

$^4\text{He}(^{18}\text{O},n\gamma)$ **1979Wa10**

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	R. B. Firestone	NDS 127, 1 (2015)	15-Jan-2015

1979Wa10: $^4\text{He}(^{18}\text{O},n\gamma)$, E=20-27 MeV. Measured DSA. ^{21}Ne levels deduced $T_{1/2}$. Implanted target. Shell model interpretation.

1977Be30: $^4\text{He}(^{18}\text{O},n)$ E=19 MeV, measured $\gamma(\theta,t)$, DSA.

1978Ro10: $^2\text{H}(^{20}\text{Ne},p\gamma)$, $(^{20}\text{Ne},n\gamma)$, E=47.0 MeV; measured $p\gamma(\theta)$, $\gamma(\theta,t)$, DSA.

1981Ru01: $(^{16}\text{O},\alpha p)$, E=31.5 MeV. Plunger system, laser interferometry.

 ^{21}Ne Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0		
350.72 6	7.13 ps 14	$T_{1/2}$: Weighted average of 7.0 ps 2 (1977Be30), 7.09 ps 14 (1978Ro10), and 7.5 ps 3 (1981Ru01).
1747.2 3	49 fs 4	
2788.87 10		
2795.8 7	5.5 fs 7	
2867.2 4	42 fs 4	

 $\gamma(^{21}\text{Ne})$

<u>E_γ</u>	<u>I_γ</u>	<u>$E_i(\text{level})$</u>	<u>E_f</u>
350.72 6		350.72	0
1120.0 3	62 2	2867.2	1747.2
1396.4 3	5 1	1747.2	350.72
1747.2 3	95 1	1747.2	0
2516.5 4	38 2	2867.2	350.72
2788.87 10	100	2788.87	0
2795.64 7	100	2795.8	0

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Level Scheme

Intensities: Type not specified

Legend

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{max}$
- $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{max}$
- $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{max}$

