⁹Be(²⁴O,²³O) **2018Di09**

²³₈O₁₅

Type Author Citation Literature Cutoff Date

Full Evaluation M. S. Basunia[#], A. Chakraborty^{##} NDS 171, 1 (2021) 1-Jun-2020

Secondary beam of ²⁴O, E=92.3 MeV/nucleon, on ⁹Be target (thickness 188 mg/cm²) located at target position in the S800 spectrograph. ²⁴O was produced from fragmentation of primary beam of ⁴⁸Ca, E=140 MeV/nucleon, on a ⁹Be target. The ²⁴O beam with 1% momentum spread was selected with the A1900 fragment separator at NSCL. The projectile-like neutron-removal residues were characterized with the spectrograph. Two cathode readout drift chambers, an ionization chamber for energy-loss measurements, and a plastic scintillator that served as trigger and time-of-flight reference. Measured one-neutron removal cross section of ²⁴O.

²³O Levels

E(level)[†] $J^{\pi \dagger}$ Comments

0.0 $I/2^+$ Comments $\sigma_{1n}(\exp t) = 74 \text{ mb } 11.$ Determined a FWHM of 115 MeV/c I3 for the intrinsic 23 O parallel momentum distribution by fitting the measured values.

[†] From Adopted Levels.