

$^{69}\text{Cu}$        $Z = 29$        $N = 40$       [link to full NNDC output](#)

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

BE = 599.969 ( 0.001) MeV

Qbeta- = 2.682 ( 0.002) MeV

	Energy T	J+	J-	J-other	T1/2		
69CU	1		0.000	3/2-	1	2.85 M	15
69CU	2		1.096	1/2-	2	2.0 PS	2
69CU	3		1.110	1/2-	3		
69CU	4				4	4.3 PS	4
69CU	5				5		
69CU	6				6		
69CU	7				7		
69CU	8		1.711	7/2-	8		
69CU	9		1.871	7/2-	9	0.30 PS	5
69CU	10		2.182	9/2-	10		
69CU	11				11		
69CU	12				12		
69CU	13		2.668	11/2-	13		
69CU	14				14		
69CU	15				15	357 NS	2
69CU	16				16		
69CU	17				17		
69CU	18		2.868	11/2-	18		
69CU	19				19		
69CU	20				20		
69CU	21		3.483	15/2-	21		
69CU	22				22	22 NS	1
69CU	23				23	39 NS	6

S-p = 9.561 ( 0.003)-----  
 S-n = 8.241 ( 0.002)-----  
 S-2p = 24.992 ( 0.007)-----  
 S-2n = 14.559 ( 0.002)-----  
 S-alpha= 8.976 ( 0.002)-----

S+p = -11.117 ( 0.002)  
 S+n = -5.312 ( 0.002)  
 S+2p = -18.981 ( 0.002)  
 S+2n = -13.118 ( 0.002)  
 S+alpha = -6.388 ( 0.002)

gap p = -1.556 ( 0.004)

gap n = 2.929 ( 0.003)  
gap 2p = 6.012 ( 0.007)  
gap 2n = 1.442 ( 0.003)  
gap alpha = 2.588 ( 0.003)