

## Investigation of heavy ion tracks in LiF crystals by dislocation mobility method

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The track damage created in LiF by swift heavy ions was studied using methods of dislocation mobility and track etching. The crystals were irradiated with Bi and Pb ions of a specific energy of 11 MeV/u at fluences between  $10^7$  and  $10^{10}$  cm<sup>-2</sup>. The measurements on crosssections cleaved parallel to the irradiated surface showed continuity of the track etching for the depth up to 70% of the ion range. In deeper layers, numerous etch pits had a flat-bottomed shape indicating the discontinuities of the track structure. At this stage, a decrease of the ion-induced effect in dislocation mobility was observed. The observed reduction of the efficiency of ion tracks as obstacles for dislocations could be ascribed to the change in the track structure at the final part of ion path.