

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia and A. M. Hurst		NDS 134, 1 (2016)	1-Feb-2016

$Q(\beta^-)=16.07\times 10^3$ 17; $S(n)=6.9\times 10^2$ 11; $S(p)=28540$ SY; $Q(\alpha)=-2.13\times 10^4$ 3 [2012Wa38](#)

$\Delta S(p)=530$ (syst) ([2012Wa38](#)).

$S(2n)=-90$ 110 ([2012Wa38](#)).

[1990Gu02](#): Nonexistence determined in $\text{Ta}(^{48}\text{Ca},X)$ by [1990Gu02](#).

[1996Fa01](#): $^9\text{Be}(^{40}\text{Ar},X)$, $E=90$ MeV/nucleon; Several hundred events expected, none observed ([1996Fa01](#)).

[2000Oz01](#): $^9\text{Be}(^{40}\text{Ar},X)$, $E\sim 1$ GeV/nucleon; Confirm particle instability.

[2004Lu19](#): $\text{Ta}(^{40}\text{Ar},X)$, $E=90.1$ MeV/nucleon; No evidence was found.

[2005Sc20](#): $\text{C}(^{27}\text{F},X)$, $E=90$ MeV/nucleon; No evidence of ^{26}O .

 ^{26}O LevelsCross Reference (XREF) Flags

A $^9\text{Be}(^{27}\text{F},^{26}\text{O}), \text{C}(^{27}\text{F},^{26}\text{O})$

E(level)	J^π	$T_{1/2}$	XREF	Comments
0.0	0^+	4.5 ps +32-34	A	%2n=100 E(level): 2016Ko11 deduced g.s. of ^{26}O as unstable to 2-neutron emission, with an adopted resonance value of 18 keV 10 (stat) 4 (syst). from their measurements. $T_{1/2}$: From 2013Ko10 . Half-life of 4.5 ps +11-15 (stat) 30 (syst) is deduced at 82% confidence level, suggesting the possibility of two-neutron radioactive decay. Evaluators added the uncertainties in quadrature. Other values: ≤ 4.0 ns, from mean lifetime of $\tau \leq 5.7$ ns (2013Ca18) at 95% C.L.; < 10 fs (2013Th04).
1277 96	(2^+)		A	J^π : 2016Ko11 propose as the first excited state of ^{26}O . E(level): From $E_{\text{res}}=1280$ keV +110-80 (2016Ko11 list as 1.28 MeV +11-8). Compiler used $E_{\text{res}}=1295$ keV 95, with symmetric uncertainty, to deduce the excited level energy. FWHM 540 keV at 1300 keV.
2×10^3 †			A	E(level): From 2013Ko10 , resonance energy at approximately 2 MeV. Note that position of this state in Figure 1 of 2013Ko10 is based on predictions from the continuum shell model calculations.
4.23×10^3 † 20			A	E(level): Deduced by evaluator from measured $E_r=4225$ keV +227-176 (2013Ca18) and considering $E_r=18$ keV 10 (stat) 4 (syst) for g.s. Evaluator used $E_{\text{res}}=4250$ keV 200, with symmetric uncertainty, to deduce the excited level energy.

† [2016Ko11](#) note that no resonance like structure at higher energies reported by [2013Ca18](#) was observed.