

I. G. Ignat'ev, V. I. Miroschnyenko, O. G. Ponomarev, V. Yu. Storizhko

OPTIMIZATION OF THE ELECTROSTATIC STRUCTURE OF THE ION MICROPROBE

The paper presents optimization data obtained for an immersion probe-forming system of the ion microprobe to be used in 3 MeV H^+ ion accelerator generating 0,4 μm beam spot for normalized acceptance of $7 \mu m^2 \cdot mrad^2 \cdot MeV$. To achieve higher microprobe resolution it is intended to place an electrostatic lens between the collimators and the accelerating tube.

Keywords: ion beam; immersion probe-forming system; optimizations; electrostatic accelerator.