

Errata to “Energy Levels of Light Nuclei, $A = 13 - 15$ ” (Nuclear Physics A268 (1976) 1)

I. in Table 2 of the Introduction:

a. under ^{13}C , in the δ column: omit the first value of $-(0.69 \pm 0.05)$, and under ^{13}N in the δ column, omit the first 4 values of -0.07 ± 0.13 , $0.82_{-0.6}^{+1.2}$, $\geq 0.83 \pm 0.29$ and -0.04 ± 0.14 .

b. under ^{13}C , change to these values:

$$3.85 \rightarrow 3.09, \Gamma_\gamma = (0.5 \pm 0.2) \times 10^{-6}, \Gamma_\gamma/\Gamma_W = 1.3 \pm 0.3;$$

$$3.85 \rightarrow 3.68, \text{E1}, \Gamma_\gamma/\Gamma_W = (1.0 \pm 0.1) \times 10^{-2}.$$

c. under ^{14}C , change to these values:

$$6.73 \rightarrow 6.09, \text{E2}, \Gamma_\gamma/\Gamma_W = 1.1 \pm 0.6;$$

$$7.01 \rightarrow 6.09, 2^+ \rightarrow 1^-, \text{E1}, \Gamma_\gamma/\Gamma_W = (2.3 \pm 1.2) \times 10^{-3}.$$

d. under ^{14}N , change to these values:

$$6.44 \rightarrow 0, \Gamma_\gamma/\Gamma_W = (4.1 \pm 0.2) \times 10^{-2}.$$

e. under ^{15}C , change to these values:

$$0.74 \rightarrow 0, \Gamma_\gamma/\Gamma_W = 0.44 \pm 0.01.$$

f. under ^{15}N , change to these values:

$$7.30 \rightarrow 0, \text{E1}, \Gamma_\gamma/\Gamma_W = (1.6 \pm 0.6) \times 10^{-2};$$

$$\text{M2}, \Gamma_\gamma/\Gamma_W = 0.4 \pm 0.2;$$

$$11.62 \rightarrow 0, \Gamma_\gamma/\Gamma_W = (2.7 \pm 0.1) \times 10^{-2}.$$

I am greatly indebted to Prof. P.M. Endt for his careful study of this table and for pointing out errors to his colleague who is a neophyte, in particular regarding γ -ray strengths.

II. in Table 14.11, Energy levels of ^{14}N :

E_x (MeV)	$J^\pi; T$
22.5	$(2^-); 1$
23.0	$(0, 1, 2)^-; 1$

These changes also have to be made in Figs. 7 and 9 [Energy level diagram for ^{14}N , and the $A = 14$ isobar diagram.]

I am greatly indebted to Prof. H.T. Richards for his careful study of the evidence concerning the J^π of these states and for suggesting the assignments shown above.

in ^{13}C , reaction 72: change “The population of $^{73}\text{C}^*(3.09, 3.85)\dots$ ” to read as The population of $^{13}\text{C}^*(3.09, 3.85)\dots$

in ^{13}N , reaction 28: change “...also $^{13}\text{N}^*(2.37, 3.51 \pm 3.55)$.” to read as ...also $^{13}\text{N}^*(2.37, 3.51 + 3.55)$); change NA76I to NA76/1976NA1P.

in ^{13}N , reaction 36: change “...see reaction 74 in ^{13}C .” to read as ...see reaction 75 in ^{13}C .

in ^{13}N , reaction 42: change “See ^{16}O in (AJ76).” to read as See ^{16}O in (AJ77).

in Table 13.27: change BE68B to BE68T/1968BE2C under footnote A; footnote ⁱ is referred to the row of $E_{\text{res}} = 1.734 \pm 6$ (MeV \pm keV) as best guess.

in ^{14}C , reaction 15: change $^{13}\text{C}(\text{n}, \text{t})^{10}\text{B}$ to $^{13}\text{C}(\text{n}, \text{t})^{11}\text{B}$.

in ^{14}N , reaction 14: change “... ^{12}C in (AJ76)...” to read as ^{12}C in (AJ75).

in ^{14}N , reaction 16, first paragraph: change Table 14.6 to Table 14.16.

in ^{14}N , reaction 23, change all PO75H to PO75F/1975PO10.

in ^{14}N , reaction 38, last line: change See also ^{15}O to See also ^{15}N .

in ^{14}N , reaction 45: change Table 12.27 to Table 14.27.

in ^{14}N , reaction 48, second paragraph: change “... ^{18}F in (AJ71, AJ77) to ^{18}F in (AJ72, AJ78).

in ^{14}N , reaction 65, last paragraph: change ^{18}F in (AJ77) to ^{18}F in (AJ78).

in Table 15.13, 9.2 ± 0.5 in column (TH67L/1967TH05) should be at the same row with C \rightarrow 9.155.