${}^{9}\text{Be}(p,d)$, ${}^{9}\text{Be}(p,np)$ **2004Ti06**

History

Type	Author	Citation	Literature Cutoff Date
Update	J. H. Kelley, J. L. Godwin, C. G. Sheu	ENSDF	31-Mar-2004

1966La20: ${}^{9}\text{Be}(p,d)$ E=7.0,8.0,9.0 MeV, measured $\sigma(E,E_d)$,$\sigma(E,E_\alpha)$. ${}^{8}\text{Be}$ deduced level, Γ-level.

1968Le01: ${}^{9}\text{Be}(p,d)$ E=100 MeV, measured $\sigma(E_d,\theta)$. ${}^{8}\text{Be}$ deduced levels, relative S.

1969Ba05: ${}^{9}\text{Be}(p,d)$ E=155.6 MeV, measured $\sigma(E_d,\theta)$. ${}^{8}\text{Be}$ deduced levels, J, π, L, S.

1969Co06: ${}^{9}\text{Be}(p,pn)$ E=12, 17 MeV, measured $\sigma(E,\theta)$.

1969Su02: ${}^{9}\text{Be}(p,d)$ E=185 MeV, measured $\sigma(E_d,\theta)$. ${}^{8}\text{Be}$ deduced levels, L_N, S.

1971Be52: ${}^{9}\text{Be}(p,d)$ E=3.8 MeV, measured $\sigma(E_d)$. ${}^{8}\text{Be}$ deduced variations In ghost anomaly.

1971Sc26: ${}^{9}\text{Be}(p,d)$ E=46,100 MeV. Analyzed $\sigma(\theta)$. ${}^{8}\text{Be}$ levels deduced S. DWBA, local-energy approximation.

1972Hu03: ${}^{9}\text{Be}(P,d_0)$ E=5,6,7,8,9,10,11 MeV, measured $\sigma(\theta)$. ${}^{8}\text{Be}$ deduced S.

1974Mi05: ${}^{9}\text{Be}(p,pn)$ E=46 MeV, measured $\sigma(E_P,\theta)$.

1974Wi21: ${}^{9}\text{Be}(p,d)$ E=6.5-9.5 MeV, measured $\sigma(E,E_P,\theta)$, $\sigma(E,E_d,\theta)$.

1975Ch42: ${}^{9}\text{Be}(p,pn)$ E=5.5 MeV, measured σ.

1976Ba67: ${}^{9}\text{Be}(p,d)$ E=39.91 MeV, measured $\sigma(\theta)$. Deduced anomaly.

1976Da15: ${}^{9}\text{Be}(\text{pol. }p,d)$ E=15 MeV, measured $\sigma(\theta)$, $A_Y(\text{THETA})$. ${}^{8}\text{Be}$ levels deduced S, Γ, J-admixtures.

1977Gu14: ${}^{9}\text{Be}(p,d)$ E=17.7 MeV, measured $\sigma(E_d,\theta)$.

1977Wa05: ${}^{9}\text{Be}(p,pn)$ E=45, 47 MeV, measured excitation energy, energy sharing spectra.

1978Je01: ${}^{9}\text{Be}(p,pn)$ E=10-24 MeV, measured $\sigma(E_P,\theta_P,\theta_N)$ In kinematically complete geometry. Deduced reaction mechanism.

1981Ov02: ${}^{9}\text{Be}(p,d)$ E=33 MeV, measured $\sigma(E_d)$. ${}^{8}\text{Be}$ resonances deduced Γ, α-reduced widths.

1984Wa21: ${}^{9}\text{Be}(\text{pol. }p,pn)$ E=148.8 MeV, measured separation energy spectra, $\sigma(E_P,\theta_P,\theta_N)$, analyzing powers. ${}^{8}\text{Be}$ deduced tentative deep-hole neutron states.

1984Za07: ${}^{9}\text{Be}(p,d)$ E=50,72 MeV, measured $\sigma(\theta)$. Deduced reaction mechanism. ${}^{8}\text{Be}$ levels deduced S.

1985Be30: ${}^{9}\text{Be}(p,np)$ E=1 GeV, measured $\sigma(E_{p1},\sigma(E_N)$. Deduced proton, neutron space distribution role.

1985Pu03: ${}^{9}\text{Be}(p,d)$ E=9 MeV. Analyzed breakup $\sigma(\theta_{\alpha_1},\theta_{\alpha_2},E_{\alpha_1})$. ${}^{8}\text{Be}$ deduced resonances, Γ.

1987Go27: ${}^{9}\text{Be}(p,d)$ E=18.6 MeV. Analyzed $\sigma(\theta)$. Deduced model parameters. ${}^{8}\text{Be}$ levels deduced spectroscopic factors.

1987Ka25: ${}^{9}\text{Be}(\text{pol. }p,d)$ E=60 MeV, measured inclusive spectra, analyzing power vs. θ. Deduced continuum final state matrix element amplitudes.

1992Ko26: ${}^{9}\text{Be}(p,d)$ E=9 MeV. Analyzed data. Deduced two-cluster system resonance parameter variation features.

1997Za06: ${}^{9}\text{Be}(p,d)$ E=16-390 keV, measured astrophysical S-factor, $\sigma(\theta)$.

1998Br10: ${}^{9}\text{Be}(\text{pol. }p,d)$ E=77-321 keV, measured $\sigma(\theta)$, $A_Y(\text{THETA})$. Deduced reaction mechanism.

2000Sh01: ${}^{9}\text{Be}(p,np)$ E=70 MeV, measured proton spectra, neutron spectra, pp-, pn-coin, $\sigma(E,\theta)$. ${}^{8}\text{Be}$ deduced radius.

2001Ba47: ${}^{9}\text{Be}(p,d)$ E=16-700 keV. Analyzed σ, $\sigma(\theta)$, astrophysical S-factor, analyzing powers. Deduced R-matrix parameters.

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

E(level)	$T_{1/2}$	Comments
0.0	5.5 eV 13	
3038 25	1.50 MeV 2	
11.3×10^3 3	5.2 MeV 1	E(level): from (1969Su02).
		Γ: from (1981Be53).
16.6×10^3		
16.9×10^3		
17.6×10^3		
18.2×10^3		
19.1×10^3		
19.21×10^3	208 keV 30	
19.4×10^3		
22.05×10^3		