

Table 18.18 from (1995TI07): Branching in  $^{18}\text{N}(\beta^-)^{18}\text{O}$  <sup>a</sup>

Decay to $^{18}\text{O}^*$ (keV)	Decay mode	$J^\pi$	Branch <sup>b</sup> (%)	$\log ft$
$1982.05 \pm 0.09$ <sup>c</sup>	$\gamma$	$2^+$	$3.4 \pm 1.3$	$6.79 \pm 0.17$
$3554.13 \pm 0.80$	$\gamma$	$4^+$	$< 0.5$	$> 7.3$
$3633.70 \pm 0.11$	$\gamma$	$0^+$	$< 0.3$	$> 7.5$
$3920.42 \pm 0.14$	$\gamma$	$2^+$	$< 0.4$	$> 7.4$
$4455.52 \pm 0.10$	$\gamma$	$1^-$	$47.2 \pm 0.9$	$5.167 \pm 0.013$
$5097.60 \pm 0.60$	$\gamma$	$3^-$	$< 0.4$	$> 7.1$
$5530.17 \pm 0.32$	$\gamma$	$2^-$	$2.7 \pm 0.3$	$6.16 \pm 0.05$
$6198.22 \pm 0.40$	$\gamma$	$1^-$	$1.2 \pm 0.2$	$6.34 \pm 0.08$
$6349.76 \pm 1.0$	$\gamma$	$(2^-)$	$1.9 \pm 0.2$	$6.10 \pm 0.05$
$6880.45 \pm 0.27$	$\gamma$	$0^-$ <sup>d</sup>	$12.8 \pm 0.7$	$5.13 \pm 0.03$
7620	$\alpha$	$1^-$	$6.8 \pm 0.5$	$5.17 \pm 0.04$
$7771.07 \pm 0.50$	$\gamma$	$2^-$ <sup>d</sup>	$4.3 \pm 0.4$	$5.32 \pm 0.05$
8040	$\alpha$	$1^-$	$1.8 \pm 0.2$	$5.61 \pm 0.05$
9000 <sup>e</sup>	$\alpha$	$(1^-)$	$\geq 3.6 \pm 0.2$	$\leq 5.0$
$(9090 \pm 30)$	n	$(0-2)^-$	$0.16 \pm 0.03$	$6.27 \pm 0.09$
$9270 \pm 20$	n	$(0-2)^-$	$0.39 \pm 0.09$	$5.80 \pm 0.11$
$9470 \pm 20$	n	$(0-2)^-$	$0.47 \pm 0.09$	$5.64 \pm 0.09$
$9690 \pm 20$	n	$(0-2)^-$	$0.14 \pm 0.03$	$6.06 \pm 0.10$
$9910 \pm 20$	n	$(0-2)^-$	$0.17 \pm 0.03$	$5.87 \pm 0.08$
$10240 \pm 30$	n	$(0-2)^-$	$0.16 \pm 0.03$	$5.73 \pm 0.09$
$10650 \pm 30$	n	$(0-2)^-$	$0.43 \pm 0.09$	$5.07 \pm 0.10$
$10990 \pm 30$	n	$(0-2)^-$	$0.13 \pm 0.03$	$5.38 \pm 0.11$
$11490 \pm 30$	n	$(0-2)^-$	$0.19 \pm 0.04$	$4.85 \pm 0.10$

<sup>a</sup> Branchings to  $\gamma$ -decaying levels (1982OL01), branchings to  $\alpha$ -decaying levels (1989ZH04) and branchings to n-decaying levels (1994SC01).

<sup>b</sup>  $12.2 \pm 0.6\%$  of the  $\beta$ -decay branching ratio has been measured to feed  $\alpha$ -emitting states (1989ZH04).  $14.3 \pm 2.0\%$  has been measured to feed n-decaying states (1991RE02). The branching ratio of  $\gamma$ -decaying states (1982OL01) have been renormalized to take these values into account. See reaction 22 of  $^{18}\text{O}$ . Branchings in this table do not add up to 100% since n-decaying levels below 9.00 MeV were not measured by (1994SC01) and there is a missing 12.1% branching to n-decaying levels not listed.

<sup>c</sup>  $E_\gamma = 1981.933 \pm 0.09$  keV is adopted by (1982OL01).

<sup>d</sup> See (1982OL01).

<sup>e</sup> Found as a broad bump at 3 MeV in  $\beta$ -delayed alpha spectrum. Could be several unresolved  $1^-$  states or a new broad  $1^-$  state in  $^{18}\text{O}$  (1989ZH04).