ENERGY DISTRIBUTION OF ELECTRONS IN THE "ZERO-ENERGY PEAK" INDUCED BY A RADIOACTIVE DECAY OR A TARGET BOMBARDMENT WITH CHARGED PARTICLES

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S u m m a r y

The energy distribution of near-zero electrons (e_0-electrons) emitting from the surface of radioactive sources or from the surface bombardment with α- or β-particles is studied. The integrated spectrum $N(E)$ of e_0-electrons with the energy $E = (0 \div 24)$ eV is determined from the measurements of the delay curve by applying a retarding potential between the source (or the target) and the detector of e_0-electrons. The calculated distribution of e_0-electrons is shown to be in good agreement with the theoretical one obtained in the framework of the shakeoff model, i.e. when the perturbation by an electric charge arising near the surface and it shakes off weakly bound electrons from the surface.