

**Adopted Levels, Gammas**

Type	Author	History Citation	Literature Cutoff Date
Update	M. S. Basunia		31-Jan-2005

Q(β<sup>-</sup>)=-8.28×10<sup>3</sup> 5; S(n)=8453 21; S(p)=2.12×10<sup>3</sup> 4; Q(α)=6178 3 [2012Wa38](#)

Note: Current evaluation has used the following Q record -8250 508442 222110 306178 3 [2003Au03](#).

<sup>175</sup>Pt Levels

Cross Reference (XREF) Flags

- A <sup>144</sup>Sm(<sup>35</sup>Cl,p3nγ)
- B <sup>179</sup>Hg α decay

E(level)	J <sup>π</sup> †	T <sub>1/2</sub>	XREF	Comments
0.0	7/2 <sup>-</sup>	2.53 s 6	B	%ε+%β <sup>+</sup> =36 5; %α=64 5 J <sup>π</sup> : Based on unhindered (HF=1.31 7) 6286 4 keV α transition from <sup>179</sup> Hg to the g.s. of <sup>175</sup> Pt, deduced α-decay reduced widths, information of the daughter <sup>175</sup> Pt and grand-daughter <sup>175</sup> Os nuclei ( <a href="#">2002Ko09</a> ). %α: From <a href="#">1979Ha10</a> (a%=4.8 8, 55 5, and 4.7 1.0 of 6038α, 5964α, and 5831α respectively). Other: 56 5 ( <a href="#">1996Pa01</a> 5960α), consistent with measured value of 57.3 11 for Iα(6038 keV) + Iα(5964 keV) ( <a href="#">1986Ke03</a> ). T <sub>1/2</sub> : Weighted average of 2.4 s 3( <a href="#">1996Pa01</a> ), 2.56 s 10( <a href="#">1979Ha10</a> ), 2.54 s 15( <a href="#">1979Ha10</a> ), and 2.52 s 8( <a href="#">1973Ga08</a> ).
0.0+x‡	(13/2 <sup>+</sup> )		A	
138.4+x‡	(11/2 <sup>+</sup> )		A	
328.1+x‡	(17/2 <sup>+</sup> )		A	
381.6+x‡	(15/2 <sup>+</sup> )		A	
744.0+x‡	(19/2 <sup>+</sup> )		A	
764.7+x‡	(21/2 <sup>+</sup> )		A	
1171.8+x‡	(23/2 <sup>+</sup> )		A	
1231.3+x‡	(25/2 <sup>+</sup> )		A	
1662.8+x‡	(27/2 <sup>+</sup> )		A	
1738.3+x‡	(29/2 <sup>+</sup> )		A	
2211.5+x‡	(31/2 <sup>+</sup> )		A	
2293.5+x‡	(33/2 <sup>+</sup> )		A	
2816.9+x‡	(35/2 <sup>+</sup> )		A	
2897.1+x‡	(37/2 <sup>+</sup> )		A	
3474.9+x‡	(39/2 <sup>+</sup> )		A	
3544.0+x‡	(41/2 <sup>+</sup> )		A	
4231.0+x‡	(45/2 <sup>+</sup> )		A	

† Spin and parity assignments are based on rotational and energy systematics of the i<sub>13/2</sub> Coriolis-mixed band in other N=97 nuclei ([1990Ce05](#)).

‡ Band(A): i<sub>13/2</sub> Coriolis-mixed rotational band.

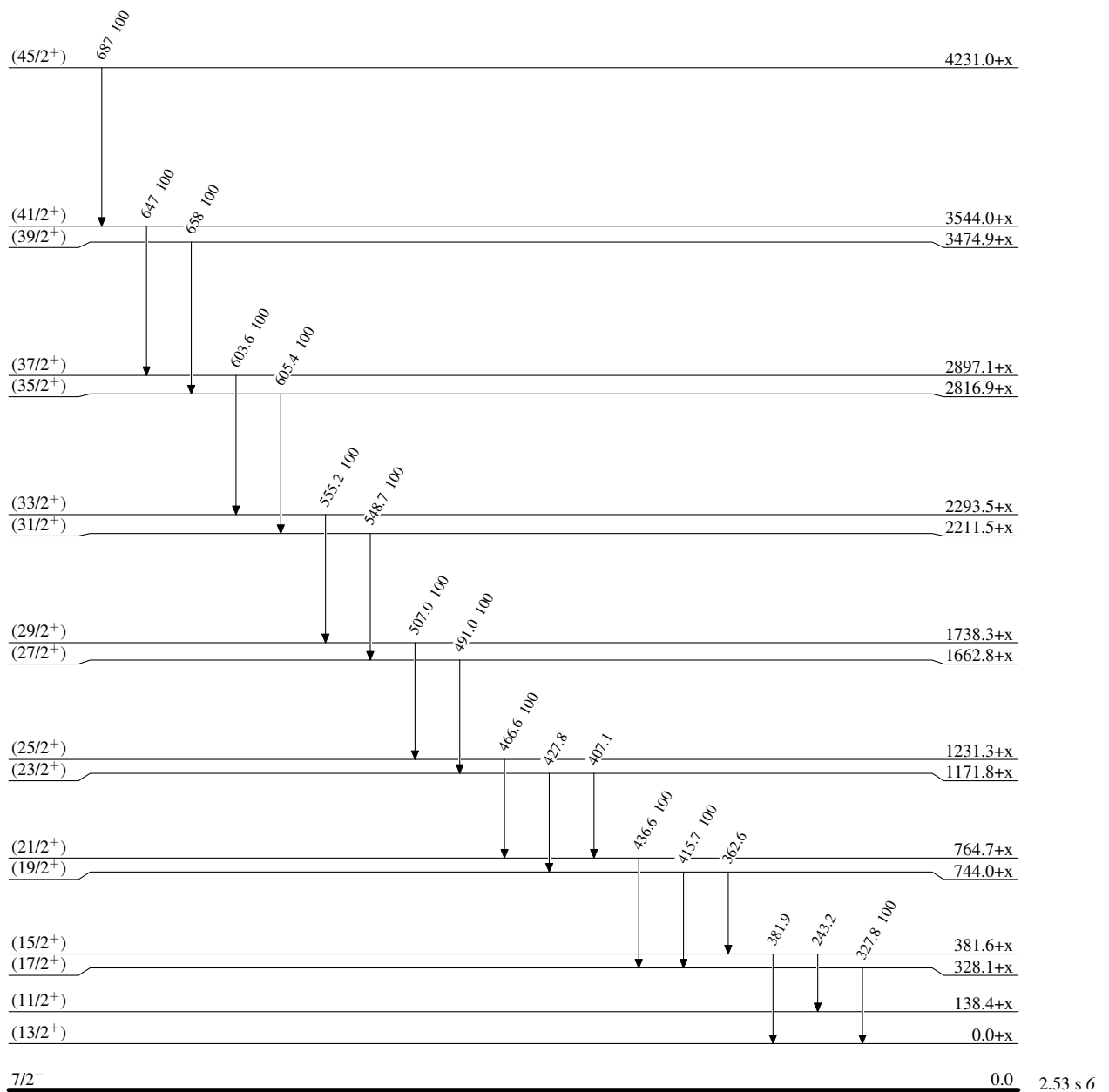
Adopted Levels, Gammas (continued)

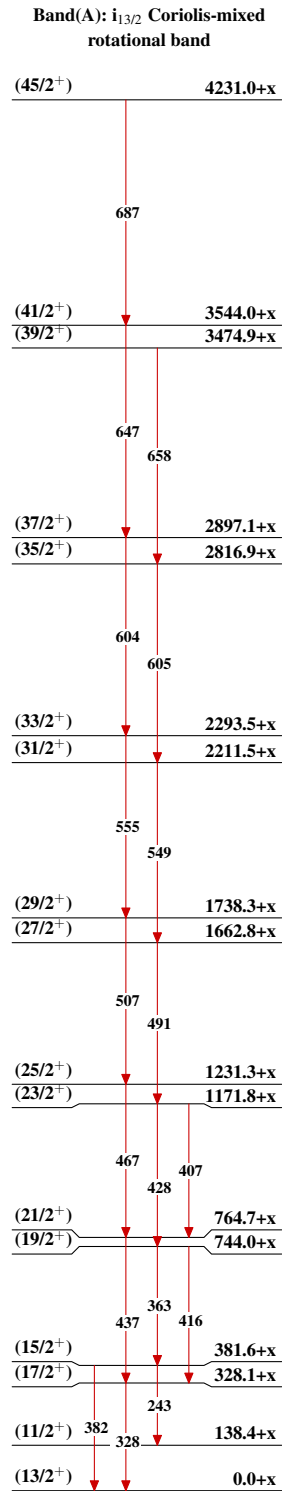
$\gamma(^{175}\text{Pt})$						Comments
$E_i(\text{level})$	$J_i^\pi$	$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_f$	$J_f^\pi$	
328.1+x	(17/2 <sup>+</sup> )	327.8	100	0.0+x	(13/2 <sup>+</sup> )	I <sub>γ</sub> : Not available.
381.6+x	(15/2 <sup>+</sup> )	243.2		138.4+x	(11/2 <sup>+</sup> )	
		381.9		0.0+x	(13/2 <sup>+</sup> )	
744.0+x	(19/2 <sup>+</sup> )	362.6		381.6+x	(15/2 <sup>+</sup> )	
		415.7	100 <i>14</i>	328.1+x	(17/2 <sup>+</sup> )	
764.7+x	(21/2 <sup>+</sup> )	436.6	100	328.1+x	(17/2 <sup>+</sup> )	
1171.8+x	(23/2 <sup>+</sup> )	407.1		764.7+x	(21/2 <sup>+</sup> )	
		427.8		744.0+x	(19/2 <sup>+</sup> )	
1231.3+x	(25/2 <sup>+</sup> )	466.6	100	764.7+x	(21/2 <sup>+</sup> )	
1662.8+x	(27/2 <sup>+</sup> )	491.0	100	1171.8+x	(23/2 <sup>+</sup> )	
1738.3+x	(29/2 <sup>+</sup> )	507.0	100	1231.3+x	(25/2 <sup>+</sup> )	
2211.5+x	(31/2 <sup>+</sup> )	548.7	100	1662.8+x	(27/2 <sup>+</sup> )	
2293.5+x	(33/2 <sup>+</sup> )	555.2	100	1738.3+x	(29/2 <sup>+</sup> )	
2816.9+x	(35/2 <sup>+</sup> )	605.4	100	2211.5+x	(31/2 <sup>+</sup> )	
2897.1+x	(37/2 <sup>+</sup> )	603.6	100	2293.5+x	(33/2 <sup>+</sup> )	
3474.9+x	(39/2 <sup>+</sup> )	658	100	2816.9+x	(35/2 <sup>+</sup> )	
3544.0+x	(41/2 <sup>+</sup> )	647	100	2897.1+x	(37/2 <sup>+</sup> )	
4231.0+x	(45/2 <sup>+</sup> )	687	100	3544.0+x	(41/2 <sup>+</sup> )	

<sup>†</sup> From (<sup>35</sup>Cl,p3n $\gamma$ ).  $\Delta E=0.3$  to  $0.9$  keV.

Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level



**Adopted Levels, Gammas** $^{175}_{78}\text{Pt}_{97}$