

$^{48}\text{Ca}(^{11}\text{B},5\text{n}\gamma)$ 1977Na12

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde		NDS 121, 1 (2014)	20-Jun-2014

E=25-50 MeV, Ge(Li), measured $\sigma(E,E\gamma)$, $\gamma\gamma$ -coin, RDM, and DSA.

 ^{54}Mn Levels

E(level)	$T_{1/2}^{\dagger}$	Comments
0.0		
156.27 11	157 ps 44	$T_{1/2}$: from RDM.
368.27 23		
1073.20 27		
1783.46 34	>0.7 ps	
1925.19 33	>0.7 ps	
2856.5 10		From unplaced γ and unresolved γ given by 1977Na12.

† From DSAM, except as noted.

 $\gamma(^{54}\text{Mn})$

E_{γ}	$I_{\gamma}^{\dagger}$	$E_i(\text{level})$	E_f	Comments
156.27 11	81	156.27	0.0	Additional information 1.
212.00 20		368.27	156.27	Additional information 2.
				Unresolved from the much more intense ^{56}Mn 212 γ .
704.93 14	19	1073.20	368.27	Additional information 3.
851.98 19	7	1925.19	1073.20	
931.0 10		2856.5	1925.19	measured by 1977Na12, but unplaced in ^{54}Mn by 1977Na12.
1415.17 25	15	1783.46	368.27	
1782.2 4		2856.5	1073.20	Unresolved from ^{56}Mn 1782 γ .
				Additional information 4.

† 1977Na12 assured that the normalization is such that the average intensity of the strongest 25 lines from $^{11}\text{B}+^{48}\text{Ca}$ is 25000.

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Level Scheme

Intensities: Relative I_γ

Legend

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

