

Table 12.19 from (2017KE05): Resonance cross sections in $^{11}\text{B}(p, \gamma)^{12}\text{C}$ and $^{11}\text{B}(p, \alpha)^8\text{Be}$ ^a

E_p (MeV)	Γ_{cm} (keV)	$\sigma(\gamma_0)$ (μb)	$\sigma(\gamma_1)$ (μb)	$\sigma(\alpha_0)$ (mb)	$\sigma(\alpha_1)$ (mb)	$^{12}\text{C}^*$ (MeV)	$J^\pi; T$
0.162	5.3 ± 0.2	5.5	152	res.	res.	16.1060 ± 0.0008	$2^+; 1$
0.675	300	non-res.	48	non-res.	600	16.576	$2^-; 1$
1.388	1150	[27] ^b	3	3.3	≈ 180	17.230	$1^-; 1$
2.00	96 ± 5	non-res.	non-res.	9.0	(25)	17.79	$0^+; 1$
2.37	600 ± 100		0.77			18.13	$(1^+; 0)$
2.64	≈ 400	weak	res.	32.4 ± 4.8	270 ± 40	18.38	$3^-; 1$
2.66	43	non-res.	non-res.	non-res.	non-res.	18.39	0^-
3.01	100	non-res.	non-res.	3.4		18.71	n. π . ^d ; (1)
3.12	100	weak	[20] ^b	non-res.	non-res.	18.81	$2^+; 1$
3.5	1100	[20] ^b	res.	5.2	res.	19.2	$(1^-; 1)$
3.75	(1100)	non-res.	res.	7.4 ± 1.1	300 ± 40	19.39	$(2^+; 0)$
4.93	180	non-res.	res.	res.	170 ± 40	20.47	
5.11	275	non-res.	[35] ^b	6.0 ± 0.9	non-res.	20.64	$(3^-; 1)$
5.85	300			res.		(21.31)	
6.0		res.	non-res.	res.		21.5	
6.7	500	res.	[35] ^b	res.		22.1	
7.25	3200	120	non-res.		res.	22.6	$(1^-; 1)$
8.3		res.	res.	res.		23.6	
10.3	≈ 6500	[60] ^b	83			25.4	
11.76 ^e		non-res.	45 ^c	res.		26.72	(1^-)
12.5 ^f	≈ 700	21 ^c	non-res.			27.4	
13.0	≈ 6000			res.		27.9	
13.09		19 ^c	38 ^c			27.94	
13.8 ^f	≈ 2500	non-res.	25 ^c			28.6	
14.3 ^e		16 ^c	non-res.			29.0	
14.8	broad	res.				29.5	

^a For references see (1975AJ02, 1980AJ01). See also (1985KI16: theory). ^b Estimated.

^c $4\pi \times \sigma(90^\circ)$. ^d Natural parity. ^e Resonant in γ_2 . ^f Resonant in γ_3 .