

Table 9.8 from (79AJ01): Levels of ${}^9\text{Be}$ from ${}^9\text{Be}(e, e'){}^9\text{Be}^*$ ^a

E_x in ${}^9\text{Be}$ (MeV \pm keV)	$\Gamma_{c.m.}$ (keV)	Transition	J^π	Γ_{γ_0} (eV)	Refs.
1.78 ± 30 ^b	150 ± 50	E1	$\frac{1}{2}^+$	0.30 ± 0.12	(CL68A)
2.44 ± 20 ^c	< 30	M1	$\frac{3}{2}^-$	0.089 ± 0.010	(CL68A)
		E2		$(1.89 \pm 0.14) \times 10^{-3}$ ^d	(CL68A)
3.04 ± 20	450 ± 150	E1 ^e	$\frac{5}{2}^+$ ^e	0.30 ± 0.25 ⁿ	(CL68A, FA75F)
4.7 ± 200	700 ± 300	E(1)		2.4 ± 1.2 ^f	(CL68A)
6.4 ± 100	2000 ± 500	E2	$\frac{7}{2}^-$	0.109 ± 0.005	(NG63, NG65)
	1100 ± 300			0.082 ± 0.035	(CL68A)
g					
13.84 ± 50 ^h					(BE73C)
14.388 ± 15	< 70	M1 ⁱ	$\frac{3}{2}^-$	6.9 ± 0.5 ^j	(BE73C)
15.10 ± 50 ^h					(BE73C)
15.97 ± 30 ^h	≈ 300	M1		3.7 ± 0.8 ^f	(BE73C)
16.631 ± 15	< 70	M2 ^k	$\leq \frac{7}{2}^+$	0.26 ± 0.02 ^f	(BE73C)
		M1	$\leq \frac{5}{2}^-$	2.0 ± 0.5 ^f	(BE73C)
16.961 ± 15	< 70	M1	$\frac{1}{2}^-$	11.5 ± 1.4 ^l	(BE73C)
17.28		M1	$\leq \frac{5}{2}^-$	7.3 ± 1.3 ^f	(BE73C)
17.480 ± 20	≈ 100	M2 ^{i,k}	$\leq \frac{7}{2}^+$	0.40 ± 0.03 ^f	(BE73C)
18.02 ± 50 ^h					(BE73C)
18.62 ± 50 ^h					(BE73C)
19.51 ± 50 ^h					(BE73C)
20.76 ± 50 ^h					(BE73C)
m					

^a See also Table 9.8 in (74AJ01).

^b $E_x = 1.79 \pm 0.06$ (SL73A).

^c See also (FA75F).

^d $B(C2, \omega) \uparrow = 45.7 \pm 3.5 e^2 \cdot \text{fm}^4$. Form factor measured for $E_e = 60.7$ to 120.0 MeV (EN74).

^e Assumed.

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

^g For additional states reported by (VA68D) see Table 9.8 in (74AJ01) and footnote ^h in that table.

^h Weak transition.

ⁱ See also (NA74G).

^j Best value, calculated by (BE73C): see footnote ^f in Table 9.8 in (74AJ01).

^k Or pure spin-flip E1.

^l See also footnote ^j in (74AJ01) and (FA75F).

^m 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 (VA68D).

ⁿ The group reported by (CL68A) may consist of two unresolved states, the second one reached by an M1 transition [$J^\pi = (\frac{1}{2})^-$] with $\Gamma_{\gamma_0} = 0.18 \pm 0.09$ eV. I am indebted to Dr. L.W. Fagg for his help in understanding this point.