

STUDY OF  $e_0$ -ELECTRON YIELDS  
FROM THE SURFACE OF THIN  
FILMS AFTER  $\beta$ -PARTICLE  
IRRADIATION FROM  $^{152}\text{Eu}$ ,  
 $^{154}\text{Eu}$ , AND  $^{226}\text{Ra}$  DECAYS

*A.O. Valchuk, V.T. Kupryashkin, L.P. Sidorenko,  
O.I. Feoktistov, I.P. Shapovalova*

Institute for Nuclear Research,  
Nat. Acad. Sci. of Ukraine  
(47, Nauky Prosp., Kyiv 03028, Ukraine)

S u m m a r y

We study the yields of  $e_0$ -electrons emitted from the surface of thin films after the bombardment with  $\beta$ -particles from the radioactive sources with  $^{152}\text{Eu}$ ,  $^{154}\text{Eu}$ , and  $^{226}\text{Ra}$  by the method of  $(e\gamma)$ -coincidences. The yields of  $e_0$ -electrons are found to be inversely proportional to the velocity of incident  $\beta$ -particles. This means that the ionization of target atoms is proportional to the duration of the perturbation induced by  $\beta$ -particles passing near the atoms.