

^{109}Ag $Z = 47$ $N = 62$ adopted link ENSDF link

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

BE = 931.723 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2
109AG 1			0.000	1/2-	1 STABLE
109AG 2	0.088	7/2+			2 39.79 S 21
109AG 3	0.133	9/2+			3 2.60 NS 12
109AG 4			0.311	3/2-	4 5.9 PS 4
109AG 5			0.415	5/2-	5 33.4 PS 13
109AG 6				0.420 (7/2+,9/2+)	6
109AG 7				0.697	7
109AG 8			0.702	3/2-	8 0.27 PS 7
109AG 9	0.706	1/2+			9
109AG 10				0.707 (3/2,5/2-)	10
109AG 11	0.724	3/2+			11 3.2 NS 8
109AG 12	0.735	5/2+			12
109AG 13	0.773	11/2+			13
109AG 14				0.789	14
109AG 15				0.812	15
109AG 16			0.863	5/2-	16 1.39 PS 19
109AG 17	0.869	5/2+			17
109AG 18				0.890 (7/2+,9/2+)	18
109AG 19	0.911	7/2+			19
109AG 20			0.912	7/2-	20
109AG 21				0.929 (9/2+)	21
109AG 22	0.931	13/2+			22
109AG 23				1.070	23
109AG 24			1.091	9/2-	24 1.9 PS 3
109AG 25				1.099 (5/2,7/2-)	25
109AG 26				1.200 (7/2+,9/2+)	26
109AG 27			1.260	1/2-	27
109AG 28				1.310 1/2-,3/2-	28
109AG 29			1.324	3/2-	29 0.31 PS 9
109AG 30	1.430	1/2+			30
109AG 31				1.490 3/2+,5/2+	31
109AG 32			1.500	3/2-	32
109AG 33				1.524 (3/2,5/2)-	33
109AG 34				1.599	34
109AG 35			1.613	1/2-	35
109AG 36	1.658	1/2+			36
109AG 37				1.675	37
109AG 38	1.703	15/2+			38

109AG 39						1.736	(3/2,5/2)-	39
109AG 40						1.792	(7/2,9/2)-	40

109AG 41						1.815	(3/2,5/2)-	41
109AG 42						1.839	(5/2)-	42
109AG 43						1.841	3/2+,5/2+	43
109AG 44						1.860	(7/2+,9/2+)	44
109AG 45						1.891	(7/2,9/2)-	45
109AG 46		1.894	17/2+					46 0.57 PS 5
109AG 47						1.950	(7/2,9/2)-	47
109AG 48						1.970	3/2+,5/2+	48
109AG 49						1.993	(3/2,5/2)-	49
109AG 50						2.043	(9/2+)	50

109AG 51						2.062	(7/2,9/2)-	51
109AG 52						2.093	(3/2,5/2)-	52
109AG 53						2.124	(5/2,7/2)+	53
109AG 54						2.185	(9/2+)	54
109AG 55						2.199	(7/2-,9/2-)	55
109AG 56				2.206	15/2-			56
109AG 57						2.222	(7/2-,9/2-)	57
109AG 58						2.230	(5/2,7/2)+	58
109AG 59						2.256	(9/2,11/2)+	59
109AG 60						2.267	(5/2,7/2)+	60

109AG 61						2.314	(3/2-,5/2-)	61
109AG 62		2.320	1/2+					62
109AG 63						2.364	(9/2,11/2)+	63
109AG 64				2.420	17/2-			64
109AG 65						2.434	(7/2,9/2)-	65
109AG 66						2.466	(7/2,9/2)-	66
109AG 67		2.471	1/2+					67
109AG 68				2.480	17/2-			68
109AG 69						2.537	(9/2,11/2)+	69
109AG 70		2.567	19/2+					70 0.39 PS 4

109AG 71				2.568	19/2-			71
109AG 72						2.569	(9/2+,11/2+)	72
109AG 73						2.614		73
109AG 74						2.659		74
109AG 75				2.661	19/2-			75
109AG 76				2.741	21/2-			76
109AG 77		2.841	21/2+					77 0.82 PS 8
109AG 78						2.940	(21/2-)	78
109AG 79				2.989	23/2-			79
109AG 80		3.090	23/2+					80 1.53 PS 16

109AG 81						3.204	(23/2-)	81
109AG 82						3.275	3/2+,5/2+	82
109AG 83		3.276	25/2+					83 1.87 PS 21

S-alpha= 3.293 (0.003)-----									
109AG	84				3.317		25/2-		84
109AG	85		3.575						85 0.71 PS 8
109AG	86		3.969						86 0.37 PS 4
109AG	87		4.376						87 0.291 PS 35
109AG	88		4.886						88 0.180 PS 21
109AG	89						5.415 (35/2+)		89 0.222 PS 28
109AG	90						5.998 (37/2+)		90

S-p = 6.484 (0.002)-----
 S-n = 9.184 (0.003)-----
 S-2p = 16.434 (0.012)-----
 S-2n = 16.455 (0.003)-----
 S-alpha= 3.293 (0.003)-----

S+p = -8.918 (0.001)
 S+n = -6.809 (0.002)
 S+2p = -14.251 (0.004)
 S+2n = -15.639 (0.002)
 S+alpha = -3.073 (0.001)

gap p = -2.433 (0.002)
 gap n = 2.375 (0.003)
 gap 2p = 2.183 (0.013)
 gap 2n = 0.817 (0.003)
 gap alpha = 0.220 (0.003)