

Title (en)

METHOD AND DEVICE FOR CARRYING OUT A QUANTITATIVE SPATIALLY-RESOLVED LOCAL AND DISTRIBUTION ANALYSIS OF CHEMICAL ELEMENTS AND IN SITU CHARACTERIZATION OF THE ABLATED SURFACE REGIONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR DURCHFÜHRUNG EINER QUANTITATIVEN ORTSAUFGELOSTEN LOKAL- UND VERTEILUNGSANALYSE CHEMISCHER ELEMENTE UND IN-SITU CHARAKTERISIERUNG DE ABLATIERTEN OBERFLÄCHENREGIONEN

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR L'EXÉCUTION D'UNE ANALYSE QUANTITATIVE LOCALE À RÉOLUTION SPATIALE DE LA RÉPARTITION D'ÉLÉMENTS CHIMIQUES ET LA CARACTÉRISATION IN SITU DES ZONES DE SURFACE ENLEVÉES

Publication

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Application

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Abstract (en)

[origin: WO2010115394A1] A laser ablation chamber, suitable for use in a conventional laser microdissection unit (LMD), enables in combination with the LMD both a quantitative spatially-resolved nano-local and distribution analysis of element concentrations in a sample and a microscopic recording of the surface topography of said sample in the nanometer range. This can optionally be followed by further examinations without for this purpose the sample needing to be removed from a slide comprising the sample. For the examination, a region of the sample to be analyzed is selected with the aid of a microscope of an LMD. In the process, the sample is situated on the underside of a cover glass (slide), which at the same time is part of a laser ablation chamber that is mounted underneath the slide and within the LMD. Part of the sample is ablated and analyzed. Optionally, it is possible to cut out in a targeted fashion certain regions of the tissue in which metals were detected by means of the available LMD instruments for the purpose of further analysis and to collect these regions in sample containers that are attached under the slide after the laser ablation.

IPC 8 full level

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CPC (source: EP US)

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