

Adopted Levels, Gammas

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

Q(β^-)=3454 20; S(n)=5604 20; S(p)=6511 20; Q(α)=6.6×10² 4 [2017Wa10](#)
 Q(ϵ)=83 20; S(2n)=12874 20; S(2p)=1.564×10⁴ 20 [2017Wa10](#)
[Additional information 1.](#)

¹⁵⁰Pm Levels

Cross Reference (XREF) Flags

- A ¹⁵⁰Nd(p, γ)
- B ¹⁵²Sm(d, α)
- C ¹⁵⁰Nd(³He,t)

E(level)	J ^{π}	T _{1/2}	XREF	Comments
0	(1 ⁻)	2.698 h 15	ABC	% β^- =100 J ^{π} : from β^- decay and shell-model considerations. T _{1/2} : from 1977Ho09 , others: 2.68 h 2 (1952Ki25), 2.7 h 1 (1963Ei06), 2.7 h (1952Lo01).
56.8 6			AB	
115.6 9			ABC	
128.3 8			AB	
129.7 8			A	
158.6 8			AB	
172.1 7			AB	
196.7 9			A C	
208.0 12			AB	
220.0 13			A	
226.3 13			A	
229.5 10			AB	
244.8 13			A	
246.4? 9			AB	XREF: B(249.5).
258.5 13			AB	XREF: B(264.4).
281.5 12			A C	
288.8 15			AB	
294.3 13			A	
304.1 6			B	
319.0 12			AB	
326.0 13			A	
330.0 13			AB	
369.3 15			AB	
388.9 22			B	
401.2 12			BC	
431.7 15			B	
442.3 8			B	
471.6 7			B	
491.0 17			B	
508.9 15			BC	
541.7 21			B	
581.3 13			BC	
609.7 7			B	
634.7 18			B	
664.7 13			BC	
690.1 19			B	
711.8 8			B	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) ^{150}Pm Levels (continued)

<u>E(level)</u>	<u>XREF</u>	<u>E(level)</u>	<u>XREF</u>	<u>E(level)</u>	<u>XREF</u>	<u>E(level)</u>	<u>XREF</u>
740.9 5	BC	891.3 12	BC	1134 2	BC	1358 2	BC
767.7 18	B	929.7 7	B	1161 2	B	1416 2	BC
803.4 11	B	942.2 7	B	1190 2	B	1580 10	C
840.0 16	B	967.2 7	B	1240 2	BC	1680 10	C
862.2 8	BC	1000 10	C	1267 2	BC	1830 10	C
875.8 12	B	1104 2	B	1315 2	BC	1950 10	C

 $\gamma(^{150}\text{Pm})$

<u>$E_i(\text{level})$</u>	<u>E_γ</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>	<u>$E_i(\text{level})$</u>	<u>E_γ</u>	<u>I_γ</u>	<u>E_f</u>	<u>J_f^π</u>
56.8	56.8	100	0	(1 ⁻)	226.3	98.0	100	128.3	
115.6	59.0	100	56.8		229.5	229.5	100	0	(1 ⁻)
128.3	127.9	100	0	(1 ⁻)	244.8	116.5	100	128.3	
129.7	72.9		56.8		246.4?	75 [†]		172.1	
	129.7		0	(1 ⁻)		117.5		128.3	
158.6	101.8		56.8		258.5	99.9	100	158.6	
	158.6		0	(1 ⁻)	281.5	109.4	100	172.1	
172.1	56.6 [†]		115.6		288.8	80.8	100	208.0	
	115.5		56.8		294.3	166.0	100	128.3	
	172.4		0	(1 ⁻)	319.0	146.9	100	172.1	
196.7	68.6		128.3		326.0	167.4	100	158.6	
	139.7		56.8		330.0	171.4	100	158.6	
208.0	151.2	100	56.8		369.3	161.3	100	208.0	
220.0	90.3	100	129.7						

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

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Level Scheme

Intensities: Type not specified

Legend

- ▶ $I_\gamma < 2\% \times I_\gamma^{max}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{max}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{max}$
- - -▶ γ Decay (Uncertain)

