^{128}Te(^{37}Cl,5nγ):tsd 2008Te07

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 176, 1 (2021)	1-May-2021

Compiled for XUNDL database by S. Geraedts and B. Singh (McMaster).

2008Te07: E=170 MeV beam provided by ATLAS facility at Argonne. Measured Eγ, Iγ, $\gamma\gamma$ using GAMMASPHERE array. Comparisons with cranked-shell model calculations.

All γ rays in this band were detected in coincidence with γ's in the normal deformed yrast band in ^{160}Tm.

^{160}Tm Levels

E(level)[†]	J^π
x[‡]	J
680.0+x[‡] *10*	J+2
1412.0+x[‡] *15*	J+4
2196.0+x[‡] *18*	J+6
3032.0+x[‡] *20*	J+8
3916.0+x[‡] *23*	J+10
4856.0+x[‡] *25*	J+12
5847+x[‡] *3*	J+14
6896+x[‡] *3*	J+16

[†] From Eγ's, assuming 1 keV uncertainty for each γ ray.

[‡] Band(A): Triaxial SD band. Population intensity≈1% of the channel populating ^{160}Tm. Comparisons with model calculations gives deformation parameters: ε_2≈0.39 and γ≈20°. Proposed configuration=[π6(21),ν(22)5], implying $\pi[h^6_{11/2},(h_{9/2}f_{7/2})^2,(i_{13/2})^1]$; and $\nu[(N_{osc}=4)^2,(h_{11/2})^2,(i_{13/2})^5]$.

γ(^{160}Tm)

E_γ	E_i(level)	J^π_i	E_f	J^π_f
680	680.0+x	J+2	x	J
732	1412.0+x	J+4	680.0+x	J+2
784	2196.0+x	J+6	1412.0+x	J+4
836	3032.0+x	J+8	2196.0+x	J+6
884	3916.0+x	J+10	3032.0+x	J+8
940	4856.0+x	J+12	3916.0+x	J+10
991	5847+x	J+14	4856.0+x	J+12
1049	6896+x	J+16	5847+x	J+14

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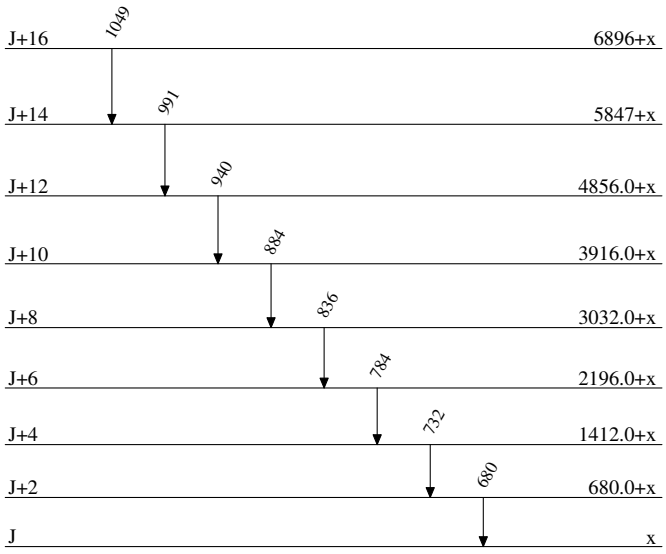
Level Scheme



$^{160}_{69}Tm_{91}$

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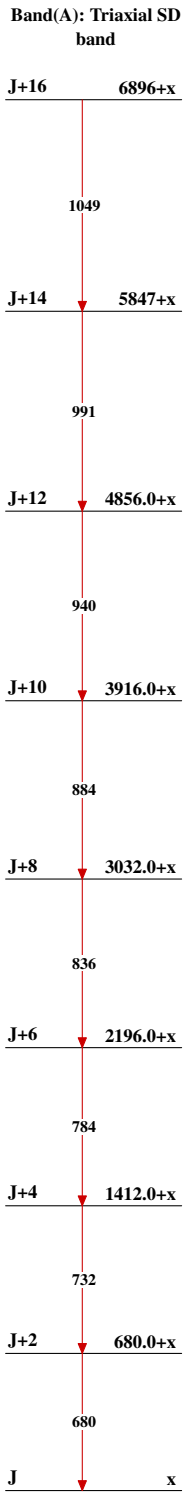

$^{160}_{69}Tm_{91}$