## $^{38}$Ar(p,$^{3}$He) 1970Ha10,1969Ha19

History

| Type | Author | Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | Ninel Nica, John Cameron and Balraj Singh | NDS 113, 1 (2012) | 31-Dec-2011 |

1970Ha10, 1969Ha19: E=45 MeV, measured $\sigma$(E($^{3}$He),$\theta$) and did DWBA analysis; describe method to investigate parentage of nuclear states by simultaneous observation of (p,t) and (p,$^{3}$He) reactions on $0^+$ (T>O) targets producing analog final states with same isospin As the target.

### $^{36}$Cl Levels

| E(level)[†] | $J^\pi$ | L | Relative intensity[#] | Comments |
|---|---|---|---|---|
| 0.0 | | | 40 | |
| 1164[‡] | | | 75 | |
| 1598[‡] | | | 170 | |
| 1944 *30* | | | 75 | |
| 2500 *30* | | | 60 | |
| 3.12×10$^{3}$ *10* | $0^+$ | 0 | | E(level): from 1969Ha19 (energy estimated In this range based on analogy with $^{36}$Ar).<br>$J^\pi$: $0^+$, T=1 analog state. |
| 3470 *30* | | | 70 | |
| 4295 *30* | $0^+$ | 0 | 150 | E(level): from 1970Ha10 (table 2 "Summary of experimental results for high-T states").<br>$J^\pi$: $0^+$, T=2 analog state. |
| 5660 *30* | | | 110 | |

[†] From 1970Ha10 (fig. 6, energy spectrum of $^{3}$He At 22.3°), except when noted otherwise.
[‡] Energy calibration point from $^{36}$Cl with energy quoted by 1970Ha10 from 1967En05.
[#] Estimated by evaluators from energy spectrum In 1970Ha10 (fig. 6, arbitrary units).