

$^{45}\text{Sc}(\text{p,d})$  1964Ka11

Type	Author	History	Citation	Literature Cutoff Date
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Target  $^{45}\text{Sc } J^\pi=7/2^-$ .

1964Ka11: E=17.5 MeV proton beam was produced from the Princeton fm cyclotron. Targets were natural scandium. Deuterons were detected by a three-detector telescope of a thin, about 50  $\mu\text{m}$  silicon surface transmission detector followed by a 500  $\mu\text{m}$  detector and a third barrier detector of large area, overall resolution FWHM=57 keV. Measured  $\sigma(E_d, \theta)$ . Deduced levels, J,  $\pi$ , L-transfers, spectroscopic factors from DWBA analysis.

Others: 1985Ko34, 1996Ej03, 2009Da05.

 $^{44}\text{Sc}$  Levels

$d\sigma/d\Omega$  is for maximum in units of mb/sr.

Spectroscopic factor  $C^2S$  here is equal to  $\sigma_{\text{exp}}/\sigma_{\text{DW}}$  (1964Ka11).

E(level) <sup>†</sup>	L <sup>‡</sup>	$C^2S$ <sup>‡</sup>	Comments
0	3	0.30	$d\sigma/d\Omega=0.16$ .
266 9	3	0.47	$d\sigma/d\Omega=0.23$ .
344 10	3	0.38	$d\sigma/d\Omega=0.18$ .
646 12	3	0.32	$d\sigma/d\Omega=0.14$ .
748 15	3	0.22	$d\sigma/d\Omega=0.09$ .
952 15	3	1.36	$d\sigma/d\Omega=0.52$ .
1025 20			$d\sigma/d\Omega=0.12$ .
1165 17			$d\sigma/d\Omega=0.08$ .
1410 20	(2)		$d\sigma/d\Omega=0.05$ .
1510 20			$d\sigma/d\Omega=0.08$ .
1660 20	(2)		$d\sigma/d\Omega=0.07$ .

<sup>†</sup> From 1964Ka11.

<sup>‡</sup> From DWBA analysis of measured  $\sigma(\theta)$  (1964Ka11).