

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:

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

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

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

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

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

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

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

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

$$0.74 \rightarrow 0, \Gamma_{\gamma}/\Gamma_{\text{W}} = 0.44 \pm 0.01.$$

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

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

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

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

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 Table 13.7, under the row of Γ_{γ_2} (eV): add footnote ^e to the 2nd and 3rd columns. (Added on 07/14/2015)

in Table 13.8, under 2nd column, add footnote ^f to the value of 5.3. (Added on 07/14/2015)

in Table 13.16, under 1st column, add footnote ^e to the value of 15.8. (Added on 07/15/2015)

in ¹³C, reaction 72: change “The population of ⁷³C*(3.09, 3.85)...” to read as The population of ¹³C*(3.09, 3.85)...

in ¹³C, reaction 82: change “see Table 13.19” to “see Table 13.22”. (Added on 01/14/2020)

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 ¹³N, reaction 20: change “(FU74A)” to “(FU75/1975FU01)”. (Added on 07/22/2015)

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

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

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

in ¹³O, reaction 3: change “See ((AJ75)).” to read as “See ((AJ74/1974AJ01)).” (Added on 07/22/2015)

in Table 14.4, footnote ^c: change “...shown in Table 14.1.” to read as “...shown in Table 14.3.” (Added on 09/08/2015)

in ¹⁴C, reaction 15: change ¹³C(n, t)¹⁰B to ¹³C(n, t)¹¹B.

in ¹⁴N, Table 14.12: footnote ^c was not labeled anywhere in the table. (Added on 08/25/2015)

in ¹⁴N, Table 14.15: add footnote ^b to the 6th column title “Refs.”. (Added on 08/25/2015)

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

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

in ¹⁴N, 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 15.4, add ^c for $E_x = 10.7019 \pm 0.3$ (MeV \pm keV) in the first column. Note: This footnote is added by the best guess; see abstract of (KO76A/1976KO11). (Added on 10/13/2015)

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