

$^{113}\text{In}(p,4n\gamma), ^{112}\text{Sn}(p,p2n\gamma)$ 1985ViZV

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev		NDS 113, 1315 (2012)	1-Aug-2011

1985ViZV: E(p)=50 MeV. Measured I_γ (from singles spectra) after subtracting background from a region between beam pulses. Level scheme constructed by evaluators.

 ^{110}Sn Levels

E(level) [†]	J ^π [‡]	Comments
0.0	0 ⁺	
1211.71 10	2 ⁺	
2121.04 23	2 ⁺	Additional information 1. E(level): From Adopted Levels.
2196.8 4	4 ⁺	
2455.0 4	4 ⁺	
2479.7 4	6 ⁺	
2754.8 9	6 ⁺	
2822.3 6	(3,4 ⁺)	
2948.8 6	(3,4 ⁺)	
2967.2 10	2 ⁺	
3222.3 4	(3,4 ⁺)	
3688.6 4	7 ⁻	
3764.9 5	8 ⁻	Additional information 2.
4894.9 5	10 ⁻	
6035.2 3	(12 ⁺)	Additional information 3.
6777.7 3	(14 ⁺)	

[†] From a least-squares fit to E_γ .

[‡] From Adopted Levels.

 $\gamma(^{110}\text{Sn})$

E_γ [†]	I_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	I_γ [‡]
^x 158.0 2	1.9 4					
^x 257.8 9	1.3 1					
^x 268.7 7	2.5 1					
275.1 8	2.8 2	2754.8	6 ⁺	2479.7	6 ⁺	2.0 2
282.9 1	55 5	2479.7	6 ⁺	2196.8	4 ⁺	44 4
^x 377.9 7	2.5 2					0.2 1
^x 467.3 8	5.2 3					2.0 1
487.5 9	0.9 1	2967.2	2 ⁺	2479.7	6 ⁺	3.5 2
^x 521.0 9	1.4 7					
625.5 5	2.0 1	2822.3	(3,4 ⁺)	2196.8	4 ⁺	1.6 1
^x 707.3 5	0.8 5					
^x 728.4 8	4.6 3					
742.5 3	2.0 1	6777.7	(14 ⁺)	6035.2	(12 ⁺)	2.1 3
752.0 5	3.5 3	2948.8	(3,4 ⁺)	2196.8	4 ⁺	2.8 4
^x 888.1 7	4.1 8					1.7 3
985.1 3	61 5	2196.8	4 ⁺	1211.71	2 ⁺	54 4
^x 1060.5 7	2.9 3					2.9 3
^x 1083.4 2	12.8 8					1.5 3
1101.3 4	1.2 1	3222.3	(3,4 ⁺)	2121.04	2 ⁺	3.3 3
1130.0 5	5.2 3	4894.9	10 ⁻	3764.9	8 ⁻	5.4 3
^x 1148.0 9	1.7 2					3.2 3

Continued on next page (footnotes at end of table)

$^{113}\text{In}(p,4n\gamma), ^{112}\text{Sn}(p,p2n\gamma)$ 1985ViZV (continued) $\gamma(^{110}\text{Sn})$ (continued)

E_γ^\dagger	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	I_γ^\ddagger
1208.9 2	32 6	3688.6	7^-	2479.7	6^+	28 5
1211.7 1	100	1211.71	2^+	0.0	0^+	100
^x 1237.1 5	1.8 4					6.5 7
1243.3 3	7.9 8	2455.0	4^+	1211.71	2^+	5.1 5
^x 1343.9 2	12.0 8					

[†] From $^{113}\text{In}(p,4n\gamma)$ ($I_\gamma(1211.7)=100$) in 1985ViZV.

[‡] From $^{112}\text{Sn}(p,p2n\gamma)$ ($I_\gamma(1211.7)=100$) in 1985ViZV.

^x γ ray not placed in level scheme.

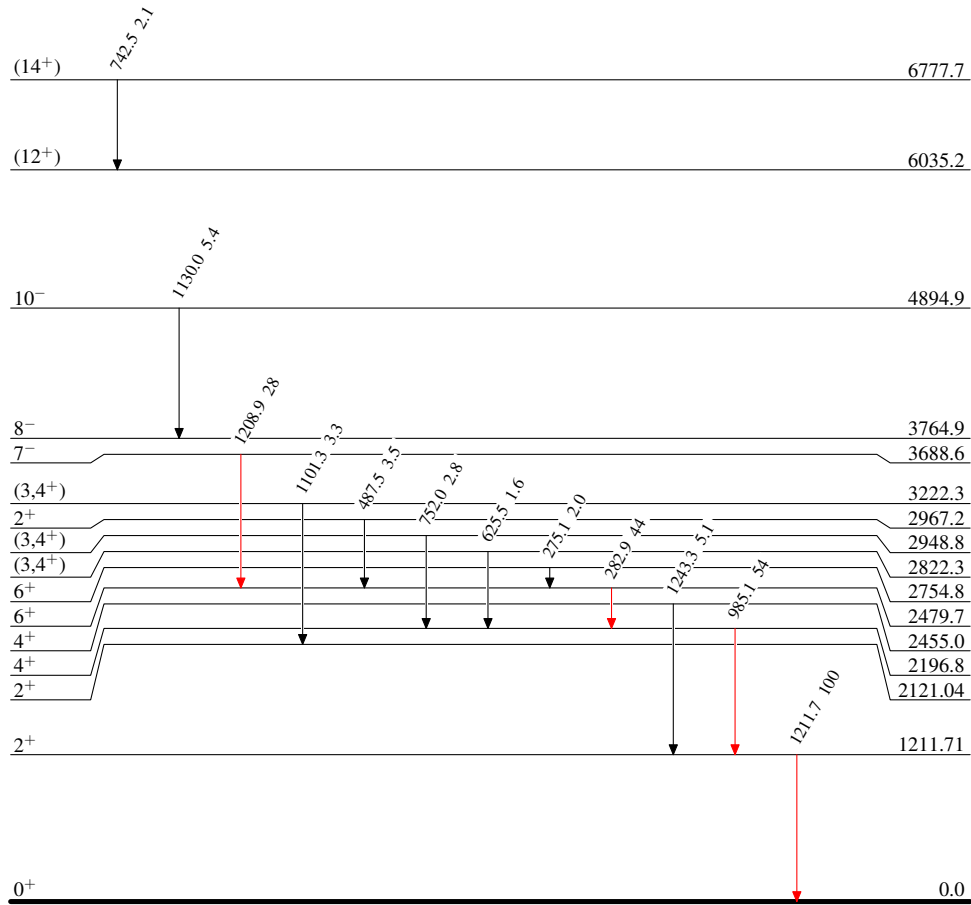
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Level Scheme

Intensities: Relative $I_{(\gamma+ce)}$

Legend

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

 $^{110}\text{Sn}_{60}$