

^{163}Yb $Z = 70$ $N = 93$ adopted link ENSDF link

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

BE = 1320.154 (0.015) MeV

Qbeta+ = 3.435 (0.016) MeV

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

S-alpha=	-2.842 (0.016)				
163YB 1			0.000 3/2-		1 11.05 M 35
163YB 2			0.054 5/2-		2 3.8 NS 3
163YB 3				0.058 (3/2-,5/2,7/2-)	3 10 NS GT
163YB 4				0.099 (5/2+)	4 10 NS AP
163YB 5				0.124 (9/2+)	5 10 NS AP
163YB 6			0.133 7/2-		6 1.15 NS 8
163YB 7				0.156	7
163YB 8				0.168 (13/2+)	8 2.37 NS 7
163YB 9				0.221 LE 7/2	9
163YB 10			0.235 9/2-		10

163YB 11				0.264 (11/2+)	11
163YB 12				0.371 (17/2+)	12 0.104 NS 4
163YB 13				0.372 LE 7/2	13
163YB 14				0.394 (11/2-)	14
163YB 15				0.450 LE 9/2	15
163YB 16				0.465	16
163YB 17				0.474 LE 7/2	17
163YB 18				0.484 (15/2+)	18
163YB 19				0.515 LE 9/2	19
163YB 20				0.528 (13/2-)	20

163YB 21				0.538 LE 7/2	21
163YB 22				0.578	22
163YB 23				0.621	23
163YB 24				0.674 LE 9/2	24
163YB 25				0.716 (21/2+)	25 8.3 PS 9
163YB 26				0.749	26
163YB 27				0.768	27
163YB 28				0.854 (19/2+)	28
163YB 29				0.855	29
163YB 30				0.871 LE 7/2	30

163YB 31				0.913 (17/2-)	31
163YB 32				0.939	32
163YB 33				1.179 (25/2+)	33 2.4 PS 5
163YB 34				1.344 (23/2+)	34
163YB 35				1.358 (21/2-)	35
163YB 36				1.642 (23/2-)	36

163YB 37				1.736	(29/2+)	37	1.1 PS 4	
163YB 38				1.819	(25/2-)	38		
163YB 39				1.923	(27/2+)	39		
163YB 40				2.028	(25/2-)	40		

163YB 41				2.114	(27/2-)	41		
163YB 42				2.286	(29/2-)	42		
163YB 43				2.365	(33/2+)	43	0.42 PS 14	
163YB 44				2.524	(29/2-)	44		
163YB 45				2.527	(31/2-)	45		
163YB 46				2.570	(31/2+)	46		
163YB 47				2.798	(33/2-)	47		
163YB 48				3.023	(35/2-)	48		
163YB 49				3.045	(37/2+)	49	0.24 PS +16-10	
163YB 50				3.075	(33/2-)	50		

163YB 51				3.266	(35/2+)	51		
163YB 52				3.368	(37/2-)	52		
163YB 53				3.614	(39/2-)	53		
163YB 54				3.680	(37/2-)	54		
163YB 55				3.751	(41/2+)	55	0.17 PS +9-6	
163YB 56				3.990	(39/2+)	56		
163YB 57				4.001	(41/2-)	57		
163YB 58				4.295	(43/2-)	58		
163YB 59				4.477	(45/2+)	59	0.17 PS +5-9	
163YB 60				4.703	(45/2-)	60		

163YB 61				5.048	(47/2-)	61		
S-p	=	5.105	(0.030)	-----				
163YB 62				5.246	(49/2+)	62	0.17 PS +18-9	
163YB 63				6.081	(53/2+)	63		

S-p = 5.105 (0.030)-----
S-n = 7.544 (0.021)-----
S-2p = 8.671 (0.017)-----
S-2n = 17.602 (0.021)-----
S-alpha= -2.842 (0.016)-----

S+p = -2.637 (0.032)
S+n = -9.790 (0.021)
S+2p = -6.920 (0.032)
S+2n = -17.144 (0.031)
S+alpha = 3.401 (0.032)

gap p = 2.468 (0.044)
gap n = -2.246 (0.030)
gap 2p = 1.751 (0.036)
gap 2n = 0.458 (0.037)
gap alpha = 0.559 (0.035)