

^{83}Rb $Z = 37$ $N = 46$ adopted link ENSDF link

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

BE = 720.043 (0.002) MeV

Qbeta+ = 0.920 (0.002) MeV

	Energy T	J+	J-	J-other	T1/2		
83RB	1		0.000	5/2-	1	86.2 D	1
83RB	2		0.005	3/2-	2	71.5 MS	8
83RB	3	0.042	9/2+		3	0.3 MS	GT
83RB	4		0.099	3/2-	4		
83RB	5		0.389	3/2-	5	8 PS	3
83RB	6	0.424	5/2+		6	74 PS	+21-14
83RB	7			0.440 (3/2-)	7		
83RB	8			0.467	8		
83RB	9			0.565 (3/2-,5/2,7/2-)	9	1.0 PS	+8-4
83RB	10		0.737	7/2-	10	10.4 PS	69
83RB	11	0.794	13/2+		11	4.2 PS	7
83RB	12			0.805 (7/2)+	12	0.76 PS	14
83RB	13			0.822 (3/2)-	13		
83RB	14			0.854 (3/2-,5/2,7/2-)	14		
83RB	15			0.908 (3/2,5/2,7/2-)	15		
83RB	16			1.010 (3/2-,5/2,7/2-)	16		
83RB	17			1.035 (3/2-,5/2,7/2-)	17		
83RB	18	1.038	11/2+		18	0.55 PS	21
83RB	19			1.083	19		
83RB	20			1.097 (7/2+,9/2+)	20	2.1 PS	7
83RB	21		1.103	9/2-	21	0.83 PS	21
83RB	22			1.202 (5/2,7/2,9/2)+	22		
83RB	23			1.243 (5/2)+	23		
83RB	24			1.278 (3/2-,5/2,7/2-)	24		
83RB	25			1.296 (5/2,7/2-)	25		
83RB	26			1.343 (3/2,5/2)-	26		
83RB	27			1.366 (7/2+,9/2)	27		
83RB	28			1.375	28		
83RB	29			1.425	29		
83RB	30			1.587 (9/2,13/2)	30	1.9 PS	6
83RB	31			1.598 (5/2,7/2-)	31		
83RB	32			1.606 (3/2,5/2,7/2-)	32		
83RB	33			1.615 (5/2+,7/2,9/2+)	33		
83RB	34			1.629 3/2+,5/2+	34		
83RB	35			1.649 (3/2-,5/2,7/2-)	35		
83RB	36			1.695 (7/2,9/2)+	36		
83RB	37			1.749 (5/2+,7/2)	37		

83RB 38				1.754	11/2-			38	0.69 PS	14
83RB 39						1.780		39	1.7 PS	6
83RB 40						1.799	(5/2)+	40		

83RB 41		1.889	17/2+					41	1.05 PS	12
83RB 42						1.916	(5/2,7/2-)	42		
83RB 43		1.943	15/2+					43	1.25 PS	42
83RB 44		1.952	5/2+					44		
83RB 45						2.036	(5/2,7/2-)	45		
83RB 46						2.057	(7/2+,9/2)	46		
83RB 47						2.062	1/2-,3/2-	47		
83RB 48				2.067	11/2-			48		
83RB 49				2.073	13/2-			49	0.55 PS	14
83RB 50						2.090	(5/2+,7/2+)	50		

83RB 51						2.095	(5/2+,7/2,9/2)	51		
83RB 52				2.102	13/2-			52	1.18 PS	28
83RB 53						2.135	(5/2+,7/2)	53		
83RB 54		2.190	9/2+					54		
83RB 55						2.206	(13/2)	55		
83RB 56						2.310		56		
83RB 57				2.314	13/2-			57	0.69 PS	21
83RB 58						2.318	(17/2+)	58	1.4 PS	7
83RB 59						2.334	1/2+,3/2+,5/2+	59		
83RB 60				2.414	15/2-			60	4.2 NS	21

83RB 61						2.442		61		
83RB 62						2.568		62		
83RB 63				2.576	15/2-			63	0.62 PS	14
83RB 64						2.584	3/2+,5/2+	64		
83RB 65				2.596	17/2-			65	70 PS	35
83RB 66		2.691	1/2+					66		
83RB 67				2.700	17/2-			67		
83RB 68				2.772	17/2-			68		
83RB 69						2.782		69		
83RB 70		2.860	21/2+					70	1.45 PS	14

83RB 71						2.906	(5/2)+	71		
83RB 72				2.958	19/2-			72	6.9 PS	+69-35
83RB 73						3.016		73		
83RB 74		3.059	1/2+					74		
83RB 75						3.139	(19/2)	75		
83RB 76						3.147	3/2+,5/2+	76		
83RB 77				3.195	19/2-			77	0.90 PS	LT
83RB 78						3.242	1/2+,3/2+,5/2+	78		
83RB 79		3.330	21/2+					79	0.90 PS	LT
83RB 80				3.363	21/2-			80	1.9 PS	5

83RB 81						3.421	(5/2)+	81		
83RB 82				3.440	21/2-			82		

83RB 83						3.537		83		
83RB 84				3.559		21/2-		84	0.24 PS	+14-10
83RB 85				3.601		21/2-		85	0.28 PS	6
83RB 86							3.616	86		
83RB 87		3.727		23/2+				87	0.17 PS	6
83RB 88							3.766	88		
83RB 89							3.783	89		
83RB 90							3.915	90		

83RB 91		3.992		25/2+				91	0.67 PS	6
83RB 92						4.085	23/2-	92	0.229 PS	21
83RB 93							4.130	93		
83RB 94						4.135	23/2-	94		
83RB 95						4.164	23/2-	95		
83RB 96							4.407	96		
83RB 97		4.435		25/2+				97	0.31 PS	10
83RB 98							4.461	98	0.29 PS	8
83RB 99						4.642	25/2-	99	0.270 PS	35
83RB 100						4.686	25/2-	100	0.33 PS	4

83RB 101							4.715	101		
83RB 102							4.964	102		
83RB 103							5.051	103		
83RB 104							5.216	104		
83RB 105		5.316		29/2+				105	0.236 PS	35
83RB 106						5.349	27/2-	106		
83RB 107							5.422	107		

S-alpha=		5.428		(0.003)						
83RB 108							5.448	108	0.035 PS	14
83RB 109							5.577	109		
83RB 110							5.667	110	0.40 PS	LT

S-p		=		5.768		(0.002)				
83RB 111						5.869	29/2-	111	0.39 PS	6
83RB 112						5.971	29/2-	112	0.312 PS	35
83RB 113							6.088	113		
83RB 114							6.250	114		
83RB 115							6.357	115		
83RB 116							6.423	116		
83RB 117							6.438	117		
83RB 118							6.470	118		
83RB 119							6.557	119		
83RB 120							6.669	120		

83RB 121							6.688	121	0.111 PS	21
83RB 122							6.912	122		
83RB 123							6.913	123	0.125 PS	14
83RB 124							6.934	124		
83RB 125						7.068	33/2-	125	0.19 PS	6
83RB 126							7.167	126		

83RB 127				7.372	(33/2-)	127	0.062 PS	21
83RB 128				7.447	(33/2-)	128		
83RB 129				7.633		129		
83RB 130				7.906	(35/2-)	130		

83RB 131				8.033	(35/2-)	131		
83RB 132				8.094	(35/2-)	132	0.17 PS	6
83RB 133				8.193	(35/2+)	133		
83RB 134		8.420	37/2-			134		
83RB 135				8.672	(37/2-)	135	0.166 PS	28
83RB 136				8.837	(37/2+)	136		
83RB 137				8.962		137		
83RB 138				9.341	(39/2-)	138		
83RB 139				9.634	(39/2-)	139		
83RB 140		9.910	41/2-			140		

S-p = 5.768 (0.002)-----
S-n = 10.954 (0.004)-----
S-2p = 15.672 (0.003)-----
S-2n = 19.757 (0.005)-----
S-alpha= 5.428 (0.003)-----

S+p = -8.868 (0.003)
S+n = -8.760 (0.003)
S+2p = -13.349 (0.019)
S+2n = -19.239 (0.002)
S+alpha = -6.373 (0.003)

gap p = -3.100 (0.004)
gap n = 2.195 (0.005)
gap 2p = 2.322 (0.019)
gap 2n = 0.517 (0.006)
gap alpha = -0.945 (0.004)