

INVESTIGATIONS OF THE ELECTRON EMISSION  
FROM Al FOIL INDUCED BY ALPHA-PARTICLES  
IN FORWARD AND BACKWARD DIRECTIONS

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S u m m a r y

We investigated electron emission from the surface of Al foil induced by alpha-particles from  $\text{Pu}^{238}$  in forward and backward directions. Angular distributions (AD) and yields of electrons with near-zero energy  $e_0$  and fast electrons  $e_f$  are measured. The AD for  $e_0$ -electrons emitted in the both directions are sharply extended forward in a surface normal direction. The AD is cosinusoidal for  $e_f$ -electrons emitted in the forward direction and isotropic for those emitted in the backward direction. The yields of  $e_0$ -electrons are approximately equal, the energy of alphas being the same, and those for  $e_f$ -electrons are different by a factor of 7. The obtained results are discussed.