

^{177}Yb $Z = 70$ $N = 107$ adopted link ENSDF link

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

BE = 1424.845 (0.000) MeV

Qbeta- = 1.398 (0.001) MeV

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

S-alpha=	-0.252	(0.173)	-----		
177YB 1	0.000	9/2+			1 1.911 H 3
177YB 2			0.105	7/2-	2 4.48 NS 8
177YB 3	0.122	11/2+			3
177YB 4				0.150	4
177YB 5			0.221	9/2-	5
177YB 6	0.265	13/2+			6
177YB 7			0.331	1/2-	7 6.41 S 2
177YB 8			0.362	11/2-	8
177YB 9				0.375 (3/2)-	9
177YB 10				0.423 (5/2)-	10

177YB 11	0.431	15/2+			11
177YB 12				0.433	12
177YB 13				0.526 (7/2)-	13
177YB 14			0.528	13/2-	14
177YB 15				0.613 (9/2-)	15
177YB 16	0.618	17/2+			16
177YB 17				0.622	17
177YB 18				0.704 (3/2)-	18
177YB 19				0.715	19
177YB 20			0.720	15/2-	20

177YB 21				0.771 (5/2)-	21
177YB 22	0.827	19/2+			22
177YB 23				0.832 (1/2,3/2)	23
177YB 24				0.865 (7/2)-	24
177YB 25				0.867 (1/2,3/2)	25
177YB 26			0.936	17/2-	26
177YB 27				0.939 (1/2,3/2)	27
177YB 28				0.961	28
177YB 29				0.975 (9/2-)	29
177YB 30				0.998 (1/2-,3/2)	30

177YB 31				1.049	31
177YB 32	1.058	21/2+			32
177YB 33				1.109 (11/2-)	33
177YB 34				1.125	34
177YB 35				1.169	35
177YB 36				1.176 (15/2+)	36

177YB 37				1.209	(3/2-, 5/2+)	37
177YB 38				1.221	(7/2)-	38
177YB 39				1.284	(1/2-, 3/2)	39
177YB 40		1.310	23/2+			40

177YB 41				1.319	(1/2-, 3/2)	41
177YB 42				1.359	(3/2)-	42
177YB 43				1.378	(17/2+)	43
177YB 44				1.417	(1/2, 3/2, 5/2+)	44
177YB 45				1.444	(5/2)-	45
177YB 46				1.494	(3/2, 5/2)+	46
177YB 47				1.562	(7/2)-	47
177YB 48				1.592	(1/2, 3/2, 5/2+)	48
177YB 49				1.601	(19/2+)	49
177YB 50				1.626		50

177YB 51				1.643		51
177YB 52				1.657	(1/2, 3/2, 5/2+)	52
177YB 53				1.690		53
177YB 54				1.701	(1/2, 3/2)	54
177YB 55				1.725	(9/2)-	55
177YB 56				1.734		56
177YB 57				1.750		57
177YB 58				1.826	(1/2, 3/2, 5/2+)	58
177YB 59				1.845	(21/2+)	59
177YB 60				1.850		60

177YB 61				1.863		61
177YB 62				1.876		62
177YB 63				1.899	(11/2-)	63
177YB 64				1.920	(1/2-, 3/2-)	64
177YB 65				1.936		65
177YB 66				1.957		66
177YB 67				1.986		67
177YB 68				1.999	(3/2, 5/2)+	68
177YB 69				2.021	(1/2, 3/2, 5/2+)	69
177YB 70				2.031	(1/2-, 3/2, 5/2+)	70

177YB 71				2.061		71
177YB 72				2.067	(1/2, 3/2, 5/2+)	72
177YB 73				2.083		73
177YB 74				2.116		74
177YB 75				2.137	(1/2, 3/2)	75
177YB 76				2.145	(13/2-)	76
177YB 77				2.162	(3/2, 5/2)+	77
177YB 78				2.174		78
177YB 79				2.179	(1/2, 3/2, 5/2+)	79
177YB 80				2.194		80

177YB 81				2.211		81

177YB 82			2.227		82
177YB 83			2.243	(1/2,3/2,5/2+)	83
177YB 84			2.275		84
177YB 85			2.292		85
177YB 86			2.308		86
177YB 87			2.325		87
177YB 88			2.341		88
177YB 89			2.372		89
177YB 90			2.377	(1/2,3/2,5/2+)	90

177YB 91			2.385		91
177YB 92			2.395	(1/2,3/2,5/2+)	92
177YB 93			2.424		93
177YB 94			2.442		94
177YB 95			2.461		95
177YB 96			2.476		96
177YB 97			2.479	(1/2,3/2,5/2+)	97
177YB 98			2.487		98
177YB 99			2.509		99
177YB 100			2.525		100

177YB 101			2.533		101
177YB 102			2.547		102
177YB 103			2.561		103
177YB 104			2.568		104
177YB 105			2.585		105
177YB 106			2.602		106
177YB 107			2.623		107
177YB 108			2.635		108
177YB 109			2.653		109
177YB 110			2.667		110

177YB 111			2.703		111
177YB 112			2.741	(1/2,3/2,5/2+)	112
177YB 113			2.777		113
177YB 114			2.806		114
177YB 115			2.835		115
177YB 116			2.855	(1/2,3/2,5/2+)	116
177YB 117			2.889		117
177YB 118			2.908	(1/2,3/2,5/2+)	118
177YB 119			2.935		119
177YB 120			2.967		120

177YB 121			2.984		121
177YB 122			3.006		122
177YB 123			3.306	(1/2,3/2,5/2+)	123

S-p = 8.904 (0.100)-----
S-n = 5.566 (0.000)-----

```
S-2p = 16.970 ( 0.350)-----  
S-2n = 12.433 ( 0.000)-----  
S-alpha= -0.252 ( 0.173)-----  
  
S+p = -6.641 ( 0.002)  
S+n = -6.762 ( 0.007)  
S+2p = -14.055 ( 0.001)  
S+2n = -11.809 ( 0.179)  
S+alpha = 1.158 ( 0.001)  
  
gap p = 2.263 ( 0.100)  
gap n = -1.196 ( 0.007)  
gap 2p = 2.916 ( 0.350)  
gap 2n = 0.625 ( 0.179)  
gap alpha = 0.906 ( 0.173)
```