²³²Th(P,¹⁸N) 1991Re02

Type Author Citation Literature Cutoff Date

Full Evaluation R. Spitzer, J. H. Kelley ENSDF 30-Jun-2021

1991Re02: Spallation products from 800 MeV proton bombardment of a 232 Th target were captured by a transport line with a mass-to-charge filter and transfered to the TOFI spectrometer at LAMPF. The beam line was separately tuned to transport a number of different nuclides. The ions were implanted in a Si detector, and identification by standard techniques was implemented. The β -delayed neutrons were detected in a polyethylene moderated 3 He counter; half-lives and β -delayed neutron probabilities were deduced from analysis of the number of implanted ions (per beam pulse) and the rate of β -delayed neutrons detected in the zero-threshold counter. The β -delayed neutron probability =14.3% 20 was deduced along with $T_{1/2}$ =790 ms 210; an additional proceedings result of P_n =12.0% 13 (U. Koster et al., AIP Conf. Proc. 455 (1998) p. 989) is mentioned in the text.

A reanalysis of the (1991Re02) data, with additional data was published in (1994ReZZ). The reanalysis indicates P_n =(12.0 13)% and $T_{1/2}$ =658 ms 44. Other reanalyses of these data are found in (1993ReZX,1994KiZU,1995ReZZ,2008ReZZ).

¹⁸N Levels

E(level) $T_{1/2}$ Comments

658 ms 44 $\%\beta^-$ n=12.0 13 (1994ReZZ) T_{1/2}: From (1994ReZZ).