

^{192}Au IT decay (160 ms)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

Parent: ^{192}Au : E=431.6 5; $J^\pi=(11^-)$; $T_{1/2}=160$ ms 20; %IT decay=100.0

All data are from Adopted Levels, unless noted to the contrary.

 ^{192}Au Levels

E(level) [†]	J^π [‡]	$T_{1/2}$ [‡]	Comments
0.0	1 ⁻	4.94 h 9	
31.61 5	2 ⁻	0.69 ns 2	
72.6 3	3 ⁻		
135.4 3	(5) ⁺	29 ms	
224.9 4	(6) ⁺		
242.9 4	(7) ⁺		
371.8 4	(8) ⁺		
431.6 5	(11 ⁻)	160 ms 20	%IT=100

[†] From least-squares fit to E_γ .

[‡] From Adopted Levels.

 $\gamma(^{192}\text{Au})$

E_γ [‡]	$E_i(\text{level})$	J^π_i	E_f	J^π_f	Mult. [‡]	δ [‡]	α [†]	$I_{(\gamma+ce)}$ ^{#&}	Comments
(18.0 @ 6)	242.9	(7) ⁺	224.9	(6) ⁺					
31.61 5	31.61	2 ⁻	0.0	1 ⁻	M1+E2	0.084 3	46.2 9	100	ce(L)/($\gamma+ce$)=0.749 10; ce(M)/($\gamma+ce$)=0.177 5; ce(N+)/($\gamma+ce$)=0.0524 14 ce(N)/($\gamma+ce$)=0.0440 12; ce(O)/($\gamma+ce$)=0.00788 22; ce(P)/($\gamma+ce$)=0.000443 11
41.0 3	72.6	3 ⁻	31.61	2 ⁻	M1+E2	0.063	18.9 5		$\alpha(L)=14.5$ 4; $\alpha(M)=3.40$ 10; $\alpha(N+..)=1.01$ 3 $\alpha(N)=0.845$ 23; $\alpha(O)=0.154$ 5; $\alpha(P)=0.0097$ 3
59.8 3	431.6	(11 ⁻)	371.8	(8) ⁺	E3		2.44×10^3 8	100	ce(L)/($\gamma+ce$)=0.724 18; ce(M)/($\gamma+ce$)=0.214 9; ce(N+)/($\gamma+ce$)=0.062 3 ce(N)/($\gamma+ce$)=0.0537 25; ce(O)/($\gamma+ce$)=0.0084 4; ce(P)/($\gamma+ce$)= 1.07×10^{-5} 5 %I γ =0.0410 13 from %(I($\gamma+ce$))=100 and α .
62.8 3	135.4	(5) ⁺	72.6	3 ⁻	M2		157 4		$\alpha(L)=117$ 3; $\alpha(M)=30.6$ 8; $\alpha(N+..)=9.20$ 24 $\alpha(N)=7.75$ 20; $\alpha(O)=1.38$ 4; $\alpha(P)=0.0741$ 19
89.5 3	224.9	(6) ⁺	135.4	(5) ⁺	M1+E2	0.18	9.91 17		$\alpha(K)=7.93$ 14; $\alpha(L)=1.52$ 3; $\alpha(M)=0.357$ 7; $\alpha(N+..)=0.1059$ 19 $\alpha(N)=0.0889$ 16; $\alpha(O)=0.0161$ 3; $\alpha(P)=0.000964$ 17
103.8 3	135.4	(5) ⁺	31.61	2 ⁻	E3		103.3 23		$\alpha(K)=0.977$ 15; $\alpha(L)=75.2$ 17; $\alpha(M)=21.0$ 5; $\alpha(N+..)=6.08$ 14

Continued on next page (footnotes at end of table)

^{192}Au IT decay (160 ms) (continued) $\gamma(^{192}\text{Au})$ (continued)

<u>E_γ</u> [‡]	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.</u> [‡]	<u>δ</u> [‡]	<u>α</u> [†]	Comments
107.5 3	242.9	(7) ⁺	135.4	(5) ⁺	E2		3.86 7	$\alpha(\text{N})=5.24$ 12; $\alpha(\text{O})=0.834$ 19; $\alpha(\text{P})=0.00162$ 4 $\alpha(\text{K})=0.617$ 9; $\alpha(\text{L})=2.43$ 5; $\alpha(\text{M})=0.632$ 13; $\alpha(\text{N}+..)=0.180$ 4
128.9 3	371.8	(8) ⁺	242.9	(7) ⁺	M1+E2	1.0	2.69 5	$\alpha(\text{N})=0.155$ 3; $\alpha(\text{O})=0.0249$ 5; $\alpha(\text{P})=7.86\times 10^{-5}$ 13 $\alpha(\text{K})=1.67$ 3; $\alpha(\text{L})=0.770$ 13; $\alpha(\text{M})=0.193$ 4; $\alpha(\text{N}+..)=0.0559$ 10
146.9 3	371.8	(8) ⁺	224.9	(6) ⁺	E2		1.133 19	$\alpha(\text{N})=0.0477$ 8; $\alpha(\text{O})=0.00800$ 14; $\alpha(\text{P})=0.000198$ 3 $\alpha(\text{K})=0.351$ 6; $\alpha(\text{L})=0.587$ 10; $\alpha(\text{M})=0.152$ 3; $\alpha(\text{N}+..)=0.0435$ 8 $\alpha(\text{N})=0.0374$ 7; $\alpha(\text{O})=0.00604$ 11; $\alpha(\text{P})=3.65\times 10^{-5}$ 6

[†] [Additional information 1.](#)[‡] From Adopted Gammas.

From %IT=100.

@ From level energy difference.

& Absolute intensity per 100 decays.

^{192}Au IT decay (160 ms)

Legend

Decay Scheme

%IT=100.0

 - - - - - $\rightarrow$ γ Decay (Uncertain)
