

$^{45}\text{Sc}(\text{p,t})$ 1977SaZF,1973Se01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen [#]		NDS 126, 1 (2015)	31-Mar-2015

$J^\pi(^{45}\text{Sc g.s.})=7/2^-$.

1977SaZF: E=40 MeV. Measured $\sigma(\theta)$, DWBA analysis.

1973Se01: E=52 MeV proton beam was produced from the synchrocyclotron at the Institute for Nuclear Studies. Target of scandium oxide on Mylar backings. Tritons were momentum analyzed with a broad-range spectrograph and detected with a proportional counter, FWHM $\approx$ 70 keV. Measured $\sigma(E_t,\theta)$.Deduced levels, L from DWBA analysis.

1972KrZD: E=27 MeV. Measured $\sigma(\theta)$.

 ^{43}Sc Levels

E(level) [†]	L [‡]	E(level) [†]	L [‡]	E(level) [†]	L [‡]	E(level) [†]	L [‡]
0	0 ^c	2337 10	2 ^c	3257 10	4	3949 10	3
470 [#] 10	2	2460 10	2 ^c	3290 10	2	4015 10	5
850 [#] 10	2	2549 10	(5,6)	3328 10	2	4049 10	4
1180 [#] 10	2	2633 10	2	3373 10	2	4138 10	5
1410 [#] 10	0 ^c	2670 10	2	3448 10	5	4169 10	4
1811 [@] 2	2	2760 ^b 10	4 ^b	3480 10	3	4211 10	3
1830 [#] 10	2 ^c	2793 10	2	3509 10	0	4239 10	0 ^c
1880 [#] 10	2 ^c	2838 10	5	3676 10	3	4650 [#] 10	
1933 [@] 5	5	2859 10	3	3700 10	6	5236 ^a 10	
2110 ^{&} 10	(3+5)	2984 10	4	3771 10	5		
2246 10	2	3123 10	6	3807 10	5		
2291 10	4	3205 10	(4)	3848 10	5		

[†] From 1977SaZF (as quoted by 1978En02), unless otherwise stated. There are four additional levels between 5700 and 6100 in 1977SaZF.

[‡] From 1977SaZF (as quoted by 1978En02), unless otherwise stated.

[#] From 1973Se01.

[@] Rounded off energy from Adopted Levels.

[&] Doublet.

^a 5250 (1973Se01).

^b L=3 for a 2780 group (1973Se01).

^c From 1973Se01.