

^{170}Yb $Z = 70$ $N = 100$ [link to full NNDC output](#)

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

BE = 1378.124 (0.000) MeV

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

S-alpha=	-1.737	(0.001)	-----		
170YB 1	0.000	0+			1 STABLE
170YB 2	0.084	2+			2 1.61 NS 2
170YB 3	0.277	4+			3 98 PS 4
170YB 4	0.573	6+			4 13 PS 3
170YB 5	0.963	8+			5 2.97 PS 25
170YB 6	1.069	0+			6
170YB 7	1.139	2+			7 2.1 PS 4
170YB 8	1.146	2+			8 0.83 PS 16
170YB 9				1.225 (3)+	9
170YB 10	1.229	0+			10 0.51 PS 10

170YB 11			1.258 4-		11 370 NS 15
170YB 12				1.292 (4)+	12
170YB 13	1.306	2+			13
170YB 14				1.329 (4)+	14
170YB 15			1.345 5-		15
170YB 16			1.365 1-		16
170YB 17				1.397 (3)-	17
170YB 18				1.409 (4)+	18
170YB 19				1.425 (2)-	19
170YB 20	1.438	10+			20 1.16 PS 8

170YB 21			1.450 6-		21
170YB 22				1.460 (5)+	22
170YB 23	1.480	0+			23
170YB 24				1.510 (5-)	24
170YB 25			1.512 1-		25
170YB 26	1.521	6+			26
170YB 27	1.529	5+			27
170YB 28	1.535	2+			28
170YB 29				1.552	29
170YB 30	1.566	0+			30

170YB 31			1.573 7-		31
170YB 32				1.573 (4-)	32
170YB 33	1.601	6+			33
170YB 34				1.635 (1+)	34
170YB 35				1.658 (2)+	35
170YB 36				1.660 (5-)	36
170YB 37	1.669	6+			37

170YB 38						1.690				38
170YB 39						1.712	(7-)			39
170YB 40				1.716	8-					40

170YB 41						1.718	(2)-			41
170YB 42						1.763	(6-)			42
170YB 43						1.781	(7)+			43
170YB 44						1.783	(3-)			44
170YB 45						1.789	(3-)			45
170YB 46						1.793	(6-)			46
170YB 47						1.803	(8)+			47
170YB 48						1.835	7(+)			48
170YB 49						1.838	(2)+			49
170YB 50				1.851	6-					50 0.2 NS LT

170YB 51						1.871				51
170YB 52				1.872	9-					52
170YB 53				1.903	7-					53
170YB 54						1.911				54
170YB 55		1.954	8+							55
170YB 56						1.965	(7-)			56
170YB 57						1.971				57
170YB 58		1.983	12+							58 0.77 PS 6
170YB 59						1.986	1-,2-			59
170YB 60						2.001				60

170YB 61						2.005	(9)-			61
170YB 62		2.009	8+							62
170YB 63		2.040	1+							63
170YB 64						2.045	(8-)			64
170YB 65						2.047				65
170YB 66						2.053	0-,1-,2-			66
170YB 67				2.057	10-					67
170YB 68		2.088	0+							68
170YB 69						2.097	(8-)			69
170YB 70						2.099	(8-)			70

170YB 71				2.116	1-					71
170YB 72				2.126	1-					72
170YB 73		2.135	10+							73
170YB 74						2.137				74
170YB 75						2.170	(9+)			75
170YB 76						2.171	(2+)			76
170YB 77		2.186	0+							77
170YB 78				2.190	7-					78 2.5 NS 3
170YB 79						2.201	1-,2-			79
170YB 80						2.221	(9)-			80

170YB 81		2.229	0+							81
170YB 82				2.242	11-					82

170YB 83						2.249		83
170YB 84						2.253	(9-)	84
170YB 85				2.268	1-			85
170YB 86				2.275	1-			86
170YB 87		2.289	1+					87
170YB 88						2.328	(0+)	88
170YB 89						2.342	(8-)	89
170YB 90						2.352	0-,1-,2-	90

170YB 91				2.364	1-			91
170YB 92						2.368	(1)-	92
170YB 93		2.373	10+					93
170YB 94						2.388	(11)-	94
170YB 95						2.399	(10-)	95
170YB 96		2.399	0+					96
170YB 97				2.400	1-			97
170YB 98						2.412	(10)+	98
170YB 99						2.429	(10-)	99
170YB 100						2.429	1+,2+	100

170YB 101						2.436	(2,3)-	101
170YB 102						2.461	(10-)	102
170YB 103				2.474	12-			103
170YB 104						2.478	(10-)	104
170YB 105				2.496	1-			105
170YB 106						2.498	0-,1-,2-	106
170YB 107		2.501	0+					107
170YB 108		2.523	1+					108
170YB 109		2.524	12+					109
170YB 110						2.525	(9-)	110

170YB 111				2.537	1-			111
170YB 112		2.560	0+					112
170YB 113		2.580	14+					113
170YB 114						2.595		114
170YB 115						2.604	(11-)	115
170YB 116						2.604	(11+)	116
170YB 117		2.661	1+					117
170YB 118						2.667	1(+)	118
170YB 119						2.678		119
170YB 120				2.681	13-			120

170YB 121						2.732	(10-)	121
170YB 122				2.748	1-			122
170YB 123						2.768	0-,1-	123
170YB 124				2.776	1-			124
170YB 125		2.783	1+					125
170YB 126						2.816	(12-)	126
170YB 127						2.820	0-,1-	127
170YB 128						2.827	(12+)	128

170YB 129					2.847	(12-)	129
170YB 130	2.854	0+					130

170YB 131					2.856	(13-)	131
170YB 132					2.859	(12+)	132
170YB 133					2.927	(12-)	133
170YB 134			2.930	1-			134
170YB 135					2.939	12(-)	135
170YB 136			2.940	1-			136
170YB 137	2.945	0+					137
170YB 138			2.948	1-			138
170YB 139	2.957	1+					139
170YB 140					2.959	(11-)	140

170YB 141	2.966	1+					141
170YB 142			2.966	14-			142
170YB 143			2.969	1-			143
170YB 144			2.975	1-			144
170YB 145					2.987	(14+)	145
170YB 146	2.995	0+					146
170YB 147			3.008	1-			147
170YB 148	3.027	0+					148
170YB 149	3.042	1+					149
170YB 150					3.050	(13-)	150

170YB 151	3.065	1+					151
170YB 152					3.067	(13+)	152
170YB 153			3.068	1-			153
170YB 154					3.071	0,1	154
170YB 155	3.077	0+					155
170YB 156					3.092	1	156
170YB 157					3.100	1(-)	157
170YB 158	3.108	0+					158
170YB 159			3.116	1-			159
170YB 160			3.124	1-			160

170YB 161	3.131	1+					161
170YB 162					3.141	(1)	162
170YB 163	3.146	1+					163
170YB 164			3.149	1-			164
170YB 165	3.150	0+					165
170YB 166	3.153	0+					166
170YB 167					3.161	(1-)	167
170YB 168			3.166	1-			168
170YB 169			3.170	1-			169
170YB 170			3.180	1-			170

170YB 171			3.186	15-			171
170YB 172					3.187	(1-)	172
170YB 173	3.195	16+					173

170YB 174			3.196	1-			174
170YB 175					3.202	(12-)	175
170YB 176	3.203	1+					176
170YB 177			3.213	1-			177
170YB 178	3.258	1+					178
170YB 179					3.269	1(+)	179
170YB 180			3.274	1-			180

170YB 181	3.292	1+					181
170YB 182					3.296	(14-)	182
170YB 183	3.302	1+					183
170YB 184					3.307	(14+)	184
170YB 185					3.314	1	185
170YB 186	3.325	0+					186
170YB 187					3.333	(14+)	187
170YB 188					3.366	1	188
170YB 189			3.385	1-			189
170YB 190					3.402	(15-)	190

170YB 191					3.423	(0-)	191
170YB 192					3.438	(14-)	192
170YB 193					3.467	(13-)	193
170YB 194					3.500		194
170YB 195			3.534	16-			195
170YB 196					3.547	(16+)	196
170YB 197					3.558	(15+)	197
170YB 198					3.567	(15-)	198
170YB 199					3.742	(14-)	199
170YB 200					3.757	(17-)	200

170YB 201	3.807	18+					201
170YB 202					3.833	(16+)	202
170YB 203					3.842	(16-)	203
170YB 204					3.844	(16+)	204
170YB 205					4.012	(16-)	205
170YB 206					4.018	(17-)	206
170YB 207					4.065	(17+)	207
170YB 208			4.174	18-			208
170YB 209					4.207	(18+)	209
170YB 210			4.390	19-			210

170YB 211	4.437	20+					211
170YB 212			4.886	20-			212
170YB 213			5.085	21-			213

S-p = 6.778 (0.001)-----
S-n = 8.458 (0.001)-----
S-2p = 12.351 (0.001)-----
S-2n = 15.325 (0.001)-----

S-alpha= -1.737 (0.001)-----

S+p = -4.354 (0.002)

S+n = -6.614 (0.000)

S+2p = -10.216 (0.024)

S+2n = -14.634 (0.000)

S+alpha = 2.494 (0.002)

gap p = 2.424 (0.002)

gap n = 1.843 (0.001)

gap 2p = 2.134 (0.024)

gap 2n = 0.690 (0.001)

gap alpha = 0.757 (0.003)