110 Pd(t,p) 1972Ca10

History

Type Author Citation Literature Cutoff Date NDS 124, 157 (2015) 1-Aug-2014 Full Evaluation S. Lalkovski, F. G. Kondev

1972Ca10: Facility: Los Alamos Van de Graaff; Beam: E(t) = 15 MeV; Target: $125 \mu g/cm^2$ enriched to 97.4% in 110 Pd; Detectors: Elbek-type magnetic spectrograph, nuclear emulsions; Measured: E(p), FWHM \approx 15 keV, σ (E, θ), Q – value; Deduced: ¹¹²Pd level scheme, L, J^{π} , DWBA.

¹¹²Pd Levels

| E(level) [†] | $J^{\pi \ddagger}$ | <u>L</u> # | Comments |
|-----------------------|--------------------|------------|--|
| 0 | 0+ | 0 | |
| 351 5 | 2+ | 2 | |
| 736 8 | (4^{+}) | (4) | J^{π} : 2 ⁺ in the Adopted Levels. |
| | | | L: 20° data contains impurities, which leads to an ambiguous L-value; $d\sigma/d\Omega$ analysis in 1972Ca10 favors rather L=4 than L=0 or 2. |
| 882 8 | (2^{+}) | (2) | J^{π} : 4 ⁺ in the Adopted Levels. |
| 928 8 | | | |
| 1123 8 | 0_{+} | 0 | |

[†] From 1972Ca10. ‡ Based on L.

[#] From DWBA analysis in 1972Ca10.