

STUDIES OF e_0 -ELECTRON
YIELD FROM THE SURFACE
OF A TARGET BOMBARDED
BY α -PARTICLES FROM THE U-120 CYCLOTRON

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S u m m a r y

The yields of near-zero-energy electrons (e_0 -electrons) emitted from the surface of an Al target bombarded with cyclotron-generated α -particles with different energies have been determined. The spectra of α -particles and (e, α) -coincidences are measured to establish the dependence on the e_0 -electron yield on the α -particle energy. The e_0 -electron yield has been demonstrated to be reciprocal to the α -particle velocity, similarly to what was observed earlier for β -particles. Probable origins of such a dependence are discussed.