

$^{96}\text{Ru}(\alpha, \text{p}2\text{n}\gamma)$ 1985Be06

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

$E(\alpha)=30\text{-}55$ MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$, $\gamma(\theta)$, excit; coaxial detectors.

 ^{97}Rh Levels

<u>E(level)</u>	<u>J^π[†]</u>
0.0	9/2 ⁺
857.7	13/2 ⁽⁺⁾
1463.5	15/2
1553.1	17/2 ⁽⁺⁾
1961.3	19/2 ⁽⁺⁾
2225.4	17/2
2895.1	23/2 ⁽⁺⁾
3055.8	21/2
3259.1	23/2 ⁽⁺⁾
3550.7	25/2 ⁽⁺⁾

[†] Assignments by the authors based on $\gamma\gamma$, $\gamma(\theta)$, $I\gamma$ results and can differ from values assigned in the Adopted Levels, Gammas dataset.

 $\gamma(^{97}\text{Rh})$

<u>E_γ</u>	<u>I_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.</u> [†]	<u>Comments</u>
89.2 3	5 1	1553.1	17/2 ⁽⁺⁾	1463.5	15/2	D	Mult.: $\Delta J=1$ from $\gamma(\theta)$.
^x 259.3 3	8 2						
291.6 3	8 2	3550.7	25/2 ⁽⁺⁾	3259.1	23/2 ⁽⁺⁾	D	Mult.: $\Delta J=1$ from $\gamma(\theta)$.
408.2 3	41 4	1961.3	19/2 ⁽⁺⁾	1553.1	17/2 ⁽⁺⁾	D	Mult.: $\Delta J=1$ from $\gamma(\theta)$.
^x 463.8 3	8 4						
605.8 3	35 3	1463.5	15/2	857.7	13/2 ⁽⁺⁾	D	Mult.: $\Delta J=0$ or 1 from $\gamma(\theta)$.
655.5 3	11 2	3550.7	25/2 ⁽⁺⁾	2895.1	23/2 ⁽⁺⁾	D	Mult.: $\Delta J=1$ from $\gamma(\theta)$.
672.4 3	4 2	2225.4	17/2	1553.1	17/2 ⁽⁺⁾		
695.4 3	60 5	1553.1	17/2 ⁽⁺⁾	857.7	13/2 ⁽⁺⁾	(E2)	
761.9 3	20 2	2225.4	17/2	1463.5	15/2	D	Mult.: $\Delta J=1$ from $\gamma(\theta)$.
830.4 3	16 4	3055.8	21/2	2225.4	17/2	(E2)	
857.7 3	100 10	857.7	13/2 ⁽⁺⁾	0.0	9/2 ⁺	(E2)	
933.8 3	13 4	2895.1	23/2 ⁽⁺⁾	1961.3	19/2 ⁽⁺⁾	(E2)	
1297.8 3	17 3	3259.1	23/2 ⁽⁺⁾	1961.3	19/2 ⁽⁺⁾	(E2)	

[†] From $\gamma(\theta)$; stretched Q transitions are assumed to be (E2).

^x γ ray not placed in level scheme.

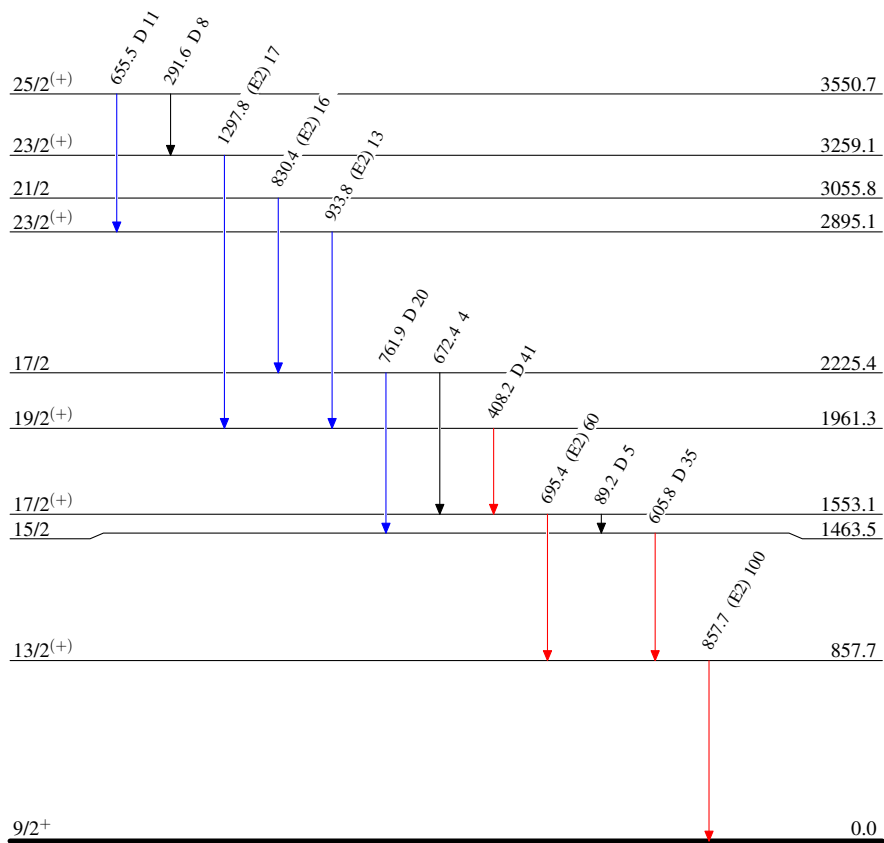
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Level Scheme

Intensities: Relative I_γ

Legend

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

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