

¹¹⁷Sn(p,n γ) **1995Bu15**

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

1995Bu15: E(p)=5.5, 5.9 MeV, measured: γ , $\gamma(\theta)$, $\gamma(t)$ with DSA method.

1976ShYX: E(p)=6, 10, 12.5 MeV, preliminary report.

Other: **1975Fr10.**

¹¹⁷Sb Levels

E(level) [†]	J π [#]	T _{1/2} [‡]	E(level) [†]	J π [#]	T _{1/2} [‡]
0	5/2 ⁺		1716.3	(1/2,3/2) ⁺	32 fs +7-6
527.3	7/2 ⁺		1742.9?	9/2	
719.4	(1/2,3/2) ⁺		1751.8		2.4×10 ² fs +31-9
923.3	(1/2,3/2 ⁺)	118 fs +70-35	1761.0	9/2	
1089.4	7/2	1.5×10 ² fs +15-6	1810.0	(1/2,3/2) ⁺	
1160.0	9/2 ⁺		1871.5	13/2 ⁺	
1310.6	9/2 ⁺	≥55 fs	1885.7?		
1323.1	11/2 ⁻		1974.9?		
1353.4	5/2		1995.2?		
1378.9	7/2	1.5×10 ² fs +15-6	2022?		
1453.8	3/2		2033.7	9/2	
1471.7	7/2	≥367 fs	2039.7		
1487.4	9/2		2085.2		66 fs +30-18
1534.5	11/2 ⁺		2129.0?		
1535.6	7/2	≥243 fs	2237.5	15/2 ⁺	
1623.3	3/2	≥132 fs	2295.5?		
1630.2?	7/2		2300.0	(1/2,3/2) ⁺	14 fs +10-8
1709.8	11/2		2323.1	15/2 ⁻	

[†] From **1995Bu15**. Levels not given in other works are questionable.

[‡] From **1995Bu15**.

[#] From $\gamma(\theta)$ and $\sigma(E)$.

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

E γ [†]	E _i (level)	J π _i	E _f	J π _f	E γ [†]	E _i (level)	J π _i	E _f	J π _f
163.0	1323.1	11/2 ⁻	1160.0	9/2 ⁺	719.4	719.4	(1/2,3/2) ⁺	0	5/2 ⁺
221.7	1310.6	9/2 ⁺	1089.4	7/2	734.4	1453.8	3/2	719.4	(1/2,3/2) ⁺
289.3	1378.9	7/2	1089.4	7/2	761.0	2295.5?		1534.5	11/2 ⁺
337.0	1871.5	13/2 ⁺	1534.5	11/2 ⁺	783.5	1310.6	9/2 ⁺	527.3	7/2 ⁺
366.0	2237.5	15/2 ⁺	1871.5	13/2 ⁺	795.9	1323.1	11/2 ⁻	527.3	7/2 ⁺
374.5	1534.5	11/2 ⁺	1160.0	9/2 ⁺	796.3	1885.7?		1089.4	7/2
382.4	1471.7	7/2	1089.4	7/2	923.3	923.3	(1/2,3/2 ⁺)	0	5/2 ⁺
432.3	1742.9?	9/2	1310.6	9/2 ⁺	943.7	2033.7	9/2	1089.4	7/2
446.3	1535.6	7/2	1089.4	7/2	960.1	1487.4	9/2	527.3	7/2 ⁺
527.3	527.3	7/2 ⁺	0	5/2 ⁺	996.4	1716.3	(1/2,3/2) ⁺	719.4	(1/2,3/2) ⁺
552.3	2039.7		1487.4	9/2	1000.1	2323.1	15/2 ⁻	1323.1	11/2 ⁻
632.7	1160.0	9/2 ⁺	527.3	7/2 ⁺	1008.7	1535.6	7/2	527.3	7/2 ⁺
634.5	1353.4	5/2	719.4	(1/2,3/2) ⁺	1032.4	1751.8		719.4	(1/2,3/2) ⁺
662.4	1751.8		1089.4	7/2	1051.6	1974.9?		923.3	(1/2,3/2) ⁺
671.9	1761.0	9/2	1089.4	7/2	1071.9	1995.2?		923.3	(1/2,3/2) ⁺
700.0	1623.3	3/2	923.3	(1/2,3/2 ⁺)	1089.4	1089.4	7/2	0	5/2 ⁺
706.9	1630.2?	7/2	923.3	(1/2,3/2 ⁺)	1090.4	1810.0	(1/2,3/2) ⁺	719.4	(1/2,3/2) ⁺

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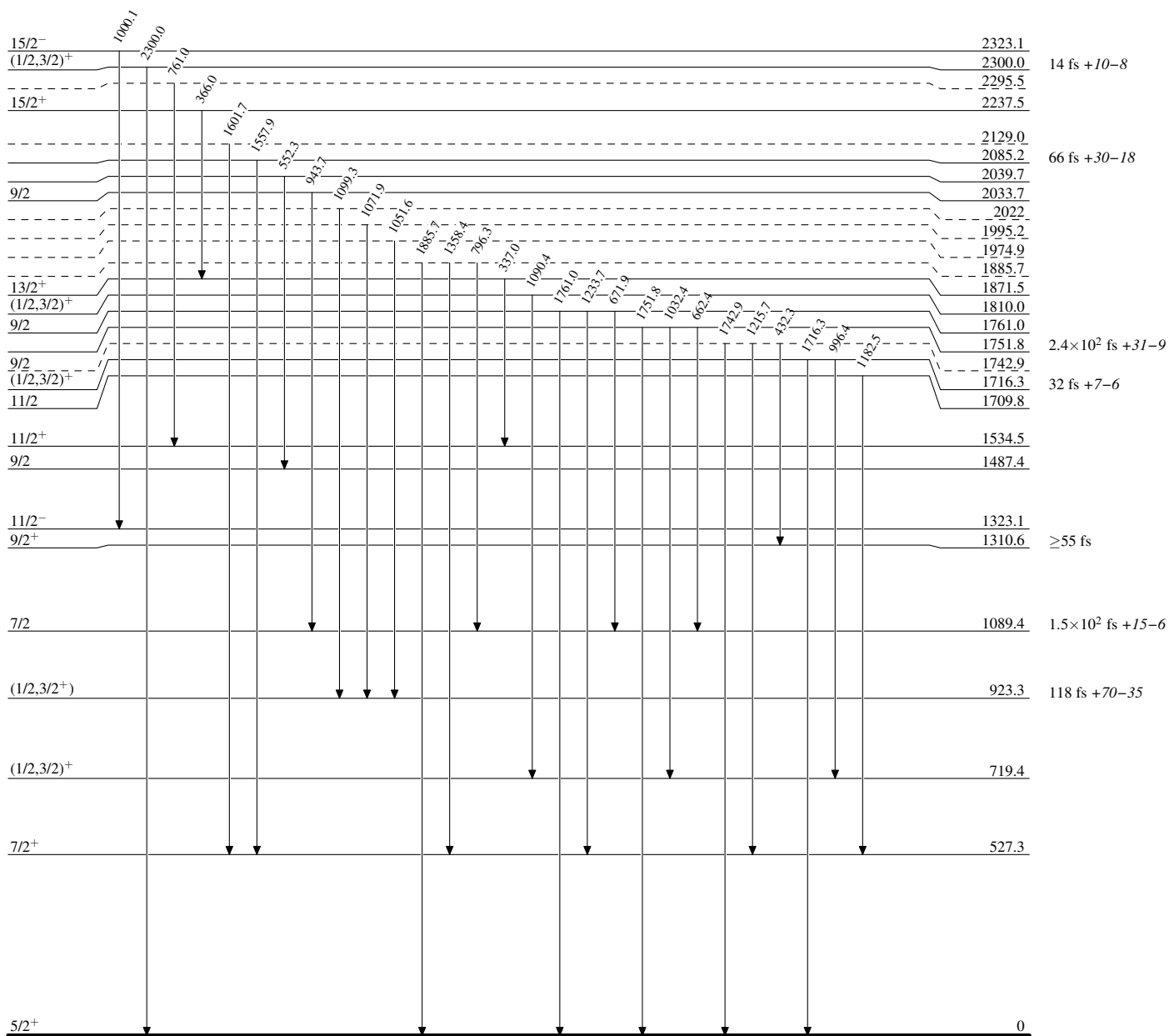
$^{117}\text{Sn}(p,n\gamma)$ **1995Bu15** (continued) $\gamma(^{117}\text{Sb})$ (continued)

E_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1099.3	2022?		923.3	(1/2,3/2 ⁺)	1471.8	1471.7	7/2	0	5/2 ⁺
1102.9	1630.2?	7/2	527.3	7/2 ⁺	1535.6	1535.6	7/2	0	5/2 ⁺
1160.0	1160.0	9/2 ⁺	0	5/2 ⁺	1557.9	2085.2		527.3	7/2 ⁺
1182.5	1709.8	11/2	527.3	7/2 ⁺	1601.7	2129.0?		527.3	7/2 ⁺
1215.7	1742.9?	9/2	527.3	7/2 ⁺	1630.2	1630.2?	7/2	0	5/2 ⁺
1233.7	1761.0	9/2	527.3	7/2 ⁺	1716.3	1716.3	(1/2,3/2) ⁺	0	5/2 ⁺
1310.6	1310.6	9/2 ⁺	0	5/2 ⁺	1742.9	1742.9?	9/2	0	5/2 ⁺
1323.1	1323.1	11/2 ⁻	0	5/2 ⁺	1751.8	1751.8		0	5/2 ⁺
1353.4	1353.4	5/2	0	5/2 ⁺	1761.0	1761.0	9/2	0	5/2 ⁺
1358.4	1885.7?		527.3	7/2 ⁺	1885.7	1885.7?		0	5/2 ⁺
1378.9	1378.9	7/2	0	5/2 ⁺	2300.0	2300.0	(1/2,3/2) ⁺	0	5/2 ⁺
1453.8	1453.8	3/2	0	5/2 ⁺					

† From [1976ShYX](#).

$^{117}\text{Sn}(p,n\gamma)$ 1995Bu15

Level Scheme



$^{117}_{51}\text{Sb}_{66}$

$^{117}\text{Sn}(p,n\gamma)$ 1995Bu15

Level Scheme (continued)

