

${}^9\text{Be}(n,n')$, ${}^9\text{Be}(n,2n)$ 2004Ti06

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

- 1966Sc16: ${}^9\text{Be}(n,n)$ E=2.60-2.77 MeV, measured polarization(E).
 1972Ri01: ${}^9\text{Be}(n,n)$ E=4.8 GeV/c, measured $\sigma(\theta)$.
 1974Hy01: ${}^9\text{Be}(n,n)$, (n,n') E=14.1 MeV, measured $\sigma(E_{N'},\theta)$. Deduced optical parameters.
 1978Ho23: ${}^9\text{Be}(n,n)$, (n,n') E=7-15 MeV, measured $\sigma(\theta)$. Deduced reaction mechanisms contributing to $\sigma(n,2n)$.
 1981Ch36: ${}^9\text{Be}(n,n)$ E=14.7 MeV, measured $\sigma(\theta)$. Deduced optical model parameters.
 1981Mu07: ${}^9\text{Be}(n,n)$ E=14 MeV, analyzed $\sigma(\theta)$, $\sigma(\text{nonelastic})$, $\sigma(\text{total})$.
 1983By01: ${}^9\text{Be}(n,n)$ E=8-16 MeV, analyzed data.
 1983Da22: ${}^9\text{Be}(n,n)$ E=7-15 MeV, measured $\sigma(\theta)$. Deduced spherical optical model parameters.
 1984By03: ${}^9\text{Be}(\text{pol. } n,N)$ E=9-17 MeV, measured analyzing power vs θ , $\sigma(\theta)$. Deduced Legendre coefficients.
 1984Sh01: ${}^9\text{Be}(n,n)$, (n,n') E=14.7 MeV, measured $\sigma(\theta)$. Deduced optical model parameters.
 1984Ta19: ${}^9\text{Be}(n,n)$ E=0.5-14 MeV, measured $\sigma(\theta_N, E_N)$.
 1985Ha02: ${}^9\text{Be}(n,n)$ E=14.6 MeV, measured $\sigma(\theta)$.
 1985Te01: ${}^9\text{Be}(n,n)$, (n,n') E=11, 14, 17 MeV, measured $\sigma(\theta)$. Deduced optical model parameters, Coulomb correction terms.
 1986Ha31: ${}^9\text{Be}(n,n)$ E=14.6 MeV, measured $\sigma(\theta)$. Deduced optical model parameters.
 1986Mu07: ${}^9\text{Be}(n,n)$ E=11-17 MeV, analyzed data. Deduced potential parameters.
 1986Sh33: ${}^9\text{Be}(n,n)$, (n,n') E=threshold-20 MeV, compiled evaluated neutron induced reaction data.
 1987Gl06: ${}^9\text{Be}(n,n)$ E=slow, measured spin-dependent scattering lengths.
 1989Su13: ${}^9\text{Be}(n,n)$ E=1-10 MeV, measured $\sigma(E)$, $\sigma(\theta)$. ${}^9\text{Be}(n,n')$ E=4.5-10 MeV, measured $\sigma(\theta)$. Deduced angle-integrated σ .
 1990O101: ${}^9\text{Be}(n,n)$, (n,n') E=21.6 MeV, measured $\sigma(E,\theta)$. Deduced optical-model potential parameters. DWBA analyses.
 1969Ho45: ${}^9\text{Be}(n,2n)$ E=2.0-6.4 MeV, measured $\sigma(E)$.
 1969Pr17: ${}^9\text{Be}(n,2n)$ E=14 MeV, measured $\sigma(\theta(N_1))$, $\theta(N_2)$.
 1972Zh05: ${}^9\text{Be}(n,2n)$ E=fission spectrum, measured multiplication factor for fission neutrons In Be.
 1973Bl03: ${}^9\text{Be}(n,2n)$ E=2.37-3.34 MeV, measured $\sigma(E)$.
 1985Pe06: ${}^9\text{Be}(n,2n)$ E=threshold-20 MeV, analyzed data. Deduced $\sigma(E)$.
 1988Be04: ${}^9\text{Be}(n,2n)$ E=5.9 MeV, analyzed $\sigma(\theta_N, E_N)$. Deduced reaction mechanism. ${}^9\text{Be}$ levels deduced decay branching ratios.
 1990Bo43: ${}^9\text{Be}(n,2n)$ E=10.3 MeV, measured absolute $\sigma(\theta)$. Deduced nn-scattering length.
 1994Me08: ${}^9\text{Be}(n,2n)$ E=fast, measured α -production σ following ${}^8\text{Be}$ breakup, reaction σ .

 ${}^9\text{Be}$ Levels

E(level)	Comments
0.0	
1.7×10^3	see (1957Hu14,1958Wa05,1959Ma34).
2.4×10^3	(1959Ma34) measured ${}^9\text{Be}(n,2n)$ and deduce that $\Gamma_{n0}/\Gamma=0.12$ 5.
3.1×10^3	
$6.8 \times 10^3?$	see (1963Je05).