

$^{114}\text{Sn}(^3\text{He},3n\gamma)$ **1986Lo14**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 515 (2012)	1-Jan-2012

$E(^3\text{He})=27.5$ MeV.
 Enriched target (98.7%).
 Measured: γ , $\gamma(E)$, $\gamma(t)$, $\gamma\gamma$, $\gamma(\theta)$, ce.

^{114}Te Levels

E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger
0	0 ⁺	2029.8 [#] 4	4 ⁺	3121.2 4		3880.8 4	(10 ⁺)
708.90 [‡] 17	2 ⁺	2217.6 [‡] 3	6 ⁺	3154.2 4	7 ⁻	3969.9 [‡] 4	(10 ⁺)
1342.61 [#] 17	2 ⁺	2607.5 3	(6 ⁺)	3252.8 4	7 ⁺	4063.7 5	(9 ⁻ ,10 ⁻)
1484.2 [‡] 3	4 ⁺	2647.6 4	(5 ⁺)	3280.1 4	8 ⁻		
1960.4 [#] 3	(3 ⁺)	3088.2 [‡] 4	8 ⁺	3513.8 4	9 ⁻		

[†] From γ -ray multiplicities.
[‡] Band(A): g.s. band.
[#] Band(B): γ band.

$\gamma(^{114}\text{Te})$

E_γ	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	Comments
125.6 2	≈ 5	3280.1	8 ⁻	3154.2	7 ⁻	(M1)	Mult.: $A_2=0.14$ 17; $A_4=0.2$ 2.
233.3 2	≈ 1	3513.8	9 ⁻	3280.1	8 ⁻		
390.4 2	6.2	2607.5	(6 ⁺)	2217.6	6 ⁺	(M1+E2)	$\alpha(K)\text{exp}=0.012$ 2 Mult.: $A_2=-0.04$ 6; $A_4=0.19$ 9.
425.9 2	3.6	3513.8	9 ⁻	3088.2	8 ⁺	E1(+M2)	Mult.: $A_2=-0.14$ 11; $A_4=0.04$ 17.
545.6 2	9.7	2029.8	4 ⁺	1484.2	4 ⁺	M1+E2	$\alpha(K)\text{exp}=0.0054$ 7 Mult.: $A_2=-0.12$ 2; $A_4=-0.09$ 2.
617.8 [#] 2	<9 [#]	1960.4	(3 ⁺)	1342.61	2 ⁺	(M1)	Mult.: $A_2=0.01$ 7; $A_4=0.0$ 1.
617.8 [#] 2	<9 [#]	2647.6	(5 ⁺)	2029.8	4 ⁺	(M1)	$\alpha(K)\text{exp}=0.0020$ 5 Mult.: $A_2=0.01$ 7; $A_4=0.0$ 1.
633.7 2	15	1342.61	2 ⁺	708.90	2 ⁺	M1(+E2)	$\alpha(K)\text{exp}=0.0065$ 6 Mult.: $A_2=0.20$ 9; $A_4=-0.07$ 12.
708.9 2	100	708.90	2 ⁺	0	0 ⁺	E2	$\alpha(K)\text{exp}=0.0029$ 1
734.0 2	41	2217.6	6 ⁺	1484.2	4 ⁺	E2	Mult.: $A_2=0.16$ 1; $A_4=-0.11$ 1.
775.3 2	60	1484.2	4 ⁺	708.90	2 ⁺	E2	$\alpha(K)\text{exp}=0.0021$ 1 Mult.: $A_2=0.16$ 6; $A_4=-0.02$ 9.
783.6 2	5.4	4063.7	(9 ⁻ ,10 ⁻)	3280.1	8 ⁻	M1,E2	$\alpha(K)\text{exp}=0.0023$ 4 Mult.: $A_2=-0.04$ 9; $A_4=-0.03$ 14.
792.6 2	4.4	3880.8	(10 ⁺)	3088.2	8 ⁺	(E2)	$\alpha(K)\text{exp}=0.0013$ 5 Mult.: $A_2=0.27$ 12; $A_4=0.11$ 17. E_γ : this placement does not agree with 1985JaZZ, not adopted.
870.9 2	14	3088.2	8 ⁺	2217.6	6 ⁺	E2	$\alpha(K)\text{exp}=0.0018$ 2 Mult.: $A_2=0.13$ 7; $A_4=-0.11$ 10.
881.7 2	1.8	3969.9	(10 ⁺)	3088.2	8 ⁺	(E2)	$\alpha(K)\text{exp}=0.0012$ 8 Mult.: $A_2=0.11$ 15; $A_4=-0.11$ 10.
903.6 2	≈ 2	3121.2		2217.6	6 ⁺		
936.2 2	15	3154.2	7 ⁻	2217.6	6 ⁺	(E1+M2)	$\alpha(K)\text{exp}=0.0039$ 6 Mult.: $A_2=-0.36$ 8; $A_4=-0.10$ 13.

Continued on next page (footnotes at end of table)

$^{114}\text{Sn}(^3\text{He},3n\gamma)$ 1986Lo14 (continued) $\gamma(^{114}\text{Te})$ (continued)

E_γ	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	Comments
1035.2 2	6.0	3252.8	7 ⁺	2217.6	6 ⁺	M1	$\alpha(\text{K})\text{exp}=0.0010$ 2 Mult.: $A_2=-0.33$ 10; $A_4=0.03$ 15.
1122.7 2	≈8	2607.5	(6 ⁺)	1484.2	4 ⁺	E2	$\alpha(\text{K})\text{exp}=0.0011$ 2 Mult.: $A_2=0.47$ 12; $A_4=-0.40$ 17.
1342.6 2	0.3	1342.61	2 ⁺	0	0 ⁺		

[†] From $\alpha(\text{K})\text{exp}$ and $\gamma(\theta)$.

[‡] Uncertainty ranges from 2 to 30%.




Multiply placed with undivided intensity.

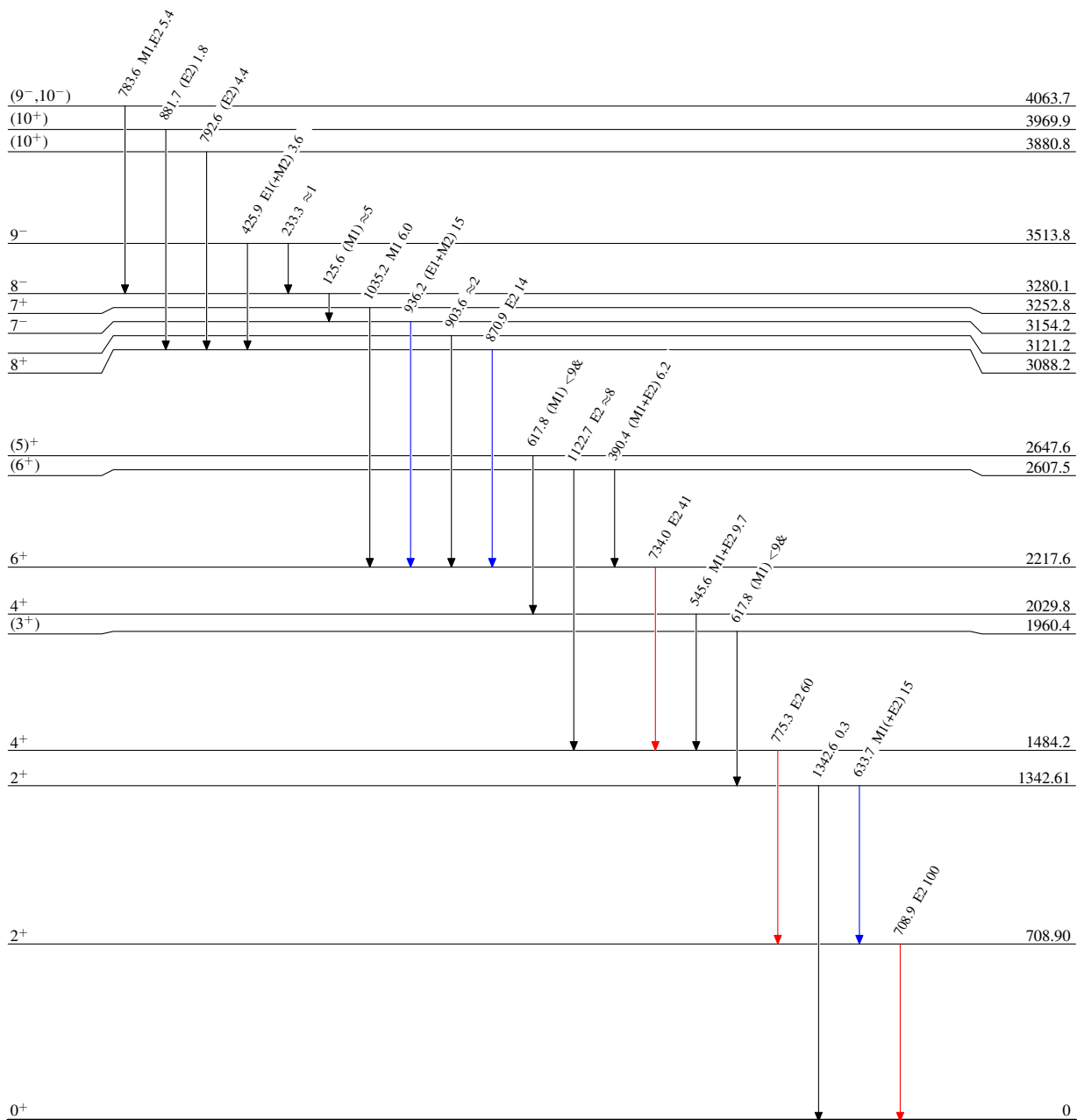
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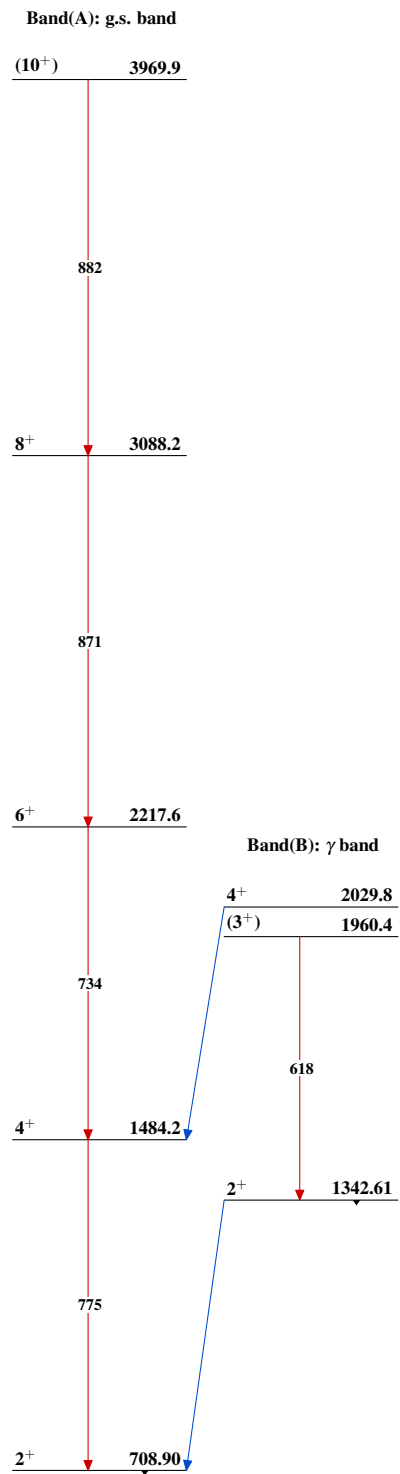
Level Scheme

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{114}\text{Te}_{52}$

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