

^{90}Nb $Z = 41$ $N = 49$ adopted link ENSDF link

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

BE = 777.004 (0.003) MeV

Qbeta+ = 6.111 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2
90NB 1	0.000	8+			1 14.60 H 5
90NB 2	0.122	6+			2 63 US 2
90NB 3			0.125 4-		3 18.91 S 6
90NB 4	0.171	7+			4 1 US LT
90NB 5	0.285	5+			5
90NB 6				0.328 4(+)	6
90NB 7			0.362 5-		7
90NB 8	0.382	1+			8 6.19 MS 8
90NB 9				0.651 4(+)	9
90NB 10				0.813 (9)+	10
90NB 11				0.823	11
90NB 12				0.827	12
90NB 13				0.848	13
90NB 14			0.854 2-		14
90NB 15				0.958 (3,4,5)	15
90NB 16				1.128	16
90NB 17				1.195	17
90NB 18				1.231	18
90NB 19				1.255	19
90NB 20				1.280	20
90NB 21				1.286 (3,4,5)	21
90NB 22	1.344	1+			22
90NB 23				1.363 (3+)	23
90NB 24				1.372	24
90NB 25				1.414	25
90NB 26				1.433	26
90NB 27				1.498 2-,3-,4-	27
90NB 28				1.558 4-,5-,6-	28
90NB 29				1.631	29
90NB 30				1.647	30
90NB 31				1.692	31
90NB 32	1.769	1+			32
90NB 33				1.804	33
90NB 34				1.809 (9-)	34
90NB 35				1.816	35
90NB 36				1.836	36
90NB 37				1.845 (1+)	37

90NB 38						1.873			38
90NB 39						1.880	(11-)		39 463 NS 13
90NB 40						1.972	(3,4,5)		40

90NB 41						1.986	(10+)		41
90NB 42						1.990			42
90NB 43						2.000			43
90NB 44						2.037			44
90NB 45						2.063	(10+)		45
90NB 46						2.082			46
90NB 47						2.104			47
90NB 48		2.126	1+						48
90NB 49						2.168	(3,4,5)		49
90NB 50						2.181	(12-)		50

90NB 51		2.309	3+						51
90NB 52						2.344			52
90NB 53						2.370			53
90NB 54						2.430			54
90NB 55						2.479			55
90NB 56						2.487	(12-)		56
90NB 57						2.530			57
90NB 58						2.560			58
90NB 59						2.580			59
90NB 60						2.650			60

90NB 61						2.680			61
90NB 62						2.690	(11+)		62
90NB 63						2.710			63
90NB 64						2.730			64
90NB 65						2.780			65
90NB 66						2.793			66
90NB 67						2.814	(13-)		67
90NB 68						2.819	(12+)		68
90NB 69						2.850			69
90NB 70						2.880			70

90NB 71						2.950			71
90NB 72						2.980			72
90NB 73						3.020			73
90NB 74						3.072	(13-)		74
90NB 75						3.075	(13-)		75
90NB 76						3.160			76
90NB 77						3.315	(13+)		77
90NB 78						3.497	(13+)		78
90NB 79				3.654	13-				79
90NB 80						3.672	(14-)		80

90NB 81						3.976	(14+)		81
90NB 82						4.068	(15+)		82

90NB 83				4.331	14(-)	83
90NB 84				4.422	(15+)	84
90NB 85		5.037	0+			85
90NB 86				5.051		86
S-p	=	5.073	(0.004)	-----		
90NB 87				5.558	15(-)	87
90NB 88				5.576	(15-)	88
90NB 89				5.763	(17+)	89
S-alpha=	=	5.803	(0.015)	-----		
90NB 90				6.147	(18+)	90

90NB 91				6.155	16(-)	91
90NB 92				6.230		92
90NB 93				6.685		93
90NB 94				6.742	17(+)	94
90NB 95				7.024	18(+)	95
90NB 96				7.351	(17-)	96
90NB 97				7.768	19(+)	97
90NB 98				8.095	(18-)	98
90NB 99				8.376		99

S-p = 5.073 (0.004)-----
S-n = 10.107 (0.024)-----
S-2p = 12.940 (0.004)-----
S-2n = 22.633 (0.058)-----
S-alpha= 5.803 (0.015)-----

S+p = -6.836 (0.007)
S+n = -12.048 (0.004)
S+2p = -10.842 (0.005)
S+2n = -19.934 (0.004)
S+alpha = -3.922 (0.005)

gap p = -1.764 (0.008)
gap n = -1.941 (0.024)
gap 2p = 2.098 (0.006)
gap 2n = 2.698 (0.058)
gap alpha = 1.882 (0.015)