

${}^9\text{Be}(\gamma,\gamma')$ 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

1984A122: ${}^9\text{Be}(\gamma,\gamma')$ E=16-28 MeV bremsstrahlung, measured $\sigma(E)$, $\sigma(\theta)$ vs E.

1992Ki05: ${}^9\text{Be}(\gamma,X)$ E=14.38-16.98 MeV, measured $\sigma(E_\gamma)$. ${}^9\text{Be}$ levels deduced $\Gamma_{\gamma 0}$, isospin mixing, giant M1 resonance parameters. Shell model calculations.

1999ZhZN: ${}^9\text{Be}(\gamma,\gamma)$ E \leq 30 MeV, compiled, evaluated σ data.

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

E(level)	$T_{1/2}$	Comments
0		
14392	365 eV 29	$\Gamma_\gamma=16.1$ eV 14; $\Gamma_{\gamma 0}=6.60$ eV 40 $\Gamma_{\gamma 0}$: from weighted average of 5.9 eV 8 (1992Ki05), and inelastic electron scattering results 6.2 eV 6 (1973Be19) and 8.1 eV 8 (1968Cl08). Other values from ${}^9\text{Be}(e,e')$ are 10.5 eV 1.5 (1966Cl01), 18 eV 9 (1962Ed02), and 8 eV 2 (1968Va05). Other unpublished values of 6.7 eV 14 and 7.2 eV 3 are cited in (1973Be19,1992Ki05). Γ : deduced from $\Gamma_{\gamma 0}/\Gamma=0.0181$ ${}^7\text{Li}({}^3\text{He},p\gamma)$ (1978Di08). Γ_γ : deduced from sum of γ -ray branching ratios in (1978Di08) and $\Gamma=365$ eV 29.
16975	389 eV 10	$\Gamma_\gamma=23.8$ eV 16; $\Gamma_{\gamma 0}=16.9$ eV 10 Γ : from (1992Ki05). Other result $\Gamma=303$ eV 30 (1986Be33). $\Gamma_{\gamma 0}$: from weighted average of 18.8 eV 27 (1992Ki05), 16.8 eV 13 (1987Zi01) and 16.4 eV 17 (1986Zi01). $\Gamma_d=62$ eV 10(1992Ki05), using $\Gamma_p/\Gamma_\gamma\approx 0.5$ (1965Im01) then $\Gamma_p=12$ eV +12 -66, and $\Gamma_\alpha+\Gamma_n=290$ eV 20. See (1992Ki05) and Table 9.5 in (2004Ti06).
17.4×10^3	4	E(level): from (1984A122).
18.8×10^3	4	E(level): from (1984A122).
20.6×10^3	3	E(level): from (1984A122).
22.8×10^3	3	E(level): from (1984A122).
24.6×10^3	4	E(level): from (1984A122).
26.2×10^3	4	E(level): from (1984A122).
28.0×10^3	4	E(level): from (1984A122).
29.4×10^3	4	E(level): from (1984A122).