

$^{24}\text{Mg}(\text{p},\alpha),(\text{p},\alpha\gamma)$  1970Li08,1970Pr01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	R. B. Firestone	NDS 127, 1 (2015)	15-Jan-2015

1970Li08:  $^{24}\text{Mg}(\text{p},\alpha\gamma)$  E=17.5 MeV. Measured  $\sigma(\text{E}\alpha,\text{E}\text{p})$ ,  $\alpha\text{p}(\theta)$ .

1970Pr01:  $^{24}\text{Mg}(\text{p},\alpha\gamma)$  E=17.5 MeV. Measured  $\alpha\gamma(\theta)$ ,  $I_\gamma$ ,  $\sigma(\text{E}\alpha,\theta(\alpha))$ .

2001Gr14:  $^{18}\text{Ne}(\alpha,\text{p})$ , E=1.5-3.0 MeV; measured  $\text{E}\text{p}$ .

 $^{21}\text{Na}$  Levels

E(level)	$J^\pi$	E(level)	$J^\pi$	E(level)
0		2800	1/2	3864
332	5/2,3/2	2834	9/2,5/2	4160?
1723	7/2,3/2	3544	5/2	4308
2432		3680		4425
				4988

 $\gamma(^{21}\text{Na})$ 




$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\delta$	Comments
332	100	332	5/2,3/2	0		M1+E2	+0.05 2	Mult.: $A_2=-0.292$ 2, $A_4=-0.032$ 3.
402	<6	2834	9/2,5/2	2432				
709	<4	2432		1723	7/2,3/2			
1111	64 6	2834	9/2,5/2	1723	7/2,3/2	M1+E2	+0.12 3	Mult.: $A_2=-0.09$ 4, $A_4=+0.11$ 6. $\delta$ : If 9/2 to 7/2.
1391	7 2	1723	7/2,3/2	332	5/2,3/2	M1+E2	+0.14 3	Mult.: $A_2=-0.07$ 1, $A_4=+0.05$ 2.
1723	93 2	1723	7/2,3/2	0		E2		Mult.: $A_2=+0.46$ 21, $A_4=-0.31$ 26.
2100	<4	2432		332	5/2,3/2			
2432	>96	2432		0				Mult.: $A_2=0$ , $A_4=0$ .
2502	36 6	2834	9/2,5/2	332	5/2,3/2			
2834	<2	2834	9/2,5/2	0				

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## Level Scheme

Intensities: Type not specified

## Legend

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

