

$^{152}\text{Sm}(\text{d,t})$  1973Ne16

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

E=12 MeV.

Others: 1976BjZY, E(d)=17 MeV; 1968TjZZ.

Enge spectrograph. FWHM=5 keV.  $\sigma(\theta)$  data from  $5^\circ$  to  $140^\circ$  at 16 angles. Relative  $\sigma$ 's accurate to 15%. DWBA analysis of  $\sigma(\theta)$  data.

 $^{151}\text{Sm}$  Levels

E(level) <sup>‡</sup>	L	Comments
4.8 30	1	Little if any of the strength of this peak is due to excitation of g.s.
67 3	3	Doublet.
92 3	3	L: not consistent with adopted $J^\pi=(9/2)^+$ . See 1973Ne16 for a discussion of this discrepancy.
149 3	(6) <sup>†</sup>	
168 3	2+3	Doublet.
176 3	5	
210 3	3	
262 3	5	
286 3		
307 3	2	
316 3	1	
346 3	2	
357 3	0	
≈397	2	
449 3	1	
≈470		
503 3	0	
523 3	2	
632 3		
≈705	(5,6) <sup>†</sup>	
≈742	(4,5) <sup>†</sup>	
898 3		
≈1375	(5) <sup>†</sup>	

<sup>†</sup> From  $\sigma(^3\text{He},^4\text{He})/\sigma(\text{d,t})$ .

<sup>‡</sup> Uncertainty estimated by the evaluator.