

^{87}Nb $Z = 41$ $N = 46$ adopted link ENSDF link

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

BE = 744.003 (0.007) MeV

Qbeta+ = 5.473 (0.008) MeV

	Energy T	J+	J-	J-other	T1/2	
87NB	1			0.000 (1/2)-	1	3.7 M 1
87NB	2			0.004 (9/2)+	2	2.6 M 1
87NB	3			0.200 (3/2-)	3	
87NB	4			0.267 (7/2)+	4	
87NB	5			0.334 (5/2-)	5	28 NS 2
87NB	6			0.401 (9/2,7/2,5/2)+	6	
87NB	7			0.785 (13/2)+	7	1.8 PS 3
87NB	8			0.840 (7/2-)	8	
87NB	9			0.995 (11/2+)	9	
87NB	10			1.051 (11/2)+	10	
87NB	11			1.169 (9/2-)	11	
87NB	12			1.604 (11/2-)	12	
87NB	13			1.737 (17/2)+	13	0.69 PS 21
87NB	14			1.954 (15/2)+	14	23 PS 18
87NB	15			1.977 (13/2-)	15	
87NB	16			2.115 (15/2+)	16	
87NB	17			2.277 (15/2-)	17	
87NB	18			2.308 (15/2+)	18	
87NB	19			2.412 (17/2-)	19	58 PS 5
87NB	20			2.491 (21/2)+	20	13.9 PS 7
87NB	21			2.581 (17/2-)	21	
87NB	22			2.861 (21/2)+	22	0.8 PS 5
87NB	23			2.906 (19/2-)	23	
87NB	24			2.988 (19/2-)	24	
S-p	=	3.194 (0.008)				
87NB	25			3.219 (21/2-)	25	0.55 PS 14
87NB	26			3.220 (23/2+)	26	0.55 PS 14
87NB	27			3.446 (25/2)+	27	1.7 PS 1
87NB	28			3.742 (25/2+)	28	
87NB	29			3.781 (23/2-)	29	
87NB	30			3.869 (25/2+)	30	
S-alpha	=	4.094 (0.020)				
87NB	31			4.131 (25/2-)	31	2.1 PS 3
87NB	32			4.286 (25/2-)	32	
87NB	33			4.301 (27/2+)	33	
87NB	34			4.592 (29/2)+	34	
87NB	35			4.779 (27/2-)	35	

87NB	36			4.940	(29/2)+	36		
87NB	37			5.010	(29/2-)	37	3.5 PS	3
87NB	38			5.301	(29/2-)	38		
87NB	39			5.592	(31/2-)	39		
87NB	40			5.620	(31/2+)	40		

87NB	41			5.776	(31/2-)	41	0.28 PS	9
87NB	42			5.841	(33/2)+	42	0.29 PS	+9-6
87NB	43			6.039	(33/2-)	43	0.24 PS	4
87NB	44			6.197	(33/2+)	44		
87NB	45			6.367	(33/2)+	45		
87NB	46			6.393	(33/2-)	46		
87NB	47			6.444	(33/2-)	47		
87NB	48			6.540	(33/2+)	48		
87NB	49			6.745	(35/2-)	49	0.33 PS	5
87NB	50			6.810	(35/2+)	50	0.44 PS	6

87NB	51			6.973	(35/2-)	51	0.31 PS	+16-8
87NB	52			7.140	(37/2)+	52	0.30 PS	4
87NB	53			7.226	(37/2-)	53	0.58 PS	9
87NB	54			7.619	(37/2+)	54	0.33 PS	+7-5
87NB	55			7.647	(37/2-)	55	0.26 PS	+12-9
87NB	56			7.942	(37/2+)	56		
87NB	57			8.062	(39/2+)	57	0.49 PS	8
87NB	58			8.254	(39/2-)	58	0.46 PS	7
87NB	59			8.366	(39/2-)	59		
87NB	60			8.432	(41/2)+	60	0.40 PS	6

87NB	61			8.535	(41/2-)	61	0.33 PS	5
87NB	62			8.571	(41/2+)	62	0.64 PS	+14-10
87NB	63			8.873	(41/2+)	63		
87NB	64			8.934	(41/2-)	64	0.152 PS	28
87NB	65			9.014	(41/2+)	65		
87NB	66			9.514	(43/2+)	66	0.062 PS	+28-21
87NB	67			9.575	(41/2+)	67		
87NB	68			9.843	(43/2-)	68	0.28 PS	+5-4
87NB	69			9.888	(43/2-)	69		
87NB	70			9.997	(45/2+)	70	0.222 PS	35

S-p = 3.194 (0.008)-----
S-n = 12.812 (0.009)-----
S-2p = 10.610 (0.020)-----
S-2n = 23.737 (0.008)-----
S-alpha= 4.094 (0.020)-----

S+p = -6.101 (0.008)
S+n = -10.368 (0.058)
S+2p = -8.098 (0.008)

S+2n = -22.894 (0.025)
S+alpha = -4.537 (0.007)

gap p = -2.907 (0.011)
gap n = 2.443 (0.059)
gap 2p = 2.512 (0.022)
gap 2n = 0.844 (0.026)
gap alpha = -0.443 (0.021)