

^{77}Cu $Z = 29$ $N = 48$ adopted link ENSDF link

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

BE = 647.666 (0.001) MeV

Qbeta- = 9.926 (0.002) MeV

	Energy T	J+	J-	J-other	T1/2
77CU 1			0.000	5/2-	1 469.8 MS 20
77CU 2				0.293 (3/2-)	2
77CU 3				0.946 (9/2-)	3
77CU 4				1.154 (7/2-)	4
77CU 5				1.776 (13/2-)	5
77CU 6				1.955 (11/2-)	6
77CU 7				2.068 (7/2-)	7
77CU 8				2.605 (11/2,13/2-)	8
77CU 9				2.695 (7/2-)	9
77CU 10				2.869 (11/2,13/2-)	10
77CU 11				2.909 (9/2,11/2-)	11
77CU 12				3.412 (9/2,11/2-)	12
77CU 13				3.954 (7/2,9/2,11/2-)	13

S-p = 13.978 (0.304)-----
 S-n = 5.953 (0.002)-----
 S-2p = 32.891 (0.375)-----
 S-2n = 10.535 (0.001)-----
 S-alpha= 13.325 (0.292)-----

S+p = -15.909 (0.002)
 S+n = -3.998 (0.013)
 S+2p = -28.263 (0.002)
 S+2n = -9.688 (0.105)
 S+alpha = -11.190 (0.003)

gap p = -1.931 (0.304)
 gap n = 1.955 (0.013)
 gap 2p = 4.628 (0.375)
 gap 2n = 0.847 (0.105)
 gap alpha = 2.135 (0.292)