^{11}C β^+ decay 2002Wo02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu	NP A880,88 (2012)	1-Jan-2011

Parent: ^{11}C: E=0.0; $J^\pi=3/2^-$; $T_{1/2}$=1221.8 s *8*; Q(β^+)=1982.4 *10*; %β^+ decay=100

^{11}C-$T_{1/2}$: $T_{1/2}$=1221.8 s *8* = 20.364 min *14*. From weighted average of $T_{1/2}$=20.334 min *24* (2002Wo02), 20.382 min *20* (1975Az01), 20.34 min *4* (1964Ka31) and 20.40 min *4* (1969Aw02).

1975Az01: ^{11}C, measured $T_{1/2}$. Calculate log *ft*.

1975Be28: ^{11}C, measured $T_{1/2}$, β^-shape spectrum. Deduced E_β(MAX), ft, shape factors.

1995Go34: ^{11}C, compiled, reviewed β^-decay asymmetry data.

2000Le02: ^{11}C(β^+), measured $T_{1/2}$.

2002Wo02: ^{11}C(β^+), (ε), measured E_γ, I_γ, $\beta\gamma$-coin, $T_{1/2}$.

2004Ni04: ^{11}C(ε), (β+), measured $\beta\gamma$-coin. Deduced activity.

See (1980Aj01) for references; see also (1985Aj01).

Additional information 1.

^{11}B Levels

E(level)	J^π
0	$3/2^-$

ε,β^+ radiations

E(decay)	E(level)	Iβ^+[†]	Iε[†]	Log *ft*	I($\varepsilon+\beta^+$)[†]	Comments
(1982.4 *17*)	0	99.7669 *25*	0.2331 *25*	3.5921 *19*	100	av Eβ=385.70 *44*; εK=0.002218 *8*; εL=0.0001132 *4* Iβ^+: calculated from εK(exp)/Iβ^+=0.230×10^{-2} *+14−11* and theoretical εK(exp)/εL(exp) ratio.

[†] Absolute intensity per 100 decays.