^{192}Os(^{7}Li,6nγ) 1974Tj02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 143, 1 (2017)	31-Mar-2017

E(^{7}Li)=58 MeV; measured γ, $\gamma\gamma$, $\gamma(\theta)$;Ge(Li) detectors.

^{193}Au Levels

E(level)†	J$^{\pi}$‡	T$_{1/2}$	Comments
0.0	3/2^{+}		
258.0	5/2^{+}		
290.1	11/2^{-}		
539.3	(7/2^{+})		
697.8	(15/2)$^{-}$		
809.2	(9/2)$^{+}$		
890.7	9/2^{-}		
1419.0	(19/2)$^{-}$		
1479.0	(13/2^{+})		
1947.7	(21/2)$^{+}$	10.4 ns *8*	T$_{1/2}$: From Adopted Levels. 12 ns in 1974Tj02.
2080.8	(25/2^{+})		
2141.2	(23/2^{+})		
2173.5	(23/2^{-})		
2378.7	(27/2^{-})		

† From 1974Tj02.
‡ From Adopted Levels.

γ(^{193}Au)

E$_{\gamma}$	I$_{\gamma}$†	E$_{i}$(level)	J$_{i}^{\pi}$	E$_{f}$	J$_{f}^{\pi}$	Comments
133.1#	14.1	2080.8	(25/2^{+})	1947.7	(21/2)$^{+}$	Iγ(45°)/Iγ(90°)=1.37.
193.5#	30.1	2141.2	(23/2^{+})	1947.7	(21/2)$^{+}$	Iγ(45°)/Iγ(90°)=1.08.
205.2	72.8	2378.7	(27/2^{-})	2173.5	(23/2^{-})	Iγ(45°)/Iγ(90°)=1.11. I$_{\gamma}$: includes contribution from ^{192}Os Coulomb excitation.
258.1	38.1	258.0	5/2^{+}	0.0	3/2^{+}	Iγ(45°)/Iγ(90°)=0.97.
281.5	6.4	539.3	(7/2^{+})	258.0	5/2^{+}	Iγ(45°)/Iγ(90°)=1.06.
407.7	100	697.8	(15/2)$^{-}$	290.1	11/2^{-}	Iγ(45°)/Iγ(90°)=1.16.
528.7	33.9	1947.7	(21/2)$^{+}$	1419.0	(19/2)$^{-}$	Iγ(45°)/Iγ(90°)=0.80.
(539.0‡)		539.3	(7/2^{+})	0.0	3/2^{+}	
(550.6‡)		809.2	(9/2)$^{+}$	258.0	5/2^{+}	
600.9	19.4	890.7	9/2^{-}	290.1	11/2^{-}	Iγ(45°)/Iγ(90°)=1.04.
669.8	10.7	1479.0	(13/2^{+})	809.2	(9/2)$^{+}$	Iγ(45°)/Iγ(90°)=1.77. E$_{\gamma}$: 2014Th02 (p,2nγ) measure a 668.4 keV *2* γ ray in $\gamma\gamma$ spectra and do not find any signature of a doublet (without a broadened peak width) in coincidence with 550.6γ. Evaluator considers 669.8γ same as 668.4γ.
721.2	77.8	1419.0	(19/2)$^{-}$	697.8	(15/2)$^{-}$	Iγ(45°)/Iγ(90°)=1.20.
754.5	32.5	2173.5	(23/2^{-})	1419.0	(19/2)$^{-}$	Iγ(45°)/Iγ(90°)=1.27.
1250.1	≈10	1947.7	(21/2)$^{+}$	697.8	(15/2)$^{-}$	

† Relative Iγ at 90°.
‡ γ expected from Adopted Levels, but not measured in this reaction.
# Placement in level scheme from Adopted Levels. 1974Tj02 identify as preceding γ of 21/2^{+} isomer.

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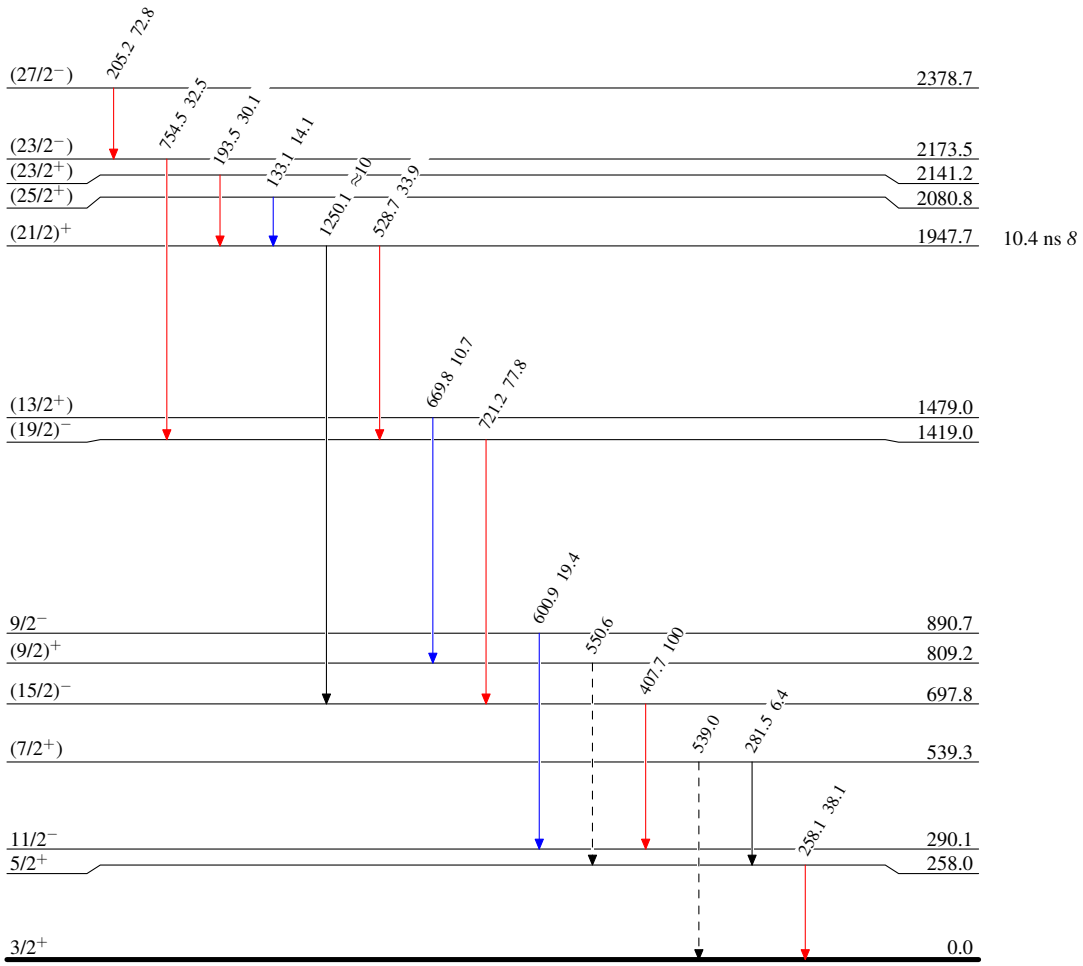
Level Scheme

Intensities: Relative I_γ

Legend

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



$^{193}_{79}Au_{114}$