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## Laser Ion Source for Semiconductor Applications

Linear accelerator I-3 at Institute for theoretical and experimental physics (ITEP) consists of a buncher, two-gap 2 MV accelerating cavity and a beam transport line. Laser ion source is used to generate ions for the linac. The ion source is based on pulsed CO<sub>2</sub> laser setup with radiation-flux density of 1011 W/cm<sup>2</sup> at the target surface. Beam of carbon ions with energy of ~9 MeV was used to irradiate silicon components. Such process causing formation of stable recombination centers inside the silicon. The set of samples was irradiated at the beginning of 2021. Layout and parameters of the ion source and the linear accelerator are described. Results of the experiment are presented.

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