

^{78}Rb $Z = 37$ $N = 41$ adopted link ENSDF link

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

BE = 667.551 (0.003) MeV

Qbeta+ = 7.243 (0.003) MeV

	Energy T	J+	J-	J-other	T1/2
78RB 1				0.000 0(+)	1 17.66 M 3
78RB 2				0.047 (1-)	2 0.91 US 4
78RB 3				0.103 1(+)	3
78RB 4				0.111 4(-)	4 5.74 M 3
78RB 5				0.115 (4+)	5
78RB 6				0.120 (3+)	6
78RB 7				0.134 (2-)	7
78RB 8				0.161 2(+)	8
78RB 9				0.232 (2+)	9
78RB 10				0.264 (5-)	10 122 PS 18
78RB 11				0.270 (5+)	11 77 PS 11
78RB 12				0.274 (3-)	12
78RB 13				0.290 (1)	13
78RB 14				0.315 (0-, 1, 2+)	14
78RB 15				0.327 (3+)	15
78RB 16				0.334 (3+)	16
78RB 17				0.351 (3+)	17
78RB 18				0.396 (4-)	18
78RB 19				0.399 (4+)	19
78RB 20				0.423 (6+)	20 67 PS 11
78RB 21				0.440 (4-)	21
78RB 22				0.476 (4-)	22
78RB 23				0.489 6(-)	23 26.3 PS 35
78RB 24				0.505 (0-, 1)	24
78RB 25				0.529 (4+)	25
78RB 26				0.538 (4+)	26
78RB 27				0.595 (5-)	27
78RB 28				0.664 (5-)	28
78RB 29				0.667 (7+)	29 9.7 PS 21
78RB 30				0.689 (5+)	30
78RB 31				0.700 (5-)	31
78RB 32				0.737 (6+)	32
78RB 33				0.767 (7-)	33 9.0 PS 21
78RB 34				0.786 (5+)	34
78RB 35				0.825 (5+)	35
78RB 36				0.853 (8+)	36 20.8 PS 35
78RB 37				0.872 (6-)	37

78RB 38				0.896		38		
78RB 39				0.949	(6-)	39		
78RB 40				1.017	(6-)	40		

78RB 41				1.081	(6+)	41		
78RB 42				1.114	8(-)	42	3.5 PS	14
78RB 43				1.115	(7+)	43		
78RB 44				1.166	(7-)	44		
78RB 45				1.220	(9+)	45	2.1 PS	7
78RB 46				1.240	(7-)	46		
78RB 47				1.351	(8+)	47		
78RB 48				1.358	(7-)	48		
78RB 49				1.454	(8+)	49		
78RB 50				1.474	9(-)	50	2.8 PS	14

78RB 51				1.604	(8-)	51		
78RB 52				1.625	(10+)	52	1.23 PS	+28-21
78RB 53				1.678	(8-)	53		
78RB 54				1.745	(9+)	54		
78RB 55				1.942	10(-)	55	0.61 PS	+11-9
78RB 56				1.985	(9-)	56		
78RB 57				2.024	(11+)	57	0.63 PS	+12-10
78RB 58				2.044	(9-)	58		
78RB 59				2.369	11(-)	59	0.39 PS	+7-6
78RB 60				2.651	(12+)	60		

78RB 61				2.955	12(-)	61	0.28 PS	+7-6
78RB 62				3.042	(13+)	62	0.28 PS	+8-6
78RB 63				3.453	(13-)	63	0.17 PS	+6-5
78RB 64				3.897	(14+)	64	0.21 PS	LT

S-alpha=				4.072	(0.007)	-----		
S-p				4.055	(0.004)	-----		
78RB 65				4.151	(14-)	65	0.24 PS	LT
78RB 66				4.254	(15+)	66	0.14 PS	+5-4
78RB 67				4.731	(15-)	67	0.18 PS	LT
78RB 68				5.327	(16+)	68		
78RB 69				5.639	(17+)	69	0.12 PS	LT
78RB 70				6.203	(17-)	70		

78RB 71				7.192	(19+)	71		
78RB 72				7.866	(19)	72		
78RB 73				8.931	(21+)	73		
78RB 74				9.723	(21)	74		
78RB 75				0.000	0(+)	75		

S-p = 4.055 (0.004)-----
S-n = 10.176 (0.003)-----
S-2p = 11.224 (0.010)-----
S-2n = 22.599 (0.003)-----

S-alpha= 4.072 (0.007)-----

S+p = -5.833 (0.008)

S+n = -11.939 (0.004)

S+2p = -8.791 (0.007)

S+2n = -21.383 (0.004)

S+alpha = -3.554 (0.006)

gap p = -1.778 (0.009)

gap n = -1.762 (0.005)

gap 2p = 2.434 (0.012)

gap 2n = 1.216 (0.005)

gap alpha = 0.519 (0.009)