

Table 13.5 from (1970AJ04): Resonances in  ${}^9\text{Be}(\alpha, n){}^{12}\text{C}$ 

$E_\alpha$ <sup>a</sup> (MeV)	$E_\alpha$ <sup>b</sup> (MeV)	$E_\alpha$ <sup>c</sup> (MeV)	$\Gamma_{\text{cm}}$ (keV)	$J^\pi$	${}^{13}\text{C}^*$ <sup>d</sup> (MeV)	Refs.
0.52	0.52		$\approx 55$ <sup>e</sup>	$(\frac{1}{2}^+)$	11.01	(1956JA28, 1968DA05)
0.60	0.60		$< 4$ <sup>e</sup>		11.06	(1968DA05)
1.9	1.905	1.92	130	$(\frac{7}{2}^-)$	11.97	(1953TA06, 1954BE08, 1955TA28, 1956BO61, 1956JA28, 1965GI02)
2.24		2.25	280		12.20	(1956BO61, 1965GI02)
2.58	2.6	2.58	$\approx 200$	$(\frac{1}{2}^-)$	12.44	(1953TA06, 1956BO61, 1956JA28, 1965GI02, 1965GR22)
4.00	3.98	4.00	60		13.41	(1956BO61, 1959GI47, 1963SE04, 1965GI02, 1965GR22)
4.18			570		13.55	(1957RI38, 1965GR22)
4.50	4.47	4.50	$\approx 350$		13.76	(1956BO61, 1959GI47, 1963SE04, 1965GI02, 1965GR22)
5.0	5.02	5.0	$\approx 200$		14.13	(1956BO61, 1963SE04, 1965GI02)
$5.40 \pm 0.10$	5.3		260		$14.39 \pm 0.10$	(1963SE04, 1965GR22, 1966MI12)
	5.75	5.75	210		14.63	(1959GI47, 1963SE04, 1965GI02, 1965GR22, 1966MI12)
$6.20 \pm 0.05$			380		$14.95 \pm 0.05$	(1965GR22, 1966MI12)
		(6.7)	broad		(15.29)	(1965GI02)
$7.10 \pm 0.05$	7.00		220		$15.53 \pm 0.05$	(1963SE04, 1965GR22, 1966MI12)
	7.75	7.8	210		16.02	(1959GI47, 1963SE04, 1965GI02, 1965GR22)
$7.95 \pm 0.05$			230		$16.16 \pm 0.05$	(1965GR22, 1966MI12)
$9.10 \pm 0.05$		9.1	330		$16.96 \pm 0.05$	(1965GI02, 1965GR22, 1966MI12)
$9.7 \pm 0.10$	9.70		190		$17.37 \pm 0.1$	(1965GR22, 1966MI12)
$10.2 \pm 0.05$			170		$17.72 \pm 0.05$	(1965GR22, 1966MI12)
(10.60)			40		(17.99)	(1965GR22)
$11.05 \pm 0.05$			300		$18.30 \pm 0.05$	(1965GR22, 1966MI12)
$11.70 \pm 0.03$	11.60		70		$18.76 \pm 0.03$	(1965GR22, 1966MI12)
$14.25$ <sup>f</sup>			$\approx 120$		20.52	(1968SN1B)

<sup>a</sup> Resonances in neutron yield.

<sup>b</sup> Resonances in  $n_1$  group and for 4.4 MeV  $\gamma$ -rays.

<sup>c</sup> Resonances in total cross section.

<sup>d</sup> Not corrected for effects of Coulomb barrier penetration.

<sup>e</sup>  $\omega\gamma = 3.79$  and  $0.88$  eV, respectively (1968DA05).

<sup>f</sup> Resonance in yield of 12.7 and 15.1 MeV  $\gamma$ -rays.