

$^{12}\text{C}(\text{d},\alpha)$ 1988Aj01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. L. Godwin, et al.		NP A745 155 (2004)	31-Mar-2004
<p>1965Br28: $^{12}\text{C}(\text{d},\alpha)$ E=3.0-4.5 MeV, measured Q. 1965Ba06,1966Ba32: $^{12}\text{C}(\text{d},\alpha)$ E=9.2-13.8 MeV, measured $\sigma(\text{E},\text{E}_\alpha,\theta)$. 1966Ha09: $^{12}\text{C}(\text{d},\alpha)$ E=11 MeV, measured $\sigma(\text{E}_\alpha,\theta)$. ^{10}B deduced levels. 1969Co02: $^{12}\text{C}(\text{d},\alpha)$ E=5 to 10 MeV, measured $\sigma(\text{E},\theta)$, $\sigma(\text{E},\text{E}_\text{p},\theta)$, $\sigma(\text{E},\text{E}_\alpha,\theta)$. 1969De29: $^{12}\text{C}(\text{d},\alpha)$ E=7 MeV, measured $\sigma(\text{E}_\alpha)$. 1970We03: $^{12}\text{C}(\text{d},\alpha)$ E not given, measured nothing. Deduced reaction mechanism. 1971Ja04: $^{12}\text{C}(\text{d},\alpha)$ E=14-18,26-30 MeV, measured $\sigma(\text{E},\theta)$. Deduced reaction mechanism. 1969Sm03,1971Ri15,1972Sm07: $^{12}\text{C}(\text{d},\alpha)$ E=8-17 MeV, analyzed $\sigma(\text{E},\theta)$, asymmetry(E). Deduced possible compound-nucleus model interpretation. 1971Vo04: $^{12}\text{C}(\text{d},\alpha)$ E=14-17 MeV, measured $\sigma(\text{E}_\alpha,\theta)$. Deduced non-compound-nucleus contribution. 1974Jo01: $^{12}\text{C}(\text{d},\alpha)$ E=13.8-17 MeV, measured $\sigma(\text{E},\text{E}_\alpha,\theta)$. Deduced reaction mechanism. 1975Ku15: $^{12}\text{C}(\text{pol. d},\alpha)$ E=14.5 MeV, measured $\sigma(\text{E}_\alpha,\theta)$. ^{10}B levels deduced J, π. 1976Va07: $^{12}\text{C}(\text{d},\alpha)$ E=40 MeV, measured $\sigma(\text{E}_\alpha,\theta)$. 1977Co17: $^{12}\text{C}(\text{pol. d},\alpha)$ E=20.7,29 MeV, measured $\sigma(\theta)$, $A_Y(\text{THETA})$. 1979Wa24: $^{12}\text{C}(\text{d},\alpha)$ E=9 MeV, measured $\sigma(\theta)$. Zero-range DWBA. 1981Jo02: $^{12}\text{C}(\text{d},\alpha)$ E=7-16 MeV, analyzed $\sigma(\theta)$, $\sigma(\text{E})$. S-matrix analysis. 1982Ma25: $^{12}\text{C}(\text{pol. d},\alpha)$ E=52 MeV, measured $\sigma(\theta)$, $i\text{T}_{11}(\text{THETA})$. 1983Ji04: $^{12}\text{C}(\text{d},\alpha)$ E=1.5-2.1 MeV, measured $\sigma(\theta)$. 1984LoZZ: $^{12}\text{C}(\text{d},\alpha)$ E=14.5 MeV, measured $\sigma(\theta-\alpha)$, α-α-coin. ^{10}B level deduced α-decay characteristics.</p>				

 ^{10}B Levels

E(level)	J^π	Comments
0		
720 9		E(level): from weighted average of 720 keV 10 (1962Ar02) and 720 keV 20 (1965Be17).
2150. 9		E(level): from weighted average of 2150 keV 10 (1962Ar02) and 2150 keV 20 (1965Be17).
3582. 9		E(level): from weighted average of 3580 keV 10 (1962Ar02) and 3590 keV 20 (1965Be17).
4.77×10^3 1	3^+	E(level): from weighted average of 4770 keV 10 (1962Ar02) and 4770 keV 20 (1965Be17). J^π from (1975Ku15).
5.11×10^3 1	2^-	E(level): from (1962Ar02). J^π from (1975Ku15).
5.17×10^3 5		E(level): from (1965Be17).
5.92×10^3		E(level): see (1974Aj01).
6.04×10^3 5		E(level): from (1965Be17).
6.13×10^3		E(level): see (1974Aj01).
6.56×10^3	$(3^+,4^-)$	E(level): see (1974Aj01). J^π from (1975Ku15).
6.67×10^3 11		E(level): from (1965Be17).
7.05×10^3 10		E(level): from (1965Be17).