

<sup>115</sup>In(p,n $\gamma$ ) 1988Vi06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 2391 (2012)	1-Sep-2012

E(p)=6.8 MeV.

Measured  $\gamma\gamma$ ,  $\gamma\epsilon$  coin,  $\gamma\gamma(t)$ ,  $\gamma(\theta)$ ,  $\gamma(t)$  pulsed beam.

<sup>115</sup>Sn Levels

E(level)	J $\pi^\dagger$	T <sub>1/2</sub>	E(level)	J $\pi^\dagger$	E(level)	E(level)
0.0	1/2 <sup>+</sup>	stable	1825.5	3/2 <sup>+</sup>	2196.1	2553.5
497.3	3/2 <sup>+</sup>		1857.6		2207.5	2653.6
613.0	7/2 <sup>+</sup>		1945.6		2229.9	2685.2
713.7			1973.8		2313.8	2759.7
986.5	5/2 <sup>+</sup>		2025.1	15/2 <sup>-</sup>	2347.1	2800.0?
1279.9	3/2 <sup>+</sup>		2060.0		2352.0	2807.4
1416.7	5/2 <sup>+</sup>		2076.9		2364.8	2842.6
1633.2	3/2 <sup>+</sup>		2084.2		2440.3	2975.3
1643.4	7/2 <sup>+</sup>		2155.8		2447.4	3206.1
1733.8	5/2 <sup>+</sup>		2164.7		2464.3	3841.9
1785.8			2192.8		2486.6	

$\dagger$  As given by authors based on  $\gamma(\theta)$ .

$\gamma(^{115}\text{Sn})$

E $\gamma$	I $\gamma$	E <sub>i</sub> (level)	J $\pi_i$	E <sub>f</sub>	J $\pi_f$	E $\gamma$	I $\gamma$	E <sub>i</sub> (level)	J $\pi_i$	E <sub>f</sub>	J $\pi_f$
100.6 1	4.8 4	713.7		613.0	7/2 <sup>+</sup>	814.1 4	0.18 3	2447.4		1633.2	3/2 <sup>+</sup>
115.4 1	31 2	613.0	7/2 <sup>+</sup>	497.3	3/2 <sup>+</sup>	817.5 2	0.25 5	2842.6		2025.1	15/2 <sup>-</sup>
189.1 4	0.4 1	2553.5		2364.8		<sup>x</sup> 838.8 4	0.31 4				
232.5 7	0.10 5	2440.3		2207.5		861.8 3	0.24 4	2807.4		1945.6	
306.6 9	0.12 3	2164.7		1857.6		867.7 2	0.49 6	2653.6		1785.8	
353.2 6	0.08 5	1633.2	3/2 <sup>+</sup>	1279.9	3/2 <sup>+</sup>	896.7 6	0.05 2	2313.8		1416.7	5/2 <sup>+</sup>
369.5 7	0.11 3	1785.8		1416.7	5/2 <sup>+</sup>	919.4 1	0.68 9	1416.7	5/2 <sup>+</sup>	497.3	3/2 <sup>+</sup>
373.8 1	0.55 8	986.5	5/2 <sup>+</sup>	613.0	7/2 <sup>+</sup>	929.7 1	3.5 4	1643.4	7/2 <sup>+</sup>	713.7	
401.5 3	0.25 3	2347.1		1945.6		948.6 4	0.28 4	2364.8		1416.7	5/2 <sup>+</sup>
454.2 5	0.17 3	1733.8	5/2 <sup>+</sup>	1279.9	3/2 <sup>+</sup>	986.5 1	2.7 2	986.5	5/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>
489.3 3	7.7 7	986.5	5/2 <sup>+</sup>	497.3	3/2 <sup>+</sup>	1020.2 6	0.23 4	1633.2	3/2 <sup>+</sup>	613.0	7/2 <sup>+</sup>
497.3 1	100 3	497.3	3/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>	1030.7 4	0.18 1	2447.4		1416.7	5/2 <sup>+</sup>
521.3 2	0.25 3	2164.7		1643.4	7/2 <sup>+</sup>	1072.1 1	5.1 4	1785.8		713.7	
561.5 1	0.90 1	2347.1		1785.8		1097.6 1	1.1 1	2084.2		986.5	5/2 <sup>+</sup>
574.5 7	0.14 3	2207.5		1633.2	3/2 <sup>+</sup>	1120.8 7	0.55 4	1733.8	5/2 <sup>+</sup>	613.0	7/2 <sup>+</sup>
618.4 5	0.22 4	2352.0		1733.8	5/2 <sup>+</sup>	1135.9 5	0.23 4	1633.2	3/2 <sup>+</sup>	497.3	3/2 <sup>+</sup>
643.9 $\dagger$ 2	0.10 2	2800.0?		2155.8		1169.3 2	0.39 4	2155.8		986.5	5/2 <sup>+</sup>
656.9 1	0.89 8	1643.4	7/2 <sup>+</sup>	986.5	5/2 <sup>+</sup>	1178.4 4	0.18 6	2164.7		986.5	5/2 <sup>+</sup>
660.3 5	0.18 3	2685.2		2025.1	15/2 <sup>-</sup>	1199.5 5	0.24 5	2842.6		1643.4	7/2 <sup>+</sup>
<sup>x</sup> 693.9 3	0.86 8					1206.5 6	0.20 6	2192.8		986.5	5/2 <sup>+</sup>
703.7 1	1.7 2	2347.1		1643.4	7/2 <sup>+</sup>	1209.5 6	0.36 6	2196.1		986.5	5/2 <sup>+</sup>
734.6 5	0.11 2	2759.7		2025.1	15/2 <sup>-</sup>	1212.3 5	0.21 5	1825.5	3/2 <sup>+</sup>	613.0	7/2 <sup>+</sup>
739.6 3	0.25 5	2685.2		1945.6		1220.8 1	0.92 9	2207.5		986.5	5/2 <sup>+</sup>
747.3 2	0.41 5	1733.8	5/2 <sup>+</sup>	986.5	5/2 <sup>+</sup>	1231.9 1	7.3 7	1945.6		713.7	
780.0 4	0.24 4	2196.1		1416.7	5/2 <sup>+</sup>	1236.5 5	1.2 3	1733.8	5/2 <sup>+</sup>	497.3	3/2 <sup>+</sup>
790.9 4	0.13 4	2207.5		1416.7	5/2 <sup>+</sup>	1244.5 1	0.62 6	1857.6		613.0	7/2 <sup>+</sup>
803.7 5	0.12 3	2084.2		1279.9	3/2 <sup>+</sup>	1279.9 1	2.1 2	1279.9	3/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>
810.6 5	0.10 3	2975.3		2164.7		1311.4 1	3.4 3	2025.1	15/2 <sup>-</sup>	713.7	

Continued on next page (footnotes at end of table)

$^{115}\text{In}(p,n\gamma)$  **1988Vi06 (continued)** $\gamma(^{115}\text{Sn})$  (continued)

$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
1328.0 3	0.34 6	1825.5	3/2 <sup>+</sup>	497.3	3/2 <sup>+</sup>	1733.8 <sup>#</sup> 3	0.11 <sup>#</sup> 4	1733.8	5/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>
1360.3 1	2.9 2	1857.6		497.3	3/2 <sup>+</sup>	1733.8 <sup>#</sup> 3	0.11 <sup>#</sup> 4	2229.9		497.3	3/2 <sup>+</sup>
1378.2 3	0.74 6	2364.8		986.5	5/2 <sup>+</sup>	1752.3 3	0.42 5	2364.8		613.0	7/2 <sup>+</sup>
1383.3 <sup>‡</sup> 1	3.6 3	2800.0 <sup>†</sup>		1416.7	5/2 <sup>+</sup>	1816.5 2	0.29 5	2313.8		497.3	3/2 <sup>+</sup>
1416.7 1	3.1 2	1416.7	5/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>	1825.3 1	0.76 9	1825.5	3/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>
1453.7 1	0.73 7	2440.3		986.5	5/2 <sup>+</sup>	1854.8 2	0.45 8	2352.0		497.3	3/2 <sup>+</sup>
1471.4 7	0.72 7	2084.2		613.0	7/2 <sup>+</sup>	1940.5 4	1.7 2	2553.5		613.0	7/2 <sup>+</sup>
1476.5 1	0.67 6	1973.8		497.3	3/2 <sup>+</sup>	1967.0 9	0.26 5	2464.3		497.3	3/2 <sup>+</sup>
1542.8 2	0.58 2	2155.8		613.0	7/2 <sup>+</sup>	1973.8 6	0.14 5	1973.8		0.0	1/2 <sup>+</sup>
1562.6 1	1.0 1	2060.0		497.3	3/2 <sup>+</sup>	1989.3 2	0.25 6	2486.6		497.3	3/2 <sup>+</sup>
1579.6 1	1.1 1	2076.9		497.3	3/2 <sup>+</sup>	2045.9 3	0.25 6	2759.7		713.7	
1587.3 3	0.55 4	2084.2		497.3	3/2 <sup>+</sup>	2060.1 4	0.23 7	2060.0		0.0	1/2 <sup>+</sup>
1594.3 1	1.1 1	2207.5		613.0	7/2 <sup>+</sup>	<sup>x</sup> 2120.7 5	0.06 4				
1633.2 1	2.7 2	1633.2	3/2 <sup>+</sup>	0.0	1/2 <sup>+</sup>	2219.5 5	0.05 3	3206.1		986.5	5/2 <sup>+</sup>
1658.3 1	0.71 7	2155.8		497.3	3/2 <sup>+</sup>	2352.0 6	0.06 4	2352.0		0.0	1/2 <sup>+</sup>
1666.8 5	0.82 5	2164.7		497.3	3/2 <sup>+</sup>	2425.2 4	0.15 4	3841.9		1416.7	5/2 <sup>+</sup>
1695.5 3	0.46 6	2192.8		497.3	3/2 <sup>+</sup>	2439.2 4	0.10 3	2440.3		0.0	1/2 <sup>+</sup>
<sup>x</sup> 1731.0 3	0.11 5					2593.1 6	0.05 3	3206.1		613.0	7/2 <sup>+</sup>

<sup>†</sup> Placed from a 4029 level by [1991Vi10](#) (same author) in ( $\alpha,2n\gamma$ ).

<sup>‡</sup> Placed from a 1996 level by [1991Vi10](#) (same author) in ( $\alpha,2n\gamma$ ).

<sup>#</sup> Multiply placed with undivided intensity.

<sup>x</sup>  $\gamma$  ray not placed in level scheme.

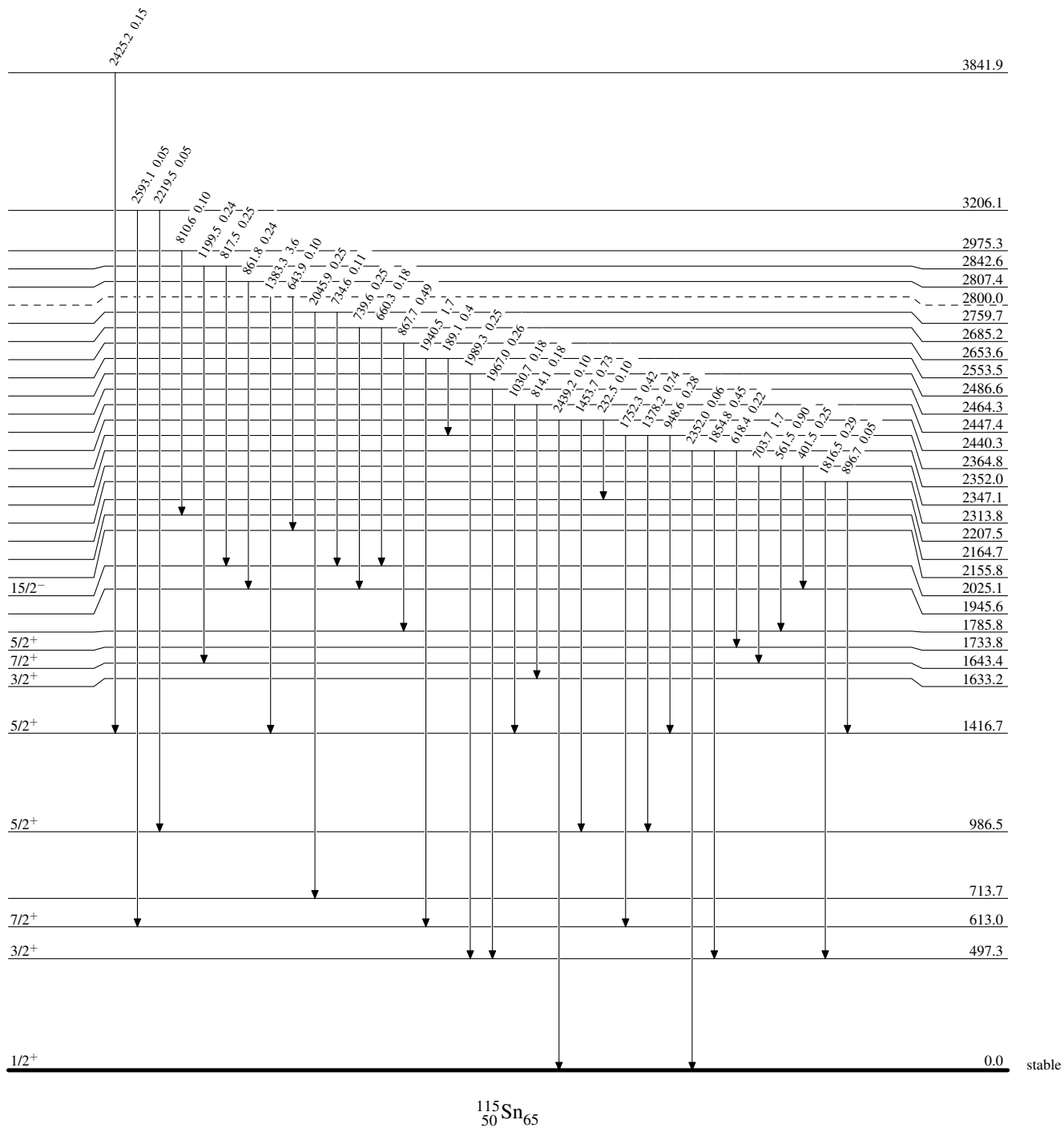
$^{115}\text{In}(p,n\gamma)$  1988Vi06

Level Scheme

Intensities: Relative  $I_\gamma$

Legend

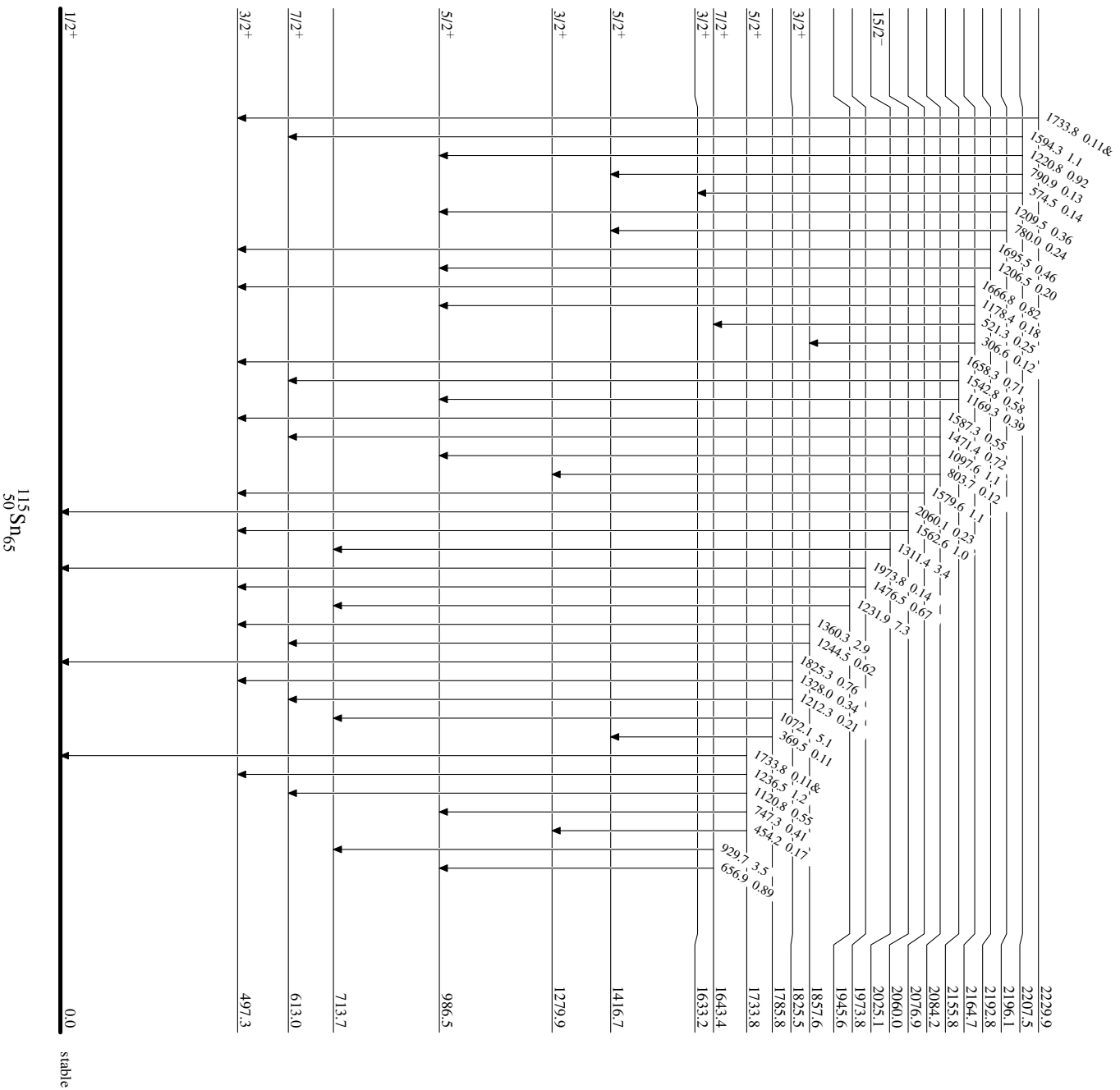
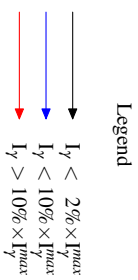
- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$



<sup>115</sup>In(p,n) $\gamma$  1988V106

Level Scheme (continued)

Intensities: Relative I <sub>$\gamma$</sub>   
& Multiply placed: undivided intensity given



$^{115}\text{In}(p,n\gamma)$  1988Vi06

## Level Scheme (continued)

Intensities: Relative  $I_\gamma$   
& Multiply placed: undivided intensity given

## Legend

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

