Adopted Levels

Type Author Citation Literature Cutoff Date

Full Evaluation E. Browne NDS 107, 2579 (2006)

Literature Cutoff Date

 $Q(\beta^{-})=-3.1\times10^{3} SY$; $S(n)=7.2\times10^{3} SY$; $S(p)=2.3\times10^{3} SY$; $Q(\alpha)=7.2\times10^{3} SY$ 2012Wa38

Note: Current evaluation has used the following Q record.

 $S(n)=7110 SY; S(p)=2180 SY; Q(\alpha)=7270 SY$ 2003Au03

²³²Am produced in the ²³⁰Th(¹⁰B,⁸N) reaction. Measured excitation function, detected fission fragments (1967Ku15).

²³²Am produced in the ²³⁷Np(α ,9n) reaction (E α =104 MeV). Detected fission fragments and alpha particles from the ²³⁸Np decay chain (1978Ha05).

²³²Am produced in the ²³⁷Np(α ,9n) reaction (E α =94-98 MeV). Americium was chemically separated. Measured K x-rays and electron-capture delayed fission fragments (1990Ha28).

²³²Am Levels

E(level) $T_{1/2}$ Comments 0 79 s 2 $\% \varepsilon \approx 97$; $\% \alpha \approx 3$; $\% \varepsilon \text{F} = 0.069 10$

 $\%\alpha$: Value from calculated $T_{1/2}(\alpha)$ in 2001Mo07, 1997Mo25.

 $T_{1/2}$: From 1989HaZO, 1990HaZ8. Other values: 84 s 18 (1967Ku15), 55 s 2 (1978Ha25).

Fission fragments following the electron-capture (ε) decay of 232 Am have been detected. An emission probability of 0.069% 10 has been estimated on the basis of a measured K x-ray/fission ratio and reported in 1990Ha28. The detected fission fragments probably originate from highly excited states in 232 Pu populated in the ε decay of 232 Am.

Possible configuration= $((\pi 5/2[523])(\nu 3/2[631])) J^{\pi}=1^{-}$.