

^{23}Mg $Z = 12$ $N = 11$ adopted link ENSDF link

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

BE = 181.726 (0.000) MeV

Qbeta+ = 4.056 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
23MG 1	0.000	3/2+			1 11.3046 S 45
23MG 2	0.451	5/2+			2 1.15 PS 8
23MG 3	2.052	7/2+			3 65 FS 12
23MG 4	2.357	1/2+			4 575 FS 118
23MG 5	2.714	9/2+			5 65 FS 8
23MG 6			2.771 1/2-		6 75 FS 10
23MG 7				2.905 (3/2)+	7 10.4 FS 21
23MG 8			3.794 3/2-		8 28.4 FS 42
23MG 9				3.861 3/2+,5/2+	9 8.3 FS 21
23MG 10			3.972 5/2-		10 14 NS LT
23MG 11	4.356	1/2+			11 7.6 FS LT
23MG 12				4.681 (7/2)+	12 6.9 FS 21
23MG 13				5.287 3/2+,5/2+	13 3.5 FS 14
23MG 14				5.454 (11/2)+	14 10.4 FS LT
23MG 15	5.658	5/2+			15
23MG 16				5.691 (1/2 TO 9/2)+	16
23MG 17				5.712 1/2+,3/2+,5/2+	17
23MG 18				5.938 (11/2+)	18
23MG 19				5.993 1/2-,3/2-	19
23MG 20				6.129 (7/2-)	20 12.5 FS 21
23MG 21				6.132 3/2+,5/2+	21
23MG 22				6.195 (13/2+)	22 11.9 FS 21
23MG 23				6.240 (9/2)+	23 27.7 FS LT
23MG 24				6.246	24
23MG 25				6.372 (7/2+)	25
23MG 26				6.377 (7/2+)	26 31.2 FS LT
23MG 27				6.391 (3/2+,5/2+)	27
23MG 28				6.448 (9/2-)	28
23MG 29				6.450 (9/2-)	29 24.3 FS 55
23MG 30				6.514 (7/2+)	30
23MG 31				6.540 3/2+,5/2+	31
23MG 32	6.575	5/2+			32
23MG 33				6.775	33
23MG 34				6.804 3/2+,5/2+	34
23MG 35				6.805	35
23MG 36				6.818 1/2+,3/2+,5/2+	36
23MG 37	6.908	5/2+			37 6.9 FS LT

23MG	38	6.984	5/2+					38				
23MG	39				7.007	(3/2+,5/2+)		39				
23MG	40				7.022	(9/2)+		40				

23MG	41				7.112	(3/2 TO 11/2)+		41				
23MG	42				7.145	(13/2+)		42				
23MG	43				7.149	(5/2+)		43				
23MG	44				7.228			44				
23MG	45				7.260	(3/2+,5/2+)		45				
23MG	46				7.262	(11/2+)		46	1.4 FS	7		
23MG	47				7.383	(7/2+)		47				
23MG	48				7.451	(9/2)+		48	9.7 FS	LT		
23MG	49				7.497	(9/2)+		49	13.9 FS	LT		
S-p	=	7.581	(0.000)	-----								
23MG	50	7.583	5/2+					50				

23MG	51				7.624	(9/2)+		51	2.8 FS	14		
23MG	52				7.648	3/2+,5/2+		52				
23MG	53				7.770			53	1.4 FS	7		
23MG	54				7.782	(11/2+)		54	0.7 FS	LT		
23MG	55				7.785	3/2+,5/2+		55	6.9 FS	21		
23MG	56	7.803	3/2 5/2+					56				
23MG	57				7.856	(7/2+)		57				
23MG	58				7.918			58				
23MG	59				8.016	(5/2,7/2)		59				
23MG	60				8.044			60				

23MG	61				8.062			61				
23MG	62				8.074			62				
23MG	63				8.141			63				
23MG	64	8.163	5/2+					64				
23MG	65				8.193			65				
23MG	66				8.288			66				
23MG	67				8.330	3/2+,5/2+		67				
23MG	68				8.342			68				
23MG	69				8.393			69				
23MG	70				8.427			70				

23MG	71				8.449	3/2+,5/2+		71				
23MG	72				8.557			72				
23MG	73				8.578	3/2,5/2,7/2		73				
23MG	74				8.617	(5/2,7/2,9/2)-		74				
23MG	75				8.762			75				
23MG	76				8.793	(7/2+)		76				
23MG	77				8.840	3/2,5/2,7/2		77				
23MG	78				8.870			78				
23MG	79				8.908	(5/2+)		79				
23MG	80				8.924	1/2-,3/2-		80				

23MG	81				8.942			81	70 FS	LT		

23MG 82				8.993	3/2+,5/2+,7/2+	82
23MG 83				9.020	1/2-,3/2-	83
23MG 84				9.022	3/2,5/2,7/2	84
23MG 85				9.060		85
23MG 86				9.102	3/2,5/2,7/2	86
23MG 87				9.135	3/2,5/2,7/2	87
23MG 88				9.159	1/2+,3/2+,5/2+	88
23MG 89				9.253		89
23MG 90				9.325	3/2,5/2,7/2	90

23MG 91				9.374		91
23MG 92				9.403		92
23MG 93				9.421	3/2+,5/2+,7/2+	93
23MG 94				9.468	3/2+,5/2+,7/2+	94
23MG 95				9.502	1/2+,3/2+,5/2+	95
23MG 96				9.597	(15/2+,17/2+)	96 70 FS LT
23MG 97				9.604	3/2,5/2,7/2	97
23MG 98				9.642		98
S-alpha=	9.651	(0.000)	-----			
23MG 99		9.673	3/2-			99
23MG 100				9.717		100

23MG 101				9.750		101
23MG 102				9.850	(3/2+,5/2+)	102
23MG 103				9.970	(1/2-,3/2-)	103

S-p = 7.581 (0.000)-----
S-n = 13.145 (0.000)-----
S-2p = 14.320 (0.000)-----
S-2n = 32.520 (0.001)-----
S-alpha= 9.651 (0.000)-----

S+p = -1.864 (0.000)
S+n = -16.531 (0.000)
S+2p = -5.277 (0.010)
S+2n = -23.862 (0.000)
S+alpha = -9.336 (0.000)

gap p = 5.717 (0.000)
gap n = -3.386 (0.000)
gap 2p = 9.043 (0.010)
gap 2n = 8.658 (0.001)
gap alpha = 0.315 (0.000)