

$^{116}\text{Sn}(n,\gamma)$ E=resonance

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Jean Blachot	ENSDF	1-Mar-2009

E=0.111, 0.148, 0.663 keV ([1978RaZX](#)). Other: [1968Sa16](#).
 S(n)=6944.6 *II* ([1995Au04](#)).

 ^{117}Sn Levels

E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)
0.0	1/2 ⁺	1004.8	3/2 ⁺	1445.5	5/2 ⁺	2331.6
158.6	3/2 ⁺	1020.8	5/2 ⁺	1496.1	(3/2 ⁺ ,5/2 ⁺)	2655.5
314.6	11/2 ⁻	1178.8	5/2 ⁺	1578.6	(3/2 ⁺)	3225.2
712.0	7/2 ⁺	1304.4	(7/2 ⁻)	1668.6		

[†] From Adopted Levels.

 $\gamma(^{117}\text{Sn})$

E_γ	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
156.0 <i>I</i>		314.6	11/2 ⁻	158.6	3/2 ⁺
158.6 <i>I</i>		158.6	3/2 ⁺	0.0	1/2 ⁺
553.4 <i>25</i>		712.0	7/2 ⁺	158.6	3/2 ⁺
846.0 <i>15</i>	60	1004.8	3/2 ⁺	158.6	3/2 ⁺
861.9 <i>25</i>	50	1020.8	5/2 ⁺	158.6	3/2 ⁺
989.8 <i>15</i>		1304.4	(7/2 ⁻)	314.6	11/2 ⁻
1004.5 <i>15</i>	40	1004.8	3/2 ⁺	0.0	1/2 ⁺
1020.7 <i>15</i>	50	1020.8	5/2 ⁺	0.0	1/2 ⁺
1020.7 <i>15</i>		1178.8	5/2 ⁺	158.6	3/2 ⁺
1160.1 <i>20</i>	18	2655.5		1496.1	(3/2 ⁺ ,5/2 ⁺)
1287.2 <i>20</i>	50	1445.5	5/2 ⁺	158.6	3/2 ⁺
1338.1 <i>20</i>		1496.1	(3/2 ⁺ ,5/2 ⁺)	158.6	3/2 ⁺
1419.2 <i>20</i>	57	1578.6	(3/2 ⁺)	158.6	3/2 ⁺
1446.2 <i>20</i>	50	1445.5	5/2 ⁺	0.0	1/2 ⁺
1509.6 <i>15</i>		1668.6		158.6	3/2 ⁺
1577.9 <i>25</i>	43	1578.6	(3/2 ⁺)	0.0	1/2 ⁺
^x 1586.2 <i>25</i>					
1650.2 <i>15</i>	24	2655.5		1004.8	3/2 ⁺
^x 1810.5 <i>25</i>					
^x 1840.4 <i>25</i>					
^x 1885.3 <i>25</i>					
2046.4 <i>20</i>		3225.2		1178.8	5/2 ⁺
2172.6 <i>15</i>		2331.6		158.6	3/2 ⁺
^x 2367.3 <i>25</i>					
2497 <i>2</i>	58	2655.5		158.6	3/2 ⁺

[†] % photon branching from each level.

^x γ ray not placed in level scheme.

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Level Scheme

Intensities: Relative I_γ

Legend

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

