

⁹⁴Mo(⁶Li,3n γ) 1983Ka31

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 111, 525 (2010)	19-Nov-2009

⁹⁷Rh Levels

1983Ka31: ⁹⁴Mo(⁶Li,3n γ), E(⁶Li)=22-34 MeV; measured E γ , I γ , $\gamma\gamma$, $\gamma(\theta)$, excit;Ge(Li) detectors (resolution=2.1 keV at 1330 keV).

E(level)	J π [†]	Comments
0.0	9/2 ⁺	
857.6	(13/2 ⁺)	
1463.0	(15/2 ⁺)	J π : J \leq 13/2 from 605.4 γ excit.
1553.1	(17/2 ⁺)	
1962.2	(19/2 ⁺)	J π : J $>$ 13/2 from 409.1 γ excit.
2224.8	(17/2 ⁻)	J π : J $<$ 13/2 from 761.8 γ excit; contradicts adopted J assignment.
2617.2	(21/2 ⁺)	
3054.8	(21/2 ⁻)	
3258.2	(23/2 ⁺)	
3550.2	(25/2 ⁺)	

[†] From Adopted Levels.

γ (⁹⁷Rh)

E γ	I γ	E _i (level)	J π _i	E _f	J π _f	Mult. [†]	Comments
292.0		3550.2	(25/2 ⁺)	3258.2	(23/2 ⁺)		
409.1	33.1 10	1962.2	(19/2 ⁺)	1553.1	(17/2 ⁺)	D	Mult.: Δ J=1, D; M1 In 1983Ka31 is not adopted here.
605.4	36.6 15	1463.0	(15/2 ⁺)	857.6	(13/2 ⁺)	(M1+E2)	
655.0		2617.2	(21/2 ⁺)	1962.2	(19/2 ⁺)		
695.5	50.4 15	1553.1	(17/2 ⁺)	857.6	(13/2 ⁺)	(E2)	
761.8	22.8 15	2224.8	(17/2 ⁻)	1463.0	(15/2 ⁺)		E γ ,I γ : γ is a doublet, total intensity given.
830.0		3054.8	(21/2 ⁻)	2224.8	(17/2 ⁻)		E γ : transition is a doublet.
857.6	100	857.6	(13/2 ⁺)	0.0	9/2 ⁺	(E2)	
933.0		3550.2	(25/2 ⁺)	2617.2	(21/2 ⁺)		
1296.0		3258.2	(23/2 ⁺)	1962.2	(19/2 ⁺)		

[†] Based on $\gamma(\theta)$, Δ J=2, Q and Δ J=1, D+Q transitions are assumed to be Δ J=2, (E2) and Δ J=1, (M1+E2), respectively.

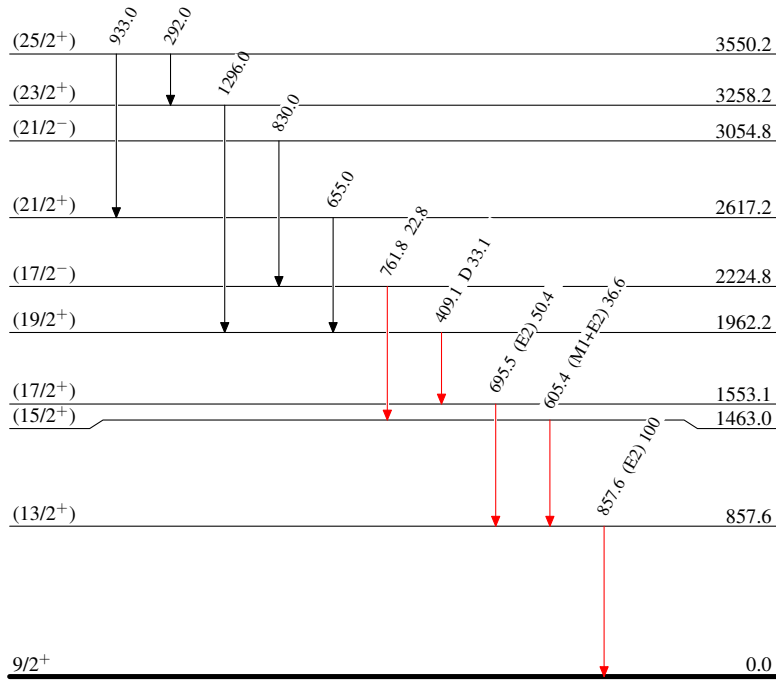
$^{94}\text{Mo}(^6\text{Li},3n\gamma)$ 1983Ka31

Level Scheme

Intensities: Relative I_γ

Legend

- \blackrightarrow $I_\gamma < 2\% \times I_\gamma^{max}$
- $\color{blue}\blackrightarrow$ $I_\gamma < 10\% \times I_\gamma^{max}$
- $\color{red}\blackrightarrow$ $I_\gamma > 10\% \times I_\gamma^{max}$



$^{97}_{45}\text{Rh}_{52}$