Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 177, 509, 2021	4-Jul-2021

Q(β^-)=3630 *SY*; S(n)=4890 *SY*; S(p)=10160 *SY*; Q(α)=−1670 *SY* 2021Wa16
ΔQ(β^-)=200 keV, ΔS(n)=200 keV, ΔS(p)=360 keV, ΔQ(α)=280 keV from 2021Wa16 (systematics).

^{203}Pt Levels

Cross Reference (XREF) Flags

A ^{9}Be(^{208}Pb,Xγ)

E(level)[†]	J$^\pi$	$T_{1/2}$	XREF	Comments
0	(1/2$^-$)	22 s *4*	A	%β^-=100 J$^\pi$: Direct β^- feeding to J=1/2 and 3/2 states in the daughter ^{203}Au nucleus (2013Mo20); shell model predictions and similarity with the ^{205}Hg and ^{207}Pb (N=125) isotones. $T_{1/2}$: From β-γ(Δt) analysis in 2014Mo15. Other: 10.1 s *30* (2005KuZU) probably associated with the decay of the J^π=(13/2$^+$) isomeric state (2013Mo20). Configuration=$\nu(p^{-1}_{1/2})$. The assignment is tentative.
367.0?[‡]	(5/2$^-$)[#]		A	
1367?[‡] *3*	(13/2$^+$)[#]	12 s *5*	A	%IT=?; %β^-=? %β^-: This branch was tentatively suggested in 2013Mo20, but the evaluator found no convincing evidences about its existence. See the comment with the 353γ in the ^{9}Be(^{208}Pb,Xγ) data set. $T_{1/2}$: From 2013Mo20, using 367γ(t) and 353γ(t). Other: 10.1 s *30* (2005KuZU), associated with the ground state. Configuration=$\nu(i^{-1}_{13/2})$. The assignment is tentative.
1367+x[@]	(27/2$^-$)[@]		A	Additional information 1. E(level): Probably a long-lived isomeric state (2011St21). Configuration=$\nu(i^{-1}_{13/2})\pi[h^{-1}_{11/2},d^{-1}_{3/2}\ 7^-]$. The assignment is tentative.
2471.0+x[@]	(33/2$^+$)[@]	641 ns *55*	A	$T_{1/2}$: From 1104γ(t) in 2011St21. Experimental isomeric ratio=1.3% *2* (2011St21). Configuration=$\nu(i^{-1}_{13/2})\pi[(h^{-2}_{11/2})_{10^+}]$. The assignment is tentative.

[†] From Eγ.
[‡] Tentative assignment proposed in 2013Mo20. It is also possible that the 12 s activity is associated with the ground state β^- decay of ^{203}Ir, as the isomer is not observed in 2011St21.
[#] Based on shell model predictions and similarity with the ^{205}Hg and ^{207}Pb (N=125) isotones.
[@] From 2011St21.

$\gamma(^{203}Pt)$

E$_i$(level)	J$_i^\pi$	E$_\gamma$	I$_\gamma$	E$_f$	J$_f^\pi$	Mult.	α[†]	Comments
367.0?	(5/2$^-$)	367		0	(1/2$^-$)			E$_\gamma$: From 2013Mo20. In coincidence with the Pt K$_{\alpha_2}$ x rays and shows a 12 s lifetime.
1367?	(13/2$^+$)	1000.0 *29*	100	367.0?	(5/2$^-$)	[M4]	0.1186 *20*	α(K)=0.0903 *15*; α(L)=0.0215 *4*; α(M)=0.00524 *9* α(N)=0.001304 *23*; α(O)=0.000230 *4*;

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

γ(^{203}Pt) (continued)

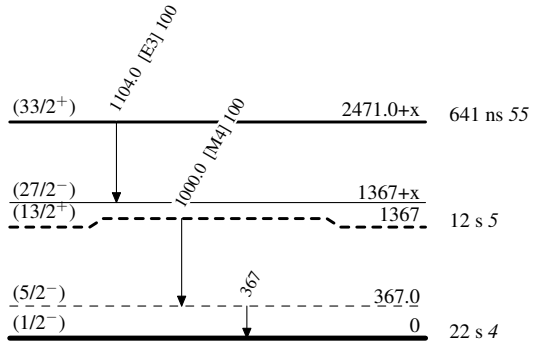
E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	α†	Comments
2471.0+x	(33/2$^+$)	1104.0	100	1367+x	(27/2$^-$)	[E3]	0.00993 *14*	α(P)=1.343×10^{-5} *23* E_γ: Weighted average from the observed 925 keV *13* and 986 keV *3* K- and L-CE lines in coincidence with 367γ in 2013Mo20 (B_{e^-}(K)=78.395 keV and B_{e^-}(L)=13.880 keV). B(M4)(W.u.)=0.38 *+27−11*, by assuming %IT=100. α(K)=0.00768 *11*; α(L)=0.001716 *24*; α(M)=0.000411 *6* α(N)=0.0001015 *14*; α(O)=1.765×10^{-5} *25*; α(P)=8.99×10^{-7} *13*; α(IPF)=4.58×10^{-8} *13* B(E3)(W.u.)=0.384 *+36−30* E_γ: From 2011St21.

† Additional information 2.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{203}_{78}Pt_{125}$