^{110}Te α decay

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne and A. Negret	NDS 109, 943 (2008)	1-May-2007

Parent: ^{110}Te: E=0.0; $J^\pi=0^+$; $T_{1/2}$=18.6 s *8*; Q(α)=2723 *16*; %α decay6.7×10^{-4} *CA*
$T_{1/2}(^{110}Te)$=18.6 s *8*, measured by 1977Ki11 and adopted in 1992De49, is used here.
The α branching is estimated as 6.7×10^{-4}% *35* from $r_0(^{106}Sn)$=1.57 *5*.
1981Sc17 estimated the α branching as 7.6×10^{-4}% from the Rasmussen formalism.

Q(α)(^{110}Te)=2723 *16* is the recommended value in 2003Au03.

^{106}Sn Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα †#	HF ‡	Comments
2624 *15*	0.0	100	1.0	Eα: measured by 1981Sc17. Iα: only one α group was observed. An upper limit for a 1462-keV α transition to the 2^+ state at 1206 keV (level was observed in (HI,xnγ), not in α decay) is estimated to be Iα(unobserved 1462α)/Iα(2624α)<2×10^{-17}, by requiring HF(1462α)>1.

† α intensity per 100 α decays.
‡ $r_0(^{106}Sn)$ is estimated as 1.57 *5* by extrapolation from $r_0(^{102}Sn)$=1.70 *4* and $r_0(^{104}Sn)$=1.632 *14*.
# For absolute intensity per 100 decays, multiply by calc 6.7×10^{-6}.