

^{96}Mo $Z = 42$ $N = 54$ adopted link ENSDF link

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

BE = 830.783 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
96MO	1 0.000	0+			1 STABLE
96MO	2 0.778	2+			2 3.67 PS 6
96MO	3 1.148	0+			3 61 PS 8
96MO	4 1.330	0+			4
96MO	5 1.498	2+			5 0.78 PS 7
96MO	6 1.626	2+			6 0.90 PS GT
96MO	7 1.628	4+			7 1.2 PS 2
96MO	8 1.870	4+			8 6.4 PS +28-15
96MO	9 1.978	3+			9 2.29 PS GT
96MO	10 2.096	2+			10 97 FS 11
96MO	11 2.219	4+			11 0.38 PS GT
96MO	12		2.235 3-		12 0.277 PS GT
96MO	13			2.399	13
96MO	14 2.426	2+			14 0.19 PS +4-3
96MO	15 2.438	5+			15 0.139 PS GT
96MO	16 2.441	6+			16 0.208 PS GT
96MO	17 2.476	4+			17
96MO	18			2.481 (4)+	18 1.01 PS GT
96MO	19			2.502 (1)	19 97 FS 13
96MO	20			2.540 (3+)	20 69 FS 10
96MO	21 2.594	3+			21 0.8 PS +43-4
96MO	22			2.612	22 0.194 PS GT
96MO	23			2.623 (0)+	23 0.6 PS +6-2
96MO	24 2.625	4+			24 0.5 PS +8-2
96MO	25 2.700	2+			25 103 FS 14
96MO	26			2.713	26
96MO	27			2.734 (5-)	27
96MO	28			2.735 (4,5)+	28 0.25 PS GT
96MO	29 2.736	3+			29 121 FS +18-17
96MO	30 2.742	0+			30
96MO	31			2.749 (0+)	31 0.17 PS +4-3
96MO	32 2.755	6+			32 0.194 PS GT
S-alpha=	2.761 (0.000)				
96MO	33 2.787	2+			33 0.15 PS +4-3
96MO	34			2.790 (2,4)	34 0.68 PS GT
96MO	35 2.795	1+			35 31 FS 3
96MO	36			2.806 (1)	36 114 FS +21-18
96MO	37 2.818	4+			37 59 FS +16-12

96MO	38					2.875	7+,6+		38
96MO	39	2.975	5+						39
96MO	40	2.978	8+						40

96MO	41	2.987	2+						41 104 FS +15-14
96MO	42	3.006	0+						42 90 FS +19-15
96MO	43					3.020			43
96MO	44	3.025	2+						44 83 FS +13-12
96MO	45					3.053	(4+)		45 69 FS +14-11
96MO	46	3.088	3+						46 0.33 PS +53-14
96MO	47					3.088	(4+,5-)		47
96MO	48					3.090	2,3		48 66 FS +10-8
96MO	49					3.134			49 76 FS 10
96MO	50					3.154	1		50 73 FS +10-9

96MO	51			3.179	3-				51 142 FS +24-21
96MO	52	3.187	4+						52
96MO	53					3.203			53
96MO	54	3.211	3+						54 104 FS +22-18
96MO	55					3.233	(3)		55 236 FS +10-62
96MO	56	3.241	4+						56
96MO	57					3.256			57 0.4 PS +9-2
96MO	58	3.285	2+						58 0.13 PS +4-3
96MO	59	3.300	1+						59 8.3 FS 14
96MO	60					3.328	(1)		60 49 FS +12-10

96MO	61					3.335	(4+)		61 0.13 PS +4-3
96MO	62	3.352	2+						62 36 FS +10-8
96MO	63					3.364			63 120 FS +5-3
96MO	64					3.370	(8)+		64
96MO	65	3.374	2+						65 23 FS 3
96MO	66	3.417	4+						66 0.61 PS GT
96MO	67			3.418	5-				67
96MO	68	3.420	2+						68
96MO	69					3.421	(1)		69 52 FS +9-8
96MO	70	3.425	1+						70 8.3 FS +28-21

96MO	71					3.434	(4)+		71 97 FS +21-17
96MO	72	3.442	4+						72
96MO	73					3.445			73
96MO	74					3.465	(3)		74 44 FS +7-6
96MO	75	3.472	2+						75 66 FS +19-14
96MO	76					3.473	(7)+		76
96MO	77					3.531	1,2,3		77 43 FS 6
96MO	78					3.541	(3)		78 83 FS +22-17
96MO	79					3.551	3		79
96MO	80			3.556	5-				80

96MO	81					3.573	(1)		81 87 FS +24-18
96MO	82	3.597	2+						82

96MO 83				3.600	1-				83	10.4 FS	21
96MO 84							3.610	2,3	84	104 FS	+21-17
96MO 85							3.623	(3+)	85	0.236 PS	GT
96MO 86							3.646		86		
96MO 87		3.669	3+						87	44 FS	+9-8
96MO 88							3.683		88		
96MO 89							3.690	(2+)	89		
96MO 90				3.694	5-				90		

96MO 91		3.709	2+						91		
96MO 92		3.736	4+						92		
96MO 93							3.787	(10)+	93		
96MO 94							3.800		94		
96MO 95							3.847		95		
96MO 96							3.866		96		
96MO 97				3.895	1-				97		
96MO 98							3.916	(9)+	98		
96MO 99							3.965	(4+)	99		
96MO 100							4.038	(3-)	100		

96MO 101		4.098	4+						101		
96MO 102							4.215		102		
96MO 103		4.245	10+						103		
96MO 104							4.280		104		
96MO 105							4.469		105		
96MO 106							4.533	(11)+	106		
96MO 107							4.584	(12)+	107		
96MO 108							4.603		108		
96MO 109				4.714	1-				109		
96MO 110							4.795	(11)+	110		

96MO 111							5.132	(12)+	111		
96MO 112							5.641	(13)+	112		
96MO 113							5.655	(13)+	113		
96MO 114							5.811	(14)+	114		
96MO 115		6.300	0+						115		
96MO 116							6.415	(15)+	116		
96MO 117							6.710	(15)+	117		
96MO 118							7.505	(17)+	118		
96MO 119							7.554		119		
96MO 120							8.424	(19)+	120		

S-p	=	9.298	(0.001)	-----							
S-n	=	9.154	(0.000)	-----							
96MO 121							9.467	(20+)	121		
96MO 122							9.882		122		

S-p	=	9.298	(0.001)	-----							
S-n	=	9.154	(0.000)	-----							

S-2p = 16.104 (0.000)-----
S-2n = 16.523 (0.000)-----
S-alpha= 2.761 (0.000)-----

S+p = -5.719 (0.004)
S+n = -6.821 (0.000)
S+2p = -14.008 (0.006)
S+2n = -15.464 (0.000)
S+alpha = -2.857 (0.000)

gap p = 3.579 (0.004)
gap n = 2.333 (0.000)
gap 2p = 2.096 (0.006)
gap 2n = 1.060 (0.000)
gap alpha = -0.097 (0.000)