

$^{94}\text{Zr}(^{12}\text{C,p2n}\gamma)$  1974Gr07

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110, 2081 (2009)	1-Mar-2009

E=44-56 MeV. Measured:  $E\gamma$ ,  $I\gamma$ ,  $\gamma(\theta)$ . Observed as impurity in  $^{103}\text{Pd}$  spectrum obtained in  $^{94}\text{Zr}(^{12}\text{C},3n\gamma)$  reaction.

 $^{103}\text{Rh}$  Levels

E(level)	$J^{\pi\dagger}$
0.0	$1/2^-$
357.4	$5/2^-$
920.2	$9/2^-$
1636.4	$13/2^-$
2343.3	$17/2^-$
2539.1	$19/2^-$
2752.5	$21/2^-$
3013.4	$23/2^-$
3329.3	$25/2^-$

$\dagger$  From Adopted Levels.

 $\gamma(^{103}\text{Rh})$ 

$E_{\gamma}^{\dagger}$	$I_{\gamma}$	$E_i(\text{level})$	$J_i^{\pi}$	$E_f$	$J_f^{\pi}$	Mult. #	Comments
195.2 $^{\ddagger}$	2	2539.1	$19/2^-$	2343.3	$17/2^-$	M1,E2	$A_{22}=-0.056$ 39, $A_{44}=-0.003$ 43.
213.0 $^{\ddagger}$	2	2752.5	$21/2^-$	2539.1	$19/2^-$	M1,E2	$A_{22}=-0.235$ 21, $A_{44}=0.045$ 31.
260.8 $^{\ddagger}$	3	3013.4	$23/2^-$	2752.5	$21/2^-$	M1,E2	$A_{22}=-0.117$ 28, $A_{44}=-0.062$ 34.
315.8 $^{\ddagger}$	3	3329.3	$25/2^-$	3013.4	$23/2^-$	M1,E2	$A_{22}=-0.340$ 172, $A_{44}=0.245$ 155.
357.4 1	100	357.4	$5/2^-$	0.0	$1/2^-$	[E2]	$A_{22}=0.215$ 27, $A_{44}=-0.093$ 34.
562.8 1	100 19	920.2	$9/2^-$	357.4	$5/2^-$	[E2]	$A_{22}=0.354$ 29, $A_{44}=-0.137$ 38.
706.9 $^{\textcircled{a}}$		2343.3	$17/2^-$	1636.4	$13/2^-$		$E_{\gamma}$ : not observed by 1974Gr07.
(716.6)		1636.4	$13/2^-$	920.2	$9/2^-$		Probably obscured by the very intense 717.7-keV $\gamma$ transition in $^{103}\text{Pd}$ .

$\dagger$   $\gamma\gamma$  indicate all  $\gamma$ -rays are members of the same cascade.

$\ddagger$  Unassigned  $\gamma$  transitions placed in the level scheme by the evaluator based on  $^{100}\text{Mo}(^6\text{Li},3n\gamma)^{103}\text{Rh}$  data.

# From  $A_2$ ,  $A_4$  coefficient of  $\gamma(\theta)$ ; Q assumed E2, D, Q assumed M1,E2.

$\textcircled{a}$  Placement of transition in the level scheme is uncertain.

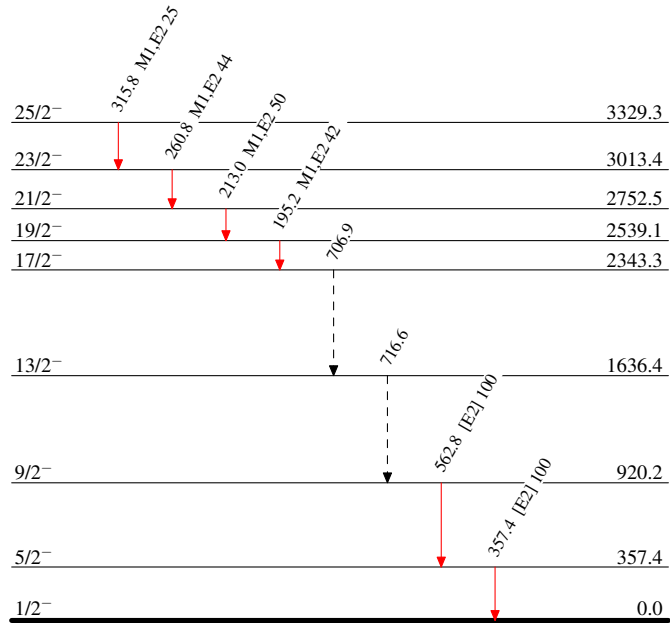
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Legend

## Level Scheme

Intensities: Type not specified

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

 $^{103}_{45}\text{Rh}_{58}$