^{107}Te α decay (3.1 ms) 1979Sc22,2002Se10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110, 2081 (2009)	1-Mar-2009

Parent: ^{107}Te: E=0; J^π=(5/2$^+$); $T_{1/2}$=3.1 ms *1*; Q(α)=4008 *5*; %α decay=7×10^1 *3*

^{107}Te-$T_{1/2}$: from delayed α measurements (1994Pa11) Other: 4.4 ms (2006Xu09).

^{107}Te-Q(α): from 2003Au03.

^{107}Te-%α decay: %α=70 *30* (1979Sc22,1981Sc17).

1979Sc22, 1981Sc17: Activity observed in ^{58}Ni(^{58}Ni,xnyp) E(^{58}Ni)=290 MeV, isotopically pure samples.

2002Se10: Measured a weak α branch to the first excited state of ^{103}Sn, Fragment mass analyzer at Argonne, $\alpha\gamma$ coin, (recoil)α and (recoil)γ coin.

Others: 1991He21, 2004Ha59.

^{103}Sn Levels

E(level)	J^π	Comments
0	(5/2$^+$)	
168	(7/2$^+$)	Population of this level from 2002Se10. E(level): 162 *4* (2002Se10) from energy interval between two α peaks.

α radiations

Eα	E(level)	Iα[†]	Comments
3690 *5*	168	0.47 *9*	Eα: from 3853 *13* − 162 *4*. Iα: from 2002Se10.
3853 *13*	0	99.53	Eα: from weighted average of 3833 *15* (1979Sc22) and 3862 *10* (1991He21). Iα: 100-0.47 *9*.

[†] For absolute intensity per 100 decays, multiply by 0.7 *3*.

γ(^{103}Sn)

E$_\gamma$	E$_i$(level)	J_i^π	E$_f$	J_f^π	Comments
168 *4*	168	(7/2$^+$)	0	(5/2$^+$)	E$_\gamma$: From coincidences with α branches feeding this level.

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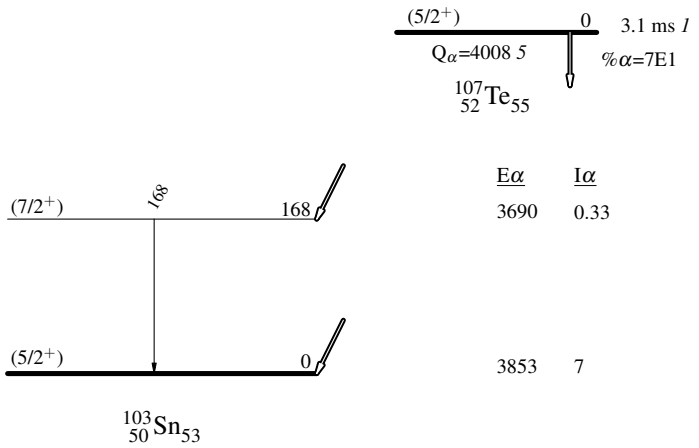
Decay Scheme



Eα	Iα
3690	0.33
3853	7