

Table 8.6 from (1974AJ01): ${}^8\text{Be}$ levels from ${}^7\text{Li}(p, \gamma){}^8\text{Be}$

E_{res} (keV)	Γ_{lab} (keV)	${}^8\text{Be}^*$	l_p	J^π	Res. ^c in	$\omega\Gamma_\gamma$ (eV)	Refs.
441.4 ± 0.5 ^a	12.2 ± 0.5	17.642	1	1^+	$\gamma_0, \gamma_1, \gamma_3, \gamma_4$	9.4	(1949FO18, 1956BU27, 1969SW01)
1030 ± 5	168	18.157	1	1^+	$\gamma_0, \gamma_1, \gamma_3, \gamma_4$	2	(1954KR06, 1960MA33, 1963RI09, 1970FI1B)
1890	150 ± 50	18.91		(2^-)	γ_3, γ_4		(1969SW01)
2060 ± 20	310 ± 20	19.06		$J = 1, 2, 3$ $\pi = (-)$ ^b	γ_1		(1957NE1A, 1963PE15, 1963RI09, 1967NI1A, 1970FI1B)
(3100)		(20.0)			γ_1		(1970FI1B)
4900		21.5			γ_1		(1970FI1B)
5000	≈ 4500	21.6	(0)	(1^-)	γ_0		(1959GE33, 1963MI08, 1963PE15, 1966FI1B, 1968BL1E, 1970FI1B)
6000		22.5			γ_1		(1963MI08, 1970FI1B)
7300		23.6			γ_1		(1970FI1B)
7500	≈ 8000	23.8	(0)	$(1^-, 2^-)$	γ_1		(1963MI08, 1963PE15, 1966FI1B, 1968BL1E, 1970FI1B)
(11100)		(27.0)			γ_1		(1970FI1B)
13000	broad	28.6					(1967FE04)

^a See (1959AJ76).

^b (1964SC19). See however reaction 18.

^c $\gamma_0, \gamma_1, \gamma_3, \gamma_4$ represent transitions to ${}^8\text{Be}^*(0, 2.9, 16.6, 16.9)$, respectively.