Laser ion acceleration in tailored mass-limited targets

A.A.Andreev^{1,2}, K.Yu.Platonov²
1. Max-Born Institute, Berlin, German, andreev@mbi-berlin.de
2. SIC "S. I. Vavilov State Optical Institute", St. Petersburg, Russia

The laser driven ion acceleration caused by ultrahigh intensity laser pulse interaction with mass limited targets has been studied with theory and PIC simulations. It is found that maximal energy of ions and its directionality can be significantly enhanced by choosing of tailored targets.