Abstract

Bi-2212 thin ®lms have been irradiated by 936 MeV Pb ions. An High Resolution Electron Microscopy (HREM) study revealed the formation of square based defects, the so-called pillar tracks, extending throughout the thickness of the ®lm and coexisting with columnar defects of same size. The pinning e ciency of this mixed structure of defects has been investigated by magnetic measurements and compared to a structure containing only columnar defects of the same size. This comparison suggests that pillar defects act the same way as columnar defects of about the same size (125 _A).