

^{202}Ir β^- decay [2013Mo20](#)

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

Parent: ^{202}Ir : $E=0$; $J^\pi=(1^-,2^-)$; $T_{1/2}=13\text{ s}$ 3; $Q(\beta^-)=6050\text{ syst}$; $\%\beta^-$ decay=100

^{202}Ir - J^π , $T_{1/2}$: From Adopted Levels for ^{202}Ir .

^{202}Ir - $Q(\beta^-)$: From [2021Wa16](#).

[2013Mo20](#): ^{202}Ir produced and identified in $^9\text{Be}(^{208}\text{Pb},x)$, $E=1\text{ GeV/nucleon}$ from the UNILAC and SIS-18 accelerator complex at GSI. ^9Be target of thickness 2.5 g/cm^2 was used. Reaction products were separated and identified by the Fragment Recoil Separator (FRS). The recoils were stopped in the RISING active stopper. Measured (ion) $\beta\gamma$, $\beta\gamma(\text{ion})$ correlations, and half-lives using RISING array for γ rays, and Si detector arrays for particle detection. Other: [2007KuZZ](#) (same collaboration).

 ^{202}Pt Levels

$E(\text{level})^\dagger$	$J^\pi^\ddagger$	$T_{1/2}$	Comments
0.0	0^+	44 h 15	$T_{1/2}$: From Adopted Levels.
535.0 13	(2^+)		
1245.1 19	(2^+)		
1253.7 20	(4^+)		
1583.0 18	(1^+)		
1759.0 21	$(2^+,3^+)$	J^π : From Adopted Levels.	
2700.0 17	$(2^-,3^-)$		

† From a least-square fit to E_γ .

‡ Tentative assignments from [2013Mo20](#), unless otherwise stated. Same values as in Adopted Levels.

 $\gamma(^{202}\text{Pt})$

By normalization: The decay scheme is incomplete and no normalization to absolute emission probabilities nor β -decay feeding intensities and $\log ft$ values are given.

$E_\gamma^\dagger$	$I_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
514 3	28 3	1759.0	$(2^+,3^+)$	1245.1	(2^+)
535.0 13	100 8	535.0	(2^+)	0.0	0^+
710.1 15	52 5	1245.1	(2^+)	535.0	(2^+)
718.7 14	3.8 10	1253.7	(4^+)	535.0	(2^+)
1048.0 12	10.0 19	1583.0	(1^+)	535.0	(2^+)
1224.0 19	15 2	1759.0	$(2^+,3^+)$	535.0	(2^+)
2165.0 11	11 2	2700.0	$(2^-,3^-)$	535.0	(2^+)

† From [2013Mo20](#).

$^{202}\text{Ir} \beta^- \text{ decay}$ **2013Mo20**

Decay Scheme

Intensities: Relative I_γ

Legend

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

