

$^{15}\text{N}(\text{p},\text{X})$  1993Ti07

Type	Author	History	Citation	Literature Cutoff Date
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For additional comments see [1993Ti07](#).

$^{16}\text{O}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
12442. 4	$1^-$	103 keV 4	$T=0; \Gamma_p=0.9$ keV 1; $\Gamma_{\gamma 0}=12$ eV 2 $\Gamma_{\alpha 0}=102$ keV 4; $\Gamma_{\alpha 1}=0.025$ keV; $\Gamma_{\gamma 1}=0.12$ eV 4.
12530. 1	$2^-$	0.097 keV 10	$T=0; \Gamma_p=0.016$ keV 3; $\Gamma_{\gamma 0}=33 \times 10^{-3}$ eV 5 $\Gamma_{\alpha 1}=0.092$ keV 10; $\Gamma_{\gamma 1}=2.1$ eV 2.
12793. 7	$0^-$	38 keV 38	$T=1; \Gamma_p=40$ keV
12968.6 3	$2^-$	1.38 keV 4	$T=1; \Gamma_p=1.04$ keV 7; $\Gamma_{\gamma 0}=34 \times 10^{-3}$ eV 9 $\Gamma_{\alpha 1}=0.30$ keV 6.
13091. 10	$1^-$	131 keV 10	$T=1; \Gamma_p=100$ keV; $\Gamma_{\gamma 0}=32$ eV 5 $\Gamma_{\alpha 0}=40$ keV.
$13.10 \times 10^3$ 15	$2^+$		$\Gamma_p \Gamma_{\alpha 0}=500$ keV <sup>2</sup> .
13262. 3	$3^-$	21.1 keV 9	$T=1; \Gamma_p=4.1$ keV $\Gamma_{\alpha 1}=8.2$ keV 11.
13664. 3	$1^+$	64 keV 3	$T=0; \Gamma_p=10$ keV; $\Gamma_{\gamma 0}<1$ eV $\Gamma_{\alpha 1}=59$ keV 6.
13900. 20		84 keV 2	$\Gamma_p=0.5$ keV
13982. 3	$2^-$	22 keV 2	
14921. 6	$2^+$	52 keV 5	$\Gamma_p=20$ keV 3 $\Gamma_{\alpha 0}=1.5$ keV; $\Gamma_{\alpha 1}=30$ keV.
$15.10 \times 10^3$	$0^+$	309 keV 93	$\Gamma_p=12$ keV $\Gamma_{\alpha 0}=152$ keV; $\Gamma_{\alpha 1}=163$ keV.
15186. 11	$2^-$	63 keV 4	$\Gamma_{\alpha 1}=7$ keV; $\Gamma_p/\Gamma=0.78$ .
$15.26 \times 10^3$	$2^+$	295 keV 93	$T=(0); \Gamma_p=15$ keV $\Gamma_{\alpha 0}=12$ keV; $\Gamma_{\alpha 1}=182$ keV.
15406. 8	$3^-$	122 keV 17	$\Gamma_p=15$ keV 5 $\Gamma_{\alpha 0}=103$ keV; $\Gamma_{\alpha 1}=1$ keV.
16200. 90	$1^-$	581 keV 56	$T=0; \Gamma_p=210$ keV 38
16210. 5	$1^+$	19 keV 3	$T=1; \Gamma_p=7$ keV 3; $\Gamma_{\gamma 0}=3.7$ eV 5 $\Gamma_p \Gamma_{\gamma}/\Gamma=2.70$ eV 25; $\Gamma_{\gamma 1}=0.44$ eV 6.
16349. 12	$0^+$	61 keV 8	$T=0; \Gamma_p=53$ keV 12
16449. 9	1 to 4	24 keV 8	$T=1$ $\Gamma_p \Gamma_{\gamma}/\Gamma=1.11$ eV 24.
16813. 5	$3^+$	26 keV 4	$T=0 \& 1; \Gamma_p=7$ keV 2 $\Gamma_{\gamma 2}=1$ eV; $\Gamma_{\gamma 3}=1.2$ eV.
17090. 40	$1^-$	380 keV 40	$T=1; \Gamma_p=270$ keV 25
17120. 5	$1^+$	31 keV 4	$T=1; \Gamma_p=22$ keV; $\Gamma_{\gamma 0}=6.7$ eV 10 $\Gamma_p \Gamma_{\gamma}/\Gamma=3.90$ eV 50; $\Gamma_{\gamma 1}=1.00$ eV 17.
17268. 9	$1^-$	75 keV 8	$T=1; \Gamma_p=45$ keV; $\Gamma_{\gamma 0}=67$ eV $\Gamma_{\gamma 3}=8$ eV.
17607. 8	$2^+$	109 keV 14	$T=(1); \Gamma_p=37$ keV 8
$17.84 \times 10^3$ 10	$2^-$	0.82 MeV 10	$\Gamma_p=0.50$ MeV 10
17877. 6	$1^-, 2^-$	24 keV 3	$T=1; \Gamma_p=6$ keV
18027. 6	$3^-$	26 keV 6	$T=1; \Gamma_p=13$ keV 3 $\Gamma_{\alpha 1}=8.9$ keV 32; $\Gamma_{\gamma 1}=4.8$ eV 19; $\Gamma_{p 0}=7.8$ keV 28.
18208. 15	$2^+$	141 keV 24	$\Gamma_p=33$ keV 12
18430. 15	$2^+$	91 keV 38	$\Gamma_p=11$ keV 6
18484. 6	$1^-$	35 keV 6	$\Gamma_p=17$ keV 3
$18.78 \times 10^3$ 10	$1^+$		$T=1; \Gamma_{\gamma 0} \geq 3.6$ eV

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$^{15}\text{N}(\text{p},\text{X})$  **1993Ti07 (continued)** $^{16}\text{O}$  Levels (continued)

E(level)	$J^\pi$	$T_{1/2}$	Comments
18979. 9	4 <sup>-</sup>	8.2 keV 38	$\Gamma_p/\Gamma \leq 0.5$ . T=1
18990. 30	1 <sup>+</sup>	$\approx 244$ keV	$\Gamma_{\alpha 1} = 0.57$ keV 49; $\Gamma_{\gamma 1} = 7.1$ eV 31 $\Gamma_{p0} = 0.98$ keV 19. $\Gamma_p \leq 130$ keV; $\Gamma_{\gamma 0} = 38$ eV $\Gamma_p \Gamma_\gamma/\Gamma \geq 1.8$ eV.
19.08 $\times 10^3$	2 <sup>+</sup>	$\approx 121$ keV	T=(1); $\Gamma_p \approx 30$ keV
19250. 30	(2, 3)	94 keV	T=(1) $\Gamma_{\gamma 1} = 1.5$ eV.
19470. 30	1 <sup>-</sup>	328 keV	T=1
19893. 7	3	42 keV 9	T=1; $\Gamma_p = 25$ keV 10 $\Gamma_{\gamma 1} = 17$ eV 6.
20412. 17	1 to 4	188 keV 19	T=1 $\Gamma_{\gamma 1} = 38$ eV; $\Gamma_{\gamma 2} = 38$ eV.
20.55 $\times 10^3$		150 keV	
20945. 20	1 <sup>-</sup>	300 keV 10	T=1; $\Gamma_{\gamma 0} = 170$ eV $\Gamma_p \Gamma_\gamma/\Gamma = 21$ eV 1.
21.50 $\times 10^3$	1 to 4	122 keV	
21.66 $\times 10^3$		$\leq 42$ keV	T=0
22150. 10	1 <sup>-</sup>	684 keV 10	T=1 $\Gamma_p \Gamma_\gamma/\Gamma = 488$ eV 20.
22890. 10	1 <sup>-</sup>	300 keV 10	T=1; $\Gamma_{\gamma 0} = 120$ eV $\Gamma_p \Gamma_\gamma/\Gamma = 69$ eV 5; $\Gamma_{\gamma 1} = 27$ eV.
24070. 30	1 <sup>-</sup>	553 keV 38	T=1 $\Gamma_p \Gamma_\gamma/\Gamma = 130$ eV 13.
24760. 60	(2,4) <sup>+</sup>	338 keV 56	T=1; $\Gamma_p = 85$ keV
25120. 60	1 <sup>-</sup>	2.95 MeV 30	T=1 $\Gamma_p \Gamma_\gamma/\Gamma = 0.65$ keV 12.
26410. 80	(2,4) <sup>+</sup>	530 keV 80	T=1; $\Gamma_p = 122$ keV
27.35 $\times 10^3$ 10	(2,4) <sup>+</sup>	0.83 MeV 12	T=1; $\Gamma_p = 206$ keV