

$^{130}\text{Te}(^{48}\text{Ca},5n\gamma):\text{SD}$ **2005Ha05,2005Ri16**

Type	Author	History Citation	Literature Cutoff Date
Update	Balraj Singh		20-Sep-2006

Additional information 1.

2005Ha05: E=200 MeV. Measured E_γ , $\gamma\gamma$, $\gamma\gamma(\theta)$ with the Gammasphere array which consisted of 102 HPGe detectors.

2005Ri16: Measured fractional Doppler shifts of transitions, deduced transition quadrupole moment.

 ^{173}Hf Levels

E(level)	J^π	E(level)	J^π	E(level)	J^π	E(level)	J^π
x [†]	J	3011+x [†]	J+8	6745+x [†]	J+16	11418+x [†]	J+24
692+x [†]	J+2	3867+x [†]	J+10	7818+x [†]	J+18	12751+x [†]	J+26
1425+x [†]	J+4	4773+x [†]	J+12	8953+x [†]	J+20	14151+x [†]	J+28
2199+x [†]	J+6	5731+x [†]	J+14	10153+x [†]	J+22	15620+x [†]	J+30

[†] Band(A): Triaxial SD band (**2005Ha05,2005Ri16**). Q(transition)=14.5 7 (**2005Ri16**, from lifetime data).

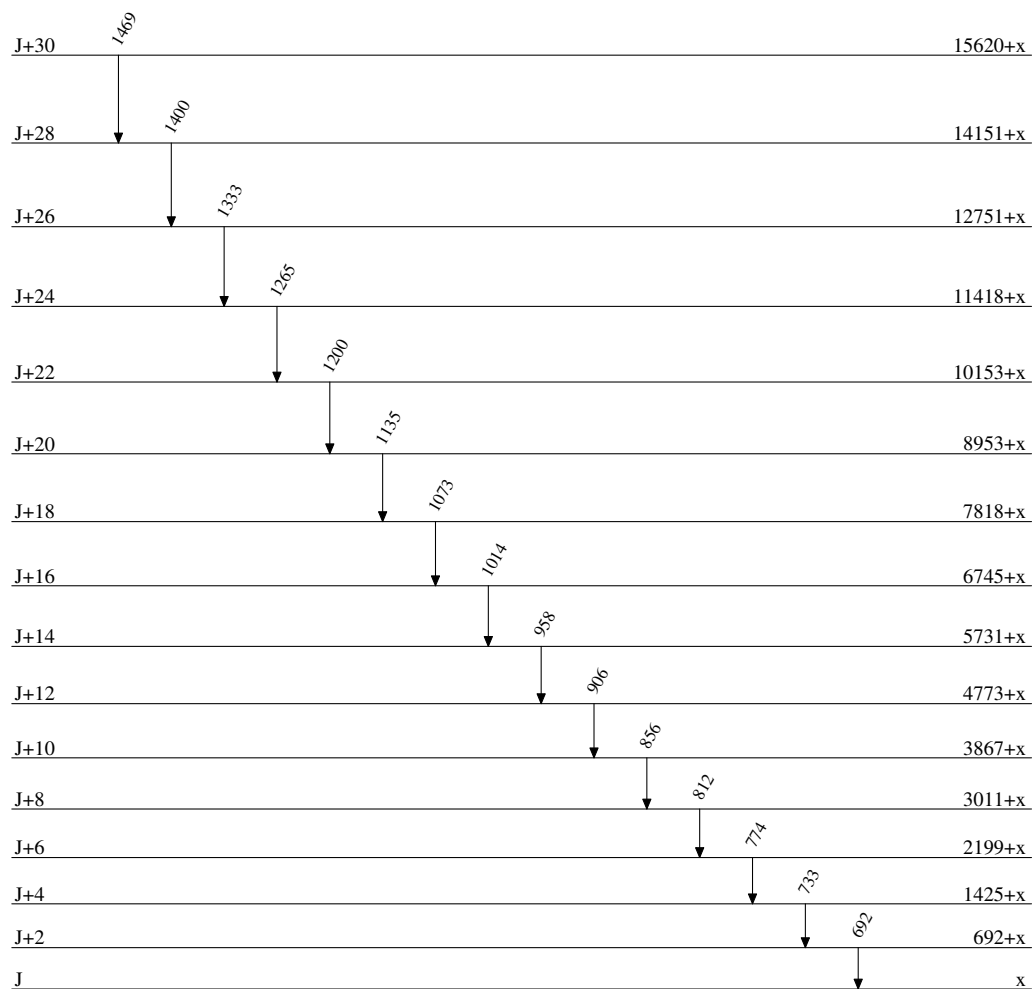
 $\gamma(^{173}\text{Hf})$

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
692	692+x	J+2	x	J	1073	7818+x	J+18	6745+x	J+16
733	1425+x	J+4	692+x	J+2	1135	8953+x	J+20	7818+x	J+18
774	2199+x	J+6	1425+x	J+4	1200	10153+x	J+22	8953+x	J+20
812	3011+x	J+8	2199+x	J+6	1265	11418+x	J+24	10153+x	J+22
856	3867+x	J+10	3011+x	J+8	1333	12751+x	J+26	11418+x	J+24
906	4773+x	J+12	3867+x	J+10	1400	14151+x	J+28	12751+x	J+26
958	5731+x	J+14	4773+x	J+12	1469	15620+x	J+30	14151+x	J+28
1014	6745+x	J+16	5731+x	J+14					

[†] Transitions in SD band are assigned to ^{174}Hf based on their $\gamma\gamma$ coin with the transitions in the ground-state band of this nucleus (**2005Ha05**).

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Level Scheme



$^{173}_{72}\text{Hf}_{101}$

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Band(A): Triaxial SD
band (2005Ha05,2005Ri16)

J+30	15620+x
1469	
J+28	14151+x
1400	
J+26	12751+x
1333	
J+24	11418+x
1265	
J+22	10153+x
1200	
J+20	8953+x
1135	
J+18	7818+x
1073	
J+16	6745+x
1014	
J+14	5731+x
958	
J+12	4773+x
906	
J+10	3867+x
856	
J+8	3011+x
812	
J+6	2199+x
774	
J+4	1425+x
733	
J+2	692+x
J	x

 $^{173}_{72}\text{Hf}_{101}$