

$^{128}\text{Te}(^{37}\text{Cl},4n\gamma):\text{SD}$ 2008Te07

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 112,2497 (2011)	1-Jun-2011

Additional information 1.

$E(^{37}\text{Cl})=170$ MeV. ^{128}Te foils of varying thickness from 400 to 500 $\mu\text{g}/\text{cm}^2$ coated with Au foils of thickness ≈ 75 $\mu\text{g}/\text{cm}^2$ on the front and ≈ 500 $\mu\text{g}/\text{cm}^2$ on the back. γ radiation studied using the GAMMASPHERE array. Emphasis was on ^{160}Tm but some data on ^{161}Tm were also collected and analyzed. Comparisons were made with cranked shell-model calculations As well As with model calculations to yield deformation parameters.

 ^{161}Tm Levels

E(level) [†]	J^π [‡]
x [#]	J
881+x [#]	J+2
1814+x [#]	J+4
2795+x [#]	J+6
3825+x [#]	J+8
4904+x [#]	J+10
6034+x [#]	J+12
7215+x [#]	J+14
8446+x [#]	J+16
9738+x? [#]	J+18

[†] Calculated by the evaluator from the E_γ values. Values not reported by 2008Te07.

[‡] Values inferred from the expected level sequence In the SD band.

[#] Band(A): triaxial SD band. Population intensity $\approx 0.3\%$ of that of the channel populating ^{161}Tm .

 $\gamma(^{161}\text{Tm})$

γ 's given In 2008Te07 only In the text and only to the nearest keV, with No uncertainties, and No I_γ values. Placement In the level scheme is not shown, but is implied by the presentation of the experimental dynamic moments of inertia As a drawing In the paper.

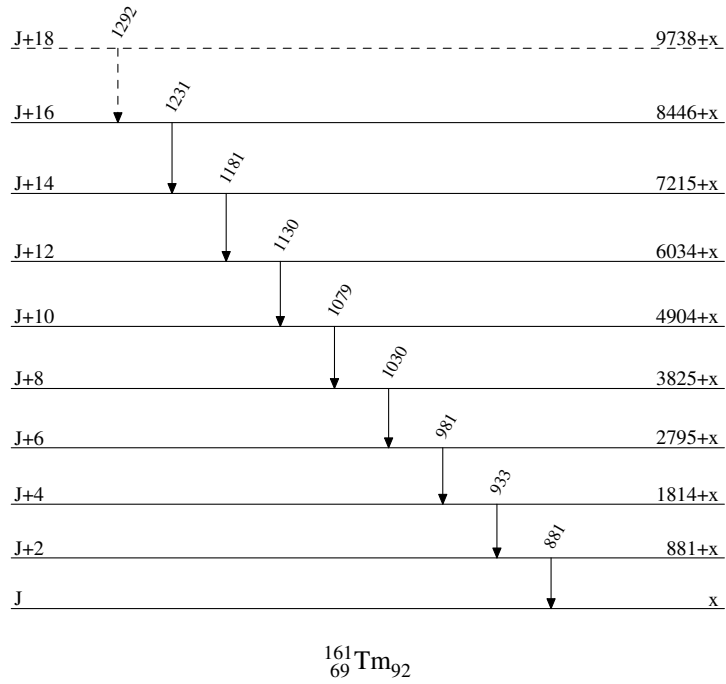
Note that the assignment of these γ 's to ^{161}Tm is regarded As tentative by 2008Te07.

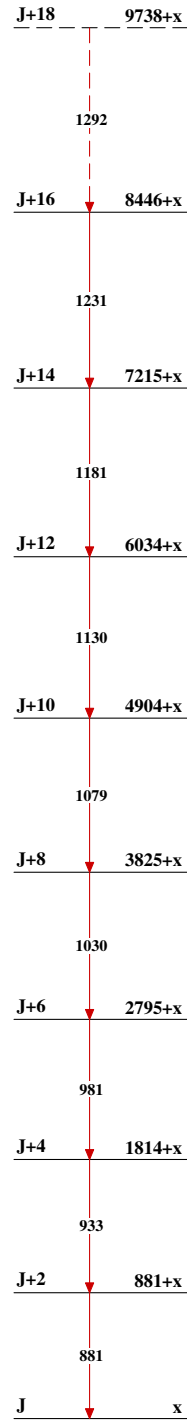
E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
881	881+x	J+2	x	J
933	1814+x	J+4	881+x	J+2
981	2795+x	J+6	1814+x	J+4
1030	3825+x	J+8	2795+x	J+6
1079	4904+x	J+10	3825+x	J+8
1130	6034+x	J+12	4904+x	J+10
1181	7215+x	J+14	6034+x	J+12
1231	8446+x	J+16	7215+x	J+14
1292 [†]	9738+x?	J+18	8446+x	J+16

[†] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme-----> γ Decay (Uncertain)

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band $^{161}_{69}\text{Tm}_{92}$