

¹²⁷I(d,p) **1991Sa07**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Zoltan Elekes and Janos Timar		NDS 129, 191 (2015)	28-Feb-2015

1991Sa07: E=22 MeV; measured E(p) at 30°; deduced L.
J^π(¹²⁷I)=5/2⁺.

¹²⁸I Levels

E(level) [‡]	L	S [†]	E(level) [‡]	S [†]	E(level) [‡]	S [†]
0.0 [#]	2	28.2 20	957.1 7	16.8 12	1627.9 5	17.0 10
27.1 3	2	28.2 21	986.8 6	15.0 12	1648.7 6	7.3 6
85.4 3		19.9 15	994.3 11	3.9 10	1664.5 6	8.8 6
128.2 3	2	57 4	1004.8 11	2.5 4	1677.4 11	4.7 8
137.0 4	5	21.8 20	1017.1 5	15.4 7	1691.8 6	11.3 9
144.7 4	5	18.5 20	1035.5 7	3.4 3	1702.5 7	6.7 7
152.0 3	0	91 6	1049.6 8	4.2 5	1713.7 7	12.6 13
161.2 3		83 6	1064.8 5	10.8 6	1717.2 10	10.0 11
167.8 3	5	57 4	1091.9 5	16.1 10	1728.9 9	9.7 8
180.3 3	2	72 5	1099.7 8	5.3 8	1745.1 6	10.7 9
224.0 5		8.3 11	1109.7 13	3.0 7	1752.5 14	3.4 10
233.2 3	2	100 7	1117.7 6	5.3 5	1762.8 9	8.4 14
269.6 3	5	47 3	1135.6 9	2.4 4	1770.7 11	6.6 13
285.4 4		20.8 19	1150.6 5	11.2 6	1783.4 6	81 6
296.2 4		18.3 17	1167.1 5	6.0 4	1794.0 7	24.4 24
343.2 4		13.2 12	1179.5 6	5.0 4	1803.8 7	38 3
371.8 3		56 4	1197.7 5	10.8 5	1820.4 10	7.2 17
379.6 20	5	16 4	1216.3 14	1.8 4	1825.5 20	3.4 16
385.9 4	0	64 5	1232.2 12	1.8 4	1836.7 9	7.5 10
416.0 3	(0)	75 5	1242.1 13	2.0 5	1845.0 7	11.7 13
480.9 5		7.1 8	1252.5 8	5.0 6	1863.5 7	14.3 14
518.7 4		5.9 5	1256.3 11	6.5 7	1875.8 7	48 3
530.2 4		37.0 17	1265.9 8	8.4 11	1886.1 9	17.7 22
550.0 4		24.5 12	1273.4 9	6.7 11	1893.6 8	23.3 25
581.3 4		19.3 11	1291.2 16	1.3 4	1905.9 7	47 3
589.4 9		3.3 6	1302.3 7	13.0 8	1916.5 12	6.6 12
606.9 6		4.1 6	1324.9 10	3.7 6	1933.5 6	98 6
613.5 8		3.6 6	1336.2 10	3.9 6	1949.7 7	38 3
629.7 4		9.5 6	1349.5 7	10.5 8	1972.6 7	39 3
660.8 5		5.3 4	1362.9 9	4.1 6	1985.0 9	10.4 14
676.3 6		3.4 4	1380.3 8	5.1 6	1994.8 9	12.8 16
704.7 7		1.9 3	1391.9 7	9.3 8	2004.1 9	10.3 15
724.2 5		5.9 7	1404.0 13	2.0 5	2025.4 8	12.1 13
750.1 4		22.0 11	1418.5 8	5.7 7	2039.5 7	58 4
768.3 6		2.3 3	1430.4 14	2.9 7	2049.8 9	10.4 14
787.1 5		8.3 8	1440.5 9	6.0 8	2065.5 10	14 4
795.3 4		23.5 13	1459.7 7	15.6 11	2070.5 9	22 4
825.1 [@] 7		10.7 9	1475.7 14	3.0 7	2081.1 8	11.4 14
844.6 7		9.3 8	1485.3 9	5.7 8	2116.1 8	16.8 15
856.8 8		7.5 8	1509.0 9	4.4 5	2131.0 9	11.4 12
867.6 10		4.7 8	1539.2 9	4.3 5	2142.6 9	13.8 15
876.2 10		9.3 15	1565.8 8	5.0 6	2152.3 10	8.5 12
882.6 10		8.5 17	1580.2 9	4.4 6	2165.7 9	19.4 17
910.1 7		12.2 9	1600.4 6	6.1 5	2190.0 9	22.3 21
945.3 9		4.5 7	1616.9 6	7.5 7	2205.5 10	37 3

[†] Relative intensities of protons. Values are relative to I(233 keV)=100.

 $^{127}\text{I}(\text{d,p})$ **1991Sa07** (continued) ^{128}I Levels (continued)

‡ At 22 MeV, $\theta=30^\circ$.

Given as 1.3 4 in [1991Sa07](#).

@ Complex peak of 821.3 keV 7 and 828.9 keV 6 in (n, γ).