

Table 12.6 from (1975AJ02): Resonances in $^{11}\text{B}(n, n)^{11}\text{B}$ ^a

E_n (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	$^{12}\text{B}^*$ (MeV)	l	J^π	Comments
0.0208 ± 0.5 ^b	$\ll 1.4$	3.3884	2	3^- ^c	$\Gamma_n = 3.1 \pm 0.6$ eV ^b
0.43 ± 10 ^{g,k}	37 ± 5	3.763	1	2^+ ^c	
1.027 ± 11 ^{h,k}	9 ± 4	4.310	0	1^- ^c	
1.09 ^c	broad	4.37	0	2^- ^c	i
1.28 ± 20 ^{g,k}	130 ± 20	4.54	2	4^- ^c	
1.78 ± 20 ^{g,k}	60 ± 20	5.00	1	1^+ ^c	
2.45 ± 20 ^g	110 ± 40	5.61	1	3^+ ^d	
2.58 ± 20 ^g	55 ± 20	5.73	2	3^- ^d	
2.7 ^d	broad	5.8	2	1^- ^{d,j}	
3.5 ^e	140	6.6	1	$(1)^+$ ^d	
3.8 ^d	broad	6.8	1	$(1)^+$ ^d	
4.55 ^f	≤ 14	7.54	> 3		
(4.68)	45	(7.66)	> 0		
4.80	90	7.77	> 0		
(5.01)	27	(7.96)	> 0		
5.31	65	8.23	> 1		
5.49	110	8.40			
5.59	75	8.49	> 1		
6.18	120	9.03	> 1		
7.18	100	9.94	> 0		
7.82	65	10.53	> 2		
9.72	120	12.27	> 2		

^a See also Table 12.5 in (1968AJ02).

^b (1969MO10). Also observed in $^{11}\text{B}(n, \gamma)$: $\Gamma_\gamma = 25 \pm 8$ meV (1969MO10).

^c (1970LA21). See also (1974BI07).

^d (1973NE19). See also (1974BI07).

^e (1961FO07).

^f This resonance and all the higher energy ones have been observed by (1961FO07).

^g (1951BO45, 1968AJ02).

^h (1962IM01).

ⁱ The low penetrability for $l = 2$ neutrons means that the observed width of this level is predominantly $l = 0$. The reduced width is probably $\approx 80\%$ $l = 2$ and 20% $l = 0$ (1970LA21).

^j 2^- cannot be excluded (1973NE19).

^k Also observed in $^{11}\text{B}(n, \gamma)$ (1962IM01).