

^{111}Sn $Z = 50$ $N = 61$ adopted link ENSDF link

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

BE = 942.737 (0.005) MeV

Qbeta+ = 2.453 (0.006) MeV

	Energy T	J+	J-	J-other	T1/2
111SN 1	0.000	7/2+			1 35.3 M 6
111SN 2	0.154	5/2+			2
111SN 3	0.255	1/2+			3 12.5 US 10
111SN 4	0.644	3/2+			4
111SN 5	0.755	5/2+			5
111SN 6			0.979 11/2-		6 10.0 NS 5
111SN 7	1.033	3/2+			7
111SN 8	1.107	1/2+			8
111SN 9				1.152 3/2+,5/2+	9
111SN 10				1.236 (9/2)+	10
111SN 11	1.277	7/2+			11 0.3 NS 2
111SN 12	1.302	5/2+			12
111SN 13	1.348	11/2+			13
S-alpha= 1.373 (0.006)					
111SN 14				1.417	14
111SN 15				1.432 3/2+,5/2+	15
111SN 16	1.478	9/2+			16
111SN 17	1.577	5/2+			17
111SN 18				1.693 (3/2+,5/2+)	18
111SN 19	1.732	1/2+			19
111SN 20				1.805	20
111SN 21	1.823	7/2+			21
111SN 22				1.866 (3/2+,5/2+)	22
111SN 23				1.890 7/2+,9/2+	23
111SN 24				1.928 9/2-,11/2-	24
111SN 25				1.956 (3/2+,5/2+)	25
111SN 26				1.988	26
111SN 27				1.996 (3/2+,5/2+)	27
111SN 28	2.030	3/2+			28
111SN 29			2.062 15/2-		29
111SN 30	2.065	15/2+			30 0.52 NS 9
111SN 31				2.090 (9/2+)	31
111SN 32				2.092 (1/2-,3/2-)	32
111SN 33				2.100 (13/2)+	33
111SN 34			2.140 1/2-		34
111SN 35				2.188 (11/2,13/2)	35
111SN 36				2.192	36

111SN 37						2.217				37
111SN 38						2.257	(17/2)+			38 4 NS GE
111SN 39						2.275				39
111SN 40						2.284	(5/2)+			40

111SN 41						2.313	(7/2+)			41
111SN 42						2.363	9/2+,11/2+,13/2+			42
111SN 43						2.374				43
111SN 44						2.386	(13/2)			44
111SN 45						2.395				45
111SN 46						2.433				46
111SN 47		2.466		5/2+						47
111SN 48		2.505		7/2+						48
111SN 49						2.523	(15/2)+			49
111SN 50						2.533	(7/2+,9/2+)			50

111SN 51						2.544				51
111SN 52						2.600	(1/2-,3/2-)			52
111SN 53						2.639				53
111SN 54						2.666				54
111SN 55						2.690				55
111SN 56		2.715		1/2+						56
111SN 57						2.738				57
111SN 58						2.786	3/2+,5/2+			58
111SN 59						2.804				59
111SN 60						2.824	3/2+,5/2+			60

111SN 61						2.867				61
111SN 62						2.910				62
111SN 63				2.984		19/2-				63 0.15 NS 10
111SN 64						3.014	7/2+,9/2+			64
111SN 65				3.124		19/2-				65
111SN 66				3.228		19/2-				66
111SN 67						3.238				67
111SN 68						3.263	1/2-,3/2-			68
111SN 69				3.306		19/2-				69
111SN 70				3.323		21/2-				70

111SN 71						3.443	7/2+,9/2+			71
111SN 72				3.459		23/2-				72
111SN 73						3.496	1/2-,3/2-			73
111SN 74						3.513				74
111SN 75						3.559				75
111SN 76						3.582				76
111SN 77				3.620		23/2-				77
111SN 78						3.622	7/2+,9/2+			78
111SN 79						3.661	1/2-,3/2-			79
111SN 80						3.694	1/2-,3/2-			80

111SN 81						3.712	7/2+,9/2+			81

111SN 82				3.758	7/2+,9/2+	82		
111SN 83				3.789	(23/2)-	83		
111SN 84				3.815	7/2+,9/2+	84		
111SN 85				3.830	7/2+,9/2+	85		
111SN 86				3.865	7/2+,9/2+	86		
111SN 87				3.952	(1/2-,3/2-)	87		
111SN 88				3.955	(23/2)	88		
111SN 89				3.971		89		
111SN 90				4.011		90		

111SN 91				4.029	(1/2-,3/2-)	91		
111SN 92		4.074	23/2-			92		
111SN 93				4.079	7/2+,9/2+	93		
111SN 94				4.130	7/2+,9/2+	94		
111SN 95				4.145		95		
111SN 96		4.156	25/2-			96		
111SN 97				4.176	7/2+,9/2+	97		
111SN 98				4.192	7/2+,9/2+	98		
111SN 99				4.232	7/2+,9/2+	99		
111SN 100				4.259		100		

111SN 101				4.286		101		
111SN 102				4.311	1/2-,3/2-	102		
111SN 103				4.332	1/2-,3/2-	103		
111SN 104				4.369	(1/2-,3/2-)	104		
111SN 105				4.393		105		
111SN 106				4.416		106		
111SN 107		4.446	25/2-			107		
111SN 108				4.448		108		
111SN 109				4.483		109		
111SN 110				4.511		110		

111SN 111				4.556	1/2-,3/2-	111		
111SN 112				4.580	1/2-,3/2-	112		
111SN 113				4.617		113		
111SN 114		4.839	27/2-			114		
111SN 115		4.877	27/2-			115	0.49 PS	+2-3
111SN 116				4.989	(27/2)	116		
111SN 117		5.746	31/2-			117	0.173 PS	14
111SN 118				5.767	(29/2,31/2)	118		
111SN 119				6.131	(31/2)	119		
111SN 120		6.689	35/2-			120	0.152 PS	14

S-p	=	6.758	(0.013)					
111SN 121				6.843	(31/2,33/2)	121		
111SN 122		7.684	39/2-			122	0.159 PS	21

S-n	=	8.168	(0.015)					
111SN 123		8.738	43/2-			123	0.125 PS	+21-14
111SN 124		9.860	47/2-			124	0.14 PS	LT

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S-p    =  6.758 ( 0.013)-----  
S-n    =  8.168 ( 0.015)-----  
S-2p   = 12.012 ( 0.006)-----  
S-2n   = 19.451 ( 0.010)-----  
S-alpha=  1.373 ( 0.006)-----  
  
S+p     = -2.949 ( 0.019)  
S+n     = -10.788 ( 0.005)  
S+2p    = -6.986 ( 0.028)  
S+2n    = -18.532 ( 0.006)  
S+alpha  =  1.451 ( 0.028)  
  
gap p   =  3.808 ( 0.023)  
gap n   = -2.620 ( 0.016)  
gap 2p  =  5.026 ( 0.029)  
gap 2n  =  0.919 ( 0.011)  
gap alpha =  2.824 ( 0.029)
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