

Errata to “Energy Levels of Light Nuclei, A = 16 – 17” (Nuclear Physics A375 (1982) 1)

in Table 16.4, Energy levels of ^{16}N : at the 0.3975 ± 0.7 level, change $|g|$ to -18.3 ± 0.13^1 .

in ^{16}N , reaction 2(c): change $^9\text{Be}(^7\text{Li}, ^8\text{Li})^8\text{B}$ to be $^9\text{Be}(^7\text{Li}, ^8\text{Li})^8\text{Be}$.

in ^{16}N , reaction 28: delete the entire last sentence: “Based on $\tau_m = 5.6 \pm 0.3$ psec, $|g| = 1.5 \pm 0.1$.”

in Table 16.12, Radiative decays in $^{16}\text{O}^2$:

E_i	E_f	Γ_{rad} (eV)
8.87	0	$(2.6 \pm 0.4) \times 10^{-4}$
	6.05	$(3.1 \pm 1.0) \times 10^{-6}$
	6.13	$(2.8 \pm 0.3) \times 10^{-3} \text{ g}$
	6.92	$(1.5 \pm 0.3) \times 10^{-4}$
	7.12	$(4.6 \pm 0.8) \times 10^{-4} \text{ g}$
10.96	7.12	(0.08 ± 0.05)

^g $(3.0 \pm 0.5) \times 10^{-4}$ (M1), $(2.5 \pm 0.3) \times 10^{-3}$ (E2); and $< 6.4 \times 10^{-5}$ (M1), $> 4 \times 10^{-4}$ (E2) for the transitions to $^{16}\text{O}^*(6.13, 7.12)$, respectively.

in Table 16.13, Resonances in $^{12}\text{C} + \alpha$: For Resonance no. 61, change J^π from $(\pm 3^-)$ to $(\neq 3^-)$.

in Table 16.14, States of ^{16}O from $^{12}\text{C}(^6\text{Li}, d)$ and $^{12}\text{C}(^7\text{Li}, t)$: For the level at 9.63 ± 30 , change the $\gamma_{\text{c.m.}}$ from 409 ± 10 to 400 ± 10 keV.

in ^{16}O , reaction 33: change $E_{\bar{d}} < 5.0$ MeV to $E_d < 5.0$ MeV.

in ^{16}O , reaction 48: change $^{15}\text{N}(d, n)^{15}\text{O}$ to $^{15}\text{N}(d, n)^{16}\text{O}$.

in ^{16}O , reaction 81: “...[see reaction 25 in ^{16}N and Table 16.10]...” should read as ...[see reaction 26 in ^{16}N and Table 16.10]...

¹ (AS75A, FO75D): I am grateful to Drs. E.K. Warburton and D.P. Balamuth for pointing out this error to me.

² I am greatly indebted to Dr. D.J. Millener for calculating the correct values for Γ_{rad} for the decay of $^{16}\text{O}^*(8.87)$ and for pointing out the typographical error in the value for the decay of $^{16}\text{O}^*(10.96)$.

in ^{16}O , reaction 84: change ^{18}F in (83AJ01) to ^{19}F in (83AJ01).

in Table 16.18, Levels of ^{16}O from $^{15}\text{N}(\text{p}, \gamma)$, $^{15}\text{N}(\text{p}, \text{p})$ and $^{15}\text{N}(\text{p}, \alpha)$: Delete the r in the Γ_{α_1} column that is in line with Resonance no. 6. The r should be in line with Resonance no. 5 that has $\Gamma_{\alpha_0} = 40$ keV.

in ^{16}F , reaction 4: “...the analog reaction ($^{16}\text{O}(\text{t}, ^3\text{He})^{16}\text{N}$).... [see reaction 23 in ^{16}N (FL74A)]...” should read as ...the analog reaction ($^{16}\text{O}(\text{t}, ^3\text{He})^{16}\text{N}$).... [see reaction 24 in ^{16}N (FL74A)]...

in ^{17}O , reaction 21: change E_α to E_α .

in ^{17}F , reaction 1: the quoted $\log ft$ value comes from (AL72M). I am grateful to Prof. C.D. Goodman for suggesting that it is too high. A recalculation suggests $\log ft = 3.36$. Therefore change $\log ft = 3.488 \pm 0.001$ to 3.36.

in ^{17}F , reaction 1: change $\log ft > 8.6$ to read as $\log ft > 5.6$.

in Table 17.20, add footnote ^f to 72 ± 37 ^e under Γ_γ (eV) column for $E_p = 14.435 \pm 10$ (MeV \pm keV). (Added on 07/24/2014)

in ^{17}F , reaction 13: under 2nd paragraph, change reference AL78T to AL78I. (Added on 07/21/2014)