

$^{22}\text{Mg}$        $Z = 12$        $N = 10$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 168.581 ( 0.000) MeV

Qbeta+ = 4.782 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
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22MG	1	0.000	0+		1 3.8755 S 12
22MG	2	1.247	2+		2 2.0 PS 8
22MG	3	3.308	4+		3 200 FS 45
22MG	4	4.402	2+		4 21 FS LT
22MG	5	5.035	2+		5 0.07 NS LT
22MG	6			5.089 (1+)	6
22MG	7			5.293 (4+)	7 44 FS 15
22MG	8			5.296 (2-)	8
22MG	9			5.318 (4+)	9 17 NS LT
22MG	10			5.452 (3+)	10 0.07 NS LT
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S-p	=	5.504 ( 0.000)			
22MG	11	5.711	2+		11 28 FS 10
22MG	12			5.838 2+,3,4+	12 17 NS LT
22MG	13	5.954	0+		13
22MG	14			6.043 (0+)	14
22MG	15			6.226 (4+)	15
22MG	16			6.243	16
22MG	17	6.254	6+		17
22MG	18	6.313	4+		18 17 NS LT
22MG	19			6.326 (1+)	19 13.6 KEV 14
22MG	20			6.476	20
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22MG	21			6.578 (1-)	21 12.8 KEV 15
22MG	22			6.608 (2+)	22 17.9 KEV 16
22MG	23			6.724	23
22MG	24			6.766 (3-)	24 105 KEV 33
22MG	25			6.865 (3+)	25
22MG	26			6.876 (1-)	26
22MG	27			6.983 (3-)	27
22MG	28			7.027 [3+]	28
22MG	29			7.048 [4+]	29
22MG	30			7.060	30
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22MG	31			7.079 [1-]	31
22MG	32			7.132 (5+)	32
22MG	33	7.218	0+		33
22MG	34			7.254 (1-)	34
22MG	35			7.338 (2+)	35
22MG	36			7.384 (3-)	36

22MG	37				7.573		37
22MG	38				7.600	(2+)	38
22MG	39				7.674	(1-)	39
22MG	40				7.741		40
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22MG	41				7.810	(2-)	41
22MG	42				7.928	[2+]	42
S-2p	=	7.936	(	0.000)	-----		
22MG	43				8.007	[3-]	43
22MG	44				8.062		44
S-alpha	=	8.142	(	0.000)	-----		
22MG	45				8.180	[2+]	45
22MG	46				8.290		46
22MG	47				8.398	[2+]	47
22MG	48				8.519	(3-)	48
22MG	49				8.579		49
22MG	50				8.658		50
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22MG	51				8.727	(2+)	51
22MG	52				8.743	[4+]	52
22MG	53				8.785	[1-]	53
22MG	54				8.827	(1-)	54
22MG	55				8.933	[2+]	55
22MG	56				8.991	(1-)	56
22MG	57				9.080		57
22MG	58				9.157	(4+)	58
22MG	59				9.248		59
22MG	60				9.318		60
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22MG	61				9.378		61
22MG	62				9.452		62
22MG	63				9.481	[3-]	63
22MG	64				9.529		64
22MG	65				9.640		65
22MG	66				9.712	[0+]	66
22MG	67				9.752	(2+, 1+)	67
22MG	68				9.859	[0+]	68
22MG	69				9.960		69
22MG	70				10.084	[2+]	70
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22MG	71				10.168	[3+]	71
22MG	72				10.272	[2+]	72
22MG	73				10.418	[4+]	73
22MG	74				10.572		74
22MG	75				10.665	[3-]	75
22MG	76				10.768	[2+]	76
22MG	77				10.876	[4+]	77
22MG	78				10.901		78
22MG	79				11.001	[0+]	79
22MG	80				11.122		80

22MG 81				11.231		81
22MG 82				11.314	[4+]	82
22MG 83				11.410		83
22MG 84				11.499	[2+]	84
22MG 85				11.594		85
22MG 86				11.748	[0+]	86
22MG 87				11.914		87
22MG 88				12.003		88
22MG 89				12.185	[3-]	89
22MG 90				12.474	[2+]	90
22MG 91				12.665	[3-]	91
22MG 92				13.014		92
22MG 93				14.012		93

S-p = 5.504 ( 0.000)-----  
S-n = 19.375 ( 0.001)-----  
S-2p = 7.936 ( 0.000)-----  
S-2n = 34.020 ( 0.002)-----  
S-alpha= 8.142 ( 0.000)-----

S+p = -0.141 ( 0.000)  
S+n = -13.145 ( 0.000)  
S+2p = -3.433 ( 0.019)  
S+2n = -29.676 ( 0.000)  
S+alpha = -9.166 ( 0.000)

gap p = 5.363 ( 0.001)  
gap n = 6.230 ( 0.001)  
gap 2p = 4.503 ( 0.019)  
gap 2n = 4.344 ( 0.002)  
gap alpha = -1.024 ( 0.001)