| Type | Author History | Citation | Literature Cutoff Date |
| :---: | :---: | :---: | :---: |
| Full Evaluation | J. H. Kelley, C. G. Sheu, J. L. Godwin, et al. | NP A745 155 (2004) | 31-Mar-2004 |
| ${ }^{\mathrm{B}}(\mathrm{p}, \mathrm{t}) \mathrm{E}$ not given. ${ }^{9} \mathrm{~B}$ levels deduced $\mathrm{J}, \pi$. |  |  |  |
| ${ }^{\mathrm{B}}(\mathrm{p}, \mathrm{t}) \mathrm{E}=45 \mathrm{keV}$, measured $\sigma\left(\mathrm{E}_{\mathrm{t}}, \theta\right), \sigma\left(\mathrm{E}\left({ }^{3} \mathrm{He}\right), \theta\right) .{ }^{9} \mathrm{~B}$ deduced levels $\mathrm{J}, \pi, \mathrm{T}, \mathrm{L}$, isobaric analogs. |  |  |  |
| $\mathrm{B}(\mathrm{p}, \mathrm{t}) \mathrm{E}=40,44,50 \mathrm{MeV}$, analyzed $\sigma(\theta)$. Zero-range DWBA. |  |  |  |
| $\left.{ }^{\mathrm{B}} \mathrm{p}, \mathrm{t}\right) \mathrm{E}=46.5 \mathrm{MeV}$, measured $\sigma\left(\mathrm{E}_{\mathrm{t}}\right) .{ }^{9} \mathrm{~B}$ deduced levels, new mass quartet, mass excesses. |  |  |  |
| ${ }^{\mathrm{B}}(\mathrm{p}, \mathrm{t}) \mathrm{E}=42 \mathrm{MeV}$, measured $\sigma\left(\mathrm{E}_{\mathrm{t}}, \mathrm{E}\left({ }^{3} \mathrm{He}\right), \mathrm{E}_{\mathrm{P}^{\prime}}\right), \mathrm{Q} .{ }^{9} \mathrm{~B}$ deduced levels. |  |  |  |
| $\mathrm{B}(\mathrm{p}, \mathrm{t}) \mathrm{E}=660 \mathrm{MeV}$, measured absolute $\sigma$. |  |  |  |

$\xrightarrow{9}$ B Levels

| E(level) | $\mathrm{J}^{\pi}$ | $\mathrm{T}_{1 / 2}$ | Comments |
| :---: | :---: | :---: | :---: |
| 0.0 | 3/2 ${ }^{-}$ |  | $\mathrm{T}=1 / 2$ |
| $2.36 \times 10^{3}$ | 5/2- |  | $\mathrm{T}=1 / 2$ |
| $7.0 \times 10^{3}$ |  |  |  |
| $12.06 \times 10^{3}$ |  |  |  |
| $14.01 \times 10^{3}$ |  |  |  |
| 14655.025 | $3 / 2^{-}$ |  | $\mathrm{T}=3 / 2$ |
|  |  |  | E (level): from (1974Ka15). Deduced mass excess of 27071.1 keV 23 . This value is related to the accepted ${ }^{11} \mathrm{C}$ mass excess and level energies and ${ }^{9} \mathrm{~B}$ mass excess, which have varied since the original published value. At that time mass excesses for ${ }^{11} \mathrm{C}$ and ${ }^{9}$ B were were 10650.2 keV 11 and 12415.7 keV 9 , respectively (1971Wa37). The level energy that was deduced In (1974Ka15) was 14655.0, but this value has changed. |
| $15.29 \times 10^{3} 4$ |  |  | E(level): from (1971Ha10). |
| $15.58 \times 10^{3} 4$ |  |  | E(level): from (1971Ha10). |
| $16.02 \times 10^{3}$ |  |  |  |
| 170764 |  | 22 keV 5 | E(level): Г: from (1974Be66). |
| $17.19 \times 10^{3}$ |  |  |  |
| $17.64 \times 10^{3}$ |  |  |  |

