

<sup>73</sup>Ge(d,<sup>3</sup>He) 1987Ro01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 111,1 (2010)	1-May-2009

$J^\pi(^{73}\text{Ge})=9/2^+$ .

E=25.2 MeV, FWHM=9 keV, measured  $\sigma(\theta)$ , DWBA calculations.

<sup>72</sup>Ga Levels

E(level)	L <sup>‡</sup>	C <sup>2</sup> S <sup>#</sup>	Comments
0.0	1+3		C <sup>2</sup> S(L=1)=0.03, C <sup>2</sup> S(L=3)=0.15-0.08.
16 4	3	0.18	
169 4	1	0.21	
201 4	3	0.08	
232 4	1(+3)	0.055 5	C <sup>2</sup> S(L=3)=0.08-0.
252 4	1(+3)	0.105 5	C <sup>2</sup> S(L=3)=0.36-0.
275 4	1(+3)	0.30 2	C <sup>2</sup> S(L=3)=0.65-0.
332 4	1(+3)	0.10 1	C <sup>2</sup> S(L=3)=0.22-0.
385 4	1(+3)	0.047	C <sup>2</sup> S(L=3)=0.17-0.05.
399 4	1(+3)	0.49 3	C <sup>2</sup> S(L=3)=0.70-0.
544 4	3	0.08	
555 4	1+3		C <sup>2</sup> S(L=1)=0.05-0.06, C <sup>2</sup> S(L=3)=0.26-0.13.
622 4	3(+1)	0.505 5	C <sup>2</sup> S(L=1)=0-0.008.
641 4	1(+3)	0.075 5	C <sup>2</sup> S(L=3)=0.16-0.
710 4	1	0.02	
737 4	1(+3)	0.04	C <sup>2</sup> S(L=3)=0.09-0.
760 4	3(+1)	0.235 15	C <sup>2</sup> S(L=1)=0-0.007.
829 4	3	0.46	
850 <sup>†</sup> 4	1(+3)	0.10 <sup>@</sup>	C <sup>2</sup> S(L=3) is not given.
894 4	1(+3)	0.065 5	C <sup>2</sup> S(L=3)=0.05-0.
1036 6			C <sup>2</sup> S(L=1)=(0.012), C <sup>2</sup> S(L=3)=(0.03).
1084 6	1(+3)	0.02	C <sup>2</sup> S(L=3)=0.04-0.
1127 6	1(+3)	0.03	C <sup>2</sup> S(L=3)=0.05-0.
1144 6	1(+3)	0.04	C <sup>2</sup> S(L=3)=0.04-0.
1199 6			C <sup>2</sup> S(L=3)=(0.17).
1216 <sup>†</sup> 6	3	0.15 <sup>@</sup>	
1250 6	3(+1)	0.155 15	C <sup>2</sup> S(L=1)=0-0.004.
1270 6	1(+3)	0.095 5	C <sup>2</sup> S(L=3)=0.08-0.
1360 6	1+3		C <sup>2</sup> S(L=1)=0.02-0.03, C <sup>2</sup> S(L=3)=0.17-0.05.
1380 6			C <sup>2</sup> S(L=1)=(0.006-0.011), C <sup>2</sup> S(L=3)=(0.05-0.02).
1481 6	1	0.04	
1562 6	1(+3)	0.055 5	C <sup>2</sup> S(L=3)=0.05-0.
1626 6	1(+3)	0.02	C <sup>2</sup> S(L=3)=0.01-0.
1691 6	3(+1)	0.33 4	C <sup>2</sup> S(L=1)=0-0.008.
1746 6	3(+1)	0.45 5	C <sup>2</sup> S(L=1)=0-0.013.
1794 6			C <sup>2</sup> S(L=1)=(0-0.004), C <sup>2</sup> S(L=3)=(0.12).
1822 6	3	0.22	
1913 6	3(+1)	0.22 4	C <sup>2</sup> S(L=1)=0-0.006.
2048 6			C <sup>2</sup> S(L=3)=(0.08).
2077 6			C <sup>2</sup> S(L=3)=(0.21).

<sup>†</sup> A large number of the observed peak is from another isotope.

<sup>‡</sup> From DWBA analysis. When the fit is obtained with a single L value but the admixture of L±2 cannot be ruled out, the latter is

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 $^{73}\text{Ge}(\text{d},^3\text{He})$  **1987Ro01 (continued)**

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 $^{72}\text{Ga}$  Levels (continued)

given in parentheses.

# Where uncertainty is given, **1987Ro01** give range of values for  $C^2S$ . The authors' range of 0.05 to 0.06 is presented here as 0.055, etc.  $C^2S$  values for the parenthetical L values are given in comments.

@ Admixture from another isotope,  $C^2S$  value has been corrected, but must be taken with caution.