

Table 9.8 from (1974AJ01): Levels of ${}^9\text{Be}$ from ${}^9\text{Be}(e, e'){}^9\text{Be}^*$

E_x in ${}^9\text{Be}$ (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	Transition	J^π	Γ_{γ_0} (eV)	Refs.
1.78 ± 30^i	150 ± 50	E1	$\frac{1}{2}^+$	0.3 ± 0.12	(1968CL08)
				4.5 ± 0.6	(1963NG01, 1965NG1A)
2.44 ± 20^i	< 30	M1	$\frac{5}{2}^-$	0.13 ± 0.03	(1960BA47)
				0.12 ± 0.02	(1962ED02)
				0.13 ± 0.015	(1968VA05)
				0.089 ± 0.010	(1968CL08)
				0.12 ± 0.02	“Best”
		E2		$(1.89 \pm 0.14) \times 10^{-3}$	(1968CL08)
3.04 ± 20^i	450 ± 150	E1	$\pi = +$	0.45 ± 0.35^e	(1968CL08)
		M1	$\pi = -$	$(8.8 \pm 4.4) \times 10^{-2}^e$	(1968CL08)
4.7 ± 200	700 ± 300	E(1)		2.4 ± 1.2^e	(1968CL08)
				0.3^e	(1968VA05) ^h
6.4 ± 100^i	2000 ± 500	E2	$\frac{7}{2}^-$	0.109 ± 0.005	(1963NG01, 1965NG1A)
	1100 ± 300			0.082 ± 0.035	(1968CL08)
8.0 ± 200		M1		3.5 ± 1.0^e	(1968VA05)
9.1 ± 200		M1		1.9 ± 0.5^e	(1968VA05) ^h
10.2 ± 200		M1		1.7 ± 0.5^e	(1968VA05) ^h
11.2 ± 200		M1		5.6 ± 1.1^e	(1968VA05) ^h
13.84 ± 50^a					(1973BE19)
14.388 ± 15	< 70	M1	$\frac{3}{2}^-$	6.2 ± 0.6	(1973BE19)
				10.5 ± 1.5^j	(1966CL01)
				18 ± 9	(1962ED02)

Table 9.8 from (1974AJ01): Levels of ${}^9\text{Be}$ from ${}^9\text{Be}(e, e'){}^9\text{Be}^*$ (continued)

E_x in ${}^9\text{Be}$ (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	Transition	J^π	Γ_{γ_0} (eV)	Refs.
15.10 ± 50^a	≈ 300	M2 ^d	$\leq \frac{7}{2}^+$	8 ± 2	(1968VA05) ^h
15.97 ± 30^a				6.9 ± 0.5^f	“Best”: see (1973BE19)
16.631 ± 15^b	< 70	M1	$\leq \frac{5}{2}^-$	$3.7 \pm 0.8^{e,k}$	(1973BE19)
16.961 ± 15^b	< 70	M1	$\frac{1}{2}^-$	$0.30 \pm 0.08^{e,k}$	(1966CL01, 1967AR1A, 1973BE19)
		M1	$\frac{1}{2}^-$	0.26 ± 0.02^e	(1966CL01)
17.28	≈ 100	} M1	$\leq \frac{5}{2}^-$	2.0 ± 0.5^e	(1973BE19)
17.480 ± 20				M2 ^d	$\leq \frac{7}{2}^+$
18.02 ± 50^a	≈ 100	} M1	$\leq \frac{5}{2}^-$	11.5 ± 1.4	(1973BE19)
				M2 ^d	$\leq \frac{7}{2}^+$
$18.62 \pm 50^{a,b}$				$0.7 \pm 0.2^{e,k}$	(1966CL01)
19.51 ± 50^a				0.42 ± 0.10^e	See (1973BE19) ^g
$20.76 \pm 50^{a,b}$				0.40 ± 0.03^e	(1973BE19)
^c					(1973BE19)
					(1973BE19)
					(1973BE19)
					(1973BE19)

^a Weak transition (1973BE19).

^b See also (1968VA05).

^c Higher states reached by M1 transitions are reported at 21.6 ± 0.2 , 22.5 ± 0.2 , 24.4 ± 0.2 and 25.7 ± 0.2 MeV (1968VA05).

^d Or pure spin-flip E1.

^e $g\Gamma_{\gamma_0}$, where $g = (2J_f + 1)/(2J_i + 1)$.

^f This value is calculated by (1973BE19): it is the weighted mean of 6.2 ± 0.6 eV, 8.1 ± 0.8 eV (an unpublished correction of (1966CL01): see (1972THZF)) and 6.7 ± 1.4 eV (an unpublished value by H.S. Caplan *et al*). We are grateful to Prof. J.C. Bergstrom for his comments.

^g Unpublished corrected value of (1966CL01)'s result: see (1973BE19).

^h And G.J. Vanpraet, private communication. All values for the cross sections listed in Table 1 of (1968VA05) for states with $E_x > 8$ MeV should be reduced by a factor of 3.13.

ⁱ See (1973SL02): $E_x = 1.79 \pm 0.06$ for ${}^9\text{Be}^*(1.7)$.

^j (1972THZF) list revised values for $\Gamma_{\gamma_0} = 8.1 \pm 0.8$ and 8.6 ± 0.9 eV for ${}^8\text{Be}^*(14.40, 16.96)$.

^k See also (1972THZF).