

$^9\text{Be}(\text{He},\alpha)$  **2004Ti06**

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

1966Su04:  $^9\text{Be}(\text{He},\alpha)$   $E=3.0$  MeV, measured  $\alpha$ - $\alpha$ ( $\theta$ ).  $^8\text{Be}$  deduced  $J, \pi$ .

1968Ar12:  $^9\text{Be}(\text{He},\alpha)$   $E=19-37$  MeV, measured  $\sigma(E_\alpha), \sigma(E_\alpha, \theta)$ .  $^8\text{Be}$  deduced levels,  $L_n, S$ .

1973Ro28:  $^9\text{Be}(\text{He},\alpha)$   $E=2.9-10.0$  MeV, measured  $\sigma(E, \theta)$ .

1974Ca32:  $^9\text{Be}(\text{He},\alpha)$   $E=5.0$  MeV, measured  $\alpha$ -continuum. Deduced contribution to  $2\alpha, 3\alpha$  decay modes.

1975Bi14:  $^9\text{Be}(\text{He},\alpha)$   $E=4, 5, 7$  MeV, measured  $\sigma(E_\alpha, \theta)$ .  $^8\text{Be}$  deduced levels, isobaric spin mixing.

1975Ro09:  $^9\text{Be}(\text{He},\alpha)$   $E=2-10$  MeV, measured  $\sigma(E, E_\alpha, \theta)$   $\alpha$ - $\alpha$ -coin,  $\alpha$ - $\alpha$ ( $\theta, t$ ). DWBA analysis.

1976Aj01:  $^9\text{Be}(\text{He},\alpha)$   $E=49.3$  MeV, measured  $\sigma(E_\alpha, \theta)$ .  $^8\text{Be}$  deduced levels,  $\Gamma$ .

1976Ka23:  $^9\text{Be}(\text{pol. } ^3\text{He},\alpha)$   $E=33.3$  MeV, measured  $\sigma(\theta), A(\theta)$ . Deduced  $J$ -dependence.  $^8\text{Be}$  levels deduced  $S$ .

1985Pu03:  $^9\text{Be}(\text{He},\alpha)$   $E=9.94$  MeV, analyzed breakup  $\sigma(\theta_{\alpha_1}, \theta_{\alpha_2}, E_{\alpha_1})$ .  $^8\text{Be}$  deduced resonances,  $\Gamma$ .

1992Ko26:  $^9\text{Be}(\text{He},\alpha)$   $E=9.94$  MeV  $E=0.68-1.98$  MeV, analyzed data. Deduced two-cluster system resonance parameter variation features.

 $^8\text{Be}$  Levels

E(level)	T <sub>1/2</sub>	S	Comments
0.0 2900 40	1.35 MeV 15		
$11.4 \times 10^3$	$\approx 2.6$ MeV		$\Gamma$ : from (1966Ca08, 1967Ca13).
$16.6 \times 10^3$			
$16.9 \times 10^3$		1.74	
$17.6 \times 10^3$		0.72	
$19.22 \times 10^3$ 3	265 keV 30	1.17	
$19.9 \times 10^3$			
$22.05 \times 10^3$ 10	270 keV 70		
$22.55 \times 10^3$ ? 6	186 keV 32		
$22.63 \times 10^3$ 10	100 keV 50		
$22.98 \times 10^3$ 10	230 keV 50		
$\approx 25 \times 10^3$ ?			