

<sup>190</sup>Os(<sup>7</sup>Li,6n $\gamma$ ) 1974Tj02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia	NDS 195,368 (2024)	1-Dec-2023

Target: enriched <sup>190</sup>Os. Projectile: <sup>7</sup>Li, E=50, 57 MeV. Measured  $\gamma$ -rays,  $\gamma\gamma$ -coin,  $\gamma\gamma(t)$ , <sup>7</sup>Li, $\gamma(\theta)$ ,  $\theta=45^\circ$  and  $90^\circ$ . Detector: Ge(Li).

<sup>191</sup>Au Levels

The observed band structure (decoupled band) has been interpreted as resulting from the coupling of an h<sub>11/2</sub> proton hole to the (oblate) even-core states.

E(level) <sup>†</sup>	J $\pi$ <sup>#</sup>	Comments
0.0	3/2 <sup>+</sup>	
266.3 <sup>‡</sup>	(11/2 <sup>-</sup> )	
686.2 <sup>‡</sup>	(15/2 <sup>-</sup> )	
1411.7 <sup>‡</sup>	(19/2 <sup>-</sup> )	
1991.0	(21/2 <sup>+</sup> )	T <sub>1/2</sub> : 10 ns 2 (1974Tj02) reassigned to 2502-keV level (see Adopted Levels).
2186.9 <sup>‡</sup>	(23/2 <sup>-</sup> )	

<sup>†</sup> Based on E(266 level)=266.3 from 1971Be61.

<sup>‡</sup> Member of favored h<sub>11/2</sub> decoupled band.

<sup>#</sup> From <sup>7</sup>Li  $\gamma(\theta)$ .

$\gamma(^{191}\text{Au})$

E $\gamma$ <sup>†</sup>	I $\gamma$ <sup>‡</sup>	E <sub>i</sub> (level)	J $\pi$ <sub>i</sub>	E <sub>f</sub>	J $\pi$ <sub>f</sub>	Mult. <sup>#</sup>	$\alpha$ <sup>@</sup>	Comments
419.9	100	686.2	(15/2 <sup>-</sup> )	266.3	(11/2 <sup>-</sup> )	E2	0.0401 6	$\alpha(K)=0.0279$ 4; $\alpha(L)=0.00923$ 13; $\alpha(M)=0.002279$ 32 $\alpha(N)=0.000564$ 8; $\alpha(O)=9.64\times 10^{-5}$ 13; $\alpha(P)=3.07\times 10^{-6}$ 4 I $\gamma$ : I $\gamma(45^\circ/90^\circ)=1.15$ (1974Tj02).
579.3	59.6	1991.0	(21/2 <sup>+</sup> )	1411.7	(19/2 <sup>-</sup> )			I $\gamma$ : I $\gamma(45^\circ/90^\circ)=0.96$ (1974Tj02).
725.5	56.4	1411.7	(19/2 <sup>-</sup> )	686.2	(15/2 <sup>-</sup> )	E2	0.01108 16	$\alpha(K)=0.00865$ 12; $\alpha(L)=0.001851$ 26; $\alpha(M)=0.000442$ 6 $\alpha(N)=0.0001095$ 15; $\alpha(O)=1.941\times 10^{-5}$ 27; $\alpha(P)=9.61\times 10^{-7}$ 13 I $\gamma$ : I $\gamma(45^\circ/90^\circ)=1.48$ (1974Tj02).
775.2	20.0	2186.9	(23/2 <sup>-</sup> )	1411.7	(19/2 <sup>-</sup> )	E2	0.00963 13	$\alpha(K)=0.00759$ 11; $\alpha(L)=0.001563$ 22; $\alpha(M)=0.000372$ 5 $\alpha(N)=9.22\times 10^{-5}$ 13; $\alpha(O)=1.639\times 10^{-5}$ 23; $\alpha(P)=8.41\times 10^{-7}$ 12 I $\gamma$ : I $\gamma(45^\circ/90^\circ)=1.26$ (1974Tj02).

<sup>†</sup> From 1974Tj02. Authors mention about observing  $\gamma$  rays between the 7/2<sup>-</sup>, 9/2<sup>-</sup>, and 13/2<sup>-</sup> 9/2<sup>-</sup>, and 13/2<sup>-</sup> levels, but those data were not listed.

<sup>‡</sup> at  $\theta=90^\circ$ , E=57 MeV. The ratio data of I $\gamma(45^\circ/90^\circ)$  are listed in comments.

<sup>#</sup> Quadrupole transitions are assumed as stretched E2.

<sup>@</sup> Additional information 1.

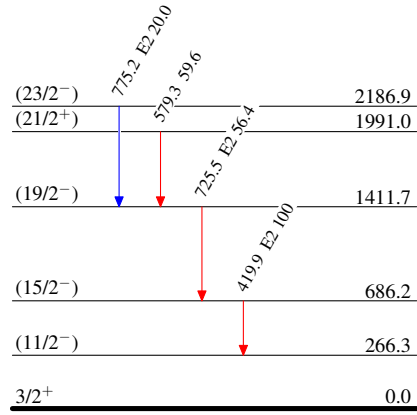
$^{190}\text{Os}(^7\text{Li},6n\gamma)$  1974Tj02

## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

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

 $^{191}_{79}\text{Au}_{112}$