

$^{97}\text{Nb}$        $Z = 41$        $N = 56$       adopted link      ENSDF link

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

BE = 836.444 ( 0.004) MeV

Qbeta- = 1.942 ( 0.004) MeV

	Energy T	J+	J-	J-other	T1/2
97NB 1	0.000	9/2+			1 72.1 M 7
97NB 2			0.743 1/2-		2 58.7 S 18
97NB 3	1.148	7/2+			3 0.15 NS LE
97NB 4	1.160	9/2+			4
97NB 5			1.251 3/2-		5
97NB 6	1.276	5/2+			6
97NB 7			1.434 5/2-		7
97NB 8				1.548 (3/2+,5/2-)	8
97NB 9				1.554 1/2-,3/2-	9
97NB 10				1.653	10
97NB 11	1.750	5/2+			11 0.2 NS LE
97NB 12				1.764 (3/2-)	12
97NB 13	1.852	5/2+			13 0.2 NS LE
97NB 14				1.945 7/2+,9/2+	14
97NB 15				1.958	15
97NB 16				2.047 (3/2-)	16
97NB 17				2.092 3/2+,5/2+	17
97NB 18				2.106 (3/2+)	18 0.2 NS LE
97NB 19			2.113 5/2-		19
97NB 20			2.247 3/2-		20
97NB 21				2.357 (1/2+)	21
97NB 22				2.388 (3/2-)	22
97NB 23				2.525 3/2+,5/2+	23
97NB 24				2.541 (5/2-)	24
97NB 25				2.550 1/2-,3/2-	25
97NB 26				2.654	26
97NB 27				2.676 3/2+,5/2+	27
97NB 28				2.702 3/2+,5/2+	28
97NB 29				2.727 3/2+,5/2+	29
97NB 30				2.748 (3/2+,5/2+)	30
97NB 31				2.792 (1/2+)	31
97NB 32				2.948	32
97NB 33				2.981 (1/2+)	33
97NB 34				3.067 (3/2+,5/2+)	34
97NB 35				3.212 (3/2+,5/2+)	35
97NB 36				3.326 (1/2-,3/2-)	36
97NB 37				3.362 3/2+,5/2+	37

97NB 38				3.418	3/2+,5/2+	38
97NB 39				3.486	(3/2+,5/2+)	39
97NB 40				3.518	3/2+,5/2+	40
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97NB 41				3.537	(3/2+,5/2+)	41
97NB 42				3.586	3/2+,5/2+	42
97NB 43				3.643	3/2+,5/2+	43
97NB 44				3.759	(5/2-,7/2-)	44
97NB 45				3.799	(3/2+,5/2+)	45
S-alpha=	3.801	( 0.011)	-----			
97NB 46				3.862	3/2+,5/2+	46
97NB 47				3.945	3/2+,5/2+	47
97NB 48				4.038	3/2+,5/2+	48
97NB 49				4.080		49
97NB 50				4.200		50
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97NB 51				4.350		51
97NB 52				4.530		52
97NB 53				4.660		53
97NB 54				4.780		54
97NB 55				4.880		55
97NB 56				4.960		56
97NB 57				5.220		57
97NB 58				5.330		58
97NB 59				5.460		59
97NB 60				5.630		60
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S-p = 7.453 ( 0.004)-----  
S-n = 8.071 ( 0.004)-----  
S-2p = 18.973 ( 0.008)-----  
S-2n = 14.959 ( 0.004)-----  
S-alpha= 3.801 ( 0.011)-----

S+p = -9.802 ( 0.004)  
S+n = -5.993 ( 0.007)  
S+2p = -16.303 ( 0.004)  
S+2n = -12.875 ( 0.013)  
S+alpha = -3.167 ( 0.024)

gap p = -2.349 ( 0.006)  
gap n = 2.078 ( 0.008)  
gap 2p = 2.670 ( 0.009)  
gap 2n = 2.084 ( 0.013)  
gap alpha = 0.634 ( 0.027)