## $^{48}$Ca($^{3}$He,$^{3}$He′),(pol $^{3}$He,$^{3}$He′) 1985Ha08

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

E=33.1 MeV polarized $^{3}$He beam was produced from the University of Birmingham Radial Ridge Cyclotron. Measured $\sigma(\theta)$ and analyzing power at $\theta$(c.m)=20° to 120°. Deduced levels, L-transfers, deformation parameter from DWBA analysis. $\sigma(\theta)$ obey the Blair phase rule (1959Bl31).

Other: 1978BeWY.

### $^{48}$Ca Levels

| E(level) | L[†] | $\beta_2$[†] |
|---|---|---|
| 0.0 | | |
| 3832 | 2 | 0.122 |
| 4504?[‡] | (4) | |
| 4507[‡] | 3 | |

[†] From DWBA fit to measured $\sigma(\theta)$ (1985Ha08).

[‡] Unresolved. From calculations assuming either a $3^-$ single-phonon transition or a one-step process to $4^+$, the $4^+$ state is at best weakly excited.