^{201}Pt β^- decay 1963Go06

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 187,355 (2023)	20-Sep-2022

Parent: ^{201}Pt: E=0; J^π=(5/2$^-$); $T_{1/2}$=2.46 min *9*; Q(β^-)=2660 *50*; %β^- decay=100

^{201}Pt-Source produced using the ^{204}Hg(n,α) reaction (σ=2.5 mb relative to that for ^{58}Ni(n,p) in 1963Go06), following radiochemical separation. Detectors: NaI(Tl) for gammas and scintillation spectrometer for β. Measured: β, γ, $\beta\gamma$ coin.

^{201}Au Levels

E(level)[†]	J^π	$T_{1/2}$	Comments
0	3/2$^+$	26.0 min *8*	J^π,$T_{1/2}$: From Adopted Levels.
70? *5*			
230? *20*			
1760? *20*			

[†] From the observed Eγ in $\beta\gamma$-coin data.

β^- radiations

E(decay)	E(level)	Comments
(9.0×10^2 *5*)	1760?	
(2.43×10^3 *5*)	230?	
2660 *50*	0	E(decay): From 1963Go06.

γ(^{201}Au)

E$_\gamma$[†]	E$_i$(level)	E$_f$	J^π_f	Comments
70[‡#] *5*	70?	0	3/2$^+$	E$_\gamma$: Energy close to Au Kα x ray.
150[‡] *10*	230?	70?		
230[‡] *20*	230?	0	3/2$^+$	
1760 *20*	1760?	0	3/2$^+$	E$_\gamma$: No coin with other gammas were observed. It shows the parent $T_{1/2}$(^{201}Pt)=2.5 m *1*.

[†] From 1963Go06.
[‡] Observed only in the $\beta\gamma$-coin data when E(β)>1600 keV.
[#] Placement of transition in the level scheme is uncertain.

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Decay Scheme