modernized layers of Metal nanoparticles including those with polymer admixtures for direct and indirect ICF scheme and interaction experiments with long and short laser pulses

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The up-to-date methods of fabrication and certification of the layers of metal ultra-dispersed powder have been developed, and among them the ones with polymer admixture into the low‑density layer of laser targets. The problems of precision certification and accuracy of overall monitoring of such layers are discussed. Similar mentioned layers are a useful addition into the construction of diagnostic and special studied targets and for conversion of laser light into the x-ray for indirect targets for high power laser installations [1, 2].

The laser experiments with the prepared targets have been carried out to improve the properties of conversion and the hydrodynamic studies under the action of long and shortwave laser pulses [3]. The obtained results are of importance from the view of points of new experiments. We succeed in overcoming problems with micro-volume and small amounts the matter used. The discussed techniques are very interesting from the viewpoint of future target design.

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