^{49}In

THERMAL CROSS SECTIONS

σ_γ = 193.5±1.5 b
a_{coh} = 3.9±0.1 fm

RESONANCE PROPERTIES

I_γ = 3200.±50. b
S_0 = 0.30±0.04
S_1 = 2.5±0.5

$^{113}_{49}$In

THERMAL CROSS SECTIONS

σ_γ = 11.4±1.1 b
σ_γ = 3.1±0.7 b [42 ms $^{114}In^{m2}$]
σ_γ = 4.4±0.7 b [49 day $^{114}In^{m1}$]
σ_γ = 3.9±0.4 b [72 sec $^{114}In^{g}$]

RESONANCE PROPERTIES

I_γ = 282±30 b
R' = 6.6±0.4 fm
S_0 = 0.85±0.20

RESONANCE PARAMETERS

I^π = 9/2$^+$ %Abn = 4.28 S_n = 7313±10 keV

E_0 (eV)	$2g\Gamma_n$ (meV)	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
1.80±0.03	<0.1		<0.08
4.70±0.03	0.104± 0.016		0.048±0.007
14.6 ±0.1	7.6 ± 0.6	60 ±20	2.1 ±0.2
21.55±0.01	2.8 ± 0.2		0.60 ±0.04
24.99±0.02	9.4 ± 0.2	80 ± 5	1.88 ±0.04
26.78±0.02	0.21 ± 0.05		0.04 ±0.01
32.24±0.02	7.7 ± 0.4	72 ±10	1.36 ±0.07
44.71±0.03	2.2 ± 0.2		0.33 ±0.03
45.38±0.03	1.68 ± 0.02		0.250±0.003
70.29±0.03	7.6 ± 0.2		0.90 ±0.02
91.59±0.05	30 ±10		3.12 ±1.04
93.00±0.05	4.24 ± 0.08		0.44 ±0.008
103.95±0.05	30 ± 2	70 ± 5	3.0 ±0.2
123.45±0.08	12 ± 1		1.08
203.36±0.16	38 ± 2		2.66
228.50±0.19	37.0 ± 9.2		2.44
234.48±0.20	13.0 ± 1.4		0.84
236.06±0.20	7.0 ± 1.8		0.44
241.73±0.21	16.6 ± 1.8		1.08
270.45±0.12	8.8 ± 1.4		0.54
304.26±0.15	12.4 ± 1.4		0.72
313.93±0.15	7.0 ± 1.8		0.40

$^{113}_{49}In$

E_0 (eV)	$2g\Gamma_n$ (meV)	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
325.83±0.16	11.54 ± 2.32		0.64
441.45±0.25	13.8 ± 1.8		0.66
511.56±0.32	39.2 ± 4.6		1.73
544.78±0.35	83.2 ± 4.6		3.6
555.37±0.36	23.6 ± 2.4		1.0
582.87±0.38	11.1 ± 4.6		4.6
593.02±0.40	41.6 ± 2.4		1.70
625.54±0.43	69.2 ± 4.6		2.78
660.81±0.47	74.0 ± 4.6		2.88
714.59±0.52	92.4 ± 9.2		3.46
769.91±0.59	74.0 ± 4.6		2.68
777.57±0.59	31.8 ± 1.4		1.14
785.35±0.60	40.6 ± 2.4		1.45
809.39±0.63	38.4 ± 2.4		1.34
912.01±0.38	180.2 ±23.2		5.96
1064.6 ±0.48	46.2 ± 4.6		1.42
1230.0 ±0.59	110.8 ± 9.2		3.14
1254.6 ±0.61	120 ±14		3.4
1761.9 ±1.0	124 ±10		2.98
2004.1 ±1.2	414 ±14		9.50

$^{115}_{49}In$

THERMAL CROSS SECTIONS

σ_γ = 202±2 b
σ_γ = 92±14 b [2.12 sec $^{116}In^{m2}$]
σ_γ = 65±5 b [54 min $^{116}In^{m1}$]
σ_γ = 45±4 b [13 sec $^{116}In^{g}$]

RESONANCE PROPERTIES

I_γ = 3300±100 b
R' = 6.6±0.2 fm
<D> = 10.7±0.6 eV
S_0 = 0.26±0.03
S_1 = 2.5±0.5

RESONANCE PARAMETERS

I^π = 9/2$^+$ %Abn = 95.72 S_n = 6780±1 keV

E_0 (eV)	$2g\Gamma_n$ (meV)	J	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
1.457±0.002	3.34 ± 0.06	5	72 ± 2	2.77 ±0.04
3.86 ±0.01	0.319 ± 0.013	4	81 ± 4	0.162 ±0.007
9.12 ±0.04	1.73 ± 0.17	5	80 ±40	0.57 ±0.06
12.1 ±0.1	0.112 ± 0.008		140 ±60	0.032 ±0.002
23.0 ±0.2	1.18 ± 0.14			0.246 ±0.029
22.73 ±0.01	1.04 ± 0.04		81 ± 5	0.218 ±0.010
39.60 ±0.03	4.0 ± 0.2		76 ± 5	0.635 ±0.030

E_0 (eV)	$2g\Gamma_n$ (meV)	J	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
46.36 ±0.04	0.26 ± 0.02			0.038 ±0.003
48.14 ±0.04	0.60 ± 0.10		90 ± 5	0.086 ±0.014
63.00 ±0.03	0.84 ± 0.10		95 ±10	0.106 ±0.011
69.50 ±0.03	0.40 ± 0.10			0.048 ±0.012
73.08 ±0.04	0.012 ± 0.006			0.0014 ±0.0007
80.87 ±0.04	1.50 ± 0.10		70 ±10	0.166 ±0.011
83.28 ±0.04	6.6 ± 0.8		73 ± 5	0.72 ±0.09
86.36 ±0.05	0.052 ± 0.026			0.0056 ±0.0028
94.34 ±0.05	2.9 ± 0.3		90 ±10	0.298 ±0.030
100.83 ±0.05	0.044 ± 0.020			0.0042
110.90 ±0.06	0.048 ± 0.024			0.0046
114.43 ±0.06	0.104 ± 0.010			0.0098
120.71 ±0.07	0.008 ± 0.004			0.00072
125.89 ±0.08	3.8 ± 0.2		65 ±20	0.34
132.81 ±0.08	5.4 ± 1.0		180 ±50	0.46
144.04 ±0.09	0.146 ± 0.020			0.0122
145.76 ±0.09	0.06 ± 0.02			0.0050
150.29 ±0.10	4.6 ± 0.1		85 ±10	0.38
158.59 ±0.11	0.146 ± 0.070			0.0116
164.67 ±0.12	18.0 ± 1.0		82 ±10	1.40
168.08 ±0.12	2.10 ± 0.10			0.162
174.08 ±0.13	0.20 ± 0.08			0.0142
177.92 ±0.13	3.0 ± 0.6		80 ±20	0.22
186.96 ±0.14	20.0 ± 2.0		100 ±20	1.462
192.24 ±0.15	0.0320± 0.0008			0.0023
194.45 ±0.15	0.124 ± 0.060			0.0088
198.83 ±0.15	0.072 ± 0.040			0.0052
205.60 ±0.16	23.0 ± 6.0			1.604
211.88 ±0.17	0.52 ± 0.10			0.036
214.09 ±0.17	0.176 ± 0.010			0.012
224.03 ±0.18	32 ± 6		60 ±15	2.14
226.81 ±0.19	1.32 ± 0.80			0.088
239.28 ±0.20	0.254 ± 0.120			0.0164
246.74 ±0.21	0.192 ± 0.100			0.0122
250.17 ±0.22	60 ± 4		85 ±10	3.8
266.96 ±0.12	4.0 ± 0.2			0.24
276.77 ±0.12	0.136 ± 0.060			0.0082
282.28 ±0.13	0.186 ± 0.080			0.011
288.88 ±0.13	20 ± 2			1.18
294.33 ±0.14	44 ±10			2.6
302.52 ±0.14	0.104 ± 0.042			0.006
308.37 ±0.15	0.126 ± 0.060			0.0072
319.49 ±0.16	15.0 ± 1.0			0.84
329.57 ±0.16	0.20 ± 0.10			0.011
336.73 ±0.17	0.20 ± 0.10			0.0112
339.80 ±0.17	1.90 ± 0.10			0.104
345.18 ±0.18	0.03 ± 0.14			0.016
354.13 ±0.18	6.28 ± 2.00			0.334
360.60 ±0.19	0.20 ± 0.10			0.0104
362.10 ±0.19	10.88 ± 0.42			0.572
366.87 ±0.19	0.34 ± 0.16			0.0172
370.94 ±0.20	6.90 ± 0.42			0.358

$^{115}_{49}In$

E_0 (eV)	$2g\Gamma_n$ (meV)	J	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
379.10 ±0.20	0.628 ± 0.104			0.0322
392.97 ±0.20	1.22 ± 0.60			0.062
384.20 ±0.21	5.86 ± 0.62			0.298
402.35 ±0.22	31.4 ± 6.2			1.57
411.56 ±0.23	31.4 ± 6.2			1.54
423.00 ±0.24	10.46 ± 1.04			0.508
431.21 ±0.25	0.22 ± 0.10			0.0106
437.16 ±0.25	1.04 ± 0.10			0.050
448.90 ±0.26	12.54 ± 2.10			0.592
453.89 ±0.27	21.0 ± 4.2			0.982
456.82 ±0.27	19.2 ± 2.0			0.90
469.65 ±0.28	5.44 ± 0.62			0.250
473.58 ±0.28	0.56 ± 0.20			0.026
477.55 ±0.29	3.14 ± 0.22			0.144
488.01 ±0.29	0.64 ± 0.30			0.030
493.67 ±0.30	0.50 ± 0.20			0.022
498.20 ±0.30	2.92 ± 0.22			0.131
501.88 ±0.31	1.04 ± 0.50			0.046
503.73 ±0.31	25.0 ± 4.2			1.12
506.21 ±0.31	1.08 ± 0.50			0.048
513.15 ±0.32	0.098 ± 0.050			0.0044
515.38 ±0.32	3.34 ± 0.22			0.147
525.46 ±0.33	14.22 ± 2.10			0.620
530.11 ±0.33	0.94 ± 0.10			0.04
547.92 ±0.35	5.44 ± 0.22			0.232
551.10 ±0.35	1.68 ± 0.10			0.072
559.70 ±0.36	0.64 ± 0.30			0.026
562.61 ±0.36	0.94 ± 0.08			0.040
569.62 ±0.37	0.52 ± 0.20			0.022
571.86 ±0.37	35.54 ± 2.10			1.49
580.19 ±0.38	7.94 ± 0.42			3.30
589.09 ±0.39	6.70 ± 0.22			0.276
602.22 ±0.40	2.10 ± 0.42			0.085
609.99 ±0.41	0.84 ± 0.06			0.034
614.13 ±0.42	37.64 ± 2.10			1.52
619.59 ±0.42	16.72 ± 1.04			0.672
643.93 ±0.45	4.80 ± 0.22			0.189
647.07 ±0.45	5.72 ± 0.20			0.146
654.80 ±0.46	9.00 ± 0.20			0.352
674.03 ±0.48	11.28 ± 0.22			0.434
683.23 ±0.49	3.14 ± 0.22			0.12
694.62 ±0.50	4.18 ± 0.22			0.159
699.15 ±0.50	1.22 ± 0.60			0.046
704.75 ±0.51	2.30 ± 0.22			0.0866
707.83 ±0.52	5.86 ± 1.04			0.220
719.85 ±0.53	3.14 ± 0.22			0.117
724.10 ±0.54	1.00 ± 0.50			0.036
727.84 ±0.54	3.34 ± 0.22			0.124
733.25 ±0.54	12.34 ± 0.22			0.456
752.66 ±0.57	2.30 ± 0.22			0.0838
760.06 ±0.58	1.08 ± 0.50			0.0392
774.02 ±0.59	20.90 ± 2.10			0.752

E_0 (eV)	$2g\Gamma_n$ (meV)	J	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
783.54 ±0.60	15.88 ± 0.42			0.568
789.58 ±0.61	16.72 ± 1.04			0.596
795.08 ±0.62	5.8 ± 4.0			0.20
800.63 ±0.62	0.90 ± 0.40			0.032
812.55 ±0.63	0.50 ± 0.20			0.018
815.73 ±0.64	3.34 ± 0.62			0.117
819.41 ±0.32	8.36 ± 1.04			0.292
829.79 ±0.33	10.88 ± 0.62			0.378
836.70 ±0.33	17.76 ± 0.62			0.614
853.52 ±0.34	58.54 ± 4.18			2.004
861.08 ±0.35	23.0 ± 4.2			0.784
863.85 ±0.35	18.8 ± 4.2			0.64
869.44 ±0.35	1.58 ± 0.80			0.054
875.09 ±0.35	6.90 ± 0.42			0.234
882.58 ±0.36	0.76 ± 0.40			0.026
891.62 ±0.37	15.88 ± 0.42			0.532
898.96 ±0.37	3.56 ± 0.42			0.119
905.76 ±0.38	0.56 ± 0.30			0.019
913.90 ±0.38	13.8 ± 0.6			0.46
923.43 ±0.38	6.28 ± 1.46			0.206
931.94 ±0.39	2.28 ± 1.0			0.075
943.74 ±0.39	1.10 ± 0.50			0.036
948.12 ±0.40	52.2 ± 0.20			1.70
956.57 ±0.40	31.36 ± 2.10			1.014
973.81 ±0.41	1.24 ± 0.60			0.040
977.99 ±0.42	36.3 ± 2.0			1.17
981.76 ±0.42	2.90 ± 0.42			0.0926
997.97 ±0.43	33.4 ± 2.0			1.06
1007.1 ±0.5	0.82 ± 0.40			0.026
1019.5 ±0.5	0.90 ± 0.40			0.028
1035.7 ±0.5	6.90 ± 1.04			0.214
1043.0 ±0.5	52.2 ± 4.2			1.618
1049.0 ±0.5	5.22 ± 0.62			0.1614
1055.1 ±0.5	10.04 ± 0.50			0.032
1060.3 ±0.5	12.96 ± 0.62			0 398
1075.1 ±0.5	35.6 ± 4.2			1.084
1085.8 ±0.5	33.4 ± 2.0			1.016
1103.7 ±0.5	1.42 ± 0.60			0.042
1111.7 ±0.5	13.18 ± 0.62			0.394
1140.2 ±0.5	19.24 ± 0.84			0.516
1170.3 ±0.6	16.72 ± 2.08			0.488
1179.7 ±0.6	19.24 ± 0.62			0.560
1188.0 ±0.6	3.0 ± 1.0			0.088
1190.8 ±0.6	3.34 ± 0.42			0.0970
1199.3 ±0.6	0.82 ± 0.40			0.024
1213.1 ±0.6	48.0 ± 6.2			1.38
1216.6 ±0.6	10.2 ± 3.0			0.292
1224.2 ±0.6	39.8 ± 4.2			1.14
1237.8 ±0.60	1.50 ± 0.60			0.042
1243.1 ±0.6	20.90 ± 2.10			0.600
1270.0 ±0.6	3.58 ± 1.8			0.1002
1276.8 ±0.6	5.52 ± 2.8			0.154

$^{115}_{49}In$

E_0 (eV)		$2g\Gamma_n$ (meV)	J	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
1281.2	±0.6	16.52 ± 0.62			0.462
1304.7	±0.6	1.82 ± 0.80			0.050
1309.3	±0.7	14.22 ± 0.62			0.392
1325.0	±0.7	11.50 ± 4.18			0.316
1330.9	±0.7	12.96 ± 0.84			0.356
1334.3	±0.7	7.94 ± 0.62			0.218
1342.3	±0.7	8.16 ± 0.62			0.222
1346.0	±0.7	14.2 ± 0.6			0.38
1349.8	±0.7	29.2 ± 4.2			0.796
1357.9	±0.7	7.32 ± 0.62			0.199
1367.6	±0.7	1.62 ± 0.80			0.044
1372.4	±0.7	2.84 ± 1.40			0.0764
1389.3	±0.7	10.24 ± 0.84			0.274
1397.9	±0.7	12.96 ± 1.04			0.346
1402.2	±0.7	7.32 ± 0.42			0.195
1415.9	±0.7	25.0 ± 2.0			0.666
1421.0	±0.7	3.28 ± 1.6			0.0872
1430.6	±0.8	8.70 ± 0.62			0.230
1441.8	±0.8	2.90 ± 0.42			0.0764
1448.6	±0.8	3.14 ± 0.62			0.0824
1460.7	±0.8	2.18 ± 0.80			0.0570
1468.4	±0.8	29.2 ± 4.2			0.764
1480.0	±0.8	6.90 ± 0.62			0.179
1484.7	±0.8	0.52 ± 0.20			0.0136
1492.6	±0.8	4.32 ± 1.4			0.112
1520.6	±0.8	44.0 ± 2.0			1.13
1546.1	±0.8	27.2 ± 2.0			0.692
1554.4	±0.8	9.52 ± 4.14			0.242
1562.9	±0.8	5.0 ± 2.0			0.126
1567.1	±0.9	20.90 ± 2.10			0.528
1579.9	±0.9	3.0 ± 1.0			0.076
1595.5	±0.9	31.4 ± 2.0			0.786
1614.0	±0.9	37.6 ± 4.2			0.936
1619.3	±0.9	188.2 ±21.0			4.68
1640.9	±0.9	46.0 ± 2.0			1.14
1646.4	±0.9	2.46 ± 1.00			0.0608
1654.7	±0.9	2.4 ± 1.0			0.060
1664.9	±0.9	15.68 ± 6.2			3.84
1675.1	±0.9	1.6 ± 0.6			0.04
1679.8	±0.9	14.2 ± 0.4			0.34
1688.4	±1.0	167.2 ± 2.0			4.08
1694.1	±1.0	12.0 ± 3.0			0.30
1704.6	±1.0	2.12 ± 1.0			0.0512
1711.4	±1.0	58.6 ± 6.2			1.414
1724.1	±1.0	9.0 ± 0.4			0.22
1735.9	±1.0	73.2 ±10.4			1.76
1739.9	±1.0	8.8 ± 3.0			0.211
1765.0	±1.0	6.2 ± 2.4			0.146
1780.3	±1.0	5.2 ± 0.4			0.124
1789.6	±1.0	2.0 ± 0.8			0.048
1796.9	±1.0	39.72 ± 2.08			0.937
1808.4	±1.0	3.8 ± 1.4			0.088

E_0 (eV)	$2g\Gamma_n$ (meV)	J	Γ_γ (meV)	$2g\Gamma_n^0$ (meV)
1813.7 ±1.0	2.36 ± 1.00			0.0554
1826.4 ±1.0	3.6 ± 1.6			0.084
1833.9 ±1.1	4.6 ± 1.6			0.108
1843.6 ±1.1	6.4 ± 2.0			0.150
1854.5 ±1.1	54.4 ± 6.2			1.262
1865.5 ±1.1	13.6 ± 1.0			0.32
1878.8 ±1.1	6.6 ± 3.0			0.154
1891.1 ±1.1	129.6 ± 6.2			2.98
1904.7 ±1.1	16.6 ± 4.2			0.38
1918.5 ±1.1	35.6 ± 6.2			0.812
1925.4 ±1.1	2.70 ± 1.2			0.0614
1939.3 ±1.2	18.2 ± 1.0			0.42
1946.4 ±1.2	33.4 ± 2.0			0.758
1959.4 ±1.2	31.4 ± 2.0			0.708
1967.7 ±1.2	15.72 ± 4.18			0.378
1980.9 ±1.2	41.8 ± 6.2			0.94

THERMAL CROSS SECTIONS

Isotope	Measurement	Reference	Author
In^{115}	activation	JNE,24,35(70)	Ryves
In^{113}	activation	CJP,47,2031(69)	Ricabarra
In	pile osci.	AE-351(69)	Sokolovski
$In^{113,115}$	activation	NP/A,112,474(68)	Alexander
$In^{113,115}$	activation	BAP,12,544(67)	Clark
In^{115}	isom. ratio	YF,1,259(65)	Balodis
In^{115}	isom. ratio	NP,66,297(65)	Poenitz
In^{115}	isom. ratio	NSE,19,464(64)	Greenfield
In	pile osci.	64PARIS,479(64)	Vidal
In^{115}	activation	ADP,12,225(63)	Alexander
In	diffraction	PR,131,2098(63)	Arnold
In^{115}	activation	NSE,17,329(63)	Beckurts
In	pile osci.	KE,6,336(63)	Huttel
In^{113}	isom. ratio	PR,129,769(63)	Keisch
In^{115}	activation	NKA,8,437(63)	Jozefowicz
In^{115}	isom. ratio	PL,3,40(62)	Fettweis
In	pile osci.	61BUCHAR(61)	Bouzyk
In	pulsed n	NSE,9,132(61)	Meadows
In^{115}	isom. ratio	PR,119,208(60)	Domanic
In	pile osci.	JAERI-1009(60)	Fuketa
In	pile osci.	JNE,12,32(60)	Tattersall
In	diffraction	JAP,30,1323(59)	Sidhu
In^{115}	activation	ZN,13A,820(58)	Meister
In	pile osci.	AERE-R/M-100(57)	Cummins
In^{115}	activation	JNE,5,230(57)	Myasishcheva
In^{115}	activation	IJP,31,630(57)	Sehgal
In	pile osci.	PR,83,641(51)	Pomerance
In^{113}	activation	PR,74,1248(48)	Goldhaber
In^{115}	activation	PR,72,888(47)	Seren

RESONANCE PARAMETERS

Isotope	Measurement	Energy Range (eV)	Reference	Author
In^{113}	σ_γ(spectra)	26.6-2002	PRIVATE COMM.(72)	Coceva
In^{115}	σ_γ(spectra)	1.5-1982	PRIVATE COMM.(72)	Coceva
In^{113}	$\sigma_t\sigma_\gamma$	21-2004	COLUMBIA,THESIS(71)	Hacken
In^{115}	$\sigma_t\sigma_\gamma$	22.7-1981	COLUMBIA,THESIS(71)	Hacken
In	σ_γ	1.46	NUK,12,259(69)	Fleck
In	σ_t	1.4-9.2	AE,16,523(64)	Begzhanov
In^{115}	polarization	1.46	PR,127,1124(62)	Sailor
In	$\bar{\sigma}_a$	1.46	JPR,22,707(61)	Ceulemans
In	polarization	1.46	PRIVATE COMM.(61)	Marshak
In	polarization	1.4-9.2	PR,118,211(60)	Stolovy
In	σ_t	1.4-9.2	PR,109,417(58)	Moore
In	σ_t	9.0-12.9	AE,5,55(56)	Radkevich
In	polarization	1.4	PR,98,1512(55)	Dabbs
In^{113}	σ_t	4.7-105	PR,99,10(55)	Harvey
In^{115}	σ_t	3.8-95	PR,99,10(55)	Harvey
In	σ_t	1.4-3.9	PR,98,1267(55)	Landon
In^{113}	σ_t	1.8-22	PR,87,161(52)	Sailor
In^{115}	σ_t	1.4-24	PR,87,161(52)	Sailor