¹⁵⁰Sm(d,d') **1968Ve01**

History

Thistory										
Type	Author	Citation	Literature Cutoff Date							
Full Evaluation	S. K. Basu, A. A. Sonzogni	NDS 114, 435 (2013)	1-Apr-2013							

E=12.1 MeV. Other: 1960El07.

Spectra of the inelastically scattered deuterons were observed at 60° , 90° , 125° , and 155° by means of a high-resolution spectrograph, FWHM=7-10 keV. The average solid angle of the spectrograph was $\approx 6 \times 10^{-4}$ sr. Average energy resolution along focal plane=0.1%. Angular momentum transfers are deduced from angular distributions. The dependence of the inelastic scattering cross section on the reduced multipole transition probability is investigated and an unsatisfactory DWBA fit is discussed.

¹⁵⁰Sm Levels

E(level)	<u>L</u> †	S [‡]	E(level)	Γ_{\downarrow}	E(level)	Γ_{\downarrow}	E(level)
0.0		0.184	1167 4	1	1819 4	(4)	2113 4
334 <i>4</i>	2		1195 <i>4</i>	2	1950 <i>4</i>	3	2152 <i>4</i>
739 <i>4</i>			1358 <i>4</i>	5	1970 <i>4</i>	4	2195 <i>4</i>
774 <i>4</i>	4		1450 <i>4</i>	4	2023 4	4	2220 4
1046 4	2		1643 <i>4</i>	4	2033 4		2271 <i>4</i>
1072 4	3		1683 <i>4</i>	3	2103 4		2280 <i>4</i>

[†] From $\sigma(\theta)$ at 90° and 125°. Conclusions of the authors are influenced by other well-established work so that these data should be taken only as showing consistency with adopted J values.

[‡] Deformation parameter from 1960El07.