## $^{49}$Ti($^{3}$He,$\alpha$) 1968Lu06

| Type | Author | History Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | Jun Chen | NDS 179, 1 (2022) | 30-Nov-2021 |

$J^{\pi}(^{49}Ti)=7/2^{-}$.

1968Lu06: E=18.2 MeV $^{3}$He beam was produced from the Livermore variable-energy cyclotron. Target was 1.6 mg/cm$^2$ 75.5% enriched $^{49}$Ti. Reaction products were detected with two Si(Li) detectors. Measured $\sigma(\theta_{c.m.}=12^{\circ}$ to $60^{\circ})$. Deduced levels, J, $\pi$, L-transfers and spectroscopic factors from DWBA analysis. Comparisons with available data.

### $^{48}$Ti Levels

Spectroscopic factor S in this dataset is defined by $C^2S=\sigma(exp)/\sigma(DWBA)$.

| E(level)[†] | L[‡] | S[‡] |
|---|---|---|
| 0.0 | 3 | 0.2 |
| 1000 | 3 | 0.7 |
| 2310 | 3 | 0.8 |
| 3330 | 3 | 3.4 |
| 4060 | (3) | (0.7) |
| 4380 | 1 | 0.1 |

[†] From 1968Lu06.
[‡] From DWBA analysis of measured $\sigma(\theta)$ (1968Lu06).