^{92}Mo(^{60}Ni,pnγ) 1989Br22

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, A. A. Sonzogni	NDS 114, 435 (2013)	1-Apr-2013

1989Br22: γ(t) and $\gamma\gamma$-coin measurements were made on recoils, stopped on a Pb-catcher foil (12 mg/cm^2), following the ^{92}Mo(^{60}Ni,pn) reaction at 245 MeV and 1 mg/cm^2 self-supporting targets. Z-identification was established through γ(K x-ray) coincidences. Mass assignments were based on excitation function results.

All the γ-transitions, except 331.2 keV E3 transition are assumed to be of M1 character.

^{150}Tm Levels

E(level)	J$^\pi$[†]	T$_{1/2}$	Comments
0.0	(6$^-$)	2.20 s *6*	J$^\pi$,T$_{1/2}$: from Adopted Levels.
16.89 *17*	(5$^-$)		
105.1? *3*	(5$^-$)		
219.99 *14*	(6$^-$)		
340.11 *15*	(7$^-$)		
671.3 *10*	(10$^+$)	5.2 ms *3*	T$_{1/2}$: from 1989Br22.

[†] Based on 10$^+$ assignment to 671 level and assumed M1 nature of transitions to lower levels. J^π=10$^+$ isomers, with T$_{1/2}$ in the ms range decaying by E3 transitions of low energy predicted from shell-model considerations. E3 isomers found in ^{146}Tb, ^{148}Ho, ^{150}Tm were assumed to be the predicted J^π=10$^+$ isomers.

γ(^{150}Tm)

E$_\gamma$	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	Comments
17		16.89	(5$^-$)	0.0	(6$^-$)		
88 *1*	1.5 *7*	105.1?	(5$^-$)	16.89	(5$^-$)	(M1)	
105.0 *6*	2 *1*	105.1?	(5$^-$)	0.0	(6$^-$)	(M1)	
114.9 *3*	6 *1*	219.99	(6$^-$)	105.1?	(5$^-$)	(M1)	
120.1 *1*	22 *2*	340.11	(7$^-$)	219.99	(6$^-$)	(M1)	
203.1 *1*	28 *3*	219.99	(6$^-$)	16.89	(5$^-$)	(M1)	
219.9 *2*	12 *2*	219.99	(6$^-$)	0.0	(6$^-$)	(M1)	
331.2	100 *4*	671.3	(10$^+$)	340.11	(7$^-$)	(E3)	Mult.: assignment based on deduced B(E3)(W.u.) value, consistent with those of adjacent nuclei.
340.2 *2*	43 *5*	340.11	(7$^-$)	0.0	(6$^-$)	(M1)	

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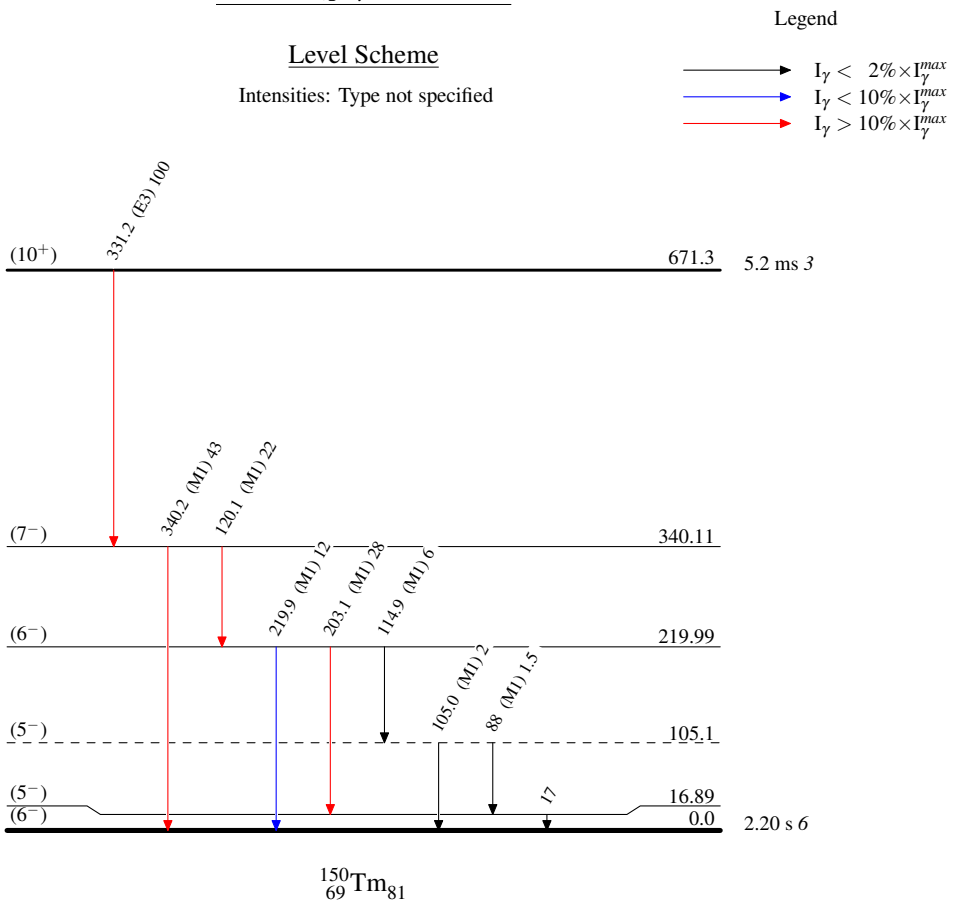
Level Scheme

Intensities: Type not specified



$^{150}_{69}Tm_{81}$