

^{56}Co $Z = 27$ $N = 29$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 486.911 (0.000) MeV

Qbeta+ = 4.567 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2

56CO	1 0.000	4+			1 77.236 D 26
56CO	2 0.158	3+			2 0.1 NS LT
56CO	3 0.576	5+			3 0.28 PS +7-5
56CO	4 0.830	4+			4 1.7 PS GT
56CO	5 0.970	2+			5 0.12 PS +12-6
56CO	6 1.009	5+			6 0.38 PS +14-9
56CO	7 1.115	3+			7 0.19 PS +9-6
56CO	8 1.451	0+			8 1.58 NS 6
56CO	9			1.585	9
56CO	10 1.720	1+			10 0.34 PS +35-12

56CO	11 1.930	3+			11 33 FS +8-7
56CO	12 2.060	2+			12 24 FS 6
56CO	13 2.225	2+			13
56CO	14 2.283	7+			14 1.25 PS GT
56CO	15			2.290	15
56CO	16 2.306	(2)+			16
56CO	17 2.357	1+			17
56CO	18 2.372	6+			18 42 FS 21
56CO	19			2.456 0+,1+	19
56CO	20			2.470	20 16 FS 9

56CO	21 2.609	3+			21
56CO	22 2.636	1+			22 14 FS 8
56CO	23			2.647 (0+,1+)	23
56CO	24 2.665	(3+)			24
56CO	25 2.730	1+			25 69 FS +21-17
56CO	26			2.770	26
56CO	27			2.789	27
56CO	28 2.926	(2+)			28
56CO	29 2.969	2+			29
56CO	30			3.048 3+,4+,5+	30

56CO	31 3.060	5+			31
56CO	32 3.076	1+			32 22 FS +8-6
56CO	33 3.140	3+			33
56CO	34			3.180 1+,3+	34
56CO	35 3.234	(0+)			35
56CO	36			3.255	36

56C0	37	3.297	4+							37
56C0	38				3.366	(-)				38
56C0	39	3.378	1+							39
56C0	40	3.382	2+							40

56C0	41						3.436	0+,1+		41
56C0	42						3.493			42
56C0	43	3.510	(0+)							43
56C0	44	3.527	0+						6 FS	5
56C0	45	3.544	7+							45
56C0	46						3.570			46
56C0	47	3.592	(0+)							47
56C0	48						3.599	0+,1+	18 FS	5
56C0	49						3.610			49
56C0	50	3.638	8+						55 FS	+28-12

56C0	51				3.642	(-)				51
56C0	52						3.694			52
56C0	53				3.717	(-)				53
56C0	54	3.798	(+)							54
56C0	55						3.807	1+,2+,3+		55
56C0	56						3.863			56
56C0	57	3.876	(+)							57
56C0	58						3.900			58
56C0	59						3.935			59
56C0	60						3.960			60

56C0	61						4.011	3+,4+,5+		61
56C0	62						4.019			62
56C0	63						4.032	1+,2+,3+		63
56C0	64						4.062			64
56C0	65						4.094			65
56C0	66						4.139	3+,4+,5+		66
56C0	67	4.180	9+						0.41 PS	4
56C0	68	4.183	(+)							68
56C0	69						4.209			69
56C0	70						4.222			70

56C0	71						4.281			71
56C0	72						4.293			72
56C0	73						4.308			73
56C0	74						4.349			74
56C0	75	4.372	1+						10 FS	+12-8
56C0	76						4.388	1+,2+,3+		76
56C0	77	4.429	(2+)							77
56C0	78	4.441	7+							78
56C0	79						4.453			79
56C0	80						4.501			80

56C0	81						4.531			81

56C0 82				4.560	82	
56C0 83				4.684	83	
56C0 84				4.743	84	
56C0 85				4.768	85	
56C0 86				4.796	86	
56C0 87				4.846	87	
56C0 88				4.928	88	
56C0 89		4.992	8-		89	
56C0 90				5.008	90	

56C0 91				5.081	91	
56C0 92		5.146	5+		92	
56C0 93				5.187	1+,2+,3+	93
56C0 94				5.239		94
56C0 95		5.275	10+			95 42 FS +28-14
56C0 96				5.338		96 8 FS LE
56C0 97			5.430 6-			97
56C0 98				5.472	1(+),(2+)	98 7 FS +4-3
56C0 99				5.500		99
56C0 100				5.562	1+,2+,3+	100

56C0 101				5.620		101
S-p =	5.848	(0.001)	-----			
56C0 102				6.069		102
56C0 103				6.228		103
56C0 104				6.319	(0+,1+)	104
56C0 105				6.545		105
56C0 106			6.570 6-			106
56C0 107				6.850		107
56C0 108				7.350		108
56C0 109				7.480		109
S-alpha=	7.754	(0.000)	-----			
56C0 110				7.870		110

56C0 111		8.920	9+			111
S-n =	10.082	(0.001)	-----			
56C0 112				10.300	(12)	112
56C0 113				11.802	(14)	113
56C0 114				13.650	(16)	114
S-2p =	15.060	(0.001)	-----			
56C0 115				15.895	(18)	115
56C0 116				18.600	(20)	116

S-p =	5.848	(0.001)	-----			
S-n =	10.082	(0.001)	-----			
S-2p =	15.060	(0.001)	-----			
S-2n =	24.173	(0.001)	-----			
S-alpha=	7.754	(0.000)	-----			

S+p = -7.332 (0.001)
S+n = -11.376 (0.001)
S+2p = -10.205 (0.001)
S+2n = -19.949 (0.001)
S+alpha = -4.730 (0.002)

gap p = -1.484 (0.001)
gap n = -1.295 (0.001)
gap 2p = 4.855 (0.001)
gap 2n = 4.224 (0.001)
gap alpha = 3.024 (0.002)