

${}^{10}\text{B}(\text{d},\alpha)$  2004Ti06

Type	Author	History	Citation	Literature Cutoff Date
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- 1968Co31:  ${}^{10}\text{B}(\text{d},\alpha)$  E=0.8-2.5 MeV, measured  $\sigma(\text{E},\theta)$ . Deduced reaction mechanism.  ${}^8\text{Be}$  transitions deduced L.
- 1969Na17:  ${}^{10}\text{B}(\text{d},\alpha)$  E=0.6, 1.1, 1.45, 1.9 MeV, measured  $\sigma(\text{E},\text{E}_\alpha,\theta)$ .  ${}^8\text{Be}$  deduced level,  $\Gamma$ -level.
- 1969Nu01:  ${}^{10}\text{B}(\text{d},\alpha)$  E=4 MeV, measured  $\sigma(\theta)$ .  ${}^8\text{Be}$  resonance deduced E,  $\Gamma$ -level.
- 1970Ca12:  ${}^{10}\text{B}(\text{d},\alpha)$  E=4-12 MeV, measured  $\sigma(\text{E},\text{E}_\alpha,\theta)$ .  ${}^8\text{Be}$  deduced levels,  $\Gamma$ -level.
- 1970St02:  ${}^{10}\text{B}(\text{d},\alpha)$  E=1-2 MeV, measured  $\sigma(\text{E},\text{E}_\alpha,\theta(\alpha))$ .  ${}^8\text{Be}$  deduced level,  $\Gamma$ -level.
- 1971La14:  ${}^{10}\text{B}(\text{d},\alpha)$  E=0.4, 1.0, 1.5 MeV, measured  $2\alpha(\theta)$ . Deduced reaction mechanism.
- 1971No04:  ${}^{10}\text{B}(\text{d},\alpha)$  E not given, analyzed  $\sigma(\text{E}_\alpha)$ .  ${}^8\text{Be}$  levels deduced  $\Gamma$ -level.
- 1973Ro28:  ${}^{10}\text{B}(\text{d},\alpha)$  E=2.9-10.0 MeV, measured  $\sigma(\text{E},\theta)$ .
- 1974La29:  ${}^{10}\text{B}(\text{d},\alpha)$  E=1.83 MeV, measured  $\sigma(\text{E}_\alpha,\theta)$ .  ${}^8\text{Be}$  levels deduced  $\Gamma$ -level.
- 1975Ro09:  ${}^{10}\text{B}(\text{d},\alpha)$  E=2.9=10 MeV, measured  $\sigma(\text{E},\text{E}_\alpha,\theta),\alpha$ - $\alpha$ -coin,  $\alpha$ - $\alpha(\theta,t)$ . DWBA analysis.
- 1975Va04:  ${}^{10}\text{B}(\text{d},\alpha)$  E=2.5-4.5 MeV, measured  $\sigma(\text{E},\text{E}_\alpha,\theta)$ ,  $\alpha$ - $\alpha$ -coin, absolute  $\sigma$ .
- 1976Gr22:  ${}^{10}\text{B}(\text{d},\alpha)$ , measured  $\sigma(\theta)$ . Deduced  $3\alpha$  reaction mechanisms.
- 1985Pu03:  ${}^{10}\text{B}(\text{d},\alpha)$  E=2.5, 3 MeV, analyzed breakup  $\sigma(\theta_{\alpha_1},\theta_{\alpha_2},\text{E}_{\alpha_1})$ .  ${}^8\text{Be}$  deduced resonances,  $\Gamma$ .
- 1992Ko26:  ${}^{10}\text{B}(\text{d},\alpha)$  E=2.5, 3 MeV, analyzed data. Deduced two-cluster system resonance parameter variation features.
- 1992PuZZ:  ${}^{10}\text{B}(\text{d},\alpha)$  E=13.6 MeV, measured residual nucleus breakup spectra.  ${}^8\text{Be}$  levels deduced  $\Gamma_\alpha/\Gamma,\Gamma_p/\Gamma$ .
- 2001Ho22:  ${}^{10}\text{B}(\text{d},\alpha)$  E=120-340 keV, measured  $\sigma(\theta)$ , S-factor.

 ${}^8\text{Be}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0			
$2.9\times 10^3$			
$11.4\times 10^3$		$\approx 4$ MeV	$\Gamma$ : from (1966Lo18,1969Lo01).
$16.63\times 10^3$	$2^+$	90 keV 5	
$16.92\times 10^3$	$2^+$	70 keV 5	
$17.64\times 10^3$			T=1
18150 5		138 keV 6	
$19.2\times 10^3$	$3^+$		
$19.86\times 10^3$			$\Gamma_\alpha/\Gamma_p=2.3$ 5 (1992Pu06)
$20.1\times 10^3$			$\Gamma_\alpha/\Gamma_p=4.5$ 6 (1992Pu06)
$21.5\times 10^3$			
$22.2\times 10^3$			
$24.\times 10^3$			
$25.2\times 10^3$			
$\approx 32.\times 10^3?$		$\approx 1$ MeV	from (1993Pa31).