

The proton capture reaction on ^{92}Mo

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We have studied details of the gamma decays after the astrophysically relevant proton capture reaction $^{92}\text{Mo}(p,\gamma)^{93}\text{Tc}$ at eight proton energies between 2.4 and 3.6 MeV. For this purpose we used the multi-purpose Ge(HP) detector array HORUS at the Cologne tandem accelerator. We could observe the deexcitation of the compound state as well as of other bound excited states to lower lying states in ^{93}Tc . The results for the partial cross sections and the relative production of the excited states are compared with the predictions from various models for the gamma-strength function.

Supported by the DFG (ZI 510/4-1 and ZI 510/5-1).