

$^{168}\text{Yb}(p,t)$ 1973Oo01

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|-----------------|----------------------|------------------------|
| Full Evaluation | Coral M. Baglin | NDS 109, 1103 (2008) | 1-Mar-2008 |

1973Oo01: E=19 MeV; 18.25% ^{168}Yb target; magnetic spectrometer with nuclear emulsions and position sensitive detectors in focal plane (FWHM=10-12 keV); measured $Q(\beta^-)$ value, $d\sigma/d\Omega(E(t),\theta)$. (4 angles).

 ^{166}Yb Levels

| E(level) [†] | J^π [‡] | L | $\Sigma\sigma(\text{c.m.})$ $\mu\text{b/sr}$ [#] |
|--------------------------|----------------------|-----|---|
| 0 [@] | 0 ⁺ | 0 | 647 22 |
| 101 ^{@ 10} | 2 ⁺ | | 267 16 |
| 329 ^{@ 10} | 4 ⁺ | | 55 8 |
| 931 ¹⁰ | (2 ⁺) | | 58 8 |
| 1043 ^{& 10} | (0 ⁺) | (0) | 76 11 |
| 1581 ¹⁰ | | | 30 16 |

[†] A search at 27.5° (near the L=0 maximum) revealed no additional states stronger than 10% of the g.s. between 2200 and 3300 keV.

[‡] Authors' assignments are based on comparison of the (p,t) angular distributions with those for levels with previously known J^π .

[#] Center of mass cross section summed over $\theta=12.5^\circ, 27.5^\circ, 42.5^\circ, 55^\circ$ (in $\mu\text{b/sr}$).

[@] Band(A): $K^\pi=0^+$ g.s. band.

[&] Band(B): $K=0^+$ β -vibrational band.

 $^{168}\text{Yb}(\text{p,t})$ **1973Oo01**Band(B): $K=0^+$
 β -vibrational band (0^+) 1043Band(A): $K^\pi=0^+$ g.s.
band 4^+ 329 2^+ 101 0^+ 0