

$^{33}\text{S}(^3\text{He},n\gamma)$ 1975Da14

| Type | Author | History | Citation | Literature Cutoff Date |
|-----------------|---|---------|---------------------|------------------------|
| Full Evaluation | Jun Chen, John Cameron and Balraj Singh | | NDS 112,2715 (2011) | 20-Oct-2011 |

1975Da14: E=6.375,6.390,6.660 MeV ^3He beam produced from the University of Alberta Van de Graaff accelerator. Targets: 150 $\mu\text{g}/\text{cm}^2$ layers of Ag_2S on silver backings. Detector: an NE213 liquid scintillator for detecting neutrons a 10% efficient Ge(Li) detector at 90 degree for detecting γ -rays. Measured time-of-flight (TOF), $\sigma(E_n, \theta)$, E_γ , $n\gamma$ -coin. Deduced levels, J^π , L for levels of 0, 1184.2, 1749.8, 2600.8 and 5537 keV.

 ^{35}Ar Levels

Target ^{33}S $J^\pi=3/2^+$.

| E(level) [†] | L [†] | Comments |
|-----------------------|----------------|-----------|
| 0 | (0) | |
| 1184.2 | 6 | |
| 1749.8 | 9 | |
| 2600.8 | 15 | (0) |
| 5537 | 25 | (0) T=3/2 |

[†] From 1975Da14.

 $\gamma(^{35}\text{Ar})$

| E_γ [†] | $E_i(\text{level})$ | E_f |
|-------------------------|---------------------|-------|
| 1184.2 | 1184.2 | 0 |
| ^x 1466.0 | 6 | |
| 1749.8 | 1749.8 | 0 |
| 2600.8 | 2600.8 | 0 |

[†] From level energy difference.

^x γ ray not placed in level scheme.

$^{33}\text{S}(^3\text{He},n\gamma)$ 1975Da14Level Scheme