

^{79}Rb $Z = 37$ $N = 42$ adopted link ENSDF link

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

BE = 679.490 (0.002) MeV

Qbeta+ = 3.640 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
79RB 1	0.000	5/2+			1 22.9 M 5
79RB 2				0.039 (3/2-)	2 20.5 NS 25
79RB 3	0.097	9/2+			3 18.6 NS 5
79RB 4				0.120 (5/2+)	4
79RB 5			0.144 3/2-		5 3 NS LT
79RB 6				0.147 (7/2+)	6
79RB 7				0.174 (5/2-)	7 3 NS LT
79RB 8				0.285 1/2-,3/2-	8 3 NS LT
79RB 9				0.357 (1/2,3/2,5/2)	9 3 NS LT
79RB 10				0.363 (5/2-)	10 3 NS LT
79RB 11				0.453 1/2-,3/2-	11 3 NS LT
79RB 12				0.453 (7/2-)	12
79RB 13	0.598	13/2+			13 8.2 PS 4
79RB 14				0.644 (11/2)+	14 5.7 PS 3
79RB 15				0.645 5/2-,7/2-	15
79RB 16				0.652 1/2-,3/2-	16 3 NS LT
79RB 17				0.670 (7/2-)	17
79RB 18				0.680 (9/2-)	18 6.4 PS 17
79RB 19				0.774 (9/2+)	19
79RB 20	0.849	1/2+			20
79RB 21				0.997 +	21
79RB 22				1.025 (9/2-)	22
79RB 23				1.050 (11/2-)	23
79RB 24				1.161 (11/2,13/2)	24
79RB 25	1.182	1/2+			25
79RB 26				1.294	26
79RB 27				1.349 (13/2-)	27 1.21 PS 30
79RB 28				1.353 (17/2+)	28 0.770 PS 30
79RB 29				1.400	29
79RB 30				1.411 (11/2-)	30
79RB 31				1.454 (15/2+)	31 0.91 PS 14
79RB 32				1.490 +	32
79RB 33				1.517 (13/2+)	33
79RB 34				1.817 (13/2-)	34
79RB 35				1.822 (15/2-)	35 0.70 PS 26
79RB 36				1.852	36
79RB 37	2.093	1/2+			37

79RB 38				2.165	(17/2-)	38	0.41 PS 10
79RB 39				2.297	(15/2-)	39	
79RB 40				2.316	(21/2+)	40	0.20 PS 3

79RB 41				2.358	(17/2+)	41	
79RB 42				2.510	(19/2+)	42	0.18 PS 5
79RB 43				2.711	(17/2-)	43	
79RB 44				2.768	(19/2-)	44	0.21 PS 5
79RB 45				3.030	(19/2-)	45	
79RB 46				3.111	(21/2-)	46	0.18 PS 3
79RB 47				3.239		47	
79RB 48				3.276	(21/2+)	48	
79RB 49				3.309	(19/2-)	49	
79RB 50				3.458	(25/2+)	50	0.117 PS 25

79RB 51				3.582	(21/2-)	51	
79RB 52				3.687	(21/2-)	52	
79RB 53				3.700	(23/2+)	53	0.104 PS 23
79RB 54				3.879	(23/2-)	54	0.111 PS 28
S-p =	3.914	(0.002)	-----				
79RB 55				3.936	(23/2-)	55	
S-alpha=	4.121	(0.005)	-----				
79RB 56				4.152	(23/2-)	56	
79RB 57				4.202	(25/2-)	57	0.10 PS 3
79RB 58				4.213		58	
79RB 59				4.352	(25/2+)	59	
79RB 60				4.601	(25/2-)	60	

79RB 61				4.686	(25/2-)	61	
79RB 62				4.774	(29/2+)	62	0.047 PS 14
79RB 63				4.955	(27/2+)	63	0.090 PS 34
79RB 64				5.144	(27/2-)	64	0.21 PS 8
79RB 65				5.287	(27/2-)	65	
79RB 66				5.463	(29/2-)	66	0.069 PS 28
79RB 67				5.608	(29/2+)	67	
79RB 68				6.276	(33/2+)	68	0.11 PS 5
79RB 69				6.346	(31/2+)	69	0.15 PS LT
79RB 70				6.573	(31/2-)	70	0.125 PS LT

79RB 71				6.899	(33/2-)	71	0.09 PS LT
79RB 72				6.945	(33/2+)	72	
79RB 73				7.910	(35/2+)	73	
79RB 74				7.964	(37/2+)	74	0.021 PS 7
79RB 75				8.135	(35/2-)	75	
79RB 76				8.341	(37/2+)	76	
79RB 77				8.370	(37/2-)	77	
79RB 78				8.490	(37/2-)	78	
79RB 79				9.642	(39/2+)	79	
79RB 80				9.828	(41/2+)	80	0.028 PS LT

79RB	81				9.851	(41/2-)	81
79RB	82				9.881	(39/2-)	82
79RB	83				9.891	(41/2+)	83

S-p = 3.914 (0.002)-----
 S-n = 11.939 (0.004)-----
 S-2p = 12.146 (0.003)-----
 S-2n = 22.115 (0.002)-----
 S-alpha= 4.121 (0.005)-----

S+p = -6.798 (0.004)
 S+n = -9.444 (0.003)
 S+2p = -9.488 (0.006)
 S+2n = -20.797 (0.005)
 S+alpha = -3.828 (0.019)

gap p = -2.884 (0.004)
 gap n = 2.495 (0.005)
 gap 2p = 2.658 (0.007)
 gap 2n = 1.318 (0.006)
 gap alpha = 0.293 (0.019)