted-laser-desorption-ionization (MALDI) analysis is disclosed. The liquid sample includes a liquid or solid matrix material used in conventional MALDI analysis and is deposited directly onto a moving sample holder (22) in the source chamber (5). The sample holder (22) is at subatmospheric pressure, causing the rapid drying of the sample. The dried sample is subsequently desorbed from the sample holder (22) by a nitrogen laser (28) in a desorption region (26). The method of the invention is particularly amenable to multiplexing, the parallel deposition of multiple samples from an array of capillaries or microchip channels (24), with the subsequent sequential desorption by a scanning laser. This format is particularly useful for high throughput mass spectrometric analysis.

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