

${}^{11}\text{B}(\text{d},\alpha)$ ,  ${}^{11}\text{B}(\text{d},\alpha\text{n})$  1974Aj01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu, J. L. Godwin, et al.		NP A745 155 (2004)	31-Mar-2004

- 1966Pu02:  ${}^{11}\text{B}(\text{d},\alpha\gamma)$  E=1.70 MeV, measured  $\gamma$ -width/ $\Gamma$  for  ${}^9\text{Be}$  levels.  ${}^9\text{Be}$  levels deduced  $\Gamma$ .  
 1968Co31:  ${}^{11}\text{B}(\text{d},\alpha)$  E=0.8-2.5 MeV, measured  $\sigma(\text{E},\theta)$ . Deduced reaction mechanism.  ${}^9\text{Be}$  transitions deduced L.  
 1969Fr03:  ${}^{11}\text{B}(\text{d},\alpha)$  E=0.7-2.2 MeV, measured  $\sigma(\text{E},\text{E}_\alpha,\theta)$ .  
 1974Ca34:  ${}^{11}\text{B}(\text{d},\alpha)$  E=3.0-3.9 MeV, measured  $\sigma(\text{E}_\alpha,\theta)$ .  
 1975Fo13:  ${}^{11}\text{B}(\text{d},\alpha)$  E=7.0 MeV, measured  $\sigma(\text{E}_\alpha)$ .  ${}^9\text{Be}$  deduced level.  
 1997Ya02, 1997Ya08:  ${}^{11}\text{B}(\text{d},\alpha)$  E(cm)=76-144 MeV, 57-141 keV, measured energy spectra,  $\sigma(\theta)$ , astrophysical S-factors. Deduced  $\sigma$ , astrophysical S-factor vs E.  
 1965O101:  ${}^{11}\text{B}(\text{d},\alpha\text{n})$  E=1.5 MeV, measured  $\sigma(\text{E}_\text{N},\text{E}_\alpha,\theta_{\text{d}(\alpha)})$ ,  $\alpha\text{n}$ -coin.  
 1985Ne01:  ${}^{11}\text{B}(\text{d},\text{n}\alpha)$  E=12 MeV, measured  $\text{np}(\theta)$ ,  $\alpha\text{n}(\theta)$ ,  $\text{np}$ -,  $\alpha\text{n}$ -coin.

 ${}^9\text{Be}$  Levels

E(level)	$T_{1/2}$	Comments
0.0		
1710 9	203 keV 10	$\Gamma_\gamma/\Gamma < 2.4 \times 10^{-5}$ E(level): from weighted average of 1.70 MeV 1 (1975Fo13), 1.75 MeV 2 (1955Le36) and 1.669 MeV 10 (1956Bo18). $\Gamma$ : from weighted average of 224 keV 25 (1958Ka31, 1966Pu02) and 200 keV 10 (1975Fo13). Note: (1966Pu02) corrected an error in (1958Ka31) who had originally reported 143 keV 15.
2425. 3	0.78 keV 13	$\Gamma_\gamma/\Gamma$ from (1966Pu02). $\Gamma_\gamma/\Gamma = 1.16 \times 10^{-4}$ 14 E(level): from weighted average of 2422 keV 5 (1951Va08), 2431 keV 6 (1954El10), 2424 keV 5 (1956Bo18) and 2.43 MeV 2 (1955Le36).
3035 25	257 keV 25	the $\Gamma_\gamma/\Gamma$ implies $\Gamma = 0.78$ keV 13 since $\Gamma_\gamma = 0.091$ eV 10 ${}^9\text{Be}(\text{e},\text{e}')$ (1968Cl08). E(level): from weighted average of 3.02 MeV 3 (1955Le36) and 3.05 MeV 3 (1956Bo18). $\Gamma$ : from (1966Pu02) who corrected an error in (1958Ka31) who had originally reported 161 keV 15.
$4.7 \times 10^3$		from (1971Re19).