

The Cross-Section Function for the $^{115}\text{In}(\gamma,2n)^{113\text{m}}\text{In}$ Reaction Determined in the Energy Range up to 23 MeV

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The cross-section function for the $^{115}\text{In}(\gamma,2n)^{113\text{m}}\text{In}$ reaction was determined in the energy range up to 23 MeV. Measurement was done using the bremsstrahlung facility at the MT25 Microtron, JINR, Dubna. 7 Indium disks were irradiated with bremsstrahlung spectra at endpoint energies of 17 MeV, 18 MeV, 19 MeV, 20 MeV, 21 MeV, 22 MeV and 23 MeV. Induced saturated activity of $^{113\text{m}}\text{In}$ was obtained with gamma spectroscopic measurement. To determine the cross-section function in the wide-energy photon beam the unfolding technique was applied. The obtained results were compared with TALYS 1.9 calculations and existing experimental data.