

$^{46}\text{Ti}(\text{d,p}),(\text{pol d,p})$ 1977St01,1972Ko41

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Full Evaluation	T. W. Burrows	NDS 108, 923 (2007)	20-Feb-2007

All data are from 1972Ko41, except as noted. Both groups measured $\sigma(\theta)$ and the vector analyzing power with Si detectors and used DWBA analysis; the results were consistent, except as noted.

1972Ko41: E=10 MeV. Energy resolution=35-70 keV (primarily) and 110-150 keV.

1977St01: E=6 and 10 MeV. Also measured tensor analyzing powers. $\theta(6 \text{ MeV})=25^\circ-115^\circ$; $\theta(10 \text{ MeV})=25^\circ-145^\circ$.

 ^{47}Ti Levels

E(level) [†]	J^π [‡]	L	S [#]	E(level) [†]	J^π [‡]	L	S [#]	E(level) [†]	J^π [‡]	L	S [#]
0.0			@	2.62×10^3	$7/2^-$	3	0.16	3.91×10^3	$3/2^-$	1	0.21
1.6×10^2	$7/2^-$	3	0.58	2.79×10^3 ^{&}	$1/2^-$	1	0.14	4.64×10^3 ^a	$1/2^-$	1	0.05
1.55×10^3	$3/2^-$	1	0.56	2.84×10^3 ^{&}	$(5/2)^-$	3	0.17	5.36×10^3 ^b	$1/2^-$	1	0.14
1.79×10^3	$1/2^-$	1	0.37	3.28×10^3	$3/2^-$	1	0.04	5.58×10^3 ^c	$1/2^-$	1	0.19
2.16×10^3	$3/2^-$	1	0.05	3.55×10^3	$1/2^-$	1	0.11	5.81×10^3 ^c	$1/2^-$	1	0.27
2.54×10^3	$3/2^-$	1	0.06	3.68×10^3	$3/2^-$	1	0.14				

[†] Nominal energies taken from (d,p) work of 1966Ra05.

[‡] From empirical or DWBA calculated J-dependence of the vector analyzing power.

[#] Smaller values were obtained by 1977St01 due to differences in their DWBA calculations. At 6 MeV, 1977St01 give S(159)=0.46, S(1549)=0.33, and S(1793)=0.20.

@ $\sigma(\theta)$ characteristic of non-stripping transition.

& 2.79- and 2.84-MeV states unresolved.

^a Unresolved from 4690.

^b Unresolved from 5410.

^c Dominates a group of weakly excited states.