

$^{31}\text{Mg}$        $Z = 12$        $N = 19$       adopted link      ENSDF link

Based on ensdf\_240402 (Apr 2024), and mass evaluation from 2020

BE = 243.945 ( 0.003) MeV

Qbeta- = 11.829 ( 0.004) MeV

	Energy	T	J+	J-	J-other	T1/2
31MG 1	0.000		1/2+			1 270 MS 2
31MG 2	0.050		3/2+			2 12.0 NS 4
31MG 3				0.221 (3/2)-		3 133 PS 8
31MG 4				0.461 (7/2-)		4 10.5 NS 8
31MG 5	0.673		3/2+			5
31MG 6					0.942 (1/2-,3/2)	6
31MG 7	0.944		5/2+			7
31MG 8					1.029 (1/2-,3/2)	8
31MG 9	1.154		(7/2+)			9
31MG 10					1.390	10
31MG 11					1.436 (1/2-,3/2)	11
31MG 12	2.015		5/2+			12
31MG 13	2.244		1/2+			13

S-p = 18.886 ( 0.006) -----  
 S-n = 2.312 ( 0.003) -----  
 S-2p = 36.100 ( 0.150) -----  
 S-2n = 8.652 ( 0.003) -----  
 S-alpha = 12.598 ( 0.091) -----

S+p = -15.266 ( 0.008)  
 S+n = -5.778 ( 0.004)  
 S+2p = -31.970 ( 0.003)  
 S+2n = -8.058 ( 0.004)  
 S+alpha = -13.694 ( 0.036)

gap p = 3.620 ( 0.010)  
 gap n = -3.466 ( 0.006)  
 gap 2p = 4.130 ( 0.150)  
 gap 2n = 0.595 ( 0.005)  
 gap alpha = -1.096 ( 0.098)