

$^{14}\text{N}(^3\text{He}, ^6\text{He})$ [2003Gu06,1974Be20](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu		NP A880,88 (2012)	1-Jan-2011

[1974Be20](#): $^{14}\text{N}(^3\text{He}, ^6\text{He})$, $E=70$ MeV; measured $\sigma(E(^6\text{He}), E_t, E(^3\text{He}))$. ^{11}N deduced levels.

[1995Gu08](#): $^{14}\text{N}(^3\text{He}, ^6\text{He})$, $E=70.08$ MeV; measured ^6He energy spectra; deduced isobaric multiplet mass equation. ^{11}N deduced levels, J , π , configuration.

[2003Gu06](#): $^{14}\text{N}(^3\text{He}, ^6\text{He})$, $E=73.4$ MeV; measured $\sigma(E, \theta)$. ^{11}N deduced levels, J , π , resonance widths. DWBA analysis.

[2003Gu30](#): $^{14}\text{N}(^3\text{He}, ^6\text{He})$, $E=73.4$ MeV; measured particle spectra, $\sigma(E, \theta)$. ^{11}N deduced resonance energies, J , π , widths. DWBA analysis.

 ^{11}N Levels

E(level)	J^π	$T_{1/2}$	Comments
0	$1/2^+$	0.24 MeV 24	E(level): from $^{11}\text{N}_{\text{g.s.}}=E_{\text{res}}=1.49$ MeV 6, see comments In the Adopted Levels data set. for $^{14}\text{N}(^3\text{He}, ^6\text{He})$ the reported ground state energy $E_{\text{res}}=1.31$ MeV 5 from (2003Gu06) lies above the adopted ground state energy $E_{\text{res}}=1.49$ MeV 6. The energies of higher excited states are deduced assuming $^{11}\text{N}_{\text{g.s.}}=E_{\text{res}}=1.49$ MeV 6.
820 63	$1/2^-$	0.73 MeV 6	E(level): Γ : from $E_{\text{res}}=1.31$ MeV 5 (2003Gu06) . E(level): from $E_{\text{res}}=2.31$ MeV 2 (2003Gu06) and $^{11}\text{N}_{\text{g.s.}}=E_{\text{RES}}=1.49$ MeV 6; see also $E_{\text{res}}=2.24$ MeV 10 (1974Be20) . Γ : from $\Gamma=0.74$ MeV 10 (1974Be20) and 0.73 MeV 6 (2003Gu06) .
2290 80	$5/2^+$	0.56 MeV 17	E(level): Γ : from $E_{\text{res}}=3.78$ MeV 5 (2003Gu06) and $^{11}\text{N}_{\text{g.s.}}=E_{\text{RES}}=1.49$ MeV 6.
3070 60	$3/2^-$	0.30 MeV 5	E(level): Γ : from $E_{\text{res}}=4.56$ MeV 1 (2003Gu06) and $^{11}\text{N}_{\text{g.s.}}=E_{\text{RES}}=1.49$ MeV 6.
4420 70	$(5/2^-)$	1.30 MeV 9	E(level): Γ : from $E_{\text{res}}=5.91$ MeV 3 (2003Gu06) and $^{11}\text{N}_{\text{g.s.}}=E_{\text{RES}}=1.49$ MeV 6.
5.31×10^3 30	$(3/2^-)$		E(level): Γ : from $E_{\text{res}}=6.80$ MeV 30 (2003Gu06) and $^{11}\text{N}_{\text{g.s.}}=E_{\text{RES}}=1.49$ MeV 6.