

^{91}Mo $Z = 42$ $N = 49$ adopted link ENSDF link

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

BE = 783.840 (0.006) MeV

Qbeta+ = 4.429 (0.007) MeV

	Energy T	J+	J-	J-other	T1/2
91MO 1	0.000	9/2+			1 15.49 M 1
91MO 2			0.653 1/2-		2 64.6 S 6
91MO 3			1.156 3/2-		3
91MO 4	1.362	5/2+			4
91MO 5				1.414 13/2(+)	5
91MO 6			1.532 5/2-		6
91MO 7				1.565	7
91MO 8				1.605	8
91MO 9				1.640 (7/2,9/2+)	9
91MO 10				1.844 5/2-,7/2-	10
91MO 11	1.902	9/2+			11
91MO 12				2.068 17/2(+)	12
91MO 13			2.084 3/2-		13
91MO 14				2.201	14
91MO 15	2.234	9/2+			15
91MO 16				2.243	16
91MO 17				2.267 21/2(+)	17 47 NS 1
91MO 18				2.280 (17/2-)	18 38 NS 4
91MO 19				2.302 (1/2-&9/2+)	19
91MO 20				2.345 (7/2+,9/2+)	20
91MO 21	2.451	9/2+			21
91MO 22				2.492	22
91MO 23				2.537 3/2+,5/2+	23
91MO 24				2.566 7/2+,9/2+	24
91MO 25				2.624	25
91MO 26				2.663	26
91MO 27				2.690 (3/2)-	27
91MO 28			2.716 5/2-		28
91MO 29				2.716 (7/2,9/2)+	29
91MO 30				2.772 (7/2+,9/2+)	30
91MO 31				2.781 (7/2+,9/2+,11/2)	31+
91MO 32	2.818	9/2+			32
91MO 33				2.851 9/2-,11/2-	33
91MO 34				2.867 9/2-,11/2-	34
91MO 35				2.883 1/2-,3/2-	35
91MO 36				2.888 (9/2+,11/2+)	36
91MO 37			2.901 3/2-		37

91MO 38						2.914	(5/2-,7/2-)	38
91MO 39						2.940	(23/2+)	39 0.08 PS
91MO 40						2.941	(5/2-,7/2-)	40

91MO 41						2.964		41
91MO 42						2.984		42
91MO 43						3.010	(5/2-,7/2-)	43
91MO 44						3.031	(1/2-,3/2-)	44
91MO 45						3.085		45
91MO 46						3.126	(1/2-,3/2-)	46
91MO 47						3.162		47
91MO 48				3.191	3/2-			48
91MO 49						3.230	(5/2-,7/2-)	49
91MO 50						3.307		50

91MO 51						3.328	(9/2+)	51
91MO 52						3.351	(5/2-,7/2-)	52
91MO 53						3.398		53
91MO 54						3.413	(5/2-,7/2-)	54
91MO 55				3.447	7/2-			55
91MO 56						3.472	(1/2-,3/2-)	56
91MO 57						3.524		57
91MO 58						3.546	(25/2+)	58 0.11 PS
91MO 59						3.585	(7/2-)	59
91MO 60						3.631	(1/2-,3/2-)	60

91MO 61		3.645	5/2+					61
91MO 62						3.696		62
91MO 63						3.729		63
91MO 64						3.759		64
91MO 65						3.806		65
91MO 66						3.810	(25/2+)	66 17 PS 3
91MO 67						3.836	(7/2-)	67
91MO 68						3.930	(9/2+)	68
91MO 69						3.956	(7/2-)	69
91MO 70						4.022	(1/2-,3/2-)	70

91MO 71						4.060	(5/2-,7/2-)	71
91MO 72		4.069	9/2+					72
91MO 73						4.091		73
91MO 74						4.116		74
91MO 75						4.133	5/2-,7/2-	75
91MO 76						4.157	(9/2+)	76
91MO 77						4.186		77
91MO 78						4.228		78
91MO 79						4.258		79
91MO 80						4.276	(9/2+)	80

91MO 81						4.301	(5/2-,7/2-)	81
91MO 82						4.342	(27/2+)	82 0.20 PS

91MO 83				4.349		83
91MO 84				4.385	(5/2-&7/2-)	84
91MO 85				4.408		85
91MO 86				4.432	(5/2-,7/2-)	86
91MO 87				4.445	25/2(+)	87
91MO 88				4.457	(27/2)	88
91MO 89		4.481	5/2-			89
91MO 90				4.522		90

91MO 91				4.560		91
91MO 92				4.577		92
91MO 93				4.603		93
91MO 94		4.643	3/2-			94
91MO 95				4.683	(7/2+,9/2+)	95
91MO 96				4.707		96
91MO 97				4.768		97
91MO 98				4.780	(1/2-,3/2-)	98
91MO 99		4.796	7/2-			99
91MO 100				4.815		100

91MO 101				4.841		101
91MO 102				4.869		102
91MO 103				4.899		103
91MO 104				4.953	(27/2+)	104
91MO 105				4.959	(29/2+)	105 0.12 PS
91MO 106				5.030	(1/2-,3/2-)	106
91MO 107				5.130		107
91MO 108				5.190	(1/2-,3/2-)	108
91MO 109				5.230	(5/2-,7/2-)	109
91MO 110				5.243	(31/2+)	110 0.40 PS

S-alpha= 5.287 (0.007)-----						
91MO 111		5.295	7/2-			111
91MO 112				5.299	(31/2)	112
91MO 113				5.340	1/2-,3/2-	113
91MO 114		5.420	7/2-			114
91MO 115				5.488	(29/2+)	115
91MO 116				5.500	1/2-,3/2-	116
91MO 117		5.516	7/2-			117
91MO 118				5.690	(7/2-)	118
91MO 119				5.796		119
91MO 120				5.818		120

91MO 121				5.900	-	121
91MO 122				5.929		122
91MO 123				5.964	(35/2)	123
91MO 124				5.990	1/2-,3/2-	124
91MO 125		6.060	7/2-			125
91MO 126				6.107	(29/2+)	126
91MO 127				6.233	(31/2+)	127

91MO 128				6.328	(31/2)	128
91MO 129				6.438	(33/2)	129
91MO 130				6.445		130

91MO 131				6.469	(33/2+)	131
91MO 132				6.659	(31/2+)	132
91MO 133				6.813		133
S-p	=	6.836	(0.007)	-----		
91MO 134				6.959		134
91MO 135		6.990	9/2+			135
91MO 136			7.120	1/2-		136
91MO 137				7.263	(33/2+)	137
91MO 138				7.321	(35/2+)	138
91MO 139				7.337	(33/2+)	139
91MO 140				7.469	(35/2+)	140

91MO 141				7.806	(33/2)	141
91MO 142				8.002	(39/2+)	142
91MO 143				8.113	(37/2+)	143
91MO 144				8.154	(39/2+)	144
91MO 145				8.170	(5/2-)	145
91MO 146				8.174		146
91MO 147				8.279	(37/2+)	147
91MO 148			8.340	3/2-		148
91MO 149				8.578		149
91MO 150				8.627	(37/2+)	150

91MO 151			8.660	3/2-		151
91MO 152				8.708		152
91MO 153				8.749	(39/2+)	153
91MO 154			8.870	5/2-		154
91MO 155				9.282	(39/2+)	155

S-p = 6.836 (0.007)-----
S-n = 10.108 (0.007)-----
S-2p = 11.909 (0.007)-----
S-2n = 23.337 (0.007)-----
S-alpha= 5.287 (0.007)-----

S+p = -4.006 (0.007)
S+n = -12.671 (0.006)
S+2p = -9.586 (0.007)
S+2n = -20.741 (0.006)
S+alpha = -3.674 (0.011)

gap p = 2.831 (0.010)
gap n = -2.563 (0.009)
gap 2p = 2.323 (0.009)
gap 2n = 2.596 (0.010)

gap alpha = 1.613 (0.014)