

^{27}Mg $Z = 12$ $N = 15$ adopted link ENSDF link

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

BE = 223.124 (0.000) MeV

Qbeta- = 2.610 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
27MG 1	0.000	1/2+			1 9.458 M 12
27MG 2	0.985	3/2+			2 0.97 PS 24
27MG 3	1.699	5/2+			3 0.81 PS 17
27MG 4	1.940	5/2+			4 0.65 PS 14
27MG 5				3.110 (7/2+)	5 71 FS 18
27MG 6				3.427 (5/2+,7/2+)	6 69 FS 34
27MG 7	3.476	1/2+			7 6.9 FS LT
27MG 8				3.491 3/2+,5/2+	8 9.7 FS LT
27MG 9			3.562 3/2-		9 7 FS LT
27MG 10				3.761 5/2-,7/2-	10 0.42 PS 7
27MG 11	3.787	3/2+			11 17 FS LT
27MG 12				3.885 (5/2+,9/2+)	12 0.5 PS GT
27MG 13				4.150 (3/2+,5/2+)	13 7 FS LT
27MG 14				4.399 (5/2+,9/2+)	14 45 FS 24
27MG 15				4.553 (3/2+,5/2+)	15 9 FS LT
27MG 16				4.777 (3/2,5/2,7/2)+	16 24 FS LT
27MG 17				4.828 1/2-,3/2-	17 7 FS LT
27MG 18				4.993 (5/2+)	18 7 FS LT
27MG 19	5.029	1/2+			19 28 FS LT
27MG 20				5.173 (3/2,5/2)+	20 10 FS LT
27MG 21				5.297	21 41 FS LT
27MG 22				5.373 (5/2-)	22 16 FS LT
27MG 23				5.413	23 7 FS LT
27MG 24				5.422 1/2-,3/2-	24 7 FS LT
27MG 25				5.628 (3/2,5/2)+	25 7 FS LT
27MG 26				5.750 5/2 T0 9/2	26 17 FS LT
27MG 27				5.765 (3/2,5/2)+	27 17 FS LT
27MG 28				5.822 (3/2,5/2)+	28 7 FS LT
27MG 29				5.830	29 82 FS LT
27MG 30				5.906 (1/2,3/2)-	30
27MG 31				5.926	31 34 FS 28
27MG 32				6.009	32 7 FS LT
27MG 33				6.084	33
27MG 34				6.125	34
27MG 35				6.161	35
27MG 36				6.312	36
27MG 37				6.336	37

27MG	38	|	|	|	6.380		38
S-n	=	6.443	(	0.000)	-----		
27MG	39	|	|	|	6.508		39
27MG	40	|	|	|	6.651		40

27MG	41	|	|	|	6.721		41
27MG	42	|	|	|	6.811		42
27MG	43	|	|	|	6.859		43
27MG	44	|	|	|	6.921		44
27MG	45	|	|	|	6.991		45
27MG	46	|	|	|	7.013		46
27MG	47	|	|	|	7.147		47
27MG	48	|	|	|	7.278		48
27MG	49	|	|	|	7.505		49
27MG	50	|	|	|	7.530		50

27MG	51	|	|	|	7.690		51
27MG	52	|	|	|	7.700		52
27MG	53	|	|	|	7.859		53
27MG	54	|	|	|	7.927		54
27MG	55	|	|	|	7.976		55

S-p	=	15.015	(	0.004)	-----		
S-n	=	6.443	(	0.000)	-----		
S-2p	=	27.129	(	0.029)	-----		
S-2n	=	17.536	(	0.000)	-----		
S-alpha	=	11.857	(	0.000)	-----		
S+p	=	-9.553	(	0.000)			
S+n	=	-8.505	(	0.000)			
S+2p	=	-21.886	(	0.000)			
S+2n	=	-12.168	(	0.000)			
S+alpha	=	-10.787	(	0.000)			
gap p	=	5.462	(	0.004)			
gap n	=	-2.061	(	0.000)			
gap 2p	=	5.243	(	0.029)			
gap 2n	=	5.368	(	0.000)			
gap alpha	=	1.070	(	0.000)			