

Jetlike component in sputtering of LiF induced by swift heavy ions

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Angular distributions of sputtered atoms from SiO₂ and LiF single crystals were measured under the irradiation of 1 MeV/*u* swift heavy ions. In contrast to the almost isotropic distribution of SiO₂, an additional jetlike component was observed for LiF. The total sputtering yield of SiO₂ (approx. 10² atoms/ion) can be reproduced by an extended inelastic thermal spike model, whereas the huge yield of LiF (approx. 10⁴ atoms/ion) needs a substantial decrease of the sublimation energy to be described by the model.