

$^9\text{Be}(d,\gamma)$ 1966Zi01,1971Ba72,1974De01

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

1966Su05: $^9\text{Be}(d,\gamma)$ $0.5 < E < 5.5$ MeV, measured $\sigma(E, 90 \text{ degree})$. $E_\gamma = 22.7$ MeV, measured $\sigma(E_\gamma, \theta)$.

1966Zi01: $^9\text{Be}(d,\gamma)$ $E = 0.4-1.4$ MeV, measured $\sigma(E, E_\gamma, \theta)$.

1971Ba72: $^9\text{Be}(d,\gamma)$ $E = 0.56-3.56$ MeV, measured $\sigma(E, \theta)$. ^{11}B deduced levels, resonances, Γ -level.

1974De01,1974De39: $^9\text{Be}(d,\gamma_0)$ $E = 2.86-11.92$ MeV, measured $\sigma(E, E_\gamma, \theta)$. ^{11}B deduced resonances, isospin splitting.

 ^{11}B Levels

E(level)	J^π	$T_{1/2}$	Comments
0			
2.12×10^3			
4.44×10^3			E(level): Unresolved.
5.02×10^3			E(level): Unresolved.
6.76×10^3			E(level): Unresolved.
6.81×10^3			E(level): Unresolved.
16.66×10^3			E(level): γ transitions: from (1966Zi01).
17.44×10^3	5 (1/2 ⁺ , 3/2 ⁺)	184 keV 4l	E(level): Γ : from $E_{\text{res}} = 1.98$ MeV 5 (1971Ba72). J^π : weak; based on assumption of E1 transition.
18.37×10^3	5 (1/2 ⁺ , 3/2 ⁺)	0.26 MeV 8	E(level): Γ : from $E_{\text{res}} = 3.12$ MeV 5 (1971Ba72). J^π : weak; based on assumption of E1 transition.
18.6×10^3			E(level): from $E_{\text{res}} \approx 3.4$ MeV (1974De39).
19.7×10^3			E(level): from $E_{\text{res}} \approx 4.7$ MeV (1974De39).
23.7×10^3			E(level): from $E_{\text{res}} \approx 9.65$ MeV (1974De39).

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

E_γ	$E_i(\text{level})$	J_i^π	E_f	E_γ	$E_i(\text{level})$	J_i^π	E_f
9.90×10^3	16.66×10^3		6.76×10^3	16.66×10^3	16.66×10^3		0
11.63×10^3	16.66×10^3		5.02×10^3	17.44×10^3	17.44×10^3	(1/2 ⁺ , 3/2 ⁺)	0
12.20×10^3	16.66×10^3		4.44×10^3	18.37×10^3	18.37×10^3	(1/2 ⁺ , 3/2 ⁺)	0
14.52×10^3	16.66×10^3		2.12×10^3	18.6×10^3	18.6×10^3		0
15.32×10^3	17.44×10^3	(1/2 ⁺ , 3/2 ⁺)	2.12×10^3	19.7×10^3	19.7×10^3		0
16.25×10^3	18.37×10^3	(1/2 ⁺ , 3/2 ⁺)	2.12×10^3	23.7×10^3	23.7×10^3		0

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Level Scheme

