

Table 9.2 from (1988AJ01): Energy Levels of  ${}^9\text{Be}$ 

$E_x^a$ (MeV $\pm$ keV)	$J^\pi; T$	$\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
g.s.	$\frac{3}{2}^-; \frac{1}{2}$		stable	2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 48
$1.684 \pm 7$	$\frac{1}{2}^+$	$217 \pm 10$	$\gamma, n$	4, 9, 10, 13, 16, 18, 19, 21, 23, 24, 32, 36, 38, 40
$2.4294 \pm 1.3$	$\frac{5}{2}^-$	$0.77 \pm 0.15$	$\gamma, n, \alpha$	4, 9, 10, 11, 12, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 32, 33, 35, 36, 37, 38, 40, 44
$2.78 \pm 120$	$\frac{1}{2}^-$	$1080 \pm 110$	n	4, 9, 12, 38, 44
$3.049 \pm 9$	$\frac{5}{2}^+$	$282 \pm 11$	$\gamma, n$	4, 9, 16, 18, 19, 21, 23, 24, 32, 36, 38, 40
$4.704 \pm 25$	$(\frac{3}{2})^+$	$743 \pm 55$	$\gamma, n$	4, 9, 16, 21, 23, 24, 38, 44
$6.76 \pm 60$	$\frac{7}{2}^-$	$1540 \pm 200$	$\gamma, n$	9, 11, 16, 17, 18, 19, 21, 23, 24, 25, 35, 40
$7.94 \pm 80$	$(\frac{1}{2}^-)$	$\approx 1000$		12, 19
$11.283 \pm 24$		$575 \pm 50$	n	9, 12, 19, 24, 35, 36
$11.81 \pm 20$	$T = \frac{1}{2}$	$400 \pm 30$	$\gamma, n$	9, 12, 13, 37, 44
$13.79 \pm 30$	$T = \frac{1}{2}$	$590 \pm 60$	$\gamma, n$	9, 16, 37
$14.3922 \pm 1.8^c$	$\frac{3}{2}^-; \frac{3}{2}$	$0.381 \pm 0.033$	$\gamma, n, \alpha$	9, 16, 19, 23, 36, 37
$14.4 \pm 300$		$\approx 800$		36
$15.10 \pm 50$			$\gamma$	16, 37
$15.97 \pm 30$	$T = \frac{1}{2}$	$\approx 300$	$\gamma$	16, 37
$16.671 \pm 8$	$(\frac{5}{2}^+)$	$41 \pm 4$	$\gamma$	9, 16, 19, 36
$16.9752 \pm 0.8^d$	$\frac{1}{2}^-; \frac{3}{2}$	$0.49 \pm 0.05$	$\gamma, n, p, d$	4, 5, 6, 15, 16
$17.298 \pm 7$	$(\frac{5}{2})^-$	200	$\gamma, n, p, d, \alpha$	5, 6, 7, 13, 16, 19

Table 9.2 from (1988AJ01): Energy Levels of  ${}^9\text{Be}$  (continued)

$E_x$ <sup>a</sup> (MeV $\pm$ keV)	$J^\pi; T$	$\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
17.493 $\pm$ 7	$(\frac{7}{2})^+$	47	$\gamma, n, p, d, \alpha$	<a href="#">5, 6, 7, 16, 19</a>
18.02 $\pm$ 50			$\gamma$	<a href="#">16</a>
18.58 $\pm$ 40			$\gamma, n, p, d, \alpha$	<a href="#">6, 16</a>
(18.6 $\pm$ 100) <sup>e</sup>	$(T = \frac{3}{2})$	$\leq 300$	p	
19.20 $\pm$ 50		310 $\pm$ 80	n, p, d, t	<a href="#">6</a>
19.51 $\pm$ 50			$\gamma$	<a href="#">13, 16</a>
(19.9 $\pm$ 200)			$\gamma, n$	<a href="#">13</a>
(20.47 $\pm$ 40)			$\gamma, p, d$	<a href="#">13</a>
20.74 $\pm$ 30		$\approx 1000$	$\gamma, n, p, t$	<a href="#">13, 16</a>
(21.4 $\pm$ 200)			$\gamma, n$	<a href="#">13</a>
(22.4 $\pm$ 200)		broad	$\gamma, n$	<a href="#">13, 19</a>
(23.8 $\pm$ 200)			$\gamma, n$	<a href="#">13</a>
(27.0 $\pm$ 500) b		broad	$\gamma, n$	<a href="#">13</a>

<sup>a</sup> See also reactions [14](#) and [16](#).

<sup>b</sup> See footnote <sup>j</sup> in [Table 9.8 of \(1984AJ01\)](#).

<sup>c</sup> See [Table 9.3](#).

<sup>d</sup> See [Table 9.4](#).

<sup>e</sup> See the “GENERAL” section.