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ANALYSIS OF MONITORING ISSUES OF LOW-DANSITY NANO-DISPERSE LAYERS FOR ICF $^{\ast)}$

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Problems and special issues of precision monitoring of nano-dispersed layers, as well as lowdensity polymer layers, including the inclusion of metal particles. There are number of tasks in which such layers are used, among the main: efficient conversion of laser radiation in x-rays, increase compression reading, neutron yield. Such layers and covers can also be used as construction layers. Research and measurements with classification are current out at neutron – physical department a sufficiently long time [1,2].

To control such layers, micro-radiography method are used in soft (3-8) thousand volts, x-rays, and to obtain a sufficient high image resolution (some microns) it is need real time from ten minutes to several hours and use special accommodations [3].

We managed to some difficulties touching on the work with micro-objects into micro-volume.

In addition, for precision monitoring the following used: optical methods, scanning electron microscopy, x-ray tomography with image processing program [3,4].

It is generally recognized, that the accuracy of monitoring, is gradually over time, and directly influences the reliability of the results of experiment and planning future investigations.

The measurements are important to support experiments on reducing layer density for diagnostic purposes, which is current and from required for current and future experiments [4,5].

Significant attention is paid to measurement using micro-tomography which allows more accurate seeing of the microstructure of the layer [6].

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