

^{82}Y $Z = 39$ $N = 43$ adopted link ENSDF link

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

BE = 699.401 (0.006) MeV

Qbeta+ = 7.946 (0.008) MeV

	Energy T	J+	J-	J-other	T1/2
82Y 1	0.000	1+			1 8.30 S 20
82Y 2	0.142	2+			2
82Y 3	0.250	2+			3
82Y 4	0.314	3+			4
82Y 5	0.337	3+			5
82Y 6	0.401	4+			6 11 NS 3
82Y 7			0.403 4-		7 268 NS 25
82Y 8			0.406 4-		8 35.3 NS 21
82Y 9				0.474 (5-)	9
82Y 10	0.507	6+			10 147 NS 7
82Y 11				0.512 (5-)	11 1.42 NS 14
82Y 12				0.587 (6-)	12
82Y 13				0.595 (6+)	13
82Y 14			0.678 6-		14 0.43 NS 3
82Y 15	0.719	7+			15 23 PS 10
82Y 16	0.751	8+			16 0.83 NS 4
82Y 17				0.818 (6-)	17
82Y 18				0.957 (7-)	18 8 PS 4
82Y 19	1.147	9+			19 1.04 PS 7
82Y 20				1.163 (7-)	20
82Y 21			1.272 8-		21 8 PS 4
82Y 22				1.284 (8+)	22
82Y 23				1.507 (8-)	23
82Y 24	1.590	10+			24 0.97 PS 7
82Y 25				1.688 (9-)	25 1.5 PS 5
82Y 26	1.960	11+			26 0.42 PS 10
82Y 27				1.964 (9-)	27
82Y 28			2.061 10-		28 0.65 PS 15
82Y 29				2.379 (10-)	29
82Y 30				2.602 (11-)	30 0.31 PS 5
82Y 31	2.651	12+			31 0.28 PS 4
82Y 32				2.915 (11-)	32
82Y 33	2.971	13+			33 0.24 PS 3
82Y 34			3.026 12-		34 0.49 PS 12
82Y 35				3.386 (12-)	35
S-alpha=	3.554 (0.006)				
82Y 36				3.675 (13-)	36 0.166 PS 21

S-p = 3.825 (0.006)-----										
82Y	37		3.904	14+					37	0.24 PS 6
82Y	38							3.935 (13-)	38	
82Y	39		4.143	15+					39	0.132 PS 14
82Y	40					4.150	14-		40	0.24 PS 6

82Y	41							4.413 (14-)	41	
82Y	42							4.886 (15-)	42	0.26 PS LT
82Y	43							5.044 (15-)	43	
82Y	44		5.250	16+					44	
82Y	45					5.414	16-		45	
82Y	46		5.456	17+					46	0.083 PS 14
82Y	47							6.223 (17-)	47	
82Y	48		6.672	18+					48	
82Y	49							6.777 (18-)	49	
82Y	50		6.914	19+					50	0.21 PS LT

82Y	51							7.591 (19-)	51	
82Y	52							8.188 (20-)	52	
82Y	53		8.194	20+					53	
82Y	54		8.516	21+					54	
82Y	55							8.602 (19+,20+)	55	
82Y	56							9.680 (22-)	56	
82Y	57		9.861	22+					57	

S-p = 3.825 (0.006)-----
S-n = 10.422 (0.008)-----
S-2p = 10.467 (0.006)-----
S-2n = 23.059 (0.008)-----
S-alpha= 3.554 (0.006)-----

S+p = -5.136 (0.008)
S+n = -12.213 (0.019)
S+2p = -7.708 (0.006)
S+2n = -21.973 (0.007)
S+alpha = -3.495 (0.008)

gap p = -1.311 (0.011)
gap n = -1.790 (0.021)
gap 2p = 2.759 (0.008)
gap 2n = 1.086 (0.011)
gap alpha = 0.059 (0.010)