## $^{109}$Ag(p,t) 1975De27

| Type | Author | History Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | Jean Blachot | NDS 109, 1383 (2008) | 1-Mar-2008 |

$J^{\pi}(^{109}Ag)=1/2^{-}$.
E(p)=29.7 MeV.
Other: E(p)=19 MeV (1975Ku14).
Resolution (FWHM): 10 keV (1975De27), 5-15 keV (1975Ku14), magnetic s.

### $^{107}$Ag Levels

ΔE: ΔE=±5 keV. Authors discuss energy shift and suggest 2 keV should be added to their values.
Ds: Absolute cross section ±40% uncertain.

| E(level)[†] | L[‡] | σ[@] | Comments |
|---|---|---|---|
| 0 | 0[#] | 599 | |
| 125 | | 2.3 | |
| 324 | 2[#] | 36 | |
| 422 | 2[#] | 422 | |
| 784 | 2[#] | 5.2 | |
| 947 | 2[#] | 9.0 | |
| 970 | 4 | 3.3 | |
| 1061 | | 1.2 | E(level): may correspond with L=4 ($^{3}$He,d) excitation at 1059 keV. |
| 1144 | 4 | 3.7 | L: other: L=3 (1975Ku14) at 1147 keV. |
| 1221 | (6) | 1.0 | |
| 1462 | 2 | 16 | |
| 1481 | 6,5 | 1.5 | |
| 1570 | 4 | 4.7 | |
| 1613 | 0[#] | 4.3 | |
| 1651 | 0[#] | 15 | |
| 1685 | 4[#] | 10 | E(level): other: 1688 (1975Ku14). |
| 1832 | 2 | 7.3 | |
| 1851 | 0[#] | 9.9 | E(level): other: 1854 (1975Ku14). |
| 1875 | 2,3 | 2.5 | E(level): other: 1880 (1975Ku14).<br>L: L=3 (1975Ku14), L=2 (1975De27). |
| 1904 | 2,3 | 14 | E(level): other: 1911 (1975Ku14).<br>L: L=3 (1975Ku14), L=2 (1975De27). |
| 1918 | 4 | 4.1 | |
| 1942 | 2 | 2.9 | |
| 1956 | 4 | 3.7 | |
| 2024 | 3,4 | 13 | E(level): other: 2030 (1975Ku14).<br>L: L=3 (1975Ku14), L=4 (1975De27). |
| 2062 | 3[#] | 6.4 | E(level): other: 2066 (1975Ku14). |
| 2111 | 4,3 | 3.1 | E(level): other: 2119 (1975Ku14). |
| 2140 | 3 | 11 | E(level): other: 2144 (1975Ku14).<br>L: L=3 (1975Ku14), L=3,2 (1975De27). |
| 2177 | 3[#] | 54 | E(level): other: 2182 (1975Ku14). |
| 2199 | 3[#] | 50 | E(level): other: 2203 (1975Ku14). |
| 2227 | 3[#] | 9.5 | E(level): other: 2229 (1975Ku14). |
| 2254 | 2 | 16 | E(level): other: 2258 (1975Ku14). |
| 2284 | 2 | 6.9 | |
| 2306 | 4 | 5.2 | |
| 2320 | 4 | 7.3 | |

Continued on next page (footnotes at end of table)

## $^{109}$Ag(p,t) 1975De27 (continued)

### $^{107}$Ag Levels (continued)

| E(level)[†] | L[‡] | $\sigma$[@] | Comments |
|---|---|---|---|
| 2347 | | 4.3 | |
| 2355 | 5 | 3.5 | |
| 2374 | 2 | 14 | |
| 2405 | 2 | 6.4 | |
| 2414 | 4 | 9 | |
| 2437 | 2 | 21 | E(level): other: 2442 (1975Ku14). |
| 2463 | 4 | 23 | E(level): other: 2467 (1975Ku14). |
| 2494 | 4 | 7.3 | |
| 2533 | 4 | 12 | |
| 2588 | | | E(level): not resolved at 20°. |
| 2594 | 4 | 19 | |
| 2666 | 4,5 | 5.6 | |
| 2672 | | 3.9 | |
| 2701 | 4 | 6.4 | |
| 2717 | | 15 | |
| 2733 | 4 | 6.4 | |
| 2776 | | ≈6 | |
| 2808 | 4 | 19 | |
| 2844 | 4 | 24 | |
| 2881 | | | E(level): not resolved at 20°. |
| 2902 | | | E(level): not resolved at 20°. |
| 3111 | | ≈16 | |
| 3125 | | ≈10 | |

[†] ΔE=±5 keV. Authors discuss energy shift and suggest 2 keV should be added to their values.
[‡] Deduced from angular distributions ($\theta$=10°,20°,30°,40°,50°) compared with DWBA calc (1975De27). Other L-values (1975Ku14): angular distribution ($\theta$=10°−75°, in 5° steps) compared with standard shapes for given L-transfer and phonon character.
[#] (p,t) L-values of 1975De27, 1975Ku14 correspond.
[@] Cross section ($\mu$b/sr) at $\theta$=20° given (1975De27).
[&] Absolute cross section ±40% uncertain.