$^{9}\text{Be}(^{3}\text{He},^{3}\text{He}'),^{9}\text{Be}(^{3}\text{He},2\alpha)$ 1969Ba06,1988Aj01

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

1967Ea01: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=3.50-9.00 MeV, measured $\sigma(E,\theta)$.

1969Pa11: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=4-18 MeV, measured $\sigma(\theta)$. Deduced optical-model parameters.

1971En03: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=30.5-31.6 MeV, measured polarization At 25 degree lab. Deduced optical model spin-orbit potential.

1972Bu30: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=13-27 MeV, measured $\sigma(E(^{3}\text{He}),\theta)$. Deduced optical-model fits.

1972Mc01: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=18 MeV, measured $P(\theta)$. Deduced optical model parameters.

1973Wi07: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=217 MeV, measured $\sigma(E(^{3}\text{He}),\theta)$. Deduced optical model parameters.

1974Bo38: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=1.2-2.5 MeV, measured $\sigma(E,\theta)$.

1975Bu11: $^{9}\text{Be}(\text{pol. }^{3}\text{He},^{3}\text{He})$ E=32.6 MeV, measured $\sigma(\theta)$, polarization(θ).

1979Go07: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=46.1 MeV, measured $\sigma(\theta)$.

1992Ad06: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=50, 60 MeV, measured $\sigma(\theta)$. Deduced model parameters. DWBA analyses.

1993Ma48: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=60 MeV, measured $\sigma(\theta)$. Deduced model parameters. ^{9}Be deduced ^{3}H-pickup spectroscopic factors.

1996Ru13: $^{9}\text{Be}(^{3}\text{He},^{3}\text{He})$ E=60 MeV, measured $\sigma(\theta)$.

1972Ta04: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=3, 4 MeV, measured $\sigma(E(\alpha_1),E(\alpha_2),\theta(\alpha_1),\theta(\alpha_2))$.

1975Ka05: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=4.0 MeV, measured $\sigma(E,E_\alpha,\theta)$. Deduced α ^{5}He relative momentum distribution.

1976Ar11: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=2.8 MeV, measured σ, α-α-coin.

1977Go16: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=9.44, 9.94, 4.4, 4.96, 5.6 MeV, measured α-α correlated spectra. Deduced reaction mechanism.

1978Ar21: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=2.5, 2.7 MeV, measured α-α-coin, $\sigma(E,\theta_1,\theta_2)$ for sequential reaction. Deduced reaction mechanism.

1979Ba27, 1981Fa02, 1981Fa07, 1984La32: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=2.8 MeV, measured $\sigma(E_{\alpha_1},\theta_{\alpha_1},\theta_{\alpha_2})$. Deduced reaction mechanism.

1986La26: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=3-12 MeV, measured $\sigma(E,E_1,E_2,\theta_1,\theta_2)$. Deduced $\sigma(E)$ for quasifree process $^{5}\text{He}(^{3}\text{He},\alpha)$. ^{9}Be deduced ^{4}He-^{5}He momentum distribution.

1987Wa25: $^{9}\text{Be}(^{3}\text{He},2\alpha)$ E=12-24 MeV, measured $\sigma(E_1,\theta_1,\theta_2)$. ^{9}Be deduced cluster characteristics.

^{9}Be Levels

E(level)	Comments
0.0	
1.67×10^{3}	from (1969Ba06).
2.43×10^{3}	from (1969Ba06). (1990Bo51) report on α decay of this state.
3.03×10^{3}	from (1969Ba06).
4.70×10^{3}	from (1969Ba06).
6.66×10^{3}	from (1969Ba06).
14.39×10^{3}	from (1969Ba06).