

Table 11.5 from (1990AJ01): Resonances in  ${}^7\text{Li}(\alpha, \gamma){}^{11}\text{B}$  <sup>a</sup>

$E_{\text{res}}$ (keV)	$\Gamma_{\text{c.m.}}$ (keV)	${}^{11}\text{B}^*$ (MeV)	$J^\pi$	$\omega\gamma$ (eV)	$\Gamma_{\gamma_0}$ (eV)	Percentage decay to ${}^{11}\text{B}^*$			
						0	4.44	6.74	6.79
$401 \pm 3$ <sup>b</sup>	$4.37 \pm 0.02$ eV	8.919	$\frac{5}{2}^-$	$(8.8 \pm 1.4) \times 10^{-3}$	$4.15 \pm 0.02$ <sup>f</sup>	$95 \pm 1$	$4.5 \pm 0.5$		
$814 \pm 2$ <sup>b</sup>	$1.8_{-1.1}^{+1.5}$ eV	9.182	$\frac{7}{2}^+$	$0.310 \pm 0.047$	$0.17_{-0.01}^{+0.05}$ <sup>e</sup>	$0.9 \pm 0.3$	$90.8 \pm 4.0$	$8.3 \pm 1.0$	$< 1.3$
$953 \pm 2$ <sup>b</sup>	4	9.271	$\frac{5}{2}^+$	$1.72 \pm 0.24$	$0.20 \pm 0.03$ <sup>f</sup>	$17.1 \pm 1.0$	$71.7 \pm 1.8$	$11.2 \pm 0.6$	$< 0.6$ <sup>c</sup>
$2500 \pm 20$	433	10.26			17	d			
$2620 \pm 20$	100	10.33			1.0	d			
$2800 \pm 50$	$\approx 140$	10.45			$10/(2J + 1)$				
(3040)	90	(10.60)			$< 0.2$	d			

<sup>a</sup> See [Table 11.6 in \(1980AJ01\)](#) for comments and references.

<sup>b</sup>  $\Gamma_{\alpha}(\text{c.m.}) = (5.9 \pm 0.9) \times 10^{-3}$ ,  $1.6_{-1.1}^{+1.5}$ , and  $4 \times 10^3$  eV for  ${}^{11}\text{B}^*(8.92, 9.19, 9.27)$  ([1984HA13](#)). See also [Table 11.4](#).

<sup>c</sup> The decay to  ${}^{11}\text{B}^*(7.29, 7.98)$  [ $J^\pi = \frac{5}{2}^+, \frac{3}{2}^+$ ] is also observed:  $\approx 1\%$  and  $\approx 0.03\%$  respectively.

<sup>d</sup>  $< 10\%$  to  ${}^{11}\text{B}^*(2.12)$ .

<sup>e</sup>  $\Gamma_\gamma$ , not  $\Gamma_{\gamma_0}$ . See also [Table 11.4](#).

<sup>f</sup> See [Table 11.4](#).