# $^{171}$Yb($\gamma$,$\gamma$): Mossbauer

History

| Type | Author | Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | Coral M. Baglin, E. A. Mccutchan | NDS 151, 334 (2018) | 30-Jun-2018 |

See $^{171}$Yb Adopted Levels for nuclear moments.

$^{171}$Tm sources: see 1965Ka04, 1966Gu07, 1966He09, 1970He25, and 1971Pl03; measured nuclear moments, $\delta$(66.7$\gamma$), $T_{1/2}$(66.7 level).

$^{171}$Lu sources: see 1966Ka12, 1967He02, 1970He25, and 1971Pl03; measured nuclear moments, isomer shifts (66.7$\gamma$, 75.9$\gamma$), $\delta$(66.7$\gamma$), $T_{1/2}$(75.9 level).

Other: 1968He23.

## $^{171}$Yb Levels

| E(level)† | J$^\pi$† | $T_{1/2}$ | Comments |
|---|---|---|---|
| 0.0 | 1/2$^-$ | stable | |
| 66.7 | 3/2$^-$ | 0.87 ns *10* | $T_{1/2}$: from 1966He09, Mossbauer measurements. |
| 75.9 | 5/2$^-$ | ≥0.80 ns | $T_{1/2}$: 0.86 ns *6* without correction for broadening due to absorber thickness in Mossbauer measurements of 1967He02. Other: 1966Ka12. |

† From Adopted Levels; rounded value for E(level).

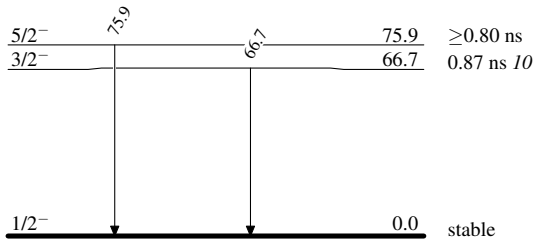
## $\gamma$($^{171}$Yb)

| $E_\gamma$† | $E_i$(level) | $J_i^\pi$ | $E_f$ | $J_f^\pi$ | Comments |
|---|---|---|---|---|---|
| 66.7 | 66.7 | 3/2$^-$ | 0.0 | 1/2$^-$ | $\delta$: 0.671 *22* (1966Gu07); 0.70 *4*, positive relative E2-M1 phase (1966He09). |
| 75.9 | 75.9 | 5/2$^-$ | 0.0 | 1/2$^-$ | |

† Rounded value from Adopted Gammas.

## $^{171}$Yb(γ,γ): Mossbauer

Level Scheme




$^{171}_{70}Yb_{101}$