

$^{31}\text{Al}$        $Z = 13$        $N = 18$       [link to full NNDC output](#)

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

BE = 254.991 ( 0.002) MeV

Qbeta- = 7.998 ( 0.002) MeV

	Energy T	J+	J-	J-other	T1/2	
31AL 1				0.000	5/2(+)	1 644 MS 25
31AL 2				0.947	1/2,3/2	2
31AL 3				1.613	1/2(+),3/2(	3+)
31AL 4				2.090		4
31AL 5				2.676		5
31AL 6				3.239	1/2(+),3/2(	6+)
31AL 7				3.433	1/2(+),3/2(	7+)
31AL 8				3.623	1/2(+),3/2(	8+)
31AL 9				4.143	1/2(+),3/2(	9+)
31AL 10				4.320		10
31AL 11				4.563	1/2(+),3/2(	11+)
31AL 12				4.640	(1/2,3/2)	12
31AL 13				4.809		13
31AL 14				5.047	1/2(+),3/2(	14+)
31AL 15				5.149	1/2(+),3/2(	15+)
31AL 16				5.729		16
31AL 17				6.480		17

S-p = 13.356 ( 0.004)-----

S-n = 7.157 ( 0.004)-----

S-2p = 32.209 ( 0.008)-----

S-2n = 12.886 ( 0.002)-----

S-alpha= 11.858 ( 0.004)-----

S+p = -16.416 ( 0.002)

S+n = -4.220 ( 0.008)

S+2p = -25.965 ( 0.002)

S+2n = -9.689 ( 0.007)

S+alpha = -12.332 ( 0.003)

gap p = -3.060 ( 0.005)

gap n = 2.937 ( 0.008)

gap 2p = 6.244 ( 0.008)

gap 2n = 3.196 ( 0.008)

gap alpha = -0.474 ( 0.005)