

Table 13.6 from (1976AJ04): Summary of results on the total radiation widths of the low-lying levels of  $^{13}\text{C}$ - $^{13}\text{N}$  <sup>a</sup>

$J_i^\pi \rightarrow J_f^\pi$	$^{13}\text{C}^*$ (MeV)	$\Gamma_\gamma$ (eV)	Refs.	$^{13}\text{N}^*$ (MeV)	$\Gamma_\gamma$ (eV)	Refs.
$\frac{1}{2}^+ \rightarrow \frac{1}{2}^-$	3.09 <sup>b</sup>	$0.43 \pm 0.04$	<a href="#">Table 13.5</a>	2.37	$0.64 \pm 0.07$	see ( <a href="#">1975FO1L</a> ) <sup>g</sup>
$\frac{3}{2}^- \rightarrow \frac{1}{2}^-$	3.68 <sup>c</sup>	$0.41 \pm 0.04$	<a href="#">Table 13.5</a>	3.51 <sup>f</sup>	0.53	( <a href="#">1963YO06</a> )
$\frac{5}{2}^+ \rightarrow \frac{1}{2}^-$	3.85 <sup>d</sup>	$(5.4 \pm 0.3) \times 10^{-5}$ <sup>e</sup>	<a href="#">Table 13.5</a>	3.55	$< 2 \times 10^{-3}$	( <a href="#">1963YO06</a> )

<sup>a</sup> See also [Tables 13.20](#) and [13.26](#).

<sup>b</sup>  $B(E1) = 0.040 \pm 0.005$  W.u.:  $\delta = -0.69 \pm 0.05$  (see ([1975MA21](#))).

<sup>c</sup> Branching ratios for cascade via  $^{13}\text{C}^*(3.09)$  is  $1.6 \pm 0.3\%$  ([1975TR07](#)).

<sup>d</sup> Branching ratios for cascades via  $^{13}\text{C}^*(3.68, 3.09)$  are  $35 \pm 2\%$  and  $1.6 \pm 0.4\%$ , respectively ([1969LI07](#)),  $36.0 \pm 0.7\%$  and  $0.6 \pm 0.2\%$ , respectively ([1975TR07](#)).

<sup>e</sup> Assuming the ground state branching ratio to be  $69 \pm 4\%$  [but see footnote <sup>b</sup>] and the mixing ratio  $\delta(E3/M2) = +(0.12 \pm 0.03)$  ([1966PO11](#)),  $\Gamma(E3) = (5.2 \pm 2.6) \times 10^{-7}$  eV and  $\Gamma(M2) = (3.61 \pm 0.23) \times 10^{-5}$  eV: then  $|M(E3)|^2 = 2.0 \pm 1.0$  single particle units ([1975RA29](#)).

<sup>f</sup> Branching ratio for cascade via  $^{13}\text{N}^*(2.37)$  is  $8 \pm 1\%$  ([1974RO29](#)).

<sup>g</sup> See also ([1968RI16](#), [1975MA21](#)).