Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 196,342 (2024)	1-Sep-2023

Q(β^-)=1660 *30*; S(n)=7020 *60*; S(p)=10140 *syst*; Q(α)=−1520 *syst* 2021Wa16
ΔS(p)=200, ΔQ(α)=200 (syst,2021Wa16).
S(2n)=12240 *30*, S(2p)=18720 *300* (syst) (2021Wa16).

^{202}Pt Levels

Cross Reference (XREF) Flags

A ^{202}Ir β^- decay
B ^{9}Be(^{208}Pb,Xγ)

E(level)†	J$^\pi$‡	$T_{1/2}$	XREF	Comments
0	0$^+$	44 h *15*	AB	%β^-=100 $T_{1/2}$: Using 439.6γ(t) in ^{202}Hg produced in ^{202}Pt β^- -> ^{202}Au β^- ($T_{1/2}$=28.4 s) -> ^{202}Hg in 1992Sh12.
534.3 *5*	(2$^+$)#		AB	
1244.4 *15*	(2$^+$)		A	
1253.1 *7*	(4$^+$)#		AB	J$^\pi$: 718.8γ to (2$^+$).
1582.3 *13*	(1$^+$)		A	
1758.3 *18*	(2$^+$,3$^+$)		A	J$^\pi$: 1224γ to (2$^+$), 514γ to 4$^+$ and population in ^{202}Ir β^- decay (J^π=1$^-$,2$^-$).
1787.4 *9*	(7$^-$)	141 μs *7*	B	%IT=100 $T_{1/2}$: From γ(t) in 2011St21. Other: 280 μs *+420−190* in 2005Ca02. configuration: $\pi(d^{-1}_{3/2},h^{-1}_{11/2})$.
2699.3 *12*	(2$^-$,3$^-$)		A	

† From a least-square fit to Eγ.
‡ Tentative assignment from 2013Mo20, unless otherwise stated.
# From 2005Ca02, based on the systematics in the even-even Pt isotopes.

$\gamma(^{202}Pt)$

E$_i$(level)	J$_i^\pi$	E$_\gamma$†	I$_\gamma$†	E$_f$	J$_f^\pi$	Mult.	α#	Comments
534.3	(2$^+$)	534.3@‡ *5*	100‡	0	0$^+$	[E2]	0.02110 *30*	α(K)=0.01579 *22*; α(L)=0.00405 *6*; α(M)=0.000978 *14* α(N)=0.0002405 *34*; α(O)=4.08×10^{-5} *6*; α(P)=1.666×10^{-6} *24* E$_\gamma$: Other: 534.9 keV *2* in 2005Ca02 and 535.0 keV *13* in 2013Mo20.
1244.4	(2$^+$)	710.1 *15*	100	534.3	(2$^+$)			
1253.1	(4$^+$)	718.8‡ *5*	100‡	534.3	(2$^+$)	[E2]	0.01079 *15*	α(K)=0.00847 *12*; α(L)=0.001776 *25*; α(M)=0.000422 *6* α(N)=0.0001039 *15*; α(O)=1.799×10^{-5} *25*; α(P)=8.97×10^{-7} *13* E$_\gamma$: Other: 718.7 keV *2* in 2005Ca02 and 718.7 keV *14* in 2013Mo20.
1582.3	(1$^+$)	1048.0 *12*	100	534.3	(2$^+$)			
1758.3	(2$^+$,3$^+$)	514 *3*	100 *11*	1244.4	(2$^+$)			

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Adopted Levels, Gammas (continued)

γ(^{202}Pt) (continued)

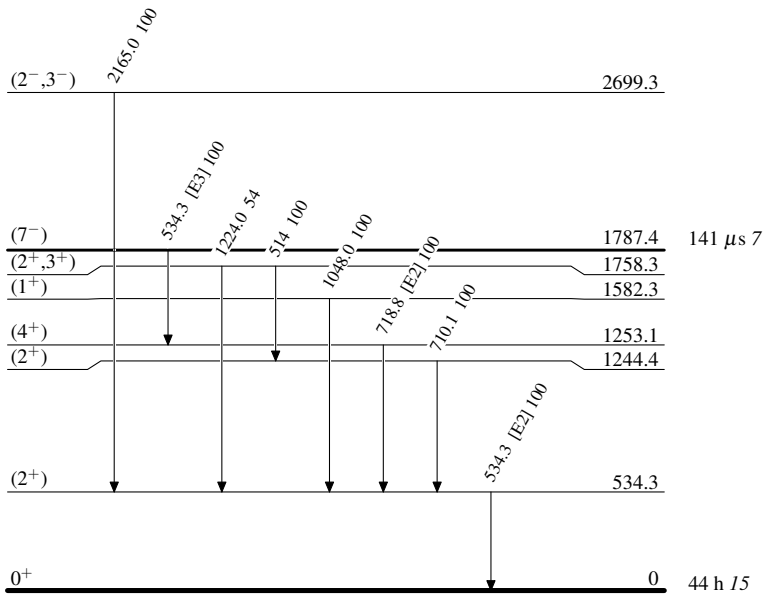
E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.	α #	Comments
1758.3	(2$^+$,3$^+$)	1224.0 *19*	54 *7*	534.3	(2$^+$)			
1787.4	(7$^-$)	534.3 @ ‡ *5*	100 ‡	1253.1	(4$^+$)	[E3]	0.0642 *9*	α(K)=0.0390 *6*; α(L)=0.01901 *28*; α(M)=0.00481 *7* α(N)=0.001185 *17*; α(O)=0.0001961 *28*; α(P)=5.18×10^{-6} *7* B(E3)(W.u.)=0.269 *14* E_γ: Other: 534.9 keV *2* in 2005Ca02.
2699.3	(2$^-$,3$^-$)	2165.0 *11*	100	534.3	(2$^+$)			

† From 2013Mo20, unless otherwise stated.
‡ From 2011St21.
# Additional information 1.
@ Multiply placed.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{202}_{78}Pt_{124}$