HEAVY-ION TARGET WITH A DISC CONVERTER

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Performance features of a heavy-ion target with 10 MJ ion beam energy and 2mm* 6mm beam cross section are studied. The ions are decelerated in a disc converter, in which high energy concentration is ensured by superposition of a few beams near the disc axis. When the beam energy is high, no impulse shape profiling is required. In the calculation, the thermonuclear mixture solid phase ignites in the capsule without "gas spark", with which the ignition reliability is higher.