

$^{33}\text{S}(\alpha, \text{d})$ **1975Na18,1977Na10**

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

1975Na18,1977Na10: E=40 MeV alpha beam produced from the Michigan State University cyclotron. Sulphur targets of a layer of the enriched S isotopes sandwiched between layers of Formvar and carbon foils. Reaction products detected in the focal plane of an Enge split-pole magnetic spectrograph with a proportional-counter plastic-scintillator combination, FWHM=40-60 keV. Measured $\sigma(E_d, \sigma)$. Deduced levels, J^π , L from the DWBA analysis.

 ^{35}Cl Levels

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

<u>E(level)[†]</u>	<u>J^π</u>	<u>L^\ddagger</u>	<u>E(level)[†]</u>	<u>J^π</u>	<u>L^\ddagger</u>	<u>E(level)[†]</u>	<u>J^π</u>	<u>L^\ddagger</u>
6200 <i>10</i>	(11/2 to 17/2) ⁺	6	7870 <i>10</i>	(11/2 to 13/2) ⁺	4+6	8840 <i>10</i>	(17/2) ⁺	6
7170 <i>10</i>	(11/2 to 17/2) ⁺	6	8010 <i>10</i>	(11/2 to 17/2) ⁺	6	9150 <i>10</i>	(11/2 to 17/2) ⁺	6
7670 <i>10</i>	(11/2 to 17/2) ⁺	6	8100 <i>10</i>	(11/2 to 17/2) ⁺	6	9450 <i>10</i>	(11/2 to 17/2) ⁺	6
7750 <i>10</i>	(11/2 to 17/2) ⁺	6	8700 <i>10</i>	(11/2 to 17/2) ⁺	6			

[†] From **1977Na10**.

[‡] Extracted from the comparison of $\sigma(\theta)$ distributions with the DWBA predictions.