Table 8.3 from (79AJ01): Energy Levels of ^{8}Be [a]

E_x (MeV ± keV)	J^π; T	$\Gamma_{c.m.}$ (keV)	Deacy	Reactions
g.s.	0^+; 0	6.8 ± 1.7 eV	α	1, 2, 4, 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 27, 30, 31, 32, 33, 34, 36, 38, 39, 40, 41, 42, 43, 45, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 64, 66, 68, 69
2.94 ± 30	2^+; 0	1560 ± 30	α	2, 4, 12, 13, 14, 15, 21, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 37, 38, 39, 40, 41, 42, 43, 45, 47, 48, 50, 51, 52, 53, 54, 57, 61
11.4 ± 300	4^+; 0	≈ 3500 [b]	α	4, 13, 21, 24, 31, 33, 40, 43, 45, 52, 53, 54
16.626 ± 3	2^+; $0+1$	108.1 ± 0.5	γ, α	2, 4, 12, 14, 15, 21, 23, 24, 29, 31, 32, 33, 38, 40, 45, 47, 48, 52, 53
16.922 ± 3	2^+; $0+1$	74.0 ± 0.4	γ, α	2, 4, 12, 14, 15, 21, 23, 24, 31, 32, 33, 38, 40, 45, 47, 48, 52, 53
17.641 ± 1.5	1^+; 1	10.7 ± 0.5	γ, p	5, 12, 15, 17, 21, 23, 31, 32, 33, 40, 45, 47, 53
18.150 ± 4	1^+; 0	138 ± 6	γ, p	12, 15, 17, 21, 31, 32, 33, 40, 45
18.91	2^-	48 ± 20	γ, n, p	12, 15, 16, 17, 21, 31, 45
19.069 ± 10	3^+; (1)	270 ± 20	γ, p	12, 15, 17, 21, 32, 45
19.24 ± 25	3^+; (0)	230 ± 30	n, p	16, 17, 21, 31, 32, 33, 40
19.4	1^-	≈ 650	n, p	12, 16, 17
19.86 ± 50	4^+; 0	700 ± 100	p, α	4, 12, 14, 20, 24, 32, 48
20.1	2^+; 0	≈ 1100	n, p, α	3, 4, 16, 20, 24, 32, 48

Table 8.3 from (79AJ01): Energy Levels of ^{8}Be [a] (continued)

E_x (MeV $\pm$ keV)	J^π; T	$\Gamma_{c.m.}$ (keV)	Deacy	Reactions
20.2	0^+; 0	< 1000	α	4
20.9	4^-	1600 ± 200	p	17
21.5	$3^{(+)}$	1000	n, p	16, 31
22.0 [c]	1^-; 1	≈ 4000	γ, p	15
22.05 ± 100		270 ± 70		33
22.2	2^+; 0	≈ 800	n, p, d, α	3, 4, 10, 17, 20
22.63 ± 100		100 ± 50		14, 33
22.98 ± 100		230 ± 50		31, 33
24.0 [c]	(1, 2)$^-$; 1	≈ 7000	γ, p	15
25.2	2^+; 0		p, d, α	4, 10, 20, 33
25.5	4^+; 0	broad	d, α	4, 10
27.494 ± 2 [d]	0^+; 2	5.5 ± 2.0	γ, p, d, α	3, 5, 7, 8, 10, 35
(28.6)		broad	γ, p	15

[a] See also Table 8.7.

[b] I am greatly indebted to Prof. F.C. Barker for enlightening discussions concerning the width of ^{8}Be*(11.4).

[c] Giant resonance: see reaction 15.

[d] See Table 8.4.