^{16}O(n,γ):E(n)=10-80 keV   2008Oh05

	History		
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. G. Sheu, J. H. Kelley, J. Purcell	ENSDF	5-Aug-2021

1994NaZT: ^{16}O(n,γ), E=10-80 keV; measured Eγ, Iγ; deduced Maxwellian-averaged σ.

1995Ig07: ^{16}O(n,γ), E=10-80 keV; measured σ; deduced Maxwellian averaged σ, nonresonant p-wave capture role.

2008Oh05: XUNDL dataset compiled by McMaster, 2008.

E(n)=10-80 keV neutrons produced in the reaction ^{7}Li(p,n) reaction using the 3.2 MV Pelletron accelerator at the Tokyo Institute of Technology. Measured Eγ, Iγ, $\gamma\gamma$ coin using anti-Compton NaI(Tl) spectrometer, time-of-flight method.

Main study was on neutron capture in ^{18}O leading to levels in ^{19}O. Since ^{16}O and ^{12}C were present in the target, side measurements were done on these two nuclides as well.

^{17}O Levels

E(level)	J^π	C^2S	Comments
0	$5/2^+$	$0.9^\dagger$ 1	
870	$1/2^+$	$0.9^\dagger$ 1	
3060	$1/2^-$		
(4190)			S(n)=4143.13 11 (2003Au03), E(n)(lab)$\approx$47 keV.

† Quoted by (2008Oh05) as 0.8 to 1.0.

$\gamma(^{17}$O)

E$_i$(level)	E$_\gamma$	I$_\gamma$	E$_f$	J^π_f
(4190)	3320	76	870	$1/2^+$
	4190	24	0	$5/2^+$

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Level Scheme

Intensities: % photon branching from each level

$^{17}_{8}$O$_9$