

$^{106}\text{Cd}(^{60}\text{Ni},3n\gamma)$ 2013Dr06

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	10-Jun-2015

2013Dr06: E=270 MeV. Measured E_γ , I_γ , $\gamma\gamma$, (recoil) γ coin correlated with α decay of ^{163}Os using the JUROGAM array consisting of 43 escape-suppressed HPGe detectors; GREAT spectrometer and RITU gas-filled separator. Recoil-decay tagging technique used to identify γ rays in specific nuclides.

^{163}Os Levels

E(level) [†]	J^π [‡]	$T_{1/2}$	Comments
0.0 [@]	7/2 ⁻	5.5 ms 6	$T_{1/2}$: from Adopted Levels.
623.7 [@] 5	(11/2 ⁻)		
1275.1 7			
1292.2 ^{?#} [@] 7	(15/2 ⁻)		
1992.2 ^{?#} [@] 9	(19/2 ⁻)		
2230.6 [@] 10	(23/2 ⁻)		

[†] From E_γ data.

[‡] As proposed in 2013Dr06.

[#] Since ordering of the 238-→700-→669 γ cascade is not established, location of the 1292 and 1992 levels could be different.

[@] Band(A): Band based on 7/2⁻.

$\gamma(^{163}\text{Os})$

E_γ [†]	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ [†]	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
^x 112.0 5	23 3					^x 636.9 5	65 7				
238.4 [‡] 5	42 4	2230.6	(23/2 ⁻)	1992.2?	(19/2 ⁻)	651.4 5	26 6	1275.1		623.7	(11/2 ⁻)
^x 521.4 5	31 4					^x 661.3 5	73 6				
^x 553.1 10	9 3					668.5 [‡] 5	39 4	1292.2?	(15/2 ⁻)	623.7	(11/2 ⁻)
^x 556.0 10	6 3					^x 693.6 10	14 3				
^x 561.0 5	20 4					700.0 [‡] 5	43 5	1992.2?	(19/2 ⁻)	1292.2?	(15/2 ⁻)
623.7 5	100 7	623.7	(11/2 ⁻)	0.0	7/2 ⁻	^x 722.5 5	27 3				

[†] Uncertainty of 0.5 keV assigned for γ rays with $I_\gamma \geq 20$, and 1.0 keV for others based on a general comment by 2013Dr06.

[‡] Ordering of the 238-→700-→669 γ cascade is not established.

^x γ ray not placed in level scheme.

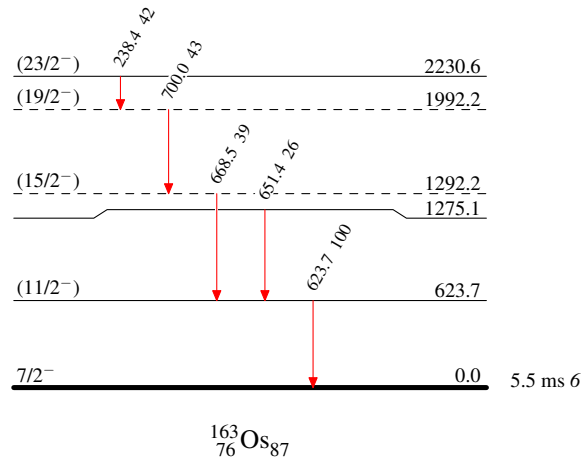
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Level Scheme

Intensities: Relative I_γ

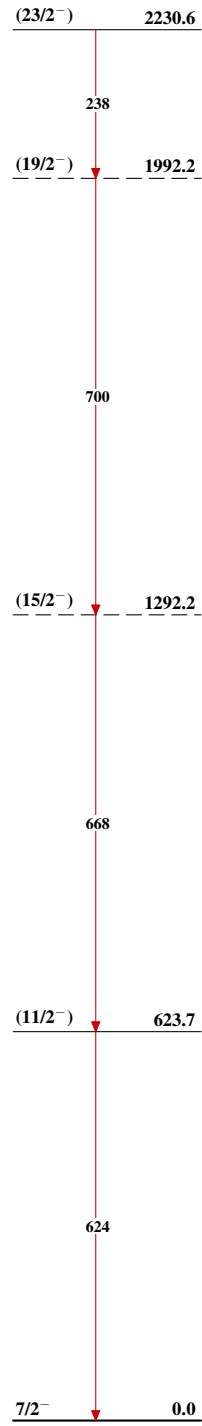
Legend

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



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Band(A): Band based on
 $7/2^-$

 $^{163}_{76}\text{Os}_{87}$