

^{227}Ac $Z = 89$ $N = 138$ adopted link ENSDF link

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

BE = 1736.711 (0.002) MeV

Qbeta- = 0.045 (0.003) MeV

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

S-alpha=	-5.042 (0.003)				
227AC 1			0.000	3/2-	1 21.772 Y 3
227AC 2	0.027	3/2+			2 38.3 NS 3
227AC 3			0.030	5/2-	3
227AC 4	0.046	5/2+			4
227AC 5			0.074	7/2-	5
227AC 6	0.085	7/2+			6
227AC 7	0.110	9/2+			7
227AC 8			0.127	9/2-	8
227AC 9				0.148	9
227AC 10				0.160	10

227AC 11	0.187	11/2+			11
227AC 12			0.199	11/2-	12
227AC 13	0.211	13/2+			13
227AC 14				0.227	14
227AC 15				0.249	15
227AC 16				0.271 (13/2-)	16
227AC 17				0.273 (5/2-)	17
227AC 18				0.305 (5/2+)	18
227AC 19				0.317 (7/2-)	19
227AC 20			0.330	3/2-	20 70 PS LT

227AC 21				0.342 (7/2+)	21
227AC 22			0.354	1/2-	22
227AC 23				0.372 (9/2-)	23
227AC 24			0.387	7/2-	24
227AC 25				0.403 (9/2+)	25
227AC 26	0.426	5/2+			26
227AC 27				0.428	27
227AC 28	0.435	1/2+			28
227AC 29				0.438 (5/2-)	29
227AC 30	0.469	9/2+			30

227AC 31				0.501 (3/2-, 5/2-)	31
227AC 32				0.514 (3/2, 5/2)+	32
227AC 33				0.527 (13/2+)	33
227AC 34				0.537 (3/2+)	34
227AC 35				0.549	35
227AC 36				0.563 (3/2+, 5/2)	36

227AC 37				0.577	(9/2-)	37
227AC 38				0.592	(13/2)+	38
227AC 39		0.639	1/2+			39
227AC 40				0.656	(7/2+)	40

227AC 41				0.669		41
227AC 42				0.699	(3/2)+	42
227AC 43				0.725		43
227AC 44				0.790	(1/2-,3/2,5/2)	44
227AC 45				0.816		45
227AC 46				0.864	(1/2,3/2,5/2)	46
227AC 47				0.875	(1/2+,3/2,5/2)	47
227AC 48				0.895	(3/2)+	48
227AC 49				0.920		49
227AC 50				0.950		50

227AC 51				0.992		51
227AC 52				1.070		52
227AC 53				1.091		53
227AC 54				1.117		54
227AC 55				1.148		55
227AC 56				1.183		56
227AC 57				1.215		57
227AC 58				1.274		58
227AC 59				1.311		59
227AC 60				1.385		60

227AC 61				1.438		61
227AC 62				1.483		62
227AC 63				1.550		63
227AC 64				1.591		64
227AC 65				1.629		65

S-p = 5.107 (0.003)-----
S-n = 6.531 (0.004)-----
S-2p = 12.549 (0.012)-----
S-2n = 11.930 (0.005)-----
S-alpha= -5.042 (0.003)-----

S+p = -6.368 (0.003)
S+n = -5.026 (0.003)
S+2p = -10.531 (0.004)
S+2n = -11.302 (0.012)
S+alpha = 5.150 (0.003)

gap p = -1.260 (0.004)
gap n = 1.505 (0.005)
gap 2p = 2.018 (0.013)
gap 2n = 0.628 (0.013)

gap alpha = 0.108 (0.004)