

NEW EXPERIMENTAL RESULTS ON APPLICATIONS OF HIGH-CURRENT RELATIVISTIC ELECTRON BEAMS

Rosmej O.N.

GSI, Darmstadt, Germany

o.rosmej@gsi.de

High-current well-directed relativistic electrons is an excellent tool for applications in many research fields such as plasma physics, nuclear physics, biology, cancer therapy, material science, etc. In the presentation, preliminary experimental results of two experimental campaigns at the PHELIX-laser, at GSI Darmstadt conducted in October-November 2021 will be reported. Experiments were focused on generation of protons, betatron radiation and FLASH-effect in radio oncology (prompt irradiation of cancer cell with a dose rate of 30 TGy/s).
