

**Adopted Levels, Gammas**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 106,619 (2005)	1-Nov-2005

$Q(\beta^-) = -9.31 \times 10^3$  *synt*;  $S(n) = 8561$  21;  $S(p) = 1.96 \times 10^3$  3;  $Q(\alpha) = 6695$  5 [2012Wa38](#)  
 Note: Current evaluation has used the following Q record -9300 *synt* 8567 22 1950 50 6695 5 [2003Au03](#).  
 $\Delta Q(\beta^-) = 60$  ([2003Au03](#)).

$^{185}\text{Pb}$  Levels

Cross Reference (XREF) Flags

A  $^{189}\text{Po}$   $\alpha$  decay (3.5 ms)

E(level)	$J^\pi$	$T_{1/2}$	XREF	Comments
0.0	$3/2^-$	6.3 s 4	A	$\% \alpha = 34$ 25; $\% \epsilon + \% \beta^+ = ?$ $\mu = -1.10$ 4 $\% \alpha = 34$ 25 from the recoil- $\alpha(^{189}\text{Po})$ - $\alpha(^{185}\text{Pb})$ correlations ( <a href="#">2005Va04</a> ). $J^\pi$ : $13/2^+$ and $3/2^-$ for the low-lying two states from laser spectroscopy; this state is populated by the $\alpha$ -decay of $^{189}\text{Po}$ , $J^\pi = (7/2^-)$ . $T_{1/2}$ : From <a href="#">2002An15</a> . Others: 4.1 s 3 from <a href="#">1980Sc09</a> . Only $\alpha$ decay was observed. $Q(\alpha) = 6698$ 4 from <a href="#">2002An15</a> . $E\alpha_0 = 6548$ , $I\alpha_2 < 1.4\%$ , $HF > 600$ ; $E\alpha_1 = 6486$ 5, $I\alpha_2 = 44\%$ 2, $HF = 11$ 6; $E\alpha_2 = 6288$ 5, $I\alpha_1 = 56\%$ 2, $HF = 1.5$ 8; from <a href="#">2002An15</a> and $E\alpha_1 = 6290$ 15, $I\alpha_1 = 12\%$ 2; $E\alpha_2 = 6485$ 15, $I\alpha_2 = 18\%$ 3 ( <a href="#">1980Sc09</a> ). $\mu$ : from Laser Resonance Spectroscopy ( <a href="#">2002An15</a> ). $\% \alpha = 50$ 25; $\% \epsilon + \% \beta^+ = ?$ $\mu = -1.19$ 3 $\% \alpha = 50$ 25 estimated from the known $\alpha$ -branching ratios of the neighboring Pb isotopes ( <a href="#">2002An15</a> ). Only $\alpha$ decay was observed. $E\alpha = 6408$ 5, $HF = 1.7$ 9 from <a href="#">2002An15</a> ; $E\alpha = 6406$ 15, $HF = 3.6$ 3, assuming $I\alpha = 52\%$ from <a href="#">1980Sc09</a> . $\% \epsilon + \% \beta^+ \approx 40$ theory ( <a href="#">1973Ta30</a> ). $J^\pi$ : see comments on the 0.0 level. $T_{1/2}$ : from <a href="#">2002An15</a> . Other: 3.6 s 3 ( <a href="#">1980Sc09</a> ). $\mu$ : from Laser Resonance Spectroscopy ( <a href="#">2002An15</a> ).
0.0+x	$13/2^+$	4.3 s 2		
224 1			A	
278 1	$(5/2^-)$		A	$J^\pi$ : assigned under the assumption that the 278 $\gamma$ is of M1.

$\gamma(^{185}\text{Pb})$

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma$	$E_f$	$J_f^\pi$
224		224 1	0.0	$3/2^-$
278	$(5/2^-)$	278 1	0.0	$3/2^-$

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**Adopted Levels, Gammas**Level Scheme