

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 107,791 (2006)	15-Sep-2005

$Q(\beta^-) = -1.235 \times 10^4$ 8; $S(n) = 1.187 \times 10^4$ 8; $S(p) = 1.65 \times 10^3$ 5; $Q(\alpha) = 6899$ 6 [2012Wa38](#)

Note: Current evaluation has used the following Q record -12330 SY118.6E2 101630 406897 6 [2003Au03](#).

$\Delta Q(\beta^-) = 200$ (syst) [2003Au03](#).

 ^{176}Hg LevelsCross Reference (XREF) Flags

- A** $^{103}\text{Rh}(^{78}\text{Kr}, p4n\gamma)$ E=380 MeV
B ^{180}Pb α decay
C $^{144}\text{Sm}(^{36}\text{Ar}, 4n\gamma)$

E(level) [†]	J ^{π} [‡]	T _{1/2}	XREF	Comments
0.0	0 ⁺	20.3 ms 14	ABC	$\% \alpha = 94$ 12 T _{1/2} : Weighted average of 18 ms 10 (1996Pa01), 20 ms 3 (1999To11), 21 ms 4 (1999Po09), 21 ms 3 (2001Ju09 , 1998Mu25) 20 ms 2 (2002Ro17). Other value: 34 ms +18-9 (1983Sc24). $\% \alpha$ from 1999Po09 . Other value: $\% \alpha = 96$ 25 (1999To11).
613.3 10	2 ⁺		A C	
1369.7 15	4 ⁺		A C	
1920.7 18	6 ⁺		A C	
2373.9 20	(8 ⁺)		C	
2450.6 20			C	
2851.5 23			C	
2874.4 23	(10 ⁺)		C	

[†] Deduced by evaluator from a least squares fit to the adopted γ -rays assuming $\Delta E = 1$ keV.

[‡] Assigned from stretched E2 transition as determined from measured intensity ratio of γ rays using the Ge detectors at 134° and 158° to those at 79° and 101° with respect to the beam direction $^{144}\text{Sm}(^{36}\text{Ar}, 4n\gamma)$.

 $\gamma(^{176}\text{Hg})$

E _i (level)	J ^{π} _i	E _{γ} [†]	I _{γ}	E _f	J ^{π} _f
613.3	2 ⁺	613.3	100	0.0	0 ⁺
1369.7	4 ⁺	756.4	100	613.3	2 ⁺
1920.7	6 ⁺	551.0	100	1369.7	4 ⁺
2373.9	(8 ⁺)	453.2	100	1920.7	6 ⁺
2450.6		529.9 [‡]	100	1920.7	6 ⁺
2851.5		400.9 [‡]	100	2450.6	
2874.4	(10 ⁺)	500.5	100	2373.9	(8 ⁺)

[†] From $^{144}\text{Sm}(^{36}\text{Ar}, 4n\gamma)$.

[‡] Placement and cascade character of 529.9 γ and 400.9 γ are tentative.

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Level Scheme

Intensities: Relative photon branching from each level

