^{9}Be(d,p),(d,α),(d,t) 1994Ly02,1995Ab41

History

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

1952Ca19: ^{9}Be(d,P).
1954Eb02: ^{9}Be(d,P) E=11.9 MeV, measured $\sigma(\theta,E_P)$.
1955Ju10: ^{9}Be(d,P).
1957Mc35: ^{9}Be(d,pγ).
1965Ja07: ^{9}Be(d,t) E=11.8 MeV, measured $\sigma(\theta,E_t)$.
1966Ha09: ^{9}Be(d,α) E=11 MeV, measured $\sigma(E_\alpha,\theta)$.
1967Bl02: ^{9}Be(d,P) E=1-6 MeV, measured polarization (E_P,θ).
1967Fi07: ^{9}Be(d,t) E=11.8 MeV, measured $\sigma(E_t,\theta)$. ^{11}B deduced levels, S.
1968Yu01: ^{9}Be(pol. d,P) E=8 MeV, measured vector analyzing power.
1969Cu10: ^{9}Be(pol. d,P) E=10 MeV, measured vector analyzing power.
1970Fi07: ^{9}Be(vector-polarized d,P) E=10, 12 MeV, measured analyzing power A(θ).
1970Po03: ^{9}Be(d,P) E=4.5-6.0 MeV, measured $\sigma(E,\theta)$, $\sigma(E,E_P,\theta)$.
1971Br44: ^{9}Be(d,P) E=12.3 MeV, measured tensor analyzing power(θ).
1971Cr05: ^{9}Be(d,pγ) E=4-5 MeV, θ_P=0 degree, measured $(E,E_P,E_\gamma,\theta(p\gamma)$. Deduced channel-spin ratio.
1971Ko41: ^{9}Be(d,P) E=1-15 MeV, analyzed pp(E,θ).
1971Sa27: ^{9}Be(d,α) E=0.9-2.2 MeV, measured $\sigma(E,\theta)$. Discussed reaction mechanism.
1972Ar31: ^{9}Be(d,P) E<2.5 MeV, measured σ(E).
1972Bu26: ^{9}Be(d,P) E=12.0 MeV, measured p(θ).
1973Jo10: ^{9}Be(pol. d,P) E=12.3 MeV, measured analyzing powers iT_{11}(THETA), T_{20}(THETA), T_{22}(THETA). Deduced importance of d-state effects.
1973Sz07: ^{9}Be(d,α) E=200-500 keV, measured $\sigma(E,E_\alpha,\theta)$.
1973Za06: ^{9}Be(d,t) E=13.6 MeV, measured $\sigma(E_t,\theta)$.
1974An01: ^{9}Be(d,P) E=0.3-0.9 MeV, measured $\sigma(E,\theta)$. ^{11}B deduced level.
1974Bo42,1974Bo45,1974Bo48: ^{9}Be(d,P_0)(d,P_1),(d,t_0) E=0.9- 2.5 MeV, measured $\sigma(E,E_{p_0},\theta)$, $\sigma(E,E_{p_1},\theta)$, $\sigma(E,E_{t_0},\theta)$. Deduced S.
1974Fr02: ^{9}Be(d,P),(d,α),(d,t) E=0.6-2.7 MeV, measured $\sigma(\theta)$.
1975Bo20: ^{9}Be(d,P) E=6, 7, 8, 10 MeV, analyzed polarization.
1975Hu18: ^{9}Be(d,pγ) E=1.5 MeV, measured pγ-coin.
1975Za06: ^{9}Be(d,t), analyzed data. Deduced J dependence of σ.
1975Zw01: ^{9}Be(d,P),(d,t) E=0.9-3.1 MeV, measured $\sigma(E,\theta)$, σ(E).
1976Bo45: ^{9}Be(d,α) E=0.9-2.5 MeV, measured $\sigma(E,E_\alpha,\theta)$.
1976Da15: ^{9}Be(pol. d,P),(pol. d,t) E=15 MeV, measured $\sigma(\theta)$, A_Y(THETA). DWBA analysis.
1977Ba39: ^{9}Be(pol. d,P),(pol. d,t) E=12 MeV, measured iT_{11}, T_{20}, T_{22}(THETA). Deduced J-mixing ratio.
1977Sl02: ^{9}Be(d,α) E=2.25-3.1 MeV, measured $\sigma(E,E_\alpha)$. ^{9}Be(d,α) E=0.9-3.1, analyzed data. DWBA analysis.
1978Al25: ^{9}Be(d,pγ) E=1.5 MeV, measured pγ angular correlation. Deduced population numbers.
1978Ta04: ^{9}Be(d,α),(d,t) E=12.17-14.43 MeV, measured $\sigma(\theta)$.
1980De42,1980De43,1980De44: ^{9}Be(pol. d,α) E=1.4-2.5 MeV, measured σ(E), analyzing power vs E,θ.
1980De45: ^{9}Be(pol. d,P) E=1.4-2.2 MeV, measured $\sigma(\theta)$, vector analyzing power vs θ,E.
1981Bo03: ^{9}Be(d,P) E=698 MeV, measured $\sigma(\theta)$. Deduced deuteron optical model parameters. DWBA calculations.
1981Ce04: ^{9}Be(d,P) E=29-170 keV, measured thick target yield. Deduced $\sigma(\theta)$.
1981Ov02: ^{9}Be(d,t) E=26 MeV, measured $\sigma(E_d)$,$\sigma(E_t)$.
1982Go05: ^{9}Be(d,P) E=12 MeV, analyzed data. ^{11}B level deduced S. DWBA.
1984An16: ^{9}Be(pol. d,α),(pol. d,t) E=2-2.8 MeV, measured $\sigma(\theta)$,vector analyzing power vs θ. Deduced reaction mechanism. DWBA formalism.
1984An16,1984De46: ^{9}Be(pol. d,P) E=2-2.8 MeV, measured $\sigma(\theta)$, vector analyzing power vs θ. Deduced reaction mechanism. DWBA formailsm.
1986Go23: ^{9}Be(d,P) E=18.6 MeV, measured $\sigma(\theta)$. Deduced vertex constants, optical model parameters. DWBA analyses.
1987Va13: ^{9}Be(d,pγ) E=12.5 MeV, measured $\sigma(\theta_P,\theta_\gamma)$.
1988Go02: ^{9}Be(d,t) E=18 MeV, measured $\sigma(\theta)$. Deduced model parameters, spectroscopic factors. Finite-range DWBA.

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1988Gu20: ^{9}Be(d,t) E=18 MeV, measured $\sigma(\theta)$. DWBA.
1989Sz02: ^{9}Be(d,P),(d,α),(d,t) E=6.7-7.5 MeV, measured $\sigma(\theta)$ vs E. Deduced reaction mechanism. DWBA analyses.
1994Ab25: ^{9}Be(d,t) E=0.9-11.2 MeV, measured σ(E).
1994Ly02: ^{9}Be(pol. d,α),(pol. d,t) E=1.3-3.1 MeV, measured vector analyzing power vs θ,E. Deduced direct, resonant interactions interference evidence. ^{11}B deduced intermediate structure. DWBA, R-matrix analyses.
1995Ab41,2000Ge16: ^{9}Be(d,t) E=3-11 MeV, measured $\sigma(\theta)$. Deduced σ. ^{11}B deduced possible $T_{1/2}$ states.
1995Gu22: ^{9}Be(d,t) E=8-50 MeV, analyzed $\sigma(\theta)$. Deduced vertex constants. ^{11}B deduced bound state spectroscopic factors. DWBA.
1995Ly03: ^{9}Be(pol. d,P) E=2.5-3 MeV, measured vector analyzing power vs θ. Deduced model parameters. Deduced ^{11}B GDR role. DWBA+R matrix theories.
1997Ya02,1997Ya08: ^{9}Be(d,P),(d,α),(d,t) $E_{C.M.}$=57-139 keV, measured energy spectra, $\sigma(\theta)$. Deduced σ, astrophysical S-factor vs E.
1998Le27: ^{9}Be(d,P) E=12.5 MeV, analyzed $\sigma(\theta)$, spin tensors. Deduced multistep processes contributions.
2000Ge16: ^{9}Be(d,P) E=3-11 MeV, measured $\sigma(\theta)$, integral σ.
2001Ze09: ^{9}Be(d,P) E=15.2 MeV, measured σ(E,θ). Deduced spin-tensor components of density matrix.

^{11}B Levels

E(level)	$T_{1/2}$	Comments
16430 *12*	40 keV	E(level): from E_{res}=750 keV *15* (1974An01: protons, (α's)); also see $E_{res}\approx$0.9 MeV (1952Ca19: protons), $E_{res}\approx$0.89 MeV (1955Ju10 : tritons). Γ: from Γ=40 keV (1974An01).
$\approx16.90\times10^{3}$?		E(level): from $E_{res}\approx$1.3 MeV (1952Ca19: protons), $E_{res}\approx$1.3 MeV (1957Mc35: protons), $E_{res}\approx$1.38 MeV (1955Ju10).
$\approx17.31\times10^{3}$	≥1 MeV	E(level): from $E_{res}\approx$1.8 MeV (1957Mc35: protons), $E_{res}\approx$1.85 MeV (1975Zw01). Also see E_{x}=17.33 MeV from reference In (1975Aj02). Γ: from (1975Zw01).
17.45×10^{3}	≈200 keV	E(level): from E_{x}=17.43 MeV (1994Ly02) and 17.46 MeV (1975Zw01). Γ: from (1975Zw01).
17.53×10^{3}?		E(level): from $E_{res}\approx$2.1 MeV (1952Ca19: protons).
17.70×10^{3}		E(level): from $E_{res}\approx$2.3 MeV (1974Fr02), also (1994Ly02). Γ: sharp.
18.1×10^{3}		from $E_{x}\approx$18.0 (1994Ly02), $E_{x}\approx$18.1 (1995Ab41).
19.5×10^{3}		E(level): from $E_{x}\approx$19.5 (1995Ab41).
22.4×10^{3}		E(level): from $E_{x}\approx$22.4 (1995Ab41).
24.4×10^{3}		E(level): from $E_{x}\approx$24.4 (1995Ab41).