Table 14.11 from (1981AJ01): Radiative decays in ^{14}N [a]

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	$J_f^\pi; T$	Branch (%)	Γ_γ (eV)	Refs.
2.31	$0^+; 1$	0	$1^+; 0$	100	$(7.2 \pm 0.8) \times 10^{-3}$	Table 14.12
3.95	$1^+; 0$	0	$1^+; 0$	[A] 3.9 ± 0.2 [b]	(M1)$(4.1 \pm 1.2) \times 10^{-4}$	(1967OL02, 1968RO1C, Table 14.12)
					(E2)$(3.2 \pm 0.4) \times 10^{-3}$	
		2.31	$0^+; 1$	[A] 96.1 ± 0.3 [b]	0.079 ± 0.010	(1967OL02, 1968RO1C, Table 14.12)
4.92	$0^-; 0$	0	$1^+; 0$	97 ± 3	$(8.4 \pm 1.6) \times 10^{-2}$	(1972RE10, Table 14.12)
		2.31	$0^+; 1$	< 1		(1966GO15)
		3.95	$1^+; 0$	1.3 ± 1.0		(1965NE06)
				≤ 0.5		(1966GO15)
5.11	$2^-; 0$	0	$1^+; 0$	[A] 79.9 ± 1.0 [b]	$(8.5 \pm 0.6) \times 10^{-5}$ [r]	(1966GO15, 1968AL12, Table 14.12)
		2.31	$0^+; 1$	[A] 19.4 ± 1.2 [b]		
		3.95	$1^+; 0$	(0.7 ± 0.4)		(1966GO15)
5.69 [c]	$1^-; 0$	0	$1^+; 0$	[A] 35.6 ± 1.2		mean
		2.31	$0^+; 1$	[A] 63.1 ± 1.2	$(2.6 \pm 1.3) \times 10^{-2}$	mean; Table 14.12
5.83 [d]	$3^-; 0$	0	$1^+; 0$	[A] 26.5 ± 2.5		mean
		5.11 [e]	$2^-; 0$	[A] 73 ± 3	$(3.6 \pm 0.3) \times 10^{-5}$	mean; Table 14.12
6.20 [f]	$1^+; 0$	0	$1^+; 0$	[A] 23.0 ± 1.9		mean
		2.31	$0^+; 1$	[A] 76.7 ± 2.0	$(3.2 \pm 0.4) \times 10^{-3}$	mean; Table 14.12
6.44 [h]	$3^+; 0$	0	$1^+; 0$	69.6 ± 1.5	$(7.3 \pm 0.4) \times 10^{-4}$ [g]	(1976SI07); Table 14.12
		3.95	$1^+; 0$	19.6 ± 1.0		(1976SI07)
		5.11	$2^-; 0$	6.4 ± 0.6		(1976SI07)
		5.83	$3^-; 0$	3.7 ± 0.6		(1976SI07)
7.03	$2^+; 0$	0	$1^+; 0$	[A] 98.6 ± 0.3	(M1)$(9.1 \pm 1.3) \times 10^{-2}$ [i]	(1967OL02, 1968RO1C)
					(E2)$(5.0 \pm 1.2) \times 10^{-2}$	
		2.31	$0^+; 1$	0.5 ± 0.1	(E2)$(6.2 \pm 1.4) \times 10^{-4}$	(1967OL02, 1968RO1C)
		3.95	$1^+; 0$	0.9 ± 0.25	$< (11 \pm 0.3) \times 10^{-4}$	(1967OL02, 1968RO1C)
		other states		≤ 0.4		(1967OL02)
7.97 [o]	$2^-; 0$	0	$1^+; 0$	55 ± 3	0.010	(1960HE14)
		3.95	$1^+; 0$	45 ± 3	0.008	(1960HE14)
		other states		≤ 3		(1960HE14)
8.06	$1^-; 1$	0	$1^+; 0$	80.3 ± 0.6	9.9 ± 2.5 [q]	(1972RE10); Table 14.19
		2.31	$0^+; 1$	1.40 ± 0.14	0.17 ± 0.05 [q]	(1972RE10)
		3.95	$1^+; 0$	12.7 ± 0.4	1.56 ± 0.40 [q]	(1972RE10)
		4.92	$0^-; 0$	1.86 ± 0.14	0.23 ± 0.06 [q]	(1972RE10)
		5.11	$2^-; 0$	0.25 ± 0.14	0.03 ± 0.02 [q]	(1972RE10)
		5.69	$1^-; 0$	3.5 ± 0.4	0.43 ± 0.12 [q]	(1972RE10)

Table 14.11 from (1981AJ01): Radiative decays in ^{14}N [a] (continued)

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	$J_f^\pi; T$	Branch (%)	Γ_γ (eV)	Refs.
8.49	$4^-; 0$	5.11	$2^-; 0$	83 ± 3	$(6.1 \pm 1.5) \times 10^{-3}$	[p]
		5.83	$3^-; 0$	17 ± 3	$(1.3 \pm 0.4) \times 10^{-3}$	[p]
8.62	$0^+; 1$	0	$1^+; 0$	23	1.20	(1959WA16)
		3.95	$1^+; 0$	24	1.26	(1959WA16)
		5.69	$1^-; 0$	13	0.69	(1959WA16) [a]
		6.20	$1^+; 0$	40		(1957WI27)
8.79	$0^-; 1$	0	$1^+; 0$	90 ± 10 [s]	46 ± 12 [s]	(1953WO41)
8.91	$3^-; 1$	0	$1^+; 0$	1.6 ± 0.5 [q]	$(6.6 \pm 2.2) \times 10^{-3}$	(1968CL05)
		5.11	$2^-; 0$	5.4 ± 2.5 [q]	$(2.3 \pm 1.2) \times 10^{-2}$ [q]	(1959WA04)
		5.83	$3^-; 0$	89 ± 3 [q]	0.37 ± 0.10 [q]	(1959WA04)
		6.44	$3^+; 0$	3 ± 1	0.012 ± 0.006 [q]	(1959WA04)
		7.03	$2^+; 0$	1.4 ± 0.8	0.006 ± 0.004 [q]	(1959WA04)
8.96	$5^+; 0$	0 [a]	$1^+; 0$	< 1		
		6.44 [a]	$3^+; 0$	100	$\Gamma_\gamma = (1.2 \pm 0.2) \times 10^{-3}$ $\Gamma_p/\Gamma_\gamma = 4.1 \pm 0.5$	Table 14.12
9.13	$3^+; 0$	0	$1^+; 0$	82 ± 3	$\Gamma_\gamma = (8.5 \pm 1.0) \times 10^{-3}$ [j]	(1978KE01, 1978KE03)
		3.95	$1^+; 0$	≤ 2		(1978KE01)
		5.83	$3^-; 0$	9 ± 3		(1978KE01)
		6.44	$3^+; 0$	9 ± 3		(1978KE01)
9.17 [l]	$2^+; 1$	0	$1^+; 0$	85.1 ± 1.0	6.6 ± 1.3 [k]	(1976SI07); Table 14.19
		2.31	$0^+; 1$	0.85 ± 0.08		(1976SI07)
		5.69	$1^-; 0$	0.49 ± 0.10		(1976SI07)
		5.83	$3^-; 0$	0.61 ± 0.08		(1976SI07)
		6.44	$3^+; 0$	8.8 ± 0.8		(1976SI07)
		7.03	$2^+; 0$	3.2 ± 0.3		(1976SI07)
9.51	$2^-; 1$	0	$1^+; 0$	< 0.16 [q]	< 0.08 [q]	
		3.95	$1^+; 0$	6 ± 1	0.30 ± 0.09 [q]	(1959WA04)
		5.11	$2^-; 0$	78 ± 3	3.84 ± 0.97 [q]	(1959WA04)
		5.83	$3^-; 0$	16 ± 2	0.79 ± 0.22 [q]	(1959WA04)
10.23	$1^{(-)}; 0$	2.31	$0^+; 1$	≈ 100	4 ± 1.3	(1963RO17)
10.43 [m]	$2^+; 1$	0	$1^+; 0$	82 ± 6	9.6 ± 1.9	(1964RO03); Table 14.19
		5.11	$2^-; 0$	2 ± 1	0.2 ± 0.1	(1964RO03)
		6.44	$3^+; 0$	8 ± 1	0.9 ± 0.2	(1964RO03)
		7.03	$2^+; 0$	6 ± 1	0.7 ± 0.2	(1964RO03)
10.81 [n]	$5^+; 0$	6.44	$3^+; 0$	100	$\Gamma_\gamma/\Gamma = 4.1 \pm 0.8\%$	(1972NO08)
11.05	3^+	0	$1^+; 0$		$\Gamma_\gamma = 0.12 \pm 0.02$	(1980RA06)
		3.95	$1^+; 0$		$= 0.09 \pm 0.02$	(1980RA06)

A = adopted. See also Table 14.12 in (1976AJ04).
[a] See also Table 14.9 in (1970AJ04), Table 14.12 in (1976AJ04) and Tables 14.12 and 14.16 here.
[b] Means of branching ratios quoted in Table 14.9 (1970AJ04).
[c] Transitions to ^{14}N*(3.95, 4.92) are ≤ 0.4 and ≤ 0.3% (1972RE10).
[d] Transitions to ^{14}N*(2.31, 3.95, 4.92) are < 3, < 1 and < 1 percent (1966GO15).
[e] $5.83 \rightarrow 5.11$: $E_\gamma = 728.3 \pm 1.0$ keV (1966AL10); the plane polarization of the γ-rays leads to odd parity for ^{14}N*(5.83) (1962RO21).
[f] Transitions to ^{14}N*(3.95, 5.11) are < 1% (1966GO15).
[g] δ(M3/E2) $= -0.004 \pm 0.010$ (1976SI07).
[h] Transitions to ^{14}N*(4.92, 5.69) are < 0.4 and < 0.3% (1976SI07).
[i] δ(E2/M1) $= 0.74 \pm 0.09$ (1976SI07).
[j] $\Gamma_{\rm p} = 43^{-15}_{+31}$ meV (1978KE03); δ(M3/E2) $= -0.03 \pm 0.02$ (1978KE01).
[k] δ(E2/M1) $= -0.003 \pm 0.003$, 0.031 ± 0.006 and -0.037 ± 0.015 for the transitions to ^{14}N*(0, 6.44, 7.03) (1976SI07).
[l] Transitions to ^{14}N*(3.95, 4.91, 5.11, 6.20) are < 0.2%; transitions to ^{14}N*(7.97, 8.06, 8.49, 8.62) are < 0.03% (1976SI07).
[m] Transitions to ^{14}N*(2.31, 3.95, 5.69, 5.83) are < 1, < 2, < 3 and < 1% (1964RO03).
[n] $\Gamma = 0.39 \pm 0.16$ eV (J.W. Noe, private communication).
[o] $\Gamma_\gamma/\Gamma = 0.7 \pm 0.2$%; $(2J+1)\Gamma_{\rm p} = 12.6 \pm 3.6$ eV (1972BA56); $\Gamma = 2.5 \pm 0.7$ eV (J.W. Noe, private comm.).
[p] $\Gamma = (3.5 \pm 0.5) \times 10^{-2}$ eV from Table 14.12; $\Gamma_{\rm p}/\Gamma = 3.7 \pm 1.1$ (1967GA12) leads to $\Gamma_\gamma = 7.4 \pm 2.5$ meV. I am indebted to P.M. Endt and E.K. Warburton for their comments.
[q] E.K. Warburton (private communication). See also (1981KO08).
[r] δ(M2/E1) $= -0.16 \pm 0.02$, δ(E3/E1) $= -0.15 \pm 0.025$: see (1981KO08).
[s] E.K. Warburton (private communication).