

^{121}Sn $Z = 50$ $N = 71$ adopted link ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 1026.709 (0.001) MeV

Qbeta- = 0.403 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2
121SN 1	0.000	3/2+			1 27.03 H 4
121SN 2			0.006 11/2-		2 43.9 Y 5
121SN 3	0.060	1/2+			3
121SN 4				0.664 7/2-,9/2-	4
121SN 5	0.869	5/2+			5
121SN 6	0.909	5/2+			6
121SN 7	0.926	7/2+			7 0.25 NS 6
121SN 8			0.949 7/2-		8
121SN 9				1.031	9
121SN 10				1.067	10
121SN 11	1.102	3/2+			11
121SN 12	1.121	5/2+			12
121SN 13				1.156	13
121SN 14				1.157 (15/2-)	14
121SN 15				1.247 (13/2-)	15
121SN 16				1.337	16
121SN 17				1.350 (7/2+,9/2+)	17
121SN 18	1.403	5/2+			18
121SN 19				1.432	19
121SN 20				1.450	20
121SN 21				1.498	21
121SN 22				1.537	22
121SN 23				1.571	23
121SN 24				1.653 1/2+,3/2	24
121SN 25				1.710 (3/2)+	25
121SN 26				1.758 (+)	26
121SN 27				1.864	27
121SN 28				1.876 9/2-,11/2-	28
121SN 29				1.877 1/2-,3/2-	29
121SN 30				1.910 1/2-,3/2-	30
121SN 31	1.912	1/2+			31
121SN 32				1.940 (3/2)+	32
121SN 33				1.959 (1/2-,3/2-)	33
121SN 34	1.960	1/2+			34
121SN 35				1.974	35
121SN 36				1.986 (1/2+)	36
121SN 37				1.998 (19/2+)	37 5.3 US 5

121SN 38						2.068	(3/2+)	38
121SN 39						2.075	(5/2-, 7/2-)	39
121SN 40						2.114	(3/2+, 5/2+)	40

121SN 41						2.164	(1/2, 3/2)	41
121SN 42						2.168	7/2+, 9/2+	42
121SN 43						2.187	(19/2-)	43
121SN 44						2.190		44
121SN 45						2.220	(3/2+, 5/2+)	45
121SN 46						2.225	(5/2-, 7/2-)	46
121SN 47						2.238		47
121SN 48						2.243		48
121SN 49						2.256	(3/2+, 5/2+)	49
121SN 50		2.280		1/2+				50

121SN 51						2.285	3/2+, 5/2+	51
121SN 52						2.330	9/2-, 11/2-	52
121SN 53						2.361		53
121SN 54						2.376	(5/2-, 7/2-)	54
121SN 55						2.415		55
121SN 56						2.440	(7/2+, 9/2+)	56
121SN 57						2.457	(1/2+)	57
121SN 58						2.460	(5/2-, 7/2-)	58
121SN 59						2.499		59
121SN 60						2.514	9/2-, 11/2-	60

121SN 61						2.524		61
121SN 62						2.558		62
121SN 63				2.589		7/2-		63
121SN 64						2.652		64
121SN 65						2.658	(23/2-)	65
121SN 66				2.666		7/2-		66
121SN 67						2.700	5/2-, 7/2-	67
121SN 68						2.713	7/2+, 9/2+	68
121SN 69						2.748		69
121SN 70						2.777		70

121SN 71						2.804	(3/2+)	71
121SN 72						2.811		72
121SN 73						2.834	(27/2-)	73
121SN 74						2.849	(5/2-, 7/2-)	74
121SN 75						2.864	(1/2, 3/2)	75
121SN 76						2.915	(5/2-, 7/2-)	76
121SN 77						2.930	(7/2-)	77
121SN 78						2.951	1/2-, 3/2-	78
121SN 79						2.961		79
121SN 80		2.999		3/2+				80

121SN 81						3.028	(7/2-)	81
121SN 82						3.076		82

121SN 83				3.096		83
121SN 84				3.107	(1/2-, 3/2-)	84
121SN 85				3.120		85
121SN 86				3.138	(7/2-)	86
121SN 87				3.140	(3/2+, 5/2+)	87
121SN 88				3.154	(5/2-, 7/2, 9/2+)	88
121SN 89				3.172		89
121SN 90				3.223		90

121SN 91				3.228		91
121SN 92		3.320	7/2-			92
121SN 93				3.321	(1/2-, 3/2-)	93
121SN 94				3.350		94
121SN 95				3.382	(7/2+, 9/2+)	95
121SN 96		3.396	3/2-			96
121SN 97				3.434	(1/2+)	97
121SN 98				3.459		98
121SN 99				3.499	(5/2-, 7/2, 9/2+)	99
121SN 100		3.510	3/2-			100

121SN 101				3.518		101
121SN 102				3.520	(5/2-, 7/2, 9/2+)	102
121SN 103				3.532		103
121SN 104				3.579		104
121SN 105				3.613		105
121SN 106				3.620	(5/2-, 7/2-)	106
121SN 107				3.658		107
121SN 108		3.680	3/2-			108
121SN 109				3.730	1/2-, 3/2-	109
121SN 110				3.763	1/2-, 3/2-	110

121SN 111				3.798	1/2-, 3/2-	111
121SN 112				3.814	1/2-, 3/2-	112
121SN 113				3.857	1/2-, 3/2-	113
121SN 114				3.875	1/2-, 3/2-	114
121SN 115				3.932	1/2-, 3/2-	115
121SN 116				3.960	1/2-, 3/2-	116
121SN 117				3.984	1/2-, 3/2-	117
121SN 118				4.020		118
121SN 119				4.059		119
121SN 120				4.073		120

121SN 121				4.094		121
121SN 122				4.111		122
121SN 123				4.144		123
121SN 124				4.171	1/2-, 3/2-	124
121SN 125				4.199		125
121SN 126				4.264	(1/2-, 3/2-)	126
121SN 127				4.274		127
121SN 128				4.330		128

121SN 129			4.401	129
121SN 130			4.453	130

121SN 131			4.468	131
121SN 132			4.519	132
121SN 133			4.540	133
121SN 134			4.646	134
121SN 135			4.680	(1/2-,3/2-) 135
121SN 136			4.736	(5/2-,7/2,9/2+) 136
121SN 137			4.773	137
121SN 138			4.826	(5/2-,7/2,9/2+) 138
121SN 139			4.905	139
121SN 140			5.051	140

S-p = 10.758 (0.040)-----
 S-n = 6.170 (0.001)-----
 S-2p = 19.798 (0.038)-----
 S-2n = 15.274 (0.001)-----
 S-alpha= 5.203 (0.001)-----

S+p = -6.427 (0.003)
 S+n = -8.815 (0.003)
 S+2p = -14.552 (0.002)
 S+2n = -14.761 (0.003)
 S+alpha = -2.250 (0.002)

gap p = 4.331 (0.040)
 gap n = -2.644 (0.003)
 gap 2p = 5.245 (0.038)
 gap 2n = 0.514 (0.003)
 gap alpha = 2.953 (0.002)