

PHOTOPROTON REACTIONS ON NATURAL MIXTURE OF STRONTIUM

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The method of induced activity was used to study photonuclear reactions on a natural mixture of strontium isotopes. The experiment was performed on a bremsstrahlung of the RM-55 electron accelerator at an electron energy of 55 MeV. A brake target made of tungsten was used. Between the brake target with strontium target was placed copper monitor. During irradiation the electron current of the accelerator was measured using a Faraday cup located behind the target assembly. The absolute value of the current was calculated by comparing the experimentally measured and theoretical values of the outputs on the monitor. Experimental data on the cross-sections of photoproton reactions on Sr isotopes are not available in the literature. In this work were given the values of the cross sections of photonuclear reactions per equivalent quantum. The experimentally obtained yields and the values of the cross sections per equivalent quantum are compared with the yields calculated using theoretical cross-sections of photonuclear reactions from CMPR.

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