^{85}Nb IT decay (3.3 s) 2005Ka39

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 116, 1 (2014)	31-Dec-2013

Parent: ^{85}Nb: E=69+y; J^π=(1/2$^-$,3/2$^-$); $T_{1/2}$=3.3 s *9*; %IT decay<100.0

^{85}Nb-J^π,$T_{1/2}$: From ^{85}Nb Adopted Levels.

^{85}Nb-%IT decay: 69γ is interpreted as isomeric transition, but its branching ratio is unknown.

2005Ka39 (also 2005Ka46): Isomer in ^{85}Nb identified in Ni(^{32}S,X) reaction at 150-170 MeV. Measured γ, ce, ce(γ) coin, half-life. ISOL technique at IGISOL facility at Jyvaskyla and at ISOLDE/CERN.

^{85}Nb Levels

E(level)	J^π	$T_{1/2}$	Comments
0	(9/2$^+$)	20.5 s *12*	J^π,$T_{1/2}$: from Adopted Levels.
0+y?			
69+y?	(1/2$^-$,3/2$^-$)	3.3 s *9*	

γ(^{85}Nb)

E_γ	E_i(level)	J_i^π	E_f	Mult.	Comments
69[†]	69+y?	(1/2$^-$,3/2$^-$)	0+y?	(E2,M2)	Mult.: from α(K)exp>2.6, K/L=4.1 *13* (2005Ka39), ce measurements. For E2, α(K)=3.2, K/L=4.5 *4*. For M2, α(K)=6.3, K/L=6.1 *6*. The theoretical K/L ratio tends to support E2.

[†] Placement of transition in the level scheme is uncertain.