^{176}Yb(^{136}Xe,Xγ) 2010Dr05

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin, E. A. Mccutchan	NDS 151, 334 (2018)	30-Jun-2018

E=6.0 MeV/nucleon. Measured Eγ, Iγ, $\gamma\gamma$ coin; pulsed beam, delayed $\gamma\gamma$ coin using Gammasphere array of Compton-suppressed Ge detectors. See 2006Dr04 for experimental details.

See 2012Ch10 for discussion of influence of residual interactions on the K-mixing-induced fast decay of the 19/2$^+$ isomer.

^{171}Tm Levels

Absolute (g_K-g_R) values from 2010Dr05 with assumed Q_0=7.7.

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	Comments
1674.43[#] *13*	19/2$^+$	1.7 μs *2*	%IT=100 Additional information 1. E(level),$T_{1/2}$: from Adopted Levels. Configuration=π7/2[523]$\otimes\nu$5/2[512]$\otimes\nu$7/2[633].
1839.28[#] *24*	21/2$^+$		
2020.82[#] *24*	23/2$^+$		Absolute (g_K-g_R)=0.023 *+18*; lower uncertainty undefined.
2220.3[#] *3*	25/2$^+$		Absolute (g_K-g_R)=0.068 *+18−17*.
2436.6[#] *4*	27/2$^+$		Absolute (g_K-g_R)=0.165 *+11−10*.
2670.0[#] *4*	29/2$^+$		Absolute (g_K-g_R)=0.165 *+48−32*.
2922.3[#] *5*	31/2$^+$		E(level): misprinted As 2912 In fig. 4 of 2010Dr05.
3188.2[#] *13*	33/2$^+$		
3467.3[#] *11*	35/2$^+$		

[†] From least-squares fit to Eγ, assuming 0.3 keV uncertainty when Eγ stated to nearest tenth of a keV, 1 keV otherwise.
[‡] Values suggested by 2010Dr05 assuming J$^\pi$(isomer)=19/2$^+$.
[#] Band(A): Band based on 19/2$^+$ isomer.

γ(^{171}Tm)

E_i(level)	J_i^π	Eγ	Iγ	E_f	J_f^π	E_i(level)	J_i^π	Eγ	Iγ	E_f	J_f^π
1839.28	21/2$^+$	164.8		1674.43	19/2$^+$	2436.6	27/2$^+$	415.7	173 *15*	2020.82	23/2$^+$
2020.82	23/2$^+$	181.6	100	1839.28	21/2$^+$	2670.0	29/2$^+$	234	100	2436.6	27/2$^+$
		346.3	153 *12*	1674.43	19/2$^+$			449.6	241 *74*	2220.3	25/2$^+$
2220.3	25/2$^+$	199.6	100	2020.82	23/2$^+$	2922.3	31/2$^+$	485.7		2436.6	27/2$^+$
		381.0	245 *32*	1839.28	21/2$^+$	3188.2	33/2$^+$	518		2670.0	29/2$^+$
2436.6	27/2$^+$	216.3	100	2220.3	25/2$^+$	3467.3	35/2$^+$	545		2922.3	31/2$^+$

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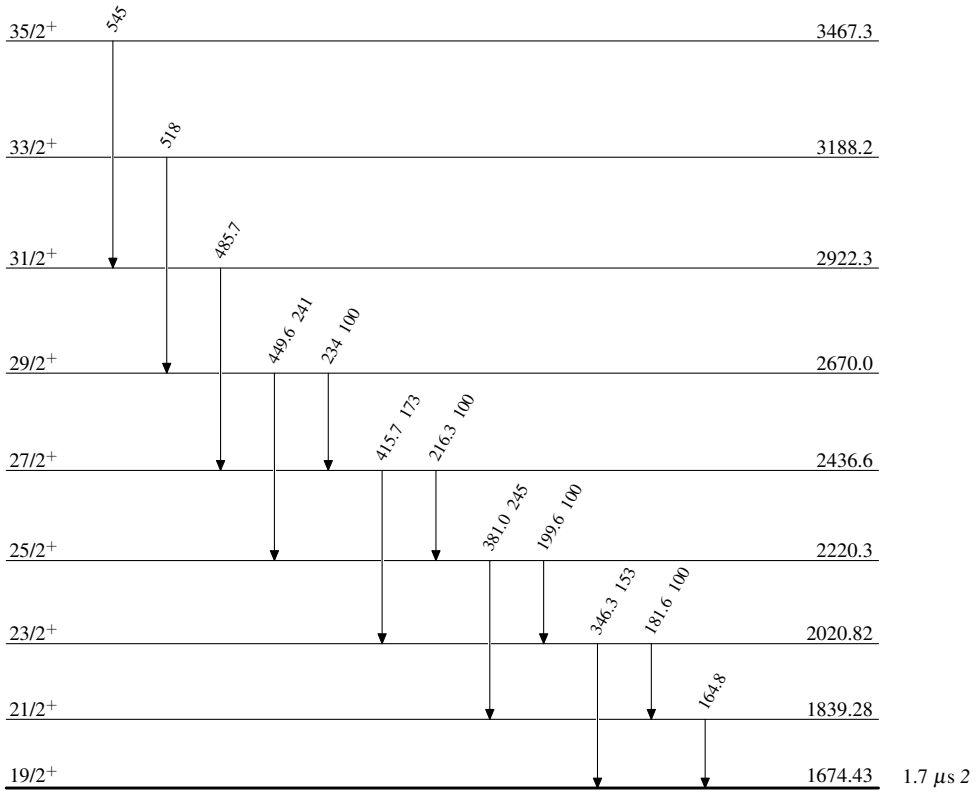
Level Scheme

Intensities: Relative photon branching from each level



$^{171}_{69}Tm_{102}$

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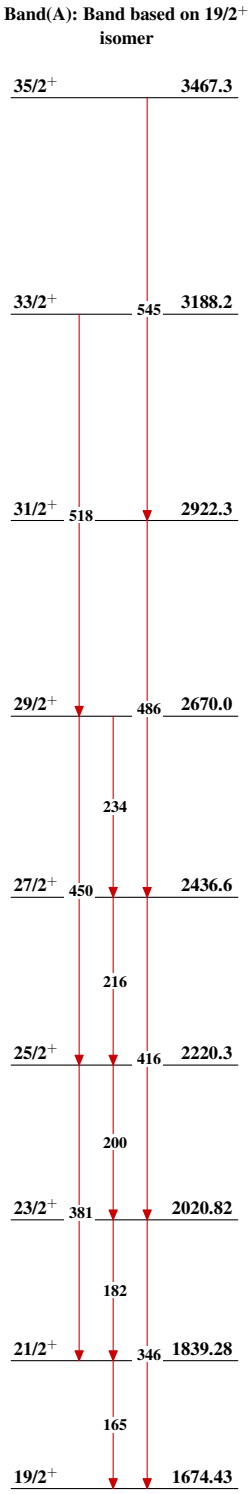

$^{171}_{69}Tm_{102}$