

^{83}Y $Z = 39$ $N = 44$ adopted link ENSDF link

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

BE = 711.614 (0.019) MeV

Qbeta+ = 4.592 (0.020) MeV

	Energy T	J+	J-	J-other	T1/2
83Y 1	0.000	9/2+			1 7.08 M 8
83Y 2			0.062 3/2-		2 2.85 M 2
83Y 3	0.097	5/2+			3 9.8 NS 10
83Y 4				0.118 (1/2-)	4
83Y 5	0.145	7/2+			5 119 PS 28
83Y 6			0.167 5/2-		6 0.76 NS LT
83Y 7				0.332 (5/2+)	7
83Y 8				0.422 (3/2-)	8
83Y 9				0.437 (5/2)	9
83Y 10			0.537 7/2-		10 8.0 PS 28
83Y 11				0.565 (1/2-, 3/2, 5/2-)	11
83Y 12				0.566 (3/2-)	12
83Y 13				0.571 (3/2+, 5/2)	13
83Y 14	0.595	13/2+			14 5.4 PS 5
83Y 15				0.642 (3/2, 5/2-)	15
83Y 16				0.722 (3/2-, 5/2)	16
83Y 17	0.737	11/2+			17 4.6 PS 10
83Y 18			0.814 9/2-		18 3.2 PS 6
83Y 19				0.856 (3/2)	19
83Y 20				0.882	20
83Y 21				1.137	21
83Y 22			1.224 11/2-		22 0.9 PS 3
83Y 23				1.250 (3/2-)	23
83Y 24	1.406	17/2+			24 0.96 PS 14
83Y 25	1.532	15/2+			25 1.3 PS 3
83Y 26			1.566 13/2-		26 0.80 PS 28
83Y 27				1.709	27
83Y 28				1.849	28
83Y 29				1.956	29
83Y 30			2.011 15/2-		30 0.97 PS 35
83Y 31				2.083 (3/2-)	31
83Y 32				2.137 (3/2)	32
83Y 33				2.145	33
83Y 34				2.260	34
83Y 35	2.371	21/2+			35 0.43 PS 7
83Y 36			2.406 17/2-		36 1.3 PS LT
83Y 37	2.430	19/2+			37 0.83 PS LT

83Y 38				2.552		38		
83Y 39		2.560		17/2-		39	46 PS	4
83Y 40				2.738		40		

83Y 41				2.823	(19/2-)	41		
83Y 42				2.888	(19/2-)	42	3.9 PS	LT
83Y 43				2.938		43		
83Y 44				3.308	(21/2-)	44		
83Y 45				3.315	(21/2-)	45		
83Y 46				3.397	(23/2+)	46	0.43 PS	+11-9
83Y 47				3.420		47		
83Y 48				3.451	(25/2+)	48		
S-p =		3.485	(0.020)	-----				
83Y 49				3.731	(23/2-)	49		
S-alpha=		3.828	(0.019)	-----				
83Y 50				3.830	(23/2-)	50	0.91 PS	+23-25

83Y 51				3.917		51		
83Y 52				4.177		52		
83Y 53				4.341	(25/2-)	53	0.34 PS	+8-4
83Y 54				4.386	(25/2-)	54	0.48 PS	+12-18
83Y 55				4.422	(27/2+)	55		
83Y 56				4.473		56		
83Y 57				4.488	(27/2+)	57	0.20 PS	+6-8
83Y 58				4.644	(29/2+)	58	0.19 PS	+4-3
83Y 59				4.796	(27/2-)	59		
83Y 60				4.992	(27/2-)	60		

83Y 61				5.177		61		
83Y 62				5.244		62		
83Y 63				5.347		63		
83Y 64				5.502	(29/2-)	64	0.19 PS	+3-6
83Y 65				5.562	(29/2-)	65		
83Y 66				5.565		66		
83Y 67				5.669		67		
83Y 68				5.747	(31/2+)	68	0.20 PS	+8-7
83Y 69				5.950	(31/2-)	69		
83Y 70				5.984	(33/2+)	70	0.22 PS	+9-7

83Y 71				6.334	(31/2-)	71	0.26 PS	LT
83Y 72				6.676	(33/2-)	72	0.46 PS	LT
83Y 73				6.781	(33/2-)	73		
83Y 74				6.782	(33/2-)	74	0.13 PS	+6-3
83Y 75				7.179	(35/2+)	75	0.24 PS	LT
83Y 76				7.238	(35/2-)	76		
83Y 77				7.451		77		
83Y 78				7.468	(37/2+)	78	0.05 PS	+3-2
83Y 79				7.819	(35/2-)	79		
83Y 80				7.919	(37/2-)	80		

83Y	81				8.070	(37/2-)	81	0.28 PS	LT
83Y	82				8.109	(37/2-)	82		
83Y	83				8.442		83		
83Y	84				8.709	(39/2-)	84		
83Y	85				8.713	(39/2+)	85		
83Y	86				9.075	(41/2+)	86	0.014 PS	+55-7
83Y	87				9.332	(41/2-)	87		
83Y	88				9.598		88		
83Y	89				9.640	(41/2-)	89		

S-p = 3.485 (0.020)-----
S-n = 12.213 (0.019)-----
S-2p = 11.327 (0.019)-----
S-2n = 22.635 (0.019)-----
S-alpha= 3.828 (0.019)-----

S+p = -6.505 (0.019)
S+n = -9.760 (0.019)
S+2p = -8.652 (0.019)
S+2n = -21.779 (0.027)
S+alpha = -4.094 (0.020)

gap p = -3.020 (0.028)
gap n = 2.453 (0.027)
gap 2p = 2.675 (0.027)
gap 2n = 0.856 (0.033)
gap alpha = -0.266 (0.027)