

(HI,xn γ) 1991Dr03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, Huo Junde		NDS 87, 15 (1999)	1-Nov-1998

$^{107}\text{Ag}(^{70}\text{Ge},p2n\gamma)$ E=290 MeV; $^{144}\text{Sm}(^{33}\text{S},3n\gamma)$ E=153 MeV measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\gamma\gamma(\theta)$. Detector: 20 Compton-suppressed Ge spectrometers and a 40-element BGO central ball.

 ^{174}Pt Levels

E(level)	J π [†]	Comments
0 [‡]	0 ⁺	
394.2 [‡] 10	2 ⁺	
891.8 [‡] 15	4 ⁺	
1276?		
1365.0 [‡] 18	6 ⁺	
1776.8 18		
1796.1 20	(7)	J π : DCO ratio to 6 ⁺ suggests stretched dipole. No γ to 4 ⁺ .
1826.6 [‡] 20	8 ⁺	
2060.8 20		
2328.1 [‡] 23	10 ⁺	
2879.2 [‡] 25	12 ⁺	
3449 [‡] 3	14 ⁺	

[†] Based on rotational structure. DCO ratios are consistent with stretched Q for transitions deexciting these levels.

[‡] Band(A): K π =0⁺ g.s. rotational band.

 $\gamma(^{174}\text{Pt})$

E_γ	I_γ	$E_i(\text{level})$	J π_i	E_f	J π_f	Comments
284.0	8 1	2060.8		1776.8		
394.2	100	394.2	2 ⁺	0	0 ⁺	Ratio(DCO)=0.96 14.
431.1	18 2	1796.1	(7)	1365.0	6 ⁺	Ratio(DCO)=0.58 20.
461.6	75 4	1826.6	8 ⁺	1365.0	6 ⁺	Ratio(DCO)=0.95 8.
473.2	93 5	1365.0	6 ⁺	891.8	4 ⁺	Ratio(DCO)=1.04 15.
497.6	103 5	891.8	4 ⁺	394.2	2 ⁺	Ratio(DCO)=0.91 9.
501.5	42 3	2328.1	10 ⁺	1826.6	8 ⁺	Ratio(DCO)=0.91 12.
551.1	30 2	2879.2	12 ⁺	2328.1	10 ⁺	Ratio(DCO)=1.17 13.
569.9	18 2	3449	14 ⁺	2879.2	12 ⁺	
882 [†]	8 2	1276?		394.2	2 ⁺	
885	13 2	1776.8		891.8	4 ⁺	

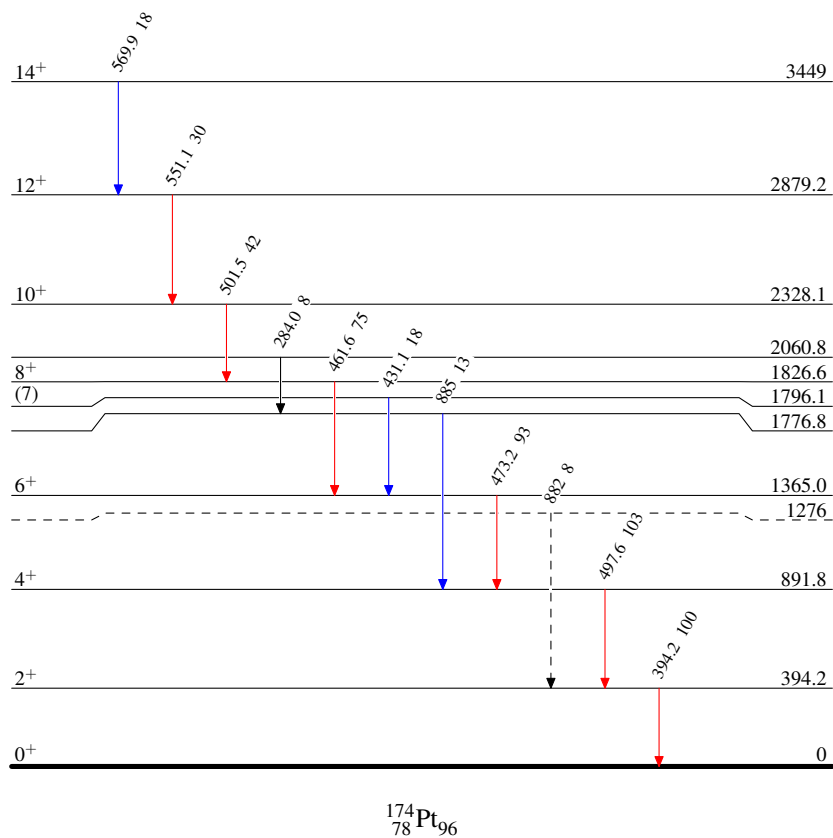
[†] Placement of transition in the level scheme is uncertain.

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Legend

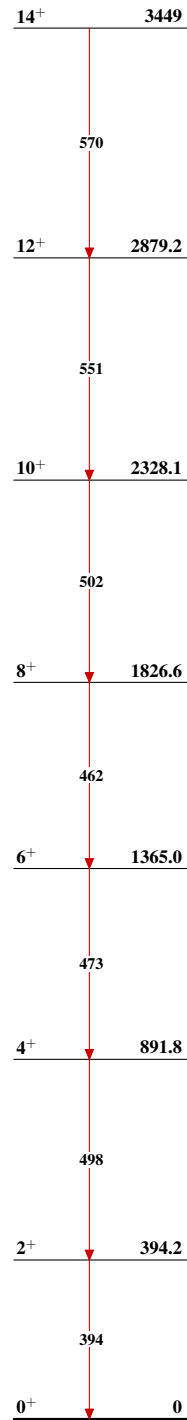
Level Scheme
 Intensities: Relative I_γ

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


 $^{174}_{78}\text{Pt}_{96}$

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**Band(A): K π =0⁺ g.s.
rotational band**



$^{174}_{78}\text{Pt}_{96}$