

^{89}Mo $Z = 42$ $N = 47$ adopted link ENSDF link

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

BE = 760.504 (0.004) MeV

Qbeta+ = 5.611 (0.024) MeV

	Energy T	J+	J-	J-other	T1/2
89MO	1			0.000 (9/2+)	1 2.11 M 10
89MO	2			0.119 (7/2+)	2
89MO	3			0.387 (1/2-)	3 190 MS 15
89MO	4			1.001 (11/2+)	4
89MO	5			1.016 (13/2+)	5
89MO	6			1.253	6
89MO	7			1.646 (11/2+)	7
89MO	8			1.740	8
89MO	9			2.008 (13/2-)	9
89MO	10			2.096 (17/2+)	10
89MO	11			2.110	11
89MO	12			2.271 (17/2-)	12 1.14 NS 8
89MO	13			2.416 (17/2+)	13
89MO	14			2.454 (17/2-)	14 5.8 PS 11
89MO	15			2.584 (21/2+)	15 9.49 NS 21
89MO	16			3.134 (23/2+)	16 1.1 PS LT
89MO	17			3.151 (21/2-)	17 1.8 PS +6-10
89MO	18			3.558 (25/2+)	18 1.0 PS LT
89MO	19			3.702 (23/2-)	19
89MO	20			3.717 (25/2+)	20 0.8 PS 6
89MO	21			4.069 (25/2-)	21 2.8 PS +6-3
89MO	22			4.261 (27/2+)	22 0.28 PS +7-14
S-alpha=	4.265 (0.008)	-----			
89MO	23			4.575 (27/2-)	23 0.69 PS +28-14
89MO	24			4.649 (29/2+)	24
89MO	25			4.981 (29/2+)	25 0.7 PS LT
89MO	26			5.171 (29/2-)	26 0.76 PS LT
89MO	27			5.251 (31/2+)	27 2.3 PS 8
89MO	28			5.340	28
89MO	29			5.420 (31/2-)	29 0.7 PS LT
89MO	30			5.480	30
89MO	31			5.643 (33/2+)	31 0.55 PS 14
S-p	6.132 (0.058)	-----			
89MO	32			6.436 (35/2-)	32 2.6 PS 6
89MO	33			6.471 (35/2+)	33
89MO	34			6.756 (37/2+)	34
89MO	35			7.590 (39/2-)	35 1.39 PS 14

89M0 36 | | | 0.000 (9/2+) 36 2.11 M 10

S-p = 6.132 (0.058)-----
S-n = 10.400 (0.005)-----
S-2p = 10.246 (0.006)-----
S-2n = 24.273 (0.005)-----
S-alpha= 4.265 (0.008)-----

S+p = -2.999 (0.004)
S+n = -13.229 (0.005)
S+2p = -7.803 (0.005)
S+2n = -23.337 (0.007)
S+alpha = -4.627 (0.004)

gap p = 3.134 (0.058)
gap n = -2.829 (0.008)
gap 2p = 2.443 (0.007)
gap 2n = 0.936 (0.009)
gap alpha = -0.362 (0.009)