

Table 16.4 from (1982AJ01): Energy levels of ^{16}N

E_x (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
0	$2^-; 1$	$\tau_{1/2} = 7.13 \pm 0.02$ sec	β^-	1, 3, 10, 12, 13, 14, 15, 18, 19, 24, 25, 26, 28, 29
0.1201 ± 0.5	0^-	$\tau_m = 7.58 \pm 0.09$ μsec	γ, β^-	10, 12, 13, 14, 18, 21, 24, 28, 29
0.2970 ± 0.7	3^-	a	γ	5, 10, 12, 13, 14, 18, 19, 24, 26, 28, 29
0.3975 ± 0.7	1^-	$\tau_m = 5.6 \pm 0.3$ psec $ g = -18.3 \pm 0.13$	γ	5, 10, 11, 12, 13, 14, 18, 21, 24, 28, 29
3.355 ± 5	1^+	$\Gamma = 15 \pm 5$	n	3, 10, 12, 16, 18, 20, 28
3.519 ± 5	2^+	3	n	3, 10, 12, 16, 18, 28
3.960 ± 5	3^+	≤ 2	n	3, 7, 10, 11, 12, 16, 18, 28
4.319 ± 5	1^+	20 ± 5	n	3, 10, 12, 16, 18, 19, 28
4.387 ± 6	1^-	82 ± 20	n	3, 10, 12, 16, 18, 28
4.76 ± 50	1^-	250 ± 50	n	12, 16, 18
4.776 ± 10	2^+	59 ± 8	n	10, 12, 16, 18, 28
(4.90 ± 10)				18
5.050 ± 6	2^-	19 ± 6	n	10, 12, 16, 18, 28
5.130 ± 7	≥ 2	$\leq 7 \pm 4$	n	10, 12, 16, 18
5.150 ± 7	($2, 3$) $^-$	$\leq 7 \pm 4$	n	12, 16, 18, 28
5.232 ± 5	3^+	≤ 4	n	10, 12, 16, 18, 28
5.24	1^+	260	n	16
5.25 ± 70	2^-	320 ± 80	n	12, 18
5.518 ± 6	3^+	$\leq 7 \pm 4$	n	10, 12, 16, 18, 28
5.730 ± 6	(5^+)	$\leq 7 \pm 4$	n	7, 10, 11, 12, 16, 18, 28
6.009 ± 10	1^-	270 ± 30	n	12, 16, 28
6.168 ± 4	(4^-)	$\leq 7 \pm 4$	n	10, 12, 18, 26, 28
6.373 ± 6	(3^-)	30 ± 6	n	12, 16, 18, 26, 28
6.426 ± 7		300 ± 30		12, 18
6.513 ± 6	1^+	34 ± 6	n	12, 16, 18, 28
6.613 ± 6		$\leq 7 \pm 4$		12, 13, 14, 18, 28
6.848 ± 6		$\leq 7 \pm 4$		10, 12, 18, 28
(6.84)	≥ 2	> 140	n	16
7.02 ± 20	1^+	22 ± 5	n	12, 16, 18, 28
7.134 ± 7		$\leq 7 \pm 4$		10, 12, 18, 28

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E_x (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
7.250 \pm 7	≥ 2	17 \pm 5	n	12, 16, 18, 28
7.573 \pm 6	≥ 3	$\leq 7 \pm 4$	n	10, 12, 16, 18, 28
7.637 \pm 5	(3, 4, 5) ⁺	$\leq 7 \pm 4$		7, 10, 11, 12, 18, 28
7.675 \pm 5		$\leq 7 \pm 4$	n	7, 12, 13, 16, 18, 28
7.877 \pm 9	≥ 4	100 \pm 15	n	12, 16, 18, 28
8.048 \pm 9		85 \pm 15	n	12, 16, 28
8.182 \pm 9	(3, 2) ⁺	28 \pm 8		10, 12, 17
8.282 \pm 8		24 \pm 8		12, 28
8.365 \pm 8	≥ 1	18 \pm 8	n	12, 16, 28
8.49 \pm 30	≥ 1	≤ 50	n	16, 28
8.72	≥ 1	40	n	16
8.819 \pm 15		≤ 50	n	16, 28
9.035 \pm 15		≤ 50		28
9.16 \pm 30	≥ 2	100	n	16, 28
9.34 \pm 30		≤ 50	n	16, 28
9.459 \pm 15	≥ 2	100	n	16, 28
9.760 \pm 10	$T = 1$	15 \pm 8		10
9.813 \pm 10	$T = 1$			10
9.928 \pm 7	0 ⁺ ; $T = 2$	< 12		10, 27
10.055 \pm 15	≥ 3	30	n	16
10.27	≥ 2	165	n	16
10.71	≥ 2	120	n	16
11.49	≥ 3		n	6, 16
11.62	≥ 3	220	n, d	9
11.701 \pm 7	1 ⁻ , 2 ⁺ ; $T = 2$	< 12		10
(11.92)		390	n, d	9
(12.09)			n	6, 16
12.26		290	n, p, d	9
(12.46)			n	16
12.61		180	n, p, d	9
12.88		155	n, p, d	9
(12.97)		175	n, d	9
13.12			n, (d)	9, 16

Table 16.4 from (1982AJ01): Energy levels of ^{16}N (continued)

E_x (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
13.83			n	16
14.41 ± 50	$(3)^+$	180	d	9

^a The previously reported τ_m needs, in the opinion of the reviewer, to be remeasured: see ([1971AJ02](#)) for the previously reported value.