^{116}Sn $Z = 50$ $N = 66$ adopted link ENSDF link

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

BE = 988.682 (0.000) MeV

	Energy	T	J+		J-		J-other		T1/2		
116SN 1	0.000		0+						1	STABLE	
116SN 2	1.294		2+						2	0.374 PS	10
116SN 3	1.757		0+						3	44 PS	6
116SN 4	2.027		0+						4	160 PS	20
116SN 5	2.112		2+						5	1.89 PS	10
116SN 6	2.225		2+						6	2.4 PS	12
116SN 7				2.266	3-				7	0.34 PS	4
116SN 8				2.366	5-				8	348 NS	19
116SN 9	2.391		4+						9	0.28 PS	14
116SN 10	2.529		4+						10	100 PS	LT
116SN 11						2.546	(0+)		11		
116SN 12	2.586		1+						12		
116SN 13	2.650		2+						13		
116SN 14				2.773	6-				14		
116SN 15						2.791	(0)+		15		
116SN 16	2.801		4+						16		
116SN 17	2.844		2+						17		
116SN 18				2.909	7-				18	0.5 NS	3
116SN 19	2.960		2+						19		
116SN 20	2.996		3+						20		
116SN 21						3.016	6(-)		21		
116SN 22	3.033		6+						22		
116SN 23	3.046		4+						23		
116SN 24	3.089		2+						24		
116SN 25	3.097		4+						25		
116SN 26				3.105	5-				26		
116SN 27						3.158	3-,4		27		
116SN 28	3.180		3+						28		
116SN 29				3.184	3-				29		
116SN 30	3.194		0+						30		
116SN 31				3.210	7-				31	0.5 NS	LT
116SN 32						3.227	(2+)		32		
116SN 33				3.228	8-				33		
116SN 34	3.228		2+						34		
116SN 35	3.236		0+						35		
116SN 36						3.258	3-,4-,5-		36		
116SN 37	3.278		6+						37		
116SN 38						3.289	LE 4		38		

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116SN  39 |                |   3.309     6-  |                          39
116SN  40 |  3.315     3+  |                |                          40
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116SN  41 |                |   3.334     1-  |                          41
116SN  42 |  3.344     2+  |                |                          42
116SN  43 |                |                |   3.351     (5+)         43
116SN  44 |  3.371     3+  |                |                          44
S-alpha=   3.376 ( 0.000)-------------------------------------------------------------------------
116SN  45 |  3.380     3+  |                |                          45
116SN  46 |  3.416     2+  |                |                          46
116SN  47 |                |   3.428     4-  |                          47
116SN  48 |                |                |   3.453     4,5          48
116SN  49 |  3.470     2+  |                |                          49
116SN  50 |  3.493     8+  |                |                          50
----------                                                             ----------
116SN  51 |                |   3.507     5-  |                          51
116SN  52 |  3.508     2+  |                |                          52
116SN  53 |  3.510     4+  |                |                          53
116SN  54 |                |                |   3.514     (2)+         54
116SN  55 |                |   3.523     9-  |                          55
116SN  56 |  3.547     10+ |                |                          56  833 NS    30
116SN  57 |  3.552     3+  |                |                          57
116SN  58 |                |                |   3.573     2+,3         58
116SN  59 |                |                |   3.576     4+,5         59
116SN  60 |  3.587     2+  |                |                          60
----------                                                             ----------
116SN  61 |  3.594     3+  |                |                          61
116SN  62 |                |   3.616     4-  |                          62
116SN  63 |  3.625     4+  |                |                          63
116SN  64 |                |                |   3.641     4,5+         64
116SN  65 |                |                |   3.648     3-,5-        65
116SN  66 |  3.658     2+  |                |                          66
116SN  67 |  3.707     3+  |                |                          67
116SN  68 |                |                |   3.712     (1)+         68
116SN  69 |  3.712     8+  |                |                          69
116SN  70 |                |                |   3.731     LE 3         70
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116SN  71 |  3.739     3+  |                |                          71
116SN  72 |                |   3.743     3-  |                          72
116SN  73 |                |                |   3.748     LE 3         73
116SN  74 |  3.777     1+  |                |                          74
116SN  75 |                |                |   3.787     (6-)         75
116SN  76 |                |                |   3.797     +            76
116SN  77 |  3.806     4+  |                |                          77
116SN  78 |  3.806     2+  |                |                          78
116SN  79 |                |                |   3.809     2+,3         79
116SN  80 |  3.837     0+  |                |                          80
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116SN  81 |                |                |   3.844     2+,3         81
116SN  82 |                |                |   3.851     1,2+         82
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116SN 83					3.851		83
116SN 84	3.887	5+					84
116SN 85	3.904	2+					85
116SN 86					3.905	1	86
116SN 87	3.917	2+					87
116SN 88					3.946	1+,2+,3	88
116SN 89					3.951	1-,2,3	89
116SN 90	3.953	2+					90
116SN 91	3.974	4+					91
116SN 92					3.986		92
116SN 93					4.001	1(-)	93
116SN 94	4.013	2+					94
116SN 95					4.015	2,3,4+	95
116SN 96	4.023	5+					96
116SN 97					4.026	1	97
116SN 98					4.029	LE 3	98
116SN 99					4.037	2+,3+	99
116SN 100					4.076	1+,2+,3+	100
116SN 101					4.077	4+,5+	101
116SN 102					4.114	1,2+	102
116SN 103					4.128	1,2+	103
116SN 104					4.144	1+,2+,3	104
116SN 105					4.162	2	105
116SN 106	4.171	2+					106
116SN 107					4.190	2+,3+,4+	107
116SN 108					4.200	1	108
116SN 109					4.202	1,2	109
116SN 110					4.212	0+,1,2	110
116SN 111	4.238	2+					111
116SN 112					4.240	4+,5+	112
116SN 113					4.252	1	113
116SN 114					4.279	1,2+	114
116SN 115					4.281	2,3-,4	115
116SN 116					4.285	(7)+	116
116SN 117					4.297	LE 3	117
116SN 118					4.308		118
116SN 119					4.340	+	119
116SN 120					4.365		120
116SN 121					4.393		121
116SN 122					4.411		122
116SN 123					4.430		123
116SN 124					4.480		124
116SN 125					4.496	(10-)	125
116SN 126	4.506	10+					126
116SN 127					4.511		127
116SN 128			4.548	1-			128

116SN 129					4.584		129
116SN 130					4.649		130
116SN 131	4.702	11+					131
116SN 132	4.765	7+					132
116SN 133					4.840	(8,10-)	133
116SN 134					4.853		134
116SN 135					4.877		135
116SN 136					4.879	(11-)	136
116SN 137	4.882	12+					137
116SN 138			4.893	1-			138
116SN 139					4.926		139
116SN 140	4.940	0+					140
116SN 141					4.952		141
116SN 142					4.980	1	142
116SN 143					5.056		143
116SN 144					5.066		144
116SN 145					5.086	1	145
116SN 146	5.161	12+					146
116SN 147					5.174		147
116SN 148					5.242		148
116SN 149	5.330	12+					149
116SN 150					5.358		150
116SN 151	5.390	12+					151
116SN 152					5.391	1	152
116SN 153					5.396		153
116SN 154					5.453	1(-)	154
116SN 155					5.475		155
116SN 156					5.484		156
116SN 157					5.493		157
116SN 158	5.496	13+					158
116SN 159					5.500		159
116SN 160	5.522	13+					160
116SN 161					5.551	1	161
116SN 162					5.555	1	162
116SN 163					5.563		163
116SN 164					5.574	(12+)	164
116SN 165			5.630	1-			165
116SN 166					5.668		166
116SN 167					5.707		167
116SN 168					5.717		168
116SN 169					5.723	(12-)	169
116SN 170					5.730		170
116SN 171					5.740		171
116SN 172					5.767		172
116SN 173					5.780	(-)	173

116SN 174	5.824	14+						174
116SN 175						5.835	1	175
116SN 176						5.860	(-)	176
116SN 177						5.924		177
116SN 178						5.929	(13+)	178
116SN 179						5.968		179
116SN 180			5.978	13-				180
116SN 181						5.990		181
116SN 182						5.996		182
116SN 183						6.006	1(-)	183
116SN 184						6.042		184
116SN 185						6.083	1	185
116SN 186						6.089	1	186
116SN 187	6.098	14+						187
116SN 188						6.117		188
116SN 189						6.131		189
116SN 190						6.152		190
116SN 191						6.160		191
116SN 192			6.181	1-				192
116SN 193						6.199		193
116SN 194			6.213	14-				194
116SN 195			6.217	1-				195
116SN 196			6.289	1-				196
116SN 197						6.293	(10-)	197
116SN 198	6.313	14+						198
116SN 199			6.323	1-				199
116SN 200			6.339	1-				200
116SN 201			6.344	15-				201
116SN 202						6.358		202
116SN 203						6.358	(14+)	203
116SN 204						6.364	1	204
116SN 205			6.372	1-				205
116SN 206						6.373		206
116SN 207						6.398	1	207
116SN 208						6.406		208
116SN 209			6.423	1-				209
116SN 210						6.428		210
116SN 211						6.436		211
116SN 212			6.446	1-				212
116SN 213			6.457	1-				213
116SN 214						6.466	1	214
116SN 215						6.469		215
116SN 216			6.472	1-				216
116SN 217						6.483		217
116SN 218			6.484	1-				218
116SN 219			6.508	1-				219

116SN 220				6.511		220
116SN 221			6.519	1-		221
116SN 222				6.532		222
116SN 223			6.582	1-		223
116SN 224			6.593	1-		224
116SN 225				6.655	(1)	225
116SN 226			6.660	16-		226
116SN 227				6.663	(15+)	227
116SN 228				6.717		228
116SN 229				6.741	(1)	229
116SN 230				6.749	1	230
116SN 231				6.754		231
116SN 232				6.834	1	232
116SN 233				6.877	1	233
116SN 234			6.889	1-		234
116SN 235				6.967	1	235
116SN 236				7.011	1	236
116SN 237				7.035		237
116SN 238			7.082	17-		238
116SN 239			7.126	1-		239
116SN 240				7.146	1	240
116SN 241			7.155	1-		241
116SN 242				7.165	1	242
116SN 243				7.174		243
116SN 244				7.204	1	244
116SN 245				7.215	1	245
116SN 246				7.225		246
116SN 247	7.229	16+				247
116SN 248				7.235	1	248
116SN 249				7.241	1	249
116SN 250				7.246		250
116SN 251				7.320	1	251
116SN 252				7.325		252
116SN 253			7.353	1-		253
116SN 254				7.457	(16+)	254
116SN 255			7.480	1-		255
116SN 256				7.598	1	256
116SN 257			7.654	1-		257
116SN 258				7.660		258
116SN 259				7.693		259
116SN 260				7.759	1	260
116SN 261				7.826	1(-)	261
116SN 262				7.897	1	262
116SN 263			7.917	1-		263
116SN 264				7.925	1(+)	264

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116SN 265 |                |                |   7.934     1              265
116SN 266 |                |                |   7.947     1              266
116SN 267 |                |   7.961     1- |                            267
116SN 268 |                |   7.992     1- |                            268
116SN 269 |                |                |   8.187     1              269
116SN 270 |                |   8.214     1- |                            270
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116SN 271 |  8.228     18+ |                |                            271
116SN 272 |                |                |   8.234     1              272
116SN 273 |                |                |   8.248     1              273
116SN 274 |                |                |   8.283     1              274
116SN 275 |                |   8.361     1- |                            275
116SN 276 |                |                |   8.428     1              276
116SN 277 |                |                |   8.458     1              277
116SN 278 |                |                |   8.586                    278
116SN 279 |                |                |   8.661                    279
116SN 280 |                |                |   8.740     (1)            280
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116SN 281 |                |                |   9.141                    281
S-p    =   9.279 ( 0.000)-------------------------------------------------------------------------
116SN 282 |                |                |   9.322     (20+)          282


S-p    =   9.279 ( 0.000)-------------------------------------------------------------------------
S-n    =   9.563 ( 0.000)-------------------------------------------------------------------------
S-2p   =  16.089 ( 0.000)-------------------------------------------------------------------------
S-2n   =  17.109 ( 0.000)-------------------------------------------------------------------------
S-alpha=   3.376 ( 0.000)-------------------------------------------------------------------------

S+p       =  -4.403 ( 0.008)
S+n       =  -6.943 ( 0.000)
S+2p      = -10.743 ( 0.018)
S+2n      = -16.270 ( 0.001)
S+alpha   =  -0.261 ( 0.002)

gap p     =   4.876 ( 0.008)
gap n     =   2.620 ( 0.001)
gap 2p    =   5.346 ( 0.018)
gap 2n    =   0.839 ( 0.001)
gap alpha =   3.115 ( 0.002)
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