

^{198}Ir β^- decay [1972ScYY](#),[1982Ta08](#)

Type	Author	History	Citation	Literature Cutoff Date
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Parent: ^{198}Ir : $E=0.0$; $T_{1/2}=8$ s I ; $Q(\beta^-)=409\times 10^1$ 20; $\% \beta^-$ decay=100.0

Source produced by $^{198}\text{Pt}(n,p)$ $E=14$ MeV, Natural, enriched targets; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin ([1982Ta08](#)).

Others: [1973Sz03](#), [1973Ur01](#).

 ^{198}Pt Levels

<u>E(level)[†]</u>	<u>Jπ[‡]</u>
0.0	0 ⁺
407.4 3	2 ⁺
914.4 5	0 ⁺

[†] From decay scheme and $E\gamma$'s by using least-squares fit to data.

[‡] From Adopted Levels.

 β^- radiations

<u>E(decay)</u>	<u>E(level)</u>
$(3.18\times 10^3$ [†] 20)	914.4
$(4.09\times 10^3$ 20)	0.0

[†] Existence of this branch is questionable.

 $\gamma(^{198}\text{Pt})$

$I\gamma$ normalization: Undetermined.

<u>$E\gamma$[†]</u>	<u>$I\gamma$[‡]</u>	<u>E_i(level)</u>	<u>Jπ_i[†]</u>	<u>E_f</u>	<u>Jπ_f[†]</u>	<u>Mult.[#]</u>	<u>α[@]</u>	<u>Comments</u>
407.4 3	76 10	407.4	2 ⁺	0.0	0 ⁺	[E2]	0.0417	$\alpha(K)=0.0291$ 5; $\alpha(L)=0.00952$ 14; $\alpha(M)=0.00234$ 4; $\alpha(N+..)=0.000674$ 10
507.0 3	100 7	914.4	0 ⁺	407.4	2 ⁺	[E2]	0.0239	$\alpha(K)=0.01771$ 25; $\alpha(L)=0.00474$ 7; $\alpha(M)=0.001149$ 17; $\alpha(N+..)=0.000332$ 5

[†] From [1982Ta08](#).

[‡] Relative intensity normalized to $I\gamma(507.0\gamma)=100$ 7.

[#] From Adopted Gamma radiations.

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

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Decay Scheme

Intensities: Relative $I_{(\gamma+ce)}$

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- Coincidence

