

**Adopted Levels, Gammas**

Type	Author	History	
Full Evaluation	J. Tuli	Citation	Literature Cutoff Date
		ENSDF	15-Aug-2015

S(n)=9672 SY; S(p)=630 SY; Q( $\alpha$ )=7378 5    [2012Wa38](#) $\Delta S(n)=257$  syst,  $\Delta S(p)=216$  syst ([2012Wa38](#)).Identification: observation of known  $\alpha$  decay from the  $^{169}\text{Pt}$   $\alpha$  decay daughter ([1999Se14](#)). **$^{173}\text{Hg}$  Levels****Cross Reference (XREF) Flags****A** (HI,xn $\gamma$ )

E(level)	$J^\pi$ <sup>†</sup>	T <sub>1/2</sub>	XREF	Comments
0	(7/2 <sup>-</sup> )	0.80 ms	8	<a href="#">A</a>
				% $\alpha$ =100 4 ( <a href="#">2012Od01</a> )
				T <sub>1/2</sub> : measured in <a href="#">2012Od01</a> from 7208 $\alpha$ (t). Others: 0.59 ms +47–18 ( <a href="#">2004Ke06</a> ), 0.93 ms +57–26 ( <a href="#">1999Se14</a> ).
				Measured E $\alpha$ =7208 5 ( <a href="#">2012Od01</a> ), 7192 13 ( <a href="#">2004Ke06</a> ), 7211 11 ( <a href="#">1999Se14</a> ). Other: <a href="#">2009Sa27</a> .
				% $\alpha$ : $\alpha$ decay only has been observed ( <a href="#">1999Se14</a> ). Gross $\beta$ decay theory predicts partial $\beta$ -decay halflife≈0.9 s ( <a href="#">1973Ta30</a> ), implying % $\varepsilon$ +% $\beta^+$ ≈0.1%.
				$J^\pi$ : Unhindered $\alpha$ decay to (7/2 <sup>-</sup> ) $^{169}\text{Pt}$ .
0+x?	(9/2 <sup>-</sup> )		<a href="#">A</a>	
721+x?	(13/2 <sup>-</sup> )		<a href="#">A</a>	
1454+x?	(17/2 <sup>-</sup> )		<a href="#">A</a>	
2029+x?	(21/2 <sup>-</sup> )		<a href="#">A</a>	

† Tentative assignments suggested by [2012Od01](#). **$\gamma(^{173}\text{Hg})$** 

E <sub>i</sub> (level)	$J_i^\pi$	E <sub><math>\gamma</math></sub>	I <sub><math>\gamma</math></sub>	E <sub>f</sub>	$J_f^\pi$
721+x?	(13/2 <sup>-</sup> )	721 <sup>†</sup>	100	0+x? (9/2 <sup>-</sup> )	
1454+x?	(17/2 <sup>-</sup> )	733 <sup>†</sup>	100	721+x? (13/2 <sup>-</sup> )	
2029+x?	(21/2 <sup>-</sup> )	575	100	1454+x? (17/2 <sup>-</sup> )	

† Ordering of 733-721 cascade is not established, it could be in reverse order.

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## Legend

Level Scheme

Intensities: Type not specified

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

