^{117}Te IT decay 1972Br38

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	ENSDF	1-Mar-2009

Parent: ^{117}Te: E=296.1; $J^\pi=11/2^-$; $T_{1/2}$=103 ms *3*; %IT decay≈100.0

Produced from ^{115}Sn(γ,2n), E(γ)=27 MeV. Measured: γ, γ(t) pulse-activation methods,Ge(Li), Si(Li) detector.

Others: 1963De37, 1969Br02, 1977Go15.

^{117}Te Levels

E(level)	J^π†	$T_{1/2}$	Comments
0	$1/2^+$	62 min *2*	
274.4	$(5/2)^+$		
296.0	$(7/2^+)$		
296.1	$(11/2^-)$	103 ms *3*	$T_{1/2}$: from 1963De37 (104 ms *5*), 1969Br02 (103 ms *3*), the γ transition unobserved would be M2. E(level): from 1999Mo30.

† From Adopted Levels.

γ(^{117}Te)

E_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.	α‡	$I_{(\gamma+ce)}$†	Comments
<1	296.1	$(11/2^-)$	296.0	$(7/2^+)$				E_γ: could be an unobserved M2 transition.
21.6 *2*	296.0	$(7/2^+)$	274.4	$(5/2)^+$	[M1]	8.70	100	ce(L)/(γ+ce)=0.83; ce(M)/(γ+ce)=0.17 Mult.: deduced from intensity balance (1972Br38).
274.4 *2*	274.4	$(5/2)^+$	0	$1/2^+$	E2	0.0517	100	ce(K)/(γ+ce)=0.832; ce(L)/(γ+ce)=0.140 α(K)exp=0.070 *15*; K/L=4.7 *3* (1969Br02)

† For absolute intensity per 100 decays, multiply by ≈1.0.

‡ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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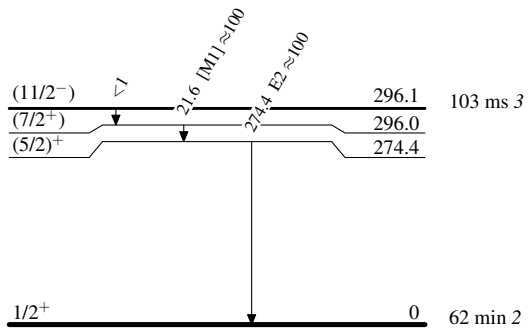
Decay Scheme

%IT≈100.0



$^{117}_{52}Te_{65}$