

^{168}Yb $Z = 70$ $N = 98$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1362.799 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2

S-alpha=	-1.936	(0.001)	-----		
168YB 1	0.000	0+			1 STABLE
168YB 2	0.088	2+			2 1.49 NS 4
168YB 3	0.287	4+			3
168YB 4	0.585	6+			4
168YB 5	0.970	8+			5
168YB 6	0.984	2+			6 1.03 PS 10
168YB 7				1.067 (3)+	7
168YB 8				1.098	8
168YB 9				1.155 (0+)	9
168YB 10				1.160 (1-)	10

168YB 11				1.171 (4)+	11
168YB 12	1.197	0+			12 1.3 NS 3
168YB 13				1.232 (1-)	13
168YB 14	1.233	2+			14
168YB 15				1.279 (2+)	15
168YB 16				1.302 (5)+	16
168YB 17				1.340 (0+)	17
168YB 18				1.390 (4+)	18
168YB 19				1.408 (2-)	19
168YB 20	1.425	10+			20

168YB 21				1.433	21
168YB 22				1.445 (6)+	22
168YB 23				1.452 (3)+	23
168YB 24				1.473 (4+)	24
168YB 25			1.480 3-		25
168YB 26				1.480 (4+)	26
168YB 27				1.543 (0+)	27 1.1 NS LE
168YB 28				1.551 (4+)	28
168YB 29			1.595 3-		29
168YB 30				1.598 (-)	30

168YB 31				1.605 (2+)	31
168YB 32				1.618 (7+)	32
168YB 33				1.651 (2,3,4)-	33
168YB 34				1.674 (5+)	34
168YB 35				1.698	35
168YB 36				1.725 (4+)	36
168YB 37				1.730 (1,2+)	37

168YB 38				1.770	5-					38
168YB 39							1.793			39
168YB 40							1.819	(6+)		40

168YB 41							1.842	(6-)		41
168YB 42							1.860			42
168YB 43							1.904	(0+)		43
168YB 44							1.918			44
168YB 45		1.936	12+							45
168YB 46							1.945	(11)		46
168YB 47							1.973	(5,6+)		47
168YB 48							1.973	(2+)		48
168YB 49							1.987	(7+)		49
168YB 50							1.993			50

168YB 51							1.999	(5)-		51 82 NS 5
168YB 52							2.003	(9+)		52
168YB 53							2.011	(2+,3,4+)		53
168YB 54							2.056	(2+,3+,4+)		54
168YB 55							2.065	(2+,3,4+)		55
168YB 56							2.092			56
168YB 57							2.101	(8-)		57
168YB 58							2.111	(5-,6-,7-)		58 0.34 NS 6
168YB 59							2.122			59
168YB 60							2.135	(3+,4+)		60

168YB 61							2.159	(4+)		61
168YB 62							2.160	(0+)		62
168YB 63							2.173			63
168YB 64							2.174	(8+)		64
168YB 65		2.180	4+							65
168YB 66							2.204	(4+)		66 0.14 NS LT
168YB 67							2.222	(-)		67 62 NS 8
168YB 68							2.256	(3+,4+)		68
168YB 69							2.292			69
168YB 70							2.327			70

168YB 71							2.365	(4+)		71
168YB 72							2.405	(3)+		72
168YB 73							2.415	(3,4,5)		73
168YB 74							2.427	(10-)		74
168YB 75							2.428	(2+,3+,4+)		75
168YB 76							2.444	(11+)		76
168YB 77							2.464			77
168YB 78							2.475	(2+,3,4+)		78
168YB 79		2.489	14+							79
168YB 80							2.500			80

168YB 81							2.514	(13)		81
168YB 82							2.645			82

168YB 83					2.825	(12-)	83
168YB 84					2.846	(13-)	84
168YB 85					2.931	(13+)	85
168YB 86		3.073	16+				86
168YB 87					3.131	(15)	87
168YB 88					3.295	(14-)	88
168YB 89					3.310	(15-)	89
168YB 90					3.447	(15+)	90

168YB 91					3.532	(15+)	91
168YB 92					3.613	(15-)	92
168YB 93		3.687	18+				93
168YB 94					3.797	(17)	94
168YB 95					3.821	(17-)	95
168YB 96					3.828	(16-)	96
168YB 97					3.982	(17+)	97
168YB 98					4.092	(17+)	98
168YB 99					4.134	(18+)	99
168YB 100					4.165	(17-)	100

168YB 101		4.337	20+				101
168YB 102					4.374	(19-)	102
168YB 103					4.410	(18-)	103
168YB 104					4.514	(19)	104
168YB 105					4.580	(19+)	105
168YB 106					4.721	(19+)	106
168YB 107					4.763	(19-)	107
168YB 108					4.786	(20+)	108
168YB 109					4.969	(21-)	109
168YB 110					5.032	(20-)	110

168YB 111		5.037	22+				111
168YB 112					5.256	(21+)	112
168YB 113					5.287	(21)	113
168YB 114					5.400	(21-)	114
168YB 115					5.405	(21+)	115
168YB 116					5.511	(22+)	116
168YB 117					5.612	(23-)	117
168YB 118					5.687	(22-)	118
168YB 119		5.797	24+				119
168YB 120					6.009	(23+)	120

168YB 121					6.081	(23-)	121
168YB 122					6.122	(23)	122
168YB 123					6.143	(23+)	123
168YB 124					6.276	(24+)	124
168YB 125					6.315	(25-)	125

S-p	=	6.327	(0.002)	-----			
168YB 126					6.392	(24-)	126
168YB 127		6.624	26+				127

168YB 128				6.810	(25-)	128
168YB 129				6.835	(25+)	129
168YB 130				6.939	(25+)	130

168YB 131				7.024	(25)	131
168YB 132				7.073	(26+)	132
168YB 133				7.082	(27-)	133
168YB 134				7.156	(26-)	134
168YB 135		7.517	28+			135
168YB 136				7.599	(27-)	136
168YB 137				7.727	(27+)	137
168YB 138				7.792	(27+)	138
168YB 139				7.912	(28+)	139
168YB 140				7.917	(29-)	140

168YB 141				7.984	(28-)	141
168YB 142				8.453	(29-)	142
168YB 143		8.475	30+			143
168YB 144				8.669	(29+)	144
168YB 145				8.698	(29+)	145
168YB 146				8.801	(30+)	146
168YB 147				8.826	(31-)	147
168YB 148				8.880	(30-)	148

S-n	=	9.063	(0.004)	-----		
168YB 149				9.372	(31-)	149
168YB 150		9.496	32+			150

168YB 151				9.748	(32+)	151
168YB 152				9.803	(33-)	152
168YB 153				9.841	(32-)	153
168YB 154				10.353	(33-)	154
168YB 155		10.575	34+			155
168YB 156				10.760	(34+)	156
168YB 157				10.848	(35-)	157
168YB 158				10.861	(34-)	158

S-2p	=	11.234	(0.002)	-----		
168YB 159				11.388	(35-)	159
168YB 160		11.703	36+			160

168YB 161				11.841	(36+)	161
168YB 162				11.931	(36-)	162
168YB 163				11.959	(37-)	163
168YB 164				12.864	(38+)	164
168YB 165				12.985	(38+)	165
168YB 166				13.023	(38-)	166
168YB 167				13.128	(39-)	167
168YB 168				14.033	(40+)	168
168YB 169				14.138	(40-)	169
168YB 170				14.190	(40)	170

168YB 171			14.362	(41-)	171
168YB 172			15.228	(42+)	172
168YB 173			15.269	(42-)	173
168YB 174			15.578	(43-)	174
S-2n = 16.129 (0.007)-----					
168YB 175			16.457	(44+)	175
168YB 176			16.846	(45-)	176
168YB 177			0.0+X		177
168YB 178			625.7+X		178
168YB 179			1289.2+X		179
168YB 180			2019.0+X		180

168YB 181			2802.1+X		181
168YB 182			3644.5+X		182
168YB 183			4548.9+X		183
168YB 184			5514.4+X		184
168YB 185			6542+X		185
168YB 186			7629+X		186
168YB 187			8772+X		187
168YB 188			0.0+Y		188
168YB 189			173.8+Y		189
168YB 190			368.6+Y		190

168YB 191			584.1+Y		191
168YB 192			820.2+Y		192
168YB 193			1075.4+Y		193
168YB 194			1349.8+Y		194
168YB 195			1642.3+Y		195
168YB 196			1952.2+Y		196
168YB 197			2279.3+Y		197
168YB 198			2616.7+Y		198

S-p = 6.327 (0.002)-----					
S-n = 9.063 (0.004)-----					
S-2p = 11.234 (0.002)-----					
S-2n = 16.129 (0.007)-----					
S-alpha= -1.936 (0.001)-----					

S+p	=	-3.792	(0.003)		
S+n	=	-6.867	(0.002)		
S+2p	=	-9.250	(0.028)		
S+2n	=	-15.325	(0.001)		
S+alpha	=	2.755	(0.024)		

gap p	=	2.535	(0.004)		
gap n	=	2.195	(0.004)		
gap 2p	=	1.984	(0.028)		
gap 2n	=	0.804	(0.007)		
gap alpha	=	0.819	(0.024)		