

$^{73}\text{Ge}({}^3\text{He},\text{d})$  **1973Ro14**

| Type            | Author                          | History | Citation             | Literature Cutoff Date |
|-----------------|---------------------------------|---------|----------------------|------------------------|
| Full Evaluation | Balraj Singh, Ameenah R. Farhan |         | NDS 107, 1923 (2006) | 30-Apr-2006            |

E=17 MeV.

 $J^\pi({}^{73}\text{Ge g.s.,target})=9/2^+$ .Multiangle spectrograph. FWHM=30 keV.  $\sigma(\theta)$  3.75° to 86.25° In steps of 7.5°. DWBA analysis. $^{74}\text{As Levels}$ 

Cross sections listed under comments are At an angle where the value is maximum.

| E(level) | L          | $(2J_f+1)C^2S^\dagger$ | Comments                                   |
|----------|------------|------------------------|--|
| 0        | 3          | 0.19                   | $d\sigma/d\Omega=0.03 \text{ mb/sr.}$      |
| 182      | <i>I</i> 0 |                        | $d\sigma/d\Omega=0.02 \text{ mb/sr.}$      |
| 273      | <i>I</i> 0 | 1+3                    | $d\sigma/d\Omega=0.30+0.09 \text{ mb/sr.}$ |
| 338      | <i>I</i> 0 | 1+3                    | $d\sigma/d\Omega=0.68+0.21 \text{ mb/sr.}$ |
| 421      | <i>I</i> 0 |                        | $d\sigma/d\Omega=0.05 \text{ mb/sr.}$      |
| 547      | <i>I</i> 0 | 1                      | $d\sigma/d\Omega=1.37 \text{ mb/sr.}$      |
| 633      | <i>I</i> 0 | 1+3                    | $d\sigma/d\Omega=0.21+0.10 \text{ mb/sr.}$ |
| 687      | <i>I</i> 0 | 1                      | $d\sigma/d\Omega=0.51 \text{ mb/sr.}$      |
| 730      | <i>I</i> 0 |                        | $d\sigma/d\Omega=0.01 \text{ mb/sr.}$      |
| 774      | <i>I</i> 0 | 1+3                    | $d\sigma/d\Omega=0.12+0.05 \text{ mb/sr.}$ |
| 836      | <i>I</i> 0 | 1                      | $d\sigma/d\Omega=0.68 \text{ mb/sr.}$      |
| 908      | <i>I</i> 0 | 1                      | $d\sigma/d\Omega=0.06 \text{ mb/sr.}$      |
| 955      | <i>I</i> 0 | 3                      | $d\sigma/d\Omega=0.03 \text{ mb/sr.}$      |
| 1007     | <i>I</i> 0 | 1                      | $d\sigma/d\Omega=0.21 \text{ mb/sr.}$      |
| 1112     | <i>I</i> 0 | 4                      | $d\sigma/d\Omega=0.14 \text{ mb/sr.}$      |
| 1363     | <i>I</i> 0 |                        |  |
| 1471     | <i>I</i> 0 | 1                      | $d\sigma/d\Omega=0.05 \text{ mb/sr.}$      |
| 1528     | <i>I</i> 0 | 1+3                    | $d\sigma/d\Omega=0.06+0.02 \text{ mb/sr.}$ |
| 1624     | <i>I</i> 0 | 3                      | $d\sigma/d\Omega=0.07 \text{ mb/sr.}$      |
| 1749     | <i>I</i> 0 | 3                      | $d\sigma/d\Omega=0.05 \text{ mb/sr.}$      |
| 1873     | <i>I</i> 0 |                        | $d\sigma/d\Omega=0.20 \text{ mb/sr.}$      |
| 1913     | <i>I</i> 0 |                        | $d\sigma/d\Omega=0.10 \text{ mb/sr.}$      |
| 2064     | <i>I</i> 0 |                        | $d\sigma/d\Omega=0.09 \text{ mb/sr.}$      |
| 2108     | <i>I</i> 0 | 4                      | $d\sigma/d\Omega=0.08 \text{ mb/sr.}$      |
| 2194     | <i>I</i> 0 | 3                      | $d\sigma/d\Omega=0.03 \text{ mb/sr.}$      |

†  $(2J_f+1)C^2S=[d\sigma/d\Omega(\exp)(2J_i+1)]/[Nd\sigma/d\Omega(\text{DWBA})]$ , where  $J_f=\text{spin of final state}$ ,  $J_i=\text{spin of target } (9/2^+)$ ; N=4.42. For mixed L-transfers values refer to two L-values, respectively.