

$^{160}\text{Yb}$        $Z = 70$        $N = 90$       adopted link      ENSDF link

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

BE = 1294.810 ( 0.005) MeV

Qbeta+ = 2.138 ( 0.033) MeV

	Energy T	J+		J-		J-other		T1/2
-----								
S-alpha=	-3.623	( 0.025)	-----					
160YB 1	0.000	0+						1 4.8 M 2
160YB 2	0.243	2+						2 121 PS 7
160YB 3	0.638	4+						3 8.5 PS 6
160YB 4	0.821	2+						4
160YB 5						1.086	(0)+	5
160YB 6	1.113	3+						6
160YB 7	1.147	6+						7 1.9 PS 2
160YB 8						1.222		8
160YB 9						1.256	(4+)	9
160YB 10						1.293	(2+)	10
-----								
160YB 11	1.358	2+						11
160YB 12						1.496	(1,2+)	12
160YB 13			1.525	3-				13
160YB 14						1.529	(2+,3,4+)	14
160YB 15						1.567	(4)-	15
160YB 16						1.568	5(-)	16
160YB 17	1.574	5+						17
160YB 18	1.592	4+						18
160YB 19						1.629		19
160YB 20						1.676	(2+,3,4+)	20
-----								
160YB 21						1.694	(4-)	21
160YB 22	1.737	8+						22 1.0 PS 2
160YB 23						1.743	(6+)	23
160YB 24						1.811	(1,2+)	24
160YB 25						1.871	(5-)	25
160YB 26			1.927	7-				26
160YB 27						1.952		27
160YB 28	1.957	6+						28
160YB 29						2.050	(6-)	29
160YB 30			2.051	6-				30
-----								
160YB 31	2.108	7+						31
160YB 32			2.272	7-				32
160YB 33						2.274	(8+)	33
160YB 34			2.362	8-				34
160YB 35	2.364	8+						35
160YB 36			2.373	9-				36

160YB 37		2.374	10+						37	1.1 PS 3
160YB 38							2.415		38	
160YB 39					2.481	9-			39	
160YB 40							2.527	(8-)	40	
-----										
160YB 41					2.579	10-			41	90 PS 28
160YB 42							2.649	(8-)	42	
160YB 43		2.701	9+						43	
160YB 44							2.704	(8-,9+)	44	
160YB 45							2.718	(9-)	45	
160YB 46					2.764	11-			46	46 PS 4
160YB 47							2.790	(10+)	47	
160YB 48							2.840	(10+)	48	
160YB 49					2.878	11-			49	
160YB 50							2.898	(10-)	50	
-----										
160YB 51							2.943		51	
160YB 52		2.961	12+						52	1.0 PS 4
160YB 53					2.978	12-			53	
160YB 54							3.009	(10-)	54	
160YB 55							3.025	(10-,11+)	55	
160YB 56							3.128	(11-)	56	
160YB 57		3.138	12+						57	6 PS LT
160YB 58					3.196	13-			58	6 PS LT
160YB 59							3.319	(12+)	59	
160YB 60							3.330	(12-)	60	
-----										
160YB 61		3.331	11+						61	
160YB 62		3.365	14+						62	7.7 PS 8
160YB 63					3.423	13-			63	3 PS LT
160YB 64							3.457	(12-,13+)	64	
160YB 65					3.518	14-			65	3.8 PS 12
160YB 66							3.545	(12-)	66	
160YB 67							3.683	(13-)	67	
160YB 68		3.746	14+						68	
160YB 69					3.757	15-			69	3 PS LT
160YB 70		3.849	16+						70	1.6 PS 3
-----										
160YB 71							3.870	(14+)	71	
160YB 72							3.897	(14-)	72	
160YB 73							4.016	(13+)	73	
160YB 74							4.025	(14-,15+)	74	
160YB 75							4.029	15(-)	75	
160YB 76					4.173	16-			76	1.4 PS 7
160YB 77							4.311	(15-)	77	
160YB 78		4.376	16+						78	
160YB 79		4.427	18+						79	2.1 PS 3
160YB 80					4.429	17-			80	1.5 PS 6
-----										
160YB 81							4.476	(16+)	81	

160YB 82						4.556	(16-)	82	
160YB 83						4.684	(16-,17+)	83	
160YB 84						4.702	17(-)	84	7 PS LT
160YB 85						4.714	(17,18+)	85	
S-p	=	4.882	( 0.028)	-----					
160YB 86				4.912	18-			86	5 PS LT
160YB 87						4.985	(17)	87	
160YB 88						4.990	(17-)	88	
160YB 89						5.036	(18+)	89	
160YB 90		5.091	20+					90	1.1 PS 3
-----									
160YB 91				5.177	19-			91	1.3 PS 8
160YB 92						5.204	(18-)	92	
160YB 93						5.332	(18-,19+)	93	
160YB 94						5.368		94	
160YB 95						5.406	(19-)	95	
160YB 96				5.693	20-			96	
160YB 97		5.828	22+					97	0.53 PS 9
160YB 98				5.948	21-			98	1.7 PS 6
160YB 99						6.124	(21-)	99	
160YB 100				6.381	22-			100	
-----									
160YB 101		6.623	24+					101	0.15 PS 2
160YB 102				6.694	23-			102	2 PS LT
160YB 103				7.092	24-			103	
S-2p	=	7.438	( 0.026)	-----					
160YB 104		7.459	26+					104	0.18 PS +3-4
160YB 105				7.459	25-			105	
160YB 106				7.870	26-			106	
160YB 107						8.272	(27-)	107	
160YB 108						8.290	(28+)	108	0.19 PS 3
160YB 109				8.708	28-			109	
160YB 110						9.127	(30+)	110	0.19 PS +3-5
-----									
160YB 111						9.132	(29-)	111	
160YB 112						9.555	(30-)	112	

S-p = 4.882 ( 0.028)-----  
S-n = 10.401 ( 0.018)-----  
S-2p = 7.438 ( 0.026)-----  
S-2n = 18.296 ( 0.010)-----  
S-alpha= -3.623 ( 0.025)-----

S+p = -1.688 ( 0.028)  
S+n = -7.742 ( 0.016)  
S+2p = -5.583 ( 0.011)  
S+2n = -17.801 ( 0.016)  
S+alpha = 3.920 ( 0.017)

gap p = 3.194 ( 0.040)  
gap n = 2.659 ( 0.024)  
gap 2p = 1.854 ( 0.028)  
gap 2n = 0.496 ( 0.019)  
gap alpha = 0.297 ( 0.030)