

Table 12.10 from (2017KE05): Resonances in  $^{11}\text{B}(n, n)^{11}\text{B}$  <sup>a</sup>

$E_n$ (MeV $\pm$ keV)	$\Gamma_{\text{cm}}$ (keV)	$^{12}\text{B}^*$ (MeV)	$l$ <sup>a, e</sup>	$J^\pi$ <sup>a, e</sup>
$0.0208 \pm 0.5$ <sup>b, d</sup>	$\ll 1.4$	$3.3889$ <sup>f</sup>	2	$3^-$
$0.43 \pm 10$ <sup>c, d</sup>	$37 \pm 5$	3.764	1	$2^+$
$1.027 \pm 11$ <sup>c, d</sup>	$9 \pm 4$	4.311	0	$1^-$
$1.19$ <sup>e</sup>	broad	4.46	0, 2	$2^-$
$1.28 \pm 20$ <sup>c, e</sup>	$130 \pm 20$	4.54	2	$4^-$
$1.78 \pm 20$ <sup>c, e</sup>	$60 \pm 20$	5.00	1	$1^+$
$2.45 \pm 20$ <sup>e</sup>	$110 \pm 40$	5.62	1	$3^+$
$2.58 \pm 20$ <sup>e</sup>	$55 \pm 20$	5.73	2	$3^-$
$2.9$ <sup>e</sup>	broad	6.0	0, 2	$1^-$
$3.5$ <sup>e</sup>	140	6.6	1	$1^+$
$4.03$ <sup>e</sup>	broad	7.06	0, 2	$1^-$
4.55	$\leq 14$	7.54	$> 3$	
$4.70$ <sup>e</sup>	45	7.68	0, 2	$2^-$
$4.80$ <sup>e</sup>	90	7.77	0, 2	$1^-$
$4.93$ <sup>e, i</sup>		(7.89)	0, 2	$1^-$
$5.19$ <sup>e, i</sup>		(8.13)	2	$3^-$
$5.31$ <sup>e</sup>	65	8.24	2	$3^-$
$5.59$ <sup>e</sup>	75	8.49	2	$3^-$
$5.82$ <sup>e</sup>		(8.70)	2	$3^-$
$6.18$ <sup>e</sup>	120	9.03	0, 2	$1^-$
$6.25$ <sup>e</sup>		(9.10)	0, 2	$2^-$
$6.78$ <sup>e</sup>	$34 \pm 5$	$9.578$ <sup>g</sup>	2	$3^-$
7.18	100	9.95	$> 0$	
7.3-8.5 <sup>h</sup>		10.11-11.06		
7.82	65	10.54	$> 2$	
9.72	120	12.28	$> 2$	

<sup>a</sup> For references see [Tables 12.5 in \(1980AJ01\)](#) and [\(1968AJ02\)](#).

<sup>b</sup> Also observed in  $^{11}\text{B}(n, \gamma)$ :  $\Gamma_\gamma = 25 \pm 8$  meV,  $\Gamma_n = 3.1 \pm 0.6$  eV [\(1969MO10\)](#).

<sup>c</sup> Also observed in  $^{11}\text{B}(n, \gamma)$ : see [\(1968AJ02\)](#).

<sup>d</sup> See also [\(1983KO03\)](#).

<sup>e</sup> From  $R$ -matrix analysis [\(1983KO03\)](#). See also [\(1980WH01\)](#) and the earlier work displayed in [\(1980AJ01\)](#).

<sup>f</sup>  $\pm 1.6$  keV [\(1969MO10\)](#).

<sup>g</sup>  $\pm 5$  keV [\(1979AU07\)](#).

<sup>h</sup> A measurement using the transmission method [\(1995DO36\)](#) reports resonances corresponding to  $^{12}\text{B}^*(10115, 10181, 10304, 10383, 10525, 10563, 10640, 10939, 11017, 11060)$  ( $\pm 35$  keV). See also [\(1979AU07\)](#).

<sup>i</sup> State at  $E_n = (5.01)$  previously identified with  $\Gamma \approx 27$  keV [\(1961FO07\)](#).