

^{63}Co $Z = 27$ $N = 36$ adopted link ENSDF link

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

BE = 549.221 (0.019) MeV

Qbeta- = 3.661 (0.019) MeV

	Energy T	J+	J-	J-other	T1/2
63CO	1		0.000	7/2-	1 27.4 S 5
63CO	2		0.995	3/2-	2 10 PS GT
63CO	3			1.384 (9/2-)	3
63CO	4			1.427 (7/2-,5/2-)	4
63CO	5			1.495 (3/2-)	5
63CO	6			1.577	6
63CO	7			1.674 (11/2-)	7
63CO	8			1.888 (1/2,3/2)-	8
63CO	9			2.078 (5/2,7/2)-	9
63CO	10		2.129	7/2-	10 155 FS +34-26
63CO	11	2.191	1/2+		11 47 FS +45-21
63CO	12		2.330	7/2-	12 143 FS +22-16
63CO	13			2.375 (5/2,7/2,9/2)-	13 136 FS +108-45
63CO	14			2.473 (5/2,7/2)-	14
63CO	15			2.539 (11/2-)	15
63CO	16			2.689 3/2+,5/2+	16 238 FS +54-41
63CO	17			2.794 (5/2,7/2)-	17
63CO	18			2.882 (1/2,3/2)-	18
63CO	19			2.932 7/2-,5/2-	19
63CO	20			3.007 (13/2-)	20
63CO	21			3.034 (13/2)	21
63CO	22			3.037 5/2,7/2-	22
63CO	23			3.133 (5/2-,7/2-)	23 0.15 PS +10-5
63CO	24			3.180 5/2-,7/2-	24 56 FS +13-10
63CO	25			3.204 (15/2)-	25
63CO	26			3.226 (15/2-)	26
63CO	27			3.413 (3/2,5/2)+	27 41 FS +41-20
63CO	28			3.422 (7/2,5/2)-	28
63CO	29			3.581 (17/2)-	29 1.2 PS +6-3
63CO	30			3.602 (5/2,7/2)-	30
63CO	31			3.611 (17/2-)	31 0.7 PS +2-1
63CO	32			3.676 (5/2,7/2)-	32
63CO	33			3.766 (5/2,7/2)-	33
63CO	34			3.893 (3/2+,5/2+)	34
63CO	35			3.985 (5/2,7/2)-	35
63CO	36			4.039 3/2+,5/2+	36
63CO	37			4.094 (3/2+,5/2+)	37

63C0	38			4.127	(3/2+,5/2+)	38
63C0	39			4.167	(19/2)-	39 0.21 PS
63C0	40			4.234	(3/2+,5/2+)	40

63C0	41			4.376	(3/2+,5/2+)	41
63C0	42			4.453	(3/2+,5/2+)	42
63C0	43			4.524	(3/2+,5/2+)	43
63C0	44			4.538	(3/2+,5/2+)	44
63C0	45			4.588	(3/2+,5/2+)	45
63C0	46			4.700	(3/2+,5/2+)	46
63C0	47			4.722	(3/2+,5/2+)	47
63C0	48			4.820	(3/2+,5/2+)	48
63C0	49			4.886	(3/2+,5/2+)	49
63C0	50			4.968	(3/2+,5/2+)	50

63C0	51			5.010	(3/2+,5/2+)	51
63C0	52			5.080	(3/2+,5/2+)	52
63C0	53			5.215	(3/2+,5/2+)	53
63C0	54			5.294	(3/2+,5/2+)	54
63C0	55			5.342	(3/2+,5/2+)	55
63C0	56			5.457	(3/2+,5/2+)	56
63C0	57			5.659	3/2+,5/2+	57

S-p = 10.262 (0.019)-----
 S-n = 8.498 (0.026)-----
 S-2p = 24.687 (0.019)-----
 S-2n = 15.096 (0.019)-----
 S-alpha= 8.751 (0.019)-----

S+p = -12.536 (0.019)
 S+n = -6.012 (0.027)
 S+2p = -19.990 (0.019)
 S+2n = -13.476 (0.019)
 S+alpha = -7.893 (0.019)

gap p = -2.274 (0.026)
 gap n = 2.486 (0.038)
 gap 2p = 4.697 (0.026)
 gap 2n = 1.620 (0.026)
 gap alpha = 0.858 (0.026)