^{201}Ir β^- decay 2013Mo20

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

Parent: ^{201}Ir: E=0.0; $J^\pi=(3/2^+)$; $T_{1/2}$=21 s *5*; Q(β^-)=3900 *syst*; %β^- decay=100

2013Mo20: ^{201}Ir produced in cold fragmentation reactions with E=1 GeV/A ^{208}Pb beam impinging a 2.5 g/cm^2 thick Be target. The beam was provided by SIS-18 synchrotron at GSI facility. Residues were separated using Fragment Separator. Measured Eγ, Iγ, $\gamma\gamma$-coin, $\beta\gamma$-coin, fragment-γ correlated event using RISING array of 15 cluster detectors. Others (same authors): 2011MoZP.

^{201}Pt Levels

E(level)†	J^π	$T_{1/2}$	Comments
0.0	(5/2$^-$)	2.46 min *9*	%β^-=100 J^π,$T_{1/2}$: From Adopted Levels.
332.6 *17*			
389.4 *13*			
655.0 *20*			
710.0 *13*			
741.0 *20*			
1442.0 *24*			
1706.3 *13*			

† From least-squares fit to Eγ.

$\gamma(^{201}Pt)$

Iγ normalization: Since the ground state to ground state β-decay feeding is not known, the decay scheme is uncertain and no β^- intensities and log ft values are provided.

E_γ†	I_γ†	E_i(level)	E_f	J^π_f
332.6 *17*	31 *3*	332.6	0.0	(5/2$^-$)
389.4 *15*	26 *3*	389.4	0.0	(5/2$^-$)
655 *2*	100 *8*	655.0	0.0	(5/2$^-$)
710.1 *15*	46 *4*	710.0	0.0	(5/2$^-$)
732 *2*	28 *3*	1442.0	710.0	
741 *2*	22 *3*	741.0	0.0	(5/2$^-$)
996.5 *16*	5.0 *12*	1706.3	710.0	
1317 *2*	11 *2*	1706.3	389.4	
1706 *2*	12 *2*	1706.3	0.0	(5/2$^-$)

† From 2013Mo20.

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Decay Scheme

Intensities: Relative I_γ