

^{80}Y $Z = 39$ $N = 41$ adopted link ENSDF link

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

BE = 676.342 (0.006) MeV

Qbeta+ = 9.163 (0.007) MeV

	Energy T	J+	J-	J-other	T1/2
80Y 1				0.000 (4-)	1 30.1 S 5
80Y 2				0.228 (1-)	2 4.8 S 3
80Y 3				0.257 (5-)	3
80Y 4				0.313 (2+)	4 4.7 US 3
80Y 5				0.324 (2-)	5
80Y 6				0.444	6
80Y 7				0.456 (3+)	7
80Y 8				0.461 (3-)	8
80Y 9				0.570 (6-)	9
80Y 10				0.623 (1+)	10

80Y 11				0.649 (4+)	11
80Y 12				0.664 (4-)	12
80Y 13				0.676	13
80Y 14				0.879 (5-)	14
80Y 15				0.887 (5+)	15
80Y 16				0.938 (7-)	16
80Y 17				1.059 (6+)	17
80Y 18				1.176 (6+)	18
80Y 19				1.186 (6+)	19
80Y 20				1.207 (6-)	20

80Y 21				1.290 (7+)	21
80Y 22				1.359 (8-)	22 0.79 PS +42-21
80Y 23				1.489 (7-)	23
80Y 24				1.490 (8+)	24
80Y 25				1.510 (7+)	25
80Y 26				1.765 (8+)	26
80Y 27				1.824 (9+)	27
80Y 28				1.825 (9-)	28 0.35 PS +6-5
80Y 29				1.916 (8+)	29
80Y 30				1.957 (8-)	30

80Y 31				2.268 (10+)	31
80Y 32				2.306 (9-)	32 0.8 PS +26-4
80Y 33				2.323 (9+)	33 0.73 PS +35-19
80Y 34				2.351 (10-)	34 0.17 PS +6-5
80Y 35				2.615 (11+)	35 0.66 PS +53-22
80Y 36				2.618 (10+)	36
80Y 37				2.867 (10+)	37 0.30 PS +12-8

80Y	38				2.901	(11-)	38	0.12	PS	+7-5
80Y	39				2.916	(10-)	39	0.41	PS	LT
S-alpha=		3.094 (0.006)		-----						
S-p		= 2.958 (0.010)		-----						
80Y	40				3.299	(12+)	40	0.17	PS	10

80Y	41				3.328	(11+)	41	0.23	PS	LT
80Y	42				3.333	(11-)	42	0.30	PS	+18-11
80Y	43				3.531	(12-)	43	0.11	PS	+8-5
80Y	44				3.628	(13+)	44	0.19	PS	4
80Y	45				3.690	(12+)	45			
80Y	46				4.014	(12+)	46	0.26	PS	LT
80Y	47				4.090	(12-)	47			
80Y	48				4.146	(13-)	48	0.15	PS	+7-6
80Y	49				4.443	(13-)	49	0.22	PS	LT
80Y	50				4.510	(13+)	50	0.19	PS	LT

80Y	51				4.559	(14+)	51	0.12	PS	+11-10
80Y	52				4.843	(14-)	52	0.12	PS	+10-7
80Y	53				4.848	(15+)	53	0.12	PS	+9-6
80Y	54				4.974	(14+)	54			
80Y	55				5.324	(14+)	55			
80Y	56				5.438	(14-)	56			
80Y	57				5.447	(15-)	57	0.11	PS	6
80Y	58				5.603	(15)	58			
80Y	59				5.682	(15-)	59			
80Y	60				5.875	(15+)	60			

80Y	61				5.999	(16+)	61	0.06	PS	+20-3
80Y	62				6.098	(16-)	62	0.12	PS	8
80Y	63				6.243	(17+)	63	0.08	PS	+17-6
80Y	64				6.433	(16+)	64			
80Y	65				6.655	(17-)	65	0.25	PS	LT
80Y	66				6.785	(16+)	66			
80Y	67				6.969	(16-)	67			
80Y	68				7.034	(17)	68			
80Y	69				7.090	(17-)	69			
80Y	70				7.423	(17+)	70			

80Y	71				7.450	(18-)	71	0.17	PS	+12-9
80Y	72				7.528	(18+)	72	0.14	PS	LT
80Y	73				7.789	(19+)	73	0.14	PS	LT
80Y	74				8.029	(19-)	74			
80Y	75				8.036	(18+)	75			
80Y	76				8.569	(19)	76			
S-2p		= 8.791 (0.007)		-----						
80Y	77				9.001	(20-)	77	0.08	PS	LT
80Y	78				9.149	(20+)	78			
80Y	79				9.496	(21+)	79			
80Y	80				9.613	(21-)	80			

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S-p    =  2.958 ( 0.010)-----
S-n    = 11.417 ( 0.080)-----
S-2p   =  8.791 ( 0.007)-----
S-2n   = 25.120 ( 0.312)-----
S-alpha=  3.094 ( 0.006)-----

S+p    =  -3.665 ( 0.092)
S+n    = -12.636 ( 0.008)
S+2p   =  -5.242 ( 0.328)
S+2n   = -23.059 ( 0.008)
S+alpha =  -2.471 ( 0.006)

gap p   =  -0.708 ( 0.093)
gap n   =  -1.219 ( 0.081)
gap 2p  =   3.549 ( 0.328)
gap 2n  =   2.062 ( 0.312)
gap alpha =  0.623 ( 0.009)

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