

$^{12}\text{C}(\text{t},\alpha\gamma)$ **1968Be30,1988Si08**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu		NP A880,88 (2012)	1-Jan-2011

1965Aj01: ^{11}B , measured not abstracted; deduced nuclear properties.

1967Ch35: $^{12}\text{C}(\text{t},\alpha)$ $E=0.6\text{--}3$ MeV, measured $\sigma(E,\theta)$.

1968Be30: $^{12}\text{C}(\text{t},\alpha)$ $E=7.48, 7.68$ MeV, measured $I_\gamma(E_{\text{ALPHA}}, \text{THETA}(\alpha\gamma))$, $I_\gamma(E_G, \text{THETA}(p\gamma))$. ^{11}B levels deduced J, γ -branching, δ .

1969Et01: $^{12}\text{C}(\text{t},\alpha)$ $E=0.6\text{--}3.4$ MeV, measured $\sigma(E,\theta)$.

1970Aj01: $^{12}\text{C}(\text{t},\alpha)$ $E=20$ MeV, measured $\sigma(E_\alpha, \theta)$. Deduced Q.

1987Fo21: $^{12}\text{C}(\text{t},\alpha)$ $E=33$ MeV, measured $\sigma(E_\alpha)$, $\sigma(\theta)$. Deduced model parameters. DWBA analysis.

1988Si08: $^{12}\text{C}(\text{t},\alpha)$ $E=38$ MeV, measured $\sigma(\theta)$. Deduced potential parameters. ^{11}B levels deduced Γ , spectroscopic factors. DWBA analyses.

1991Pi09: $^{12}\text{C}(\text{t},\alpha)$ $E=33$ MeV, measured $\sigma(\theta)$. ^{11}B levels deduced spectroscopic factors.

 ^{11}B Levels

E(level)	J^π	E(level)	J^π	E(level)	J^π	E(level)	J^π
0	$3/2^-$	5.02×10^3	$3/2^-$	7.98×10^3	$3/2^+$	9.2×10^3	
2.12×10^3	$1/2^-$	6.74×10^3		8.56×10^3	$(3/2^-)$	9.87×10^3	$3/2^+$
4.44×10^3	$5/2^-$	7.29×10^3	$5/2^+$	8.9×10^3	$5/2^-$		

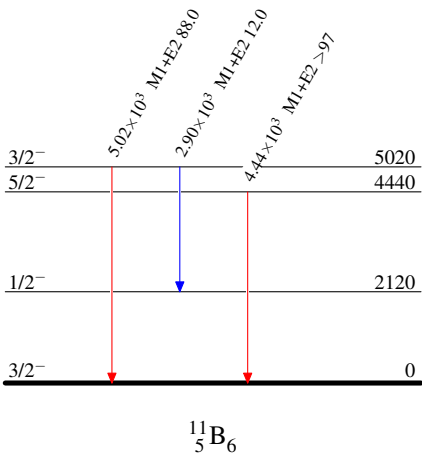
 $\gamma(^{11}\text{B})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	δ	Comments
2.90×10^3	12.0 25	5.02×10^3	$3/2^-$	2.12×10^3	$1/2^-$	M1+E2	-0.05 2	$A_2=-0.4$ 2; $A_4=-0.1$ 3 δ , branching ratio from (1968Be30).
4.44×10^3	>97	4.44×10^3	$5/2^-$	0	$3/2^-$	M1+E2	-0.19 3	$A_2=0.02$ 3; $A_4=-0.09$ 5 δ , branching ratio from (1968Be30).
5.02×10^3	88.0 25	5.02×10^3	$3/2^-$	0	$3/2^-$	M1+E2	0.03 5	$A_2=0.35$ 4; $A_4=0.0$ 1

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Level Scheme

Intensities: Type not specified



Legend

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