

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong, Zhou Chunmei		NDS 104,283 (2005)	1-Jan-2002

$Q(\beta^-)=2156$ 21; $S(n)=6.90\times 10^3$ 5; $S(p)=7.28\times 10^3$ 5; $Q(\alpha)=-4.6\times 10^2$ 5 [2012Wa38](#)

Note: Current evaluation has used the following Q record 2155 206901 437276 45 [2003Au03](#).

Identification: sources from $^{198}\text{Pt}(\gamma, p)$ chem ([1978PeZJ](#)); from $^{198}\text{Pt}(p, 2p)$ E=100 MeV, chem ([1976PeZW](#)); semi γ -decay curves measured.

$^{198}\text{Pt}(\text{pol } t, \alpha)$, E=17 MeV; measured $\sigma(E\alpha, \theta)$, analyzing power $A_y(E\alpha, \theta)$; compared with predictions of distorted wave calculation; analyzed nuclear structure with interacting boson-fermion model, U(6/4) supersymmetry, spin(6) symmetry ([1983Ci01](#), [1981Ci02](#), [1984Ci07](#), [1985Zh10](#)).

 ^{197}Ir Levels

All data are from $^{198}\text{Pt}(\text{pol } t, \alpha)$ ([1983Ci01](#)), except as noted.

E(level)	$J^\pi^\dagger$	$T_{1/2}$	$S^\ddagger$	Comments
0.0	$3/2^+$	5.8 min 5	3.5	$\% \beta^- = 100$ $T_{1/2}$: from γ -decay curves (1978PeZJ). Others: 1952Ch18 , 1954Bu02 , 1961Ho10 . $A_y(\theta=30^\circ)=-0.52$ 2; $d\sigma/d\Omega(\theta=30^\circ)=340$ $\mu\text{b/sr}$.
52 5	$1/2^+$		1.2	$A_y(\theta=30^\circ)=+0.06$ 4; $d\sigma/d\Omega(\theta=30^\circ)=167$ $\mu\text{b/sr}$.
115 5	$11/2^-$	8.9 min 3	6.9	$\% \beta^- = 99.75$ 10; $\% \text{IT} = 0.25$ 10 $\% \beta^-$, $\% \text{IT}$: For B(M4)(W.u.)=3.2 13. From syst of M4 transitions (h11/2 to d3/2) for 5 cases B(M4)(W.u.) ranges from 1.9 to 4.5 (1980Sc26). $T_{1/2}$: from γ -decay curves (1978PeZJ). Others: 9.8 min 4 (1976PeZW), 10 min 1 (1976HiZF).
224 5				
248 5				
460 5	$5/2^+$		1.8	
495 5				
561 5				
606 5	$5/2^+$		1.4	
≈ 654				
715 5	$11/2^-$		3.1	
761 5	$5/2^+$		0.90	
885 5				
924 5				
960 5				
1043 5	$1/2^+$		0.38	
1116 5	$11/2^-$		3.1	
1160 5				
≈ 1202				
≈ 1300				
1384 5			0.16 [#]	
1426 5			0.65 [#]	
≈ 1459				
1528 5				

[†] Based on the $\sigma(\theta)$ DWBA analysis and analyzing powers in $^{198}\text{Pt}(\text{pol } t, \alpha)$ ([1983Ci01](#)).

[‡] Obtained from the relation, $[d\sigma/d\Omega]_{\text{exp}} = N S [d\sigma/d\Omega]_{\text{DWBA}}$ with $N=23$. Typical errors are $\leq 20\%$.

[#] Assumes $J^\pi = 5/2^+$.