

## Direct drive targets designed for 2 MJ laser facility

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We evaluate the possibilities of the direct drive way to reach an ignition and effective burning of thermonuclear targets at the range of 1 -2 MJ laser absorbed energy. We have found it as a quite possible, since, in contrast to the indirect drive, there are no significant losses of laser energy due to its transformation in to thermal radiation.

We suggest a concrete target design, which provides the gain larger 10 at irradiation with 192 beams of second Nd-laser harmonic radiation at pulse energy of about 2 MJ [1]. Permissible limits for imbalance of beam's energies and a target shift from the center of focusing beams are concluded. The investigation based on the numerous 1D and 2D computer simulations.

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### References

- [1] Bel'kov, S.A., Bondarenko, S.V., Vergunova, G.A. et al. J. Exp Theor. Phys. (2015) 121:686.  
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