Title (en)

LASER MICROPROBE FOR SOLID SAMPLES IN WHICH VIEWING OPTICS, LASER LIGHT OPTICS AND ION OPTICS ARE ARRANGED AT THE SAME SIDE OF A SAMPLE MOUNTING

Publication

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Application

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Priority

DE 3208618 A 19820310

Abstract (en)

[origin: EP0088917A1] 1. A laser microprobe for solid-state samples, in which an observation lens means, a laser light lens means and an ion lens means are arranged on the same side of a sample holder and in which a time-of-flight mass spectrometer is used as the mass analyzer, characterized by the following features : a) on the one hand the sample holder (2) with the sample (1) and on the other hand at least the ion lens means (9) and the observation lens means (3) are movable in relation to each other between an observation position and a measuring position ; b) in the observation position the axis (5) of the observation lens means (3) is perpendicular to the surface of the sample (1) ; c) in the measuring position the axis (14) of the ion lens means (9) is perpendicular to the surface of the sample (1), while the axis (6) of the laser lens means (4) forms an angle beta<90 degrees with the sample surface, the two axes intersecting on the surface of the sample (1) ; d) stop means (25 or 41, 42) are arranged on the movable sample holder (2) or on a movable, lens means-carrying member (26), and are so adjusted that a sample area selected in the observation position by means of the observation lens means (3) lies in the measuring position at the focal point of the laser light lens means (4).

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