^{9}Be(p,n),^{9}Be(p,pn) 2004Ti06

History

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

1960Sa03:
1964Ba29: ^{9}Be(p,n) E_P=6.3-7.4 MeV, measured N-spectra (θ,E_P). ^{9}B deduced levels.
1966Da18: ^{9}Be(p,n) E=7.5 MeV, measured σ(E_N,θ). ^{9}B deduced levels.
1969Si20: ^{9}Be(p,n) E=2.06-2.10 MeV, measured σ(E).
1970An07: ^{9}Be(p,n) E=20 MeV, measured σ(E_N,θ). ^{9}B deduced No 1.4, 3.2 MeV levels.
1970Cl01: ^{9}Be(p,n) E=30, 50 MeV, measured σ(E,E_N,θ). ^{9}B deduced levels, J, π.
1970Si12: ^{9}Be(p,n) E=2-2.1 MeV, measured σ(E,θ).
1971Be46: ^{9}Be(p,n) E=23 MeV, measured σ(E_N,θ).
1972Ar22: ^{9}Be(p,n) E=17.8 MeV, measured σ(E_N). ^{9}B deduced level.
1975Ca18: ^{9}Be(p,n) E=22.8 MeV, measured σ(E_N,θ). ^{9}B deduced IAS. DWBA analysis, generalized Lane potential.
1975Mc18: ^{9}Be(p,n) E=15, 20, 30 MeV, measured σ.
1976Li08: ^{9}Be(pol. p,N) E=7-15 MeV, measured transverse polarization transfer coefficients.
1976Ro05: ^{9}Be(pol. p,N) E=2.4-2.9 MeV, measured analyzing power A(θ).
1978Ch07: ^{9}Be(p,n), ^{9}Be(p,pn) E=5.5 MeV, measured σ, pn-coin In kinematically complete experiment. ^{9}B levels deduced particle branching.
1979Ba68: ^{9}Be(p,n) E=1 GeV, measured σ(E_N,θ). Deduced dependency of quasielastic neutron production on mass.
1980Ba62: ^{9}Be(p,n) E=14.9, 17.8 MeV, measured σ(θ).
1980Ma33: ^{9}Be(pol. p,N) E=8.1-15 MeV, measured analyzing power A(E,θ).
1981Ri06: ^{9}Be(pol. p,N) E=800 MeV, measured polarization transfer parameters.
1982Gu13: ^{9}Be(p,n) E=14.9, 17.8 MeV, measured σ(θ). Deduced optical model parameters. Microscopic DWBA analysis.
1983By01: ^{9}Be(p,n) E=8.15-15.68 MeV, measured σ(E,θ). ^{9}Be(p,n) E=2-30 MeV, ^{9}Be(p,n) E=8-16 MeV, analyzed data.
1983By02: ^{9}Be(p,n), (pol. p,N) E=2.7, 2.9, 8.1, 9.1, 10 MeV, measured P(θ), A(θ) vs E.
1986Gy03: ^{9}Be(pol. p,N) E=55-72 MeV, measured polarization transfer, θ=0 degree.
1986Mu07: ^{9}Be(pol. p,N) E=8-17.57 MeV, measured σ(θ), A(θ). ^{9}Be(p,n) E=11-17 MeV, analyzed data. Deduced potential parameters.
1987Ra32: ^{9}Be(p,n) E=135 MeV, analyzed data. Deduced Gamow-Teller transitions B(GT), quenching factor.
1988He08: ^{9}Be(pol. p,N) E=54, 72 MeV, measured neutron polarization At 0 degree. Deduced transverse, longitudinal polarization transfer coefficient.
1994Sa43: ^{9}Be(pol. p,N) E=300, 400 MeV, measured σ(θ) vs energy transfer, neutron energy spectra, polarization transfer coefficients vs θ.
2000Jo17: ^{9}Be(p,n) E=35 MeV, measured σ(θ). Deduced isovector optical potential parameters. Micro- and macroscopic DWBA calculations.
1969Co06: ^{9}Be(p,pn) E=12, 17 MeV, measured σ(E,θ).
1974Mi05: ^{9}Be(p,pn) E=46 MeV, measured σ(E_P,θ).
1975Ch42: ^{9}Be(p,pn) E=5.5 MeV, measured σ.
1977Je01: ^{9}Be(p,pn) E=12.7 MeV, measured σ(E_P,θ), E_N.
1977Wa05: ^{9}Be(p,pn) E=45, 47 MeV, measured excitation energy, energy sharing spectra. PWIA, DWIA calculations.
1978Je01: ^{9}Be(p,pn) E=10-24 MeV, measured σ(E_P,θ(P),θ(N)) In kinematically complete geometry. Deduced reaction mechanism.
1984Wa21: ^{9}Be(pol. p,pn) E=148.8 MeV, measured separation energy spectra, σ(E_P,θ_P,θ_N), analyzing powers. DWIA calculations.
1985Be30: ^{9}Be(p,pn) E=1 GeV, measured angle-integrated σ(E_{P1}), σ(E_N). Deduced proton, neutron space distribution role.
1985Do16: ^{9}Be(p,pn) E=1 GeV, measured energy spectra. Deduced potential parameters.
2000Sh01: ^{9}Be(p,pn) E=70 MeV, measured proton spectra, neutron spectra, pp-, np-coin, σ(E,θ). Deduced 1S and 1p shell contributions.

^{9}Be(p,n),^{9}Be(p,pn) 2004Ti06 (continued)

^{9}B Levels

E(level)	J$^{\pi}$	T$_{1/2}$	Comments
0.0		0.54 keV *21*	Γ: from (1964Te01).
1.4×10^{3}?		≈1 MeV	E(level): Γ: from (1955Ma84). Peak also seen In (1967Sl04).
2326 *6*			E(level): from (1955Ma84).
2.71×10^{3} *10*		0.71 MeV *10*	E(level): Γ: from unpublished work cited In (1988Mi03, 1991Di03). Unpublished work is Billy Jean Pugh, PhD thesis, MIT, 1985.
2.75×10^{3} *30*		3.13 MeV *20*	E(level): Γ: from unpublished work cited In (1988Mi03, 1991Di03).
3.16×10^{3}? *7*			E(level): from prominent peak In (1967Sl04); also see (1972Ar22) who report E=3.09 MeV *10*.
4.3×10^{3}? *2*		1.6 MeV *2*	E(level): Γ: from unpublished work cited In (1988Mi03, 1991Di03). See also (1964Ba16) who observed a possible state At 4.04 MeV *3*.
4.93×10^{3}? *10*			E(level): from (1960Sa03).
7.0×10^{3} *1*			E(level): from unpublished work cited In (1988Mi03, 1991Di03).
11.63×10^{3} *20*			E(level): from unpublished work cited In (1988Mi03, 1991Di03).
12.23×10^{3} *10*		0.5 MeV *1*	E(level): Γ: from unpublished work cited In (1988Mi03, 1991Di03).
13.96×10^{3} *10*			E(level): from unpublished work cited In (1988Mi03, 1991Di03).
14.60×10^{3} *10*		0.6 MeV *1*	E(level): Γ: from unpublished work cited In (1988Mi03, 1991Di03).
14.60×10^{3} *10*			E(level): from unpublished work cited In (1988Mi03, 1991Di03). Degenerate with the above level.
15.15×10^{3} *10*			E(level): from unpublished work cited In (1988Mi03, 1991Di03).
15.44×10^{3} *10*			E(level): from unpublished work cited In (1988Mi03, 1991Di03).
15.86×10^{3} *10*			E(level): from unpublished work cited In (1988Mi03, 1991Di03).
16.71×10^{3} *10*	(5/2^{+})		E(level): from unpublished work cited In (1988Mi03, 1991Di03). J$^{\pi}$: this level is thought to Be an analog to the ^{9}Be 5/2^{+} state At 16.67 MeV (see 1991Di03).
17.54×10^{3} *10*	(7/2^{+})		E(level): from unpublished work cited In (1988Mi03, 1991Di03). J$^{\pi}$: this level is thought to Be an analog to the ^{9}Be 7/2^{+} state At 17.49 MeV (see 1991Di03).