

$^{46}\text{Ca}(\text{d},\text{t}),(^3\text{He},\alpha)$  1971Yn02,1971Ra35,1967Bj05

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows	NDS 109, 171 (2008)	30-Oct-2007

**1967Bj05:** ED=10 MeV. Measured  $\sigma(\theta(\text{C.M.})\approx 20^\circ-180^\circ)$  (g.s.),  $60^\circ$  (excited states)); mag spect, emulsions. FWHM=10-15 keV. DWBA.

**1971Ra35:** E( $^3\text{He}$ )=13.0 MeV. Measured  $\sigma(\theta(\text{C.M.})=10^\circ-90^\circ)$ ; mag spect, emulsions.  $\text{C}^2\text{S}'$ s normalized by assuming  $\text{C}^2\text{S}=8$  for L=3 transition to  $^{47}\text{Ca}$ (g.s.) In  $^{48}\text{Ca}(^3\text{He},\alpha)$ ; isospin dependent optical potentials used In analysis.

**1971Yn02:** ED=22.4 MeV. Measured  $\sigma(\theta=12^\circ-30^\circ)$ . See  $^{46}\text{Ca}(\text{d},^3\text{He})$  for details.

 $^{45}\text{Ca}$  Levels

E( $\beta$ ),S(D) from **1967Bj05**. Not observed by **1971Yn02**.

S(A) Ex	TVOther (d, $^3\text{He}$ ) <b>1967Bj05</b>	$\text{C}^2\text{S}'$ s: ( $^3\text{He},\alpha$ ) <b>1971Ra35</b>
0	6.5 15	4.6
1886	1.3 4	1.8
1900	<0.08	

E(level)	$L^\dagger$	$\text{C}^2\text{S}^\ddagger$
0.0	3	6.0
168? 10	[3]	<0.25
1435 10	1	0.15
1886 10	2	3.3
1900 10	[1]	<0.08 <sup>#</sup>
2393 10	0	0.9
2842 10	1	0.15
3560 10	(0)	0.1

<sup>†</sup> From comparison of calculation to experiment (**1971Yn02**). Values In square brackets were assumed by **1967Bj05** for calculation of  $\text{C}^2\text{S}$ .

<sup>‡</sup> From **1971Yn02**, except As noted. Normalization constant=3.

<sup>#</sup> Estimated by **1971Yn02**.