Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. Kelley, C. G. Sheu	ENSDF	01-March-2014

S(p)=−1556 *41*; Q(α)=−9.26e3 *40* 2012Wa38

Theoretical works:

2011Sh17: Simple potential model comparison of ^{14}F and its mirror nucleus ^{14}B, and a critical analysis of the 2010Go11 results. The main critique is connected with the suggestion that in 2010Go16 the observed $J^{\pi}=3^{-}$ state at E(^{13}O+p)=3.05 MeV is at too low an energy and that its deduced spectroscopic factor is not appropriate; the authors suggest the E(^{13}O+p)=3.05 MeV state is the $J^{\pi}=1^{+}$ state and mirror of ^{14}B*(1.28 MeV).

2011Sh21: Comparison of ab initio no-core Shell Model calculations with data on ^{14}F and its mirror ^{14}B nucleus.

2010Ma06: Performed ab initio no-core Shell Model calculations of the mass of ^{14}F and its mirror ^{14}B nucleus along with the ^{13}O nucleus. In addition they calculated the predicted excitation energies for ^{14}F and ^{14}B.

See earlier predictions on ^{14}F ground state properties reported in 1978Gu10, 1984An18, 1993Po11, 2000Po32, 2008Va13.

^{14}F Levels

Cross Reference (XREF) Flags

A ^{1}H(^{13}O,P)

E(level)[†]	J$^{\pi}$	T$_{1/2}$	$\Gamma/\Gamma_{s.p.}$	XREF	Comments
0	2^{-}	910 keV *100*	0.85	A	E(level): mass excess=31960 keV *50*.
0.54×10^{3} *18*	1^{-}	≈1 MeV	0.6	A	
1490 *72*	3^{-}	210 keV *40*	0.55	A	
2.79×10^{3} *11*	4^{-}	550 keV *100*	0.5	A	

[†] S(p)(^{14}F)=1.56 MeV *4*.