(HI,xnγ)   1984Ch11

History

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

See (HI,xnγ): 2.55 μs delayed for experimental details.

Prompt data were taken in the time range 0-13 ns in γ(t) measurements.

^{150}Er Levels

E(level)	J$^{\pi\dagger}$	T$_{1/2}$	E(level)	J$^{\pi\dagger}$	E(level)	T$_{1/2}$
(0.0)	0$^+$		4927.5	(14$^+$)	7372.4	15 ns *4*
2797	10$^{+\ddagger}$	2.55 μs *10*	5222.2	(16$^+$)	7937.1	
4000.7	(11$^-$)$^{\#}$		6359.3		8483.4	
4243.4	(12$^+$)		6928.3		9149.0	
4490.7	(13$^-$)		7153.4		9509.1	43 ns *3*
4884.6	(15$^-$)		7332.8			

† From comparison of level excitations above the 10$^+$ state with shell-model predictions (1981La26) for configuration=(π h$_{11/2}$)^4 states, except as noted.

‡ From assumption that the 2797 level is an expected shell-model state of configuration=(π h$_{11/2}$)$^4_{10+}$.

$^{\#}$ By analogy with ^{148}Dy, J^{π} assigned on assumption that this level is a member of a multiplet formed by coupling 10$^+$ to 3$^-$.

γ(^{150}Er)

E$_\gamma$	I$_\gamma{}^{\dagger}$	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$	E$_\gamma$	I$_\gamma{}^{\dagger}$	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$
39.4 *4*		7372.4		7332.8		569.0 *2*	23 *2*	6928.3		6359.3	
219.0 *2*	2.5 *12*	7372.4		7153.4		665.6 *2*	24 *2*	9149.0		8483.4	
247.4 *2*	29 *2*	4490.7	(13$^-$)	4243.4	(12$^+$)	684.1 *2*	27 *2*	4927.5	(14$^+$)	4243.4	(12$^+$)
^{x}286.5 *2*	23 *2*					973.7 *4*	4 *2*			6359.3	
294.8 *2*	17 *2*	5222.2	(16$^+$)	4927.5	(14$^+$)	1013.1 *3*	23 *3*	7372.4		6359.3	
337.6 *2*	81 *4*	5222.2	(16$^+$)	4884.6	(15$^-$)	1137.1 *2*	36 *3*	6359.3		5222.2	(16$^+$)
360.1 *2*	26 *2*	9509.1		9149.0		1203.7 *1*	100	4000.7	(11$^-$)	2797	10$^+$
393.9 *1*	126 *7*	4884.6	(15$^-$)	4490.7	(13$^-$)	1211.8 *4*	2 *1*	9149.0		7937.1	
404.5 *2*	17 *2*	7332.8		6928.3		1446.4 *2*	52 *4*	4243.4	(12$^+$)	2797	10$^+$
490.0 *1*	88 *5*	4490.7	(13$^-$)	4000.7	(11$^-$)	1474.6 *4*	12 *2*	6359.3		4884.6	(15$^-$)
546.3 *2*	24 *2*	8483.4		7937.1		1931.2 *4*	16 *2*	7153.4		5222.2	(16$^+$)
564.7 *2*	24 *2*	7937.1		7372.4							

† Normalized to 100 for the 1203.7 transition. Note that the branchings are discrepant in the prompt and the delayed data sets.
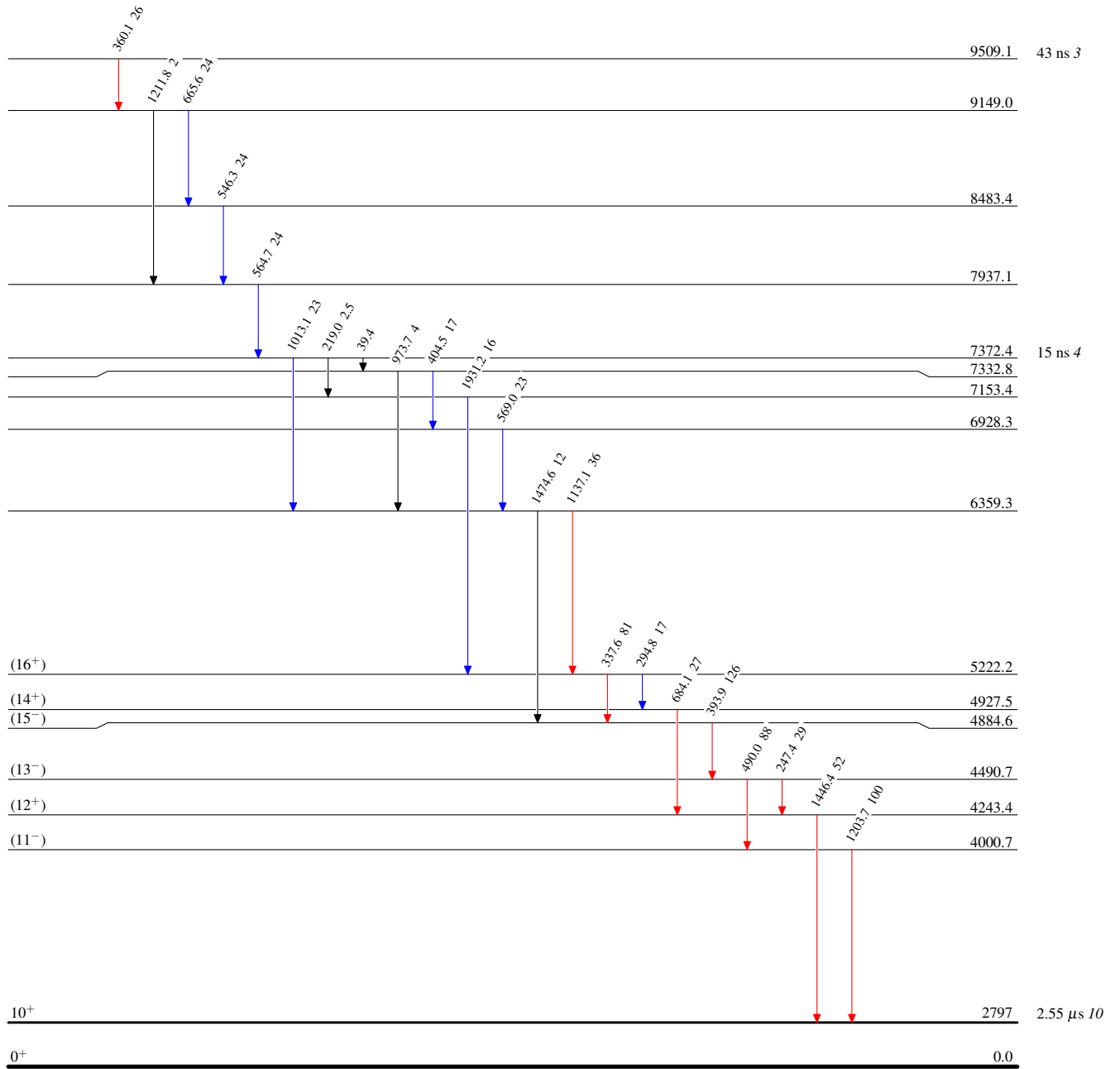
^{x} γ ray not placed in level scheme.

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Level Scheme

Intensities: Type not specified

Legend

→ $I_\gamma < 2\% \times I_\gamma^{max}$
→ $I_\gamma < 10\% \times I_\gamma^{max}$
→ $I_\gamma > 10\% \times I_\gamma^{max}$

$^{150}_{68}$Er$_{82}$