^{191}Pt IT decay (95 μs) 1976Pi03,1968Io01,1967Co20

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	V. R. Vanin et al.	NDS 108, 2393 (2007)	1-Dec-2006

Parent: ^{191}Pt: E=148.9 *4*; $J^\pi=(13/2)^+$; $T_{1/2}$=95 μs *5*; %IT decay=100.0

Isomer studied via ^{190}Os(α,3nγ) E=30-50 MeV; beam 200 μs on target, 800 μs off (1976Pi03).

^{191}Pt Levels

E(level)[†]	J^π[‡]	$T_{1/2}$	Comments
0.0	$3/2^-$	2.83 d *2*	$T_{1/2}$: adopted value.
9.547 *16*	$(5/2,7/2)^-$		
100.663 *20*	$(9/2)^-$	>1 μs	$T_{1/2}$: from 1976Pi03, γγ(t).
149.035 *22*	$(13/2)^+$	95 μs *5*	$T_{1/2}$: from 1976Pi03. Other values: 107 μs *3* (1967Co20), 111 μs *22* (1968Io01).

[†] Energies are relative to 9.56 keV for the $J^\pi=5/2^-$ state. See ^{191}Pt levels from ^{190}Os(α,3nγ).

[‡] From Adopted Levels.

γ(^{191}Pt)

E_γ	I_γ[†#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	α[@]	$I_{(\gamma+ce)}$[#]	Comments
(9.56)		9.547	$(5/2,7/2)^-$	0.0	$3/2^-$			100	
48.2 *3*	0.216 *7*	149.035	$(13/2)^+$	100.663	$(9/2)^-$	M2	462 *15*	100	ce(L)/(γ+ce)=0.744 *17*; ce(M)/(γ+ce)=0.196 *8*; ce(N+)/(γ+ce)=0.058 *3* ce(N)/(γ+ce)=0.0492 *22*; ce(O)/(γ+ce)=0.0085 *4*; ce(P)/(γ+ce)=0.000446 *20* E_γ: from 1976Pi03.
91.1 *1*	12.15 *15*	100.663	$(9/2)^-$	9.547	$(5/2,7/2)^-$	E2	7.23	100	ce(K)/(γ+ce)=0.0916 *17*; ce(L)/(γ+ce)=0.591 *7*; ce(M)/(γ+ce)=0.153 *3*; ce(N+)/(γ+ce)=0.0431 *9* ce(N)/(γ+ce)=0.0373 *8*; ce(O)/(γ+ce)=0.00579 *12*; ce(P)/(γ+ce)=1.34×10^{-5} *3* E_γ: from 1976Pi03. Other values: 94 *10* (1968Io01), 90.8 *3* (1967Co20). Mult.: α(K)exp=1.1 *3* (K x ray/Iγ measurement) is consistent with E2, E3, and E4 multipolarities (1977Ke18). Not E3 or E4 from RUL for $T_{1/2}$(100.6 level)≤100 μs.

[†] Deduced by evaluator from I(γ+ce) and α.

[‡] From adopted gammas.

[#] Absolute intensity per 100 decays.

[@] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

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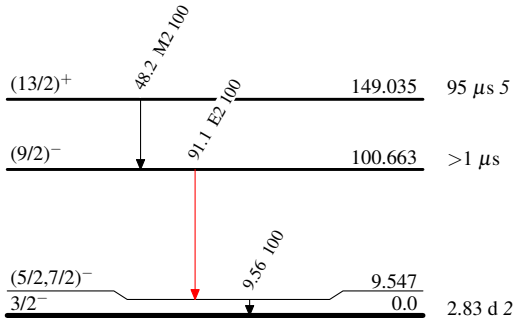
Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 decays through this branch
%IT=100.0



$^{191}_{78}Pt_{113}$